GÜHRING

KIERRE VOIMAA

Dr. Jörg Gühring

Hallituksen puheenjohtaja

Oliver Gühring

Hallituksen jäsen
Myynti ja markkinointi

7000

Työntekijää
maailmanlaajuisesti

3500

Työntekijää
Saksassa

Sisäinen koulutus ja
jatkokoulutusohjelma

Kansainvälinen Know-How-siirto-
ohjelma työntekijöiden kesken
maailmanlaajuisesti

Dietmar Pfränger

Hallituksen jäsen
T&K, logistiikka, tekniikka ja tuotanto

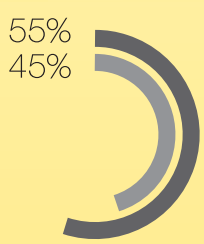
Bernd Schatz

Hallituksen jäsen
Hallinto ja talous

Ydinryhmän työkalut

50000
Vakioartikkelia

2000
Werkzeugsorten



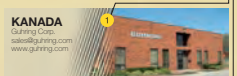
Kaikki yhdeltä toimittajalta - kattavasti ja maailmanlaajuisesti

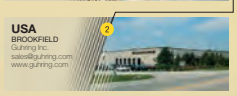
Maailmanlaajuisen valmistusverkkonsa avulla Gühring tuottaa tarkkuustyökaluja kaikille tärkeille markkina-alueille. Auto-, ilmailukuten myös yleinen koneenrakennusteollisuus luottavat edellä-kävijän työkaluihin, mitkä on valmistettu korkeiden laatustandardien mukaisesti.

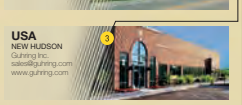
28
TUOTANTOLAITOSTA

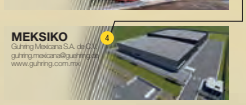
46
TYTÄRYRITYSTÄ

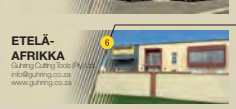
47
HUOLTOKESKUSTA

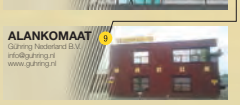


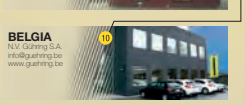


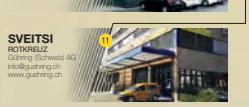


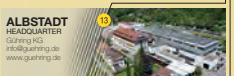


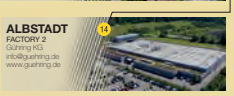


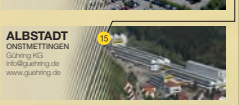


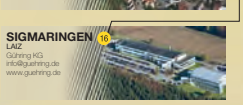


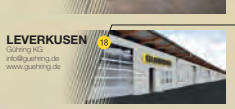


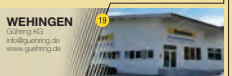


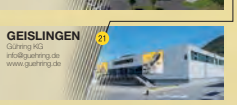












Innovaativisilla teknologioilla Gühring vastaa asiakkaan vaatimuksiin prosessin suunnittelusta useisiin työkalujen käyttöominaisuuksiin - joustavasti, tarkasti, globaalisti. Täten asiantuntijamme ovat asiakkaiden käytettävissä omassa tuotannossaan. Tuotanto, huolto ja kontaktihenkilöt ovat saatavissa yhdeltä toimittajalta maailmanlaajuisesti.

Oma kovametallituotanto

Oma koneenrakennus

Omat pinnoitteet

Korkeimmat laatustandardit maailmanlaajuisesti

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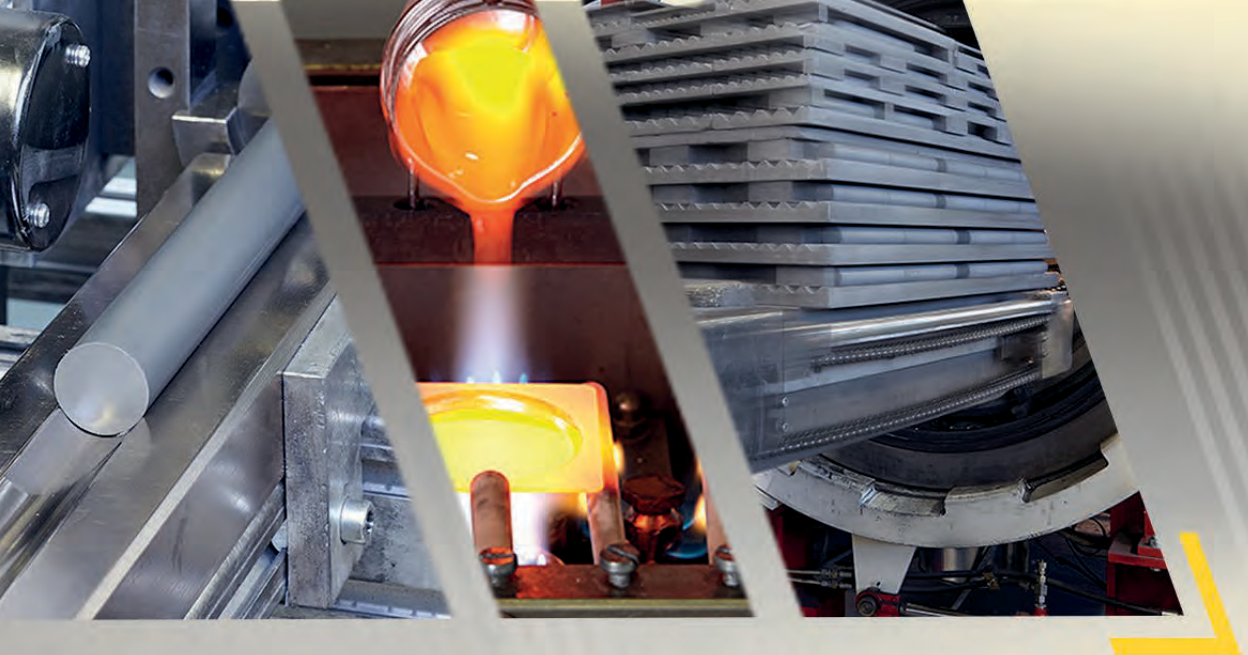
www.guehring.dk

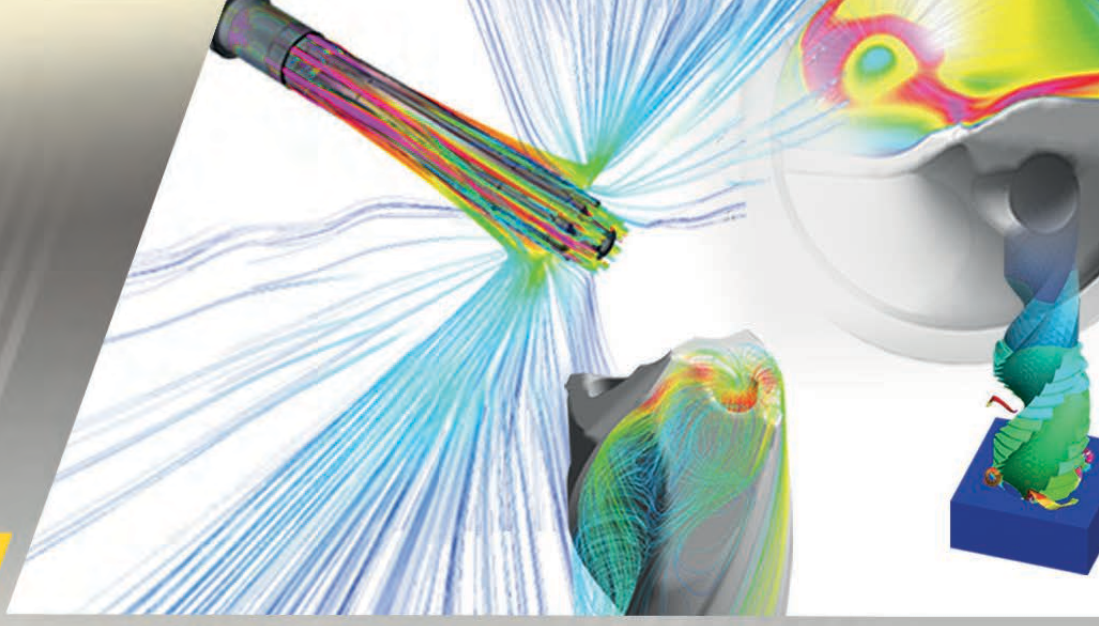
VENÄJÄ 48
Gühring - Russland
info@guhring.ru
www.guhring.ru



MATERIAALI
Oma kovametallivalmistus

Kaikkien työkaluparametrien
optimaalinen yhteensovitus
omien t&k osastojen avulla

KONE- & LAITERAKENNUS
Omat koneenrakennus- ja laiteyksiköt

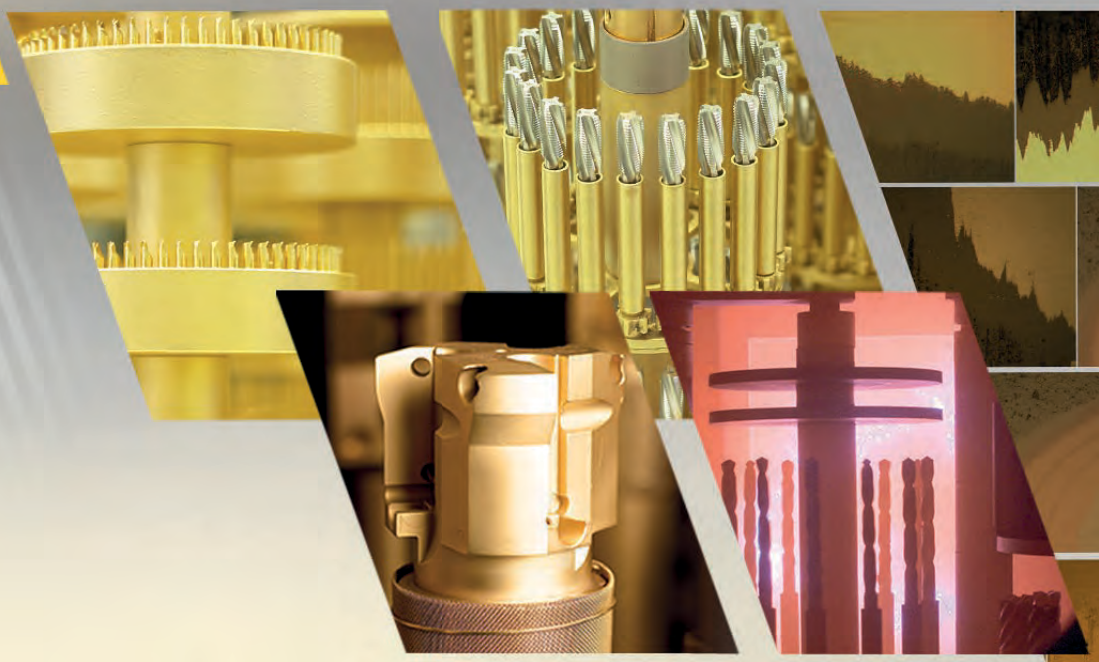


GEOMETRIAT

Omat t&k työkalujen kehitykseen

PINNOITTEET

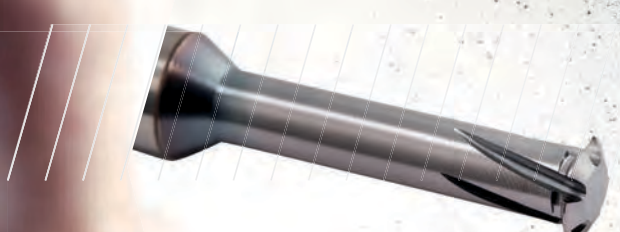
Omat pinnoitelaiteet ja
pinnoitteiden kehitystyö



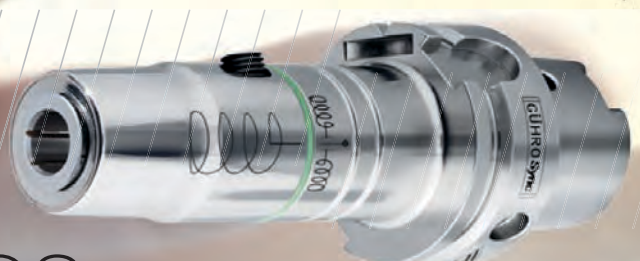
KAIKKI MEILTÄ

Lisää mahdollisuuksia tuotantoonne meidän POWER-kierreohjelmalla

- Kierrejyrsin



- Mikrokierrejyrsin



- GÜHROSync

❖ Kierretappi

❖ Manglaava kierretappi

❖ Mikrokierrejyrsin

SIRIUS®

NEW

LASTUAA PIDENPÄÄN

ERITYISESTI RUOSTUMATTOMILLE TERÄKSILLE, RATKAISU HYVÄLLÄ KULUMISKESTÄVYYDELLÄ

Enemmän tietoa Sirius-pinnoitteestamme löytyy QR-koodista tai suoraan sivulta www.guehring.de/download

Artikkelinumero 4218 löytyy sivulta 38

Uusi VA-kierretappi

NEW *Vahva kierteytys hyvälle toimivuudelle, yhdistelmäpinnoite pidemmälle kestoiälle*

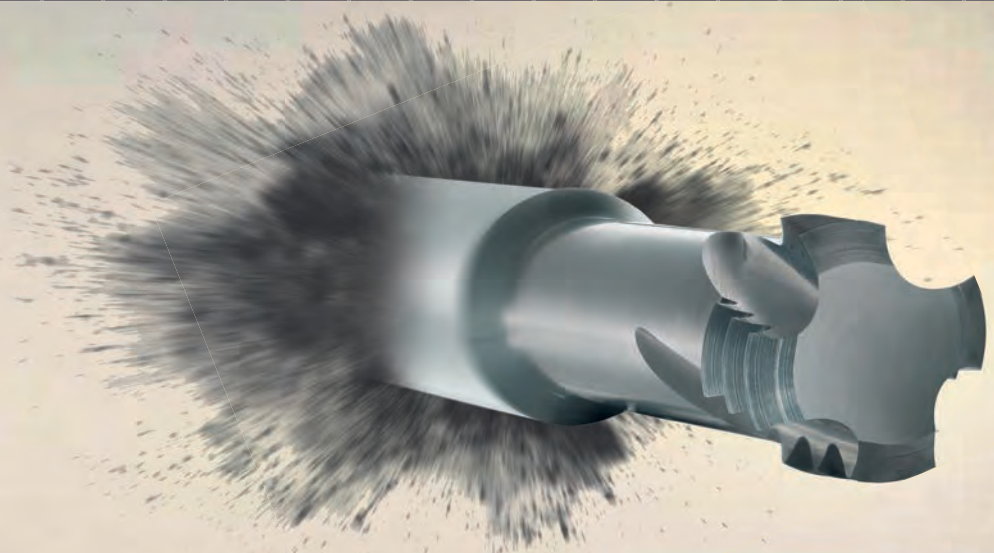
Artikkelinumero 393 löytyy sivulta 244

Kierrejyrsin

NEW

Erikoiskovametallia, innovatiivinen geometria ja paras pinnoite täydelliselle työkalulle

Artikkelinumero 4227 löytyy sivulta 703



Hartbearbeitung > 45 HRC

Kierrejyrsin kiinnitystasolla

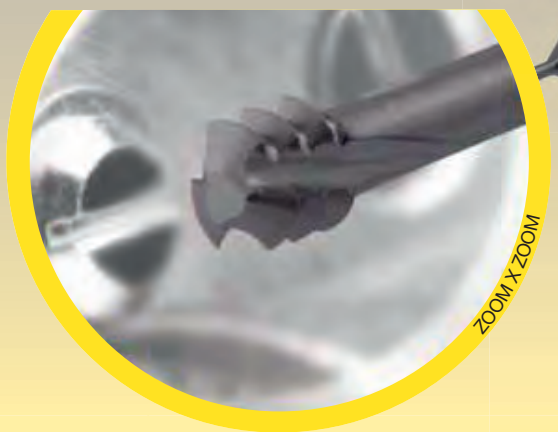
NEW NEW NEW NEW NEW NEW NEW NEW NEW NEW NEW NEW

Nyt HB-varrella varmemmalle kiinnitykselle

Artikkelinumero 3556 flöytyy sivulta 209

Taloudellista ja toimintavarmaa valmistusta Gühring-kierretyökaluilla

NEW Mikrokierrejyrsin



Yksityiskohtainen täydellisyys mikrokierteelle

Artikkelinumero 4226 M1,6 löytyy sivulta 215
Artikkelinumero 4225 M1,8 löytyy sivulta 217

Kokovertailu 1:1

PAIKKAKUNTA

LAIZ

PAIKKAKUNTA

TREUEN

GÜHRING

Tuotantopaikkakunnat
kierretyökaluille

KUVAKKEET
KATSAUS

ISO koodi

P	Teräs, runsaasti seostettu teräs
M	Ruostumaton teräs
K	Harmaavalu-, pallografiittivalu- ja adusoituvalurauta
N	Alumiinille ja muille ei-rautametalleille
S	Erikois-, super- ja titaaniseokset
H	Karkaistu teräs ja kokillivalu

Seuraavilla sivuilla löytyvät sovellus suositukset eri käyttökohteille ja yksityiskohtaiset tiedot max. vetomurtolujuudesta ja kovuudesta:

- ● hyvä soveltuvuus
- ○ rajallinen soveltuvuus

Kuvakkeet

Materiaali

HSS | HSS-E | HSS-E-PM

Pikateräsjyrsimet

VHM

TKM hienorae (HM-UF)

Kierteen syvyys

1,5xD | 2xD | 2,5xD | 3xD

Ø-Toleranssi

2B | 2BX | 3B | 3BX | 4HX | 6H | 6HX | 6GX | 2a | 6g

ISO1/4H | ISO2/6H | ISO3/6G | ....

Kierteen malli

Läpireikä

Pohjareikä

Läpireiät ja pohjareiät

Leikkuusuunta

oikeakät.

vasenkät.

Sisäinen jäähdytys

JK

ei JK

Muoto

A | B | C | C(K) | D | E

Kuvaus

V | M | F

Aloitustappi | Kakkostappi | Viimeistelytappi

Standardi

DIN 352 | DIN 371 | DIN 376 | DIN 374 | DIN 371/376 | DIN 2189 | DIN 5156 | ....

DIN mukaan

WN

Tehdas stdr. mukaan

Malli

N | N R40 | H | H R15 | VA | Al | GG | Ti Ni | ....

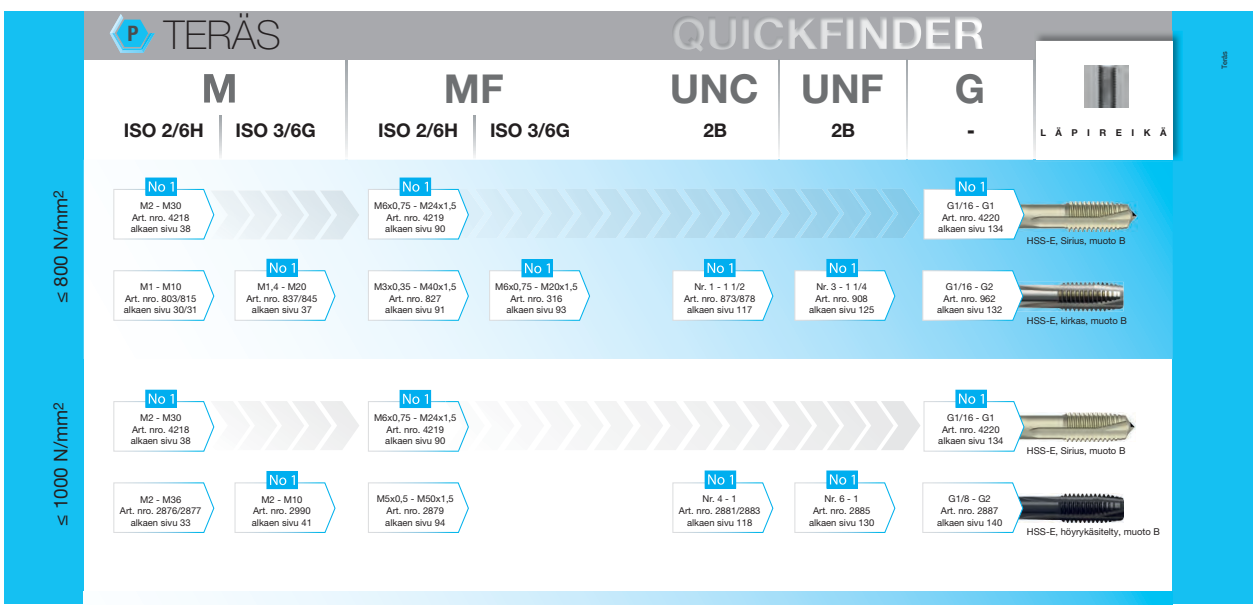
Pinnoitteet

- ○ kirkas
- ◌ höyrykäsitelty
- ● nitrattu
- A TiAlN
- C TiCN
- Cb Carbo
- P AlCrN
- S TiN
- M MolyGlide
- S Sirius

TYÖKALUN HELPPO VALINTA

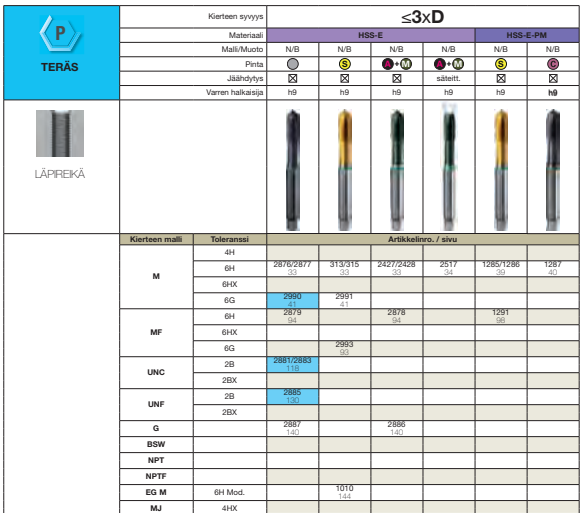
QUICKFINDER

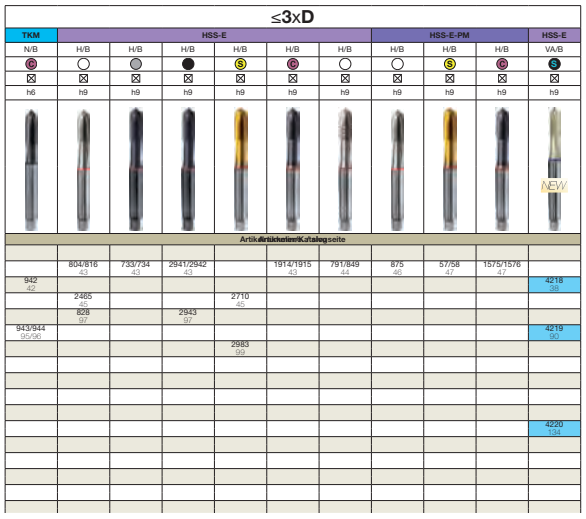
Käyttötarkoituksesta riippuen nopeasti ja helposti oikea työkalu



KOMPASSI

Koko ohjelma selkeästi näkyvillä - sisältää sovellus- ja leikkuuparametrisuositukset





Materiaaliryhmä	Vetomurtolujuus	Materiaaliesimerkkejä	Materiaalinro.	Suositeltu leikkuunopeus vc m/min					
P Rakenne- ja automaattiteräkset, seostamattomat nuorrutus- ja hiilteräkset	≤800 N/mm²	S235JR	1.0037	12	15	15	15	20	20
		C15	1.0401						
		11SMnPb30	1.0718						
Automaattiteräkset, seostamattomat hiilletys- ja nitratut teräkset	800 - 1000 N/mm²	S355J2	1.0577	10	12	12	12	15	15
		C60	1.0601						
		31CrMo12	1.8515						
Seostetut nuorrutus-, työkalu- ja pikateräkset	800 - 1200 N/mm²	42CrMo4	1.7225	6	8	8	8	10	10
		36CrNiMo4	1.6511						
		X36CrMo17	1.2316						
		HS 6-5-2	1.3343						

Suositeltu leikkuunopeus vc m/min										
40	-	-	-	-	-	-	-	-	-	25
30	6	6	6	6	6	6	8	10	10	20
25	10	10	10	12	12	10	12	15	15	15

VALITSE JA TILAA

TUOTESIVU

Kaikki tieto yhdellä silmäyksellä

Konekierretapit, metrinen ISO-kierre

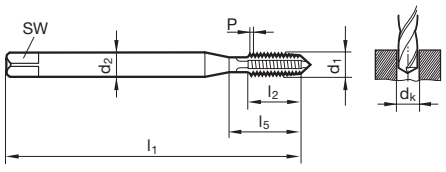
Materiaali	HSS-E
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	B
Sisäinen jäähdytys	☒

NEW

P	●
M	●
K	○
N	○
S	○
H	

Leikkuuarvosivu 21

Käyttösuositus:
- ● hyvä soveltuvuus
- ○ rajallinen soveltuvuus



DIN 2184-1 DIN 371/DIN 376 Artikkelinro. **4218**

1 Artikkelinro.

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0,400	2,800	2,100	1,60	45,000	8,000	13,500
M2,5	0,450	2,800	2,100	2,05	50,000	9,000	14,500
M3	0,500	3,500	2,700	2,50	56,000	10,000	18,000
M4	0,700	4,500	3,400	3,30	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,20	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,00	80,000	16,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	17,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	20,000	39,000
M12	1,750	9,000	7,000	10,20	110,000	24,000	49,000
M14	2,000	11,000	9,000	12,00	110,000	26,000	53,000
M16	2,000	12,000	9,000	14,00	110,000	26,000	54,000
M18	2,500	14,000	11,000	15,50	125,000	30,000	62,000
M20	2,500	16,000	12,000	17,50	140,000	32,000	62,000
M24	3,000	18,000	14,500	21,00	160,000	36,000	73,000
M30	3,500	22,000	18,000	26,50	180,000	40,000	85,000

2 Nimellismitta

Tilattaessa mainitse aina artikkelinumero ja nimellismitta esim. metriselle ISO kierteelle, koko M5 = 4218 5,000

Hinta, katso erillinen hinnastomme.

Tämän julkaisun kopioiminen kokonaisuudessaan tai osittain on kielletty. Julkaisijoita ei voida pitää vastuussa minkäänlaisista virheistä, puutteista tai muutoksista.
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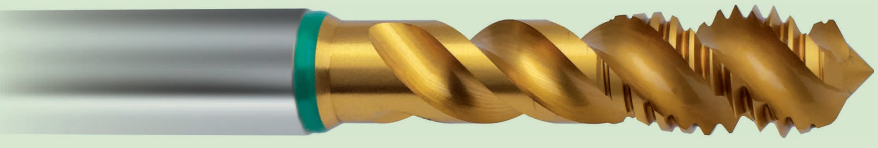
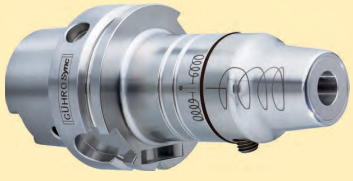




Teräs

Quickfinder ..... alkaen sivu 10
Kierretapit ..... alkaen sivu 18
Manglaavat kierretapit ..... alkaen sivu 26
Kierrejyrsimet ..... alkaen sivu 28

Ruostumaton teräs

Quickfinder ..... alkaen sivu 220
Kierretapit ..... alkaen sivu 228
Manglaavat kierretapit ..... alkaen sivu 232
Kierrejyrsimet ..... alkaen sivu 234

Harmaavalu-, pallografiittivalu- ja adusoituvalurauta

Quickfinder ..... alkaen sivu 338
Kierretapit ..... alkaen sivu 348
Manglaavat kierretapit ..... alkaen sivu 352
Kierrejyrsimet ..... alkaen sivu 354

Alumiini, ei-rautametallit ja muovit

Quickfinder ..... alkaen sivu 452
Kierretapit ..... alkaen sivu 462
Manglaavat kierretapit ..... alkaen sivu 466
Kierrejyrsimet ..... alkaen sivu 468

Erikois-, super- ja titaaniseokset

Quickfinder ..... alkaen sivu 590
Kierretapit ..... alkaen sivu 596
Manglaavat kierretapit ..... alkaen sivu 598
Kierrejyrsimet ..... alkaen sivu 600

Karkaistu teräs

Quickfinder ..... alkaen sivu 672
Kierretapit ..... alkaen sivu 676
Kierrejyrsimet ..... alkaen sivu 678

Kierreleuat ..... alkaen sivu 706

Käsikierretapit ..... alkaen sivu 721

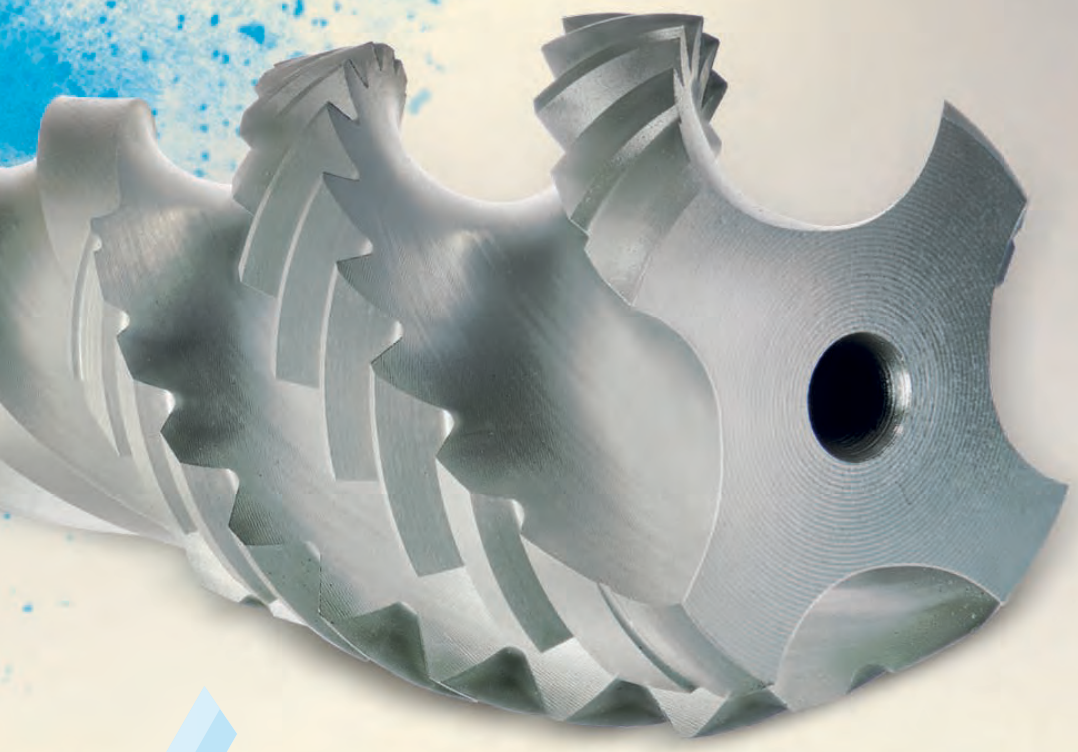
Kierteytysistukat ..... alkaen sivu 735

Tekninen osa ..... alkaen sivu 773

Sisällysluettelo ..... alkaen sivu 824

Artikkelinro. Luettelo ..... alkaen sivu 854

TERÄS



P

Yleiset rakenneteräkset, vetomurtolujuus 500 - 1200 N/mm^2, työkaluteräset, nuorrutusteräkset, pikateräkset

P TERÄS

M

ISO 2/6H

≤ 800 N/mm²

No 1
M2 - M30
Art. nro. 4218
alkaen sivu 38

M1 - M10
Art. nro. 803/815
alkaen sivu 30/31

≤ 1000 N/mm²

No 1
M2 - M30
Art. nro. 4218
alkaen sivu 38

M2 - M36
Art. nro. 2876/2877
alkaen sivu 33

≤ 1200 N/mm²

No 1
M2 - M30
Art. nro. 4218
alkaen sivu 38

M2 - M24
Art. nro. 2941/2942
alkaen sivu 43

ISO 3/6G

No 1
M1,4 - M20
Art. nro. 837/845
alkaen sivu 37

No 1
M2 - M10
Art. nro. 2990
alkaen sivu 41

MF

ISO 2/6H

No 1
M6x0,75 - M24x1,5
Art. nro. 4219
alkaen sivu 90

M3x0,35 - M40x1,5
Art. nro. 827
alkaen sivu 91

No 1
M6x0,75 - M24x1,5
Art. nro. 4219
alkaen sivu 90

M5x0,5 - M50x1,5
Art. nro. 2879
alkaen sivu 94

No 1
M6x0,75 - M24x1,5
Art. nro. 4219
alkaen sivu 90

M3x0,35 - M24x1,5
Art. nro. 2943
alkaen sivu 97

ISO 3/6G

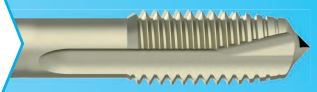
No 1
M6x0,75 - M20x1,5
Art. nro. 316
alkaen sivu 93

No 1 PARAS TYÖKALU

QUICKFINDER

UNC	UNF	G	LÄPIREIKÄ
2B	2B	-	

No 1
G1/16 - G1
Art. nro. 4220
alkaen sivu 134

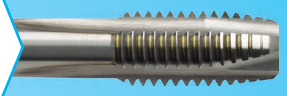


HSS-E, Sirius, muoto B

No 1
Nr. 1 - 1 1/2
Art. nro. 873/878
alkaen sivu 117

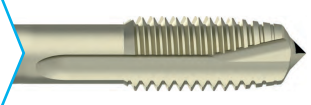
No 1
Nr. 3 - 1 1/4
Art. nro. 908
alkaen sivu 125

G1/16 - G2
Art. nro. 962
alkaen sivu 132



HSS-E, kirkas, muoto B

No 1
G1/16 - G1
Art. nro. 4220
alkaen sivu 134



HSS-E, Sirius, muoto B

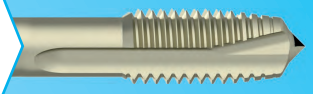
No 1
Nr. 4 - 1
Art. nro. 2881/2883
alkaen sivu 118

No 1
Nr. 6 - 1
Art. nro. 2885
alkaen sivu 130

G1/8 - G2
Art. nro. 2887
alkaen sivu 140

HSS-E, höyrykäsitelty, muoto B

No 1
G1/16 - G1
Art. nro. 4220
alkaen sivu 134



HSS-E, Sirius, muoto B

HSS-E, nitrattu, muoto B

P TERÄS

	M		MF	
	ISO 2/6H	ISO 3/6G	ISO 2/6H	ISO 3/6G
≤ 800 N/mm²	No 1 M2 - M30 Art. nro. 393 alkaen sivu 71		No 1 M6x0,75 - M24x1,5 Art. nro. 394 alkaen sivu 115	
	M2 - M30 Art. nro. 810/822 alkaen sivu 60	No 1 M3 - M24 Art. nro. 844/848 alkaen sivu 61	M3x0,35 - M30x2 Art. nro. 834 alkaen sivu 105	
≤ 1000 N/mm²	No 1 M2 - M30 Art. nro. 393 alkaen sivu 71		No 1 M6x0,75 - M24x1,5 Art. nro. 394 alkaen sivu 115	
	M2 - M36 Art. nro. 836/826 alkaen sivu 66	No 1 M2 - M20 Art. nro. 2994 alkaen sivu 73	M5x0,5 - M30x2 Art. nro. 2853 alkaen sivu 107	No 1 M8x1 - M20x1,5 Art. nro. 2999 alkaen sivu 108
≤ 1200 N/mm²	No 1 M2 - M30 Art. nro. 393 alkaen sivu 71		No 1 M6x0,75 - M24x1,5 Art. nro. 394 alkaen sivu 115	
	M2 - M30 Art. nro. 2850/2851 alkaen sivu 81	No 1 M2 - M10 Art. nro. 2985 alkaen sivu 84	M6x0,75 - M24x1,5 Art. nro. 2852 alkaen sivu 114	No 1 M8x1 - M20x1,5 Art. nro. 2988 alkaen sivu 116

No 1 PARAS TYÖKALU

QUICKFINDER

UNC	UNF	G	POHJAREIKÄ
2B	2B	-	

No 1
G1/16 - G1
Art. nro. 395
alkaen sivu 139

HSS-E, TiAlN, muoto C

No 1
Nr. 2 - 1
Art. nro. 876/881
alkaen sivu 122

No 1
Nr. 3 - 1
Art. nro. 911
alkaen sivu 128

G1/16 - G1 1/2
Art. nro. 965
alkaen sivu 136

HSS-E, kirkas, muoto C

No 1
G1/16 - G1
Art. nro. 395
alkaen sivu 139

HSS-E, TiAlN, muoto C

No 1
Nr.2 - 1
Art. nro. 2855/2857
alkaen sivu 123

No 1
Nr.10 - 7/8
Art. nro. 2859
alkaen sivu 129

G1/8 - G2
Art. nro. 2861
alkaen sivu 137

HSS-E, höyrykäsitelty, muoto C

No 1
G1/16 - G1
Art. nro. 395
alkaen sivu 139

HSS-E, TiAlN, muoto C

HSS-E, höyrykäsitelty, muoto C

P TERÄS

kierretapit ilman öljyuria

kierretapit öljyurilla

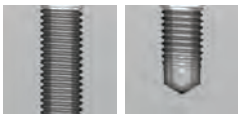
jäähdytyskanavilla

M		MF	
6HX	6GX	6HX	6GX
No 1 M1 - M20 Art. nro. 921/925 alkaen sivu 149	No 1 M2 - M10 Art. nro. 920 alkaen sivu 150	No 1 M8x1 - M20x1,5 Art. nro. 929 alkaen sivu 165	No 1 M8x1 - M18x1,5 Art. nro. 928 alkaen sivu 168
M3 - M39 Art. nro. 919/923 alkaen sivu 152	No 1 M3 - M20 Art. nro. 918/922 alkaen sivu 153	M6x0,75 - M24x1,5 Art. nro. 1275/927 alkaen sivu 169	No 1 M8x1 - M20x1,5 Art. nro. 1277/926 alkaen sivu 172
No 1 M3 - M39 Art. nro. 2012/2013 alkaen sivu 152		No 1 M6x0,75 - M20x1,5 Art. nro. 2008 alkaen sivu 170	
No 1 M3 - M20 Art. nro. 1270/1271 alkaen sivu 159	No 1 M5 - M10 Art. nro. 1713 alkaen sivu 160	No 1 M8x1 - M24x1,5 Art. nro. 1272/1273 alkaen sivu 178	No 1 M8x1 - M24x1,5 Art. nro. 1715/1716 alkaen sivu 179
No 1 M3 - M20 Art. nro. 1725/1727 alkaen sivu 159	No 1 M3 - M20 Art. nro. 1726/1728 alkaen sivu 161	No 1 M8x1 - M24x1,5 Art. nro. 1729/1731 alkaen sivu 178	No 1 M8x1 - M24x1,5 Art. nro. 1730/1732 alkaen sivu 179
No 1 M3 - M20 Art. nro. 1972/1931 alkaen sivu 163		No 1 M10x1 - M24x1,5 Art. nro. 1581 alkaen sivu 181	

No 1 PARAS TYÖKALU

QUICKFINDER

UNC	UNF	G
2BX	2BX	-

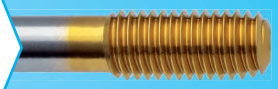


LÄPIREIKÄ
POHJAREIKÄ

No 1
Nr. 4 - 7/8
Art. nro. 2273/2274
alkaen sivu 182

No 1
Nr. 4 - 1
Art. nro. 1283/2275
alkaen sivu 183

No 1
G1/16 - G1 1/4
Art. nro. 966
alkaen sivu 184



HSS-E, TiN, muoto C

No 1
Nr. 4 - 7/8
Art. nro. 1582/1583
alkaen sivu 182

No 1
Nr. 4 - 1
Art. nro. 1584/1585
alkaen sivu 183

No 1
G1/16 - G1 1/4
Art. nro. 1586
alkaen sivu 184

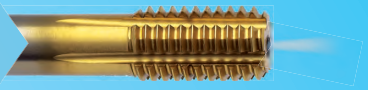
HSS-E, TiN, muoto C

HSS-E, TiCN, muoto C

MUOTO C

HSS-E-PM, TiCN, muoto C

MUOTO E



HSS-E-PM, TiN, muoto E

TKM

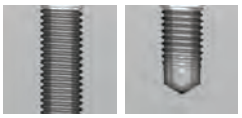
TKM, TiCN, muoto C

P TERÄS

	M UNIVERSAL	MF UNIVERSAL
1,5xD	No 1 M3 - M20 Art. nro. 3525 alkaen sivu 188	No 1 M4x0,5 - M16x1,5 Art. nro. 3527 alkaen sivu 191
2xD	No 1 M3 - M20 Art. nro. 3526 alkaen sivu 189	No 1 M4x0,5 - M16x1,5 Art. nro. 3528 alkaen sivu 192
2,5xD	No 1 M3 - M20 Art. nro. 3759 alkaen sivu 190	No 1 M4x0,5 - M16x1,5 Art. nro. 3762 alkaen sivu 193
3xD	No 1 M1,6 - M16 Art. nro. 4226 alkaen sivu 215	
universal	No 1 Ø8x0,5 - Ø20xP3,5 Art. nro. 3541 alkaen sivu 209	No 1 Ø8x0,5 - Ø20xP3,5 Art. nro. 3541 alkaen sivu 209

No 1 PARAS TYÖKALU

QUICKFINDER

UNC	UNF	G	LÄPIREIKÄ POHJAREIKÄ
UNIVERSAL	UNIVERSAL	-	
No 1 1/4 - 1/2 Art. nro. 3516 alkaen sivu 195	No 1 1/4 - 1/2 Art. nro. 3518 alkaen sivu 198	No 1 1/8 - 3/8 Art. nro. 3514 alkaen sivu 202	 TKM, TiCN
No 1 1/4 - 1/2 Art. nro. 3517 alkaen sivu 196	No 1 1/4 - 1/2 Art. nro. 3519 alkaen sivu 199	No 1 1/8 - 3/8 Art. nro. 3515 alkaen sivu 203	 TKM, TiCN
			 TKM, TiCN
			 TKM, TiCN
No 1 Ø10xUN24 - Ø20xUN7 Art. nro. 3595 alkaen sivu 211	No 1 Ø10xUN24 - Ø20xUN7 Art. nro. 3595 alkaen sivu 211	No 1 Ø10xG19 - Ø20xG11 Art. nro. 3542 alkaen sivu 212	 TKM, TiCN

TERÄS

LÄPIREIKÄ

Kierteen syvyys		**≤1,5xD**					
Materiaali		**HSS-E**					
Malli/Muoto		N/C	N/C	N/C	N/D	NR28/D	N/-
Pinta		◯	◯	◯	◯	◯	◯
Jäähdytys		☒	☒	☒	☒	☒	☒
Varren halkaisija		h9	h9	h9	h9	h9	h9
						Pora-kierretappiyhdistelmä	Mutterikierretapit
Kierteen malli	**Toleranssi**	**Artikkelinro. / sivu**					
M	4H						
	6H	995 53		806/818 50/51	801/813 49	1839 87	851 85
	6HX						
	6G			795 52			
MF	6H			830 100			
	6HX						
	6G			829 100			
UNC	2B			1977 121			
	2BX						
UNF	2B			1987 126			
	2BX						
G				963 133			
BSW							
NPT			973 146				
NPTF							
EG M	6H Mod.						
MJ	4HX						
MJF	4HX						
UNJC	3BX						
UNJF	3BX						
PG			979 147				
Jäähdytysneste:		◯/●/△	◯/●/△	◯/●/△	◯/●/△	◯/●/△	◯/●/△

= No 1

◯ = Ilma
● = Öljy
◯ = Emulsio
△ = Jäähdytysaine
☐ = Pisaravoitelu (MQL)

	Materiaaliryhmä	Vetomurtoluujuus	Materiaaliesimerkkejä	Materiaalinro.	Suositeltu leikkuunopeus vc m/min					
P	Rakenne- ja automaatti-teräkset, seostamattomat nuorrutus- ja hiiliteräkset	≤800 N/mm²	S235JR C15 11SMnPb30	1.0037 1.0401 1.0718	**6**	**6**	**6**	**6**	**6**	**6**
	Automaattiteräkset, seostamattomat hiiletys- ja nitratut teräkset	800 - 1000 N/mm²	S355J2 C60 31CrMo12	1.0577 1.0601 1.8515	-	4	-	-	-	-
	Seostetut nuorrutus-, työkalu- ja pikateräkset	800 - 1200 N/mm²	42CrMo4 36CrNiMo4 X36CrMo17 HS 6-5-2	1.7225 1.6511 1.2316 1.3343	-	-	-	-	-	-

≤1,5xD			≤3xD							
HSS-E										
N/B	N/B	N/B	NL15/D	N/B	N/B	N/B	N/B	N/B	N/B	N/B
◯	◯	◯	◯	◯	◯	◯	●	Ⓢ	Ⓒ	◯
☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
h9	h9	h9	h9	h9	h9	h9	h9	h9	h9	h9
ohutlevyjen työstöön	ohutlevyjen työstöön				mutterikierretappi					LH nousu
Artikkelinro. / sivu										
						794 36				
839/847 54	838/846 54	802 55	808/820 89	991 35	998 86	803/815 30/31	945/948 30/31	912/915 30/31	1246/1249 30/31	789/790 32
796 56	869 56	797 56				837/845 37				
						827 91	2888 91	832 91		
						316 93				
						873/878 117	2889/2890 117			
						908 125	2891 125			
						962 132	2894 132			
							2892/2893 142			
				980 147						
●/●/△	●/●/△	●/●/△	●/●/△	●/●/△	●/●/△	●/●/△	●/●/△	●/●/△	●/●/△	●/●/△

Suositeltu leikkuunopeus vc m/min										
10	10	10	10	10	6	10	10	12	12	10
-	-	-	-	6	-	6	6	8	8	6
-	-	-	-	-	-	-	-	-	-	-

TERÄS

LÄPIREIKÄ

Kierteen syvyys		≤3xD						
Materiaali		HSS-E				HSS-E-PM		
Malli/Muoto		N/B	N/B	N/B	N/B	N/B	N/B	
Pinta		○	S	A+M	A+M	S	C	
Jäähdytys		☒	☒	☒	säteitt.	☒	☒	
Varren halkaisija		h9	h9	h9	h9	h9	h9	
Kierteen malli	**Toleranssi**	**Artikkelinro. / sivu**						
M	4H							
	6H	2876/2877 33	313/315 33	2427/2428 33	2517 34	1285/1286 39	1287 40	
	6HX							
	6G	2990 41	2991 41					
MF	6H	2879 94		2878 94		1291 98		
	6HX							
	6G		2993 93					
UNC	2B	2881/2883 118						
	2BX							
UNF	2B	2885 130						
	2BX							
G		2887 140		2886 140				
BSW								
NPT								
NPTF								
EG M	6H Mod.		1010 144					
MJ	4HX							
MJF	4HX							
UNJC	3BX							
UNJF	3BX							
PG								
Jäähdytysneste:		○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	

= No 1

○ = Ilma
● = Öljy
○ = Emulsio
△ = Jäähdytysaine
☐ = Pisaravoitelu (MQL)

	Materiaaliryhmä	Vetomurtoluujuus	Materiaaliesimerkkejä	Materiaalinro.	Suositeltu leikkuunopeus vc m/min					
P	Rakenne- ja automaatti-teräkset, seostamattomat nuorrutus- ja hiiliteräkset	≤800 N/mm²	S235JR C15 11SMnPb30	1.0037 1.0401 1.0718	**12**	**15**	**15**	**15**	**20**	**20**
	Automaattiteräkset, seostamattomat hiiletys- ja nitratut teräkset	800 - 1000 N/mm²	S355J2 C60 31CrMo12	1.0577 1.0601 1.8515	**10**	**12**	**12**	**12**	**15**	**15**
	Seostetut nuorrutus-, työkalu- ja pikateräkset	800 - 1200 N/mm²	42CrMo4 36CrNiMo4 X36CrMo17 HS 6-5-2	1.7225 1.6511 1.2316 1.3343	6	8	8	8	**10**	**10**

≤3xD

TKM	HSS-E						HSS-E-PM			HSS-E
N/B	H/B	H/B	H/B	H/B	H/B	H/B	H/B	H/B	H/B	VA/B
C	○	●	●	S	C	○	○	S	C	S
☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
h6	h9	h9	h9	h9	h9	h9	h9	h9	h9	h9
										NEW
Artikkelinro. / sivu										
	804/816 43	733/734 43	2941/2942 43		1914/1915 43	791/849 44	875 46	57/58 47	1575/1576 47	
942 42										4218 38
	2465 45			2710 45						
	828 97		2943 97							
943/944 95/96										4219 90
				2983 99						
										4220 134
				980 147						
●/●/△	●/●/△	●/●/△	●/●/△	●/●/△	●/●/△	●/●/△	●/●/△	●/●/△	●/●/△	●/●/△

Suositeltu leikkuunopeus vc m/min										
40	-	-	-	-	-	-	-	-	-	**25**
30	6	6	6	6	6	6	8	10	10	**20**
25	**10**	**10**	**10**	**12**	**12**	**10**	**12**	**15**	**15**	**15**

TERÄS

POHJAREIKÄ

Kierteen syvyys		≤1,5xD							
Materiaali		HSS-E							
Malli/Muoto		N/C	N/C	N/C	NR15/C	NR15/C	NR15/C	NR15/C	NR15/C
Pinta		○	○	○	○	○	●	Ⓢ	○
Jäähdytys		☒	☒	☒	☒	☒	☒	☒	aksiaal.
Varren halkaisija		h9	h9	h9	h9	h9	h9	h9	h9
Kierteen malli	**Toleranssi**	**Artikkelinro. / sivu**							
M	4H								
	6H	995 53		806/818 50/51	992 58	809/821 57	946/949 57	913/916 57	1891/1898 59
	6HX								
	6G			795 52		799 52			
MF	6H			830 100		833 102	2838 102	1971 102	1905 104
	6HX								
	6G			829 100					
UNC	2B			1977 121		1978 119	2839/2840 120		
	2BX								
UNF	2B			1987 126		1988 127	2841 127		
	2BX								
G				963 133		964 135	2842 135		
BSW									
NPT			973 146						
NPTF									
EG M	6H Mod.								
MJ	4HX								
MJF	4HX								
UNJC	3BX								
UNJF	3BX								
PG			979 147						
Jäähdytysneste:		○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△

= No 1

○ = Ilma
● = Öljy
○ = Emulsio
△ = Jäähdytysaine
☐ = Pisaravoitelu (MQL)

	Materiaaliryhmä	Vetomurtoluujuus	Materiaaliesimerkkejä	Materiaalinro.	Suositeltu leikkuunopeus vc m/min							
P	Rakenne- ja automaatioteräkset, seostamattomat nuorrutus- ja hiiliteräkset	≤800 N/mm²	S235JR C15 11SMnPb30	1.0037 1.0401 1.0718	**6**	**6**	**6**	**8**	**8**	**8**	**10**	**8**
	Automaattiteräkset, seostamattomat hiiletys- ja nitratut teräkset	800 - 1000 N/mm²	S355J2 C60 31CrMo12	1.0577 1.0601 1.8515	-	-	-	-	-	-	-	-
	Seostetut nuorrutus-, työkalu- ja pikateräkset	800 - 1200 N/mm²	42CrMo4 36CrNiMo4 X36CrMo17 HS 6-5-2	1.7225 1.6511 1.2316 1.3343	-	-	-	-	-	-	-	-

≤1,5xD					≤2xD					≤3xD				
HSS-E			HSS-E-PM		HSS-E		HSS-E-PM			HSS-E				
NR15/C	NR15/C	NR15/E	HR15/C	HR15/C	H/C	H/C	H/C	H/E	HR15/C	NR40/C	NR40/C	NR40/C	NR40/C	NR40/C
S	C	C	○	A	C	C	C	C	C	○	○	○	●	S
aksiaal.	☒	☒	☒	☒	aksiaal.	aksiaal.	aksiaal.	aksiaal.	aksiaal.	☒	☒	☒	☒	☒
h9	h9	h9	h9	h9	h9	h9	h9	h9	h9	h9	h9	h9	h9	h9
					pitkälastuinen	pitkälastuinen, ylipitkä	pitkälastuinen	pitkälastuinen	pitkälastuinen, kirkkaat lastu-urat		ylipitkä			
Artikkelinro. / sivu														
2436/2437 59	4154 48	4155 48	872/935 76	1577/1578 76						993 65	888 88	810/822 60	783/784 60	914/917 60
					778 79	779 80	302/297 78	1091/4165 78	1188/1194 77					
												844/848 61		
	4156 103	4157 103	874 112							1970 106		834 105	2843 105	852 105
							1090 113	1007 113	1200 112					
												876/881 122	2844/2845 122	
												911 128	2846 128	
		4158 135										965 136	2849 136	
													2847/2848 143	
○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△/□	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△

Suositeltu leikkuunopeus vc m/min														
10	15	15	-	-	-	-	-	-	-	8	8	8	8	12
-	10	10	-	-	15	15	15	15	12	-	-	-	-	-
-	8	8	4	6	12	12	12	12	10	-	-		-	-

TERÄS

POHJAREIKÄ

	Kierteen syvyys	≤3xD							
	Materiaali	HSS-E							
	Malli/Muoto	NR40/C	NL40/C	NR40/C	NR40/C	NR40/C	NR40/E	NR40/C	NR40/C
	Pinta	C	○	○	S	○	○	●	S
	Jäähdytys	☒	☒	aksiaal.	aksiaal.	☒	☒	☒	☒
	Varren halkaisija	h9	h9	h9	h9	h9	h9	h9	h9

Kierteen malli	Toleranssi	Artikkelinro. / sivu							
M	4H								
	6H	1252/1254 60	786/787 62	1893 63	2438/2439 64	889/890 66	2790/2791 69	836/826 66	2440/2441 66
	6HX								
	6G							2994 73	2995 73
MF	6H					2424 107	2792 107	2853 107	
	6HX								
	6G					2998 108		2999 108	1049 108
UNC	2B					2854/2856 123		2855/2857 123	
	2BX								
UNF	2B							2859 129	
	2BX								
G						2860 137		2861 137	
BSW									
NPT									
NPTF									
EG M	6H Mod.								1011 145
MJ	4HX								
MJF	4HX								
UNJC	3BX								
UNJF	3BX								
PG									
Jäähdytysneste:		○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△

= No 1

○ = Ilma
● = Öljy
● = Emulsio
△ = Jäähdytysaine
☐ = Pisaravoitelu (MQL)

	Materiaaliryhmä	Vetomurtoluujuus	Materiaaliesimerkkejä	Materiaalinro.	Suositeltu leikkuunopeus vc m/min							
P	Rakenne- ja automaatioteräkset, seostamattomat nuorrutus- ja hiiliteräkset	≤800 N/mm²	S235JR	1.0037	12	8	8	12	10	10	10	15
			C15	1.0401								
			11SMnPb30	1.0718								
	Automaattiteräkset, seostamattomat hiiletys- ja nitratut teräkset	800 - 1000 N/mm²	S355J2	1.0577	-	-	-	-	8	8	8	10
			C60	1.0601								
			31CrMo12	1.8515								
	Seostetut nuorrutus-, työkalu- ja pikateräkset	800 - 1200 N/mm²	42CrMo4	1.7225	-	-	-	-	4	4	6	8
			36CrNiMo4	1.6511								
			X36CrMo17	1.2316								
			HS 6-5-2	1.3343								

≤3xD

HSS-E		HSS-E-PM				HSS-E						HSS-E-PM		HSS-E
NR40/C	NR40/C	NR40/C	NR40/C	NR50/C	NR50/C	HR40/C	HR40/C	HR40/C	HR40/C	HR40/C	HR40/C	VAR50/C	VAR50/C	VAR45/C
S	S	S	C	S	C	○	○	●	S	C	○	S	C	A
☒	☒	☒	☒	☒	aksiaal.	☒	☒	☒	☒	☒	aksiaal.	☒	aksiaal.	☒
h9	h9	h9	h9	h9	h9	h9	h9	h9	h9	h9	h9	h6	h6	h9
työkalut kärjen korjauksella	ylipitkä											synkro-tapit	synkro-tapit	
Artikkelinro. / sivu														
174/196 70		1288/1289 72	1290 73	767/1098 74	1152/1293 74	811/823 81	947/950 81	2850/2851 81	361/362 82	1916/1917 82	1894/1901 83			
	4153 67											761/763 75	1139/1142 75	393 71
								2985 84	2986 84					
273 109		1292 109		1100 110	1294 110	835 114	2940 114	2852 114						
												764 111	1144 111	394 115
								2988 116	2989 116					
1837 124														
1838 131														
937 141												4159 138		395 139
○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△/□	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△/□	○/●/△

Suositeltu leikkuunopeus vc m/min														
15	15	15	15	15	20	-	-	-	-	-	-	15	20	20
10	10	10	10	12	15	-	-	-	-	-	-	12	15	15
8	8	8	8	8	10	6	6	6	8	10	6	8	10	10

TERÄS

LÄPIREIÄT JA POHJA-REIÄT

Kierteen syvyys		≤1,5xD			≤3xD		
Materiaali		HSS-E	HSS-E-PM	TKM	HSS-E		
Malli/Muoto		N/C	N/C	N/C	N/C	N/C	N/C
Pinta		S	S	S	S	C	P
Jäähdytys		☒	☒	aksiaal.	☒	☒	☒
Varren halkaisija		h9	h9	h6	h9	h9	h9
Kierteen malli	**Toleranssi**	**Artikkelinro. / sivu**					
M	4H						
	6HX	921/925 149	1255/1256 149	2518 151	919/923 152	2012/2013 152	1587/1589 152
	6G						
	6GX	920 150	903/952 149		918/922 153		1588/1590 153
MF	6HX	929 165	1257/1258 166		1275/927 169	2008 170	1591/1593 169
	6G						
	6GX	928 168	1740 167		1277/926 172		1592 171
UNC	2B						
	2BX	2273/2274 182			1582/1583 182		
UNF	2B						
	2BX	1283/2275 183			1584/1585 183		
G		966 184			1586 184		
BSW							
NPT							
NPTF							
EG M	6H Mod.						
MJ	4HX						
MJF	4HX						
UNJC	3BX						
UNJF	3BX						
PG							
Jäähdytysneste:		○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	●/△

= No 1

○ = Ilma
● = Öljy
○ = Emulsio
△ = Jäähdytysaine
☐ = Pisaravoitelu (MQL)

	Materiaaliryhmä	Vetomurtolujuus	Materiaaliesimerkkejä	Materiaalinro.	Suositeltu leikkuunopeus vc m/min					
P	Rakenne- ja automaatti-teräkset, seostamattomat nuorrutus- ja hiiliteräkset	≤800 N/mm²	S235JR C15 11SMnPb30	1.0037 1.0401 1.0718	**12**	**15**	**35**	**15**	**15**	**15**
	Automaattiteräkset, seostamattomat hiiletys- ja nitratut teräkset	800 - 1000 N/mm²	S355J2 C60 31CrMo12	1.0577 1.0601 1.8515	**12**	**15**	**35**	**15**	**15**	**15**
	Seostetut nuorrutus-, työ-kalu- ja pikateräkset	800 - 1200 N/mm²	42CrMo4 36CrNiMo4 X36CrMo17 HS 6-5-2	1.7225 1.6511 1.2316 1.3343	10	**12**	**25**	**12**	**12**	**12**

≤3xD

HSS-E		HSS-E-PM								TKM	
N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/E	N/C	N/E
S	C	S	S	P	S	S	C	A	S	C	C
aksiaal.	säteitt.	☒	☒	☒	säteitt.	aksiaal.	säteitt.	säteitt.	aksiaal.	säteitt.	säteitt.
h9	h9	h9	h9	h9	h9	h9	h9	h9	h9	h6	h6
Artikkelinro. / sivu											
2442/2444 156	2446/2448 156	322/339 154	1266/1267 155	1599/1707 155	323/342 158	4143 162	1270/1271 159	1717/1719 159	1725/1727 159	1972/1931 163	1927 164
2443/2445 156	2447 157			1705/1708 153			1713 160	1718/1720 161	1726/1728 161		
		333 173	1268/1269 174	1711 175	338 177	4145 180	1272/1273 178	1721/1723 178	1729/1731 178	1581 181	
				1710/1712 176			1715/1716 179		1730/1732 179		
○/●/△	○/●/△/□	○/●/△	○/●/△	●/△	○/●/△/□	○/●/△	○/●/△/□	○/●/△/□	○/●/△	○/●/△/□	○/●/△/□

Suositeltu leikkuunopeus vc m/min											
15	15	20	20	20	20	20	20	20	20	35	35
15	15	20	20	20	20	20	20	20	20	35	35
12	12	15	15	15	15	15	15	15	15	25	25

TERÄS

LÄPIREIÄT JA POHJA-REIÄT

Kierteen syvyys	≤2xD				≤2,5xD		≤1,5xD	
Materiaali		TKM						
Malli	TM SP	TM SP	TM SP	TM SP	TM SP	TM SP	TMC SP	TMC SP
Pinta	C	C	C	C	C	C	C	C
Jäähdytys	☒	☒	aksiaal.	aksiaal.	aksiaal.	aksiaal.	aksiaal.	aksiaal.
Varren muoto	HA	HB	HA	HB	HA	HB	HA	HA
Nousu	27°	27°	27°	27°	27°	27°	10°	10°

Kierteen malli	Artikkelinro. / sivu							
M	4132 186	4133 186	3737 186	3743 186	3735 187	3740 187	3525 188	3543 188
MF			3737 186	3743 186			3527 191	3545 191
UNC			4134 194	4135 194			3516 195	3534 195
UNF			4136 197	4137 197			3518 198	3536 198
G			3745 200	3748 200	3746 201	3750 201	3514 202	3529 202
BSW								
NPT			3753 205	3754 205			3520 206	3538 206
NPTF			3756 207	3757 207			3521 208	3539 208
EG M	EG-kierteet voidaan kaiken mallisilla ja kokoisilla kierrejyrsimillä							
MJ								
MJF								
UNJC								
UNJF								
PG								
Jäähdytysneste:	○/●	○/●	○/●	○/●	○/●	○/●	○/●	○/●

= No 1

○ = Ilma
● = Öljy
○ = Emulsio
△ = Jäähdytysaine
☐ = Pisaravoitelu (MQL)

	Materiaaliryhmä	Vetomurtolujuus	Materiaaliesimerkkejä	Materiaalinro.	Käyttösuositus							
P	Rakenne- ja automaatti-teräkset, seostamattomat nuorrutus- ja hiiliteräkset	≤800 N/mm²	S235JR C15 11SMnPb30	1.0037 1.0401 1.0718	++	++	++	++	++	++	++	++
	Automaattiteräkset, seostamattomat hiiletys- ja nitratut teräkset	800 - 1000 N/mm²	S355J2 C60 31CrMo12	1.0577 1.0601 1.8515	++	++	++	++	++	++	++	++
	Seostetut nuorrutus-, työ-kalu- ja pikateräkset	800 - 1200 N/mm²	42CrMo4 36CrNiMo4 X36CrMo17 HS 6-5-2	1.7225 1.6511 1.2316 1.3343	+	+	+	+	+	+	++	++

≤2xD		≤2,5xD		universal				≤3xD	
TKM									
TMC SP	TMC SP	TMC SP	TMC SP	TMU SP	TMU SP	TMU SP	TMU SP	MTM 3 SP	MTM 1 SP
C	C	C	C	C	C	C	C	C	C
aksiaal.	aksiaal.	aksiaal.	aksiaal.	aksiaal.	aksiaal.	aksiaal.	aksiaal.	☒	☒
HA	HB	HA	HB	HA	HB	HA	HB	HA	HA
10°	10°	27°	27°	15°	15°	15°	15°	15°	15°
Artikkelinro. / sivu									
3526 189	3544 189	3759 190	3760 190	3541 209	3556 209	4162 210	4163 210	4226 215	4225 217
3528 192	3546 192	3762 193	3763 193	3541 209	3556 209	4162 210	4163 210		4225 217
3517 196	3535 196			3595 211	3596 211				
3519 199	3537 199			3595 211	3596 211				
3515 203	3533 203	3765 204	3766 204	3542 212	3557 212	3542 212	3557 212	4228 216	
				3768 213	3769 213				
				3772 214	3773 214				
EG-kierteet voidaan kaiken mallisilla ja kokoisilla kierrejyrsimillä									
○/●	○/●	○/●	○/●	○/●	○/●	○/●	○/●	○/●	○/●

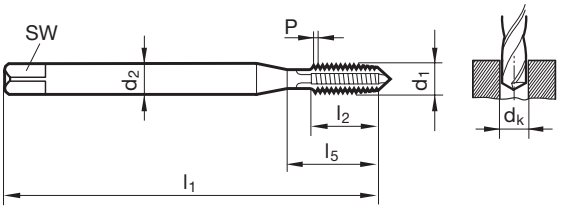
Käyttösuositus									
++	++	++	++	++	++	++	++	++	++
++	++	++	++	++	++	++	++	++	++
++	++	++	++	++	++	++	++	++	++

Konekierretapit, metrinen ISO-kierre

Materiaali	HSS-E			
Ø-Toleranssi	ISO2/6H	ISO2/6H	ISO2/6H	ISO2/6H
Pinta	○	S	●	C
Malli	N	N	N	N
Muoto	B	B	B	B
Sisäinen jäähdytys	✕	✕	✕	✕

P	≤ 800
M	
K	
N	
S	
H	

Leikkuuarvosivu 19



DIN 2184-1 DIN 371	Artikkelinro.	803	912	945	1246

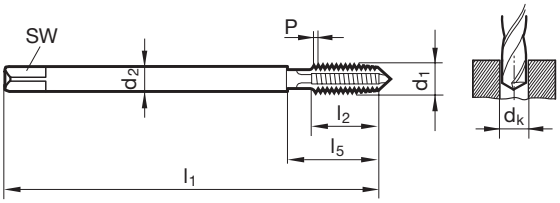
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M1	0,250	2,500	2,100	0,75	40,000	5,500	
M1,2	0,250	2,500	2,100	0,95	40,000	5,500	
M1,4	0,300	2,500	2,100	1,10	40,000	7,000	
M1,6	0,350	2,500	2,100	1,25	40,000	8,000	
M1,7	0,350	2,500	2,100	1,35	40,000	8,000	
M1,8	0,350	2,500	2,100	1,45	40,000	8,000	
M2	0,400	2,800	2,100	1,60	45,000	8,000	13,500
M2,2	0,450	2,800	2,100	1,75	45,000	9,000	14,500
M2,3	0,400	2,800	2,100	1,90	45,000	9,000	14,500
M2,5	0,450	2,800	2,100	2,05	50,000	9,000	14,500
M2,6	0,450	2,800	2,100	2,15	50,000	9,000	14,500
M3	0,500	3,500	2,700	2,50	56,000	10,000	18,000
M3,5	0,600	4,000	3,000	2,90	56,000	12,000	20,000
M4	0,700	4,500	3,400	3,30	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,20	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,00	80,000	16,000	30,000
M7	1,000	7,000	5,500	6,00	80,000	16,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	17,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	20,000	39,000

Konekierretapit, metrinen ISO-kierre

Materiaali	HSS-E			
Ø-Toleranssi	ISO2/6H	ISO2/6H	ISO2/6H	ISO2/6H
Pinta	○	S	●	C
Malli	N	N	N	N
Muoto	B	B	B	B
Sisäinen jäähdytys	✕	✕	✕	✕

P	≤ 800
M	
K	
N	
S	
H	

Leikkuuarvosivu 19



DIN 2184-1 DIN 376 — Artikkelinro. **815** **915** **948** **1249**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M1,6	0,350	1,200		1,25	40,000	8,000	
M1,8	0,350	1,200		1,45	40,000	8,000	
M2	0,400	1,400		1,60	45,000	8,000	13,500
M2,2	0,450	1,600		1,75	45,000	9,000	14,500
M2,3	0,400	1,600		1,90	45,000	9,000	14,500
M2,5	0,450	1,800		2,05	50,000	9,000	14,500
M2,6	0,450	1,800		2,15	50,000	9,000	14,500
M3	0,500	2,200		2,50	56,000	10,000	18,000
M3,5	0,600	2,500	2,100	2,90	56,000	12,000	20,000
M4	0,700	2,800	2,100	3,30	63,000	12,000	21,000
M5	0,800	3,500	2,700	4,20	70,000	14,000	25,000
M6	1,000	4,500	3,400	5,00	80,000	16,000	30,000
M7	1,000	5,500	4,300	6,00	80,000	16,000	30,000
M8	1,250	6,000	4,900	6,80	90,000	17,000	35,000
M10	1,500	7,000	5,500	8,50	100,000	20,000	39,000
M12	1,750	9,000	7,000	10,20	110,000	24,000	49,000
M14	2,000	11,000	9,000	12,00	110,000	26,000	53,000
M16	2,000	12,000	9,000	14,00	110,000	26,000	54,000
M18	2,500	14,000	11,000	15,50	125,000	30,000	62,000
M20	2,500	16,000	12,000	17,50	140,000	32,000	62,000
M22	2,500	18,000	14,500	19,50	140,000	32,000	62,000
M24	3,000	18,000	14,500	21,00	160,000	36,000	73,000
M27	3,000	20,000	16,000	24,00	160,000	36,000	73,000
M30	3,500	22,000	18,000	26,50	180,000	40,000	85,000
M33	3,500	25,000	20,000	29,50	180,000	40,000	91,000
M36	4,000	28,000	22,000	32,00	200,000	50,000	102,000
M39	4,000	32,000	24,000	35,00	200,000	50,000	107,000
M42	4,500	32,000	24,000	37,50	200,000	56,000	112,000
M45	4,500	36,000	29,000	40,50	220,000	58,000	117,000
M48	5,000	36,000	29,000	43,00	250,000	65,000	127,000
M52	5,000	40,000	32,000	47,00	250,000	65,000	128,000

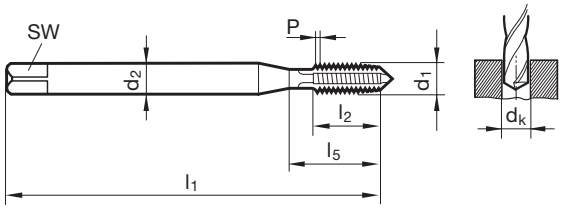
Konekierretapit, metrinen ISO-kierre

Materiaali	**HSS-E**
Ø-Toleranssi	ISO2/6H
Pinta	◯
Malli	N-LH
Muoto	B
Sisäinen jäähdytys	⊠

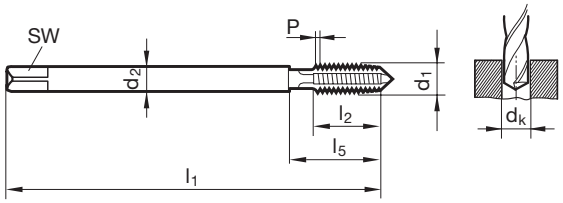
P	≤ 800
M	
K	
N	
S	
H	

Leikkuuarvosivu 19

DIN 371



DIN 376



DIN 2184-1 DIN 371 Artikkelinro. **789**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,50	56,000	10,000	18,000
M4	0,700	4,500	3,400	3,30	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,20	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,00	80,000	16,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	17,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	20,000	39,000

DIN 2184-1 DIN 376 Artikkelinro. **790**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	10,20	110,000	24,000	49,000
M14	2,000	11,000	9,000	12,00	110,000	26,000	53,000
M16	2,000	12,000	9,000	14,00	110,000	26,000	54,000
M18	2,500	14,000	11,000	15,50	125,000	30,000	62,000
M20	2,500	16,000	12,000	17,50	140,000	32,000	62,000

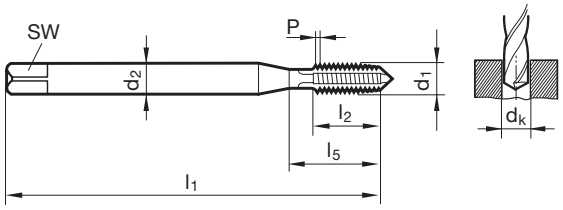
Konekierretapit, metrinen ISO-kierre

Materiaali	HSS-E		
Ø-Toleranssi	ISO2/6H	ISO2/6H	ISO2/6H
Pinta	S	A+M	
Malli	N	N	N
Muoto	B	B	B
Sisäinen jäähdytys			

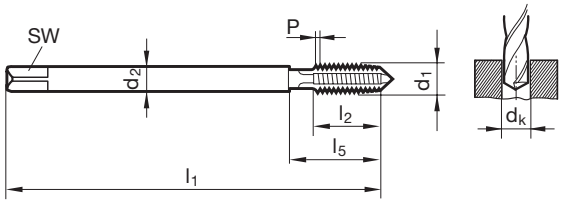
P	≤ 1000
M	○
K	
N	
S	
H	

Leikkuuarvosivu 20

DIN 371



DIN 376



DIN 2184-1 DIN 371 — Artikkelinro. **313** **2427** **2876**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0,400	2,800	2,100	1,60	45,000	8,000	13,500
M3	0,500	3,500	2,700	2,50	56,000	10,000	18,000
M3,5	0,600	4,000	3,000	2,90	56,000	12,000	20,000
M4	0,700	4,500	3,400	3,30	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,20	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,00	80,000	16,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	17,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	20,000	39,000

DIN 2184-1 DIN 376 — Artikkelinro. **315** **2428** **2877**

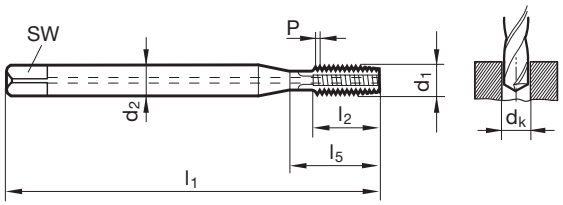
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	2,200		2,50	56,000	10,000	18,000
M4	0,700	2,800	2,100	3,30	63,000	12,000	21,000
M5	0,800	3,500	2,700	4,20	70,000	14,000	25,000
M6	1,000	4,500	3,400	5,00	80,000	16,000	30,000
M8	1,250	6,000	4,900	6,80	90,000	17,000	35,000
M10	1,500	7,000	5,500	8,50	100,000	20,000	39,000
M12	1,750	9,000	7,000	10,20	110,000	24,000	49,000
M14	2,000	11,000	9,000	12,00	110,000	26,000	53,000
M16	2,000	12,000	9,000	14,00	110,000	26,000	54,000
M18	2,500	14,000	11,000	15,50	125,000	30,000	62,000
M20	2,500	16,000	12,000	17,50	140,000	32,000	62,000
M22	2,500	18,000	14,500	19,50	140,000	32,000	62,000
M24	3,000	18,000	14,500	21,00	160,000	36,000	73,000
M27	3,000	20,000	16,000	24,00	160,000	36,000	73,000
M30	3,500	22,000	18,000	26,50	180,000	40,000	85,000
M36	4,000	28,000	22,000	32,00	200,000	50,000	102,000

Jäähdytyskanavatapit, metrinen ISO kierre

Materiaali	**HSS-E**
Ø-Toleranssi	ISO2/6H
Pinta	A+M
Malli	N
Muoto	B
Sisäinen jäähdytys	

P	≤ 1000
M	○
K	
N	
S	
H	

Leikkuuarvosivu 20



DIN 2184-1 DIN 371 Artikkelinro. **2517**

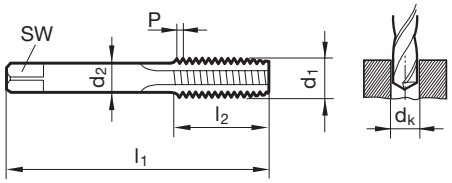
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0,800	6,000	4,900	4,20	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,00	80,000	16,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	17,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	20,000	39,000

Konekierretapit, metrinen ISO-kierre

Materiaali	**HSS-E**
Ø-Toleranssi	ISO2/6H
Pinta	◯
Malli	N
Muoto	B
Sisäinen jäähdytys	⊠

P	≤ 800
M	
K	
N	
S	
H	

Leikkuuarvosivu 19



DIN 2184-2 DIN 352 Artikkelinro. **991**

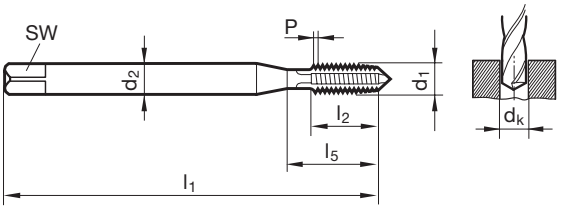
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0,400	2,800	2,100	1,60	36,000	8,000	
M2,2	0,450	2,800	2,100	1,75	36,000	9,000	
M2,3	0,400	2,800	2,100	1,90	36,000	9,000	
M2,5	0,450	2,800	2,100	2,05	40,000	9,000	
M2,6	0,450	2,800	2,100	2,15	40,000	9,000	
M3	0,500	3,500	2,700	2,50	40,000	10,000	18,000
M3,5	0,600	4,000	3,000	2,90	45,000	12,000	20,000
M4	0,700	4,500	3,400	3,30	45,000	12,000	21,000
M4,5	0,750	6,000	4,900	3,70	50,000	14,000	24,000
M5	0,800	6,000	4,900	4,20	50,000	14,000	24,000
M6	1,000	6,000	4,900	5,00	56,000	16,000	27,000
M7	1,000	6,000	4,900	6,00	56,000	16,000	32,000
M8	1,250	6,000	4,900	6,80	63,000	17,000	32,000
M9	1,250	7,000	5,500	7,80	63,000	17,000	32,000
M10	1,500	7,000	5,500	8,50	70,000	20,000	36,000
M11	1,500	8,000	6,200	9,50	70,000	20,000	36,000
M12	1,750	9,000	7,000	10,20	75,000	24,000	40,000
M14	2,000	11,000	9,000	12,00	80,000	26,000	42,000
M16	2,000	12,000	9,000	14,00	80,000	26,000	45,000
M18	2,500	14,000	11,000	15,50	95,000	30,000	50,000
M20	2,500	16,000	12,000	17,50	95,000	32,000	50,000
M22	2,500	18,000	14,500	19,50	100,000	32,000	50,000
M24	3,000	18,000	14,500	21,00	110,000	36,000	60,000

Konekierretapit, metrinen ISO-kierre

Materiaali	**HSS-E**
Ø-Toleranssi	ISO1/4H
Pinta	◯
Malli	N
Muoto	B
Sisäinen jäähdytys	⊠

P	≤ 800
M	
K	
N	
S	
H	

Leikkuuarvosivu 19



DIN 2184-1 DIN 371 Artikkelinro. **794**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0,400	2,800	2,100	1,60	45,000	8,000	13,500
M2,5	0,450	2,800	2,100	2,05	50,000	9,000	14,500
M3	0,500	3,500	2,700	2,50	56,000	10,000	18,000
M4	0,700	4,500	3,400	3,30	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,20	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,00	80,000	16,000	30,000
M7	1,000	7,000	5,500	6,00	80,000	16,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	17,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	20,000	39,000

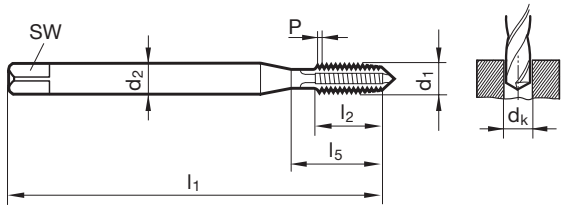
Konekierretapit, metrinen ISO-kierre

Materiaali	HSS-E
Ø-Toleranssi	ISO3/6G
Pinta	◯
Malli	N
Muoto	B
Sisäinen jäähdytys	

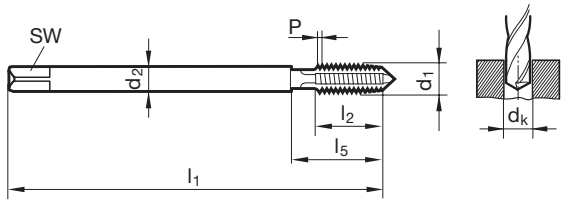
P	≤ 800
M	
K	
N	
S	
H	

Leikkuuarvosivu 19

DIN 371



DIN 376



DIN 2184-1 DIN 371 Artikkelinro. **837**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M1,4	0,300	2,500	2,100	1,10	40,000	7,000	
M1,6	0,350	2,500	2,100	1,25	40,000	8,000	
M2	0,400	2,800	2,100	1,60	45,000	8,000	13,500
M2,2	0,450	2,800	2,100	1,75	45,000	9,000	14,500
M2,5	0,450	2,800	2,100	2,05	50,000	9,000	14,500
M3	0,500	3,500	2,700	2,50	56,000	10,000	18,000
M3,5	0,600	4,000	3,000	2,90	56,000	12,000	20,000
M4	0,700	4,500	3,400	3,30	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,20	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,00	80,000	16,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	17,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	20,000	39,000

DIN 2184-1 DIN 376 Artikkelinro. **845**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0,400	1,400	1,250	1,60	45,000	8,000	13,500
M3	0,500	2,200	1,800	2,50	56,000	10,000	18,000
M4	0,700	2,800	2,100	3,30	63,000	12,000	21,000
M5	0,800	3,500	2,700	4,20	70,000	14,000	25,000
M6	1,000	4,500	3,400	5,00	80,000	16,000	30,000
M8	1,250	6,000	4,900	6,80	90,000	17,000	35,000
M10	1,500	7,000	5,500	8,50	100,000	20,000	39,000
M12	1,750	9,000	7,000	10,20	110,000	24,000	49,000
M14	2,000	11,000	9,000	12,00	110,000	26,000	53,000
M16	2,000	12,000	9,000	14,00	110,000	26,000	54,000
M20	2,500	16,000	12,000	17,50	140,000	32,000	62,000

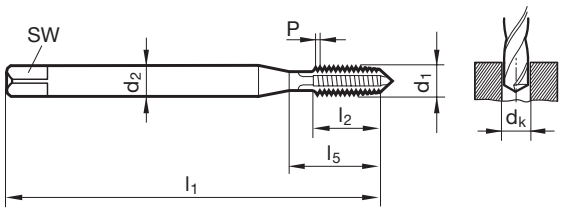
Konekierretapit, metrinen ISO-kierre

Materiaali	HSS-E
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	B
Sisäinen jäähdytys	

NEW

P	•
M	•
K	○
N	○
S	○
H	

Leikkuuarvosivu 21



DIN 2184-1 DIN 371/DIN 376 Artikkelinro. **4218**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0,400	2,800	2,100	1,60	45,000	8,000	13,500
M2,5	0,450	2,800	2,100	2,05	50,000	9,000	14,500
M3	0,500	3,500	2,700	2,50	56,000	10,000	18,000
M4	0,700	4,500	3,400	3,30	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,20	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,00	80,000	16,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	17,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	20,000	39,000
M12	1,750	9,000	7,000	10,20	110,000	24,000	49,000
M14	2,000	11,000	9,000	12,00	110,000	26,000	53,000
M16	2,000	12,000	9,000	14,00	110,000	26,000	54,000
M18	2,500	14,000	11,000	15,50	125,000	30,000	62,000
M20	2,500	16,000	12,000	17,50	140,000	32,000	62,000
M24	3,000	18,000	14,500	21,00	160,000	36,000	73,000
M30	3,500	22,000	18,000	26,50	180,000	40,000	85,000

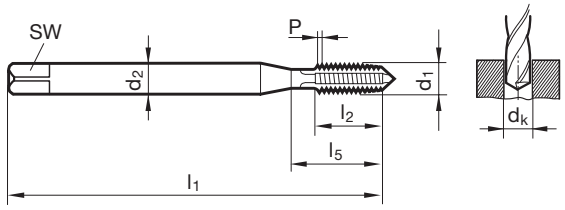
Konekierretapit, metrinen ISO-kierre

Materiaali	HSS-E-PM
Ø-Toleranssi	ISO2/6H
Pinta	S
Malli	N
Muoto	B
Sisäinen jäähdytys	

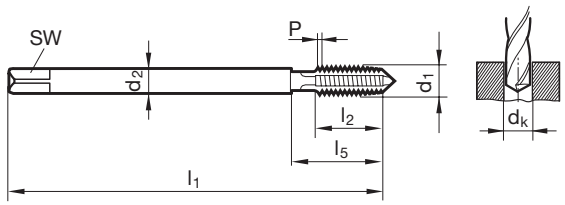
P	≤ 1000
M	○
K	
N	
S	
H	

Leikkuuarvosivu 20

DIN 371



DIN 376



DIN 2184-1 DIN 371 Artikkelinro. **1285**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0,400	2,800	2,100	1,60	45,000	8,000	13,500
M3	0,500	3,500	2,700	2,50	56,000	10,000	18,000
M4	0,700	4,500	3,400	3,30	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,20	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,00	80,000	16,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	17,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	20,000	39,000

DIN 2184-1 DIN 376 Artikkelinro. **1286**

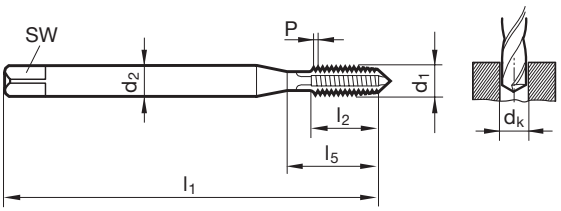
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	10,20	110,000	24,000	49,000
M14	2,000	11,000	9,000	12,00	110,000	26,000	53,000
M16	2,000	12,000	9,000	14,00	110,000	26,000	54,000
M18	2,500	14,000	11,000	15,50	125,000	30,000	62,000
M20	2,500	16,000	12,000	17,50	140,000	32,000	62,000

Konekierretapit, metrinen ISO-kierre

P	≤ 1000
M	○
K	
N	
S	
H	

Leikkuuarvosivu 20

Materiaali	**HSS-E-PM**
Ø-Toleranssi	ISO2/6H
Pinta	C
Malli	N
Muoto	B
Sisäinen jäähdytys	



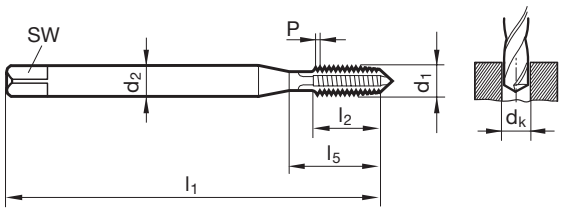
DIN 2184-1 DIN 371 Artikkelinro. **1287**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,50	56,000	10,000	18,000
M4	0,700	4,500	3,400	3,30	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,20	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,00	80,000	16,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	17,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	20,000	39,000
M12	1,750	9,000	7,000	10,20	110,000	24,000	49,000
M16	2,000	12,000	9,000	14,00	110,000	26,000	54,000
M20	2,500	16,000	12,000	17,50	140,000	32,000	62,000

Konekierretapit, metrinen ISO-kierre

P	≤ 1000	Leikkuuarvosivu 20
M	○	
K		
N		
S		
H		

Materiaali	HSS-E	
Ø-Toleranssi	ISO3/6G	ISO3/6G
Pinta		S
Malli	N	N
Muoto	B	B
Sisäinen jäähdytys		



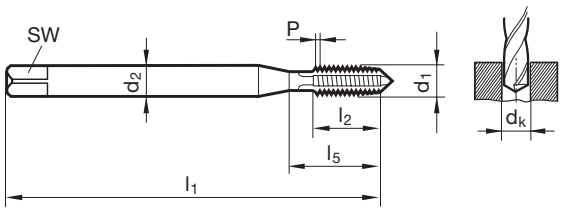
DIN 2184-1 DIN 371 Artikkelinro. **2990** **2991**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0,400	2,800	2,100	1,60	45,000	8,000	13,500
M3	0,500	3,500	2,700	2,50	56,000	10,000	18,000
M4	0,700	4,500	3,400	3,30	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,20	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,00	80,000	16,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	17,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	20,000	39,000

Konekierretapit, metrinen ISO-kierre

P	≤ 1000	Leikkuuarvosivu 21
M		
K		
N		
S		
H		

Materiaali	**TKM**
Ø-Toleranssi	6HX
Pinta	C
Malli	N
Muoto	B
Sisäinen jäähdytys	



DIN 2184-1 ~DIN 371 Artikkelinro. **942**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0,800	6,000	4,900	4,20	70,000	12,000	25,000
M6	1,000	6,000	4,900	5,00	80,000	15,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	19,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	22,500	39,000
M12	1,750	12,000	9,000	10,20	110,000	26,500	49,000

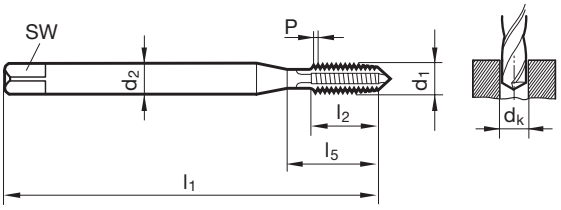
Konekierretapit, metrinen ISO-kierre

Materiaali	HSS-E			
Ø-Toleranssi	ISO2/6H	ISO2/6H	ISO2/6H	ISO2/6H
Pinta			C	
Malli	H	H	H	H
Muoto	B	B	B	B
Sisäinen jäähdytys				

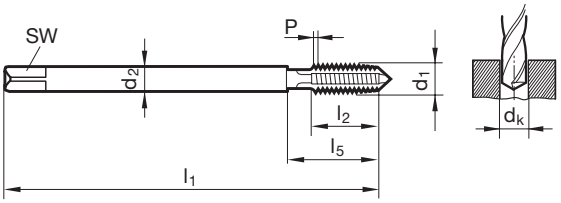
P	≤ 1200
M	
K	
N	
S	
H	

Leikkuuarvosivu 21

DIN 371



DIN 376



DIN 2184-1 DIN 371	Artikkelinro.	733	804	1914	2941

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0,400	2,800	2,100	1,60	45,000	8,000	13,500
M2,2	0,450	2,800	2,100	1,75	45,000	9,000	14,500
M2,3	0,400	2,800	2,100	1,90	45,000	9,000	14,500
M2,5	0,450	2,800	2,100	2,05	50,000	9,000	14,500
M2,6	0,450	2,800	2,100	2,15	50,000	9,000	14,500
M3	0,500	3,500	2,700	2,50	56,000	10,000	18,000
M3,5	0,600	4,000	3,000	2,90	56,000	12,000	20,000
M4	0,700	4,500	3,400	3,30	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,20	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,00	80,000	16,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	17,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	20,000	39,000

DIN 2184-1 DIN 376	Artikkelinro.	734	816	1915	2942

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	2,200	1,800	2,50	56,000	10,000	18,000
M4	0,700	2,800	2,100	3,30	63,000	12,000	21,000
M5	0,800	3,500	2,700	4,20	70,000	14,000	25,000
M6	1,000	4,500	3,400	5,00	80,000	16,000	30,000
M8	1,250	6,000	4,900	6,80	90,000	17,000	35,000
M10	1,500	7,000	5,500	8,50	100,000	20,000	39,000
M12	1,750	9,000	7,000	10,20	110,000	24,000	49,000
M14	2,000	11,000	9,000	12,00	110,000	26,000	53,000
M16	2,000	12,000	9,000	14,00	110,000	26,000	54,000
M18	2,500	14,000	11,000	15,50	125,000	30,000	62,000
M20	2,500	16,000	12,000	17,50	140,000	32,000	62,000
M24	3,000	18,000	14,500	21,00	160,000	36,000	73,000

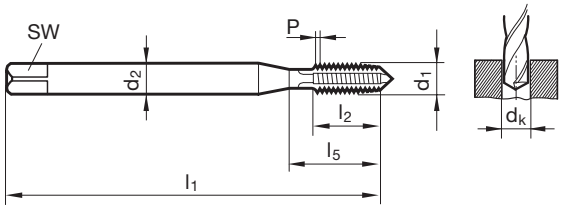
Konekierretapit, metrinen ISO-kierre

Materiaali	**HSS-E**
Ø-Toleranssi	ISO2/6H
Pinta	◯
Malli	H AZ
Muoto	B
Sisäinen jäähdytys	

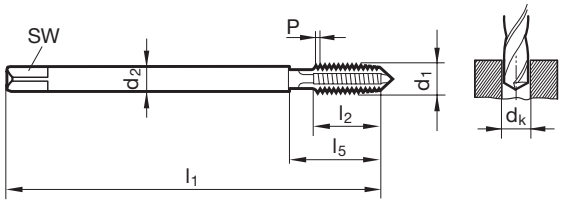
P	≤ 1200
M	
K	
N	
S	
H	

Leikkuuarvosivu 21

DIN 371



DIN 376



DIN 2184-1 DIN 371 Artikkelinro. **791**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0,400	2,800	2,100	1,60	45,000	8,000	13,500
M2,2	0,450	2,800	2,100	1,75	45,000	9,000	14,500
M2,5	0,450	2,800	2,100	2,05	50,000	9,000	14,500
M3	0,500	3,500	2,700	2,50	56,000	10,000	18,000
M3,5	0,600	4,000	3,000	2,90	56,000	12,000	20,000
M4	0,700	4,500	3,400	3,30	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,20	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,00	80,000	16,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	17,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	20,000	39,000

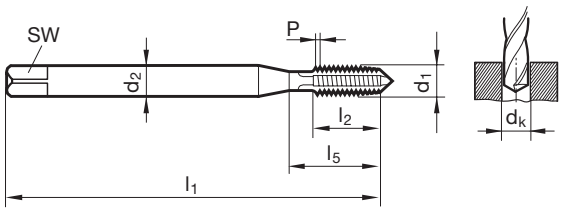
DIN 2184-1 DIN 376 Artikkelinro. **849**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	10,20	110,000	24,000	49,000
M14	2,000	11,000	9,000	12,00	110,000	26,000	53,000
M16	2,000	12,000	9,000	14,00	110,000	26,000	54,000

Konekierretapit, metrinen ISO-kierre

P	≤ 1200	Leikkuuarvosivu 21
M		
K		
N		
S		
H		

Materiaali	HSS-E	
Ø-Toleranssi	ISO3/6G	ISO3/6G
Pinta	○	S
Malli	H	H
Muoto	B	B
Sisäinen jäähdytys	✕	✕



DIN 2184-1 DIN 371 Artikkelinro. **2465** **2710**

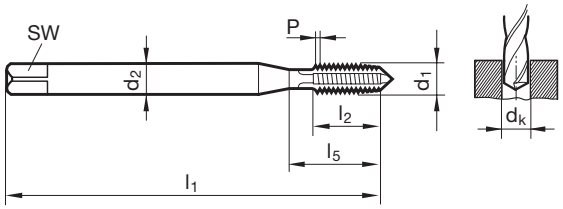
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0,400	2,800	2,100	1,60	45,000	8,000	13,500
M2,5	0,450	2,800	2,100	2,05	50,000	9,000	14,500
M3	0,500	3,500	2,700	2,50	56,000	10,000	18,000
M4	0,700	4,500	3,400	3,30	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,20	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,00	80,000	16,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	17,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	20,000	39,000

Konekierretapit, metrinen ISO-kierre

Materiaali	HSS-E-PM
Ø-Toleranssi	ISO2/6H
Pinta	◯
Malli	H
Muoto	B
Sisäinen jäähdytys	

P	≤ 1200
M	
K	
N	
S	
H	

Leikkuuarvosivu 21



DIN 2184-1 DIN 371 Artikkelinro. **875**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,50	56,000	10,000	18,000
M4	0,700	4,500	3,400	3,30	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,20	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,00	80,000	16,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	17,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	20,000	39,000

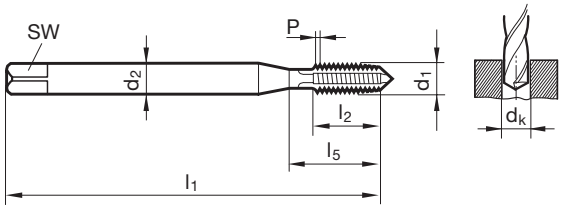
Konekierretapit, metrinen ISO-kierre

Materiaali	HSS-E-PM	
Ø-Toleranssi	ISO2/6H	ISO2/6H
Pinta	S	A
Malli	H	H
Muoto	B	B
Sisäinen jäähdytys		

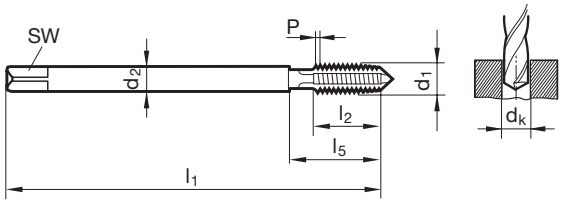
P	≤ 1200
M	
K	
N	
S	
H	

Leikkuuarvosivu 21

DIN 371



DIN 376



DIN 2184-1 DIN 371 Artikkelinro. **57** **1575**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,50	56,000	10,000	18,000
M4	0,700	4,500	3,400	3,30	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,20	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,00	80,000	16,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	17,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	20,000	39,000

DIN 2184-1 DIN 376 Artikkelinro. **58** **1576**

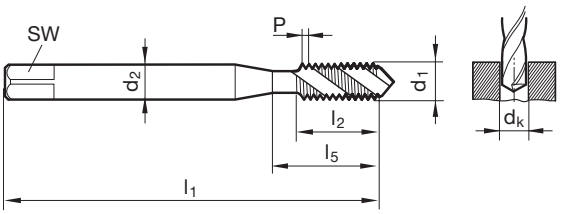
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	10,20	110,000	24,000	49,000
M14	2,000	11,000	9,000	12,00	110,000	26,000	53,000
M16	2,000	12,000	9,000	14,00	110,000	26,000	54,000
M18	2,500	14,000	11,000	15,50	125,000	30,000	62,000
M20	2,500	16,000	12,000	17,50	140,000	32,000	62,000
M24	3,000	18,000	14,500	21,00	160,000	36,000	73,000
M30	3,500	22,000	18,000	26,50	180,000	40,000	85,000

Konekierretapit, metrinen ISO-kierre

P	≤ 1000
M	○
K	○
N	
S	
H	

Leikkuuarvosivu 23

Materiaali	HSS-E	
Ø-Toleranssi	ISO2/6H	ISO2/6H
Pinta	C	C
Malli	N R15	N R15
Muoto	C	E
Sisäinen jäähdytys		



DIN 2184-1 DIN 371/DIN 376 Artikkelinro. **4154** **4155**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,50	56,000	6,000	18,000
M4	0,700	4,500	3,400	3,30	63,000	7,500	21,000
M5	0,800	6,000	4,900	4,20	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,00	80,000	11,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	14,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	16,000	39,000
M12	1,750	9,000	7,000	10,20	110,000	18,500	49,000
M16	2,000	12,000	9,000	14,00	110,000	20,000	54,000
M20	2,500	16,000	12,000	17,50	140,000	25,000	62,000

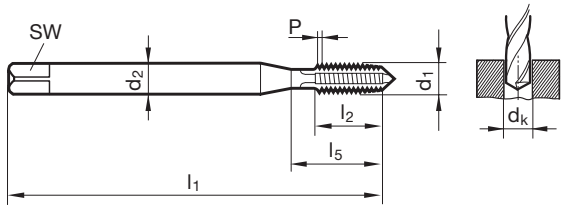
Konekierretapit, metrinen ISO-kierre

Materiaali	**HSS-E**
Ø-Toleranssi	ISO2/6H
Pinta	◯
Malli	N
Muoto	D
Sisäinen jäähdytys	⊠

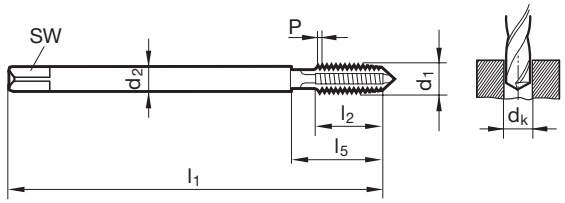
P	≤ 800
M	
K	
N	
S	
H	

Leikkuuarvosivu 18

DIN 371



DIN 376



DIN 2184-1 DIN 371 Artikkelinro. **801**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0,400	2,800	2,100	1,60	45,000	8,000	13,500
M2,2	0,450	2,800	2,100	1,75	45,000	9,000	14,500
M2,3	0,400	2,800	2,100	1,90	45,000	9,000	14,500
M2,5	0,450	2,800	2,100	2,05	50,000	9,000	14,500
M2,6	0,450	2,800	2,100	2,15	50,000	9,000	14,500
M3	0,500	3,500	2,700	2,50	56,000	10,000	18,000
M3,5	0,600	4,000	3,000	2,90	56,000	12,000	20,000
M4	0,700	4,500	3,400	3,30	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,20	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,00	80,000	16,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	17,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	20,000	39,000

DIN 2184-1 DIN 376 Artikkelinro. **813**

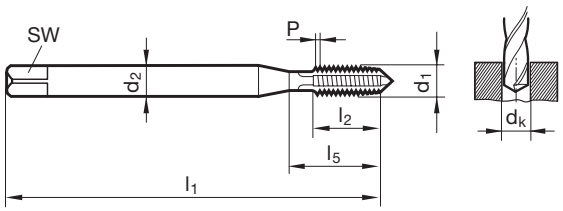
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0,400	1,400		1,60	45,000	8,000	13,500
M2,3	0,400	1,600	1,250	1,90	45,000	9,000	14,500
M2,5	0,450	1,800		2,05	50,000	9,000	14,500
M2,6	0,450	1,800	1,400	2,15	50,000	9,000	14,500
M3	0,500	2,200		2,50	56,000	10,000	18,000
M4	0,700	2,800	2,100	3,30	63,000	12,000	21,000
M5	0,800	3,500	2,700	4,20	70,000	14,000	25,000
M6	1,000	4,500	3,400	5,00	80,000	16,000	30,000
M8	1,250	6,000	4,900	6,80	90,000	17,000	35,000
M10	1,500	7,000	5,500	8,50	100,000	20,000	39,000
M12	1,750	9,000	7,000	10,20	110,000	24,000	49,000
M14	2,000	11,000	9,000	12,00	110,000	26,000	53,000
M16	2,000	12,000	9,000	14,00	110,000	26,000	54,000
M18	2,500	14,000	11,000	15,50	125,000	30,000	62,000
M20	2,500	16,000	12,000	17,50	140,000	32,000	62,000
M22	2,500	18,000	14,500	19,50	140,000	32,000	62,000
M27	3,000	20,000	16,000	24,00	160,000	36,000	73,000
M30	3,500	22,000	18,000	26,50	180,000	40,000	85,000

Konekierretapit, metrinen ISO-kierre

Materiaali	**HSS-E**
Ø-Toleranssi	ISO2/6H
Pinta	◯
Malli	N
Muoto	C
Sisäinen jäähdytys	⊠

P	≤ 800
M	
K	
N	
S	
H	

Leikkuuarvosivu 18/22



DIN 2184-1 DIN 371 Artikkelinro. **806**

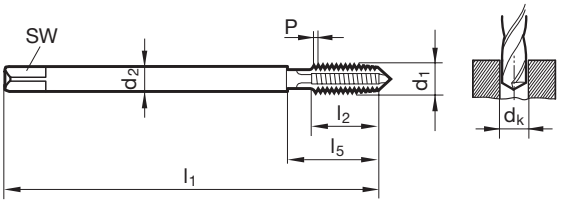
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M1	0,250	2,500	2,100	0,75	40,000	5,500	
M1,2	0,250	2,500	2,100	0,95	40,000	5,500	
M1,4	0,300	2,500	2,100	1,10	40,000	7,000	
M1,6	0,350	2,500	2,100	1,25	40,000	4,500	
M1,7	0,350	2,500	2,100	1,35	40,000	4,500	
M1,8	0,350	2,500	2,100	1,45	40,000	4,500	
M2	0,400	2,800	2,100	1,60	45,000	4,500	13,500
M2,3	0,400	2,800	2,100	1,90	45,000	4,500	14,500
M2,5	0,450	2,800	2,100	2,05	50,000	5,000	14,500
M2,6	0,450	2,800	2,100	2,15	50,000	5,000	14,500
M3	0,500	3,500	2,700	2,50	56,000	6,000	18,000
M3,5	0,600	4,000	3,000	2,90	56,000	7,000	20,000
M4	0,700	4,500	3,400	3,30	63,000	7,500	21,000
M5	0,800	6,000	4,900	4,20	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,00	80,000	11,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	14,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	16,000	39,000

Konekierretapit, metrinen ISO-kierre

Materiaali	**HSS-E**
Ø-Toleranssi	ISO2/6H
Pinta	◯
Malli	N
Muoto	C
Sisäinen jäähdytys	⊠

P	≤ 800
M	
K	
N	
S	
H	

Leikkuuarvosivu 18/22



DIN 2184-1 DIN 376 Artikkelinro. **818**

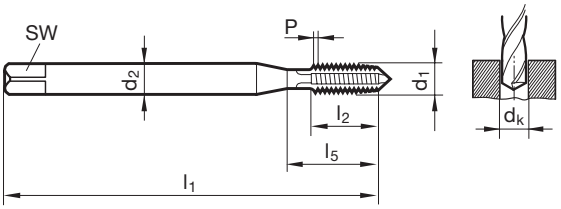
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M1,6	0,350	1,200		1,25	40,000	4,500	
M1,7	0,350	1,200		1,35	40,000	4,500	
M2	0,400	1,400		1,60	45,000	4,500	13,500
M2,5	0,450	1,800		2,05	50,000	5,000	14,500
M2,6	0,450	1,800		2,15	50,000	5,000	14,500
M3	0,500	2,200		2,50	56,000	6,000	18,000
M4	0,700	2,800	2,100	3,30	63,000	7,500	21,000
M5	0,800	3,500	2,700	4,20	70,000	8,500	25,000
M6	1,000	4,500	3,400	5,00	80,000	11,000	30,000
M8	1,250	6,000	4,900	6,80	90,000	14,000	35,000
M10	1,500	7,000	5,500	8,50	100,000	16,000	39,000
M12	1,750	9,000	7,000	10,20	110,000	18,500	49,000
M14	2,000	11,000	9,000	12,00	110,000	20,000	53,000
M16	2,000	12,000	9,000	14,00	110,000	20,000	54,000
M18	2,500	14,000	11,000	15,50	125,000	25,000	62,000
M20	2,500	16,000	12,000	17,50	140,000	25,000	62,000
M22	2,500	18,000	14,500	19,50	140,000	27,000	62,000
M24	3,000	18,000	14,500	21,00	160,000	30,000	73,000
M27	3,000	20,000	16,000	24,00	160,000	30,000	73,000
M30	3,500	22,000	18,000	26,50	180,000	35,000	85,000
M36	4,000	28,000	22,000	32,00	200,000	40,000	102,000
M42	4,500	32,000	24,000	37,50	200,000	45,000	112,000
M48	5,000	36,000	29,000	43,00	250,000	50,000	127,000

Konekierretapit, metrinen ISO-kierre

Materiaali	HSS-E	
Ø-Toleranssi	ISO3/6G	ISO3/6G
Pinta	◯	◯
Malli	N	N R15
Muoto	C	C
Sisäinen jäähdytys	☒	☒

P	≤ 800
M	
K	
N	
S	
H	

Leikkuuarvosivu 18/22



DIN 2184-1 DIN 371 — Artikkelinro. **795** **799**

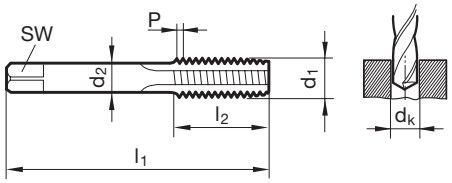
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0,400	2,800	2,100	1,60	45,000	4,500	13,500
M2,2	0,450	2,800	2,100	1,75	45,000	5,000	14,500
M2,5	0,450	2,800	2,100	2,05	50,000	5,000	14,500
M3	0,500	3,500	2,700	2,50	56,000	6,000	18,000
M3,5	0,600	4,000	3,000	2,90	56,000	7,000	20,000
M4	0,700	4,500	3,400	3,30	63,000	7,500	21,000
M5	0,800	6,000	4,900	4,20	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,00	80,000	11,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	14,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	16,000	39,000

Konekierretapit, metrinen ISO-kierre

Materiaali	**HSS-E**
Ø-Toleranssi	ISO2/6H
Pinta	◯
Malli	N
Muoto	C
Sisäinen jäähdytys	⊠

P	≤ 800
M	
K	
N	
S	
H	

Leikkuuarvosivu 18/22



DIN 2184-2 DIN 352 Artikkelinro. **995**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2,2	0,450	2,800	2,100	1,75	36,000	9,000	
M2,3	0,400	2,800	2,100	1,90	36,000	9,000	
M2,5	0,450	2,800	2,100	2,05	40,000	9,000	
M3	0,500	3,500	2,700	2,50	40,000	10,000	18,000
M3,5	0,600	4,000	3,000	2,90	45,000	7,000	20,000
M4	0,700	4,500	3,400	3,30	45,000	7,500	21,000
M5	0,800	6,000	4,900	4,20	50,000	8,500	24,000
M6	1,000	6,000	4,900	5,00	56,000	11,000	27,000
M8	1,250	6,000	4,900	6,80	63,000	14,000	32,000
M10	1,500	7,000	5,500	8,50	70,000	16,000	36,000
M12	1,750	9,000	7,000	10,20	75,000	18,500	40,000
M16	2,000	12,000	9,000	14,00	80,000	20,000	45,000

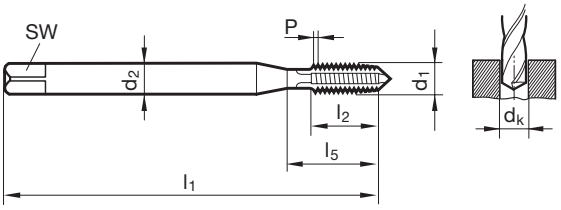
Konekierretapit, metrinen ISO-kierre

Materiaali	HSS-E	
Ø-Toleranssi	ISO2/6H	ISO2/6H
Pinta	◯	◯
Malli	N	N
Muoto	B	B
Sisäinen jäähdytys	⊠	⊠

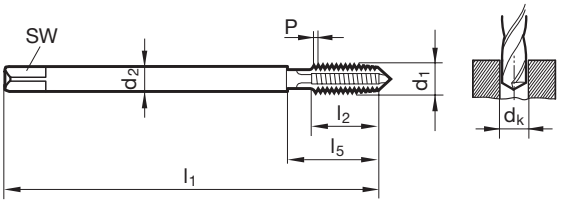
P	≤ 800
M	
K	
N	
S	
H	

Leikkuuarvosivu 19

DIN 371



DIN 376



DIN 2184-1 DIN 371 Artikkelinro. **838** **839**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M1,2	0,250	2,500	2,100	0,95	40,000	5,500	
M1,4	0,300	2,500	2,100	1,10	40,000	7,000	
M1,6	0,350	2,500	2,100	1,25	40,000	8,000	
M1,7	0,350	2,500	2,100	1,35	40,000	8,000	
M2	0,400	2,800	2,100	1,60	45,000	8,000	13,500
M2,2	0,450	2,800	2,100	1,75	45,000	9,000	14,500
M2,3	0,400	2,800	2,100	1,90	45,000	9,000	14,500
M2,5	0,450	2,800	2,100	2,05	50,000	9,000	14,500
M2,6	0,450	2,800	2,100	2,15	50,000	9,000	14,500
M3	0,500	3,500	2,700	2,50	56,000	10,000	18,000
M3,5	0,600	4,000	3,000	2,90	56,000	12,000	20,000
M4	0,700	4,500	3,400	3,30	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,20	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,00	80,000	16,000	30,000
M7	1,000	7,000	5,500	6,00	80,000	16,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	17,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	20,000	39,000

DIN 2184-1 DIN 376 Artikkelinro. **846** **847**

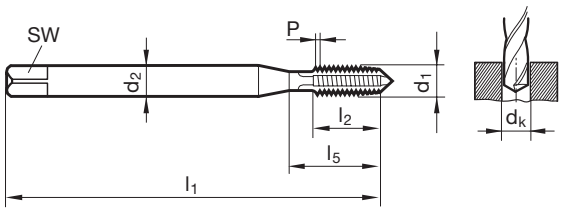
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	2,200	1,800	2,50	56,000	10,000	18,000
M4	0,700	2,800	2,100	3,30	63,000	12,000	21,000
M5	0,800	3,500	2,700	4,20	70,000	14,000	25,000
M6	1,000	4,500	3,400	5,00	80,000	16,000	30,000
M8	1,250	6,000	4,900	6,80	90,000	17,000	35,000
M10	1,500	7,000	5,500	8,50	100,000	20,000	39,000
M12	1,750	9,000	7,000	10,20	110,000	24,000	49,000
M16	2,000	12,000	9,000	14,00	110,000	26,000	54,000

Konekierretapit, metrinen ISO-kierre

Materiaali	**HSS-E**
Ø-Toleranssi	ISO2/6H
Pinta	◯
Malli	N
Muoto	B
Sisäinen jäähdytys	⊗

P	≤ 800
M	
K	
N	
S	
H	

Leikkuuarvosivu 19



DIN 2184-1 DIN 371 Artikkelinro. **802**

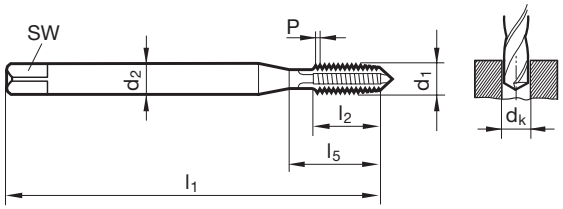
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0,400	2,800	2,100	1,60	45,000	8,000	13,500
M2,5	0,450	2,800	2,100	2,05	50,000	9,000	14,500
M3	0,500	3,500	2,700	2,50	56,000	10,000	18,000
M4	0,700	4,500	3,400	3,30	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,20	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,00	80,000	16,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	17,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	20,000	39,000

Konekierretapit, metrinen ISO-kierre

Materiaali	HSS-E		
Ø-Toleranssi	ISO3/6G	ISO3/6G	ISO3/6G
Pinta	◯	◯	◯
Malli	N	N	N
Muoto	B	B	B
Sisäinen jäähdytys	⊠	⊠	⊠

P	≤ 800
M	
K	
N	
S	
H	

Leikkuuarvosivu 19



DIN 2184-1 DIN 371 Artikkelinro. **869** **796** **797**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0,400	2,800	2,100	1,60	45,000	8,000	13,500
M2,5	0,450	2,800	2,100	2,05	50,000	9,000	14,500
M3	0,500	3,500	2,700	2,50	56,000	10,000	18,000
M4	0,700	4,500	3,400	3,30	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,20	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,00	80,000	16,000	30,000
M7	1,000	7,000	5,500	6,00	80,000	16,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	17,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	20,000	39,000

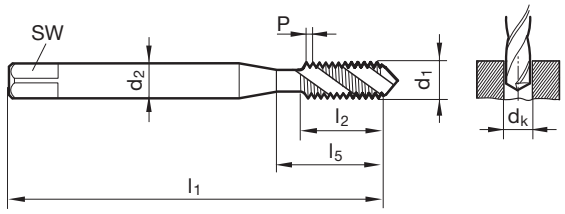
Konekierretapit, metrinen ISO-kierre

Materiaali	HSS-E		
Ø-Toleranssi	ISO2/6H	ISO2/6H	ISO2/6H
Pinta	○	(S)	●
Malli	N R15	N R15	N R15
Muoto	C	C	C
Sisäinen jäähdytys	✗	✗	✗

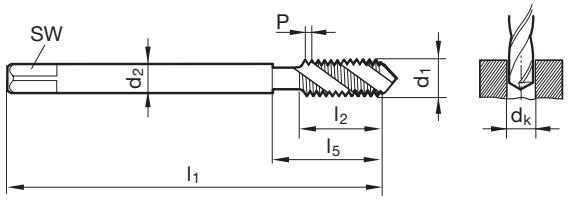
P	≤ 800
M	
K	
N	
S	
H	

Leikkuuarvosivu 22

DIN 371



DIN 376



DIN 2184-1 DIN 371	Artikkelinro.	809	913	946

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0,400	2,800	2,100	1,60	45,000	4,500	13,500
M2,2	0,450	2,800	2,100	1,75	45,000	5,000	14,500
M2,3	0,400	2,800	2,100	1,90	45,000	4,500	14,500
M2,5	0,450	2,800	2,100	2,05	50,000	5,000	14,500
M2,6	0,450	2,800	2,100	2,15	50,000	5,000	14,500
M3	0,500	3,500	2,700	2,50	56,000	6,000	18,000
M3,5	0,600	4,000	3,000	2,90	56,000	7,000	20,000
M4	0,700	4,500	3,400	3,30	63,000	7,500	21,000
M5	0,800	6,000	4,900	4,20	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,00	80,000	11,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	14,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	16,000	39,000

DIN 2184-1 DIN 376	Artikkelinro.	821	916	949

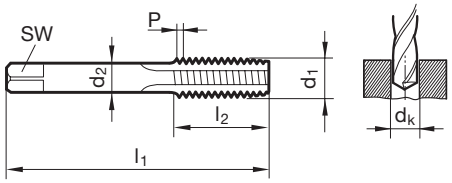
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	2,200		2,50	56,000	6,000	18,000
M3,5	0,600	2,500	2,100	2,90	56,000	7,000	20,000
M4	0,700	2,800	2,100	3,30	63,000	7,500	21,000
M5	0,800	3,500	2,700	4,20	70,000	8,500	25,000
M6	1,000	4,500	3,400	5,00	80,000	11,000	30,000
M8	1,250	6,000	4,900	6,80	90,000	14,000	35,000
M10	1,500	7,000	5,500	8,50	100,000	16,000	39,000
M12	1,750	9,000	7,000	10,20	110,000	18,500	49,000
M14	2,000	11,000	9,000	12,00	110,000	20,000	53,000
M16	2,000	12,000	9,000	14,00	110,000	20,000	54,000
M18	2,500	14,000	11,000	15,50	125,000	25,000	62,000
M20	2,500	16,000	12,000	17,50	140,000	25,000	62,000
M24	3,000	18,000	14,500	21,00	160,000	30,000	73,000
M30	3,500	22,000	18,000	26,50	180,000	35,000	85,000

Konekierretapit, metrinen ISO-kierre

Materiaali	**HSS-E**
Ø-Toleranssi	ISO2/6H
Pinta	◯
Malli	N R15
Muoto	C
Sisäinen jäähdytys	

P	≤ 800
M	
K	
N	
S	
H	

Leikkuuarvosivu 22



DIN 2184-2 DIN 352 Artikkelinro. **992**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,50	40,000	6,000	18,000
M4	0,700	4,500	3,400	3,30	45,000	7,500	21,000
M5	0,800	6,000	4,900	4,20	50,000	8,500	24,000
M6	1,000	6,000	4,900	5,00	56,000	11,000	27,000
M7	1,000	6,000	4,900	6,00	56,000	11,000	32,000
M8	1,250	6,000	4,900	6,80	63,000	14,000	32,000
M10	1,500	7,000	5,500	8,50	70,000	16,000	36,000
M12	1,750	9,000	7,000	10,20	75,000	18,500	40,000
M14	2,000	11,000	9,000	12,00	80,000	20,000	42,000
M16	2,000	12,000	9,000	14,00	80,000	20,000	45,000
M20	2,500	16,000	12,000	17,50	95,000	25,000	50,000

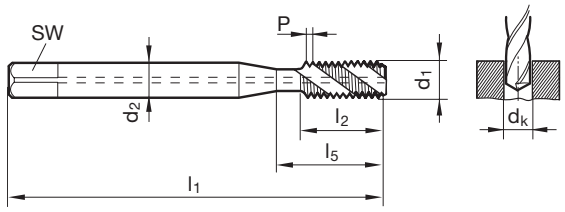
Jäähdytyskanavatapit, metrinen ISO kierre

Materiaali	HSS-E	
Ø-Toleranssi	ISO2/6H	ISO2/6H
Pinta	◯	Ⓢ
Malli	N R15	N R15
Muoto	C	C
Sisäinen jäähdytys		

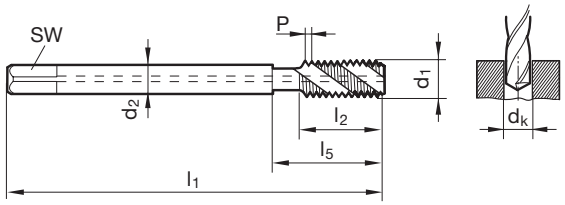
P	≤ 800
M	
K	
N	
S	
H	

Leikkuuarvosivu 22/23

DIN 371



DIN 376



DIN 2184-1 DIN 371 — Artikkelinro. **1891** **2436**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0,800	6,000	4,900	4,20	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,00	80,000	11,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	14,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	16,000	39,000

DIN 2184-1 DIN 376 — Artikkelinro. **1898** **2437**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	10,20	110,000	18,500	49,000
M14	2,000	11,000	9,000	12,00	110,000	20,000	53,000
M16	2,000	12,000	9,000	14,00	110,000	20,000	54,000
M18	2,500	14,000	11,000	15,50	125,000	25,000	62,000
M20	2,500	16,000	12,000	17,50	140,000	25,000	62,000

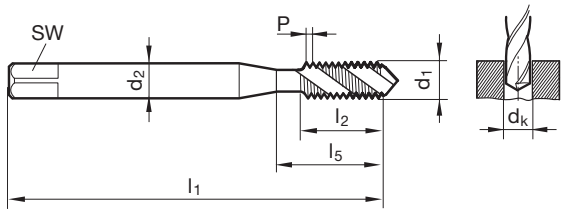
Konekierretapit, metrinen ISO-kierre

Materiaali	HSS-E			
Ø-Toleranssi	ISO2/6H	ISO2/6H	ISO2/6H	ISO2/6H
Pinta			S	C
Malli	N R40	N R40	N R40	N R40
Muoto	C	C	C	C
Sisäinen jäähdytys				

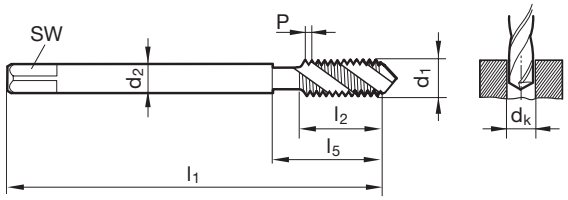
P	≤ 800
M	
K	
N	
S	
H	

Leikkuuarvosivu 23/24

DIN 371



DIN 376



DIN 2184-1 DIN 371 Artikkelinro. **783** **810** **914** **1252**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0,400	2,800	2,100	1,60	45,000	4,500	13,500
M2,2	0,450	2,800	2,100	1,75	45,000	5,000	14,500
M2,3	0,400	2,800	2,100	1,90	45,000	4,500	14,500
M2,5	0,450	2,800	2,100	2,05	50,000	5,000	14,500
M2,6	0,450	2,800	2,100	2,15	50,000	5,000	14,500
M3	0,500	3,500	2,700	2,50	56,000	6,000	18,000
M3,5	0,600	4,000	3,000	2,90	56,000	7,000	20,000
M4	0,700	4,500	3,400	3,30	63,000	7,500	21,000
M5	0,800	6,000	4,900	4,20	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,00	80,000	11,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	14,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	16,000	39,000

DIN 2184-1 DIN 376 Artikkelinro. **784** **822** **917** **1254**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	2,200		2,50	56,000	6,000	18,000
M3,5	0,600	2,500	2,100	2,90	56,000	7,000	20,000
M4	0,700	2,800	2,100	3,30	63,000	7,500	21,000
M5	0,800	3,500	2,700	4,20	70,000	8,500	25,000
M6	1,000	4,500	3,400	5,00	80,000	11,000	30,000
M7	1,000	5,500	4,300	6,00	80,000	11,000	30,000
M8	1,250	6,000	4,900	6,80	90,000	14,000	35,000
M10	1,500	7,000	5,500	8,50	100,000	16,000	39,000
M12	1,750	9,000	7,000	10,20	110,000	18,500	49,000
M14	2,000	11,000	9,000	12,00	110,000	20,000	53,000
M16	2,000	12,000	9,000	14,00	110,000	20,000	54,000
M18	2,500	14,000	11,000	15,50	125,000	25,000	62,000
M20	2,500	16,000	12,000	17,50	140,000	25,000	62,000
M22	2,500	18,000	14,500	19,50	140,000	27,000	62,000
M24	3,000	18,000	14,500	21,00	160,000	30,000	73,000
M27	3,000	20,000	16,000	24,00	160,000	30,000	73,000
M30	3,500	22,000	18,000	26,50	180,000	35,000	85,000

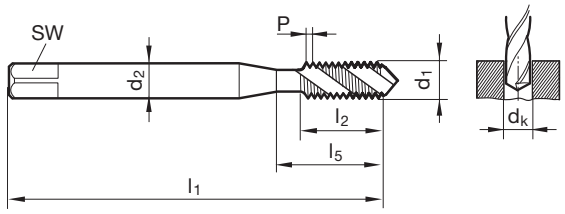
Konekierretapit, metrinen ISO-kierre

Materiaali	**HSS-E**
Ø-Toleranssi	ISO3/6G
Pinta	◯
Malli	N R40
Muoto	C
Sisäinen jäähdytys	⊠

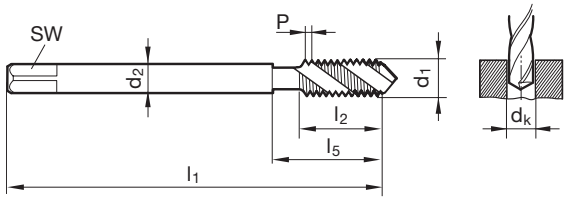
P	≤ 800
M	
K	
N	
S	
H	

Leikkuuarvosivu 23

DIN 371



DIN 376



DIN 2184-1 DIN 371 Artikkelinro. **844**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,50	56,000	6,000	18,000
M4	0,700	4,500	3,400	3,30	63,000	7,500	21,000
M5	0,800	6,000	4,900	4,20	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,00	80,000	11,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	14,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	16,000	39,000

DIN 2184-1 DIN 376 Artikkelinro. **848**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	2,200	1,800	2,50	56,000	6,000	18,000
M4	0,700	2,800	2,100	3,30	63,000	7,500	21,000
M5	0,800	3,500	2,700	4,20	70,000	8,500	25,000
M6	1,000	4,500	3,400	5,00	80,000	11,000	30,000
M7	1,000	5,500	4,300	6,00	80,000	11,000	30,000
M8	1,250	6,000	4,900	6,80	90,000	14,000	35,000
M10	1,500	7,000	5,500	8,50	100,000	16,000	39,000
M12	1,750	9,000	7,000	10,20	110,000	18,500	49,000
M14	2,000	11,000	9,000	12,00	110,000	20,000	53,000
M16	2,000	12,000	9,000	14,00	110,000	20,000	54,000
M18	2,500	14,000	11,000	15,50	125,000	25,000	62,000
M20	2,500	16,000	12,000	17,50	140,000	25,000	62,000
M24	3,000	18,000	14,500	21,00	160,000	30,000	73,000

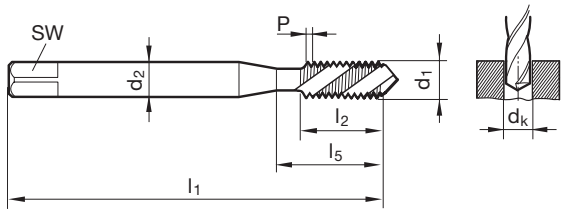
Konekierretapit, metrinen ISO-kierre

Materiaali	**HSS-E**
Ø-Toleranssi	ISO2/6H
Pinta	◯
Malli	N L40-LH
Muoto	C
Sisäinen jäähdytys	

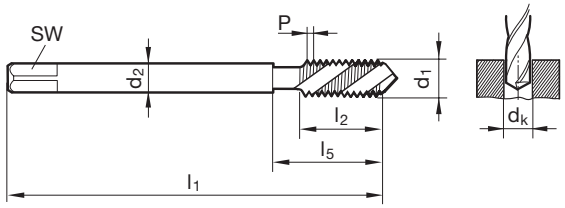
P	≤ 800
M	
K	
N	
S	
H	

Leikkuuarvosivu 24

DIN 371



DIN 376



DIN 2184-1 DIN 371 Artikkelinro. **786**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,50	56,000	6,000	18,000
M4	0,700	4,500	3,400	3,30	63,000	7,500	21,000
M5	0,800	6,000	4,900	4,20	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,00	80,000	11,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	14,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	16,000	39,000

DIN 2184-1 DIN 376 Artikkelinro. **787**

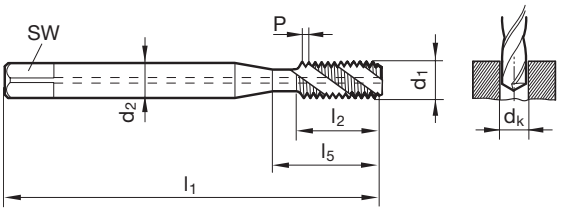
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	10,20	110,000	18,500	49,000
M14	2,000	11,000	9,000	12,00	110,000	20,000	53,000
M16	2,000	12,000	9,000	14,00	110,000	20,000	54,000
M18	2,500	14,000	11,000	15,50	125,000	25,000	62,000
M20	2,500	16,000	12,000	17,50	140,000	25,000	62,000

Jäähdytyskanavatapit, metrinen ISO kierre

Materiaali	**HSS-E**
Ø-Toleranssi	ISO2/6H
Pinta	◯
Malli	N R40
Muoto	C
Sisäinen jäähdytys	

P	≤ 800
M	
K	
N	
S	
H	

Leikkuuarvosivu 24



DIN 2184-1 DIN 371 Artikkelinro. **1893**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0,800	6,000	4,900	4,20	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,00	80,000	11,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	14,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	16,000	39,000

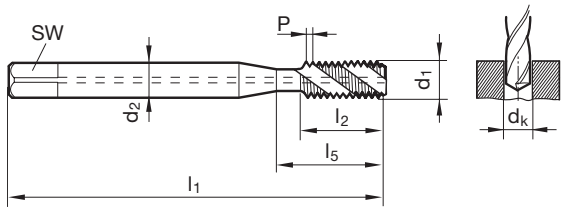
Jäähdytyskanavatapit, metrinen ISO kierre

Materiaali	**HSS-E**
Ø-Toleranssi	ISO2/6H
Pinta	S
Malli	N R40
Muoto	C
Sisäinen jäähdytys	

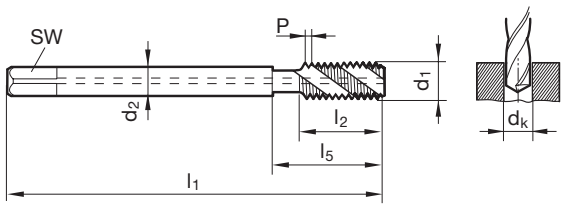
P	≤ 800
M	
K	
N	
S	
H	

Leikkuuarvosivu 24

DIN 371



DIN 376



DIN 2184-1 DIN 371 Artikkelinro. **2438**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0,800	6,000	4,900	4,20	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,00	80,000	11,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	14,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	16,000	39,000

DIN 2184-1 DIN 376 Artikkelinro. **2439**

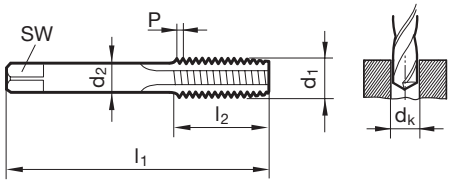
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	10,20	110,000	18,500	49,000
M14	2,000	11,000	9,000	12,00	110,000	20,000	53,000
M16	2,000	12,000	9,000	14,00	110,000	20,000	54,000
M18	2,500	14,000	11,000	15,50	125,000	25,000	62,000
M20	2,500	16,000	12,000	17,50	140,000	25,000	62,000

Konekierretapit, metrinen ISO-kierre

Materiaali	**HSS-E**
Ø-Toleranssi	ISO2/6H
Pinta	◯
Malli	N R40
Muoto	C
Sisäinen jäähdytys	⊠

P	≤ 800
M	
K	
N	
S	
H	

Leikkuuarvosivu 23



DIN 2184-2 DIN 352 Artikkelinro. **993**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0,400	2,800	2,100	1,60	36,000	8,000	
M2,5	0,450	2,800	2,100	2,05	40,000	9,000	
M3	0,500	3,500	2,700	2,50	40,000	6,000	18,000
M3,5	0,600	4,000	3,000	2,90	45,000	7,000	20,000
M4	0,700	4,500	3,400	3,30	45,000	7,500	21,000
M5	0,800	6,000	4,900	4,20	50,000	8,500	24,000
M6	1,000	6,000	4,900	5,00	56,000	11,000	27,000
M8	1,250	6,000	4,900	6,80	63,000	14,000	32,000
M10	1,500	7,000	5,500	8,50	70,000	16,000	36,000
M12	1,750	9,000	7,000	10,20	75,000	18,500	40,000
M16	2,000	12,000	9,000	14,00	80,000	20,000	45,000
M18	2,500	14,000	11,000	15,50	95,000	25,000	50,000
M20	2,500	16,000	12,000	17,50	95,000	25,000	50,000
M22	2,500	18,000	14,500	19,50	100,000	27,000	50,000

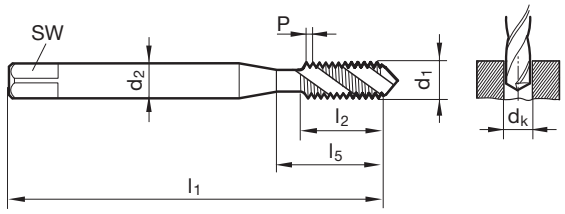
Konekierretapit, metrinen ISO-kierre

Materiaali	HSS-E			
Ø-Toleranssi	ISO2/6H	ISO2/6H	ISO2/6H	ISO2/6H
Pinta	●	○	A+M	S
Malli	N R40	N R40	N R40	N R40
Muoto	C	C	C	C
Sisäinen jäähdytys	⊠	⊠	⊠	⊠

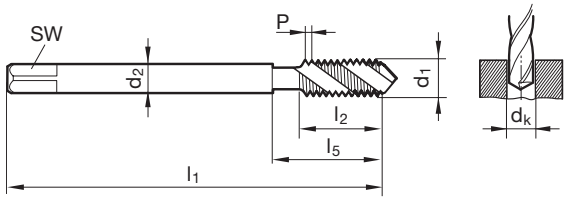
P	≤ 1000
M	○
K	○
N	
S	
H	

Leikkuuarvosivu 24

DIN 371



DIN 376



DIN 2184-1 DIN 371 — Artikkelinro. **836** **889** **2425** **2440**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0,400	2,800	2,100	1,60	45,000	4,500	13,500
M2,2	0,450	2,800	2,100	1,75	45,000	5,000	14,500
M2,3	0,400	2,800	2,100	1,90	45,000	4,500	14,500
M2,5	0,450	2,800	2,100	2,05	50,000	5,000	14,500
M2,6	0,450	2,800	2,100	2,15	50,000	5,000	14,500
M3	0,500	3,500	2,700	2,50	56,000	6,000	18,000
M3,5	0,600	4,000	3,000	2,90	56,000	7,000	20,000
M4	0,700	4,500	3,400	3,30	63,000	7,500	21,000
M5	0,800	6,000	4,900	4,20	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,00	80,000	11,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	14,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	16,000	39,000

DIN 2184-1 DIN 376 — Artikkelinro. **826** **890** **2426** **2441**

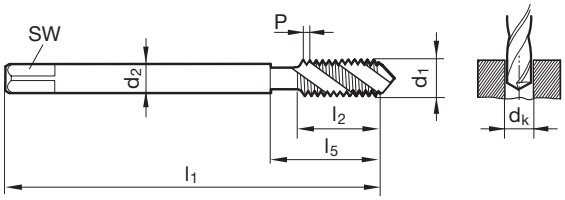
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	2,200		2,50	56,000	6,000	18,000
M3,5	0,600	2,500	2,100	2,90	56,000	7,000	20,000
M4	0,700	2,800	2,100	3,30	63,000	7,500	21,000
M5	0,800	3,500	2,700	4,20	70,000	8,500	25,000
M6	1,000	4,500	3,400	5,00	80,000	11,000	30,000
M7	1,000	5,500	4,300	6,00	80,000	11,000	30,000
M8	1,250	6,000	4,900	6,80	90,000	14,000	35,000
M10	1,500	7,000	5,500	8,50	100,000	16,000	39,000
M12	1,750	9,000	7,000	10,20	110,000	18,500	49,000
M14	2,000	11,000	9,000	12,00	110,000	20,000	53,000
M16	2,000	12,000	9,000	14,00	110,000	20,000	54,000
M18	2,500	14,000	11,000	15,50	125,000	25,000	62,000
M20	2,500	16,000	12,000	17,50	140,000	25,000	62,000
M22	2,500	18,000	14,500	19,50	140,000	27,000	62,000
M24	3,000	18,000	14,500	21,00	160,000	30,000	73,000
M27	3,000	20,000	16,000	24,00	160,000	30,000	73,000
M30	3,500	22,000	18,000	26,50	180,000	35,000	85,000
M36	4,000	28,000	22,000	32,00	200,000	40,000	102,000

Konekierretapit, metrinen ISO-kierre

Materiaali	**HSS-E**
Ø-Toleranssi	6HX
Pinta	S
Malli	N R40
Muoto	C
Sisäinen jäähdytys	

P	≤ 1000
M	○
K	○
N	
S	
H	

Leikkuuarvosivu 25



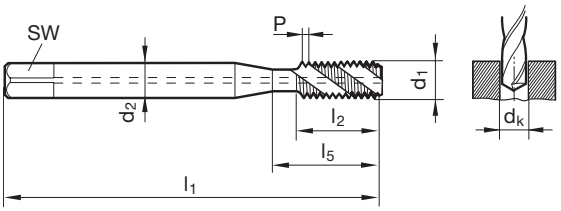
Tehdas stdr. Tehdas stdr. Artikkelinro. **4153**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,50	112,000	6,000	18,000
M4	0,700	2,800	2,100	3,30	112,000	7,500	77,000
M5	0,800	3,500	2,700	4,20	125,000	8,500	90,000
M6	1,000	4,500	3,400	5,00	125,000	11,000	90,000
M8	1,250	6,000	4,900	6,80	140,000	14,000	97,000
M10	1,500	7,000	5,500	8,50	160,000	16,000	117,000
M12	1,750	9,000	7,000	10,20	180,000	18,500	133,000
M16	2,000	12,000	9,000	14,00	220,000	20,000	168,000
M20	2,500	16,000	12,000	17,50	280,000	25,000	225,000

Jäähdytyskanavatapit, metrinen ISO kierre

P	≤ 1000
M	○
K	○
N	
S	
H	

Materiaali	**HSS-E**
Ø-Toleranssi	ISO2/6H
Pinta	A+M
Malli	N R40
Muoto	C
Sisäinen jäähdytys	



DIN 2184-1 DIN 371 Artikkelinro. **2514**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0,800	6,000	4,900	4,20	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,00	80,000	11,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	14,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	16,000	39,000

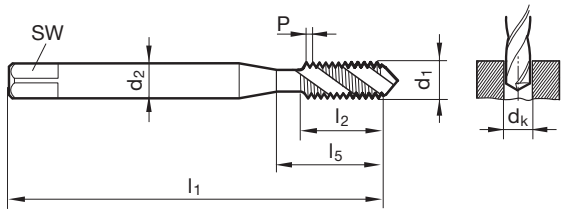
Konekierretapit, metrinen ISO-kierre

Materiaali	**HSS-E**
Ø-Toleranssi	ISO2/6H
Pinta	◯
Malli	N R40
Muoto	E
Sisäinen jäähdytys	⊠

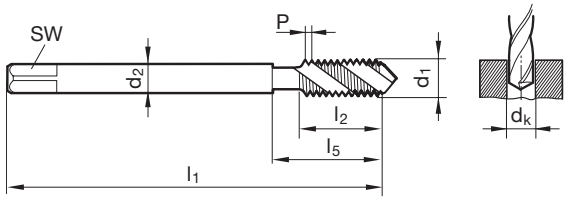
P	≤ 1000
M	○
K	○
N	○
S	
H	

Leikkuuarvosivu 24

DIN 371



DIN 376



DIN 2184-1 DIN 371 Artikkelinro. **2790**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,50	56,000	6,000	18,000
M4	0,700	4,500	3,400	3,30	63,000	7,500	21,000
M5	0,800	6,000	4,900	4,20	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,00	80,000	11,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	14,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	16,000	39,000

DIN 2184-1 DIN 376 Artikkelinro. **2791**

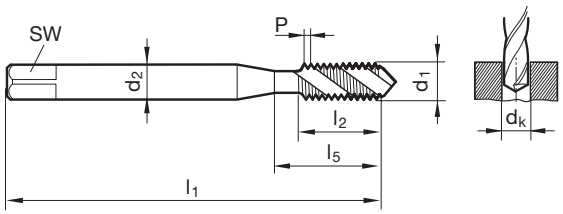
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M4	0,700	2,800	2,100	3,30	63,000	7,500	21,000
M5	0,800	3,500	2,700	4,20	70,000	8,500	25,000
M6	1,000	4,500	3,400	5,00	80,000	11,000	30,000
M8	1,250	6,000	4,900	6,80	90,000	14,000	35,000
M10	1,500	7,000	5,500	8,50	100,000	20,000	39,000
M12	1,750	9,000	7,000	10,20	110,000	18,500	49,000
M14	2,000	11,000	9,000	12,00	110,000	20,000	53,000
M16	2,000	12,000	9,000	14,00	110,000	20,000	54,000

Konekierretapit, metrinen ISO-kierre

P	≤ 1000
M	○
K	○
N	
S	
H	

Leikkuuarvosivu 25

Materiaali	**HSS-E**
Ø-Toleranssi	ISO2/6H
Pinta	Ⓢ
Malli	N R40
Muoto	C
Sisäinen jäähdytys	



DIN 2184-1 DIN 371 Artikkelinro. **174**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0,800	6,000	4,900	4,20	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,00	80,000	11,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	14,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	16,000	39,000

DIN 2184-1 DIN 376 Artikkelinro. **196**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0,800	3,500	2,700	4,20	70,000	8,500	25,000
M6	1,000	4,500	3,400	5,00	80,000	11,000	30,000
M8	1,250	6,000	4,900	6,80	90,000	14,000	35,000
M10	1,500	7,000	5,500	8,50	100,000	16,000	39,000
M12	1,750	9,000	7,000	10,20	110,000	18,500	49,000
M14	2,000	11,000	9,000	12,00	110,000	20,000	53,000
M16	2,000	12,000	9,000	14,00	110,000	20,000	54,000
M20	2,500	16,000	12,000	17,50	140,000	25,000	62,000
M24	3,000	18,000	14,500	21,00	160,000	30,000	73,000
M30	3,500	22,000	18,000	26,50	180,000	35,000	85,000

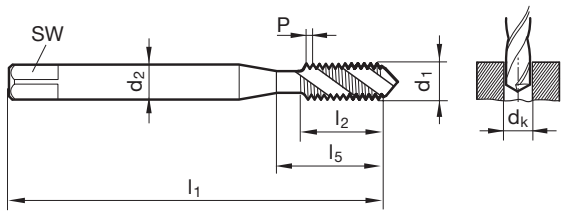
Konekierretapit, metrinen ISO-kierre

Materiaali	**HSS-E**
Ø-Toleranssi	6HX
Pinta	A
Malli	VA R45
Muoto	C
Sisäinen jäähdytys	

NEW

P	●
M	●
K	○
N	○
S	○
H	

Leikkuuarvosivu 25



DIN 2184-1 DIN 371/DIN 376 Artikkelinro. **393**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0,400	2,800	2,100	1,60	45,000	4,500	13,500
M2,5	0,450	2,800	2,100	2,05	50,000	5,000	14,500
M3	0,500	3,500	2,700	2,50	56,000	6,000	18,000
M4	0,700	4,500	3,400	3,30	63,000	7,500	21,000
M5	0,800	6,000	4,900	4,20	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,00	80,000	11,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	14,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	16,000	39,000
M12	1,750	9,000	7,000	10,20	110,000	18,500	49,000
M14	2,000	11,000	9,000	12,00	110,000	20,000	53,000
M16	2,000	12,000	9,000	14,00	110,000	20,000	54,000
M18	2,500	14,000	11,000	15,50	125,000	25,000	62,000
M20	2,500	16,000	12,000	17,50	140,000	25,000	62,000
M24	3,000	18,000	14,500	21,00	160,000	30,000	73,000
M30	3,500	22,000	18,000	26,50	180,000	35,000	85,000

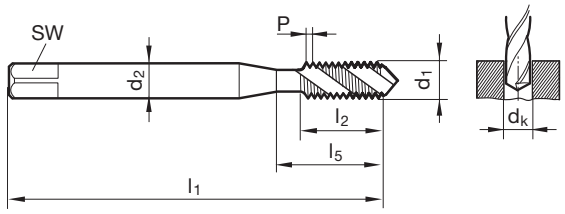
Konekierretapit, metrinen ISO-kierre

Materiaali	**HSS-E-PM**
Ø-Toleranssi	ISO2/6H
Pinta	(S)
Malli	N R40
Muoto	C
Sisäinen jäähdytys	

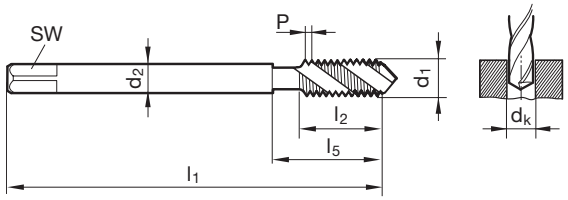
P	≤ 1000
M	○
K	○
N	
S	
H	

Leikkuuarvosivu 25

DIN 371



DIN 376



DIN 2184-1 DIN 371 Artikkelinro. **1288**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0,400	2,800	2,100	1,60	45,000	4,500	13,500
M3	0,500	3,500	2,700	2,50	56,000	6,000	18,000
M4	0,700	4,500	3,400	3,30	63,000	7,500	21,000
M5	0,800	6,000	4,900	4,20	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,00	80,000	11,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	14,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	16,000	39,000

DIN 2184-1 DIN 376 Artikkelinro. **1289**

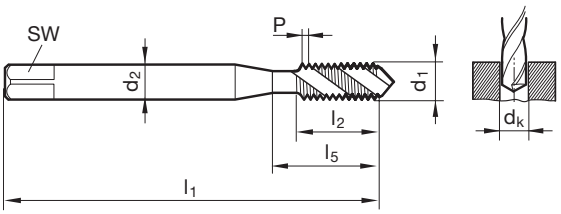
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	10,20	110,000	18,500	49,000
M14	2,000	11,000	9,000	12,00	110,000	20,000	53,000
M16	2,000	12,000	9,000	14,00	110,000	20,000	54,000
M18	2,500	14,000	11,000	15,50	125,000	25,000	62,000
M20	2,500	16,000	12,000	17,50	140,000	25,000	62,000

Konekierretapit, metrinen ISO-kierre

Materiaali	HSS-E-PM	HSS-E	
Ø-Toleranssi	ISO2/6H	ISO3/6G	ISO3/6G
Pinta	C		S
Malli	N R40	N R40	N R40
Muoto	C	C	C
Sisäinen jäähdytys			

P	≤ 1000
M	○
K	○
N	
S	
H	

Leikkuuarvosivu 24/25



DIN 2184-1 DIN 371	Artikkelinro.	1290	2994	2995

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0,400	2,800	2,100	1,60	45,000	4,500	13,500
M3	0,500	3,500	2,700	2,50	56,000	6,000	18,000
M4	0,700	4,500	3,400	3,30	63,000	7,500	21,000
M5	0,800	6,000	4,900	4,20	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,00	80,000	11,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	14,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	16,000	39,000
M12	1,750	9,000	7,000	10,20	110,000	18,500	49,000
M16	2,000	12,000	9,000	14,00	110,000	20,000	54,000
M20	2,500	16,000	12,000	17,50	140,000	25,000	62,000

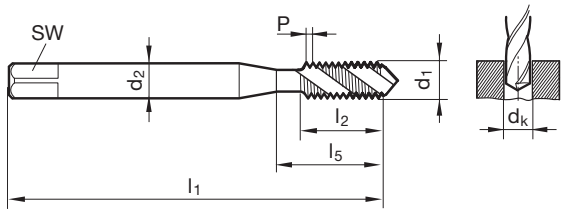
Konekierretapit, metrinen ISO-kierre

Materiaali	HSS-E-PM	
Ø-Toleranssi	ISO2/6H	ISO2/6H
Pinta	S	C
Malli	N R50	N R50
Muoto	C	C
Sisäinen jäähdytys		

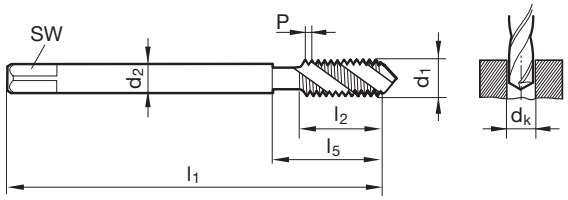
P	•
M	•
K	○
N	•
S	○
H	

Leikkuuarvosivu 25

DIN 371



DIN 376



DIN 2184-1 DIN 371 Artikkelinro. **767** **1152**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,50	56,000	6,000	18,000
M4	0,700	4,500	3,400	3,30	63,000	7,500	21,000
M5	0,800	6,000	4,900	4,20	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,00	80,000	11,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	14,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	16,000	39,000

DIN 2184-1 DIN 376 Artikkelinro. **1098** **1293**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	10,20	110,000	18,500	49,000
M14	2,000	11,000	9,000	12,00	110,000	20,000	53,000
M16	2,000	12,000	9,000	14,00	110,000	20,000	54,000
M20	2,500	16,000	12,000	17,50	140,000	25,000	62,000

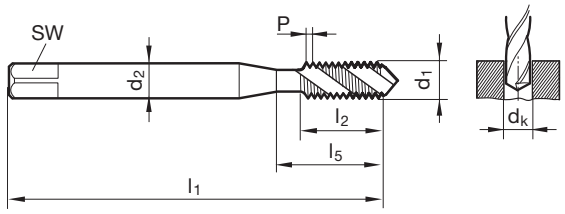
Konekierretapit, metrinen ISO-kierre

Materiaali	HSS-E-PM	
Ø-Toleranssi	6HX	6HX
Pinta	S	C
Malli	VA R50	VA R50
Muoto	C	C
Sisäinen jäähdytys		

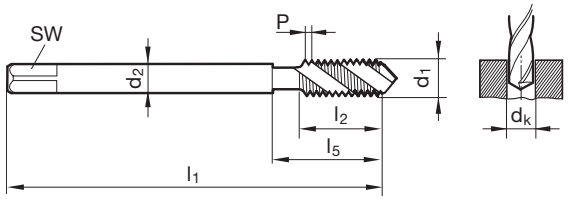
P	•
M	•
K	○
N	•
S	○
H	

Leikkuuarvosivu 25

DIN 371



DIN 376



DIN 2184-1 DIN 371	Artikkelinro.	761	1139

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,50	56,000	2,500	18,000
M4	0,700	4,500	3,400	3,30	63,000	3,500	21,000
M5	0,800	6,000	4,900	4,20	70,000	4,000	25,000
M6	1,000	6,000	4,900	5,00	80,000	5,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	6,300	35,000
M10	1,500	10,000	8,000	8,50	100,000	7,500	39,000

DIN 2184-1 DIN 376	Artikkelinro.	763	1142

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	10,20	110,000	8,800	63,000
M14	2,000	11,000	9,000	12,00	110,000	10,000	58,000
M16	2,000	12,000	9,000	14,00	110,000	10,000	58,000
M20	2,500	16,000	12,000	17,50	140,000	12,500	85,000

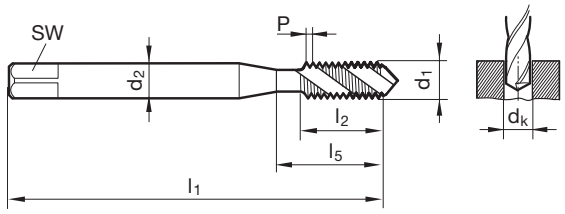
Konekierretapit, metrinen ISO-kierre

Materiaali	HSS-E-PM	
Ø-Toleranssi	ISO2/6H	ISO2/6H
Pinta	○	A
Malli	H R15	H R15
Muoto	C	C
Sisäinen jäähdytys	✕	✕

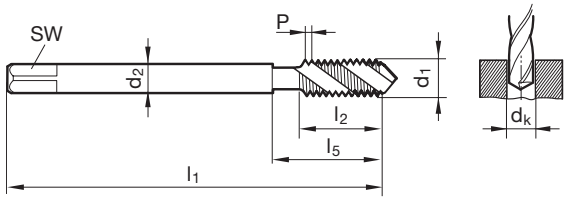
P	≤ 1200
M	
K	
N	
S	
H	

Leikkuuarvosivu 23

DIN 371



DIN 376



DIN 2184-1 DIN 371 — Artikkelinro. **872** **1577**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,50	56,000	6,000	18,000
M4	0,700	4,500	3,400	3,30	63,000	7,500	21,000
M5	0,800	6,000	4,900	4,20	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,00	80,000	11,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	14,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	16,000	39,000

DIN 2184-1 DIN 376 — Artikkelinro. **935** **1578**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	10,20	110,000	18,500	49,000
M16	2,000	12,000	9,000	14,00	110,000	20,000	54,000
M20	2,500	16,000	12,000	17,50	140,000	25,000	62,000

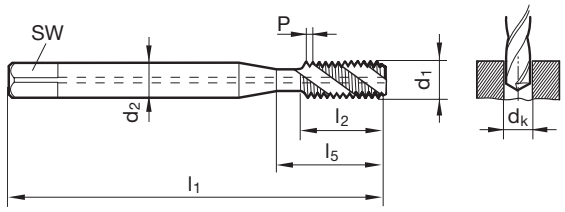
Jäähdytyskanavatapit, metrinen ISO kierre

Materiaali	HSS-E-PM
Ø-Toleranssi	6HX
Pinta	C
Malli	H R15
Muoto	C
Sisäinen jäähdytys	

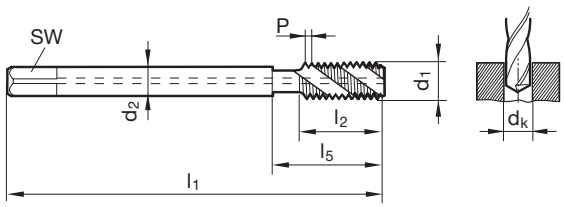
P	≤ 1200
M	
K	
N	
S	
H	

Leikkuuarvosivu 23

DIN 371



DIN 376



DIN 2184-1 DIN 371 Artikkelinro. **1188**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M6	1,000	6,000	4,900	5,00	80,000	11,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	14,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	16,000	39,000

DIN 2184-1 DIN 376 Artikkelinro. **1194**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	10,20	110,000	18,500	49,000
M14	2,000	11,000	9,000	12,00	110,000	20,000	53,000
M16	2,000	12,000	9,000	14,00	110,000	20,000	54,000
M20	2,500	16,000	12,000	17,50	140,000	25,000	62,000
M22	2,500	18,000	14,500	19,50	140,000	27,000	62,000
M24	3,000	18,000	14,500	21,00	160,000	30,000	73,000

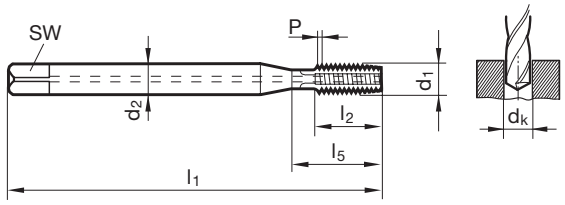
Jäähdytyskanavatapit, metrinen ISO kierre

P	≤ 1200
M	
K	•
N	≥ 7
S	
H	

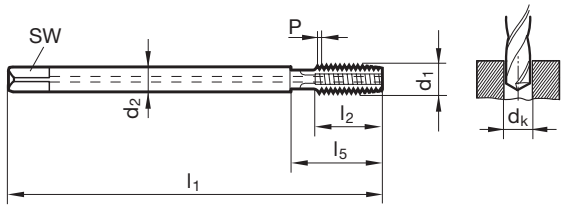
Leikkuuarvosivu 23

Materiaali	HSS-E-PM	
Ø-Toleranssi	6HX	6HX
Pinta	C	C
Malli	H	H
Muoto	C	E
Sisäinen jäähdytys		

DIN 371



DIN 376



DIN 2184-1 DIN 371 — Artikkelinro. **302** **1091**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0,800	6,000	4,900	4,20	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,00	80,000	16,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	17,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	20,000	39,000

DIN 2184-1 DIN 376 — Artikkelinro. **297** **4165**

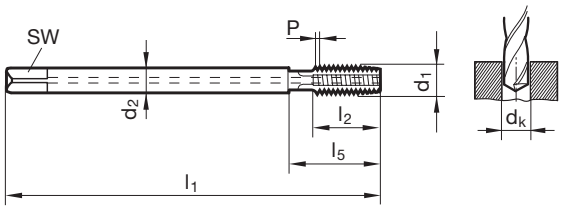
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M10	1,500	7,000	5,500	8,50	100,000	20,000	39,000
M12	1,750	9,000	7,000	10,20	110,000	24,000	49,000
M14	2,000	11,000	9,000	12,00	110,000	26,000	53,000
M16	2,000	12,000	9,000	14,00	110,000	26,000	54,000
M20	2,500	16,000	12,000	17,50	140,000	32,000	62,000

Jäähdytyskanavatapit, metrinen ISO kierre

P	≤ 1200
M	
K	•
N	≥ 7
S	
H	

Leikkuuarvosivu 23

Materiaali	**HSS-E**
Ø-Toleranssi	6HX
Pinta	C
Malli	H
Muoto	C
Sisäinen jäähdytys	



DIN 2184-1 DIN 376 Artikkelinro. **778**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M16	2,000	12,000	9,000	14,00	110,000	26,000	54,000
M20	2,500	16,000	12,000	17,50	140,000	32,000	62,000
M24	3,000	18,000	14,500	21,00	160,000	36,000	73,000
M27	3,000	20,000	16,000	24,00	160,000	36,000	73,000
M30	3,500	22,000	18,000	26,50	180,000	40,000	85,000
M33	3,500	25,000	20,000	29,50	180,000	40,000	91,000
M36	4,000	28,000	22,000	32,00	200,000	50,000	102,000
M39	4,000	32,000	24,000	35,00	200,000	50,000	107,000

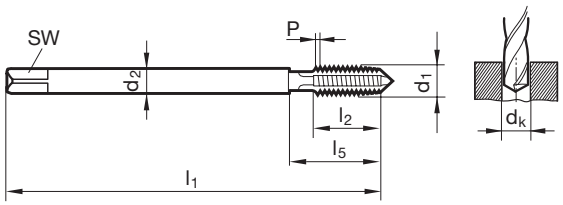
Jäähdytyskanavatapit, metrinen ISO kierre

Materiaali	HSS-E
Ø-Toleranssi	6HX
Pinta	C
Malli	H
Muoto	C
Sisäinen jäähdytys	

NEW

P	≤ 1200
M	
K	•
N	≥ 7
S	
H	

Leikkuuarvosivu 23



Tehdas stdr. ~DIN 376 Artikkelinro. **779**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M16	2,000	12,000	9,000	14,00	160,000	26,000	100,000
M20	2,500	16,000	12,000	17,50	180,000	32,000	120,000
M24	3,000	18,000	14,500	21,00	200,000	36,000	120,000
M27	3,000	20,000	16,000	24,00	225,000	36,000	145,000
M30	3,500	22,000	18,000	26,50	250,000	40,000	160,000
M33	3,500	25,000	20,000	29,50	275,000	40,000	170,000
M36	4,000	28,000	22,000	32,00	300,000	50,000	180,000
M39	4,000	32,000	24,000	35,00	325,000	50,000	210,000

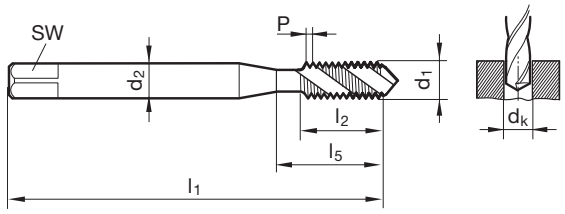
Konekierretapit, metrinen ISO-kierre

Materiaali	HSS-E		
Ø-Toleranssi	ISO2/6H	ISO2/6H	ISO2/6H
Pinta	○	●	●
Malli	H R40	H R40	H R40
Muoto	C	C	C
Sisäinen jäähdytys	✕	✕	✕

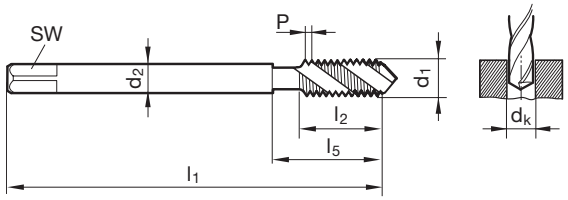
P	≤ 1200
M	
K	
N	
S	
H	

Leikkuuarvosivu 25

DIN 371



DIN 376



DIN 2184-1 DIN 371	Artikkelinro.	811	947	2850

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0,400	2,800	2,100	1,60	45,000	4,500	13,500
M2,3	0,400	2,800	2,100	1,90	45,000	4,500	14,500
M2,5	0,450	2,800	2,100	2,05	50,000	5,000	14,500
M2,6	0,450	2,800	2,100	2,15	50,000	5,000	14,500
M3	0,500	3,500	2,700	2,50	56,000	6,000	18,000
M3,5	0,600	4,000	3,000	2,90	56,000	7,000	20,000
M4	0,700	4,500	3,400	3,30	63,000	7,500	21,000
M5	0,800	6,000	4,900	4,20	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,00	80,000	11,000	30,000
M7	1,000	7,000	5,500	6,00	80,000	11,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	14,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	16,000	39,000

DIN 2184-1 DIN 376	Artikkelinro.	823	950	2851

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	2,200		2,50	56,000	6,000	18,000
M3,5	0,600	2,500	2,100	2,90	56,000	7,000	20,000
M4	0,700	2,800	2,100	3,30	63,000	7,500	21,000
M5	0,800	3,500	2,700	4,20	70,000	8,500	25,000
M6	1,000	4,500	3,400	5,00	80,000	11,000	30,000
M8	1,250	6,000	4,900	6,80	90,000	14,000	35,000
M10	1,500	7,000	5,500	8,50	100,000	16,000	39,000
M12	1,750	9,000	7,000	10,20	110,000	18,500	49,000
M14	2,000	11,000	9,000	12,00	110,000	20,000	53,000
M16	2,000	12,000	9,000	14,00	110,000	20,000	54,000
M18	2,500	14,000	11,000	15,50	125,000	25,000	62,000
M20	2,500	16,000	12,000	17,50	140,000	25,000	62,000
M22	2,500	18,000	14,500	19,50	140,000	27,000	62,000
M24	3,000	18,000	14,500	21,00	160,000	30,000	73,000
M30	3,500	22,000	18,000	26,50	180,000	35,000	85,000

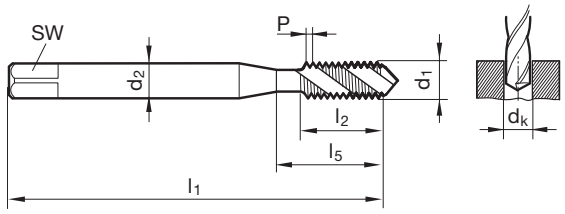
Konekierretapit, metrinen ISO-kierre

Materiaali	HSS-E	
Ø-Toleranssi	ISO2/6H	ISO2/6H
Pinta	S	C
Malli	H R40	H R40
Muoto	C	C
Sisäinen jäähdytys		

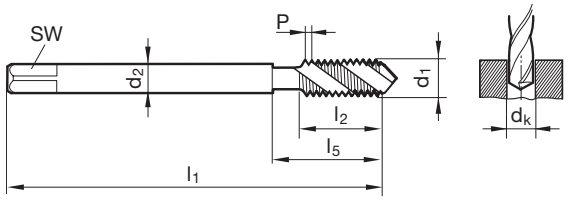
P	≤ 1200
M	
K	
N	
S	
H	

Leikkuuarvosivu 25

DIN 371



DIN 376



DIN 2184-1 DIN 371 Artikkelinro. **361** **1916**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0,400	2,800	2,100	1,60	45,000	4,500	13,500
M2,5	0,450	2,800	2,100	2,05	50,000	5,000	14,500
M3	0,500	3,500	2,700	2,50	56,000	6,000	18,000
M3,5	0,600	4,000	3,000	2,90	56,000	7,000	20,000
M4	0,700	4,500	3,400	3,30	63,000	7,500	21,000
M5	0,800	6,000	4,900	4,20	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,00	80,000	11,000	30,000
M7	1,000	7,000	5,500	6,00	80,000	11,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	14,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	16,000	39,000

DIN 2184-1 DIN 376 Artikkelinro. **362** **1917**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	2,200		2,50	56,000	6,000	18,000
M4	0,700	2,800	2,100	3,30	63,000	7,500	21,000
M5	0,800	3,500	2,700	4,20	70,000	8,500	25,000
M6	1,000	4,500	3,400	5,00	80,000	11,000	30,000
M8	1,250	6,000	4,900	6,80	90,000	14,000	35,000
M10	1,500	7,000	5,500	8,50	100,000	16,000	39,000
M12	1,750	9,000	7,000	10,20	110,000	18,500	49,000
M14	2,000	11,000	9,000	12,00	110,000	20,000	53,000
M16	2,000	12,000	9,000	14,00	110,000	20,000	54,000
M18	2,500	14,000	11,000	15,50	125,000	25,000	62,000
M20	2,500	16,000	12,000	17,50	140,000	25,000	62,000
M22	2,500	18,000	14,500	19,50	140,000	27,000	62,000
M24	3,000	18,000	14,500	21,00	160,000	30,000	73,000
M30	3,500	22,000	18,000	26,50	180,000	35,000	85,000

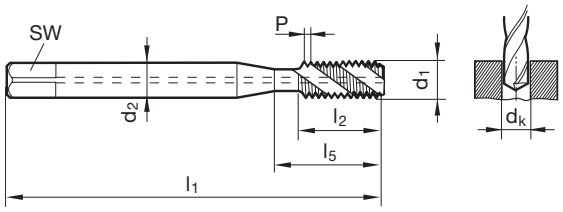
Jäähdytyskanavatapit, metrinen ISO kierre

Materiaali	**HSS-E**
Ø-Toleranssi	ISO2/6H
Pinta	◯
Malli	H R40
Muoto	C
Sisäinen jäähdytys	

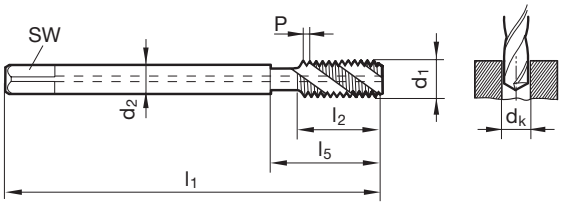
P	≤ 1200
M	
K	
N	
S	
H	

Leikkuuarvosivu 25

DIN 371



DIN 376



DIN 2184-1 DIN 371 Artikkelinro. **1894**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0,800	6,000	4,900	4,20	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,00	80,000	11,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	14,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	16,000	39,000

DIN 2184-1 DIN 376 Artikkelinro. **1901**

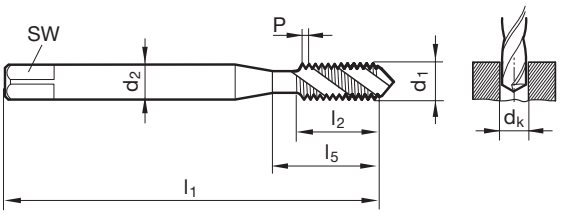
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	10,20	110,000	18,500	49,000
M14	2,000	11,000	9,000	12,00	110,000	20,000	53,000
M16	2,000	12,000	9,000	14,00	110,000	20,000	54,000
M18	2,500	14,000	11,000	15,50	125,000	25,000	62,000
M20	2,500	16,000	12,000	17,50	140,000	25,000	62,000

Konekierretapit, metrinen ISO-kierre

Materiaali	HSS-E	
Ø-Toleranssi	ISO3/6G	ISO3/6G
Pinta		S
Malli	H R40	H R40
Muoto	C	C
Sisäinen jäähdytys		

P	≤ 1200
M	
K	
N	
S	
H	

Leikkuuarvosivu 25



DIN 2184-1 DIN 371 Artikkelinro. **2985** **2986**

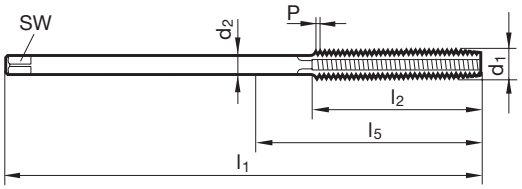
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0,400	2,800	2,100	1,60	45,000	4,500	13,500
M2,5	0,450	2,800	2,100	2,05	50,000	5,000	14,500
M3	0,500	3,500	2,700	2,50	56,000	6,000	18,000
M4	0,700	4,500	3,400	3,30	63,000	7,500	21,000
M5	0,800	6,000	4,900	4,20	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,00	80,000	11,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	14,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	16,000	39,000

Mutterikierretapit, metrinen ISO-kierre

Materiaali	**HSS-E**
Ø-Toleranssi	ISO2/6H
Pinta	◯
Malli	N
Muoto	
Sisäinen jäähdytys	

P	≤ 800
M	
K	
N	
S	
H	

Leikkuuarvosivu 18



DIN 357 DIN 357 Artikkelinro. **851**

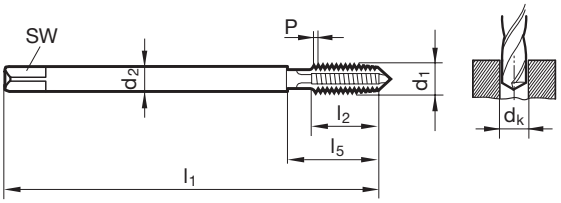
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	2,200		2,50	70,000	22,000	30,000
M4	0,700	2,800	2,100	3,30	90,000	25,000	33,000
M5	0,800	3,500	2,700	4,20	100,000	28,000	38,000
M6	1,000	4,500	3,400	5,00	110,000	32,000	44,000
M8	1,250	6,000	4,900	6,80	125,000	40,000	61,000
M10	1,500	7,000	5,500	8,50	140,000	45,000	85,000
M12	1,750	9,000	7,000	10,20	180,000	50,000	120,000
M16	2,000	12,000	9,000	14,00	200,000	63,000	145,000
M20	2,500	16,000	12,000	17,50	250,000	70,000	170,000
M30	3,500	22,000	18,000	26,50	315,000	100,000	230,000

Konekierretapit, metrinen ISO-kierre

Materiaali	**HSS-E**
Ø-Toleranssi	ISO2/6H
Pinta	◯
Malli	N
Muoto	B
Sisäinen jäähdytys	

P	≤ 800
M	
K	
N	
S	
H	

Leikkuuarvosivu 19



Tehdas stdr. Tehdas stdr. Artikkelinro. **998**

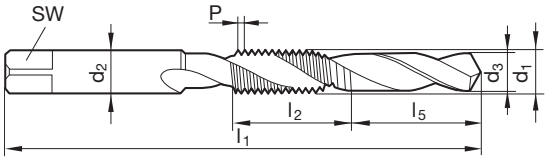
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	2,200		2,50	70,000	18,000	35,000
M4	0,700	2,800	2,100	3,30	90,000	22,000	55,000
M5	0,800	3,500	2,700	4,20	100,000	24,000	65,000
M6	1,000	4,500	3,400	5,00	110,000	25,000	75,000
M8	1,250	6,000	4,900	6,80	125,000	28,000	68,000
M10	1,500	7,000	5,500	8,50	140,000	30,000	80,000
M12	1,750	9,000	7,000	10,20	180,000	35,000	115,000
M14	2,000	11,000	9,000	12,00	200,000	35,000	125,000
M16	2,000	12,000	9,000	14,00	200,000	40,000	130,000
M20	2,500	16,000	12,000	17,50	250,000	45,000	165,000

Pora-kierretappiyhdistelmä

Materiaali	**HSS-E**
Ø-Toleranssi	ISO2/6H
Pinta	◯
Malli	N
Muoto	D
Sisäinen jäähdytys	

P	≤ 800
M	
K	
N	
S	
H	

Leikkuuarvosivu 18



Tehdas stdr. Tehdas stdr. Artikkelinro. **1839**

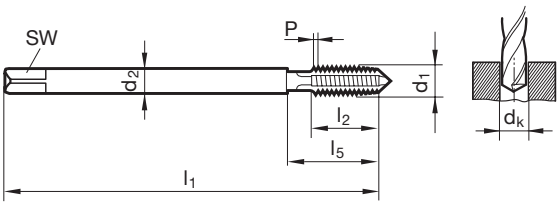
d1	P	d2	d3	SW	l1	l5	l2	koodinro.
	mm	mm	mm	mm	mm	mm	mm	
M3	0,500	3,500	2,500	2,700	62,000	11,000	12,000	3,000
M4	0,700	4,500	3,300	3,400	66,000	10,000	16,000	4,000
M5	0,800	6,000	4,200	4,900	75,000	12,000	18,000	5,000
M6	1,000	6,000	5,000	4,900	81,000	14,000	20,000	6,000
M8	1,250	6,000	6,800	4,900	93,000	20,000	12,000	8,000
M10	1,500	7,000	8,500	5,500	99,000	22,000	14,000	10,000
M12	1,750	9,000	10,200	7,000	106,000	25,000	16,000	12,000

Konekierretapit, metrinen ISO-kierre

Materiaali	**HSS-E**
Ø-Toleranssi	ISO2/6H
Pinta	◯
Malli	N R40
Muoto	C
Sisäinen jäähdytys	

P	≤ 800
M	
K	
N	
S	
H	

Leikkuuarvosivu 23



Tehdas stdr. Tehdas stdr. Artikkelinro. **888**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,50	90,000	6,000	18,000
M4	0,700	4,500	3,400	3,30	125,000	7,500	21,000
M5	0,800	6,000	4,900	4,20	140,000	8,500	25,000
M6	1,000	6,000	4,900	5,00	160,000	11,000	30,000
M8	1,250	6,000	4,900	6,80	180,000	14,000	
M10	1,500	7,000	5,500	8,50	200,000	16,000	140,000
M12	1,750	9,000	7,000	10,20	220,000	18,500	160,000
M14	2,000	11,000	9,000	12,00	220,000	20,000	160,000
M16	2,000	12,000	9,000	14,00	220,000	20,000	16,000
M20	2,500	16,000	12,000	17,50	280,000	25,000	220,000

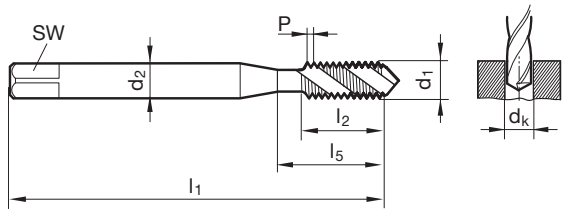
Konekierretapit, metrinen ISO-kierre

Materiaali	**HSS-E**
Ø-Toleranssi	ISO2/6H
Pinta	◯
Malli	N L15
Muoto	D
Sisäinen jäähdytys	

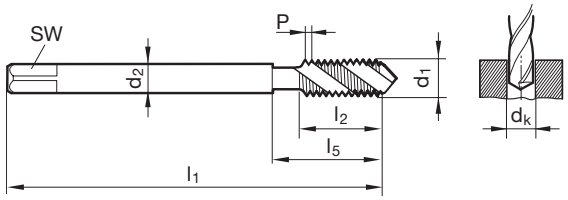
P	≤ 800
M	
K	
N	
S	
H	

Leikkuuarvosivu 19

DIN 371



DIN 376



DIN 2184-1 DIN 371 Artikkelinro. **808**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,50	56,000	10,000	18,000
M3,5	0,600	4,000	3,000	2,90	56,000	12,000	20,000
M4	0,700	4,500	3,400	3,30	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,20	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,00	80,000	16,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	17,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	20,000	39,000

DIN 2184-1 DIN 376 Artikkelinro. **820**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	2,200	1,800	2,50	56,000	10,000	18,000
M4	0,700	2,800	2,100	3,30	63,000	12,000	21,000
M5	0,800	3,500	2,700	4,20	70,000	14,000	25,000
M6	1,000	4,500	3,400	5,00	80,000	16,000	30,000
M8	1,250	6,000	4,900	6,80	90,000	17,000	35,000
M10	1,500	7,000	5,500	8,50	100,000	20,000	39,000
M12	1,750	9,000	7,000	10,20	110,000	24,000	49,000
M14	2,000	11,000	9,000	12,00	110,000	26,000	53,000
M16	2,000	12,000	9,000	14,00	110,000	26,000	54,000

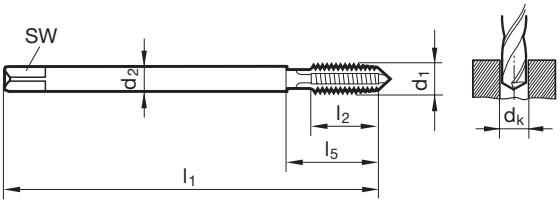
Konekierretapit, metrinen ISO-hienokierre

Materiaali	**HSS-E**
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	B
Sisäinen jäähdytys	

NEW

P	•
M	•
K	○
N	○
S	○
H	

Leikkuuarvosivu 21



DIN 2184-1 DIN 374 Artikkelinro. **4219**

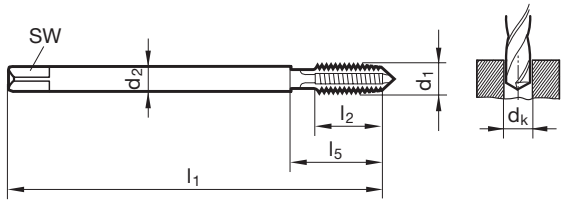
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M6 x 0,75	4,500	3,400	5,20	80,000	13,000	30,000	6,004
M8 x 0,75	6,000	4,900	7,20	80,000	14,000	30,000	8,004
M8 x 1	6,000	4,900	7,00	90,000	16,000	35,000	8,005
M10 x 1	7,000	5,500	9,00	90,000	16,000	35,000	10,005
M10 x 1,25	7,000	5,500	8,80	100,000	20,000	39,000	10,006
M12 x 1	9,000	7,000	11,00	100,000	20,000	40,000	12,005
M12 x 1,25	9,000	7,000	10,80	100,000	20,000	40,000	12,006
M12 x 1,5	9,000	7,000	10,50	100,000	20,000	40,000	12,007
M14 x 1,5	11,000	9,000	12,50	100,000	20,000	40,000	14,007
M16 x 1,5	12,000	9,000	14,50	100,000	22,000	44,000	16,007
M18 x 1,5	14,000	11,000	16,50	110,000	25,000	44,000	18,007
M20 x 1,5	16,000	12,000	18,50	125,000	25,000	44,000	20,007
M24 x 1,5	18,000	14,500	22,50	140,000	28,000	48,000	24,007

Konekierretapit, metrinen ISO-hienokierre

Materiaali	HSS-E		
Ø-Toleranssi	ISO2/6H	ISO2/6H	ISO2/6H
Pinta	○	Ⓢ	●
Malli	N	N	N
Muoto	B	B	B
Sisäinen jäähdytys	✗	✗	✗

P	≤ 800
M	
K	
N	
S	
H	

Leikkuuarvosivu 19



DIN 2184-1 DIN 374 — Artikkelinro. **827** **832** **2888**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M3 x 0,35	2,200		2,65	56,000	7,000	18,000	3,002
M3,5 x 0,35	2,500	2,100	3,15	56,000	8,000	20,000	3,502
M4 x 0,5	2,800	2,100	3,50	63,000	8,000	21,000	4,003
M5 x 0,5	3,500	2,700	4,50	70,000	10,000	25,000	5,003
M6 x 0,5	4,500	3,400	5,50	80,000	13,000	30,000	6,003
M6 x 0,75	4,500	3,400	5,20	80,000	13,000	30,000	6,004
M6 x 0,75	4,500	3,400	5,20	100,000	13,000	30,000	6,004
M7 x 0,75	5,500	4,300	6,20	80,000	13,000	30,000	7,004
M8 x 0,5	6,000	4,900	7,50	80,000	14,000	30,000	8,003
M8 x 0,75	6,000	4,900	7,20	80,000	14,000	30,000	8,004
M8 x 1	6,000	4,900	7,00	90,000	16,000	35,000	8,005
M9 x 1	7,000	5,500	8,00	90,000	16,000	35,000	9,005
M10 x 0,75	7,000	5,500	9,20	90,000	16,000	35,000	10,004
M10 x 1	7,000	5,500	9,00	90,000	16,000	35,000	10,005
M10 x 1	7,000	5,500	9,00	90,000	17,000	35,000	10,005
M10 x 1,25	7,000	5,500	8,80	100,000	20,000	39,000	10,006
M11 x 1	8,000	6,200	10,00	90,000	20,000	33,000	11,005
M12 x 1	9,000	7,000	11,00	100,000	20,000	40,000	12,005
M12 x 1,25	9,000	7,000	10,80	100,000	20,000	40,000	12,006
M12 x 1,5	9,000	7,000	10,50	100,000	20,000	40,000	12,007
M14 x 1	11,000	9,000	13,00	100,000	20,000	40,000	14,005
M14 x 1,25	11,000	9,000	12,80	100,000	20,000	40,000	14,006
M14 x 1,5	11,000	9,000	12,50	100,000	20,000	40,000	14,007
M15 x 1	12,000	9,000	14,00	100,000	20,000	40,000	15,005
M15 x 1,5	12,000	9,000	13,50	100,000	20,000	44,000	15,007
M16 x 1	12,000	9,000	15,00	100,000	22,000	44,000	16,005
M16 x 1,5	12,000	9,000	14,50	100,000	22,000	44,000	16,007
M18 x 1	14,000	11,000	17,00	110,000	25,000	44,000	18,005
M18 x 1,5	14,000	11,000	16,50	110,000	25,000	44,000	18,007
M18 x 2	14,000	11,000	16,00	125,000	30,000	58,000	18,008
M20 x 1	16,000	12,000	19,00	125,000	25,000	44,000	20,005
M20 x 1,5	16,000	12,000	18,50	125,000	25,000	44,000	20,007
M20 x 2	16,000	12,000	18,00	140,000	32,000	60,000	20,008
M22 x 1,5	18,000	14,500	20,50	125,000	25,000	44,000	22,007
M22 x 2	18,000	14,500	20,00	140,000	32,000	62,000	22,008
M24 x 1	18,000	14,500	23,00	140,000	28,000	48,000	24,005

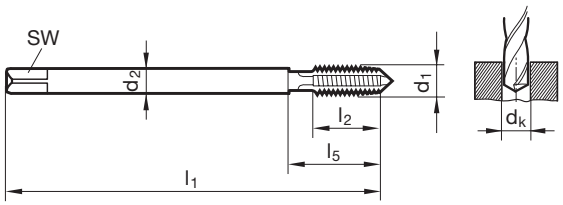
DIN 2184-1 DIN 374 Artikkelinro. **827** **832** **2888**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M24 x 1,5	18,000	14,500	22,50	140,000	28,000	48,000	24,007
M24 x 2	18,000	14,500	22,00	140,000	28,000	48,000	24,008
M26 x 1,5	18,000	14,500	24,50	140,000	28,000	50,000	26,007
M27 x 1,5	20,000	16,000	25,50	140,000	28,000	53,000	27,007
M27 x 2	20,000	16,000	25,00	140,000	28,000	53,000	27,008
M28 x 1,5	20,000	16,000	26,50	140,000	28,000	53,000	28,007
M30 x 1,5	22,000	18,000	28,50	150,000	28,000	53,000	30,007
M30 x 2	22,000	18,000	28,00	150,000	28,000	53,000	30,008
M32 x 1,5	22,000	18,000	30,50	150,000	28,000	53,000	32,007
M33 x 1,5	25,000	20,000	31,50	160,000	30,000	56,000	33,007
M35 x 1,5	28,000	22,000	33,50	170,000	30,000	56,000	35,007
M36 x 1,5	28,000	22,000	34,50	170,000	30,000	56,000	36,007
M38 x 1,5	28,000	22,000	36,50	170,000	30,000	56,000	38,007
M40 x 1,5	32,000	24,000	38,50	170,000	30,000	57,000	40,007

Konekierretapit, metrinen ISO-hienokierre

P	≤ 1000	Leikkuuarvosivu 19/20
M	○	
K		
N		
S		
H		

Materiaali	HSS-E	
Ø-Toleranssi	ISO3/6G	ISO3/6G
Pinta	(S)	○
Malli	N	N
Muoto	B	B
Sisäinen jäähdytys	☒	☒



DIN 2184-1 DIN 374 Artikkelinro. **2993** **316**

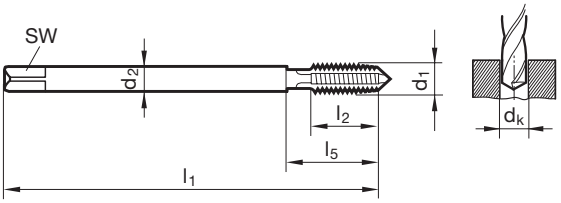
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M6 x 0,75	4,500	3,400	5,20	80,000	13,000	30,000	6,004
M8 x 1	6,000	4,900	7,00	90,000	16,000	35,000	8,005
M10 x 1	7,000	5,500	9,00	90,000	16,000	35,000	10,005
M12 x 1	9,000	7,000	11,00	100,000	20,000	40,000	12,005
M12 x 1,5	9,000	7,000	10,50	100,000	20,000	40,000	12,007
M14 x 1,5	11,000	9,000	12,50	100,000	20,000	40,000	14,007
M16 x 1,5	12,000	9,000	14,50	100,000	22,000	44,000	16,007
M18 x 1,5	14,000	11,000	16,50	110,000	25,000	44,000	18,007
M20 x 1,5	16,000	12,000	18,50	125,000	25,000	44,000	20,007

Konekierretapit, metrinen ISO-hienokierre

P	≤ 1000
M	○
K	
N	
S	
H	

Leikkuuarvosivu 20

Materiaali	HSS-E	
Ø-Toleranssi	ISO2/6H	ISO2/6H
Pinta	A+M	
Malli	N	N
Muoto	B	B
Sisäinen jäähdytys		



DIN 2184-1 DIN 374 Artikkelinro. **2878** **2879**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M5 x 0,5	3,500	2,700	4,50	70,000	10,000	25,000	5,003
M6 x 0,75	4,500	3,400	5,20	80,000	13,000	30,000	6,004
M8 x 0,75	6,000	4,900	7,20	80,000	14,000	30,000	8,004
M8 x 1	6,000	4,900	7,00	90,000	16,000	35,000	8,005
M10 x 1	7,000	5,500	9,00	90,000	16,000	35,000	10,005
M12 x 1	9,000	7,000	11,00	100,000	20,000	40,000	12,005
M12 x 1,5	9,000	7,000	10,50	100,000	20,000	40,000	12,007
M14 x 1,5	11,000	9,000	12,50	100,000	20,000	40,000	14,007
M16 x 1,5	12,000	9,000	14,50	100,000	22,000	44,000	16,007
M18 x 1,5	14,000	11,000	16,50	110,000	25,000	44,000	18,007
M20 x 1,5	16,000	12,000	18,50	125,000	25,000	44,000	20,007
M22 x 1,5	18,000	14,500	20,50	125,000	25,000	44,000	22,007
M24 x 1,5	18,000	14,500	22,50	140,000	28,000	48,000	24,007
M24 x 2	18,000	14,500	22,00	140,000	28,000	48,000	24,008
M26 x 1,5	18,000	14,500	24,50	140,000	28,000	50,000	26,007
M27 x 1,5	20,000	16,000	25,50	140,000	28,000	53,000	27,007
M27 x 2	20,000	16,000	25,00	140,000	28,000	53,000	27,008
M28 x 1,5	20,000	16,000	26,50	140,000	28,000	53,000	28,007
M30 x 1,5	22,000	18,000	28,50	150,000	28,000	53,000	30,007
M30 x 2	22,000	18,000	28,00	150,000	28,000	53,000	30,008
M32 x 1,5	22,000	18,000	30,50	150,000	28,000	53,000	32,007
M36 x 1,5	28,000	22,000	34,50	170,000	30,000	56,000	36,007
M40 x 1,5	32,000	24,000	38,50	170,000	30,000	57,000	40,007
M42 x 1,5	32,000	24,000	40,50	170,000	30,000	57,000	42,007
M45 x 1,5	36,000	29,000	43,50	180,000	32,000	60,000	45,007
M48 x 1,5	36,000	29,000	46,50	190,000	32,000	60,000	48,007
M50 x 1,5	36,000	29,000	48,50	190,000	32,000	60,000	50,007

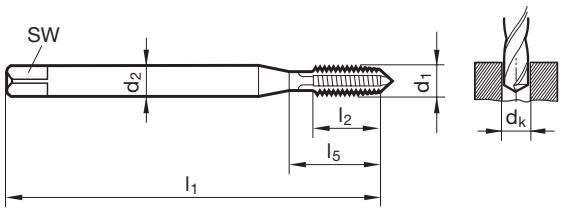
Konekierretapit, metrinen ISO-hienokierre

R Cyl

P	≤ 1000
M	
K	
N	
S	
H	

Leikkuuarvosivu 21

Materiaali	**TKM**
Ø-Toleranssi	6HX
Pinta	C
Malli	N
Muoto	B
Sisäinen jäähdytys	



DIN 2184-1 ~DIN 371 Artikkelinro. **943**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M5 x 0,5	6,000	4,900	4,50	70,000	7,500	25,000	5,003
M6 x 0,5	6,000	4,900	5,50	80,000	7,500	30,000	6,003
M6 x 0,75	6,000	4,900	5,20	80,000	11,500	30,000	6,004
M8 x 1	8,000	6,200	7,00	90,000	15,000	35,000	8,005
M10 x 1	10,000	8,000	9,00	90,000	15,000	35,000	10,005
M10 x 1,25	10,000	8,000	8,80	100,000	19,000	39,000	10,006
M12 x 1	12,000	9,000	11,00	100,000	15,000	40,000	12,005
M12 x 1,25	12,000	9,000	10,80	100,000	19,000	40,000	12,006
M12 x 1,5	12,000	9,000	10,50	100,000	22,500	40,000	12,007

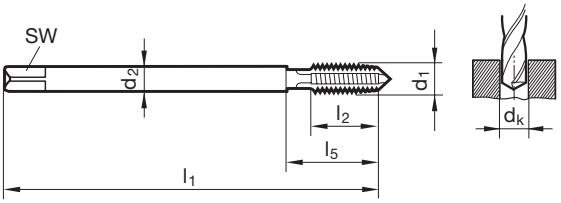
Konekierretapit, metrinen ISO-hienokierre

R Cyl

P	≤ 1000
M	
K	
N	
S	
H	

Leikkuuarvosivu 21

Materiaali	**TKM**
Ø-Toleranssi	6HX
Pinta	C
Malli	N
Muoto	B
Sisäinen jäähdytys	



DIN 2184-1 DIN 374 Artikkelinro. **944**

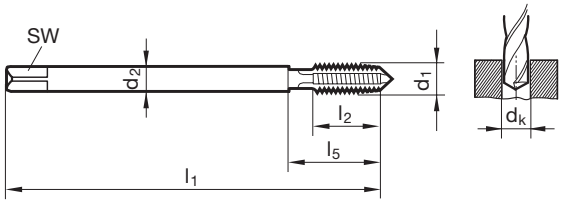
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M14 x 1,25	11,000	9,000	12,80	100,000	19,000	40,000	14,006
M14 x 1,5	11,000	9,000	12,50	100,000	22,500	40,000	14,007
M16 x 1	12,000	9,000	15,00	100,000	15,000	44,000	16,005
M16 x 1,5	12,000	9,000	14,50	100,000	22,500	44,000	16,007

Konekierretapit, metrinen ISO-hienokierre

Materiaali	HSS-E	
Ø-Toleranssi	ISO2/6H	ISO2/6H
Pinta	○	●
Malli	H	H
Muoto	B	B
Sisäinen jäähdytys	☒	☒

P	≤ 1200
M	
K	
N	
S	
H	

Leikkuuarvosivu 21



DIN 2184-1 DIN 374 — Artikkelinro. **828** **2943**

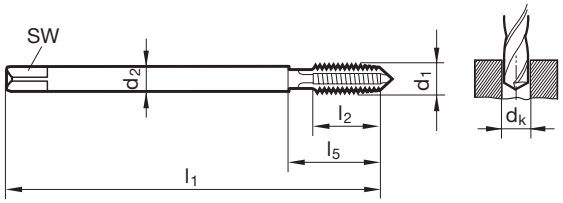
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M3 x 0,35	2,200		2,65	56,000	7,000	18,000	3,002
M4 x 0,5	2,800	2,100	3,50	63,000	8,000	21,000	4,003
M5 x 0,5	3,500	2,700	4,50	70,000	10,000	25,000	5,003
M6 x 0,5	4,500	3,400	5,50	80,000	13,000	30,000	6,003
M6 x 0,75	4,500	3,400	5,20	80,000	13,000	30,000	6,004
M8 x 0,75	6,000	4,900	7,20	80,000	14,000	30,000	8,004
M8 x 1	6,000	4,900	7,00	90,000	16,000	35,000	8,005
M10 x 1	7,000	5,500	9,00	90,000	16,000	35,000	10,005
M12 x 1	9,000	7,000	11,00	100,000	20,000	40,000	12,005
M12 x 1,5	9,000	7,000	10,50	100,000	20,000	40,000	12,007
M14 x 1,5	11,000	9,000	12,50	100,000	20,000	40,000	14,007
M16 x 1,5	12,000	9,000	14,50	100,000	22,000	44,000	16,007
M18 x 1,5	14,000	11,000	16,50	110,000	25,000	44,000	18,007
M20 x 1,5	16,000	12,000	18,50	125,000	25,000	44,000	20,007
M22 x 1,5	18,000	14,500	20,50	125,000	25,000	44,000	22,007
M24 x 1,5	18,000	14,500	22,50	140,000	28,000	48,000	24,007

Konekierretapit, metrinen ISO-hienokierre

Materiaali	HSS-E-PM
Ø-Toleranssi	ISO2/6H
Pinta	S
Malli	N
Muoto	B
Sisäinen jäähdytys	

P	≤ 1000
M	•
K	
N	
S	
H	

Leikkuuarvosivu 20



DIN 2184-1 DIN 374 Artikkelinro. **1291**

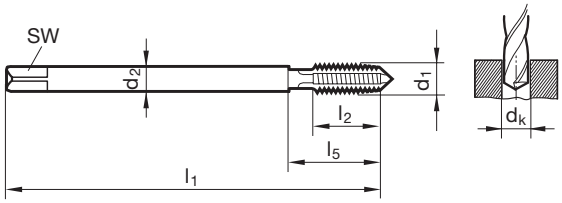
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6,000	4,900	7,00	90,000	16,000	35,000	8,005
M10 x 1	7,000	5,500	9,00	90,000	16,000	35,000	10,005
M10 x 1,25	7,000	5,500	8,80	100,000	20,000	39,000	10,006
M12 x 1	9,000	7,000	11,00	100,000	20,000	40,000	12,005
M12 x 1,25	9,000	7,000	10,80	100,000	20,000	40,000	12,006
M12 x 1,5	9,000	7,000	10,50	100,000	20,000	40,000	12,007
M14 x 1,25	11,000	9,000	12,80	100,000	20,000	40,000	14,006
M14 x 1,5	11,000	9,000	12,50	100,000	20,000	40,000	14,007
M16 x 1,5	12,000	9,000	14,50	100,000	22,000	44,000	16,007
M18 x 1,5	14,000	11,000	16,50	110,000	25,000	44,000	18,007
M20 x 1,5	16,000	12,000	18,50	125,000	25,000	44,000	20,007
M22 x 1,5	18,000	14,500	20,50	125,000	25,000	44,000	22,007
M24 x 1,5	18,000	14,500	22,50	140,000	28,000	48,000	24,007
M24 x 2	18,000	14,500	22,00	140,000	28,000	48,000	24,008

Konekierretapit, metrinen ISO-hienokierre

Materiaali	**HSS-E**
Ø-Toleranssi	ISO3/6G
Pinta	(S)
Malli	H
Muoto	B
Sisäinen jäähdytys	

P	≤ 1200
M	
K	
N	
S	
H	

Leikkuuarvosivu 21



DIN 2184-1 DIN 374 Artikkelinro. **2983**

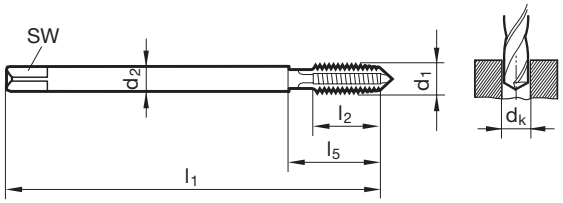
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6,000	4,900	7,00	90,000	16,000	35,000	8,005
M10 x 1	7,000	5,500	9,00	90,000	16,000	35,000	10,005
M12 x 1,5	9,000	7,000	10,50	100,000	20,000	40,000	12,007
M14 x 1,5	11,000	9,000	12,50	100,000	20,000	40,000	14,007
M16 x 1,5	12,000	9,000	14,50	100,000	22,000	44,000	16,007
M18 x 1,5	14,000	11,000	16,50	110,000	25,000	44,000	18,007
M20 x 1,5	16,000	12,000	18,50	125,000	25,000	44,000	20,007

Konekierretapit, metrinen ISO-hienokierre

P	≤ 800
M	
K	
N	
S	
H	

Leikkuuarvosivu 18/22

Materiaali	HSS-E	
Ø-Toleranssi	ISO2/6H	ISO3/6G
Pinta	◯	◯
Malli	N	N
Muoto	C	C
Sisäinen jäähdytys	☒	☒



DIN 2184-1 DIN 374 Artikkelinro. **830** **829**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M3 x 0,35	2,200		2,65	56,000	4,000	18,000	3,002
M3,5 x 0,35	2,500	2,100	3,15	56,000	4,000	20,000	3,502
M4 x 0,5	2,800	2,100	3,50	63,000	5,000	21,000	4,003
M5 x 0,5	3,500	2,700	4,50	70,000	5,000	25,000	5,003
M6 x 0,5	4,500	3,400	5,50	80,000	5,000	30,000	6,003
M6 x 0,75	4,500	3,400	5,20	80,000	8,000	30,000	6,004
M7 x 0,75	5,500	4,300	6,20	80,000	8,000	30,000	7,004
M8 x 0,5	6,000	4,900	7,50	80,000	8,000	30,000	8,003
M8 x 0,75	6,000	4,900	7,20	80,000	8,000	30,000	8,004
M8 x 1	6,000	4,900	7,00	90,000	11,000	35,000	8,005
M9 x 1	7,000	5,500	8,00	90,000	11,000	35,000	9,005
M10 x 0,75	7,000	5,500	9,20	90,000	11,000	35,000	10,004
M10 x 1	7,000	5,500	9,00	90,000	11,000	35,000	10,005
M10 x 1,25	7,000	5,500	8,80	100,000	14,000	39,000	10,006
M11 x 1	8,000	6,200	10,00	90,000	11,000	33,000	11,005
M12 x 1	9,000	7,000	11,00	100,000	11,000	40,000	12,005
M12 x 1,25	9,000	7,000	10,80	100,000	16,000	40,000	12,006
M12 x 1,5	9,000	7,000	10,50	100,000	16,000	40,000	12,007
M14 x 1	11,000	9,000	13,00	100,000	11,000	40,000	14,005
M14 x 1,25	11,000	9,000	12,80	100,000	15,000	40,000	14,006
M14 x 1,5	11,000	9,000	12,50	100,000	15,000	40,000	14,007
M15 x 1	12,000	9,000	14,00	100,000	11,000	40,000	15,005
M16 x 1	12,000	9,000	15,00	100,000	11,000	44,000	16,005
M16 x 1,5	12,000	9,000	14,50	100,000	15,000	44,000	16,007
M18 x 1	14,000	11,000	17,00	110,000	12,000	44,000	18,005
M18 x 1,5	14,000	11,000	16,50	110,000	16,000	44,000	18,007
M18 x 2	14,000	11,000	16,00	125,000	20,000	58,000	18,008
M20 x 1	16,000	12,000	19,00	125,000	12,000	44,000	20,005
M20 x 1,5	16,000	12,000	18,50	125,000	16,000	44,000	20,007
M20 x 2	16,000	12,000	18,00	140,000	20,000	60,000	20,008
M22 x 1	18,000	14,500	21,00	125,000	12,000	44,000	22,005
M22 x 1,5	18,000	14,500	20,50	125,000	16,000	44,000	22,007
M22 x 2	18,000	14,500	20,00	140,000	22,000	62,000	22,008
M24 x 1,5	18,000	14,500	22,50	140,000	16,000	48,000	24,007
M24 x 2	18,000	14,500	22,00	140,000	22,000	48,000	24,008
M25 x 1,5	18,000	14,500	23,50	140,000	20,000	50,000	25,007

DIN 2184-1 DIN 374 Artikkelinro. **830** **829**

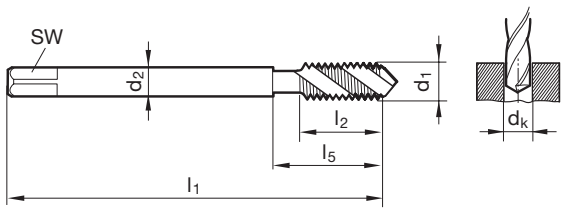
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M26 x 1,5	18,000	14,500	24,50	140,000	20,000	50,000	26,007
M27 x 2	20,000	16,000	25,00	140,000	20,000	53,000	27,008
M28 x 1,5	20,000	16,000	26,50	140,000	20,000	53,000	28,007
M30 x 1,5	22,000	18,000	28,50	150,000	20,000	53,000	30,007
M30 x 2	22,000	18,000	28,00	150,000	20,000	53,000	30,008
M32 x 1,5	22,000	18,000	30,50	150,000	25,000	53,000	32,007
M35 x 1,5	28,000	22,000	33,50	170,000	25,000	56,000	35,007
M36 x 1,5	28,000	22,000	34,50	170,000	25,000	56,000	36,007
M38 x 1,5	28,000	22,000	36,50	170,000	25,000	56,000	38,007
M40 x 1,5	32,000	24,000	38,50	170,000	25,000	57,000	40,007
M50 x 1,5	36,000	29,000	48,50	190,000	27,000	60,000	50,007
M63 x 1,5	50,000	39,000	61,50	275,000	25,000	62,000	63,007

Konekierretapit, metrinen ISO-hienokierre

Materiaali	HSS-E		
Ø-Toleranssi	ISO2/6H	ISO2/6H	ISO2/6H
Pinta	○	(S)	●
Malli	N R15	N R15	N R15
Muoto	C	C	C
Sisäinen jäähdytys	✗	✗	✗

P	≤ 800
M	
K	
N	
S	
H	

Leikkuuarvosivu 22



DIN 2184-1 DIN 374 — Artikkelinro. **833** **1971** **2838**

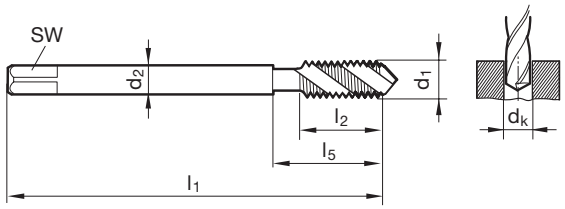
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M4 x 0,5	2,800	2,100	3,50	63,000	5,000	21,000	4,003
M5 x 0,5	3,500	2,700	4,50	70,000	5,000	25,000	5,003
M6 x 0,75	4,500	3,400	5,20	80,000	8,000	30,000	6,004
M8 x 0,75	6,000	4,900	7,20	80,000	8,000	30,000	8,004
M8 x 1	6,000	4,900	7,00	90,000	11,000	35,000	8,005
M10 x 1	7,000	5,500	9,00	90,000	11,000	35,000	10,005
M10 x 1,25	7,000	5,500	8,80	100,000	14,000	39,000	10,006
M12 x 1	9,000	7,000	11,00	100,000	11,000	40,000	12,005
M12 x 1,25	9,000	7,000	10,80	100,000	16,000	40,000	12,006
M12 x 1,5	9,000	7,000	10,50	100,000	16,000	40,000	12,007
M14 x 1	11,000	9,000	13,00	100,000	11,000	40,000	14,005
M14 x 1,25	11,000	9,000	12,80	100,000	15,000	40,000	14,006
M14 x 1,5	11,000	9,000	12,50	100,000	15,000	40,000	14,007
M16 x 1	12,000	9,000	15,00	100,000	11,000	44,000	16,005
M16 x 1,5	12,000	9,000	14,50	100,000	15,000	44,000	16,007
M18 x 1,5	14,000	11,000	16,50	110,000	16,000	44,000	18,007
M20 x 1	16,000	12,000	19,00	125,000	12,000	44,000	20,005
M20 x 1,5	16,000	12,000	18,50	125,000	16,000	44,000	20,007
M22 x 1,5	18,000	14,500	20,50	125,000	16,000	44,000	22,007
M24 x 1,5	18,000	14,500	22,50	140,000	16,000	48,000	24,007
M24 x 2	18,000	14,500	22,00	140,000	22,000	48,000	24,008
M27 x 1,5	20,000	16,000	25,50	140,000	20,000	53,000	27,007
M27 x 2	20,000	16,000	25,00	140,000	20,000	53,000	27,008
M30 x 1,5	22,000	18,000	28,50	150,000	20,000	53,000	30,007
M30 x 2	22,000	18,000	28,00	150,000	20,000	53,000	30,008

Konekierretapit, metrinen ISO-hienokierre

Materiaali	HSS-E	
Ø-Toleranssi	ISO2/6H	ISO2/6H
Pinta	C	C
Malli	N R15	N R15
Muoto	C	E
Sisäinen jäähdytys		

P	≤ 1000
M	○
K	○
N	
S	
H	

Leikkuuarvosivu 23



DIN 2184-1 DIN 374 — Artikkelinro. **4156** **4157**

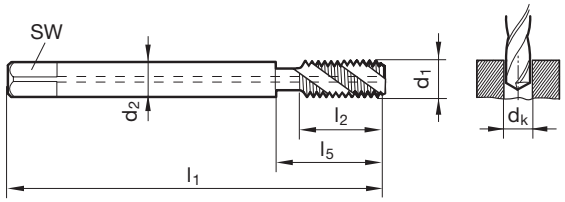
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6,000	4,900	7,00	90,000	11,000	35,000	8,005
M10 x 1	7,000	5,500	9,00	90,000	11,000	35,000	10,005
M10 x 1,25	7,000	5,500	8,80	100,000	14,000	39,000	10,006
M12 x 1	9,000	7,000	11,00	100,000	11,000	40,000	12,005
M12 x 1,5	9,000	7,000	10,50	100,000	16,000	40,000	12,007
M14 x 1,5	11,000	9,000	12,50	100,000	15,000	40,000	14,007
M16 x 1,5	12,000	9,000	14,50	100,000	15,000	44,000	16,007

Jäähdytyskanavatapit, metrinen ISO hienokierre

Materiaali	**HSS-E**
Ø-Toleranssi	ISO2/6H
Pinta	◯
Malli	N R15
Muoto	C
Sisäinen jäähdytys	

P	≤ 800
M	
K	
N	
S	
H	

Leikkuuarvosivu 22



DIN 2184-1 DIN 374 Artikkelinro. **1905**

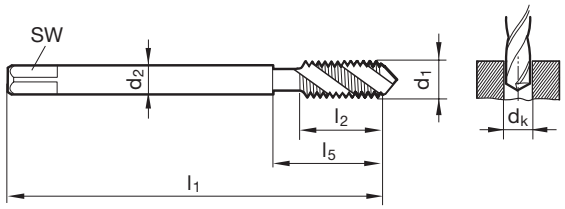
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M5 x 0,5	3,500	2,700	4,50	70,000	5,000	25,000	5,003
M6 x 0,75	4,500	3,400	5,20	80,000	8,000	30,000	6,004
M8 x 0,75	6,000	4,900	7,20	80,000	8,000	30,000	8,004
M8 x 1	6,000	4,900	7,00	90,000	11,000	35,000	8,005
M10 x 1	7,000	5,500	9,00	90,000	11,000	35,000	10,005
M10 x 1,25	7,000	5,500	8,80	100,000	14,000	39,000	10,006
M12 x 1,25	9,000	7,000	10,80	100,000	16,000	40,000	12,006
M12 x 1,5	9,000	7,000	10,50	100,000	16,000	40,000	12,007
M14 x 1	11,000	9,000	13,00	100,000	11,000	40,000	14,005
M14 x 1,25	11,000	9,000	12,80	100,000	15,000	40,000	14,006
M16 x 1	12,000	9,000	15,00	100,000	11,000	44,000	16,005
M16 x 1,5	12,000	9,000	14,50	100,000	15,000	44,000	16,007
M18 x 1	14,000	11,000	17,00	110,000	12,000	44,000	18,005
M20 x 1	16,000	12,000	19,00	125,000	12,000	44,000	20,005
M20 x 1,5	16,000	12,000	18,50	125,000	16,000	44,000	20,007

Konekierretapit, metrinen ISO-hienokierre

Materiaali	HSS-E		
Ø-Toleranssi	ISO2/6H	ISO2/6H	ISO2/6H
Pinta	○	(S)	●
Malli	N R40	N R40	N R40
Muoto	C	C	C
Sisäinen jäähdytys	✗	✗	✗

P	≤ 800
M	
K	
N	
S	
H	

Leikkuuarvosivu 23



DIN 2184-1 DIN 374 — Artikkelinro. **834** **852** **2843**

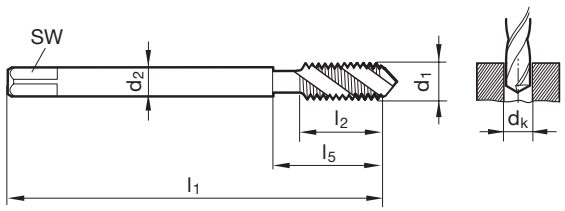
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M3 x 0,35	2,200		2,65	56,000	4,000	18,000	3,002
M3,5 x 0,35	2,500	2,100	3,15	56,000	4,000	20,000	3,502
M4 x 0,5	2,800	2,100	3,50	63,000	5,000	21,000	4,003
M5 x 0,5	3,500	2,700	4,50	70,000	5,000	25,000	5,003
M6 x 0,5	4,500	3,400	5,50	80,000	5,000	30,000	6,003
M6 x 0,75	4,500	3,400	5,20	80,000	8,000	30,000	6,004
M8 x 0,5	6,000	4,900	7,50	80,000	8,000	30,000	8,003
M8 x 0,75	6,000	4,900	7,20	80,000	8,000	30,000	8,004
M8 x 1	6,000	4,900	7,00	90,000	11,000	35,000	8,005
M10 x 0,75	7,000	5,500	9,20	90,000	11,000	35,000	10,004
M10 x 1	7,000	5,500	9,00	90,000	11,000	35,000	10,005
M10 x 1,25	7,000	5,500	8,80	100,000	14,000	39,000	10,006
M12 x 1	9,000	7,000	11,00	100,000	11,000	40,000	12,005
M12 x 1,25	9,000	7,000	10,80	100,000	16,000	40,000	12,006
M12 x 1,5	9,000	7,000	10,50	100,000	16,000	40,000	12,007
M14 x 1	11,000	9,000	13,00	100,000	11,000	40,000	14,005
M14 x 1,25	11,000	9,000	12,80	100,000	15,000	40,000	14,006
M14 x 1,5	11,000	9,000	12,50	100,000	15,000	40,000	14,007
M16 x 1	12,000	9,000	15,00	100,000	11,000	44,000	16,005
M16 x 1,5	12,000	9,000	14,50	100,000	15,000	44,000	16,007
M18 x 1	14,000	11,000	17,00	110,000	12,000	44,000	18,005
M18 x 1,5	14,000	11,000	16,50	110,000	16,000	44,000	18,007
M20 x 1	16,000	12,000	19,00	125,000	12,000	44,000	20,005
M20 x 1,5	16,000	12,000	18,50	125,000	16,000	44,000	20,007
M22 x 1,5	18,000	14,500	20,50	125,000	16,000	44,000	22,007
M24 x 1,5	18,000	14,500	22,50	140,000	16,000	48,000	24,007
M24 x 2	18,000	14,500	22,00	140,000	22,000	48,000	24,008
M26 x 1,5	18,000	14,500	24,50	140,000	20,000	50,000	26,007
M27 x 1,5	20,000	16,000	25,50	140,000	20,000	53,000	27,007
M27 x 2	20,000	16,000	25,00	140,000	20,000	53,000	27,008
M28 x 1,5	20,000	16,000	26,50	140,000	20,000	53,000	28,007
M30 x 1,5	22,000	18,000	28,50	150,000	20,000	53,000	30,007
M30 x 2	22,000	18,000	28,00	150,000	20,000	53,000	30,008

Konekierretapit, metrinen ISO-hienokierre

Materiaali	**HSS-E**
Ø-Toleranssi	ISO2/6H
Pinta	◯
Malli	N R40
Muoto	C
Sisäinen jäähdytys	

P	≤ 800
M	
K	
N	
S	
H	

Leikkuuarvosivu 23



DIN 2184-2 DIN 2181 Artikkelinro. **1970**

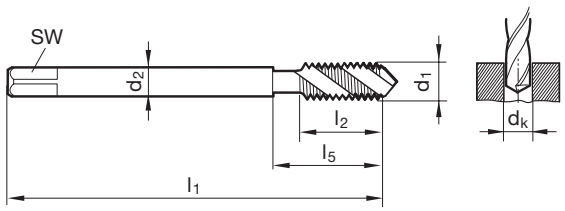
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M6 x 0,75	6,000	4,900	5,20	56,000	8,000	27,000	6,004
M8 x 0,5	6,000	4,900	7,50	56,000	8,000	30,000	8,003
M8 x 0,75	6,000	4,900	7,20	56,000	8,000	30,000	8,004
M8 x 1	6,000	4,900	7,00	63,000	11,000	30,000	8,005
M10 x 0,75	7,000	5,500	9,20	63,000	11,000	32,000	10,004
M10 x 1	7,000	5,500	9,00	63,000	11,000	32,000	10,005
M11 x 1	8,000	6,200	10,00	63,000	11,000	33,000	11,005
M12 x 1	9,000	7,000	11,00	70,000	11,000	35,000	12,005
M12 x 1,5	9,000	7,000	10,50	70,000	16,000	35,000	12,007

Konekierretapit, metrinen ISO-hienokierre

Materiaali	HSS-E		
Ø-Toleranssi	ISO2/6H	ISO2/6H	ISO2/6H
Pinta	○	●	○
Malli	N R40	N R40	N R40
Muoto	C	C	E
Sisäinen jäähdytys	⊠	⊠	⊠

P	≤ 1000
M	○
K	○
N	○
S	
H	

Leikkuuarvosivu 24



DIN 2184-1 DIN 374 — Artikkelinro. **2424** **2853** **2792**

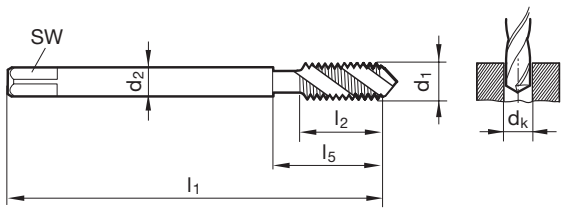
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M5 x 0,5	3,500	2,700	4,50	70,000	5,000	25,000	5,003
M6 x 0,75	4,500	3,400	5,20	80,000	8,000	30,000	6,004
M8 x 0,75	6,000	4,900	7,20	80,000	8,000	30,000	8,004
M8 x 1	6,000	4,900	7,00	90,000	11,000	35,000	8,005
M10 x 1	7,000	5,500	9,00	90,000	11,000	35,000	10,005
M10 x 1,25	7,000	5,500	8,80	100,000	14,000	39,000	10,006
M12 x 1	9,000	7,000	11,00	100,000	11,000	40,000	12,005
M12 x 1,25	9,000	7,000	10,80	100,000	16,000	40,000	12,006
M12 x 1,5	9,000	7,000	10,50	100,000	16,000	40,000	12,007
M14 x 1	11,000	9,000	13,00	100,000	11,000	40,000	14,005
M14 x 1,25	11,000	9,000	12,80	100,000	15,000	40,000	14,006
M14 x 1,5	11,000	9,000	12,50	100,000	15,000	40,000	14,007
M16 x 1	12,000	9,000	15,00	100,000	11,000	44,000	16,005
M16 x 1,5	12,000	9,000	14,50	100,000	15,000	44,000	16,007
M18 x 1	14,000	11,000	17,00	110,000	12,000	44,000	18,005
M18 x 1,5	14,000	11,000	16,50	110,000	16,000	44,000	18,007
M20 x 1,5	16,000	12,000	18,50	125,000	16,000	44,000	20,007
M22 x 1,5	18,000	14,500	20,50	125,000	16,000	44,000	22,007
M24 x 1,5	18,000	14,500	22,50	140,000	16,000	48,000	24,007
M24 x 2	18,000	14,500	22,00	140,000	22,000	48,000	24,008
M26 x 1,5	18,000	14,500	24,50	140,000	20,000	50,000	26,007
M27 x 1,5	20,000	16,000	25,50	140,000	20,000	53,000	27,007
M27 x 2	20,000	16,000	25,00	140,000	20,000	53,000	27,008
M28 x 1,5	20,000	16,000	26,50	140,000	20,000	53,000	28,007
M30 x 1,5	22,000	18,000	28,50	150,000	20,000	53,000	30,007
M30 x 2	22,000	18,000	28,00	150,000	20,000	53,000	30,008

Konekierretapit, metrinen ISO-hienokierre

P	≤ 1000
M	○
K	○
N	
S	
H	

Leikkuuarvosivu 24

Materiaali	HSS-E		
Ø-Toleranssi	ISO3/6G	ISO3/6G	ISO3/6G
Pinta	(S)	○	●
Malli	N R40	N R40	N R40
Muoto	C	C	C
Sisäinen jäähdytys	⊠	⊠	⊠



DIN 2184-1 DIN 374	Artikkelinro.	1049	2998	2999

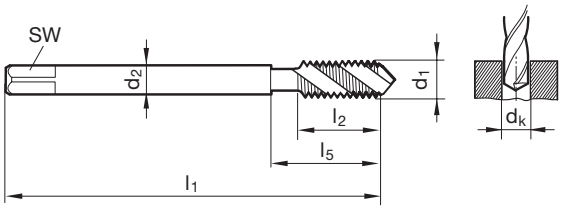
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6,000	4,900	7,00	90,000	11,000	35,000	8,005
M10 x 1	7,000	5,500	9,00	90,000	11,000	35,000	10,005
M12 x 1	9,000	7,000	11,00	100,000	11,000	40,000	12,005
M12 x 1,25	9,000	7,000	10,80	100,000	16,000	40,000	12,006
M12 x 1,5	9,000	7,000	10,50	100,000	16,000	40,000	12,007
M14 x 1,5	11,000	9,000	12,50	100,000	15,000	40,000	14,007
M16 x 1,5	12,000	9,000	14,50	100,000	15,000	44,000	16,007
M18 x 1,5	14,000	11,000	16,50	110,000	16,000	44,000	18,007
M20 x 1,5	16,000	12,000	18,50	125,000	16,000	44,000	20,007

Konekierretapit, metrinen ISO-hienokierre

P	≤ 1000
M	○
K	○
N	
S	
H	

Leikkuuarvosivu 25

Materiaali	HSS-E	HSS-E-PM
Ø-Toleranssi	ISO2/6H	ISO2/6H
Pinta	S	S
Malli	N R40	N R40
Muoto	C	C
Sisäinen jäähdytys		



DIN 2184-1 DIN 374 — Artikkelinro. **273** **1292**

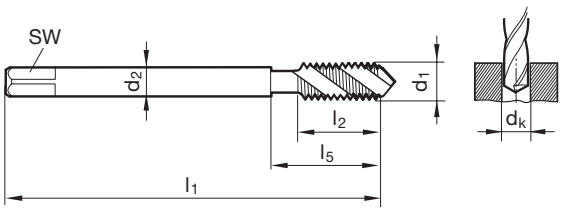
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M6 x 0,75	4,500	3,400	5,20	80,000	8,000	30,000	6,004
M8 x 1	6,000	4,900	7,00	90,000	11,000	35,000	8,005
M10 x 1	7,000	5,500	9,00	90,000	11,000	35,000	10,005
M10 x 1,25	7,000	5,500	8,80	100,000	14,000	39,000	10,006
M12 x 1	9,000	7,000	11,00	100,000	11,000	40,000	12,005
M12 x 1,25	9,000	7,000	10,80	100,000	16,000	40,000	12,006
M12 x 1,5	9,000	7,000	10,50	100,000	16,000	40,000	12,007
M14 x 1,25	11,000	9,000	12,80	100,000	15,000	40,000	14,006
M14 x 1,5	11,000	9,000	12,50	100,000	15,000	40,000	14,007
M16 x 1,5	12,000	9,000	14,50	100,000	15,000	44,000	16,007
M18 x 1,5	14,000	11,000	16,50	110,000	16,000	44,000	18,007
M20 x 1,5	16,000	12,000	18,50	125,000	16,000	44,000	20,007
M22 x 1,5	18,000	14,500	20,50	125,000	16,000	44,000	22,007
M24 x 1,5	18,000	14,500	22,50	140,000	16,000	48,000	24,007
M24 x 2	18,000	14,500	22,00	140,000	22,000	48,000	24,008

Konekierretapit, metrinen ISO-hienokierre

P	•
M	•
K	○
N	○
S	○
H	

Leikkuuarvosivu 25

Materiaali	HSS-E-PM	
Ø-Toleranssi	ISO2/6H	ISO2/6H
Pinta	S	C
Malli	N R50	N R50
Muoto	C	C
Sisäinen jäähdytys		



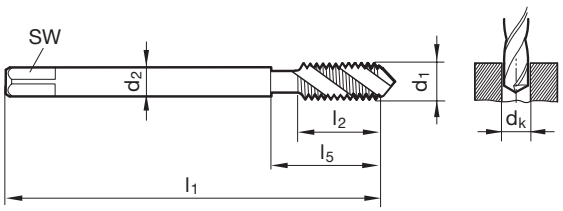
DIN 2184-1 DIN 374 Artikkelinro. **1100** **1294**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6,000	4,900	7,00	90,000	11,000	35,000	8,005
M10 x 1	7,000	5,500	9,00	90,000	11,000	35,000	10,005
M12 x 1	9,000	7,000	11,00	100,000	11,000	40,000	12,005
M12 x 1,5	9,000	7,000	10,50	100,000	16,000	40,000	12,007
M14 x 1,5	11,000	9,000	12,50	100,000	15,000	40,000	14,007
M16 x 1,5	12,000	9,000	14,50	100,000	15,000	44,000	16,007
M18 x 1,5	14,000	11,000	16,50	110,000	16,000	44,000	18,007
M20 x 1,5	16,000	12,000	18,50	125,000	16,000	44,000	20,007

Konekierretapit, metrinen ISO-hienokierre

P	•	Leikkuuarvosivu 25
M	•	
K	○	
N	•	
S	○	
H		

Materiaali	HSS-E-PM	
Ø-Toleranssi	6HX	6HX
Pinta	S	C
Malli	VA R50	VA R50
Muoto	C	C
Sisäinen jäähdytys		



DIN 2184-1 DIN 374 — Artikkelinro. **764** **1144**

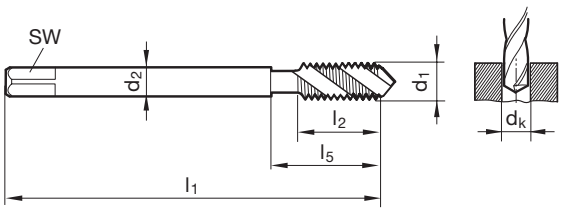
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6,000	4,900	7,00	90,000	5,000	44,000	8,005
M8 x 1	6,000	4,900	7,00	90,000	5,000	47,000	8,005
M10 x 1	7,000	5,500	9,00	90,000	5,000	47,000	10,005
M10 x 1	7,000	5,500	9,00	90,000	5,000	44,000	10,005
M12 x 1	9,000	7,000	11,00	100,000	5,000	53,000	12,005
M12 x 1,5	9,000	7,000	10,50	100,000	7,500	53,000	12,007
M14 x 1,5	11,000	9,000	12,50	100,000	7,500	48,000	14,007
M16 x 1,5	12,000	9,000	14,50	100,000	7,500	48,000	16,007
M18 x 1,5	14,000	11,000	16,50	110,000	7,500	58,000	18,007
M20 x 1,5	16,000	12,000	18,50	125,000	7,500	70,000	20,007

Konekierretapit, metrinen ISO-hienokierre

Materiaali	HSS-E-PM	
Ø-Toleranssi	ISO2/6H	6HX
Pinta	◯	C
Malli	H R15	H R15
Muoto	C	C
Sisäinen jäähdytys		

P	≤ 1200
M	
K	
N	
S	
H	

Leikkuuarvosivu 23



DIN 2184-1 DIN 374 — Artikkelinro. **874** **1200**

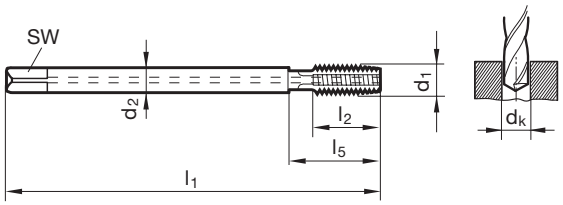
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M6 x 0,75	4,500	3,400	5,20	80,000	8,000	30,000	6,004
M8 x 0,75	6,000	4,900	7,20	80,000	8,000	30,000	8,004
M8 x 1	6,000	4,900	7,00	90,000	11,000	35,000	8,005
M9 x 1	7,000	5,500	8,00	90,000	11,000	35,000	9,005
M10 x 1	7,000	5,500	9,00	90,000	11,000	35,000	10,005
M12 x 1	9,000	7,000	11,00	100,000	11,000	40,000	12,005
M12 x 1,25	9,000	7,000	10,80	100,000	16,000	40,000	12,006
M12 x 1,5	9,000	7,000	10,50	100,000	16,000	40,000	12,007
M14 x 1,5	11,000	9,000	12,50	100,000	15,000	40,000	14,007
M16 x 1,5	12,000	9,000	14,50	100,000	15,000	44,000	16,007
M18 x 1,5	14,000	11,000	16,50	110,000	16,000	44,000	18,007
M20 x 1,5	16,000	12,000	18,50	125,000	16,000	44,000	20,007
M24 x 1,5	18,000	14,500	22,50	140,000	16,000	48,000	24,007

Jäähdytyskanavatapit, metrinen ISO hienokierre

P	≤ 1200
M	
K	•
N	≥ 7
S	
H	

Leikkuuarvosivu 23

Materiaali	HSS-E-PM	
Ø-Toleranssi	6HX	6HX
Pinta	C	C
Malli	H	H
Muoto	E	C
Sisäinen jäähdytys		



DIN 2184-1 DIN 374 — Artikkelinro. **1007** **1090**

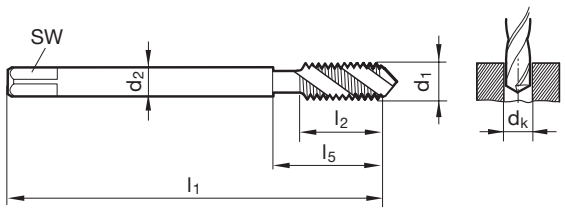
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M5 x 0,5	3,500	2,700	4,50	70,000	10,000	25,000	5,003
M6 x 0,5	4,500	3,400	5,50	80,000	13,000	30,000	6,003
M6 x 0,75	4,500	3,400	5,20	80,000	13,000	30,000	6,004
M8 x 0,75	6,000	4,900	7,20	80,000	14,000	30,000	8,004
M8 x 1	6,000	4,900	7,00	90,000	16,000	35,000	8,005
M9 x 1	7,000	5,500	8,00	90,000	16,000	35,000	9,005
M10 x 1	7,000	5,500	9,00	90,000	16,000	35,000	10,005
M10 x 1,25	7,000	5,500	8,80	100,000	20,000	39,000	10,006
M12 x 1	9,000	7,000	11,00	100,000	20,000	40,000	12,005
M12 x 1,25	9,000	7,000	10,80	100,000	20,000	40,000	12,006
M12 x 1,5	9,000	7,000	10,50	100,000	20,000	40,000	12,007
M14 x 1	11,000	9,000	13,00	100,000	20,000	40,000	14,005
M14 x 1,25	11,000	9,000	12,80	100,000	20,000	40,000	14,006
M14 x 1,5	11,000	9,000	12,50	100,000	20,000	40,000	14,007
M16 x 1	12,000	9,000	15,00	100,000	22,000	44,000	16,005
M16 x 1,5	12,000	9,000	14,50	100,000	22,000	44,000	16,007

Konekierretapit, metrinen ISO-hienokierre

Materiaali	HSS-E		
Ø-Toleranssi	ISO2/6H	ISO2/6H	ISO2/6H
Pinta	○	●	●
Malli	H R40	H R40	H R40
Muoto	C	C	C
Sisäinen jäähdytys	✕	✕	✕

P	≤ 1200
M	
K	
N	
S	
H	

Leikkuuarvosivu 25



DIN 2184-1 DIN 374	Artikkelinro.	835	2852	2940

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M6 x 0,75	4,500	3,400	5,20	80,000	8,000	30,000	6,004
M8 x 0,75	6,000	4,900	7,20	80,000	8,000	30,000	8,004
M8 x 1	6,000	4,900	7,00	90,000	11,000	35,000	8,005
M10 x 1	7,000	5,500	9,00	90,000	11,000	35,000	10,005
M12 x 1	9,000	7,000	11,00	100,000	11,000	40,000	12,005
M12 x 1,5	9,000	7,000	10,50	100,000	16,000	40,000	12,007
M14 x 1,5	11,000	9,000	12,50	100,000	15,000	40,000	14,007
M16 x 1,5	12,000	9,000	14,50	100,000	15,000	44,000	16,007
M18 x 1,5	14,000	11,000	16,50	110,000	16,000	44,000	18,007
M20 x 1,5	16,000	12,000	18,50	125,000	16,000	44,000	20,007
M22 x 1,5	18,000	14,500	20,50	125,000	16,000	44,000	22,007
M24 x 1,5	18,000	14,500	22,50	140,000	16,000	48,000	24,007

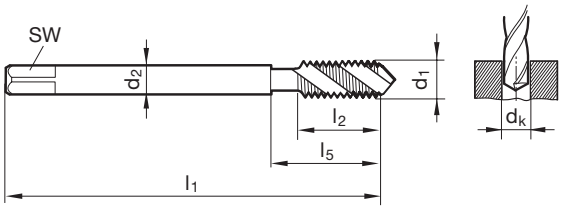
Konekierretapit, metrinen ISO-hienokierre

Materiaali	**HSS-E**
Ø-Toleranssi	6HX
Pinta	A
Malli	VA R45
Muoto	C
Sisäinen jäähdytys	

NEW

P	●
M	●
K	○
N	○
S	○
H	

Leikkuuarvosivu 25



DIN 2184-1 DIN 374 Artikkelinro. **394**

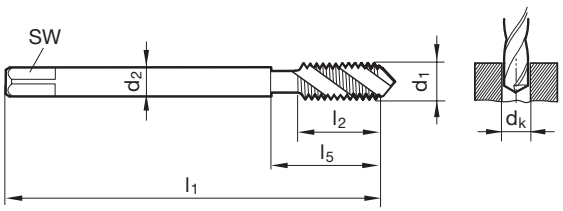
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M6 x 0,75	4,500	3,400	5,20	80,000	8,000	30,000	6,004
M8 x 0,75	6,000	4,900	7,20	80,000	8,000	30,000	8,004
M8 x 1	6,000	4,900	7,00	90,000	11,000	35,000	8,005
M10 x 1	7,000	5,500	9,00	90,000	11,000	35,000	10,005
M10 x 1,25	7,000	5,500	8,80	100,000	14,000	39,000	10,006
M12 x 1	9,000	7,000	11,00	100,000	11,000	40,000	12,005
M12 x 1,25	9,000	7,000	10,80	100,000	16,000	40,000	12,006
M12 x 1,5	9,000	7,000	10,50	100,000	16,000	40,000	12,007
M14 x 1,5	11,000	9,000	12,50	100,000	15,000	40,000	14,007
M16 x 1,5	12,000	9,000	14,50	100,000	15,000	44,000	16,007
M18 x 1,5	14,000	11,000	16,50	110,000	16,000	44,000	18,007
M20 x 1,5	16,000	12,000	18,50	125,000	16,000	44,000	20,007
M24 x 1,5	18,000	14,500	22,50	140,000	16,000	48,000	24,007

Konekierretapit, metrinen ISO-hienokierre

Materiaali	HSS-E	
Ø-Toleranssi	ISO3/6G	ISO3/6G
Pinta	S	
Malli	H R40	H R40
Muoto	C	C
Sisäinen jäähdytys		

P	≤ 1200
M	
K	
N	
S	
H	

Leikkuuarvosivu 25



DIN 2184-1 DIN 374	Artikkelinro.	2989	2988

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6,000	4,900	7,00	90,000	11,000	35,000	8,005
M10 x 1	7,000	5,500	9,00	90,000	11,000	35,000	10,005
M12 x 1	9,000	7,000	11,00	100,000	11,000	40,000	12,005
M12 x 1,5	9,000	7,000	10,50	100,000	16,000	40,000	12,007
M14 x 1,5	11,000	9,000	12,50	100,000	15,000	40,000	14,007
M16 x 1,5	12,000	9,000	14,50	100,000	15,000	44,000	16,007
M18 x 1,5	14,000	11,000	16,50	110,000	16,000	44,000	18,007
M20 x 1,5	16,000	12,000	18,50	125,000	16,000	44,000	20,007

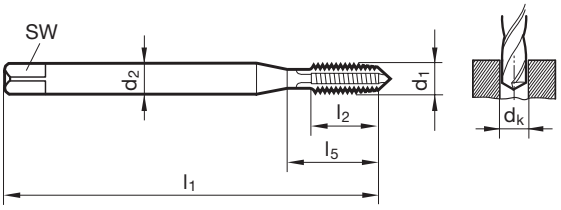
Konekierretapit UNC-kierteille

Materiaali	HSS-E	
Ø-Toleranssi	2B	2B
Pinta	○	●
Malli	N	N
Muoto	B	B
Sisäinen jäähdytys	⊠	⊠

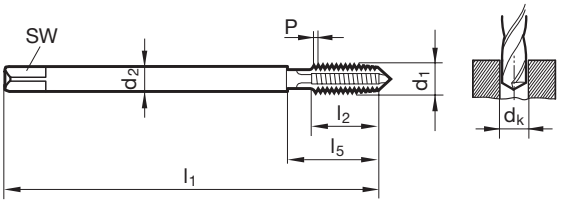
P	≤ 800
M	
K	
N	
S	
H	

Leikkuuarvosivu 19

~ DIN 371



~ DIN 376



DIN 2184-1 ~DIN 371 Artikkelinro. **873** **2889**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
1 - 64	2,800	2,100	1,55	45,000	8,000		1,854
2 - 56	2,800	2,100	1,85	45,000	9,000	14,500	2,184
3 - 48	2,800	2,100	2,10	50,000	9,000	14,500	2,515
4 - 40	3,500	2,700	2,35	56,000	11,000	18,000	2,845
5 - 40	3,500	2,700	2,65	56,000	11,000	18,000	3,175
6 - 32	4,000	3,000	2,85	56,000	12,000	20,000	3,505
8 - 32	4,500	3,400	3,50	63,000	12,000	21,000	4,166
10 - 24	6,000	4,900	3,90	70,000	14,000	25,000	4,826
12 - 24	6,000	4,900	4,50	80,000	16,000	30,000	5,486
1/4 - 20	7,000	5,500	5,10	80,000	16,000	30,000	6,350
5/16 - 18	8,000	6,200	6,60	90,000	18,000	35,000	7,938
3/8 - 16	10,000	8,000	8,00	100,000	20,000	39,000	9,525

DIN 2184-1 ~DIN 376 Artikkelinro. **878** **2890**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
7/16 - 14	8,000	6,200	9,40	100,000	22,000	42,000	11,113
1/2 - 13	9,000	7,000	10,80	110,000	25,000	49,000	12,700
9/16 - 12	11,000	9,000	12,20	110,000	28,000	53,000	14,288
5/8 - 11	12,000	9,000	13,50	110,000	30,000	53,000	15,875
3/4 - 10	14,000	11,000	16,50	125,000	33,000	62,000	19,050
7/8 - 9	18,000	14,500	19,50	140,000	35,000	62,000	22,225
1 - 8	18,000	14,500	22,25	160,000	38,000	73,000	25,400
1 1/8 - 7	22,000	18,000	25,00	180,000	44,000	85,000	28,575
1 1/4 - 7	22,000	18,000	28,00	180,000	44,000	85,000	31,750
1 1/2 - 6	28,000	22,000	34,00	200,000	50,000	102,000	38,100

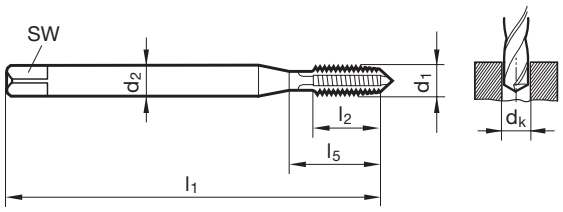
Konekierretapit UNC-kierteille

Materiaali	**HSS-E**
Ø-Toleranssi	2B
Pinta	●
Malli	N
Muoto	B
Sisäinen jäähdytys	⊠

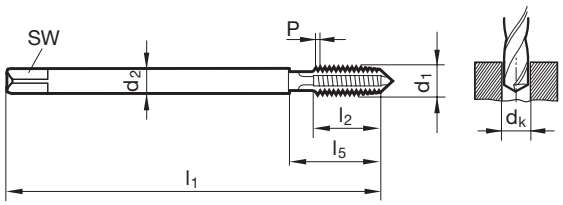
P	≤ 1000
M	○
K	
N	
S	
H	

Leikkuuarvosivu 20

~ DIN 371



~ DIN 376



DIN 2184-1 ~DIN 371 Artikkelinro. **2881**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
4 - 40	3,500	2,700	2,35	56,000	11,000	18,000	2,845
5 - 40	3,500	2,700	2,65	56,000	11,000	18,000	3,175
6 - 32	4,000	3,000	2,85	56,000	12,000	20,000	3,505
8 - 32	4,500	3,400	3,50	63,000	12,000	21,000	4,166
10 - 24	6,000	4,900	3,90	70,000	14,000	25,000	4,826
12 - 24	6,000	4,900	4,50	80,000	16,000	30,000	5,486
1/4 - 20	7,000	5,500	5,10	80,000	16,000	30,000	6,350
5/16 - 18	8,000	6,200	6,60	90,000	18,000	35,000	7,938
3/8 - 16	10,000	8,000	8,00	100,000	20,000	39,000	9,525

DIN 2184-1 ~DIN 376 Artikkelinro. **2883**

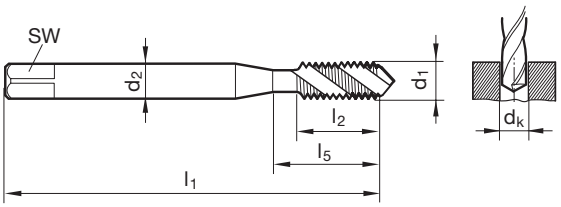
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
7/16 - 14	8,000	6,200	9,40	100,000	22,000	42,000	11,113
1/2 - 13	9,000	7,000	10,80	110,000	25,000	49,000	12,700
5/8 - 11	12,000	9,000	13,50	110,000	30,000	53,000	15,875
3/4 - 10	14,000	11,000	16,50	125,000	33,000	62,000	19,050
7/8 - 9	18,000	14,500	19,50	140,000	35,000	62,000	22,225
1 - 8	18,000	14,500	22,25	160,000	38,000	73,000	25,400

Konekierretapit UNC-kierteille

Materiaali	**HSS-E**
Ø-Toleranssi	2B
Pinta	◯
Malli	N R15
Muoto	C
Sisäinen jäähdytys	⊠

P	≤ 800
M	
K	
N	
S	
H	

Leikkuuarvosivu 22



DIN 2184-1 ~DIN 371 Artikkelinro. **1978**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
4 - 40	3,500	2,700	2,35	56,000	7,000	18,000	2,845
6 - 32	4,000	3,000	2,85	56,000	8,000	20,000	3,505
8 - 32	4,500	3,400	3,50	63,000	8,000	21,000	4,166
12 - 24	6,000	4,900	4,50	80,000	11,000	30,000	5,486
1/4 - 20	7,000	5,500	5,10	80,000	13,000	30,000	6,350
5/16 - 18	8,000	6,200	6,60	90,000	14,000	35,000	7,938
3/8 - 16	10,000	8,000	8,00	100,000	16,000	39,000	9,525

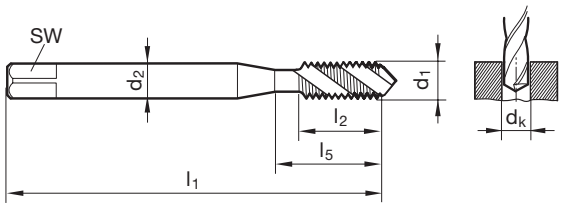
Konekierretapit UNC-kierteille

Materiaali	**HSS-E**
Ø-Toleranssi	2B
Pinta	
Malli	N R15
Muoto	C
Sisäinen jäähdytys	

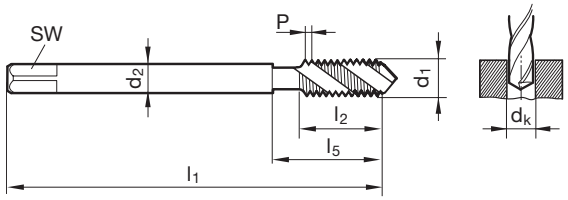
P	≤ 800
M	
K	
N	
S	
H	

Leikkuuarvosivu 22

~ DIN 371



~ DIN 376



DIN 2184-1 ~DIN 371 Artikkelinro. **2839**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
4 - 40	3,500	2,700	2,35	56,000	7,000	18,000	2,845
6 - 32	4,000	3,000	2,85	56,000	8,000	20,000	3,505
8 - 32	4,500	3,400	3,50	63,000	8,000	21,000	4,166
10 - 24	6,000	4,900	3,90	70,000	11,000	25,000	4,826

DIN 2184-1 ~DIN 376 Artikkelinro. **2840**

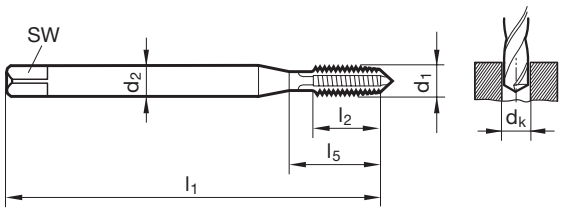
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
1/2 - 13	9,000	7,000	10,80	110,000	20,000	49,000	12,700
7/8 - 9	18,000	14,500	19,50	140,000	28,000	62,000	22,225
1 - 8	18,000	14,500	22,25	160,000	32,000	73,000	25,400

Konekierretapit UNC-kierteille

Materiaali	**HSS-E**
Ø-Toleranssi	2B
Pinta	◯
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	≤ 800
M	
K	
N	
S	
H	

Leikkuuarvosivu 18/22



DIN 2184-1 ~DIN 371 Artikkelinro. **1977**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
3 - 48	2,800	2,100	2,10	50,000	6,000	14,500	2,515
4 - 40	3,500	2,700	2,35	56,000	7,000	18,000	2,845
5 - 40	3,500	2,700	2,65	56,000	7,000	18,000	3,175
6 - 32	4,000	3,000	2,85	56,000	8,000	20,000	3,505
8 - 32	4,500	3,400	3,50	63,000	8,000	21,000	4,166
10 - 24	6,000	4,900	3,90	70,000	11,000	25,000	4,826
12 - 24	6,000	4,900	4,50	80,000	11,000	30,000	5,486
1/4 - 20	7,000	5,500	5,10	80,000	13,000	30,000	6,350
5/16 - 18	8,000	6,200	6,60	90,000	14,000	35,000	7,938
3/8 - 16	10,000	8,000	8,00	100,000	16,000	39,000	9,525

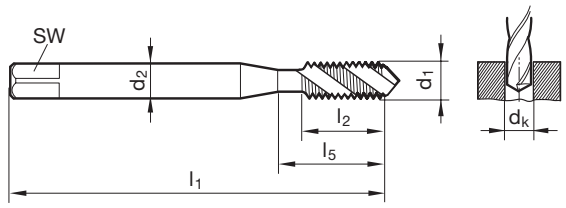
Konekierretapit UNC-kierteille

Materiaali	HSS-E	
Ø-Toleranssi	2B	2B
Pinta	○	●
Malli	N R40	N R40
Muoto	C	C
Sisäinen jäähdytys	⊠	⊠

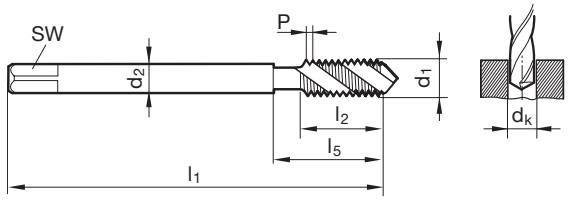
P	≤ 800
M	
K	
N	
S	
H	

Leikkuuarvosivu 23

~ DIN 371



~ DIN 376



DIN 2184-1 ~DIN 371 Artikkelinro. **876** **2844**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
2 - 56	2,800	2,100	1,85	45,000	5,000	14,500	2,184
3 - 48	2,800	2,100	2,10	50,000	6,000	14,500	2,515
4 - 40	3,500	2,700	2,35	56,000	7,000	18,000	2,845
5 - 40	3,500	2,700	2,65	56,000	7,000	18,000	3,175
6 - 32	4,000	3,000	2,85	56,000	8,000	20,000	3,505
8 - 32	4,500	3,400	3,50	63,000	8,000	21,000	4,166
10 - 24	6,000	4,900	3,90	70,000	11,000	25,000	4,826
12 - 24	6,000	4,900	4,50	80,000	11,000	30,000	5,486
1/4 - 20	7,000	5,500	5,10	80,000	13,000	30,000	6,350
5/16 - 18	8,000	6,200	6,60	90,000	14,000	35,000	7,938
3/8 - 16	10,000	8,000	8,00	100,000	16,000	39,000	9,525

DIN 2184-1 ~DIN 376 Artikkelinro. **881** **2845**

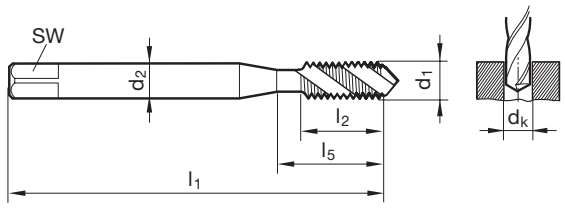
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
7/16 - 14	8,000	6,200	9,40	100,000	18,000	42,000	11,113
1/2 - 13	9,000	7,000	10,80	110,000	20,000	49,000	12,700
9/16 - 12	11,000	9,000	12,20	110,000	21,000	53,000	14,288
5/8 - 11	12,000	9,000	13,50	110,000	24,000	53,000	15,875
3/4 - 10	14,000	11,000	16,50	125,000	25,000	62,000	19,050
7/8 - 9	18,000	14,500	19,50	140,000	28,000	62,000	22,225
1 - 8	18,000	14,500	22,25	160,000	32,000	73,000	25,400

Konekierretapit UNC-kierteille

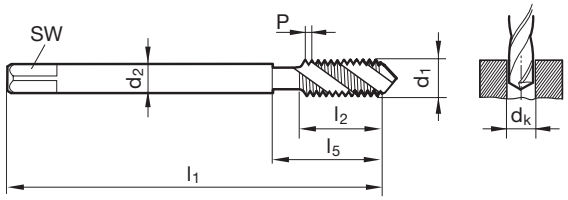
P	≤ 1000	Leikkuuarvosivu 24
M	○	
K	○	
N	○	
S		
H		

Materiaali	HSS-E	
Ø-Toleranssi	2B	2B
Pinta	○	●
Malli	N R40	N R40
Muoto	C	C
Sisäinen jäähdytys	⊠	⊠

~ DIN 371



~ DIN 376



DIN 2184-1 ~DIN 371 — Artikkelinro. **2854** **2855**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
2 - 56	2,800	2,100	1,85	45,000	5,000	14,500	2,184
4 - 40	3,500	2,700	2,35	56,000	7,000	18,000	2,845
5 - 40	3,500	2,700	2,65	56,000	7,000	18,000	3,175
6 - 32	4,000	3,000	2,85	56,000	8,000	20,000	3,505
8 - 32	4,500	3,400	3,50	63,000	8,000	21,000	4,166
10 - 24	6,000	4,900	3,90	70,000	11,000	25,000	4,826
12 - 24	6,000	4,900	4,50	80,000	11,000	30,000	5,486
1/4 - 20	7,000	5,500	5,10	80,000	13,000	30,000	6,350
5/16 - 18	8,000	6,200	6,60	90,000	14,000	35,000	7,938
3/8 - 16	10,000	8,000	8,00	100,000	16,000	39,000	9,525

DIN 2184-1 ~DIN 376 — Artikkelinro. **2856** **2857**

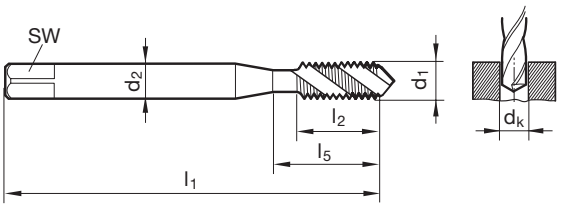
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
7/16 - 14	8,000	6,200	9,40	100,000	18,000	42,000	11,113
1/2 - 13	9,000	7,000	10,80	110,000	20,000	49,000	12,700
9/16 - 12	11,000	9,000	12,20	110,000	21,000	53,000	14,288
5/8 - 11	12,000	9,000	13,50	110,000	24,000	53,000	15,875
3/4 - 10	14,000	11,000	16,50	125,000	25,000	62,000	19,050
7/8 - 9	18,000	14,500	19,50	140,000	28,000	62,000	22,225
1 - 8	18,000	14,500	22,25	160,000	32,000	73,000	25,400

Konekierretapit UNC-kierteille

P	≤ 1000
M	○
K	○
N	
S	
H	

Leikkuuarvosivu 25

Materiaali	**HSS-E**
Ø-Toleranssi	2B
Pinta	S
Malli	N R40
Muoto	C
Sisäinen jäähdytys	



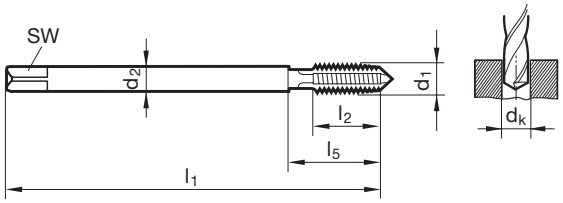
DIN 2184-1 ~DIN 371 Artikkelinro. **1837**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
10 - 24	6,000	4,900	3,90	70,000	11,000	25,000	4,826
12 - 24	6,000	4,900	4,50	80,000	11,000	30,000	5,486
1/4 - 20	7,000	5,500	5,10	80,000	13,000	30,000	6,350
5/16 - 18	8,000	6,200	6,60	90,000	14,000	35,000	7,938
3/8 - 16	10,000	8,000	8,00	100,000	16,000	39,000	9,525

Konekierretapit UNF-kierteille

P	≤ 800	Leikkuuarvosivu 19
M		
K		
N		
S		
H		

Materiaali	HSS-E	
Ø-Toleranssi	2B	2B
Pinta	○	●
Malli	N	N
Muoto	B	B
Sisäinen jäähdytys	☒	☒



DIN 2184-1 ~DIN 374 Artikkelinro. **908** **2891**

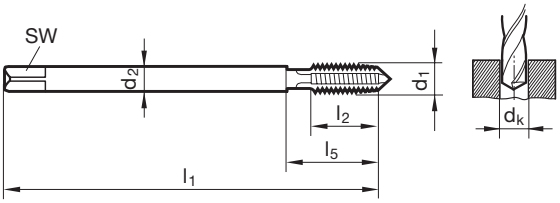
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
3 - 56	1,800		2,15	50,000	9,000	14,500	2,515
4 - 48	2,200		2,40	56,000	10,000	18,000	2,845
5 - 44	2,500	2,100	2,70	56,000	10,000	18,000	3,175
6 - 40	2,500	2,100	2,95	56,000	11,000	20,000	3,505
8 - 36	2,800	2,100	3,50	63,000	12,000	21,000	4,166
10 - 32	3,500	2,700	4,10	70,000	14,000	25,000	4,826
12 - 28	4,000	3,000	4,60	80,000	16,000	30,000	5,486
1/4 - 28	4,500	3,400	5,50	80,000	16,000	30,000	6,350
5/16 - 24	6,000	4,900	6,90	90,000	18,000	35,000	7,938
3/8 - 24	7,000	5,500	8,50	90,000	18,000	35,000	9,525
7/16 - 20	8,000	6,200	9,90	100,000	22,000	42,000	11,113
1/2 - 20	9,000	7,000	11,50	100,000	20,000	40,000	12,700
9/16 - 18	11,000	9,000	12,90	100,000	22,000	40,000	14,288
5/8 - 18	12,000	9,000	14,50	100,000	22,000	44,000	15,875
3/4 - 16	14,000	11,000	17,50	110,000	25,000	44,000	19,050
7/8 - 14	18,000	14,500	20,40	125,000	25,000	44,000	22,225
1 - 12	18,000	14,500	23,25	140,000	28,000	50,000	25,400
1 1/8 - 12	22,000	18,000	26,50	150,000	28,000	53,000	28,575
1 1/4 - 12	22,000	18,000	29,50	150,000	28,000	53,000	31,750

Konekierretapit UNF-kierteille

Materiaali	HSS-E
Ø-Toleranssi	2B
Pinta	◯
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	≤ 800
M	
K	
N	
S	
H	

Leikkuuarvosivu 18/22



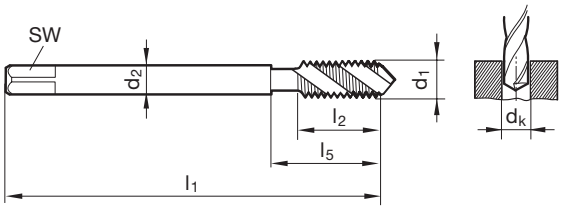
DIN 2184-1 ~DIN 374 Artikkelinro. **1987**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
3 - 56	1,800	1,400	2,15	50,000	5,000	14,500	2,515
4 - 48	2,200	1,800	2,40	56,000	6,000	18,000	2,845
5 - 44	2,500	2,100	2,70	56,000	6,000	18,000	3,175
6 - 40	2,500	2,100	2,95	56,000	6,500	20,000	3,505
8 - 36	2,800	2,100	3,50	63,000	7,000	21,000	4,166
10 - 32	3,500	2,700	4,10	70,000	8,500	25,000	4,826
12 - 28	4,000	3,000	4,60	80,000	9,000	30,000	5,486
1/4 - 28	4,500	3,400	5,50	80,000	9,000	30,000	6,350
5/16 - 24	6,000	4,900	6,90	90,000	11,000	35,000	7,938
3/8 - 24	7,000	5,500	8,50	90,000	11,000	35,000	9,525
7/16 - 20	8,000	6,200	9,90	100,000	13,000	42,000	11,113
1/2 - 20	9,000	7,000	11,50	100,000	13,000	40,000	12,700
9/16 - 18	11,000	9,000	12,90	100,000	14,000	40,000	14,288
5/8 - 18	12,000	9,000	14,50	100,000	15,000	44,000	15,875
3/4 - 16	14,000	11,000	17,50	110,000	16,000	44,000	19,050
7/8 - 14	18,000	14,500	20,40	125,000	19,000	44,000	22,225
1 - 12	18,000	14,500	23,25	140,000	22,000	50,000	25,400

Konekierretapit UNF-kierteille

P	≤ 800	Leikkuuarvosivu 22
M		
K		
N		
S		
H		

Materiaali	HSS-E	
Ø-Toleranssi	2B	2B
Pinta	○	●
Malli	N R15	N R15
Muoto	C	C
Sisäinen jäähdytys	⊠	⊠



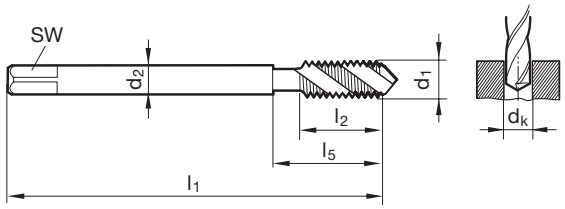
DIN 2184-1 ~DIN 374 Artikkelinro. **1988** **2841**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
3 - 56	1,800	1,400	2,15	50,000	5,000	14,500	2,515
6 - 40	2,500	2,100	2,95	56,000	6,500	20,000	3,505
8 - 36	2,800	2,100	3,50	63,000	7,000	21,000	4,166
10 - 32	3,500	2,700	4,10	70,000	8,500	25,000	4,826
1/4 - 28	4,500	3,400	5,50	80,000	9,000	30,000	6,350
5/16 - 24	6,000	4,900	6,90	90,000	11,000	35,000	7,938
3/8 - 24	7,000	5,500	8,50	90,000	11,000	35,000	9,525
7/16 - 20	8,000	6,200	9,90	100,000	13,000	42,000	11,113
1/2 - 20	9,000	7,000	11,50	100,000	13,000	40,000	12,700
9/16 - 18	11,000	9,000	12,90	100,000	14,000	40,000	14,288
5/8 - 18	12,000	9,000	14,50	100,000	15,000	44,000	15,875
3/4 - 16	14,000	11,000	17,50	110,000	16,000	44,000	19,050
1 - 12	18,000	14,500	23,25	140,000	22,000	50,000	25,400

Konekierretapit UNF-kierteille

P	≤ 800	Leikkuuarvosivu 23
M		
K		
N		
S		
H		

Materiaali	HSS-E	
Ø-Toleranssi	2B	2B
Pinta	○	●
Malli	N R40	N R40
Muoto	C	C
Sisäinen jäähdytys	⊠	⊠



DIN 2184-1 ~DIN 374 Artikkelinro. **911** **2846**

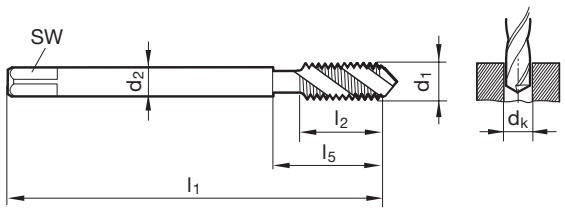
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
3 - 56	1,800	1,400	2,15	50,000	5,000	14,500	2,515
4 - 48	2,200	1,800	2,40	56,000	6,000	18,000	2,845
5 - 44	2,500	2,100	2,70	56,000	6,000	18,000	3,175
6 - 40	2,500	2,100	2,95	56,000	6,500	20,000	3,505
8 - 36	2,800	2,100	3,50	63,000	7,000	21,000	4,166
10 - 32	3,500	2,700	4,10	70,000	8,500	25,000	4,826
12 - 28	4,000	3,000	4,60	80,000	9,000	30,000	5,486
1/4 - 28	4,500	3,400	5,50	80,000	9,000	30,000	6,350
5/16 - 24	6,000	4,900	6,90	90,000	11,000	35,000	7,938
3/8 - 24	7,000	5,500	8,50	90,000	11,000	35,000	9,525
7/16 - 20	8,000	6,200	9,90	100,000	13,000	42,000	11,113
1/2 - 20	9,000	7,000	11,50	100,000	13,000	40,000	12,700
9/16 - 18	11,000	9,000	12,90	100,000	14,000	40,000	14,288
5/8 - 18	12,000	9,000	14,50	100,000	15,000	44,000	15,875
3/4 - 16	14,000	11,000	17,50	110,000	16,000	44,000	19,050
7/8 - 14	18,000	14,500	20,40	125,000	19,000	44,000	22,225
1 - 12	18,000	14,500	23,25	140,000	22,000	50,000	25,400

Konekierretapit UNF-kierteille

Materiaali	**HSS-E**
Ø-Toleranssi	2B
Pinta	
Malli	N R40
Muoto	C
Sisäinen jäähdytys	

P	≤ 1000
M	○
K	○
N	
S	
H	

Leikkuuarvosivu 24



DIN 2184-1 ~DIN 374 Artikkelinro. **2859**

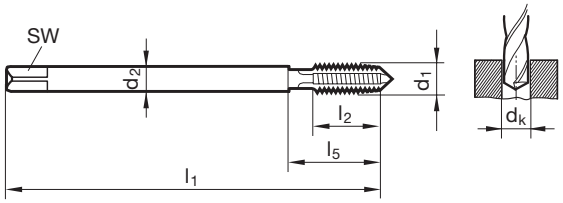
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
10 - 32	3,500	2,700	4,10	70,000	8,500	25,000	4,826
12 - 28	4,000	3,000	4,60	80,000	9,000	30,000	5,486
1/4 - 28	4,500	3,400	5,50	80,000	9,000	30,000	6,350
5/16 - 24	6,000	4,900	6,90	90,000	11,000	35,000	7,938
3/8 - 24	7,000	5,500	8,50	90,000	11,000	35,000	9,525
7/16 - 20	8,000	6,200	9,90	100,000	13,000	42,000	11,113
1/2 - 20	9,000	7,000	11,50	100,000	13,000	40,000	12,700
5/8 - 18	12,000	9,000	14,50	100,000	15,000	44,000	15,875
7/8 - 14	18,000	14,500	20,40	125,000	19,000	44,000	22,225

Konekierretapit UNF-kierteille

Materiaali	HSS-E
Ø-Toleranssi	2B
Pinta	
Malli	N
Muoto	B
Sisäinen jäähdytys	

P	≤ 1000
M	○
K	
N	
S	
H	

Leikkuuarvosivu 20



DIN 2184-1 ~DIN 374 Artikkelinro. **2885**

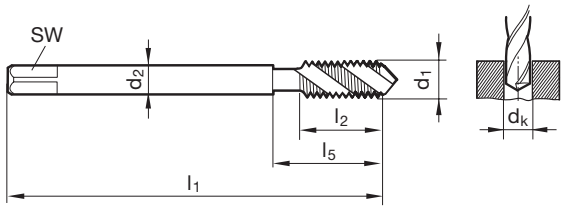
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
6 - 40	2,500	2,100	2,95	56,000	11,000	20,000	3,505
10 - 32	3,500	2,700	4,10	70,000	14,000	25,000	4,826
1/4 - 28	4,500	3,400	5,50	80,000	16,000	30,000	6,350
3/8 - 24	7,000	5,500	8,50	90,000	18,000	35,000	9,525
5/8 - 18	12,000	9,000	14,50	100,000	22,000	44,000	15,875
7/8 - 14	18,000	14,500	20,40	125,000	25,000	44,000	22,225
1 - 12	18,000	14,500	23,25	140,000	28,000	50,000	25,400

Konekierretapit UNF-kierteille

Materiaali	HSS-E
Ø-Toleranssi	2B
Pinta	S
Malli	N R40
Muoto	C
Sisäinen jäähdytys	

P	≤ 1000
M	○
K	○
N	
S	
H	

Leikkuuarvosivu 25



DIN 2184-1 ~DIN 374 Artikkelinro. **1838**

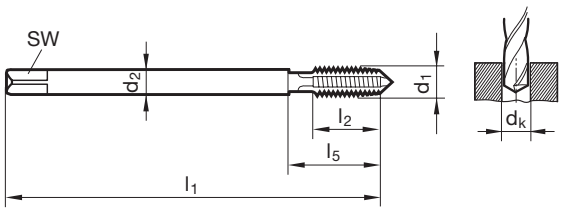
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
10 - 32	3,500	2,700	4,10	70,000	8,500	25,000	4,826
12 - 28	4,000	3,000	4,60	80,000	9,000	30,000	5,486
1/4 - 28	4,500	3,400	5,50	80,000	9,000	30,000	6,350
5/16 - 24	6,000	4,900	6,90	90,000	11,000	35,000	7,938
3/8 - 24	7,000	5,500	8,50	90,000	11,000	35,000	9,525
7/16 - 20	8,000	6,200	9,90	100,000	13,000	42,000	11,113
1/2 - 20	9,000	7,000	11,50	100,000	13,000	40,000	12,700
5/8 - 18	12,000	9,000	14,50	100,000	15,000	44,000	15,875
7/8 - 14	18,000	14,500	20,40	125,000	19,000	44,000	22,225
1 - 12	18,000	14,500	23,25	140,000	22,000	50,000	25,400

Konekierretapit BSP-kierteille

P	≤ 800
M	
K	
N	
S	
H	

Leikkuuarvosivu 19

Materiaali	HSS-E	
Ø-Toleranssi		
Pinta	○	●
Malli	N	N
Muoto	B	B
Sisäinen jäähdytys	✕	✕



DIN 2184-1 DIN 5156 — Artikkelinro. **962** **2894**

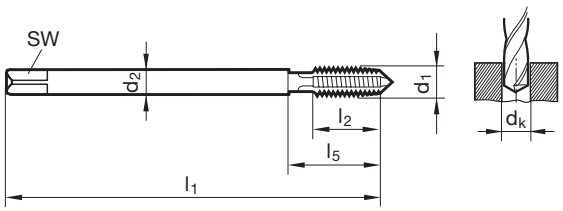
d1	P	d2	SW	dk	l1	l2	l5	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28,000	6,000	4,900	6,80	90,000	18,000	30,000	7,723
G1/8	28,000	7,000	5,500	8,80	90,000	18,000	35,000	9,728
G1/4	19,000	11,000	9,000	11,80	100,000	20,000	40,000	13,157
G3/8	19,000	12,000	9,000	15,25	100,000	22,000	44,000	16,662
G1/2	14,000	16,000	12,000	19,00	125,000	25,000	44,000	20,955
G5/8	14,000	18,000	14,500	21,00	125,000	25,000	48,000	22,911
G3/4	14,000	20,000	16,000	24,50	140,000	28,000	53,000	26,441
G7/8	14,000	22,000	18,000	28,25	150,000	28,000	53,000	30,201
G1	11,000	25,000	20,000	30,75	160,000	30,000	56,000	33,249
G1 1/4	11,000	32,000	24,000	39,50	170,000	30,000	57,000	41,910
G1 3/8	11,000	36,000	29,000	41,75	180,000	32,000	60,000	44,323
G1 1/2	11,000	36,000	29,000	45,25	190,000	32,000	60,000	47,803
G2	11,000	45,000	35,000	57,00	220,000	40,000	95,000	59,614

Konekierretapit BSP-kierteille

Materiaali	HSS-E
Ø-Toleranssi	
Pinta	◯
Malli	N
Muoto	C
Sisäinen jäähdytys	⊠

P	≤ 800
M	
K	
N	
S	
H	

Leikkuuarvosivu 18/22



DIN 2184-1 DIN 5156 Artikkelinro. **963**

d1	P	d2	SW	dk	l1	l2	l5	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28,000	6,000	4,900	6,80	90,000	11,000	30,000	7,723
G1/8	28,000	7,000	5,500	8,80	90,000	11,000	35,000	9,728
G1/4	19,000	11,000	9,000	11,80	100,000	14,000	40,000	13,157
G3/8	19,000	12,000	9,000	15,25	100,000	14,000	44,000	16,662
G1/2	14	16,000	12,000	19,00	125,000	18,000	44,000	20,955
G5/8	14,000	18,000	14,500	21,00	125,000	18,000	48,000	22,911
G3/4	14,000	20,000	16,000	24,50	140,000	20,000	53,000	26,441
G7/8	14,000	22,000	18,000	28,25	150,000	22,000	53,000	30,201
G1	11,000	25,000	20,000	30,75	160,000	24,000	56,000	33,249
G1 1/8	11,000	28,000	22,000	35,50	170,000	24,000	56,000	37,897
G1 1/4	11,000	32,000	24,000	39,50	170,000	25,000	57,000	41,910
G1 3/8	11,000	36,000	29,000	41,75	180,000	27,000	60,000	44,323
G1 1/2	11,000	36,000	29,000	45,25	190,000	27,000	60,000	47,803
G1 3/4	11,000	40,000	32,000	51,00	190,000	27,000	93,000	53,746
G2	11,000	45,000	35,000	57,00	220,000	32,000	95,000	59,614

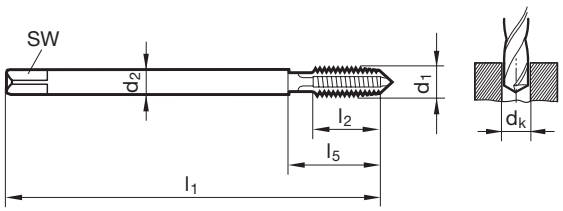
Konekierretapit BSP-kierteille

Materiaali	HSS-E
Ø-Toleranssi	X
Pinta	S
Malli	N
Muoto	B
Sisäinen jäähdytys	

NEW

P	•
M	•
K	○
N	○
S	○
H	

Leikkuuarvosivu 21



DIN 2184-1 DIN 5156 Artikkelinro. **4220**

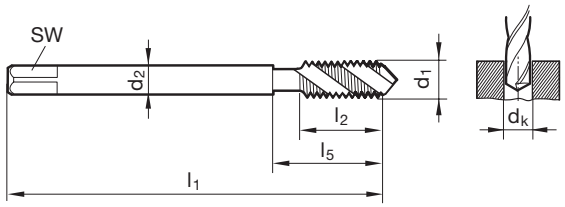
d1	P	d2	SW	dk	l1	l2	l5	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28,000	6,000	4,900	6,80	90,000	18,000	30,000	7,723
G1/8	28,000	7,000	5,500	8,80	90,000	18,000	35,000	9,728
G1/4	19,000	11,000	9,000	11,80	100,000	20,000	40,000	13,157
G3/8	19,000	12,000	9,000	15,25	100,000	22,000	44,000	16,662
G1/2	14,000	16,000	12,000	19,00	125,000	25,000	44,000	20,955
G5/8	14,000	18,000	14,500	21,00	125,000	25,000	48,000	22,911
G3/4	14,000	20,000	16,000	24,50	140,000	28,000	53,000	26,441
G7/8	14,000	22,000	18,000	28,25	150,000	28,000	53,000	30,201
G1	11,000	25,000	20,000	30,75	160,000	30,000	56,000	33,249

Konekierretapit BSP-kierteille

Materiaali	HSS-E		
Ø-Toleranssi			
Pinta	○	●	C
Malli	N R15	N R15	N R15
Muoto	C	C	E
Sisäinen jäähdytys	✕	✕	✕

P	≤ 800
M	
K	
N	
S	
H	

Leikkuuarvosivu 22/23



DIN 2184-1 DIN 5156	Artikkelinro.	964	2842	4158

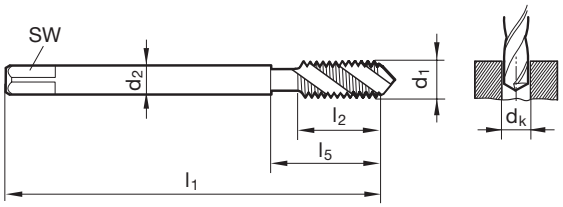
d1	P	d2	SW	dk	l1	l2	l5	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28,000	6,000	4,900	6,80	90,000	11,000	30,000	7,723
G1/8	28,000	7,000	5,500	8,80	90,000	11,000	35,000	9,728
G1/4	19,000	11,000	9,000	11,80	100,000	14,000	40,000	13,157
G3/8	19,000	12,000	9,000	15,25	100,000	14,000	44,000	16,662
G1/2	14,000	16,000	12,000	19,00	125,000	18,000	44,000	20,955
G5/8	14,000	18,000	14,500	21,00	125,000	18,000	48,000	22,911
G3/4	14,000	20,000	16,000	24,50	140,000	20,000	53,000	26,441
G7/8	14,000	22,000	18,000	28,25	150,000	22,000	53,000	30,201
G1	11,000	25,000	20,000	30,75	160,000	24,000	56,000	33,249

Konekierretapit BSP-kierteille

P	≤ 800
M	
K	
N	
S	
H	

Leikkuuarvosivu 23

Materiaali	HSS-E	
Ø-Toleranssi		
Pinta	○	●
Malli	N R40	N R40
Muoto	C	C
Sisäinen jäähdytys	☒	☒



DIN 2184-1 DIN 5156 — Artikkelinro. **965** **2849**

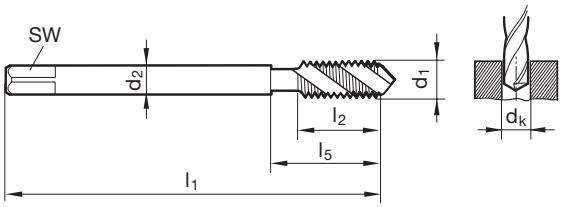
d1	P	d2	SW	dk	l1	l2	l5	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28,000	6,000	4,900	6,80	90,000	11,000	30,000	7,723
G1/8	28,000	7,000	5,500	8,80	90,000	11,000	35,000	9,728
G1/4	19,000	11,000	9,000	11,80	100,000	14,000	40,000	13,157
G3/8	19,000	12,000	9,000	15,25	100,000	14,000	44,000	16,662
G1/2	14,000	16,000	12,000	19,00	125,000	18,000	44,000	20,955
G5/8	14,000	18,000	14,500	21,00	125,000	18,000	48,000	22,911
G3/4	14,000	20,000	16,000	24,50	140,000	20,000	53,000	26,441
G1	11,000	25,000	20,000	30,75	160,000	24,000	56,000	33,249
G1 1/4	11,000	32,000	24,000	39,50	170,000	25,000	57,000	41,910
G1 1/2	11,000	36,000	29,000	45,25	190,000	27,000	60,000	47,803

Konekierretapit BSP-kierteille

P	≤ 1000
M	○
K	○
N	○
S	
H	

Leikkuuarvosivu 24

Materiaali	HSS-E	
Ø-Toleranssi		
Pinta	○	●
Malli	N R40	N R40
Muoto	C	C
Sisäinen jäähdytys	⊠	⊠



DIN 2184-1 DIN 5156 — Artikkelinro. **2860** **2861**

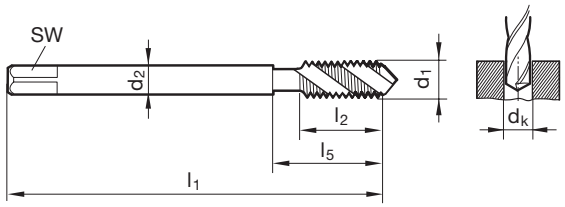
d1	P	d2	SW	dk	l1	l2	l5	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/8	28,000	7,000	5,500	8,80	90,000	11,000	35,000	9,728
G1/4	19,000	11,000	9,000	11,80	100,000	14,000	40,000	13,157
G3/8	19,000	12,000	9,000	15,25	100,000	14,000	44,000	16,662
G1/2	14,000	16,000	12,000	19,00	125,000	18,000	44,000	20,955
G5/8	14,000	18,000	14,500	21,00	125,000	18,000	48,000	22,911
G3/4	14,000	20,000	16,000	24,50	140,000	20,000	53,000	26,441
G7/8	14,000	22,000	18,000	28,25	150,000	22,000	53,000	30,201
G1	11,000	25,000	20,000	30,75	160,000	24,000	56,000	33,249
G1 1/8	11,000	28,000	22,000	35,50	170,000	24,000	56,000	37,897
G1 1/4	11,000	32,000	24,000	39,50	170,000	25,000	57,000	41,910
G1 1/2	11,000	36,000	29,000	45,25	190,000	27,000	60,000	47,803
G2	11,000	45,000	35,000	57,00	220,000	32,000	95,000	59,614

Konekierretapit BSP-kierteille

Materiaali	HSS-E-PM
Ø-Toleranssi	
Pinta	S
Malli	VA R50
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	○
N	•
S	○
H	

Leikkuuarvosivu 25



DIN 2184-1 DIN 5156 Artikkelinro. **4159**

d1	P	d2	SW	dk	l1	l2	l5	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28,000	6,000	4,900	6,80	90,000	4,500	47,000	7,723
G1/8	28,000	7,000	5,500	8,80	90,000	4,500	47,000	9,728
G1/4	19,000	11,000	9,000	11,80	100,000	6,700	48,000	13,157
G3/8	19,000	12,000	9,000	15,25	100,000	6,700	48,000	16,662
G1/2	14,000	16,000	12,000	19,00	125,000	9,100	70,000	20,955

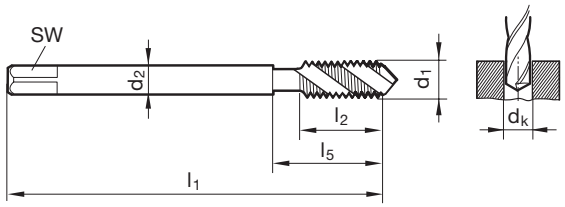
Konekierretapit BSP-kierteille

Materiaali	HSS-E
Ø-Toleranssi	X
Pinta	A
Malli	VA R45
Muoto	C
Sisäinen jäähdytys	

NEW

P	•
M	•
K	○
N	○
S	○
H	

Leikkuuarvosivu 19



DIN 2184-1 DIN 5156 Artikkelinro. **395**

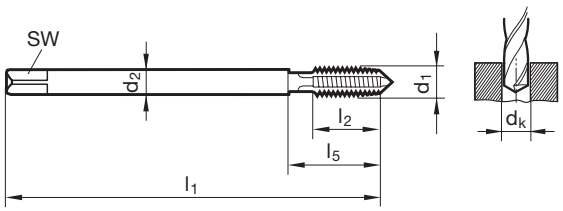
d1	P	d2	SW	dk	l1	l2	l5	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28,000	6,000	4,900	6,80	90,000	11,000	30,000	7,723
G1/8	28,000	7,000	5,500	8,80	90,000	11,000	35,000	9,728
G1/4	19,000	11,000	9,000	11,80	100,000	14,000	40,000	13,157
G3/8	19,000	12,000	9,000	15,25	100,000	14,000	44,000	16,662
G1/2	14,000	16,000	12,000	19,00	125,000	18,000	44,000	20,955
G5/8	14,000	18,000	14,500	21,00	125,000	18,000	48,000	22,911
G3/4	14,000	20,000	16,000	24,50	140,000	20,000	53,000	26,441
G7/8	14,000	22,000	18,000	28,25	150,000	22,000	53,000	30,201
G1	11,000	25,000	20,000	30,75	160,000	24,000	56,000	33,249

Konekierretapit BSP-kierteille

P	≤ 1000
M	○
K	
N	
S	
H	

Leikkuuarvosivu 20

Materiaali	HSS-E	
Ø-Toleranssi		
Pinta	A+M	
Malli	N	N
Muoto	B	B
Sisäinen jäähdytys		



DIN 2184-1 DIN 5156 — Artikkelinro. **2886** **2887**

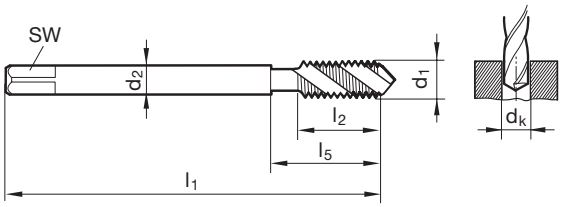
d1	P	d2	SW	dk	l1	l2	l5	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/8	28,000	7,000	5,500	8,80	90,000	18,000	35,000	9,728
G1/4	19,000	11,000	9,000	11,80	100,000	20,000	40,000	13,157
G3/8	19,000	12,000	9,000	15,25	100,000	22,000	44,000	16,662
G1/2	14,000	16,000	12,000	19,00	125,000	25,000	44,000	20,955
G3/4	14,000	20,000	16,000	24,50	140,000	28,000	53,000	26,441
G1	11,000	25,000	20,000	30,75	160,000	30,000	56,000	33,249
G1 1/4	11,000	32,000	24,000	39,50	170,000	30,000	57,000	41,910
G1 1/2	11,000	36,000	29,000	45,25	190,000	32,000	60,000	47,803
G2	11,000	45,000	35,000	57,00	220,000	40,000	95,000	59,614

Konekierretapit BSP-kierteille

Materiaali	HSS-E
Ø-Toleranssi	
Pinta	S
Malli	N R40
Muoto	C
Sisäinen jäähdytys	

P	≤ 1000
M	○
K	○
N	
S	
H	

Leikkuuarvosivu 25



DIN 2184-1 DIN 5156 Artikkelinro. **937**

d1	P	d2	SW	dk	l1	l2	l5	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/8	28,000	7,000	5,500	8,80	90,000	11,000	35,000	9,728
G1/4	19,000	11,000	9,000	11,80	100,000	14,000	40,000	13,157
G3/8	19,000	12,000	9,000	15,25	100,000	14,000	44,000	16,662
G1/2	14,000	16,000	12,000	19,00	125,000	18,000	44,000	20,955
G3/4	14,000	20,000	16,000	24,50	140,000	20,000	53,000	26,441
G7/8	14,000	22,000	18,000	28,25	150,000	22,000	53,000	30,201
G1	11,000	25,000	20,000	30,75	160,000	24,000	56,000	33,249

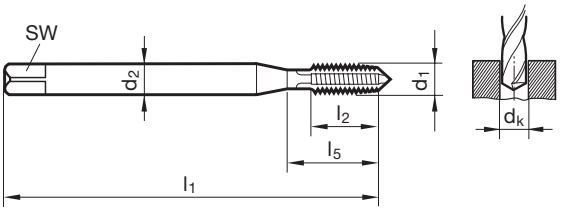
Konekierretapit BSW-kierteille

Materiaali	HSS-E
Ø-Toleranssi	
Pinta	
Malli	N
Muoto	B
Sisäinen jäähdytys	

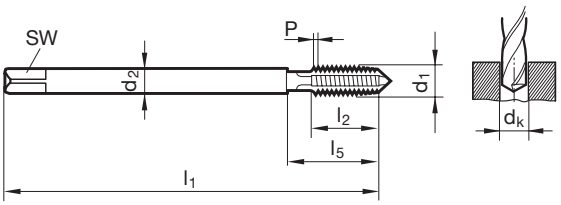
P	≤ 800
M	
K	
N	
S	
H	

Leikkuuarvosivu 19

~ DIN 371



~ DIN 376



DIN 2184-1 ~DIN 371 Artikkelinro. **2892**

d1	P	d2	SW	dk	l1	l2	l5	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	
W1/8	40,000	3,500	2,700	2,50	56,000	11,000	18,000	3,175
W5/32	32,000	4,500	3,400	3,20	63,000	12,000	21,000	3,969
W3/16	24,000	6,000	4,900	3,60	70,000	14,000	25,000	4,762
W1/4	20,000	7,000	5,500	5,10	80,000	16,000	30,000	6,350
W5/16	18,000	8,000	6,200	6,50	90,000	18,000	35,000	7,938
W3/8	16,000	10,000	8,000	7,90	100,000	20,000	39,000	9,525

DIN 2184-1 ~DIN 376 Artikkelinro. **2893**

d1	P	d2	SW	dk	l1	l2	l5	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	
W7/16	14,000	8,000	6,200	9,20	100,000	22,000	42,000	11,113
W1/2	12,000	9,000	7,000	10,50	110,000	25,000	49,000	12,700
W9/16	12,000	11,000	9,000	12,00	110,000	28,000	53,000	14,287
W5/8	11,000	12,000	9,000	13,50	110,000	30,000	53,000	15,876
W3/4	10,000	14,000	11,000	16,25	125,000	33,000	62,000	19,051
W7/8	9,000	18,000	14,500	19,25	140,000	35,000	62,000	22,226
W1	8,000	18,000	14,500	22,00	160,000	38,000	73,000	25,401

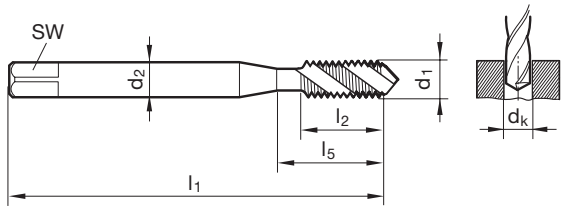
Konekierretapit BSW-kierteille

Materiaali	**HSS-E**
Ø-Toleranssi	
Pinta	
Malli	N R40
Muoto	C
Sisäinen jäähdytys	

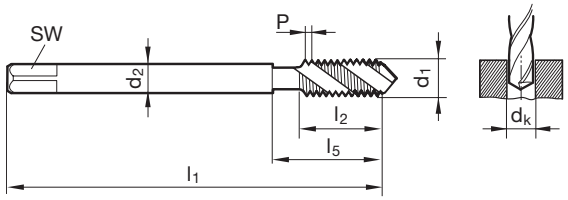
P	≤ 800
M	
K	
N	
S	
H	

Leikkuuarvosivu 23

~ DIN 371



~ DIN 376



DIN 2184-1 ~DIN 371 Artikkelinro. **2847**

d1	P	d2	SW	dk	l1	l2	l5	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	
W1/8	40,000	3,500	2,700	2,50	56,000	7,000	18,000	3,175
W3/16	24,000	6,000	4,900	3,60	70,000	11,000	25,000	4,762
W1/4	20,000	7,000	5,500	5,10	80,000	13,000	30,000	6,350
W5/16	18,000	8,000	6,200	6,50	90,000	14,000	35,000	7,938
W3/8	16,000	10,000	8,000	7,90	100,000	16,000	39,000	9,525

DIN 2184-1 ~DIN 376 Artikkelinro. **2848**

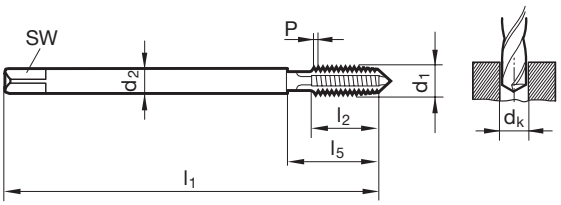
d1	P	d2	SW	dk	l1	l2	l5	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	
W3/8	16,000	7,000	5,500	7,90	100,000	16,000	39,000	9,525
W7/16	14,000	8,000	6,200	9,20	100,000	18,000	42,000	11,113
W1/2	12,000	9,000	7,000	10,50	110,000	20,000	49,000	12,700
W5/8	11,000	12,000	9,000	13,50	110,000	24,000	53,000	15,876
W3/4	10,000	14,000	11,000	16,25	125,000	25,000	62,000	19,051
W7/8	9,000	18,000	14,500	19,25	140,000	28,000	62,000	22,226
W1	8,000	18,000	14,500	22,00	160,000	32,000	73,000	25,401

Konekierretapit EG-kierteille

P	≤ 1000
M	○
K	
N	
S	
H	

Leikkuuarvosivu 20

Materiaali	**HSS-E**
Ø-Toleranssi	6H mod
Pinta	S
Malli	N
Muoto	B
Sisäinen jäähdytys	



DIN 40435 DIN 40435 Artikkelinro. **1010**

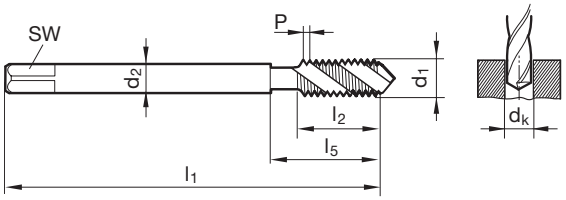
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
EG M4	0,700	6,000	4,900	4,20	70,000	12,000	25,000
EG M5	0,800	6,000	4,900	5,25	80,000	14,000	30,000
EG M6	1,000	8,000	6,200	6,30	90,000	17,000	35,000
EG M8	1,250	10,000	8,000	8,40	100,000	20,000	39,000
EG M10	1,500	9,000	7,000	10,50	100,000	20,000	40,000
EG M12	1,750	11,000	9,000	12,50	110,000	28,000	53,000
EG M14	2,000	12,000	9,000	14,50	110,000	26,000	54,000
EG M16	2,000	14,000	11,000	16,50	125,000	33,000	62,000

Konekierretapit EG-kierteille

Materiaali	HSS-E
Ø-Toleranssi	6H mod
Pinta	S
Malli	N R40
Muoto	C
Sisäinen jäähdytys	

P	≤ 1000
M	○
K	○
N	
S	
H	

Leikkuuarvosivu 24



DIN 40435 DIN 40435 Artikkelinro. **1011**

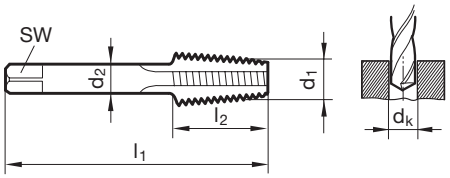
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
EG M4	0,700	6,000	4,900	4,20	70,000	7,500	25,000
EG M5	0,800	6,000	4,900	5,25	80,000	8,500	30,000
EG M6	1,000	8,000	6,200	6,30	90,000	11,000	35,000
EG M8	1,250	10,000	8,000	8,40	100,000	14,000	39,000
EG M10	1,500	9,000	7,000	10,50	100,000	16,000	40,000
EG M12	1,750	11,000	9,000	12,50	110,000	18,500	53,000
EG M14	2,000	12,000	9,000	14,50	110,000	20,000	54,000
EG M16	2,000	14,000	11,000	16,50	125,000	20,000	62,000

Konekierretapit NPT-kierteille

Materiaali	HSS-E
Ø-Toleranssi	
Pinta	◯
Malli	N
Muoto	C
Sisäinen jäähdytys	⊠

P	≤ 800
M	
K	
N	
S	
H	

Leikkuuarvosivu 18/22



Tehdas stdr. Tehdas stdr. Artikkelinro. **973**

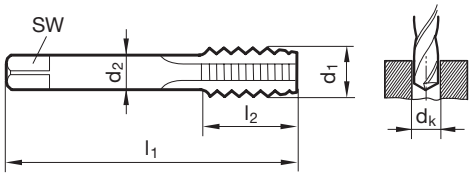
d1	P	d2	SW	dk	l1	l2	l5	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	
1/16	27,000	6,000	4,900	6,15	56,000	14,000	27,000	8,190
1/8	27,000	7,000	5,500	8,40	63,000	15,000	29,000	10,620
1/4	18,000	11,000	9,000	11,10	63,000	21,000	33,000	14,140
3/8	18,000	12,000	9,000	14,30	70,000	21,000	35,000	17,570
1/2	14,000	16,000	12,000	17,90	80,000	27,000	41,000	21,900
3/4	14,000	20,000	16,000	23,30	100,000	27,000	42,000	27,230
1	11,500	25,000	20,000	29,00	110,000	32,000	53,000	34,180
1 1/4	11,500	32,000	24,000	37,70	125,000	33,000	54,500	42,900
1 1/2	11,500	36,000	29,000	43,70	140,000	33,000	56,000	48,940
2	11,500	36,000	29,000	55,60	160,000	33,000	63,000	61,000

Konekierretapit PG-kierteille

P	≤ 800
M	
K	
N	
S	
H	

Leikkuuarvosivu 18-22

Materiaali	HSS-E	
Ø-Toleranssi		
Pinta	◯	◯
Malli	N	N
Muoto	B	C
Sisäinen jäähdytys	☒	☒



DIN 2184-2 DIN 40432 — Artikkelinro. **980** **979**

d1	P	d2	SW	dk	l1	l2	l5	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	
PG7	20,000	9,000	7,000	11,40	70,000	22,000	35,000	12,500
PG9	18,000	12,000	9,000	14,00	70,000	22,000	35,000	15,200
PG11	18,000	14,000	11,000	17,30	80,000	22,000	40,000	18,600
PG13,5	18,000	16,000	12,000	19,00	80,000	22,000	40,000	20,400
PG16	18,000	18,000	14,500	21,30	80,000	22,000	40,000	22,500
PG21	16,000	22,000	18,000	26,90	90,000	22,000	42,000	28,300
PG29	16,000	28,000	22,000	35,50	100,000	25,000	45,000	37,000

MANGLAAVAT KIERRETAPIT

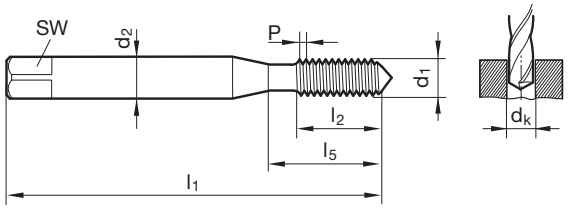
Manglaavat kierretapit, metrinen ISO-kierre

Materiaali	HSS-E-PM	HSS-E	HSS-E-PM
Ø-Toleranssi	6GX	6HX	6HX
Pinta	S	S	S
Malli	N	N	N
Muoto	C	C	C
Sisäinen jäähdytys	✕	✕	✕

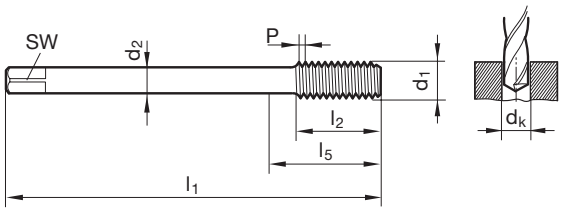
P	•
M	•
K	
N	○
S	
H	

Leikkuuarvosivu 26

~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371	Artikkelinro.	903	921	1255

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M1	0,250	2,500	2,100	0,90	40,000	4,000	
M1,2	0,250	2,500	2,100	1,10	40,000	4,800	
M1,4	0,300	2,500	2,100	1,25	40,000	5,600	
M1,6	0,350	2,500	2,100	1,45	40,000	6,400	
M1,7	0,350	2,500	2,100	1,55	40,000	6,800	
M1,8	0,350	2,500	2,100	1,65	40,000	7,300	
M2	0,400	2,800	2,100	1,85	45,000	8,000	13,500
M2,5	0,450	2,800	2,100	2,30	50,000	9,000	14,500
M3	0,500	3,500	2,700	2,80	56,000	10,000	18,000
M3,5	0,600	4,000	3,000	3,25	56,000	12,000	20,000
M4	0,700	4,500	3,400	3,70	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,65	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,55	80,000	16,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	17,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	20,000	39,000

DIN 2174 ~DIN 376	Artikkelinro.	952	925	1256

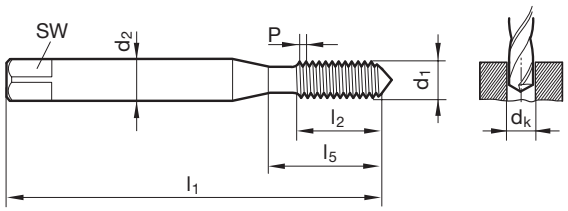
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	11,20	110,000	24,000	49,000
M14	2,000	11,000	9,000	13,10	110,000	26,000	53,000
M16	2,000	12,000	9,000	15,10	110,000	26,000	54,000
M18	2,500	14,000	11,000	16,90	125,000	30,000	62,000
M20	2,500	16,000	12,000	18,90	140,000	32,000	62,000

Manglaavat kierretapit, metrinen ISO-kierre

Materiaali	HSS-E
Ø-Toleranssi	6GX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	○
S	
H	

Leikkuuarvosivu 26



DIN 2174 ~DIN 371 Artikkelinro. **920**

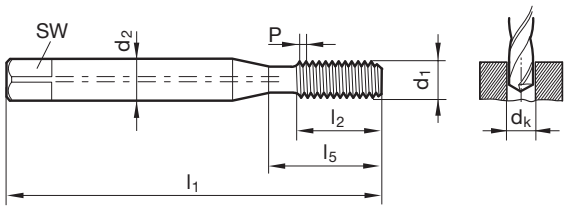
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0,400	2,800	2,100	1,85	45,000	8,000	13,500
M2,5	0,450	2,800	2,100	2,30	50,000	9,000	14,500
M3	0,500	3,500	2,700	2,80	56,000	10,000	18,000
M3,5	0,600	4,000	3,000	3,25	56,000	12,000	20,000
M4	0,700	4,500	3,400	3,70	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,65	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,55	80,000	16,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	17,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	20,000	39,000

Manglaavat kierretapit JK, metrinen ISO-kierre

Materiaali	**TKM**
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	≥ 7
S	○
H	

Leikkuuarvosivu 26



DIN 2174 ~DIN 371/~DIN 376 Artikkelinro. **2518**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0,800	6,000	4,900	4,65	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,55	80,000	11,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	14,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	16,000	39,000
M12	1,750	9,000	7,000	11,20	110,000	18,500	49,000
M16	2,000	12,000	9,000	15,10	110,000	20,000	54,000

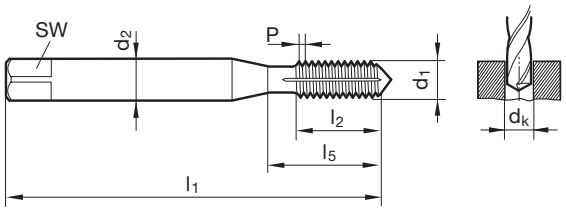
Manglaavat kierretapit, metrinen ISO-kierre

Materiaali	HSS-E		
Ø-Toleranssi	6HX	6HX	6HX
Pinta	S	P	C
Malli	N	N	N
Muoto	C	C	C
Sisäinen jäähdytys			

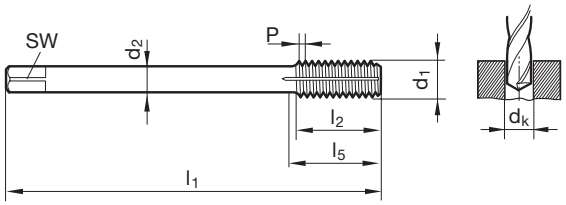
P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 26

~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371	Artikkelinro.	919	1587	2012

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,80	56,000	10,000	18,000
M3,5	0,600	4,000	3,000	3,25	56,000	12,000	20,000
M4	0,700	4,500	3,400	3,70	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,65	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,55	80,000	16,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	17,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	20,000	39,000

DIN 2174 ~DIN 376	Artikkelinro.	923	1589	2013

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M6	1,000	4,500	3,400	5,55	80,000	16,000	30,000
M8	1,250	6,000	4,900	7,40	90,000	17,000	35,000
M10	1,500	7,000	5,500	9,30	100,000	20,000	39,000
M12	1,750	9,000	7,000	11,20	110,000	24,000	49,000
M14	2,000	11,000	9,000	13,10	110,000	26,000	53,000
M16	2,000	12,000	9,000	15,10	110,000	26,000	54,000
M18	2,500	14,000	11,000	16,90	125,000	30,000	62,000
M20	2,500	16,000	12,000	18,90	140,000	32,000	62,000
M22	2,500	18,000	14,500	20,90	140,000	32,000	62,000
M24	3,000	18,000	14,500	22,70	160,000	36,000	73,000
M27	3,000	20,000	16,000	25,70	160,000	36,000	73,000
M30	3,500	22,000	18,000	28,50	180,000	40,000	85,000
M33	3,500	25,000	20,000	31,50	180,000	40,000	91,000
M36	4,000	28,000	22,000	34,30	200,000	50,000	102,000
M39	4,000	32,000	24,000	37,30	200,000	50,000	107,000

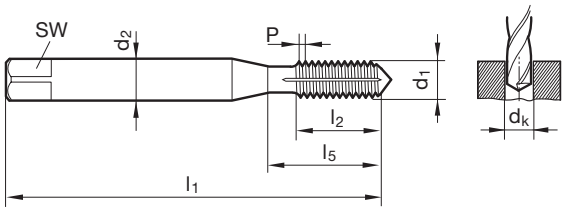
Manglaavat kierretapit, metrinen ISO-kierre

Materiaali	HSS-E		HSS-E-PM
Ø-Toleranssi	6GX	6GX	6GX
Pinta	S	P	P
Malli	N	N	N
Muoto	C	C	C
Sisäinen jäähdytys	✕	✕	✕

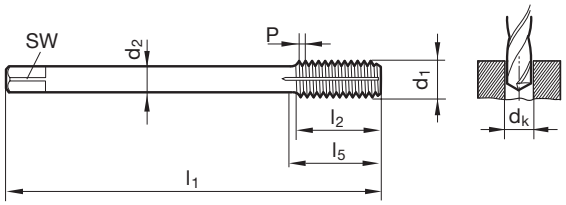
P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 26/27

~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371	Artikkelinro.	918	1588	1705

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,80	56,000	10,000	18,000
M3,5	0,600	4,000	3,000	3,25	56,000	12,000	20,000
M4	0,700	4,500	3,400	3,70	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,65	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,55	80,000	16,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	17,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	20,000	39,000

DIN 2174 ~DIN 376	Artikkelinro.	922	1590	1708

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M6	1,000	4,500	3,400	5,55	80,000	16,000	30,000
M8	1,250	6,000	4,900	7,40	90,000	17,000	35,000
M10	1,500	7,000	5,500	9,30	100,000	20,000	39,000
M12	1,750	9,000	7,000	11,20	110,000	24,000	49,000
M14	2,000	11,000	9,000	13,10	110,000	26,000	53,000
M16	2,000	12,000	9,000	15,10	110,000	26,000	54,000
M18	2,500	14,000	11,000	16,90	125,000	30,000	62,000
M20	2,500	16,000	12,000	18,90	140,000	32,000	62,000

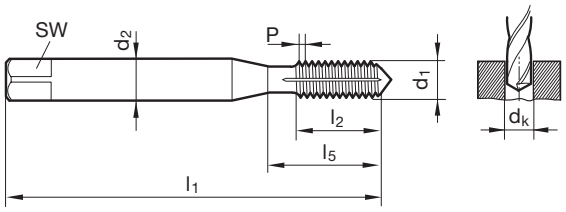
Manglaavat kierretapit, metrinen ISO-kierre

Materiaali	HSS-E-PM
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

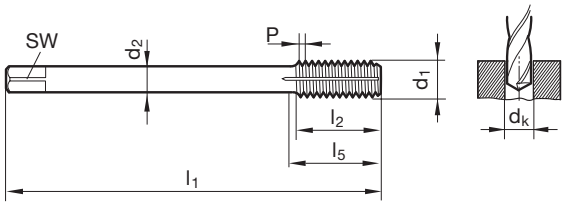
P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 27

~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371 Artikkelinro. **322**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,80	56,000	6,000	18,000
M4	0,700	4,500	3,400	3,70	63,000	7,500	21,000
M5	0,800	6,000	4,900	4,65	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,55	80,000	11,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	14,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	16,000	39,000

DIN 2174 ~DIN 376 Artikkelinro. **339**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	11,20	110,000	18,500	49,000
M16	2,000	12,000	9,000	15,10	110,000	20,000	54,000

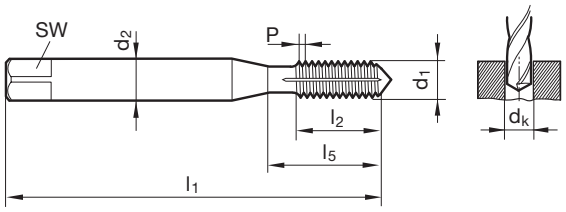
Manglaavat kierretapit, metrinen ISO-kierre

Materiaali	HSS-E-PM	
Ø-Toleranssi	6HX	6HX
Pinta	S	P
Malli	N	N
Muoto	C	C
Sisäinen jäähdytys		

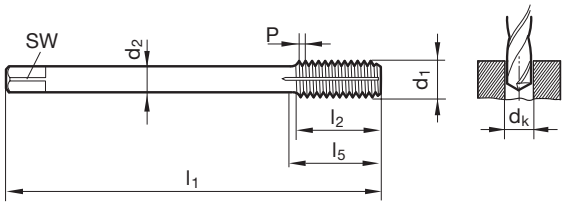
P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 27

~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371 Artikkelinro. **1266** **1599**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,80	56,000	10,000	18,000
M4	0,700	4,500	3,400	3,70	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,65	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,55	80,000	16,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	17,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	20,000	39,000

DIN 2174 ~DIN 376 Artikkelinro. **1267** **1707**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	11,20	110,000	24,000	49,000
M14	2,000	11,000	9,000	13,10	110,000	26,000	53,000
M16	2,000	12,000	9,000	15,10	110,000	26,000	54,000
M20	2,500	16,000	12,000	18,90	140,000	32,000	62,000

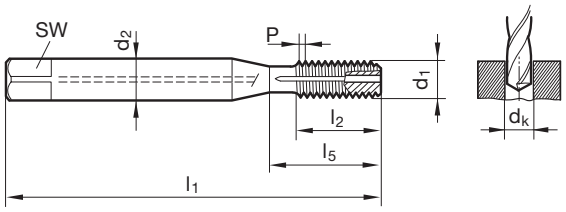
Manglaavat kierretapit JK, metrinen ISO-kierre

Materiaali	HSS-E		
Ø-Toleranssi	6HX	6GX	6HX
Pinta	S	S	C
Malli	N	N	N
Muoto	C	C	C
Sisäinen jäähdytys			

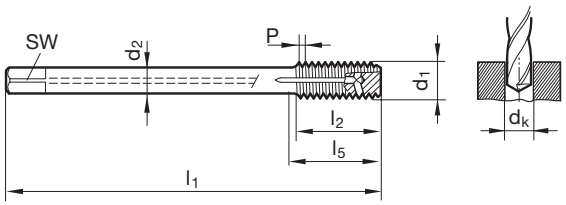
P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 27

~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371 — Artikkelinro. **2442** **2443** **2446**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0,800	6,000	4,900	4,65	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,55	80,000	11,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	14,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	16,000	39,000

DIN 2174 ~DIN 376 — Artikkelinro. **2444** **2445** **2448**

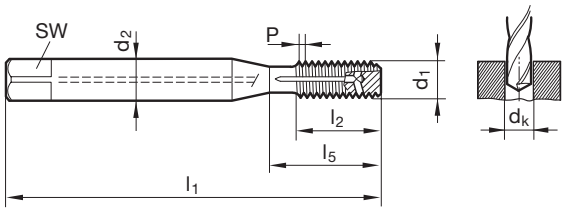
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	11,20	110,000	18,500	49,000
M14	2,000	11,000	9,000	13,10	110,000	20,000	53,000
M16	2,000	12,000	9,000	15,10	110,000	20,000	54,000

Manglaavat kierretapit JK, metrinen ISO-kierre

Materiaali	**HSS-E**
Ø-Toleranssi	6GX
Pinta	C
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	≥ 7
S	○
H	

Leikkuuarvosivu 27



DIN 2174 ~DIN 371 Artikkelinro. **2447**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0,800	6,000	4,900	4,65	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,55	80,000	11,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	14,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	16,000	39,000

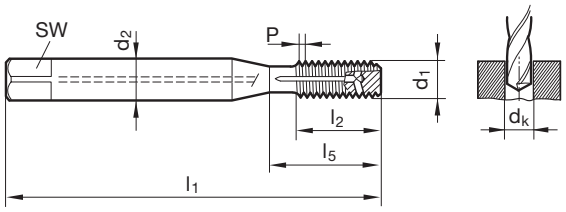
Manglaavat kierretapit JK, metrinen ISO-kierre

Materiaali	HSS-E-PM
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

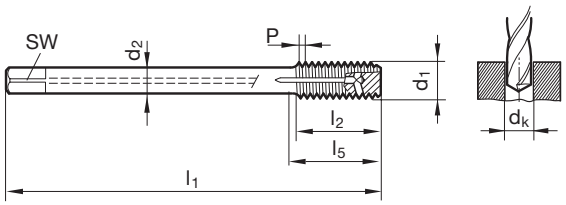
P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 27

~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371 Artikkelinro. **323**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0,800	6,000	4,900	4,65	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,55	80,000	11,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	14,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	16,000	39,000

DIN 2174 ~DIN 376 Artikkelinro. **342**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	11,20	110,000	18,500	49,000
M14	2,000	11,000	9,000	13,10	110,000	20,000	53,000
M16	2,000	12,000	9,000	15,10	110,000	20,000	54,000

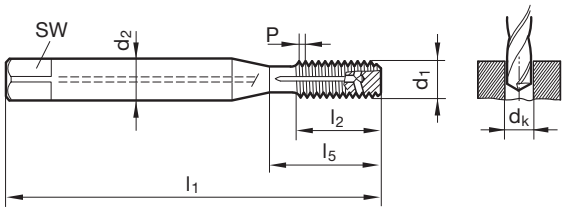
Manglaavat kierretapit JK, metrinen ISO-kierre

P	•
M	•
K	
N	≥ 7
S	•
H	

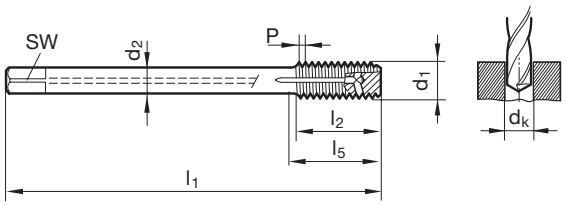
Leikkuuarvosivu 27

Materiaali	HSS-E-PM		
Ø-Toleranssi	6HX	6HX	6HX
Pinta	C	A	S
Malli	N	N	N
Muoto	C	C	E
Sisäinen jäähdytys			

~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371	Artikkelinro.	1270	1717	1725

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,80	56,000	10,000	18,000
M4	0,700	4,500	3,400	3,70	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,65	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,55	80,000	16,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	17,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	20,000	39,000

DIN 2174 ~DIN 376	Artikkelinro.	1271	1719	1727

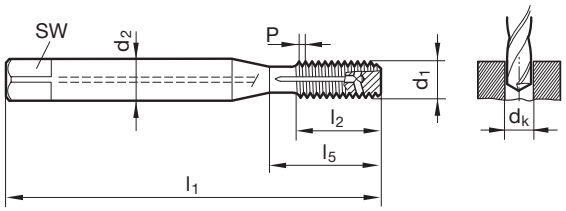
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	11,20	110,000	24,000	49,000
M14	2,000	11,000	9,000	13,10	110,000	26,000	53,000
M16	2,000	12,000	9,000	15,10	110,000	26,000	54,000
M18	2,500	14,000	11,000	16,90	125,000	30,000	62,000
M20	2,500	16,000	12,000	18,90	140,000	32,000	62,000

Manglaavat kierretapit JK, metrinen ISO-kierre

Materiaali	HSS-E-PM
Ø-Toleranssi	6GX
Pinta	C
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	≥ 7
S	•
H	

Leikkuuarvosivu 27



DIN 2174 ~DIN 371 Artikkelinro. **1713**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0,800	6,000	4,900	4,65	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,55	80,000	16,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	17,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	20,000	39,000

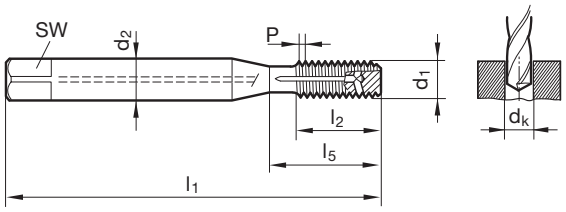
Manglaavat kierretapit JK, metrinen ISO-kierre

Materiaali	HSS-E-PM	
Ø-Toleranssi	6GX	6GX
Pinta	A	S
Malli	N	N
Muoto	C	E
Sisäinen jäähdytys		

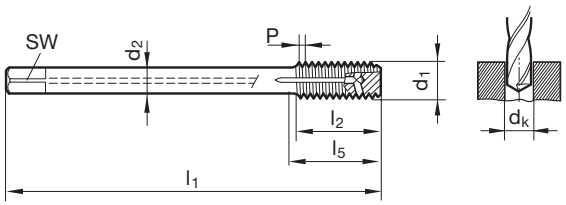
P	•
M	•
K	
N	
S	•
H	

Leikkuuarvosivu 27

~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371 — Artikkelinro. **1718** **1726**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,80	56,000	10,000	18,000
M4	0,700	4,500	3,400	3,70	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,65	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,55	80,000	16,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	17,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	20,000	39,000

DIN 2174 ~DIN 376 — Artikkelinro. **1720** **1728**

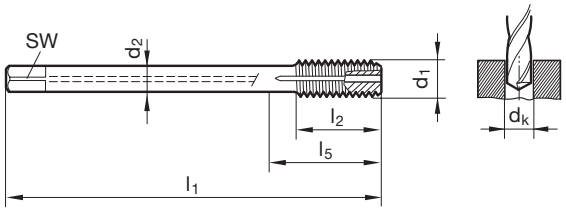
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	11,20	110,000	24,000	49,000
M14	2,000	11,000	9,000	13,10	110,000	26,000	53,000
M16	2,000	12,000	9,000	15,10	110,000	26,000	54,000
M20	2,500	16,000	12,000	18,90	140,000	32,000	62,000

Manglaavat kierretapit JK, metrinen ISO-kierre

Materiaali	HSS-E-PM
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 27



Tehdas stdr. Tehdas stdr. Artikkelinro. **4143**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,80	112,000	6,000	18,000
M4	0,700	2,800	2,100	3,70	112,000	7,500	77,000
M5	0,800	3,500	2,700	4,65	125,000	8,500	90,000
M6	1,000	4,500	3,400	5,55	125,000	11,000	90,000
M8	1,250	6,000	4,900	7,40	140,000	14,000	97,000
M10	1,500	7,000	5,500	9,30	160,000	16,000	117,000
M12	1,750	9,000	7,000	11,20	180,000	18,500	133,000
M16	2,000	12,000	9,000	15,10	220,000	20,000	168,000
M20	2,500	16,000	12,000	18,90	280,000	25,000	225,000

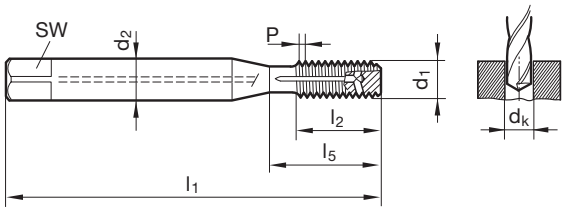
Manglaavat kierretapit JK, metrinen ISO-kierre

Materiaali	**TKM**
Ø-Toleranssi	6HX
Pinta	C
Malli	N
Muoto	C
Sisäinen jäähdytys	

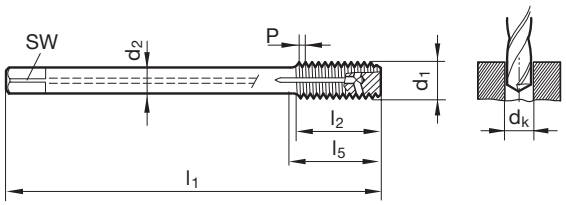
P	•
M	•
K	
N	≥ 7
S	•
H	

Leikkuuarvosivu 27

~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371 Artikkelinro. **1972**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,80	56,000	6,000	18,000
M4	0,700	4,500	3,400	3,70	63,000	7,500	21,000
M5	0,800	6,000	4,900	4,65	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,55	80,000	11,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	14,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	16,000	39,000

DIN 2174 ~DIN 376 Artikkelinro. **1931**

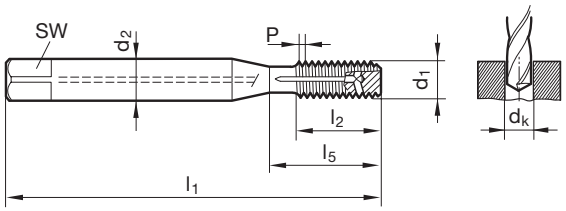
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	11,20	110,000	18,500	49,000
M14	2,000	11,000	9,000	13,10	110,000	20,000	53,000
M16	2,000	12,000	9,000	15,10	110,000	20,000	54,000
M18	2,500	14,000	11,000	16,90	125,000	25,000	62,000
M20	2,500	16,000	12,000	18,90	140,000	25,000	62,000

Manglaavat kierretapit JK, metrinen ISO-kierre

P	•
M	•
K	
N	≥ 7
S	•
H	

Leikkuuarvosivu 27

Materiaali	**TKM**
Ø-Toleranssi	6HX
Pinta	C
Malli	N
Muoto	E
Sisäinen jäähdytys	



DIN 2174 ~DIN 371 Artikkelinro. **1927**

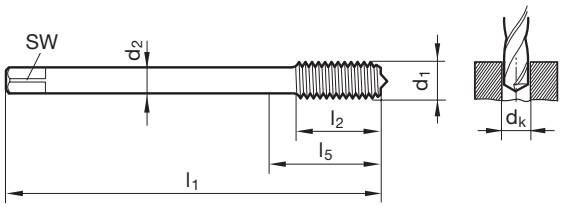
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,80	56,000	6,000	18,000
M4	0,700	4,500	3,400	3,70	63,000	7,500	21,000
M5	0,800	6,000	4,900	4,65	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,55	80,000	11,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	14,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	16,000	39,000

Manglaavat kierretapit, metrinen ISO-hienokierre

Materiaali	**HSS-E**
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	○
S	
H	

Leikkuuarvosivu 26



DIN 2174 ~DIN 374 Artikkelinro. **929**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6,000	4,900	7,55	90,000	16,000	35,000	8,005
M10 x 1	7,000	5,500	9,55	90,000	16,000	35,000	10,005
M14 x 1,5	11,000	9,000	13,30	100,000	20,000	40,000	14,007
M18 x 1	14,000	11,000	17,55	110,000	25,000	44,000	18,005
M18 x 1,5	14,000	11,000	17,30	110,000	25,000	44,000	18,007
M20 x 1	16,000	12,000	19,55	125,000	25,000	44,000	20,005
M20 x 1,5	16,000	12,000	19,30	125,000	25,000	44,000	20,007

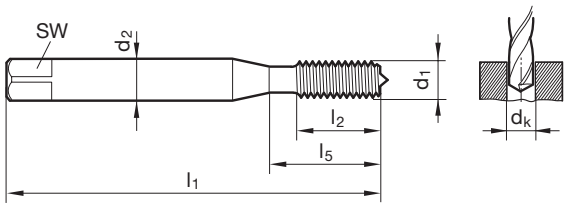
Manglaavat kierretapit, metrinen ISO-hienokierre

Materiaali	**HSS-E-PM**
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

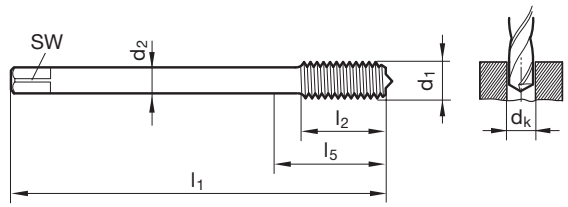
P	•
M	•
K	
N	○
S	
H	

Leikkuuarvosivu 26

~ DIN 371



~ DIN 374



DIN 2174 ~DIN 371 Artikkelinro. **1257**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8,000	6,200	7,55	90,000	16,000	35,000	8,005
M9 x 1	9,000	7,000	8,55	90,000	16,000	35,000	9,005
M10 x 1	10,000	8,000	9,55	90,000	16,000	35,000	10,005

DIN 2174 ~DIN 374 Artikkelinro. **1258**

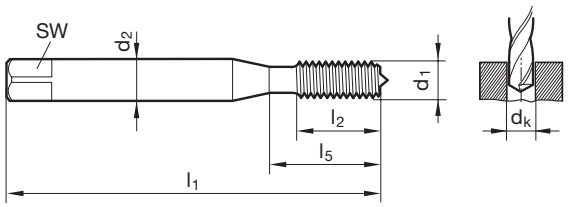
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9,000	7,000	11,55	100,000	20,000	40,000	12,005
M12 x 1,25	9,000	7,000	11,40	100,000	20,000	40,000	12,006
M12 x 1,5	9,000	7,000	11,30	100,000	20,000	40,000	12,007
M14 x 1	11,000	9,000	13,55	100,000	20,000	40,000	14,005
M14 x 1,25	11,000	9,000	13,40	100,000	20,000	40,000	14,006
M14 x 1,5	11,000	9,000	13,30	100,000	20,000	40,000	14,007
M16 x 1	12,000	9,000	15,55	100,000	22,000	44,000	16,005
M16 x 1,5	12,000	9,000	15,30	100,000	22,000	44,000	16,007
M20 x 1	16,000	12,000	19,55	125,000	25,000	44,000	20,005
M20 x 1,5	16,000	12,000	19,30	125,000	25,000	44,000	20,007
M24 x 1,5	18,000	14,500	23,30	140,000	28,000	48,000	24,007
M24 x 2	18,000	14,500	23,10	140,000	28,000	48,000	24,008

Manglaavat kierretapit, metrinen ISO-hienokierre

Materiaali	HSS-E-PM
Ø-Toleranssi	6GX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	○
S	
H	

Leikkuuarvosivu 26



DIN 2174 ~DIN 371 Artikkelinro. **1740**

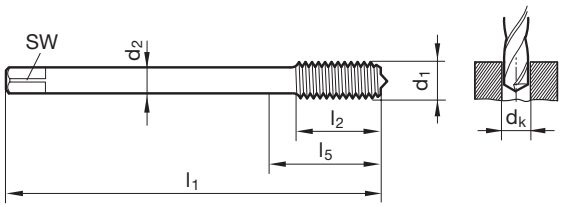
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8,000	6,200	7,55	90,000	16,000	35,000	8,005
M10 x 1	10,000	8,000	9,55	90,000	16,000	35,000	10,005
M10 x 1,25	10,000	8,000	9,40	100,000	20,000	39,000	10,006

Manglaavat kierretapit, metrinen ISO-hienokierre

Materiaali	**HSS-E**
Ø-Toleranssi	6GX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	○
S	
H	

Leikkuuarvosivu 26



DIN 2174 ~DIN 374 Artikkelinro. **928**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6,000	4,900	7,55	90,000	16,000	35,000	8,005
M12 x 1,5	9,000	7,000	11,30	100,000	20,000	40,000	12,007
M16 x 1,5	12,000	9,000	15,30	100,000	22,000	44,000	16,007
M18 x 1	14,000	11,000	17,55	110,000	25,000	44,000	18,005
M18 x 1,5	14,000	11,000	17,30	110,000	25,000	44,000	18,007

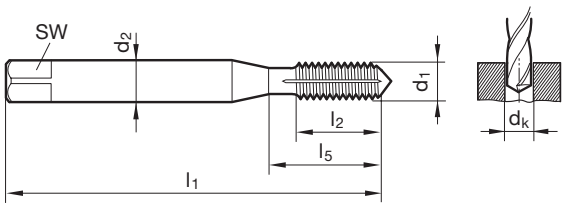
Manglaavat kierretapit, metrinen ISO-hienokierre

Materiaali	HSS-E	
Ø-Toleranssi	6HX	6HX
Pinta	S	P
Malli	N	N
Muoto	C	C
Sisäinen jäähdytys		

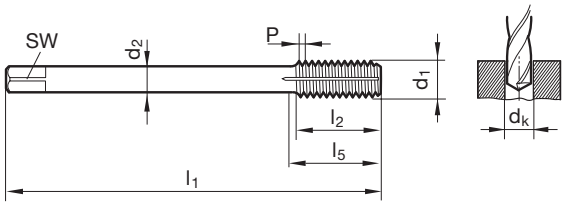
P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 26

~ DIN 371



~ DIN 374



DIN 2174 ~DIN 371 — Artikkelinro. **1275** **1591**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M6 x 0,75	6,000	4,900	5,65	80,000	13,000	30,000	6,004
M8 x 0,75	8,000	6,200	7,65	80,000	14,000	30,000	8,004
M8 x 1	8,000	6,200	7,55	90,000	16,000	35,000	8,005
M10 x 1	10,000	8,000	9,55	90,000	16,000	35,000	10,005
M10 x 1,25	10,000	8,000	9,40	100,000	20,000	39,000	10,006

DIN 2174 ~DIN 374 — Artikkelinro. **927** **1593**

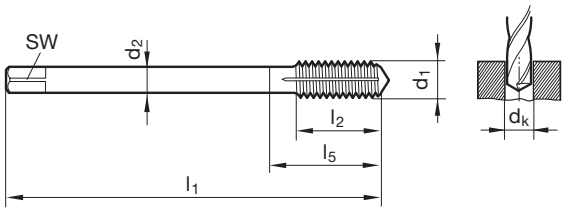
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M6 x 0,75	4,500	3,400	5,65	80,000	13,000	30,000	6,004
M8 x 0,75	6,000	4,900	7,65	80,000	14,000	30,000	8,004
M8 x 1	6,000	4,900	7,55	90,000	16,000	35,000	8,005
M10 x 1	7,000	5,500	9,55	90,000	16,000	35,000	10,005
M10 x 1,25	7,000	5,500	9,40	100,000	20,000	39,000	10,006
M12 x 1	9,000	7,000	11,55	100,000	20,000	40,000	12,005
M12 x 1,25	9,000	7,000	11,40	100,000	20,000	40,000	12,006
M12 x 1,5	9,000	7,000	11,30	100,000	20,000	40,000	12,007
M14 x 1	11,000	9,000	13,55	100,000	20,000	40,000	14,005
M14 x 1,5	11,000	9,000	13,30	100,000	20,000	40,000	14,007
M16 x 1,5	12,000	9,000	15,30	100,000	22,000	44,000	16,007
M18 x 1	14,000	11,000	17,55	110,000	25,000	44,000	18,005
M18 x 1,5	14,000	11,000	17,30	110,000	25,000	44,000	18,007
M20 x 1	16,000	12,000	19,55	125,000	25,000	44,000	20,005
M20 x 1,5	16,000	12,000	19,30	125,000	25,000	44,000	20,007
M22 x 1,5	18,000	14,500	21,30	125,000	25,000	44,000	22,007
M24 x 1,5	18,000	14,500	23,30	140,000	28,000	48,000	24,007

Manglaavat kierretapit, metrinen ISO-hienokierre

Materiaali	HSS-E
Ø-Toleranssi	6HX
Pinta	C
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	≥ 7
S	○
H	

Leikkuuarvosivu 26



DIN 2174 ~DIN 374 Artikkelinro. **2008**

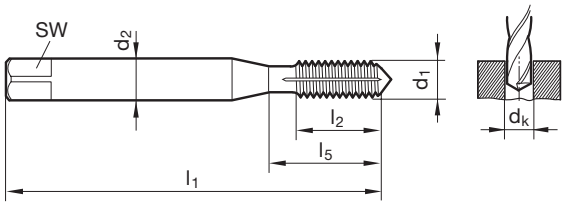
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M6 x 0,75	4,500	3,400	5,65	80,000	13,000	30,000	6,004
M8 x 0,75	6,000	4,900	7,65	80,000	14,000	30,000	8,004
M8 x 1	6,000	4,900	7,55	90,000	16,000	35,000	8,005
M10 x 1,25	7,000	5,500	9,40	100,000	20,000	39,000	10,006
M12 x 1,5	9,000	7,000	11,30	100,000	20,000	40,000	12,007
M16 x 1,5	12,000	9,000	15,30	100,000	22,000	44,000	16,007
M20 x 1,5	16,000	12,000	19,30	125,000	25,000	44,000	20,007

Manglaavat kierretapit, metrinen ISO-hienokierre

Materiaali	**HSS-E**
Ø-Toleranssi	6GX
Pinta	P
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	
K	
N	
S	
H	

Leikkuuarvosivu 26



DIN 2174 ~DIN 371 Artikkelinro. **1592**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8,000	6,200	7,55	90,000	16,000	35,000	8,005
M10 x 1	10,000	8,000	9,55	90,000	16,000	35,000	10,005

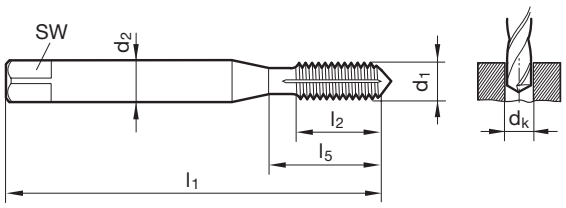
Manglaavat kierretapit, metrinen ISO-hienokierre

Materiaali	**HSS-E**
Ø-Toleranssi	6GX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

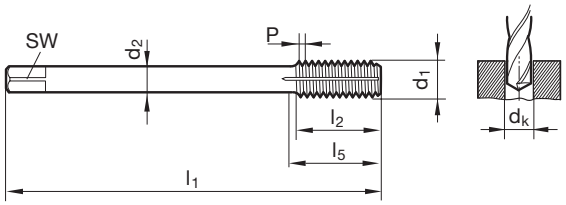
P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 26

~ DIN 371



~ DIN 374



DIN 2174 ~DIN 371 Artikkelinro. **1277**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8,000	6,200	7,55	90,000	16,000	35,000	8,005
M10 x 1	10,000	8,000	9,55	90,000	16,000	35,000	10,005

DIN 2174 ~DIN 374 Artikkelinro. **926**

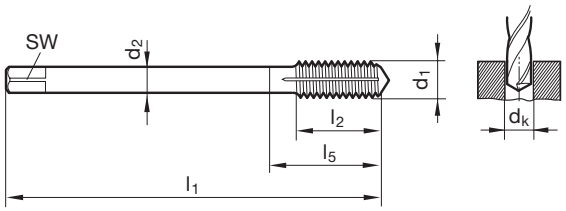
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6,000	4,900	7,55	90,000	16,000	35,000	8,005
M10 x 1	7,000	5,500	9,55	90,000	16,000	35,000	10,005
M12 x 1	9,000	7,000	11,55	100,000	20,000	40,000	12,005
M12 x 1,5	9,000	7,000	11,30	100,000	20,000	40,000	12,007
M14 x 1,5	11,000	9,000	13,30	100,000	20,000	40,000	14,007
M16 x 1	12,000	9,000	15,55	100,000	22,000	44,000	16,005
M16 x 1,5	12,000	9,000	15,30	100,000	22,000	44,000	16,007
M18 x 1,5	14,000	11,000	17,30	110,000	25,000	44,000	18,007
M20 x 1,5	16,000	12,000	19,30	125,000	25,000	44,000	20,007

Manglaavat kierretapit, metrinen ISO-hienokierre

Materiaali	HSS-E-PM
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 26



DIN 2174 ~DIN 374 Artikkelinro. **333**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6,000	4,900	7,55	90,000	11,000	35,000	8,005
M10 x 1	7,000	5,500	9,55	90,000	11,000	35,000	10,005
M12 x 1	9,000	7,000	11,55	100,000	11,000	40,000	12,005
M12 x 1,5	9,000	7,000	11,30	100,000	16,000	40,000	12,007
M14 x 1,5	11,000	9,000	13,30	100,000	15,000	40,000	14,007
M16 x 1,5	12,000	9,000	15,30	100,000	15,000	44,000	16,007
M18 x 1,5	14,000	11,000	17,30	110,000	16,000	44,000	18,007
M20 x 1,5	16,000	12,000	19,30	125,000	16,000	44,000	20,007

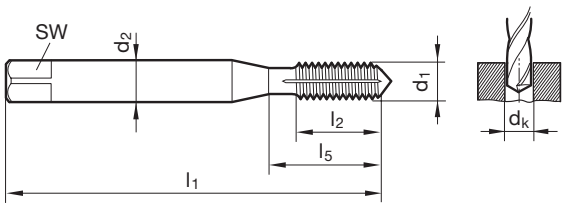
Manglaavat kierretapit, metrinen ISO-hienokierre

Materiaali	**HSS-E-PM**
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

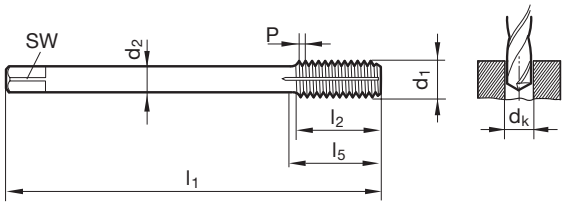
P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 27

~ DIN 371



~ DIN 374



DIN 2174 ~DIN 371 Artikkelinro. **1268**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8,000	6,200	7,55	90,000	16,000	35,000	8,005
M10 x 1	10,000	8,000	9,55	90,000	16,000	35,000	10,005

DIN 2174 ~DIN 374 Artikkelinro. **1269**

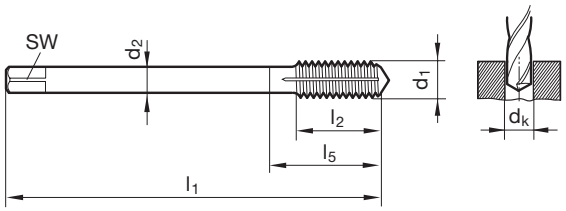
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M12 x 1,25	9,000	7,000	11,40	100,000	20,000	40,000	12,006
M12 x 1,5	9,000	7,000	11,30	100,000	20,000	40,000	12,007
M14 x 1	11,000	9,000	13,55	100,000	20,000	40,000	14,005
M14 x 1,25	11,000	9,000	13,40	100,000	20,000	40,000	14,006
M14 x 1,5	11,000	9,000	13,30	100,000	20,000	40,000	14,007
M16 x 1,5	12,000	9,000	15,30	100,000	22,000	44,000	16,007
M18 x 1,5	14,000	11,000	17,30	110,000	25,000	44,000	18,007
M20 x 1	16,000	12,000	19,55	125,000	25,000	44,000	20,005
M20 x 1,5	16,000	12,000	19,30	125,000	25,000	44,000	20,007
M24 x 2	18,000	14,500	23,10	140,000	28,000	48,000	24,008

Manglaavat kierretapit, metrinen ISO-hienokierre

Materiaali	HSS-E-PM
Ø-Toleranssi	6HX
Pinta	P
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	
K	
N	
S	
H	

Leikkuuarvosivu 27



DIN 2174 ~DIN 374 Artikkelinro. **1711**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9,000	7,000	11,55	100,000	20,000	40,000	12,005
M12 x 1,5	9,000	7,000	11,30	100,000	20,000	40,000	12,007
M14 x 1,5	11,000	9,000	13,30	100,000	20,000	40,000	14,007
M16 x 1,5	12,000	9,000	15,30	100,000	22,000	44,000	16,007
M18 x 1,5	14,000	11,000	17,30	110,000	25,000	44,000	18,007
M20 x 1,5	16,000	12,000	19,30	125,000	25,000	44,000	20,007
M24 x 1,5	18,000	14,500	23,30	140,000	28,000	48,000	24,007

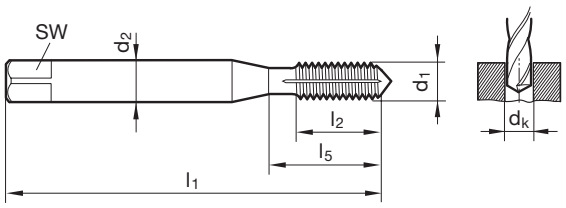
Manglaavat kierretapit, metrinen ISO-hienokierre

Materiaali	HSS-E-PM
Ø-Toleranssi	6GX
Pinta	P
Malli	N
Muoto	C
Sisäinen jäähdytys	

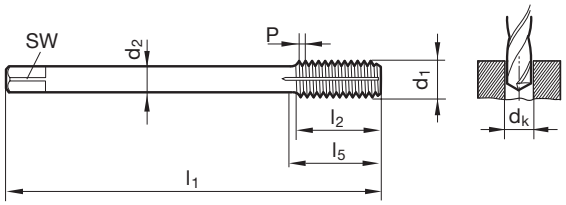
P	•
M	
K	
N	
S	
H	

Leikkuuarvosivu 27

~ DIN 371



~ DIN 374



DIN 2174 ~DIN 371 Artikkelinro. **1710**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8,000	6,200	7,55	90,000	16,000	35,000	8,005
M10 x 1	10,000	8,000	9,55	90,000	16,000	35,000	10,005

DIN 2174 ~DIN 374 Artikkelinro. **1712**

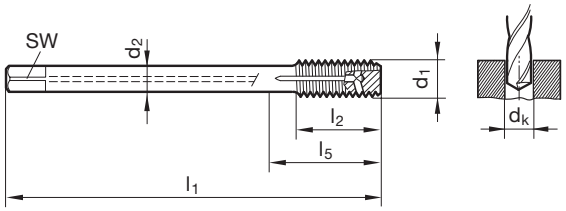
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9,000	7,000	11,55	100,000	20,000	40,000	12,005
M12 x 1,25	9,000	7,000	11,40	100,000	20,000	40,000	12,006
M12 x 1,5	9,000	7,000	11,30	100,000	20,000	40,000	12,007
M14 x 1,5	11,000	9,000	13,30	100,000	20,000	40,000	14,007
M16 x 1,5	12,000	9,000	15,30	100,000	22,000	44,000	16,007
M18 x 1,5	14,000	11,000	17,30	110,000	25,000	44,000	18,007
M20 x 1,5	16,000	12,000	19,30	125,000	25,000	44,000	20,007
M24 x 1,5	18,000	14,500	23,30	140,000	28,000	48,000	24,007

Manglaavat kierretapit JK, metrinen ISO-hienokierre

Materiaali	HSS-E-PM
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 27



DIN 2174 ~DIN 374 Artikkelinro. **338**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6,000	4,900	7,55	90,000	11,000	35,000	8,005
M10 x 1	7,000	5,500	9,55	90,000	11,000	35,000	10,005
M12 x 1,5	9,000	7,000	11,30	100,000	16,000	40,000	12,007
M14 x 1,5	11,000	9,000	13,30	100,000	15,000	40,000	14,007
M16 x 1,5	12,000	9,000	15,30	100,000	15,000	44,000	16,007

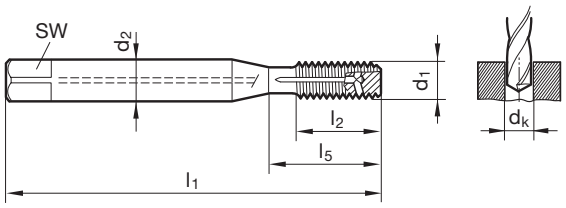
Manglaavat kierretapit JK, metrinen ISO-hienokierre

Materiaali	HSS-E-PM		
Ø-Toleranssi	6HX	6HX	6HX
Pinta	C	A	S
Malli	N	N	N
Muoto	C	C	E
Sisäinen jäähdytys			

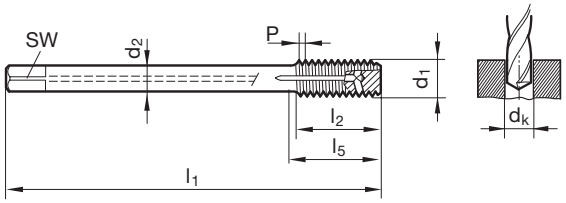
P	•
M	•
K	
N	≥ 7
S	•
H	

Leikkuuarvosivu 27

~ DIN 371



~ DIN 374



DIN 2174 ~DIN 371 — Artikkelinro. **1272** **1721** **1729**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8,000	6,200	7,55	90,000	16,000	35,000	8,005
M9 x 1	9,000	7,000	8,55	90,000	16,000	35,000	9,005
M10 x 1	10,000	8,000	9,55	90,000	16,000	35,000	10,005
M10 x 1,25	10,000	8,000	9,40	100,000	20,000	39,000	10,006

DIN 2174 ~DIN 374 — Artikkelinro. **1273** **1723** **1731**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9,000	7,000	11,55	100,000	20,000	40,000	12,005
M12 x 1,25	9,000	7,000	11,40	100,000	20,000	40,000	12,006
M12 x 1,5	9,000	7,000	11,30	100,000	20,000	40,000	12,007
M14 x 1	11,000	9,000	13,55	100,000	20,000	40,000	14,005
M14 x 1,25	11,000	9,000	13,40	100,000	20,000	40,000	14,006
M14 x 1,5	11,000	9,000	13,30	100,000	20,000	40,000	14,007
M16 x 1,5	12,000	9,000	15,30	100,000	22,000	44,000	16,007
M18 x 1,5	14,000	11,000	17,30	110,000	25,000	44,000	18,007
M20 x 1	16,000	12,000	19,55	125,000	25,000	44,000	20,005
M20 x 1,5	16,000	12,000	19,30	125,000	25,000	44,000	20,007
M22 x 1,5	18,000	14,500	21,30	125,000	25,000	44,000	22,007
M24 x 1,5	18,000	14,500	23,30	140,000	28,000	48,000	24,007

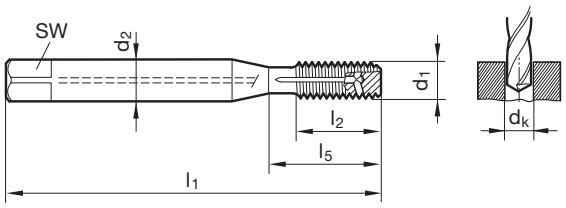
Manglaavat kierretapit JK, metrinen ISO-hienokierre

Materiaali	HSS-E-PM	
Ø-Toleranssi	6GX	6GX
Pinta	C	S
Malli	N	N
Muoto	C	E
Sisäinen jäähdytys		

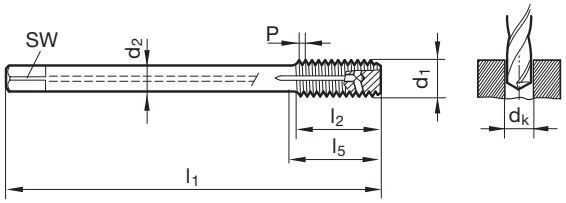
P	•
M	•
K	
N	≥ 7
S	•
H	

Leikkuuarvosivu 27

~ DIN 371



~ DIN 374



DIN 2174 ~DIN 371 — Artikkelinro. **1715** **1730**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8,000	6,200	7,55	90,000	16,000	35,000	8,005
M10 x 1	10,000	8,000	9,55	90,000	16,000	35,000	10,005
M10 x 1,25	10,000	8,000	9,40	100,000	20,000	39,000	10,006

DIN 2174 ~DIN 374 — Artikkelinro. **1716** **1732**

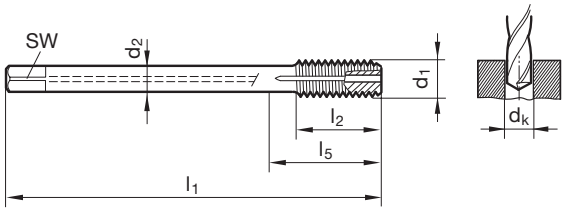
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9,000	7,000	11,55	100,000	20,000	40,000	12,005
M12 x 1,5	9,000	7,000	11,30	100,000	20,000	40,000	12,007
M14 x 1,5	11,000	9,000	13,30	100,000	20,000	40,000	14,007
M16 x 1,5	12,000	9,000	15,30	100,000	22,000	44,000	16,007
M18 x 1,5	14,000	11,000	17,30	110,000	25,000	44,000	18,007
M20 x 1,5	16,000	12,000	19,30	125,000	25,000	44,000	20,007
M24 x 1,5	18,000	14,500	23,30	140,000	28,000	48,000	24,007

Manglaavat kierretapit JK, metrinen ISO-hienokierre

P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 27

Materiaali	**HSS-E-PM**
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	



Tehdas stdr. Tehdas stdr. Artikkelinro. **4145**

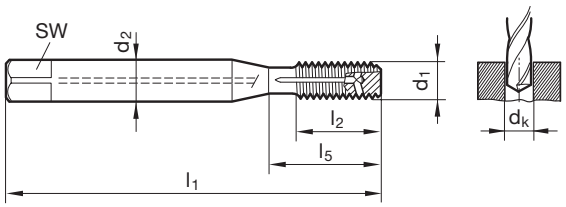
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6,000	4,900	7,55	140,000	14,000	97,000	8,005
M10 x 1	7,000	5,500	9,55	160,000	16,000	117,000	10,005
M10 x 1,25	7,000	5,500	9,40	160,000	16,000	117,000	10,006
M12 x 1	9,000	7,000	11,55	180,000	18,500	133,000	12,005
M12 x 1,5	9,000	7,000	11,30	180,000	18,500	133,000	12,007
M14 x 1,5	11,000	9,000	13,30	220,000	20,000	168,000	14,007
M16 x 1,5	12,000	9,000	15,30	220,000	20,000	168,000	16,007

Manglaavat kierretapit JK, metrinen ISO-hienokierre

P	•
M	•
K	
N	≥ 7
S	•
H	

Leikkuuarvosivu 27

Materiaali	**TKM**
Ø-Toleranssi	6HX
Pinta	C
Malli	N
Muoto	C
Sisäinen jäähdytys	



DIN 2174 ~DIN 371/~DIN 376 Artikkelinro. **1581**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M10 x 1	10,000	8,000	9,55	90,000	11,000	35,000	10,005
M12 x 1	9,000	7,000	11,55	100,000	15,000	40,000	12,005
M12 x 1,5	9,000	7,000	11,30	100,000	15,000	40,000	12,007
M14 x 1	11,000	9,000	13,55	100,000	15,000	40,000	14,005
M14 x 1,25	11,000	9,000	13,40	100,000	15,000	40,000	14,006
M14 x 1,5	11,000	9,000	13,30	100,000	15,000	40,000	14,007
M16 x 1,5	12,000	9,000	15,30	100,000	15,000	44,000	16,007
M18 x 1,5	14,000	11,000	17,30	110,000	15,000	44,000	18,007
M20 x 1,5	16,000	12,000	19,30	125,000	15,000	44,000	20,007
M24 x 1,5	18,000	14,500	23,30	140,000	15,000	48,000	24,007

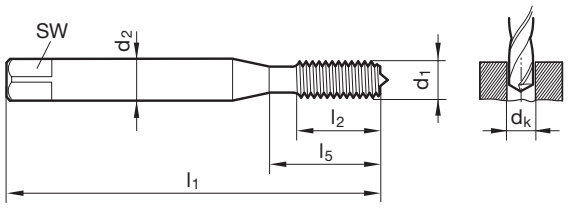
Manglaavat kierretapit UNC-kierteille

Materiaali	HSS-E	
Ø-Toleranssi	2BX	2BX
Pinta	S	S
Malli	N	N
Muoto	C	C
Sisäinen jäähdytys		

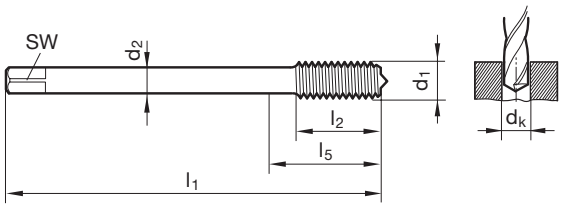
P	•
M	•
K	
N	○
S	
H	

Leikkuuarvosivu 26

~ DIN 371



~ DIN 376



DIN 2184-1 ~DIN 371 Artikkelinro. **2273** **1582**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
4 - 40	3,500	2,700	2,55	56,000	11,000	18,000	2,845
5 - 40	3,500	2,700	2,90	56,000	11,000	18,000	3,175
6 - 32	4,000	3,000	3,15	56,000	12,000	20,000	3,505
8 - 32	4,500	3,400	3,80	63,000	12,000	21,000	4,166
10 - 24	6,000	4,900	4,35	70,000	14,000	25,000	4,826
12 - 24	6,000	4,900	5,00	80,000	16,000	30,000	5,486
1/4 - 20	7,000	5,500	5,75	80,000	16,000	30,000	6,350
5/16 - 18	8,000	6,200	7,30	90,000	18,000	35,000	7,938
3/8 - 16	10,000	8,000	8,80	100,000	20,000	39,000	9,525

DIN 2184-1 ~DIN 376 Artikkelinro. **2274** **1583**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
7/16 - 14	8,000	6,200	10,30	100,000	22,000	42,000	11,113
1/2 - 13	9,000	7,000	11,80	110,000	25,000	49,000	12,700
9/16 - 12	11,000	9,000	13,30	110,000	28,000	53,000	14,288
5/8 - 11	12,000	9,000	14,80	110,000	30,000	53,000	15,875
3/4 - 10	14,000	11,000	17,90	125,000	33,000	62,000	19,050
7/8 - 9	18,000	14,500	21,00	140,000	35,000	62,000	22,225

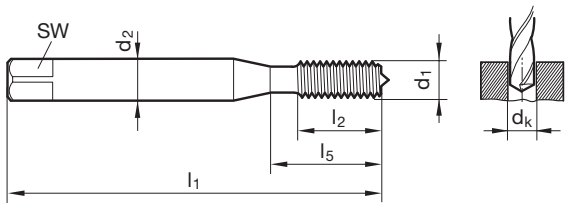
Manglaavat kierretapit UNF-kierteille

Materiaali	HSS-E	
Ø-Toleranssi	2BX	2BX
Pinta	S	S
Malli	N	N
Muoto	C	C
Sisäinen jäähdytys		

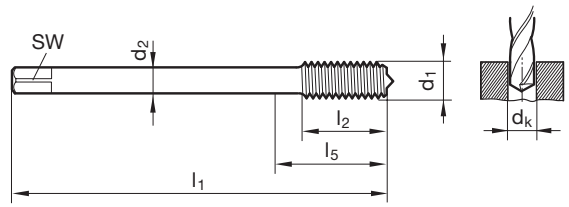
P	•
M	•
K	
N	○
S	
H	

Leikkuuarvosivu 26

~ DIN 371



~ DIN 376



DIN 2184-1 ~DIN 371 Artikkelinro. **1283** **1584**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
4 - 48	3,500	2,700	2,60	56,000	10,000	18,000	2,845
5 - 44	3,500	2,700	2,90	56,000	10,000	18,000	3,175
6 - 40	4,000	3,000	3,20	56,000	11,000	20,000	3,505
8 - 36	4,500	3,400	3,85	63,000	12,000	21,000	4,166
10 - 32	6,000	4,900	4,45	70,000	14,000	25,000	4,826
12 - 28	6,000	4,900	5,10	80,000	16,000	30,000	5,486
1/4 - 28	7,000	5,500	5,95	80,000	16,000	30,000	6,350
5/16 - 24	8,000	6,200	7,45	90,000	18,000	35,000	7,938
3/8 - 24	10,000	8,000	9,05	90,000	18,000	35,000	9,525

DIN 2184-1 ~DIN 374 Artikkelinro. **2275** **1585**

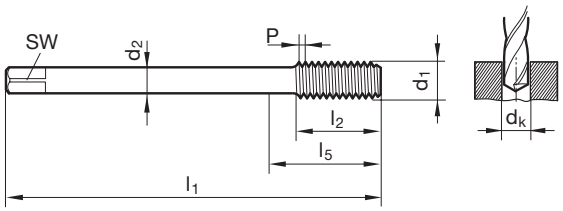
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
10 - 32	3,500	2,700	4,45	70,000	14,000	25,000	4,826
12 - 28	4,000	3,000	5,10	80,000	16,000	30,000	5,486
1/4 - 28	4,500	3,400	5,95	80,000	16,000	30,000	6,350
5/16 - 24	6,000	4,900	7,45	90,000	18,000	35,000	7,938
3/8 - 24	7,000	5,500	9,05	90,000	18,000	35,000	9,525
7/16 - 20	8,000	6,200	10,55	100,000	22,000	42,000	11,113
1/2 - 20	9,000	7,000	12,10	100,000	20,000	40,000	12,700
9/16 - 18	11,000	9,000	13,65	100,000	22,000	40,000	14,288
5/8 - 18	12,000	9,000	15,25	100,000	22,000	44,000	15,875
3/4 - 16	14,000	11,000	18,35	110,000	25,000	44,000	19,050
7/8 - 14	18,000	14,500	21,40	125,000	25,000	44,000	22,225
1 - 12	18,000	14,500	24,45	140,000	28,000	50,000	25,400

Manglaavat kierretapit BSP-kierteille

P	•	
M	•	
K		
N	○	
S		
H		

Leikkuuarvosivu 26

Materiaali	HSS-E	
Ø-Toleranssi	X	X
Pinta	S	S
Malli	N	N
Muoto	C	C
Sisäinen jäähdytys		



DIN 2184-1 DIN 2189 — Artikkelinro. **966** **1586**

d1	P	d2	SW	dk	l1	l2	l5	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28,000	6,000	4,900	7,30	90,000	18,000	30,000	7,723
G1/8	28,000	7,000	5,500	9,30	90,000	18,000	35,000	9,728
G1/4	19,000	11,000	9,000	12,50	100,000	20,000	40,000	13,157
G3/8	19,000	12,000	9,000	16,00	100,000	22,000	44,000	16,662
G1/2	14,000	16,000	12,000	20,00	125,000	25,000	44,000	20,955
G3/4	14,000	20,000	16,000	25,50	140,000	28,000	53,000	26,441
G1	11,000	25,000	20,000	32,00	160,000	30,000	56,000	33,249
G1 1/4	11,000	32,000	24,000	40,75	170,000	30,000	57,000	41,910

KIERRE-JYRSIMET

P

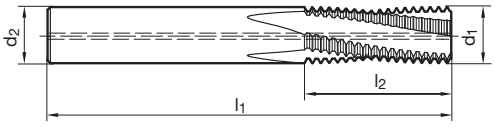
Kierrejyrsimet ilman viistettä metrisille ISO-kierteille

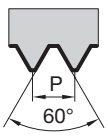
2xD

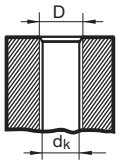
P	•
M	○
K	•
N	•
S	○
H	≤55

Leikkuuarvosivu 28

Materiaali	TKM			
Pinta	C	C	C	C
Malli	TM SP	TM SP	TM SP	TM SP
Sisäinen jäähdytys				
Varren muoto	HA	HB	HA	HB
		NEW		NEW







Tehdas stdr.	Artikkelinro.	3737	3743	4132	4133

D	P	d1	d2	dk	l1	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm		
M6	1,000	4,800	6,000	5,00	54,000	13,500	3	6,000
M8	1,250	6,400	8,000	6,80	62,000	18,100	3	8,000
M8 x 1	1,000	6,400	8,000	7,00	62,000	17,500	3	8,005
M10	1,500	7,950	10,000	8,50	74,000	21,800	3	10,000
M10 x 1	1,000	7,950	10,000	9,00	74,000	21,500	3	10,005
M10 x 1,25	1,250	7,950	10,000	8,80	74,000	21,900	3	10,006
M12	1,750	9,950	10,000	10,20	74,000	25,400	4	12,000
M12 x 1,5	1,500	9,950	10,000	10,50	74,000	26,300	4	12,007
M14	2,000	11,200	12,000	12,00	90,000	31,000	4	14,000
M14 x 1,5	1,500	11,200	12,000	12,50	90,000	30,800	4	14,007
M16	2,000	12,800	14,000	14,00	90,000	35,000	4	16,000
M16 x 1,5	1,500	12,800	14,000	14,50	90,000	33,800	4	16,007
M20	2,500	14,950	16,000	17,50	102,000	41,300	4	20,000
M20 x 1,5	1,500	14,950	16,000	18,50	102,000	42,800	4	20,007

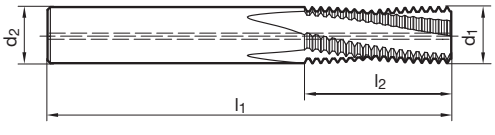
Kierrejyrsimet ilman viistettä metrisille ISO-kierteille

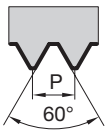
2,5xD

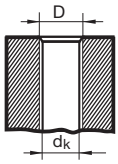
P	•
M	○
K	•
N	•
S	○
H	≤55

Leikkuuarvosivu 28

Materiaali	TKM	
Pinta	C	C
Malli	TM SP	TM SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr. Artikkelinro. **3735** **3740**

D	P	d1	d2	dk	l1	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm		
M6	1,000	4,800	6,000	5,00	54,000	16,500	3	6,000
M8	1,250	6,400	8,000	6,80	62,000	21,900	3	8,000
M10	1,500	7,950	10,000	8,50	74,000	26,300	3	10,000
M12	1,750	9,950	10,000	10,20	74,000	32,400	4	12,000
M14	2,000	11,200	12,000	12,00	90,000	37,000	4	14,000
M16	2,000	12,800	14,000	14,00	90,000	43,000	4	16,000
M20	2,500	14,950	16,000	17,50	102,000	48,800	4	20,000

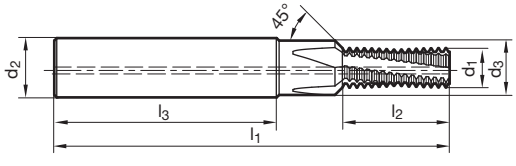
Viisteelliset kierrejyrsimet metrisille ISO-kierteille

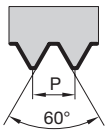
P	•
M	•
K	•
N	•
S	•
H	≤55

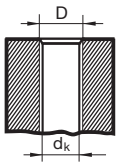
Leikkuuarvosivu 28

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB

NEW







Tehdas stdr. Artikkelinro. **3525** **3543**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0,500	2,300	6,000	3,400	2,50	48,000	36,000	5,300	3	3,000
M4	0,700	3,000	6,000	4,500	3,30	48,000	36,000	7,400	3	4,000
M5	0,800	4,000	6,000	5,500	4,20	54,000	36,000	9,200	3	5,000
M6	1,000	4,800	8,000	6,600	5,00	62,000	36,000	10,500	3	6,000
M8	1,250	6,400	10,000	9,000	6,80	74,000	40,000	13,100	3	8,000
M10	1,500	7,950	12,000	11,000	8,50	80,000	45,000	17,300	4	10,000
M12	1,750	9,950	14,000	13,500	10,20	90,000	45,000	20,100	4	12,000
M14	2,000	11,200	16,000	15,500	12,00	102,000	48,000	25,000	4	14,000
M16	2,000	12,800	18,000	17,500	14,00	102,000	48,000	27,000	4	16,000
M20	2,500	14,500	20,000	21,500	17,50	125,000	50,000	33,800	4	20,000

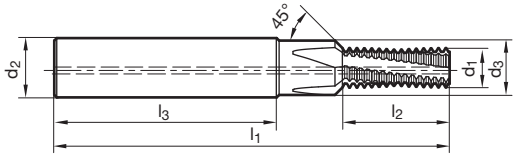
Viisteelliset kierrejyrsimet metrisille ISO-kierteille

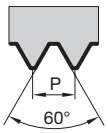
2xD

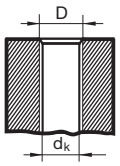
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 29

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr. Artikkelinro. **3526** **3544**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0,500	2,300	6,000	3,400	2,50	48,000	36,000	6,800	3	3,000
M4	0,700	3,000	6,000	4,500	3,30	48,000	36,000	8,800	3	4,000
M5	0,800	4,000	6,000	5,500	4,20	54,000	36,000	10,800	3	5,000
M6	1,000	4,800	8,000	6,600	5,00	62,000	36,000	13,500	3	6,000
M8	1,250	6,400	10,000	9,000	6,80	74,000	40,000	18,100	3	8,000
M10	1,500	7,950	12,000	11,000	8,50	80,000	45,000	21,800	4	10,000
M12	1,750	9,950	14,000	13,500	10,20	90,000	45,000	25,400	4	12,000
M14	2,000	11,200	16,000	15,500	12,00	102,000	48,000	31,000	4	14,000
M16	2,000	12,800	18,000	17,500	14,00	102,000	48,000	35,000	4	16,000
M20	2,500	14,500	20,000	21,500	17,50	125,000	50,000	41,300	4	20,000

Viisteelliset kierrejyrsimet metrisille ISO-kierteille

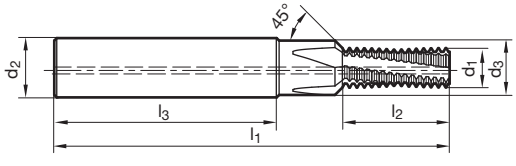
2,5xD

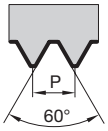
P	•
M	•
K	•
N	•
S	•
H	≤55

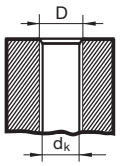
Leikkuuarvosivu 29

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB

NEW







Tehdas stdr. Artikkelinro. **3759** **3760**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0,500	2,300	6,000	3,400	2,50	48,000	36,000	7,800	3	3,000
M4	0,700	3,000	6,000	4,500	3,30	48,000	35,600	10,900	3	4,000
M5	0,800	4,000	6,000	5,500	4,20	54,000	36,000	13,200	3	5,000
M6	1,000	4,800	8,000	6,600	5,00	62,000	36,000	16,500	3	6,000
M8	1,250	6,400	10,000	9,000	6,80	74,000	40,000	21,900	3	8,000
M10	1,500	7,950	12,000	11,000	8,50	80,000	45,000	26,300	4	10,000
M12	1,750	9,950	14,000	13,500	10,20	90,000	45,000	32,400	4	12,000
M14	2,000	11,200	16,000	15,500	12,00	102,000	48,000	37,000	4	14,000
M16	2,000	12,800	18,000	17,500	14,00	102,000	48,000	43,000	4	16,000
M20	2,500	14,500	20,000	21,500	17,50	125,000	50,000	48,800	4	20,000

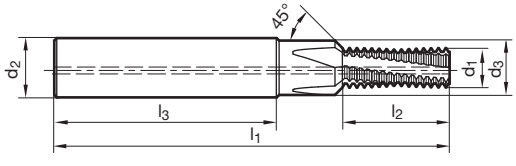
Viisteelliset kierrejyrsimet metrisille ISO-hienokierteille

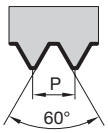
1,5xD

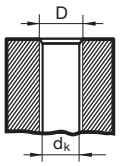
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 28

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3527	3545

D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm	mm		
M4 x 0,5	0,500	3,000	6,000	4,500	3,50	48,000	36,000	7,300	3	4,003
M5 x 0,5	0,500	4,000	6,000	5,500	4,50	54,000	36,000	8,800	3	5,003
M6 x 0,5	0,500	4,800	8,000	6,600	5,50	62,000	36,000	9,800	3	6,003
M6 x 0,75	0,750	4,800	8,000	6,600	5,20	62,000	36,000	10,100	3	6,004
M8 x 0,75	0,750	6,400	10,000	9,000	7,20	74,000	40,000	13,100	3	8,004
M8 x 1	1,000	6,400	10,000	9,000	7,00	74,000	40,000	13,500	3	8,005
M10 x 1	1,000	7,950	12,000	11,000	9,00	80,000	45,000	16,500	4	10,005
M10 x 1,25	1,250	7,950	12,000	11,000	8,80	80,000	45,000	16,900	4	10,006
M12 x 1	1,000	9,950	14,000	13,500	11,00	90,000	45,000	19,500	4	12,005
M12 x 1,5	1,500	9,950	14,000	13,500	10,50	90,000	45,000	20,300	4	12,007
M14 x 1,5	1,500	11,200	16,000	15,500	12,50	102,000	48,000	23,300	4	14,007
M16 x 1,5	1,500	12,800	18,000	17,500	14,50	102,000	48,000	26,300	4	16,007

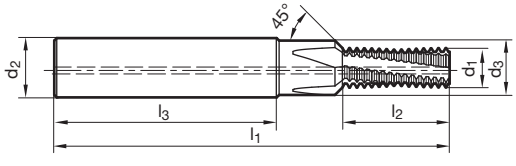
Viisteelliset kierrejyrsimet metrisille ISO-hienokierteille

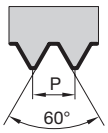
2xD

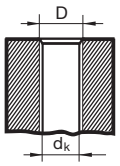
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 29

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3528	3546

D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm	mm		
M4 x 0,5	0,500	3,000	6,000	4,500	3,50	48,000	36,000	8,800	3	4,003
M5 x 0,5	0,500	4,000	6,000	5,500	4,50	54,000	36,000	10,800	3	5,003
M6 x 0,5	0,500	4,800	8,000	6,600	5,50	62,000	36,000	12,800	3	6,003
M6 x 0,75	0,750	4,800	8,000	6,600	5,20	62,000	36,000	13,100	3	6,004
M8 x 0,75	0,750	6,400	10,000	9,000	7,20	74,000	40,000	16,900	3	8,004
M8 x 1	1,000	6,400	10,000	9,000	7,00	74,000	40,000	17,500	3	8,005
M10 x 1	1,000	7,950	12,000	11,000	9,00	80,000	45,000	21,500	4	10,005
M10 x 1,25	1,250	7,950	12,000	11,000	8,80	80,000	45,000	21,900	4	10,006
M12 x 1	1,000	9,950	14,000	13,500	11,00	90,000	45,000	25,500	4	12,005
M12 x 1,5	1,500	9,950	14,000	13,500	10,50	90,000	45,000	26,300	4	12,007
M14 x 1,5	1,500	11,200	16,000	15,500	12,50	102,000	48,000	30,800	4	14,007
M16 x 1,5	1,500	12,800	18,000	17,500	14,50	102,000	48,000	33,800	4	16,007

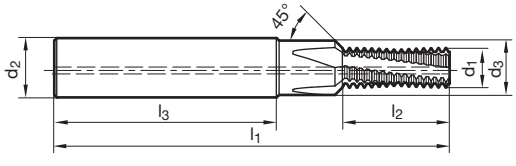
Viisteelliset kierrejyrsimet metrisille ISO-hienokierteille

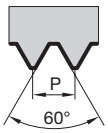
2,5xD

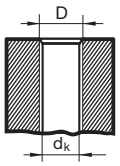
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 29

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3762	3763

D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm	mm		
M4 x 0,5	0,500	3,000	6,000	4,500	3,50	48,000	36,000	10,300	3	4,003
M5 x 0,5	0,500	4,000	6,000	5,500	4,50	54,000	36,000	12,800	3	5,003
M6 x 0,5	0,500	4,800	8,000	6,600	5,50	62,000	36,000	15,300	3	6,003
M6 x 0,75	0,750	4,800	8,000	6,600	5,20	62,000	36,000	15,400	3	6,004
M8 x 0,75	0,750	6,400	10,000	9,000	7,20	74,000	40,000	20,600	3	8,004
M8 x 1	1,000	6,400	10,000	9,000	7,00	74,000	40,000	20,500	3	8,005
M10 x 1	1,000	7,950	12,000	11,000	9,00	80,000	45,000	25,500	4	10,005
M10 x 1,25	1,250	7,950	12,000	11,000	8,80	80,000	45,000	25,600	4	10,006
M12 x 1	1,000	9,950	14,000	13,500	11,00	90,000	45,000	30,500	4	12,005
M12 x 1,5	1,500	9,950	14,000	13,500	10,50	90,000	45,000	30,800	4	12,007
M14 x 1,5	1,500	11,200	16,000	15,500	12,50	102,000	48,000	38,300	4	14,007
M16 x 1,5	1,500	12,800	18,000	17,500	14,50	102,000	48,000	41,300	4	16,007

Kierrejyrsimet ilman viistettä UNC-kierteille

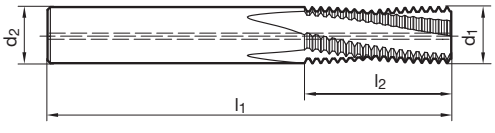
2xD

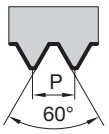
P	•
M	○
K	•
N	•
S	○
H	≤55

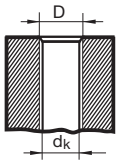
Leikkuuarvosivu 28

Materiaali	TKM	
Pinta	C	C
Malli	TM SP	TM SP
Sisäinen jäähdytys		
Varren muoto	HA	HB

NEW







Tehdas stdr.	Artikkelinro.	4134	4135

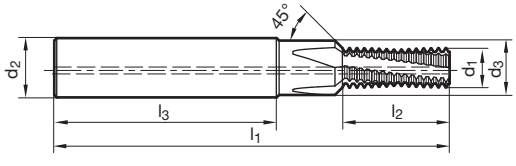
D	d1	d2	dk	l1	l2	Z	koodinro.
	mm	mm	mm	mm	mm		
10 - 24	3,400	6,000	3,90	54,000	11,100	3	4,826
12 - 24	4,100	6,000	4,50	54,000	12,200	3	5,486
1/4 - 20	4,700	6,000	5,10	54,000	14,600	3	6,350
5/16 - 18	6,100	8,000	6,60	64,000	17,600	3	7,938
3/8 - 16	7,600	8,000	8,00	64,000	21,400	3	9,525
7/16 - 14	9,000	10,000	9,40	74,000	24,500	3	11,113
1/2 - 13	9,950	10,000	10,80	74,000	28,300	4	12,700
9/16 - 12	11,400	12,000	12,20	90,000	30,700	4	14,288
5/8 - 11	12,700	14,000	13,50	90,000	35,800	4	15,875

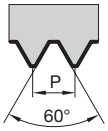
Viisteelliset kierrejyrsimet UNC-kierteille

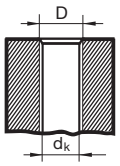
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 28

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr. Artikkelinro. **3516** **3534**

D	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 20	4,800	8,000	6,600	5,10	62,000	36,000	12,100	3	6,350
5/16 - 18	5,950	10,000	9,000	6,60	74,000	40,000	14,800	3	7,938
3/8 - 16	7,100	12,000	11,000	8,00	80,000	45,000	16,700	4	9,525
7/16 - 14	7,950	12,000	11,000	9,40	80,000	45,000	19,000	4	11,113
1/2 - 13	9,950	14,000	13,500	10,80	90,000	45,000	22,500	4	12,700

Viisteelliset kierrejyrsimet UNC-kierteille

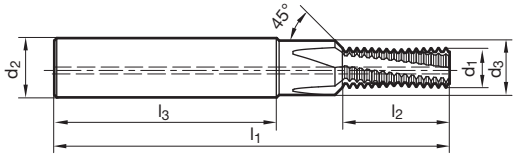
2xD

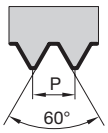
P	•
M	•
K	•
N	•
S	•
H	≤55

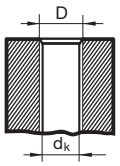
Leikkuuarvosivu 29

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB

NEW







Tehdas stdr. Artikkelinro. **3517** **3535**

D	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 20	4,800	8,000	6,600	5,10	62,000	36,000	14,600	3	6,350
5/16 - 18	5,950	10,000	9,000	6,60	74,000	40,000	17,600	3	7,938
3/8 - 16	7,100	12,000	11,000	8,00	80,000	45,000	21,400	4	9,525
7/16 - 14	7,950	12,000	11,000	9,40	80,000	45,000	24,500	4	11,113
1/2 - 13	9,950	14,000	13,500	10,80	90,000	45,000	28,300	4	12,700

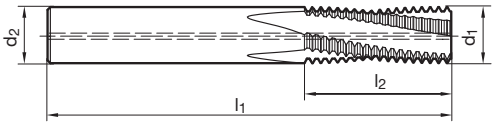
Kierrejyrsimet ilman viistettä UNF-kierteille

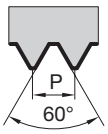
2xD

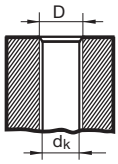
P	•
M	○
K	•
N	•
S	○
H	≤55

Leikkuuarvosivu 28

Materiaali	TKM	
Pinta	C	C
Malli	TM SP	TM SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	4136	4137

D	d1	d2	dk	l1	l2	Z	koodinro.
	mm	mm	mm	mm	mm		
10 - 32	3,800	6,000	4,10	54,000	11,500	3	4,826
12 - 28	4,300	6,000	4,60	54,000	12,200	3	5,486
1/4 - 28	5,100	6,000	5,50	54,000	14,100	3	6,350
5/16 - 24	6,300	8,000	6,90	64,000	17,500	3	7,938
3/8 - 24	7,800	8,000	8,50	64,000	20,600	3	9,525
7/16 - 20	9,400	10,000	9,90	74,000	24,800	3	11,113
1/2 - 20	9,950	10,000	11,50	74,000	27,300	4	12,700
9/16 - 18	11,400	12,000	12,90	90,000	30,300	4	14,288
5/8 - 18	12,700	14,000	14,50	90,000	33,200	4	15,875

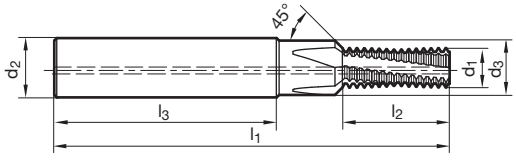
Viisteelliset kierrejyrsimet UNF-kierteille

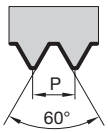
P	•
M	•
K	•
N	•
S	•
H	≤55

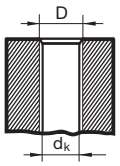
Leikkuuarvosivu 28

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB

NEW







Tehdas stdr.	Artikkelinro.	3518	3536

D	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 28	4,800	8,000	6,600	5,50	62,000	36,000	11,300	3	6,350
5/16 - 24	5,950	10,000	9,000	6,90	74,000	40,000	13,200	3	7,938
3/8 - 24	7,950	12,000	11,000	8,50	80,000	45,000	16,400	4	9,525
7/16 - 20	7,950	12,000	11,000	9,90	80,000	45,000	18,400	4	11,113
1/2 - 20	9,950	14,000	13,500	11,50	90,000	45,000	21,000	4	12,700

Viisteelliset kierrejyrsimet UNF-kierteille

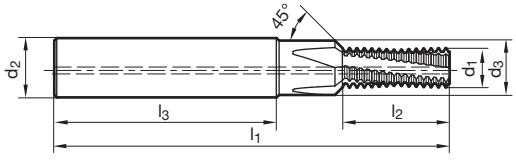
2xD

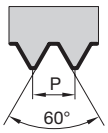
P	•
M	•
K	•
N	•
S	•
H	≤55

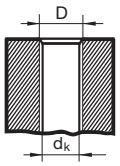
Leikkuuarvosivu 29

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB

NEW







Tehdas stdr.	Artikkelinro.	3519	3537

D	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 28	4,800	8,000	6,600	5,50	62,000	36,000	14,100	3	6,350
5/16 - 24	5,950	10,000	9,000	6,90	74,000	40,000	17,500	3	7,938
3/8 - 24	7,950	12,000	11,000	8,50	80,000	45,000	20,600	4	9,525
7/16 - 20	7,950	12,000	11,000	9,90	80,000	45,000	24,800	4	11,113
1/2 - 20	9,950	14,000	13,500	11,50	90,000	45,000	27,300	4	12,700

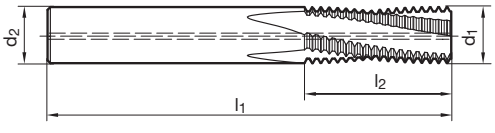
Kierrejyrsimet ilman viistettä BSP-kierteille

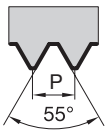
2xD

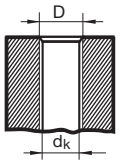
P	•
M	○
K	•
N	•
S	○
H	≤55

Leikkuuarvosivu 28

Materiaali	TKM	
Pinta	C	C
Malli	TM SP	TM SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3745	3748

D	P	d1	d2	dk	l1	l2	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm		
G1/8	28,000	7,950	8,000	8,80	64,000	21,300	3	9,728
G1/4	19,000	10,500	12,000	11,80	90,000	28,700	4	13,157
G3/8	19,000	13,600	14,000	15,25	90,000	35,400	4	16,662

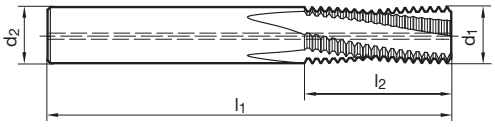
Kierrejyrsimet ilman viistettä BSP-kierteille

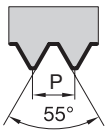
2,5xD

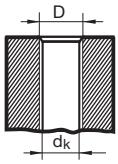
P	•
M	○
K	•
N	•
S	○
H	≤55

Leikkuuarvosivu 28

Materiaali	TKM	
Pinta	C	C
Malli	TM SP	TM SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3746	3750

D	P	d1	d2	dk	l1	l2	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm		
G1/8	28,000	7,950	8,000	8,80	64,000	24,900	3	9,728
G1/4	19,000	10,500	12,000	11,80	90,000	35,400	4	13,157
G3/8	19,000	13,600	14,000	15,25	90,000	43,500	4	16,662

Viisteelliset kierrejyrsimet BSP-kierteille

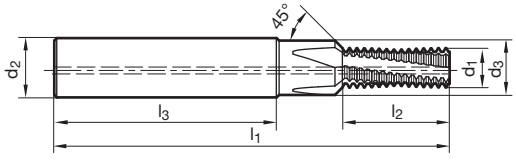
1,5xD

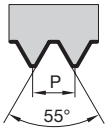
P	•
M	•
K	•
N	•
S	•
H	≤55

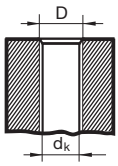
Leikkuuarvosivu 28

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB

NEW







Tehdas stdr.	Artikkelinro.	3514	3529

D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28,000	7,950	12,000	11,000	8,80	80,000	45,000	15,900	4	9,728
G1/4	19,000	9,950	14,000	13,900	11,80	90,000	45,000	22,100	4	13,157
G3/8	19,000	13,600	18,000	17,500	15,25	102,000	48,000	27,400	4	16,662

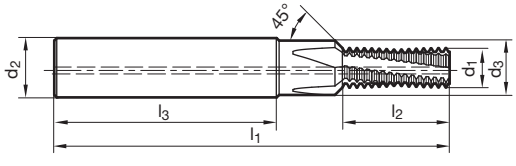
Viisteelliset kierrejyrsimet BSP-kierteille

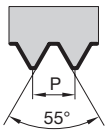
2xD

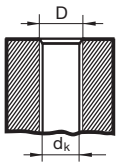
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 29

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3515	3533

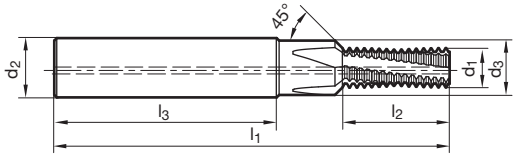
D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28,000	7,950	12,000	11,000	8,80	80,000	45,000	21,300	4	9,728
G1/4	19,000	9,950	14,000	13,900	11,80	90,000	45,000	28,700	4	13,157
G3/8	19,000	13,600	18,000	17,500	15,25	102,000	48,000	35,400	4	16,662

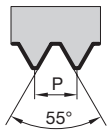
Viisteelliset kierrejyrsimet BSP-kierteille

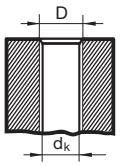
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 29

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3765	3766

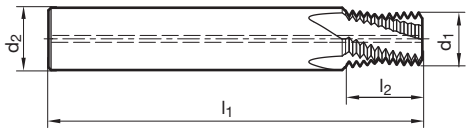
D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28,000	7,950	12,000	11,000	8,80	80,000	45,000	24,900	4	9,728
G1/4	19,000	9,950	14,000	13,900	11,80	90,000	45,000	35,400	4	13,157
G3/8	19,000	13,600	18,000	17,500	15,25	102,000	48,000	43,500	4	16,662

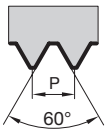
Kierrejyrsimet ilman viistettä NPT-kierteille

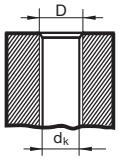
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 28

Materiaali	TKM	
Pinta	C	C
Malli	TM SP	TM SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3753	3754

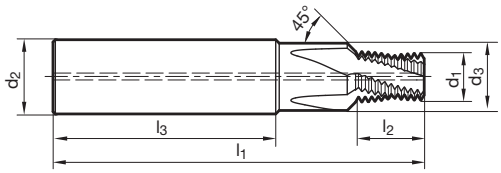
D	P	d1	d2	dk	l1	l2	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm		
1/16	27,000	5,900	8,000	6,15	54,000	9,900	3	8,190
1/8	27,000	7,300	8,000	8,40	64,000	9,900	3	10,620
1/4	18,000	9,950	12,000	11,10	72,000	19,000	4	14,140
3/8	18,000	12,500	14,000	14,30	80,000	14,800	4	17,570

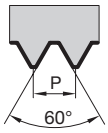
Viisteelliset kierrejyrsimet NPT-kierteille

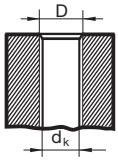
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 28

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3520	3538

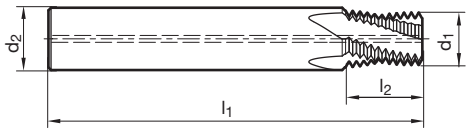
D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
1/8	27,000	7,300	12,000	11,000	8,40	70,000	45,000	9,900	4	10,620
1/4	18,000	9,950	16,000	14,500	11,10	80,000	48,000	14,800	4	14,140
3/8	18,000	12,500	18,000	17,500	14,30	80,000	48,000	14,800	4	17,570

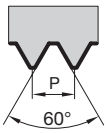
Kierrejyrsimet ilman viistettä NPTF-kierteille

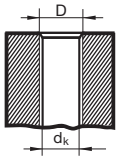
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 28

Materiaali	TKM	
Pinta	C	C
Malli	TM SP	TM SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3756	3757

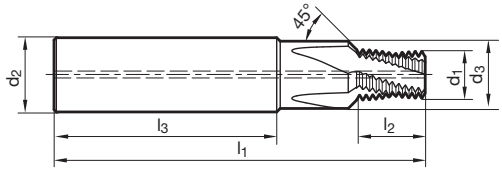
D	P	d1	d2	dk	l1	l2	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm		
1/16	27,000	5,900	8,000	6,15	54,000	9,900	3	8,190
1/8	27,000	7,300	8,000	8,40	64,000	9,900	3	10,620
1/4	18,000	9,950	12,000	11,10	72,000	19,000	4	14,140
3/8	18,000	12,500	14,000	14,30	80,000	14,800	4	17,570

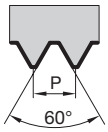
Viisteelliset kierrejyrsimet NPTF-kierteille

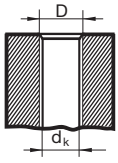
		Materiaali	TKM	
		Pinta	C	C
		Malli	TMC SP	TMC SP
		Sisäinen jäähdytys		
		Varren muoto	HA	HB
P	•			
M	•			
K	•			
N	•			
S	•			
H	≤55			

Leikkuuarvosivu 28

NEW







Tehdas stdr.	Artikkelinro.	3521	3539

D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
1/8	27,000	7,300	12,000	11,000	8,40	70,000	45,000	9,900	4	10,620
1/4	18,000	9,950	16,000	14,500	11,10	80,000	48,000	14,800	4	14,140
3/8	18,000	12,500	18,000	17,500	14,30	80,000	48,000	14,800	4	17,570

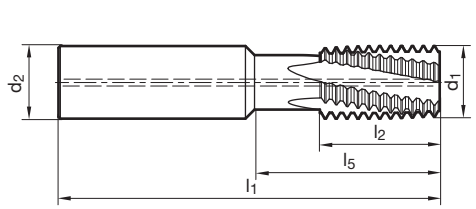
Kierrejyrsimet metrisille ISO-kierteille

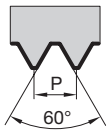
P	•
M	•
K	•
N	•
S	•
H	≤55

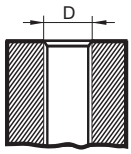
Leikkuuarvosivu 29

Materiaali	TKM	
Pinta	C	C
Malli	TMU SP	TMU SP
Sisäinen jäähdytys		
Varren muoto	HA	HB

NEW







Tehdas stdr. Artikkelinro. **3541** **3556**

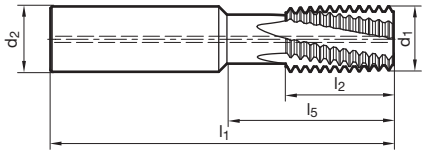
P	D	d1	d2	l1	l5	l2	Z	koodinro.
mm		mm	mm	mm	mm	mm		
0,500	≥ 10	7,950	8,000	64,000		20,000	4	8,050
1,000	≥ 12	9,950	10,000	70,000	25,000	16,000	4	10,100
1,250	≥ 12	9,950	10,000	70,000	25,000	16,000	4	10,125
1,500	≥ 12	9,950	10,000	70,000	25,000	16,000	4	10,150
1,000	≥ 14	11,950	12,000	80,000	31,000	20,000	4	12,100
1,250	≥ 14	11,950	12,000	80,000	31,000	20,000	4	12,125
1,500	≥ 14	11,950	12,000	80,000	31,000	20,000	4	12,150
1,000	≥ 18	15,950	16,000	90,000	40,000	25,000	5	16,100
1,500	≥ 18	15,950	16,000	90,000	40,000	25,000	5	16,150
2,000	≥ 18	15,950	16,000	90,000	40,000	25,000	5	16,200
3,000	≥ 24	17,950	18,000	102,000	50,000	33,000	5	18,300
1,000	≥ 24	19,950	20,000	105,000	50,000	33,000	5	20,100
1,500	≥ 26	19,950	20,000	105,000	50,000	33,000	5	20,150
2,000	≥ 27	19,950	20,000	105,000	50,000	33,000	5	20,200
2,500	≥ 30	19,950	20,000	105,000	50,000	33,000	5	20,250
3,000	≥ 30	19,950	20,000	105,000	50,000	33,000	5	20,300
3,500	≥ 30	19,950	20,000	105,000	50,000	33,000	5	20,350

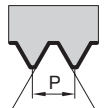
Kierrejyrsimet ulkokierteelle

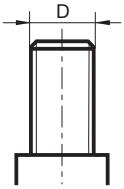
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 29

Materiaali	TKM	
Pinta	C	C
Malli	TMU SP	TMU SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr. Artikkelinro. **4162** **4163**

P	D	d1	d2	l1	l5	l2	Z	koodinro.
mm		mm	mm	mm	mm	mm		
0,500	≥ 3	9,950	10,000	70,000	25,000	16,000	4	10,050
0,750	≥ 5	9,950	10,000	70,000	25,000	16,000	4	10,075
1,000	≥ 6	11,950	12,000	80,000	31,000	20,000	4	12,100
1,250	≥ 8	11,950	12,000	80,000	31,000	20,000	4	12,125
1,500	≥ 10	11,950	12,000	80,000	31,000	20,000	4	12,150
1,500	≥ 10	15,950	16,000	90,000	40,000	25,000	5	16,150
2,000	≥ 14	15,950	16,000	90,000	40,000	25,000	5	16,200
2,500	≥ 18	15,950	16,000	90,000	40,000	25,000	5	16,250
3,000	≥ 24	19,950	20,000	105,000	50,000	33,000	5	20,300

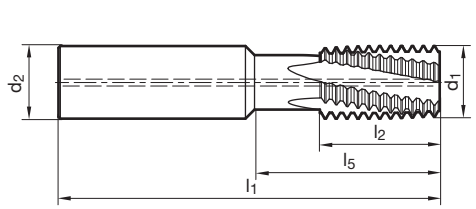
Kierrejyrsimet UN-kierteille

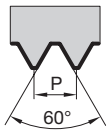
P	•
M	•
K	•
N	•
S	•
H	≤55

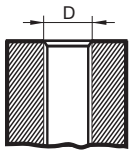
Leikkuuarvosivu 29

Materiaali	TKM	
Pinta	C	C
Malli	TMU UN	TMU UN
Sisäinen jäähdytys		
Varren muoto	HA	HB

NEW







Tehdas stdr.	Artikkelinro.	3595	3596

P	D	d1	d2	l1	l5	l2	Z	koodinro.
G/inch		mm	mm	mm	mm	mm		
24,000	≥ 1/2	9,950	10,000	70,000	25,000	16,000	4	10,240
24,000	≥ 1/2	9,950	10,000	70,000	25,000	16,000	4	10,240
10,000	≥ 3/4	11,950	12,000	80,000	31,000	20,000	4	12,100
16,000	≥ 5/8	11,950	12,000	80,000	31,000	20,000	4	12,160
18,000	≥ 5/8	11,950	12,000	80,000	31,000	20,000	4	12,180
20,000	≥ 11/16	11,950	12,000	80,000	31,000	20,000	4	12,200
24,000	≥ 5/8	11,950	12,000	80,000	31,000	20,000	4	12,240
12,000	≥ 7/8	15,950	16,000	90,000	40,000	25,000	5	16,120
14,000	≥ 7/8	15,950	16,000	90,000	40,000	25,000	5	16,140
16,000	≥ 7/8	15,950	16,000	90,000	40,000	25,000	5	16,160
18,000	≥ 7/8	15,950	16,000	90,000	40,000	25,000	5	16,180
20,000	≥ 13/16	15,950	16,000	90,000	40,000	25,000	5	16,200
7,000	≥ 1	19,950	20,000	105,000	50,000	33,000	5	20,070
8,000	≥ 1	19,950	20,000	105,000	50,000	33,000	5	20,080
12,000	≥ 1	19,950	20,000	105,000	50,000	33,000	5	20,120
14,000	≥ 1	19,950	20,000	105,000	50,000	33,000	5	20,140
16,000	≥ 1	19,950	20,000	105,000	50,000	33,000	5	20,160

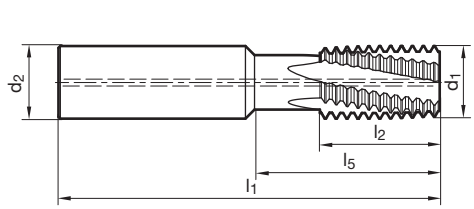
Kierrejyrsimet BSP-kierteille

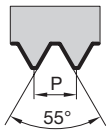
Materiaali	TKM	
Pinta	C	C
Malli	TM SP	TM SP
Sisäinen jäähdytys		
Varren muoto	HA	HB

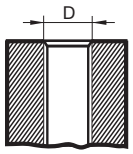
NEW

P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 29







Tehdas stdr.	Artikkelinro.	3542	3557

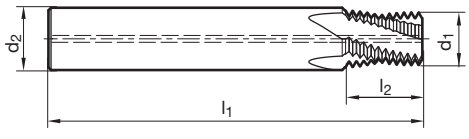
P	D	d1	d2	l1	l5	l2	Z	koodinro.
G/inch		mm	mm	mm	mm	mm		
19,000	≥ 1/4	9,950	10,000	70,000	25,000	16,000	4	10,190
14,000	≥ 1/2	15,950	16,000	90,000	40,000	25,000	5	16,140
11,000	≥ 1	19,950	20,000	105,000	50,000	33,000	5	20,110

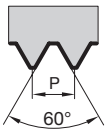
Kierrejyrsimet NPT-kierteille

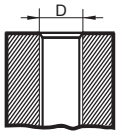
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 29

Materiaali	TKM	
Pinta	C	C
Malli	TM SP	TM SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3768	3769

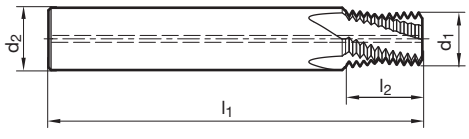
P	D	d1	d2	l1	l2	Z	koodinro.
G/inch		mm	mm	mm	mm		
14,000	≥ 1/2	14,500	16,000	90,000	19,050	5	21,900
11,500	≥ 1	18,500	20,000	90,000	23,190	5	34,180

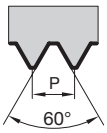
Kierrejyrsimet NPTF-kierteille

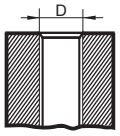
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 29

Materiaali	TKM	
Pinta	C	C
Malli	TM SP	TM SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3772	3773

P	D	d1	d2	l1	l2	Z	koodinro.
G/inch		mm	mm	mm	mm		
14,000	≥ 1/2	14,500	16,000	90,000	19,050	5	21,900
11,500	≥ 1	18,500	20,000	90,000	23,190	5	34,180

Mikro-kierrejyrsimet

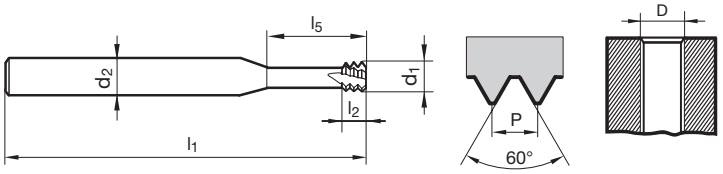
3xD

P	•
M	•
K	•
N	•
S	•
H	

Leikkuuarvosivu 29

Materiaali	**TKM**
Pinta	C
Malli	SP M
Kierteet	3,0
Varren muoto	HA

NEW



Tehdas stdr. Artikkelinro. **4226**

D	P	d1	d2	l1	l2	l5	Z	koodinro.
	mm	mm	mm	mm	mm	mm		
M1,6	0,350	1,200	3,000	39,000	1,100	4,800	3	1,600
M1,8	0,350	1,400	3,000	39,000	1,100	5,400	3	1,800
M2	0,400	1,550	3,000	39,000	1,200	6,000	4	2,000
M2,5	0,450	1,950	3,000	39,000	1,400	7,500	4	2,500
M3	0,500	2,400	6,000	58,000	1,500	9,500	4	3,000
M3,5	0,600	2,800	6,000	58,000	1,800	11,000	4	3,500
M4	0,700	3,200	6,000	58,000	2,100	12,500	4	4,000
M5	0,800	4,000	6,000	58,000	2,400	16,000	4	5,000
M6	1,000	4,800	6,000	58,000	3,000	20,000	4	6,000
M8	1,250	5,950	6,000	58,000	3,800	24,000	4	8,000
M10	1,500	7,800	8,000	73,000	4,500	33,000	4	10,000
M12	1,750	9,000	10,000	84,000	5,300	38,000	4	12,000
M16	2,000	11,800	10,000	84,000	6,000	35,000	5	16,000

Mikro-kierrejyrsimet

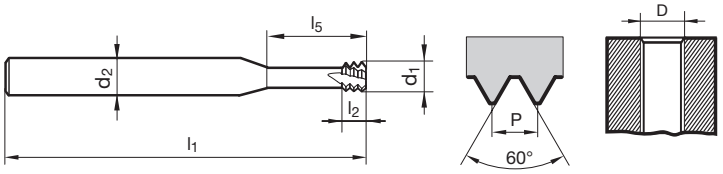
3xD

P	•
M	•
K	•
N	•
S	•
H	

Leikkuuarvosivu 29

Materiaali	**TKM**
Pinta	C
Malli	SP G
Kierteet	3,0
Varren muoto	HA

NEW



Tehdas stdr. Artikkelinro. **4228**

D	P	d1	d2	l1	l2	l5	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm		
G1/8	28,000	6,200	8,000	64,000	2,700	19,500	4	9,728
G3/8	19,000	9,950	10,000	73,000	4,000	25,000	4	16,662
G7/8	14,000	11,950	12,000	84,000	5,400	37,000	4	30,201
G2	11,000	15,950	16,000	105,000	6,900	44,000	5	59,614

Mikro-kierrejyrsimet

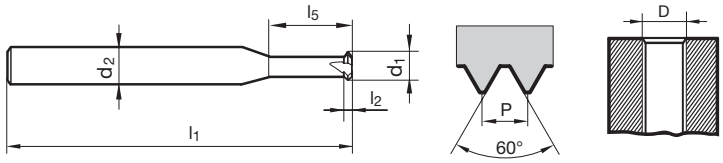
3xD

P	•
M	•
K	•
N	•
S	•
H	

Leikkuuarvosivu 29

Materiaali	**TKM**
Pinta	C
Malli	SP M/MF
Kierteet	1,0
Varren muoto	HA

NEW

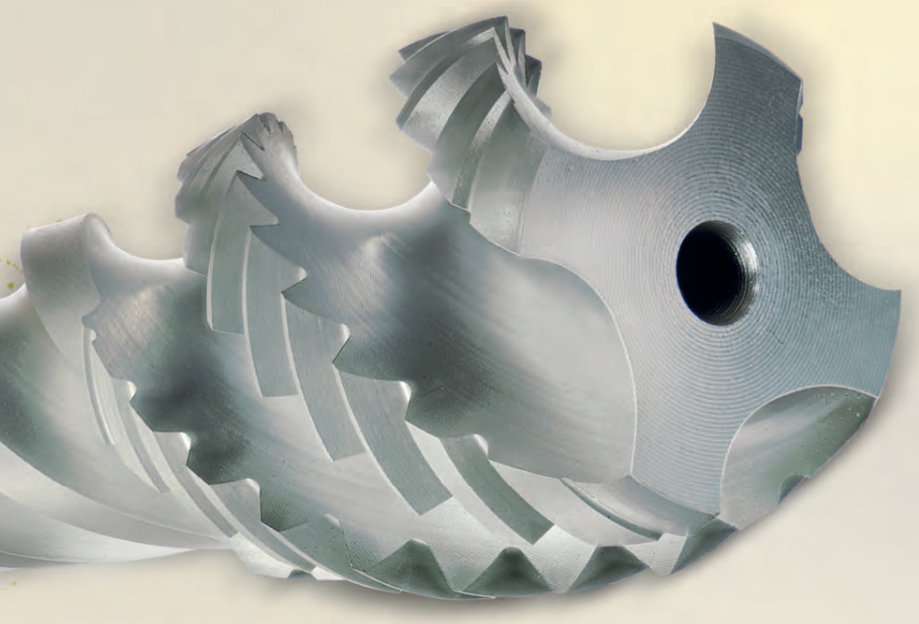


Tehdas stdr. Artikkelinro. **4225**

D	P	d1	d2	l1	l2	l5	Z	koodinro.
	mm	mm	mm	mm	mm	mm		
M1,4 - M1,8	0,350	1,050	3,000	39,000	0,400	3,800	3	1,800
M2 - M2,4	0,400	1,500	3,000	39,000	0,400	7,000	3	2,400
M2,5 - M3	0,500	2,000	3,000	39,000	0,500	9,000	4	3,000
M3,5 - M4,5	0,750	2,800	6,000	58,000	0,800	14,000	4	4,500
M5 - M7	1,000	4,000	6,000	58,000	1,000	19,000	4	7,000
M8 - M10	1,500	6,400	8,000	64,000	1,500	24,000	5	10,000

RUOSTU

MATON TERÄS



M

Ruostumattomat- ja haponkestävät-
teräkset, austeniittiset- ja martensiittiset teräkset

RUOSTUMATON TERÄS

M

ISO 2/6H

No 1

M2 - M30
Art. nro. 4218
alkaen sivu 239

M2 - M30
Art. nro. 2869/2870
alkaen sivu 236

ISO 3/6G

No 1

M6x0,75 - M24x2
Art. nro. 4219
alkaen sivu 248

M3x0,35 - M24x1,5
Art. nro. 2871
alkaen sivu 257

MF

ISO 2/6H

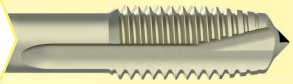
ISO 3/6G

No 1 PARAS TYÖKALU

QUICKFINDER

UNC	UNF	G	LÄPIREIKÄ
2B	2B	-	

No 1
G1/16 - G1
Art. nro. 4220
alkaen sivu 264



HSS-E, Sirius, muoto B

No 1
No. 4 - 1
Art. nro. 2872/2873
alkaen sivu 258

No 1
No. 4 - 1
Art. nro. 2874
alkaen sivu 260

G1/16 - G1
Art. nro. 2875
alkaen sivu 263

HSS-E, höyrykäsitelty, muoto B

RUOSTUMATON TERÄS

M

ISO 2/6H

No 1
M2 - M30
Art. nro. 393
alkaen sivu 244

M3 - M30
Art. nro. 2862/2863
alkaen sivu 243

No 1
M3 - M20
Art. nro. 761/763
alkaen sivu 247

No 1
M3 - M20
Art. nro. 1139/1142
alkaen sivu 247

ISO 3/6G

MF

ISO 2/6H

No 1
M6x0,75 - M24x1,5
Art. nro. 394
alkaen sivu 252

M3x0,35 - M24x1,5
Art. nro. 2864
alkaen sivu 251

No 1
M8x1 - M20x1,5
Art. nro. 764
alkaen sivu 255

No 1
M8x1 - M20x1,5
Art. nro. 1144
alkaen sivu 255

ISO 3/6G

No 1 PARAS TYÖKALU

QUICKFINDER

UNC	UNF	G	POHJAREIKÄ
2B	2B	-	

No 1
G1/16 - G1
Art. nro. 395
alkaen sivu 267

HSS-E, TiAlN, muoto C

No 1
No. 2 - 7/8
Art. nro. 2865/2866
alkaen sivu 259

No 1
No. 10 - 1
Art. nro. 2868
alkaen sivu 262

G1/16 - G1 1/2
Art. nro. 968
alkaen sivu 265

HSS-E, höyrykäsitelty, muoto C

FOR
SYNCHRO MACHINING
VARREN HALKAISIJA h6

No 1
G1/16 - G1/2
Art. nro. 4159
alkaen sivu 266

HSS-E-PM, TiN, muoto C

HSS-E-PM, TiCN, muoto C

RUOSTUMATON TERÄS

kierretapit ilman öljyuria

kierretapit öljyurilla

jäähdytyskanavilla

M

6HX

No 1
M1 - M20
Art. nro. 921/925
alkaen sivu 271

M3 - M39
Art. nro. 919/923
alkaen sivu 274

No 1
M3 - M39
Art. nro. 2012/2013
alkaen sivu 274

No 1
M3 - M20
Art. nro. 1270/1271
alkaen sivu 280

No 1
M3 - M20
Art. nro. 1725/1727
alkaen sivu 280

No 1
M3 - M20
Art. nro. 1972/1931
alkaen sivu 284

6GX

No 1
M2 - M10
Art. nro. 920
alkaen sivu 272

No 1
M3 - M39
Art. nro. 918/922
alkaen sivu 274

No 1
M5 - M10
Art. nro. 1713
alkaen sivu 281

No 1
M3 - M20
Art. nro. 1726/1728
alkaen sivu 282

MF

6HX

No 1
M8x1 - M20x1,5
Art. nro. 929
alkaen sivu 286

M6x0,75 - M24x1,5
Art. nro. 1275/927
alkaen sivu 288

No 1
M6x0,75 - M20x1,5
Art. nro. 2008
alkaen sivu 291

No 1
M8x1 - M24x1,5
Art. nro. 1272/1273
alkaen sivu 296

No 1
M8x1 - M24x1,5
Art. nro. 1729/1731
alkaen sivu 296

No 1
M10x1 - M24x1,5
Art. nro. 1581
alkaen sivu 299

6GX

No 1
M8x1 - M18x1,5
Art. nro. 928
alkaen sivu 290

No 1
M8x1 - M20x1,5
Art. nro. 1277/926
alkaen sivu 292

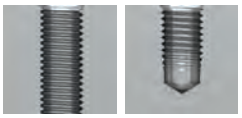
No 1
M8x1 - M24x1,5
Art. nro. 1715/1716
alkaen sivu 297

No 1
M8x1 - M24x1,5
Art. nro. 1730/1732
alkaen sivu 297

No 1 PARAS TYÖKALU

QUICKFINDER

UNC	UNF	G
2BX	2BX	-

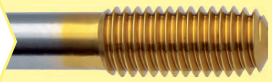


LÄPIREIKÄ
POHJAREIKÄ

No 1
Nr. 4 - 7/8
Art. nro. 2273/2274
alkaen sivu 300

No 1
Nr. 4 - 1
Art. nro. 1283/2275
alkaen sivu 301

No 1
G1/16 - G1 1/4
Art. nro. 966
alkaen sivu 302

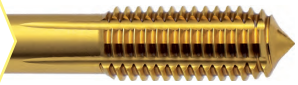


HSS-E, TiN, muoto C

No 1
Nr. 4 - 7/8
Art. nro. 1582/1583
alkaen sivu 300

No 1
Nr. 4 - 1
Art. nro. 1584/1585
alkaen sivu 301

No 1
G1/16 - G1 1/4
Art. nro. 1586
alkaen sivu 302

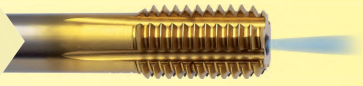


HSS-E, TiN, muoto C

MUOTO C

HSS-E-PM, TiCN, muoto C

MUOTO E



HSS-E-PM, TiN, muoto E

TKM

TKM, TiCN, muoto C

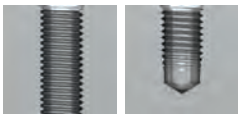
RUOSTUMATON TERÄS

	M UNIVERSAL	MF UNIVERSAL
1,5xD	No 1 M3 - M20 Art. nro. 3525 alkaen sivu 306	No 1 M4x0,5 - M16x1,5 Art. nro. 3527 alkaen sivu 309
2xD	No 1 M3 - M20 Art. nro. 3526 alkaen sivu 307	No 1 M4x0,5 - M16x1,5 Art. nro. 3528 alkaen sivu 310
2,5xD	No 1 M3 - M20 Art. nro. 3759 alkaen sivu 308	No 1 M4x0,5 - M16x1,5 Art. nro. 3762 alkaen sivu 311
3xD	No 1 M1,6 - M16 Art. nro. 4226 alkaen sivu 333	
universal	No 1 Ø8x0,5 - Ø30xP3,5 Art. nro. 3541 alkaen sivu 327	No 1 Ø8x0,5 - Ø30xP3,5 Art. nro. 3541 alkaen sivu 327

No 1 PARAS TYÖKALU

QUICKFINDER

UNC	UNF	G
UNIVERSAL	UNIVERSAL	-



L Ä P I R E I K Ä
P O H J A R E I K Ä

UNC	UNF	G	
No 1 1/4 - 1/2 Art. nro. 3516 alkaen sivu 313	No 1 1/4 - 1/2 Art. nro. 3518 alkaen sivu 316	No 1 1/8 - 3/8 Art. nro. 3514 alkaen sivu 320	 TKM, TiCN
No 1 1/4 - 1/2 Art. nro. 3517 alkaen sivu 314	No 1 1/4 - 1/2 Art. nro. 3519 alkaen sivu 317	No 1 1/8 - 3/8 Art. nro. 3515 alkaen sivu 321	 TKM, TiCN
			 TKM, TiCN
			 TKM, TiCN
No 1 Ø10xUN24 - Ø20xUN7 Art. nro. 3595 alkaen sivu 329	No 1 Ø10xUN24 - Ø20xUN7 Art. nro. 3595 alkaen sivu 329	No 1 Ø10xG19 - Ø20xG11 Art. nro. 3542 alkaen sivu 330	 TKM, TiCN

KOMPASSI

M

RUOSTUMATON TERÄS

LÄPIREIKÄ

Kierteen syvyys		≤1,5xD						
Materiaali		HSS-E					HSS-E-PM	
Malli/Muoto		VA/B	VA/B	VA/B	VA AZ/B	VA/B	VA/B	VA/B
Pinta		○	●	(S)	○	(S)	○	(S)
Jäähdytys		☒	☒	☒	☒	☒	☒	☒
Varren halkaisija		h9	h9	h9	h9	h9	h9	h9

Kierteen malli	Toleranssi	Artikkelinro. / sivu						
M	4H							
	6H	1870/1872 236	2869/2870 236	2086/2087 236	1871/792 240		877/879 237	1002 238
	6HX					4218 239		
	6G							
MF	6H	1873 256	2871 257	1001 257			887 256	1291 248
	6HX					4219 248		
	6G							
UNC	2B	1980/1985 258	2872/2873 258					
	2BX							
UNF	2B	1990 260	2874 260					
	2BX							
G		967 263	2875 263			4220 264		
BSW								
NPT								
NPTF								
EG M	6H Mod.							
MJ	4HX							
MJF	4HX							
UNJC	3BX							
UNJF	3BX							
PG								
Emulsio		○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△

= No 1

○ = Ilma
● = Öljy
○ = Emulsio
△ = Jäähdytysaine
□ = Pisaravoitelu (MQL)

	Materiaaliryhmä	Vetomurtoluujuus	Materiaaliesimerkkejä	Materiaalinro.	Suositeltu leikkuunopeus vc m/min						
M	Ruostumaton teräs, rikitetty, austeniittinen	≤1000 N/mm²	X5CrNi18-10 X6CrNiTi18-10 X8CrNiS18-9	1.4301 1.4571 1.4305	8	8	10	8	10	8	10
	Ruostumaton- ja haponkestävä teräs, martensiittinen	≤1000 N/mm²	X17CrNi16-2 X90CrMoV18 X2CrTi12	1.4057 1.4112 1.4512	6	6	8	6	12	6	8
	Duplex ja Super Duplex	≤1300 N/mm²	X2CrNiMoN22-5-3 X2CrNiMoN25-7-4 X2CrNiMoCuWN25-7-4	1.4462 1.4410 1.4501	-	-	-	-	10	-	-

M

RUOSTUMATON TERÄS

POHJAREIKÄ

	Kierteen syvyys		≤1,5xD					
	Materiaali		HSS-E					
	Malli/Muoto		VA R15 / C	VA R15 / C	VA R25 / C	VA R25 / C	NR15 / C	NR15 / C
	Materiaali		●	Ⓢ	●	Ⓢ	Ⓒ	Ⓒ
	Jäähdytys		☒	☒	☒	☒	☒	☒
	Varren halkaisija		h9	h9	h9	h9	h9	h9
	Kierteen malli	**Toleranssi**	**Artikkelinro. / sivu**					
	M	4H						
		6H	843/785 241	2896/2895 241			4154 242	4155 242
		6HX						
		6G						
	MF	6H	1874 249	2897 249			4156 250	4157 250
		6HX						
		6G						
	UNC	2B						
		2BX						
	UNF	2B	1991 261	2898 261				
		2BX						
	G							
	BSW							
	NPT				1087 268	1088 268		
	NPTF					4127 269		
	EG M	6H Mod.						
	MJ	4HX						
	MJF	4HX						
	UNJC	3BX						
	UNJF	3BX						
	PG							
		Jäähdytysneste:	●/●/△	●/●/△	●/●/△	●/●/△	●/●/△	●/●/△

= No 1

○ = Ilma
● = Öljy
● = Emulsio
△ = Jäähdytysaine
□ = Pisaravoitelu (MQL)

	Materiaaliryhmä	Vetomurtoluujuus	Materiaaliesimerkkejä	Materiaalinro.	Suositeltu leikkuunopeus vc m/min					
M	Ruostumaton teräs, rikitetty, austeniittinen	≤1000 N/mm²	X5CrNi18-10 X6CrNiTi18-10 X8CrNiS18-9	1.4301 1.4571 1.4305	**6**	**8**	**6**	**8**	**8**	**8**
	Ruostumaton- ja haponkestävä teräs, martensiittinen	≤1000 N/mm²	X17CrNi16-2 X90CrMoV18 X2CrTi12	1.4057 1.4112 1.4512	4	6	4	6	6	6
	Duplex ja Super Duplex	≤1300 N/mm²	X2CrNiMoN22-5-3 X2CrNiMoN25-7-4 X2CrNiMoCuWN25-7-4	1.4462 1.4410 1.4501	-	-	-	-	-	-

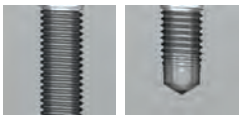
≤3xD

HSS-E				HSS-E-PM					
NR40 / C	NR40 / C	NR40 / C	VA R45/C	NR40 / C	NR40 / C	NR50 / C	NR50 / C	VA R50/C	VA R50/C
○	●	○	A	○	S	S	C	S	C
☒	☒	aksiaal.	☒	☒	☒	☒	aksiaal.	☒	aksiaal.
h9	h9	h9	h9	h9	h9	h9	h9	h6	h6
Artikkelinro. / sivu									
814/825 243	2862/2863 243	1892/1899 243		909/910 246	59/60 246	767/1098 245	1152/1293 245		
			393 244					761/763 247	1139/1142 247
	2864 251			936 253	1004 253	1100 254	1294 254		
			394 252					764 255	1144 255
1981/1986 259	2865/2866 259								
2867 262	2868 262								
	968 265		395 267	939 265				4159 266	
○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△

Suositeltu leikkuunopeus vc m/min									
6	**6**	**6**	**15**	**8**	**10**	**10**	**10**	**12**	**12**
4	4	**4**	**10**	**6**	**6**	6	6	**8**	**8**
-	-	-	**6**	-	-	-	-	-	-

M

RUOSTUMATON TERÄS



LÄPIREIÄT JA POHJA-REIÄT

Kierteen syvyys		1,5xD		
Materiaali		HSS-E	HSS-E-PM	TKM
Malli/Muoto		N / C	N / C	N / C
Materiaali		(S)	(S)	(S)
Jäähdytys		☒	☒	aksiaal.
Varren halkaisija		h9	h9	h6
Kierteen malli	**Toleranssi**	**Artikkelinro. / sivu**		
M	4H			
	6H			
	6HX	921/925 271	1255/1256 271	2518 273
	6GX	920 272	903/952 271	
MF	6H			
	6HX	929 286	1257/1258 287	
	6GX	928 290	1740 289	
UNC	2BX	2273/2274 300		
	3BX			
UNF	2BX	1283/2275 301		
	3BX			
G		966 302		
BSW				
NPT				
NPTF				
EG M	6H Mod.			
MJ	4HX			
MJF	4HX			
UNJC	3BX			
UNJF	3BX			
PG				
Jäähdytysneste:		○/●/△	○/●/△	○/●/△

= No 1

○ = Ilma
● = Öljy
○ = Emulsio
△ = Jäähdytysaine
□ = Pisaravoitelu (MQL)

	Materiaaliryhmä	Vetomurtoluujuus	Materiaaliesimerkkejä	Materiaalinro.	Suositeltu leikkuunopeus vc m/min		
M	Ruostumaton teräs, rikitetty, austeniittinen	≤1000 N/mm²	X5CrNi18-10 X6CrNiTi18-10 X8CrNiS18-9	1.4301 1.4571 1.4305	4	4	15
	Ruostumaton- ja haponkestävä teräs, martensiittinen	≤1000 N/mm²	X17CrNi16-2 X90CrMoV18 X2CrTi12	1.4057 1.4112 1.4512	4	4	12
	Duplex ja Super Duplex	≤1300 N/mm²	X2CrNiMoN22-5-3 X2CrNiMoN25-7-4 X2CrNiMoCuWN25-7-4	1.4462 1.4410 1.4501	-	-	-

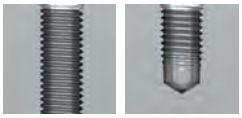
≤3xD

HSS-E				HSS-E-PM							TKM	
N / C	N / C	N / C	N / C	N / C	N / C	N / C	N / C	N / C	N / C	N / E	N / C	N / E
S	C	S+	C	S	S	S	S	C	A	S	C	C
☒	☒	aksiaal.	säteitt.	☒	☒	säteitt.	aksiaal.	säteitt.	säteitt.	aksiaal.	säteitt.	säteitt.
h9	h9	h9	h9	h9	h9	h9	h9	h9	h9	h9	h6	h6
Artikkelinro. / sivu												
919/923 274	2012/2013 274	2442/2444 277	2446/2448 277	322/339 275	1266/1267 276	323/342 279	4143 283	1270/1271 280	1717/1719 280	1725/1727 280	1972/1931 284	1927 285
918/922 274		2443/2445 277	2447 278					1713 281	1718/1720 282	1726/1728 282		
1275/927 288	2008 291			333 294	1268/1269 293	338 295	4145 298	1272/1273 296	1721/1723 296	1729/1731 296	1581 299	
1277/926 292								1715/1716 297		1730/1732 297		
1582/1583 300												
1584/1585 301												
1586 302												
○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△

Suositeltu leikkuunopeus vc m/min												
6	**8**	6	**8**	**8**	**8**	**8**	**8**	**10**	**10**	**8**	**15**	**15**
4	**6**	4	*6*	*6*	*6*	*6*	*6*	*8*	**8**	**6**	**12**	**12**
-	-	-	**8**	**8**	**8**	**8**	**8**	**10**	**10**	**8**	**15**	**15**

M

RUOSTUMATON TERÄS



LÄPIREIÄT JA POHJA-REIÄT

Kierteen syvyys	≤2xD				≤2,5xD		≤1,5xD	
Materiaali		TKM						
Malli	TM SP	TM SP	TM SP	TM SP	TM SP	TM SP	TMC SP	TMC SP
Pinta	C	C	C	C	C	C	C	C
Jäähdytys	☒	☒	aksiaal.	aksiaal.	aksiaal.	aksiaal.	aksiaal.	aksiaal.
Varren muoto	HA	HB	HA	HB	HA	HB	HA	HA
Nousu	27°	27°	27°	27°	27°	27°	10°	10°

Kierteen malli	Artikkelinro. / sivu							
M	4132 304	4133 304	3737 304	3743 304	3735 305	3740 305	3525 306	3543 306
MF			3737 304	3743 304			3527 309	3545 309
UNC			4134 312	4135 312			3516 313	3534 313
UNF			4136 315	4137 315			3518 316	3536 316
G			3745 318	3748 318	3746 319	3750 319	3514 320	3529 320
BSW								
NPT			3753 323	3754 323			3520 324	3538 324
NPTF			3756 325	3757 325			3521 326	3539 326
EG M	EG-kierteet voidaan kaiken mallisilla ja kokoisilla kierrejyrsimillä							
MJ								
MJF								
UNJC								
UNJF								
PG								
Jäähdytysneste:	○/●	○/●	○/●	○/●	○/●	○/●	○/●	○/●

= No 1

○ = Ilma
● = Öljy
○ = Emulsio
△ = Jäähdytysaine
☐ = Pisaravoitelu (MQL)

	Materiaaliryhmä	Vetomurtolujuus	Materiaaliesimerkkejä	Materiaalinro.	Käyttösuositus							
M	Ruostumaton teräs, rikitetty, austeniittinen	≤1000 N/mm²	X5CrNi18-10 X6CrNiTi18-10 X8CrNiS18-9	1.4301 1.4571 1.4305	+	+	+	+	+	+	++	++
	Ruostumaton- ja haponkestävä teräs, martensiittinen	≤1000 N/mm²	X17CrNi16-2 X90CrMoV18 X2CrTi12	1.4057 1.4112 1.4512	+	+	+	+	+	+	++	++
	Duplex ja Super Duplex	≤1300 N/mm²	X2CrNiMoN22-5-3 X2CrNiMoN25-7-4 X2CrNiMoCuWN25-7-4	1.4462 1.4410 1.4501	+	+	+	+	+	+	++	++

≤2xD		≤2,5xD		universal				≤3xD	
TKM									
TMC SP	TMC SP	TMC SP	TMC SP	TMU SP	TMU SP	TMU SP	TMU SP	MTM 3 SP	MTM 1 SP
C	C	C	C	C	C	C	C	C	C
aksiaal.	aksiaal.	aksiaal.	aksiaal.	aksiaal.	aksiaal.	aksiaal.	aksiaal.	☒	☒
HA	HB	HA	HB	HA	HB	HA	HB	HA	HA
10°	10°	27°	27°	15°	15°	15°	15°	15°	15°
Artikkelinro. / sivu									
3526 307	3544 307	3759 308	3760 308	3541 327	3556 327	4162 328	4163 328	4226 333	4225 335
3528 310	3546 310	3762 311	3763 311	3541 327	3556 327	4162 328	4163 328		4225 335
3517 314	3535 314			3595 329	3596 329				
3519 317	3537 317			3595 329	3596 329				
3515 321	3533 321	3765 322	3766 322	3542 330	3557 330			4228 334	
				3768 331	3769 331				
				3772 332	3773 332				
EG-kierteet voidaan kaiken mallisilla ja kokoisilla kierrejyrsimillä									
○/●	○/●	○/●	○/●	○/●	○/●	○/●	○/●	○/●	○/●

Käyttösuositus									
++	++	++	++	++	++	++	++	++	++
++	++	++	++	++	++	++	++	++	++
++	++	++	++	++	++	++	++	++	++

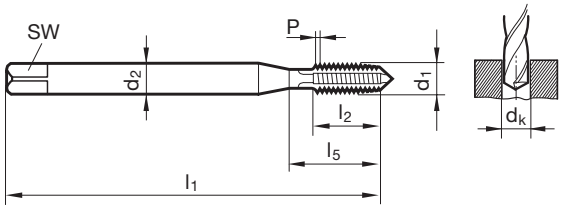
Konekierretapit, metrinen ISO-kierre

Materiaali	HSS-E		
Ø-Toleranssi	ISO2/6H	ISO2/6H	ISO2/6H
Pinta	○	S	●
Malli	N	N	VA
Muoto	B	B	B
Sisäinen jäähdytys	✕	✕	✕

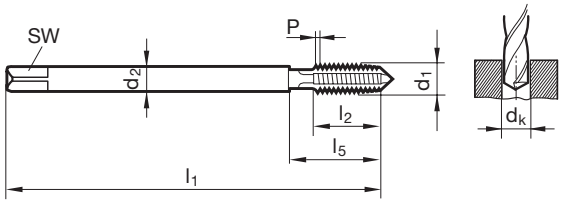
P	≤ 1000
M	•
K	
N	•
S	
H	

Leikkuuarvosivu 229

DIN 371



DIN 376



DIN 2184-1 DIN 371 — Artikkelinro. **1870** **2086** **2869**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0,400	2,800	2,100	1,60	45,000	8,000	13,500
M2,5	0,450	2,800	2,100	2,05	50,000	9,000	14,500
M3	0,500	3,500	2,700	2,50	56,000	10,000	18,000
M3,5	0,600	4,000	3,000	2,90	56,000	12,000	20,000
M4	0,700	4,500	3,400	3,30	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,20	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,00	80,000	16,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	17,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	20,000	39,000

DIN 2184-1 DIN 376 — Artikkelinro. **1872** **2087** **2870**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	2,200		2,50	56,000	10,000	18,000
M4	0,700	2,800	2,100	3,30	63,000	12,000	21,000
M5	0,800	3,500	2,700	4,20	70,000	14,000	25,000
M6	1,000	4,500	3,400	5,00	80,000	16,000	30,000
M8	1,250	6,000	4,900	6,80	90,000	17,000	35,000
M10	1,500	7,000	5,500	8,50	100,000	20,000	39,000
M12	1,750	9,000	7,000	10,20	110,000	24,000	49,000
M14	2,000	11,000	9,000	12,00	110,000	26,000	53,000
M16	2,000	12,000	9,000	14,00	110,000	26,000	54,000
M18	2,500	14,000	11,000	15,50	125,000	30,000	62,000
M20	2,500	16,000	12,000	17,50	140,000	32,000	62,000
M24	3,000	18,000	14,500	21,00	160,000	36,000	73,000
M30	3,500	22,000	18,000	26,50	180,000	40,000	85,000

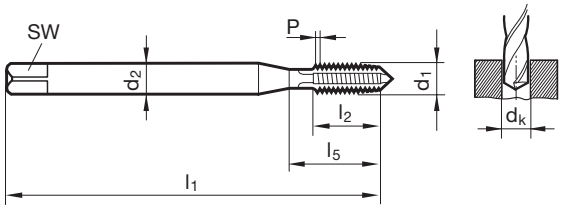
Konekierretapit, metrinen ISO-kierre

Materiaali	**HSS-E-PM**
Ø-Toleranssi	ISO2/6H
Pinta	◯
Malli	N
Muoto	B
Sisäinen jäähdytys	⊠

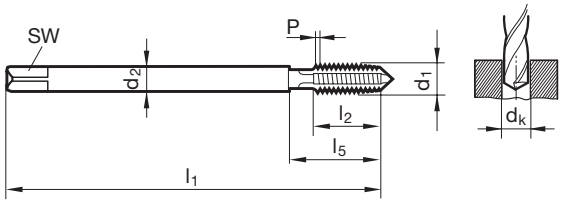
P	≤ 1000
M	•
K	
N	○
S	
H	

Leikkuuarvosivu 229

DIN 371



DIN 376



DIN 2184-1 DIN 371 Artikkelinro. **877**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0,400	2,800	2,100	1,60	45,000	8,000	13,500
M2,5	0,450	2,800	2,100	2,05	50,000	9,000	14,500
M3	0,500	3,500	2,700	2,50	56,000	10,000	18,000
M4	0,700	4,500	3,400	3,30	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,20	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,00	80,000	16,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	17,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	20,000	39,000

DIN 2184-1 DIN 376 Artikkelinro. **879**

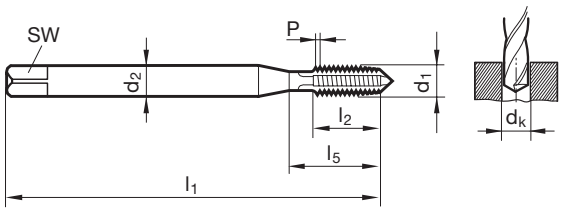
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	10,20	110,000	24,000	49,000
M14	2,000	11,000	9,000	12,00	110,000	26,000	53,000
M16	2,000	12,000	9,000	14,00	110,000	26,000	54,000
M20	2,500	16,000	12,000	17,50	140,000	32,000	62,000

Konekierretapit, metrinen ISO-kierre

Materiaali	HSS-E-PM
Ø-Toleranssi	ISO2/6H
Pinta	S
Malli	N
Muoto	B
Sisäinen jäähdytys	

P	≤ 1000
M	•
K	
N	
S	
H	

Leikkuuarvosivu 229



DIN 2184-1 DIN 371/DIN 376 Artikkelinro. **1002**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0,400	2,800	2,100	1,60	45,000	8,000	13,500
M3	0,500	3,500	2,700	2,50	56,000	10,000	18,000
M4	0,700	4,500	3,400	3,30	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,20	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,00	80,000	16,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	17,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	20,000	39,000
M12	1,750	9,000	7,000	10,20	110,000	24,000	49,000

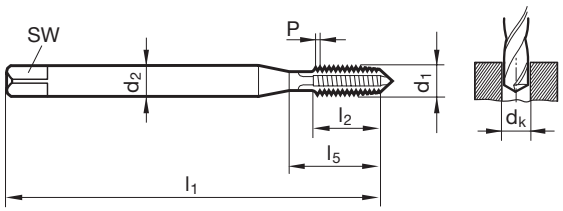
Konekierretapit, metrinen ISO-kierre

Materiaali	HSS-E
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	B
Sisäinen jäähdytys	

NEW

P	•
M	•
K	○
N	○
S	○
H	

Leikkuuarvosivu 229



DIN 2184-1 DIN 371/DIN 376 Artikkelinro. **4218**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0,400	2,800	2,100	1,60	45,000	8,000	13,500
M2,5	0,450	2,800	2,100	2,05	50,000	9,000	14,500
M3	0,500	3,500	2,700	2,50	56,000	10,000	18,000
M4	0,700	4,500	3,400	3,30	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,20	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,00	80,000	16,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	17,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	20,000	39,000
M12	1,750	9,000	7,000	10,20	110,000	24,000	49,000
M14	2,000	11,000	9,000	12,00	110,000	26,000	53,000
M16	2,000	12,000	9,000	14,00	110,000	26,000	54,000
M18	2,500	14,000	11,000	15,50	125,000	30,000	62,000
M20	2,500	16,000	12,000	17,50	140,000	32,000	62,000
M24	3,000	18,000	14,500	21,00	160,000	36,000	73,000
M30	3,500	22,000	18,000	26,50	180,000	40,000	85,000

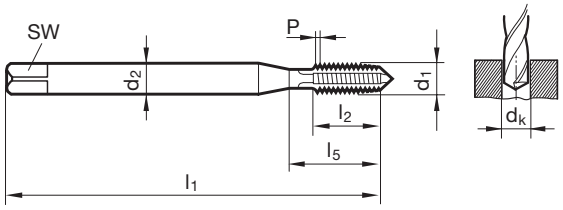
Konekierretapit, metrinen ISO-kierre

Materiaali	**HSS-E**
Ø-Toleranssi	ISO2/6H
Pinta	◯
Malli	VA AZ
Muoto	B
Sisäinen jäähdytys	

P	≤ 1000
M	•
K	
N	○
S	
H	

Leikkuuarvosivu 229

DIN 371



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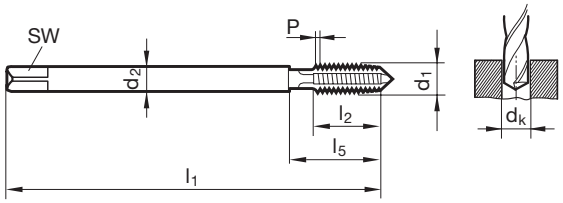


DIN 2184-1 DIN 371 Artikkelinro. **1871**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,50	56,000	10,000	18,000
M4	0,700	4,500	3,400	3,30	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,20	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,00	80,000	16,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	17,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	20,000	39,000

DIN 2184-1 DIN 376 Artikkelinro. **792**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	10,20	110,000	24,000	49,000
M14	2,000	11,000	9,000	12,00	110,000	26,000	53,000
M16	2,000	12,000	9,000	14,00	110,000	26,000	54,000

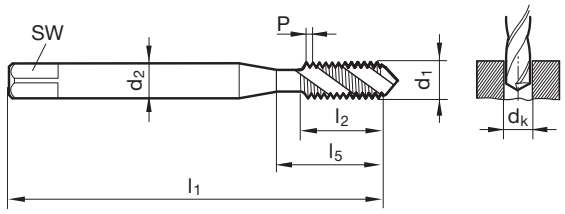
Konekierretapit, metrinen ISO-kierre

Materiaali	HSS-E	
Ø-Toleranssi	ISO2/6H	ISO2/6H
Pinta		S
Malli	VA R15	VA R15
Muoto	C	C
Sisäinen jäähdytys		

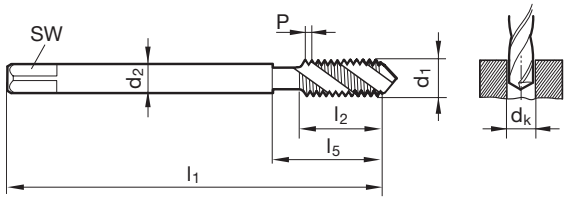
P	
M	•
K	
N	
S	
H	

Leikkuuarvosivu 230

DIN 371



DIN 376



DIN 2184-1 DIN 371 — Artikkelinro. **843** **2896**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0,400	2,800	2,100	1,60	45,000	4,500	13,500
M2,5	0,450	2,800	2,100	2,05	50,000	5,000	14,500
M3	0,500	3,500	2,700	2,50	56,000	6,000	18,000
M3,5	0,600	4,000	3,000	2,90	56,000	7,000	20,000
M4	0,700	4,500	3,400	3,30	63,000	7,500	21,000
M5	0,800	6,000	4,900	4,20	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,00	80,000	11,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	14,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	16,000	39,000

DIN 2184-1 DIN 376 — Artikkelinro. **785** **2895**

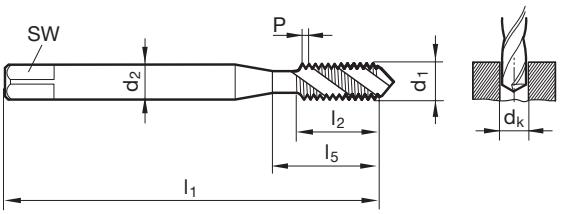
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	10,20	110,000	18,500	49,000
M16	2,000	12,000	9,000	14,00	110,000	20,000	54,000
M20	2,500	16,000	12,000	17,50	140,000	25,000	62,000
M22	2,500	18,000	14,500	19,50	140,000	27,000	62,000
M24	3,000	18,000	14,500	21,00	160,000	30,000	73,000

Konekierretapit, metrinen ISO-kierre

Materiaali	HSS-E	
Ø-Toleranssi	ISO2/6H	ISO2/6H
Pinta	C	C
Malli	N R15	N R15
Muoto	C	E
Sisäinen jäähdytys		

P	≤ 1000
M	○
K	○
N	
S	
H	

Leikkuuarvosivu 230



DIN 2184-1 DIN 371/DIN 376 Artikkelinro. **4154** **4155**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,50	56,000	6,000	18,000
M4	0,700	4,500	3,400	3,30	63,000	7,500	21,000
M5	0,800	6,000	4,900	4,20	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,00	80,000	11,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	14,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	16,000	39,000
M12	1,750	9,000	7,000	10,20	110,000	18,500	49,000
M16	2,000	12,000	9,000	14,00	110,000	20,000	54,000
M20	2,500	16,000	12,000	17,50	140,000	25,000	62,000

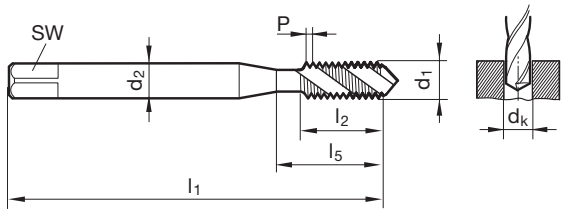
Konekierretapit, metrinen ISO-kierre

Materiaali	HSS-E		
Ø-Toleranssi	ISO2/6H	ISO2/6H	ISO2/6H
Pinta	○	○	●
Malli	VA R40	VA R40	VA R40
Muoto	C	C	C
Sisäinen jäähdytys	⊠	⊠	⊠

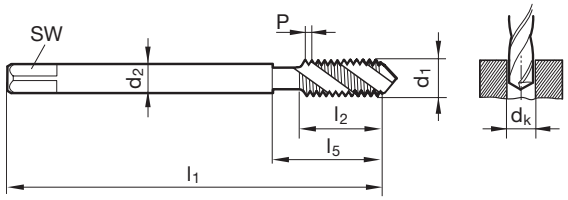
P	
M	•
K	
N	•
S	
H	

Leikkuuarvosivu 231

DIN 371



DIN 376



DIN 2184-1 DIN 371 — Artikkelinro. **814** **1892** **2862**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,50	56,000	6,000	18,000
M4	0,700	4,500	3,400	3,30	63,000	7,500	21,000
M5	0,800	6,000	4,900	4,20	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,00	80,000	11,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	14,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	16,000	39,000

DIN 2184-1 DIN 376 — Artikkelinro. **825** **1899** **2863**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	10,20	110,000	18,500	49,000
M14	2,000	11,000	9,000	12,00	110,000	20,000	53,000
M16	2,000	12,000	9,000	14,00	110,000	20,000	54,000
M18	2,500	14,000	11,000	15,50	125,000	25,000	62,000
M20	2,500	16,000	12,000	17,50	140,000	25,000	62,000
M22	2,500	18,000	14,500	19,50	140,000	27,000	62,000
M24	3,000	18,000	14,500	21,00	160,000	30,000	73,000
M30	3,500	22,000	18,000	26,50	180,000	35,000	85,000

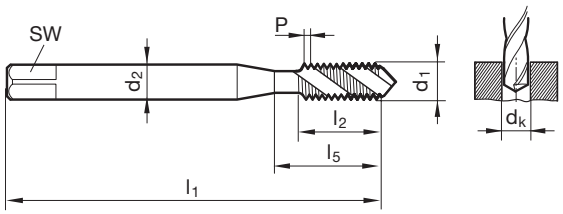
Konekierretapit, metrinen ISO-kierre

P	•
M	•
K	○
N	○
S	○
H	

Leikkuuarvosivu 231

Materiaali	**HSS-E**
Ø-Toleranssi	6HX
Pinta	A
Malli	VA R45
Muoto	C
Sisäinen jäähdytys	

NEW



DIN 2184-1 DIN 371/DIN 376 Artikkelinro. **393**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0,400	2,800	2,100	1,60	45,000	4,500	13,500
M2,5	0,450	2,800	2,100	2,05	50,000	5,000	14,500
M3	0,500	3,500	2,700	2,50	56,000	6,000	18,000
M4	0,700	4,500	3,400	3,30	63,000	7,500	21,000
M5	0,800	6,000	4,900	4,20	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,00	80,000	11,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	14,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	16,000	39,000
M12	1,750	9,000	7,000	10,20	110,000	18,500	49,000
M14	2,000	11,000	9,000	12,00	110,000	20,000	53,000
M16	2,000	12,000	9,000	14,00	110,000	20,000	54,000
M18	2,500	14,000	11,000	15,50	125,000	25,000	62,000
M20	2,500	16,000	12,000	17,50	140,000	25,000	62,000
M24	3,000	18,000	14,500	21,00	160,000	30,000	73,000
M30	3,500	22,000	18,000	26,50	180,000	35,000	85,000

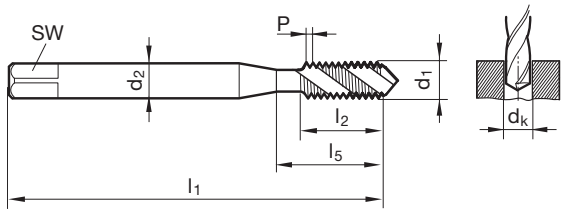
Konekierretapit, metrinen ISO-kierre

P	•
M	•
K	○
N	•
S	○
H	

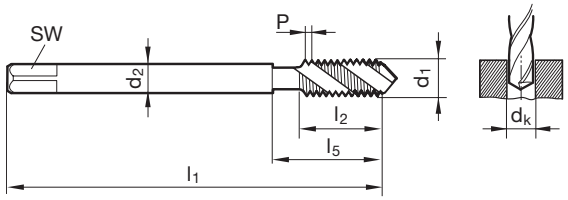
Leikkuuarvosivu 231

Materiaali	HSS-E-PM	
Ø-Toleranssi	ISO2/6H	ISO2/6H
Pinta	S	C
Malli	N R50	N R50
Muoto	C	C
Sisäinen jäähdytys		

DIN 371



DIN 376



DIN 2184-1 DIN 371 Artikkelinro. **767** **1152**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,50	56,000	6,000	18,000
M4	0,700	4,500	3,400	3,30	63,000	7,500	21,000
M5	0,800	6,000	4,900	4,20	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,00	80,000	11,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	14,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	16,000	39,000

DIN 2184-1 DIN 376 Artikkelinro. **1098** **1293**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	10,20	110,000	18,500	49,000
M14	2,000	11,000	9,000	12,00	110,000	20,000	53,000
M16	2,000	12,000	9,000	14,00	110,000	20,000	54,000
M20	2,500	16,000	12,000	17,50	140,000	25,000	62,000

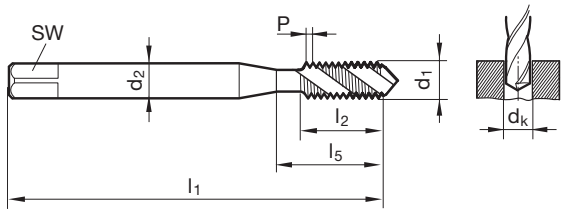
Konekierretapit, metrinen ISO-kierre

Materiaali	HSS-E-PM	
Ø-Toleranssi	ISO2/6H	ISO2/6H
Pinta	S	○
Malli	VA R40	VA R40
Muoto	C	C
Sisäinen jäähdytys	✕	✕

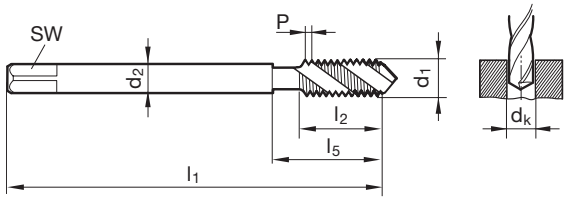
P	
M	•
K	
N	
S	
H	

Leikkuuarvosivu 231

DIN 371



DIN 376



DIN 2184-1 DIN 371	Artikkelinro.	59	909

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,50	56,000	6,000	18,000
M4	0,700	4,500	3,400	3,30	63,000	7,500	21,000
M5	0,800	6,000	4,900	4,20	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,00	80,000	11,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	14,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	16,000	39,000

DIN 2184-1 DIN 376	Artikkelinro.	60	910

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	10,20	110,000	18,500	49,000
M14	2,000	11,000	9,000	12,00	110,000	20,000	53,000
M16	2,000	12,000	9,000	14,00	110,000	20,000	54,000
M20	2,500	16,000	12,000	17,50	140,000	25,000	62,000
M24	3,000	18,000	14,500	21,00	160,000	30,000	73,000

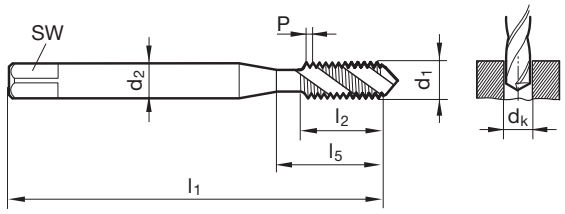
Konekierretapit, metrinen ISO-kierre

P	•
M	•
K	○
N	•
S	○
H	

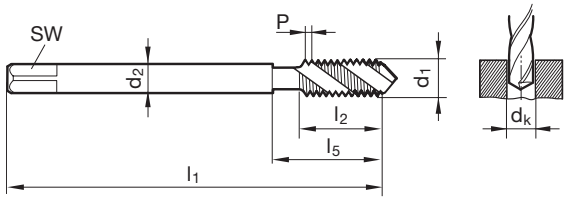
Leikkuuarvosivu 231

Materiaali	HSS-E-PM	
Ø-Toleranssi	6HX	6HX
Pinta	S	C
Malli	VA R50	VA R50
Muoto	C	C
Sisäinen jäähdytys		

DIN 371



DIN 376



DIN 2184-1 DIN 371 Artikkelinro. **761** **1139**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,50	56,000	2,500	18,000
M4	0,700	4,500	3,400	3,30	63,000	3,500	21,000
M5	0,800	6,000	4,900	4,20	70,000	4,000	25,000
M6	1,000	6,000	4,900	5,00	80,000	5,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	6,300	35,000
M10	1,500	10,000	8,000	8,50	100,000	7,500	39,000

DIN 2184-1 DIN 376 Artikkelinro. **763** **1142**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	10,20	110,000	8,800	63,000
M14	2,000	11,000	9,000	12,00	110,000	10,000	58,000
M16	2,000	12,000	9,000	14,00	110,000	10,000	58,000
M20	2,500	16,000	12,000	17,50	140,000	12,500	85,000

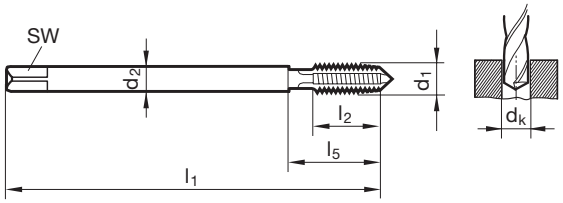
Konekierretapit, metrinen ISO-hienokierre

P	≤ 1000
M	•
K	
N	
S	
H	

Leikkuuarvosivu 229

Materiaali	HSS-E-PM	HSS-E
Ø-Toleranssi	ISO2/6H	6HX
Pinta	S	S
Malli	N	N
Muoto	B	B
Sisäinen jäähdytys		

NEW



DIN 2184-1 DIN 374 — Artikkelinro. **1291** **4219**

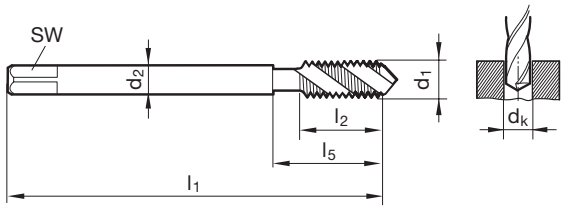
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M6 x 0,75	4,500	3,400	5,20	80,000	13,000	30,000	6,004
M8 x 0,75	6,000	4,900	7,20	80,000	14,000	30,000	8,004
M8 x 1	6,000	4,900	7,00	90,000	16,000	35,000	8,005
M10 x 1	7,000	5,500	9,00	90,000	16,000	35,000	10,005
M10 x 1,25	7,000	5,500	8,80	100,000	20,000	39,000	10,006
M12 x 1	9,000	7,000	11,00	100,000	20,000	40,000	12,005
M12 x 1,25	9,000	7,000	10,80	100,000	20,000	40,000	12,006
M12 x 1,5	9,000	7,000	10,50	100,000	20,000	40,000	12,007
M14 x 1,25	11,000	9,000	12,80	100,000	20,000	40,000	14,006
M14 x 1,5	11,000	9,000	12,50	100,000	20,000	40,000	14,007
M16 x 1,5	12,000	9,000	14,50	100,000	22,000	44,000	16,007
M18 x 1,5	14,000	11,000	16,50	110,000	25,000	44,000	18,007
M20 x 1,5	16,000	12,000	18,50	125,000	25,000	44,000	20,007
M22 x 1,5	18,000	14,500	20,50	125,000	25,000	44,000	22,007
M24 x 1,5	18,000	14,500	22,50	140,000	28,000	48,000	24,007
M24 x 2	18,000	14,500	22,00	140,000	28,000	48,000	24,008

Konekierretapit, metrinen ISO-hienokierre

P		
M	•	
K		
N		
S		
H		

Leikkuuarvosivu 230

Materiaali	HSS-E	
Ø-Toleranssi	ISO2/6H	ISO2/6H
Pinta	●	Ⓢ
Malli	VA R15	VA R15
Muoto	C	C
Sisäinen jäähdytys	⊠	⊠



DIN 2184-1 DIN 374 — Artikkelinro. **1874** **2897**

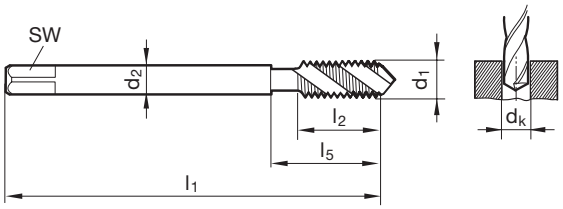
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M4 x 0,5	2,800	2,100	3,50	63,000	5,000	21,000	4,003
M5 x 0,5	3,500	2,700	4,50	70,000	5,000	25,000	5,003
M6 x 0,5	4,500	3,400	5,50	80,000	5,000	30,000	6,003
M6 x 0,75	4,500	3,400	5,20	80,000	8,000	30,000	6,004
M8 x 1	6,000	4,900	7,00	90,000	11,000	35,000	8,005
M10 x 1	7,000	5,500	9,00	90,000	11,000	35,000	10,005
M12 x 1	9,000	7,000	11,00	100,000	11,000	40,000	12,005
M12 x 1,5	9,000	7,000	10,50	100,000	16,000	40,000	12,007
M14 x 1,5	11,000	9,000	12,50	100,000	15,000	40,000	14,007
M16 x 1,5	12,000	9,000	14,50	100,000	15,000	44,000	16,007
M18 x 1,5	14,000	11,000	16,50	110,000	16,000	44,000	18,007
M20 x 1,5	16,000	12,000	18,50	125,000	16,000	44,000	20,007
M20 x 2	16,000	12,000	18,00	140,000	20,000	60,000	20,008
M22 x 1,5	18,000	14,500	20,50	125,000	16,000	44,000	22,007
M24 x 1,5	18,000	14,500	22,50	140,000	16,000	48,000	24,007

Konekierretapit, metrinen ISO-hienokierre

P	≤ 1000
M	○
K	○
N	
S	
H	

Leikkuuarvosivu 230

Materiaali	HSS-E	
Ø-Toleranssi	ISO2/6H	ISO2/6H
Pinta	C	C
Malli	N R15	N R15
Muoto	C	E
Sisäinen jäähdytys		



DIN 2184-1 DIN 374 Artikkelinro. **4156** **4157**

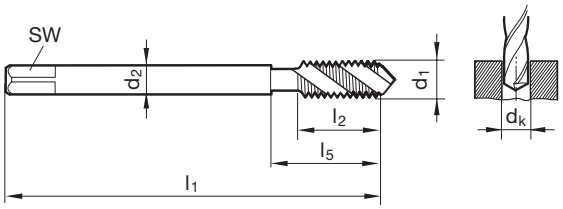
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6,000	4,900	7,00	90,000	11,000	35,000	8,005
M10 x 1	7,000	5,500	9,00	90,000	11,000	35,000	10,005
M10 x 1,25	7,000	5,500	8,80	100,000	14,000	39,000	10,006
M12 x 1	9,000	7,000	11,00	100,000	11,000	40,000	12,005
M12 x 1,5	9,000	7,000	10,50	100,000	16,000	40,000	12,007
M14 x 1,5	11,000	9,000	12,50	100,000	15,000	40,000	14,007
M16 x 1,5	12,000	9,000	14,50	100,000	15,000	44,000	16,007

Konekierretapit, metrinen ISO-hienokierre

Materiaali	**HSS-E**
Ø-Toleranssi	ISO2/6H
Pinta	
Malli	VA R40
Muoto	C
Sisäinen jäähdytys	

P	
M	•
K	
N	
S	
H	

Leikkuuarvosivu 231



DIN 2184-1 DIN 374 Artikkelinro. **2864**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M3 x 0,35	2,200		2,65	56,000	4,000	18,000	3,002
M4 x 0,5	2,800	2,100	3,50	63,000	5,000	21,000	4,003
M5 x 0,5	3,500	2,700	4,50	70,000	5,000	25,000	5,003
M6 x 0,5	4,500	3,400	5,50	80,000	5,000	30,000	6,003
M6 x 0,75	4,500	3,400	5,20	80,000	8,000	30,000	6,004
M8 x 0,5	6,000	4,900	7,50	80,000	8,000	30,000	8,003
M8 x 0,75	6,000	4,900	7,20	80,000	8,000	30,000	8,004
M8 x 1	6,000	4,900	7,00	90,000	11,000	35,000	8,005
M10 x 1	7,000	5,500	9,00	90,000	11,000	35,000	10,005
M12 x 1	9,000	7,000	11,00	100,000	11,000	40,000	12,005
M12 x 1,5	9,000	7,000	10,50	100,000	16,000	40,000	12,007
M14 x 1,5	11,000	9,000	12,50	100,000	15,000	40,000	14,007
M16 x 1,5	12,000	9,000	14,50	100,000	15,000	44,000	16,007
M18 x 1,5	14,000	11,000	16,50	110,000	16,000	44,000	18,007
M20 x 1,5	16,000	12,000	18,50	125,000	16,000	44,000	20,007
M22 x 1,5	18,000	14,500	20,50	125,000	16,000	44,000	22,007
M24 x 1,5	18,000	14,500	22,50	140,000	16,000	48,000	24,007

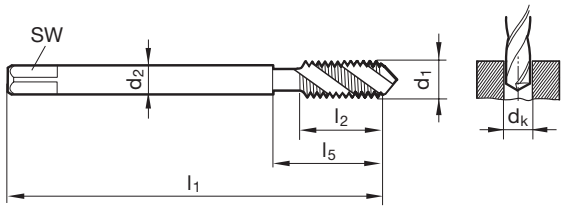
Konekierretapit, metrinen ISO-hienokierre

Materiaali	**HSS-E**
Ø-Toleranssi	6HX
Pinta	A
Malli	VA R45
Muoto	C
Sisäinen jäähdytys	

NEW

P	•
M	•
K	○
N	○
S	○
H	

Leikkuuarvosivu 231



DIN 2184-1 DIN 374 Artikkelinro. **394**

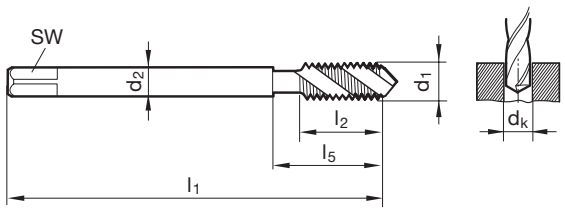
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M6 x 0,75	4,500	3,400	5,20	80,000	8,000	30,000	6,004
M8 x 0,75	6,000	4,900	7,20	80,000	8,000	30,000	8,004
M8 x 1	6,000	4,900	7,00	90,000	11,000	35,000	8,005
M10 x 1	7,000	5,500	9,00	90,000	11,000	35,000	10,005
M10 x 1,25	7,000	5,500	8,80	100,000	14,000	39,000	10,006
M12 x 1	9,000	7,000	11,00	100,000	11,000	40,000	12,005
M12 x 1,25	9,000	7,000	10,80	100,000	16,000	40,000	12,006
M12 x 1,5	9,000	7,000	10,50	100,000	16,000	40,000	12,007
M14 x 1,5	11,000	9,000	12,50	100,000	15,000	40,000	14,007
M16 x 1,5	12,000	9,000	14,50	100,000	15,000	44,000	16,007
M18 x 1,5	14,000	11,000	16,50	110,000	16,000	44,000	18,007
M20 x 1,5	16,000	12,000	18,50	125,000	16,000	44,000	20,007
M24 x 1,5	18,000	14,500	22,50	140,000	16,000	48,000	24,007

Konekierretapit, metrinen ISO-hienokierre

P		
M	•	
K		
N	•	
S		
H		

Leikkuuarvosivu 231

Materiaali	HSS-E-PM	
Ø-Toleranssi	ISO2/6H	ISO2/6H
Pinta	◯	Ⓢ
Malli	VA R40	VA R40
Muoto	C	C
Sisäinen jäähdytys	⊠	⊠



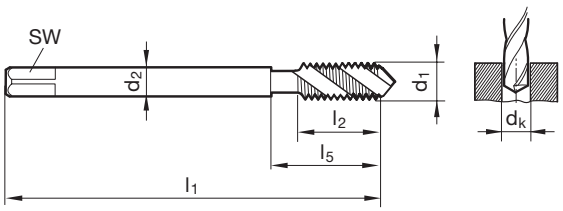
DIN 2184-1 DIN 374 — Artikkelinro. **936** **1004**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6,000	4,900	7,00	90,000	11,000	35,000	8,005
M10 x 1	7,000	5,500	9,00	90,000	11,000	35,000	10,005
M12 x 1	9,000	7,000	11,00	100,000	11,000	40,000	12,005
M12 x 1,5	9,000	7,000	10,50	100,000	16,000	40,000	12,007
M14 x 1,5	11,000	9,000	12,50	100,000	15,000	40,000	14,007
M16 x 1,5	12,000	9,000	14,50	100,000	15,000	44,000	16,007
M18 x 1,5	14,000	11,000	16,50	110,000	16,000	44,000	18,007
M20 x 1,5	16,000	12,000	18,50	125,000	16,000	44,000	20,007

Konekierretapit, metrinen ISO-hienokierre

P	•	Leikkuuarvosivu 231
M	•	
K	○	
N	○	
S	○	
H		

Materiaali	HSS-E-PM	
Ø-Toleranssi	ISO2/6H	ISO2/6H
Pinta	S	C
Malli	N R50	N R50
Muoto	C	C
Sisäinen jäähdytys		



DIN 2184-1 DIN 374 — Artikkelinro. **1100** **1294**

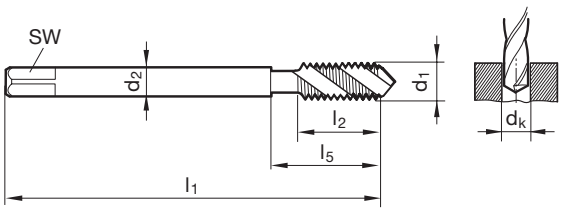
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6,000	4,900	7,00	90,000	11,000	35,000	8,005
M10 x 1	7,000	5,500	9,00	90,000	11,000	35,000	10,005
M12 x 1	9,000	7,000	11,00	100,000	11,000	40,000	12,005
M12 x 1,5	9,000	7,000	10,50	100,000	16,000	40,000	12,007
M14 x 1,5	11,000	9,000	12,50	100,000	15,000	40,000	14,007
M16 x 1,5	12,000	9,000	14,50	100,000	15,000	44,000	16,007
M18 x 1,5	14,000	11,000	16,50	110,000	16,000	44,000	18,007
M20 x 1,5	16,000	12,000	18,50	125,000	16,000	44,000	20,007

Konekierretapit, metrinen ISO-hienokierre

P	•
M	•
K	○
N	•
S	○
H	

Leikkuuarvosivu 231

Materiaali	HSS-E-PM	
Ø-Toleranssi	6HX	6HX
Pinta	S	C
Malli	VA R50	VA R50
Muoto	C	C
Sisäinen jäähdytys		



DIN 2184-1 DIN 374 — Artikkelinro. **764** **1144**

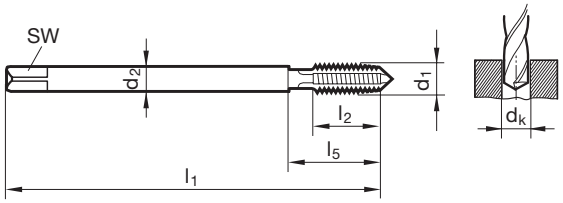
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6,000	4,900	7,00	90,000	5,000	44,000	8,005
M8 x 1	6,000	4,900	7,00	90,000	5,000	47,000	8,005
M10 x 1	7,000	5,500	9,00	90,000	5,000	47,000	10,005
M10 x 1	7,000	5,500	9,00	90,000	5,000	44,000	10,005
M12 x 1	9,000	7,000	11,00	100,000	5,000	53,000	12,005
M12 x 1,5	9,000	7,000	10,50	100,000	7,500	53,000	12,007
M14 x 1,5	11,000	9,000	12,50	100,000	7,500	48,000	14,007
M16 x 1,5	12,000	9,000	14,50	100,000	7,500	48,000	16,007
M18 x 1,5	14,000	11,000	16,50	110,000	7,500	58,000	18,007
M20 x 1,5	16,000	12,000	18,50	125,000	7,500	70,000	20,007

Konekierretapit, metrinen ISO-hienokierre

Materiaali	HSS-E-PM	HSS-E
Ø-Toleranssi	ISO2/6H	ISO2/6H
Pinta	◯	◯
Malli	N	N
Muoto	B	B
Sisäinen jäähdytys	⊠	⊠

P	≤ 1000
M	•
K	
N	•
S	
H	

Leikkuuarvosivu 229



DIN 2184-1 DIN 374 — Artikkelinro. **887** **1873**

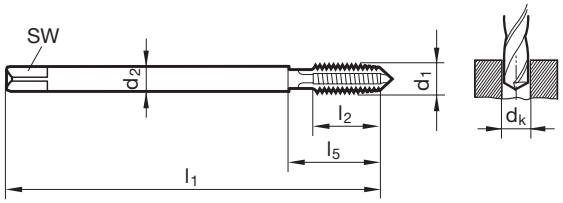
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M5 x 0,5	3,500	2,700	4,50	70,000	10,000	25,000	5,003
M6 x 0,75	4,500	3,400	5,20	80,000	13,000	30,000	6,004
M7 x 0,75	5,500	4,300	6,20	80,000	13,000	30,000	7,004
M8 x 0,75	6,000	4,900	7,20	80,000	14,000	30,000	8,004
M8 x 1	6,000	4,900	7,00	90,000	16,000	35,000	8,005
M10 x 1	7,000	5,500	9,00	90,000	16,000	35,000	10,005
M12 x 1	9,000	7,000	11,00	100,000	20,000	40,000	12,005
M12 x 1,5	9,000	7,000	10,50	100,000	20,000	40,000	12,007
M14 x 1,5	11,000	9,000	12,50	100,000	20,000	40,000	14,007
M16 x 1,5	12,000	9,000	14,50	100,000	22,000	44,000	16,007
M18 x 1,5	14,000	11,000	16,50	110,000	25,000	44,000	18,007
M20 x 1,5	16,000	12,000	18,50	125,000	25,000	44,000	20,007
M24 x 1,5	18,000	14,500	22,50	140,000	28,000	48,000	24,007
M24 x 2	18,000	14,500	22,00	140,000	28,000	48,000	24,008

Konekierretapit, metrinen ISO-hienokierre

P	≤ 1000
M	•
K	
N	
S	
H	

Leikkuuarvosivu 229

Materiaali	HSS-E	
Ø-Toleranssi	ISO2/6H	ISO2/6H
Pinta	S	
Malli	N	N
Muoto	B	B
Sisäinen jäähdytys		



DIN 2184-1 DIN 374 — Artikkelinro. **1001** **2871**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M3 x 0,35	2,200		2,65	56,000	7,000	18,000	3,002
M4 x 0,5	2,800	2,100	3,50	63,000	8,000	21,000	4,003
M5 x 0,5	3,500	2,700	4,50	70,000	10,000	25,000	5,003
M6 x 0,75	4,500	3,400	5,20	80,000	13,000	30,000	6,004
M8 x 0,75	6,000	4,900	7,20	80,000	14,000	30,000	8,004
M8 x 1	6,000	4,900	7,00	90,000	16,000	35,000	8,005
M10 x 1	7,000	5,500	9,00	90,000	16,000	35,000	10,005
M12 x 1	9,000	7,000	11,00	100,000	20,000	40,000	12,005
M12 x 1,5	9,000	7,000	10,50	100,000	20,000	40,000	12,007
M14 x 1,5	11,000	9,000	12,50	100,000	20,000	40,000	14,007
M16 x 1,5	12,000	9,000	14,50	100,000	22,000	44,000	16,007
M18 x 1,5	14,000	11,000	16,50	110,000	25,000	44,000	18,007
M20 x 1,5	16,000	12,000	18,50	125,000	25,000	44,000	20,007
M22 x 1,5	18,000	14,500	20,50	125,000	25,000	44,000	22,007
M24 x 1,5	18,000	14,500	22,50	140,000	28,000	48,000	24,007

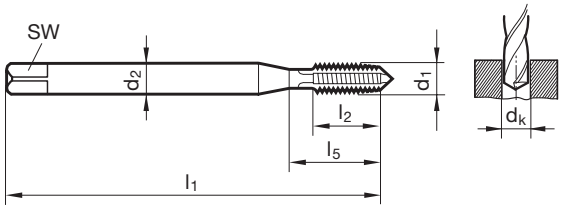
Konekierretapit UNC-kierteille

P	≤ 1000
M	•
K	
N	•
S	
H	

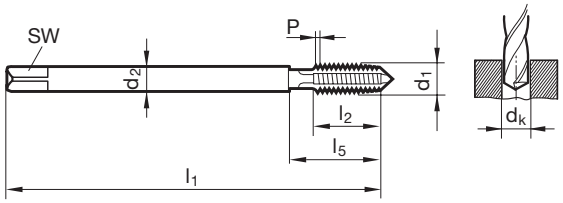
Leikkuuarvosivu 229

Materiaali	HSS-E	
Ø-Toleranssi	2B	2B
Pinta	○	●
Malli	N	VA
Muoto	B	B
Sisäinen jäähdytys	⊠	⊠

~ DIN 371



~ DIN 376



DIN 2184-1 ~DIN 371 — Artikkelinro. **1980** **2872**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
4 - 40	3,500	2,700	2,35	56,000	11,000	18,000	2,845
5 - 40	3,500	2,700	2,65	56,000	11,000	18,000	3,175
6 - 32	4,000	3,000	2,85	56,000	12,000	20,000	3,505
8 - 32	4,500	3,400	3,50	63,000	12,000	21,000	4,166
10 - 24	6,000	4,900	3,90	70,000	14,000	25,000	4,826
12 - 24	6,000	4,900	4,50	80,000	16,000	30,000	5,486
1/4 - 20	7,000	5,500	5,10	80,000	16,000	30,000	6,350
5/16 - 18	8,000	6,200	6,60	90,000	18,000	35,000	7,938
3/8 - 16	10,000	8,000	8,00	100,000	20,000	39,000	9,525

DIN 2184-1 ~DIN 376 — Artikkelinro. **1985** **2873**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
1/2 - 13	9,000	7,000	10,80	110,000	25,000	49,000	12,700
9/16 - 12	11,000	9,000	12,20	110,000	28,000	53,000	14,288
5/8 - 11	12,000	9,000	13,50	110,000	30,000	53,000	15,875
3/4 - 10	14,000	11,000	16,50	125,000	33,000	62,000	19,050
7/8 - 9	18,000	14,500	19,50	140,000	35,000	62,000	22,225
1 - 8	18,000	14,500	22,25	160,000	38,000	73,000	25,400

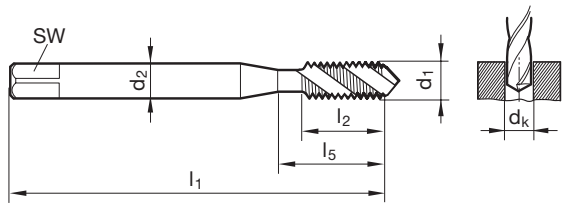
Konekierretapit UNC-kierteille

P		
M	•	
K		
N	•	
S		
H		

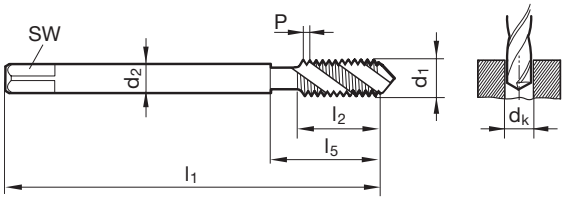
Leikkuuarvosivu 231

Materiaali	HSS-E	
Ø-Toleranssi	2B	2B
Pinta	○	●
Malli	VA R40	VA R40
Muoto	C	C
Sisäinen jäähdytys	⊠	⊠

~ DIN 371



~ DIN 376



DIN 2184-1 ~DIN 371 Artikkelinro. **1981** **2865**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
2 - 56	2,800	2,100	1,85	45,000	5,000	14,500	2,184
4 - 40	3,500	2,700	2,35	56,000	7,000	18,000	2,845
5 - 40	3,500	2,700	2,65	56,000	7,000	18,000	3,175
6 - 32	4,000	3,000	2,85	56,000	8,000	20,000	3,505
8 - 32	4,500	3,400	3,50	63,000	8,000	21,000	4,166
10 - 24	6,000	4,900	3,90	70,000	11,000	25,000	4,826
12 - 24	6,000	4,900	4,50	80,000	11,000	30,000	5,486
1/4 - 20	7,000	5,500	5,10	80,000	13,000	30,000	6,350
5/16 - 18	8,000	6,200	6,60	90,000	14,000	35,000	7,938
3/8 - 16	10,000	8,000	8,00	100,000	16,000	39,000	9,525

DIN 2184-1 ~DIN 376 Artikkelinro. **1986** **2866**

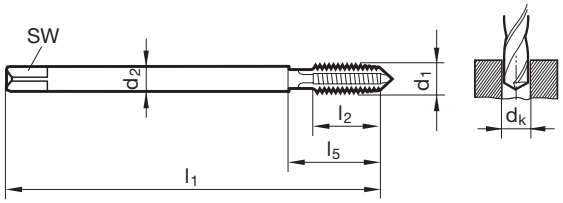
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
7/16 - 14	8,000	6,200	9,40	100,000	18,000	42,000	11,113
1/2 - 13	9,000	7,000	10,80	110,000	20,000	49,000	12,700
9/16 - 12	11,000	9,000	12,20	110,000	21,000	53,000	14,288
5/8 - 11	12,000	9,000	13,50	110,000	24,000	53,000	15,875
3/4 - 10	14,000	11,000	16,50	125,000	25,000	62,000	19,050
7/8 - 9	18,000	14,500	19,50	140,000	28,000	62,000	22,225

Konekierretapit UNF-kierteille

Materiaali	HSS-E	
Ø-Toleranssi	2B	2B
Pinta	○	●
Malli	N	VA
Muoto	B	B
Sisäinen jäähdytys	⊠	⊠

P	≤ 1000
M	•
K	
N	•
S	
H	

Leikkuuarvosivu 229



DIN 2184-1 ~DIN 374 Artikkelinro. **1990** **2874**

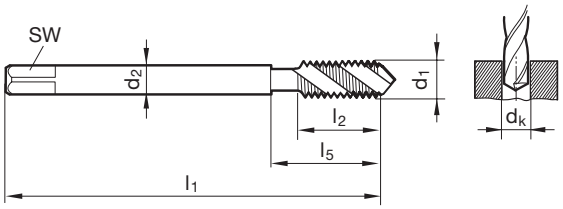
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
4 - 48	2,200		2,40	56,000	10,000	18,000	2,845
6 - 40	2,500	2,100	2,95	56,000	11,000	20,000	3,505
10 - 32	3,500	2,700	4,10	70,000	14,000	25,000	4,826
12 - 28	4,000	3,000	4,60	80,000	16,000	30,000	5,486
1/4 - 28	4,500	3,400	5,50	80,000	16,000	30,000	6,350
5/16 - 24	6,000	4,900	6,90	90,000	18,000	35,000	7,938
3/8 - 24	7,000	5,500	8,50	90,000	18,000	35,000	9,525
5/8 - 18	12,000	9,000	14,50	100,000	22,000	44,000	15,875
7/8 - 14	18,000	14,500	20,40	125,000	25,000	44,000	22,225
1 - 12	18,000	14,500	23,25	140,000	28,000	50,000	25,400

Konekierretapit UNF-kierteille

P	
M	•
K	
N	
S	
H	

Leikkuuarvosivu 230

Materiaali	HSS-E	
Ø-Toleranssi	2B	2B
Pinta		S
Malli	VA R15	VA R15
Muoto	C	C
Sisäinen jäähdytys		



DIN 2184-1 ~DIN 374 Artikkelinro. **1991** **2898**

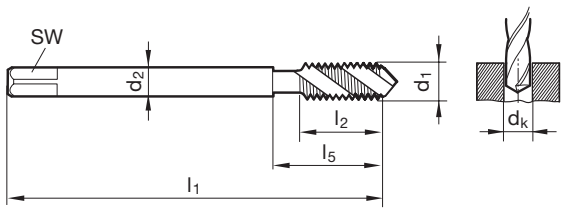
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
5 - 44	2,500	2,100	2,70	56,000	6,000	18,000	3,175
6 - 40	2,500	2,100	2,95	56,000	6,500	20,000	3,505
10 - 32	3,500	2,700	4,10	70,000	8,500	25,000	4,826
1/4 - 28	4,500	3,400	5,50	80,000	9,000	30,000	6,350
5/16 - 24	6,000	4,900	6,90	90,000	11,000	35,000	7,938
3/8 - 24	7,000	5,500	8,50	90,000	11,000	35,000	9,525
7/16 - 20	8,000	6,200	9,90	100,000	13,000	42,000	11,113
1/2 - 20	9,000	7,000	11,50	100,000	13,000	40,000	12,700
5/8 - 18	12,000	9,000	14,50	100,000	15,000	44,000	15,875
7/8 - 14	18,000	14,500	20,40	125,000	19,000	44,000	22,225
1 - 12	18,000	14,500	23,25	140,000	22,000	50,000	25,400

Konekierretapit UNF-kierteille

Materiaali	HSS-E	
Ø-Toleranssi	2B	2B
Pinta	○	●
Malli	VA R40	VA R40
Muoto	C	C
Sisäinen jäähdytys	⊠	⊠

P	
M	•
K	
N	•
S	
H	

Leikkuuarvosivu 231



DIN 2184-1 ~DIN 374 Artikkelinro. **2867** **2868**

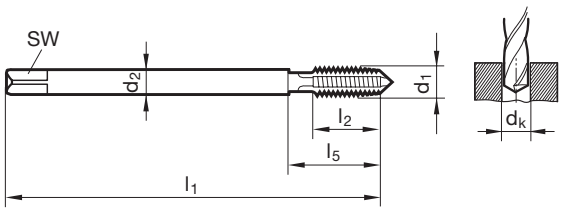
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
10 - 32	3,500	2,700	4,10	70,000	8,500	25,000	4,826
1/4 - 28	4,500	3,400	5,50	80,000	9,000	30,000	6,350
5/16 - 24	6,000	4,900	6,90	90,000	11,000	35,000	7,938
3/8 - 24	7,000	5,500	8,50	90,000	11,000	35,000	9,525
7/16 - 20	8,000	6,200	9,90	100,000	13,000	42,000	11,113
1/2 - 20	9,000	7,000	11,50	100,000	13,000	40,000	12,700
5/8 - 18	12,000	9,000	14,50	100,000	15,000	44,000	15,875
7/8 - 14	18,000	14,500	20,40	125,000	19,000	44,000	22,225
1 - 12	18,000	14,500	23,25	140,000	22,000	50,000	25,400

Konekierretapit BSP-kierteille

P	≤ 1000
M	•
K	
N	•
S	
H	

Leikkuuarvosivu 229

Materiaali	HSS-E	
Ø-Toleranssi		
Pinta	○	●
Malli	N	VA
Muoto	B	B
Sisäinen jäähdytys	⊠	⊠



DIN 2184-1 DIN 5156 — Artikkelinro. **967** **2875**

d1	P	d2	SW	dk	l1	l2	l5	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28,000	6,000	4,900	6,80	90,000	18,000	30,000	7,723
G1/8	28,000	7,000	5,500	8,80	90,000	18,000	35,000	9,728
G1/4	19,000	11,000	9,000	11,80	100,000	20,000	40,000	13,157
G3/8	19,000	12,000	9,000	15,25	100,000	22,000	44,000	16,662
G1/2	14,000	16,000	12,000	19,00	125,000	25,000	44,000	20,955
G3/4	14,000	20,000	16,000	24,50	140,000	28,000	53,000	26,441
G7/8	14,000	22,000	18,000	28,25	150,000	28,000	53,000	30,201
G1	11,000	25,000	20,000	30,75	160,000	30,000	56,000	33,249

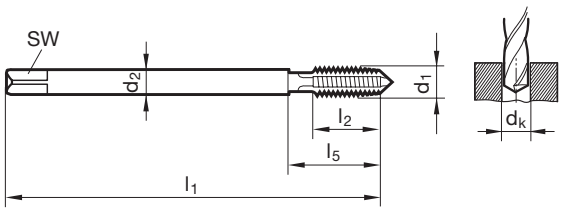
Konekierretapit BSP-kierteille

P	•
M	•
K	○
N	○
S	○
H	

Leikkuuarvosivu 229

Materiaali	**HSS-E**
Ø-Toleranssi	X
Pinta	S
Malli	N
Muoto	B
Sisäinen jäähdytys	

NEW



DIN 2184-1 DIN 5156 Artikkelinro. **4220**

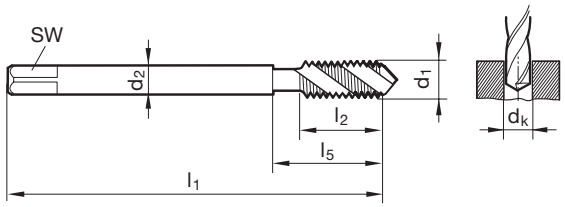
d1	P	d2	SW	dk	l1	l2	l5	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28,000	6,000	4,900	6,80	90,000	18,000	30,000	7,723
G1/8	28,000	7,000	5,500	8,80	90,000	18,000	35,000	9,728
G1/4	19,000	11,000	9,000	11,80	100,000	20,000	40,000	13,157
G3/8	19,000	12,000	9,000	15,25	100,000	22,000	44,000	16,662
G1/2	14,000	16,000	12,000	19,00	125,000	25,000	44,000	20,955
G5/8	14,000	18,000	14,500	21,00	125,000	25,000	48,000	22,911
G3/4	14,000	20,000	16,000	24,50	140,000	28,000	53,000	26,441
G7/8	14,000	22,000	18,000	28,25	150,000	28,000	53,000	30,201
G1	11,000	25,000	20,000	30,75	160,000	30,000	56,000	33,249

Konekierretapit BSP-kierteille

P	
M	•
K	
N	•
S	
H	

Leikkuuarvosivu 231

	HSS-E-PM	HSS-E
Materiaali		
Ø-Toleranssi		
Pinta	○	●
Malli	VA R40	VA R40
Muoto	C	C
Sisäinen jäähdytys	⊠	⊠



DIN 2184-1 DIN 5156 — Artikkelinro. **939** **968**

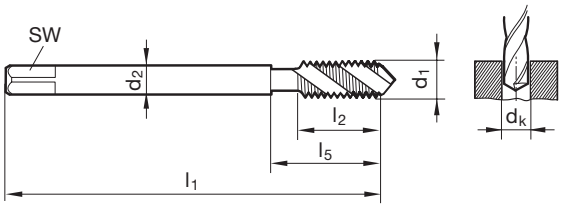
d1	P	d2	SW	dk	l1	l2	l5	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28,000	6,000	4,900	6,80	90,000	11,000	30,000	7,723
G1/8	28,000	7,000	5,500	8,80	90,000	11,000	35,000	9,728
G1/4	19,000	11,000	9,000	11,80	100,000	14,000	40,000	13,157
G3/8	19,000	12,000	9,000	15,25	100,000	14,000	44,000	16,662
G1/2	14,000	16,000	12,000	19,00	125,000	18,000	44,000	20,955
G5/8	14,000	18,000	14,500	21,00	125,000	18,000	48,000	22,911
G3/4	14,000	20,000	16,000	24,50	140,000	20,000	53,000	26,441
G7/8	14,000	22,000	18,000	28,25	150,000	22,000	53,000	30,201
G1	11,000	25,000	20,000	30,75	160,000	24,000	56,000	33,249
G1 1/8	11,000	28,000	22,000	35,50	170,000	24,000	56,000	37,897
G1 1/4	11,000	32,000	24,000	39,50	170,000	25,000	57,000	41,910
G1 3/8	11,000	36,000	29,000	41,75	180,000	27,000	60,000	44,323
G1 1/2	11,000	36,000	29,000	45,25	190,000	27,000	60,000	47,803

Konekierretapit BSP-kierteille

Materiaali	HSS-E-PM
Ø-Toleranssi	
Pinta	S
Malli	VA R50
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	○
N	•
S	○
H	

Leikkuuarvosivu 231



DIN 2184-1 DIN 5156 Artikkelinro. **4159**

d1	P	d2	SW	dk	l1	l2	l5	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28,000	6,000	4,900	6,80	90,000	4,500	47,000	7,723
G1/8	28,000	7,000	5,500	8,80	90,000	4,500	47,000	9,728
G1/4	19,000	11,000	9,000	11,80	100,000	6,700	48,000	13,157
G3/8	19,000	12,000	9,000	15,25	100,000	6,700	48,000	16,662
G1/2	14,000	16,000	12,000	19,00	125,000	9,100	70,000	20,955

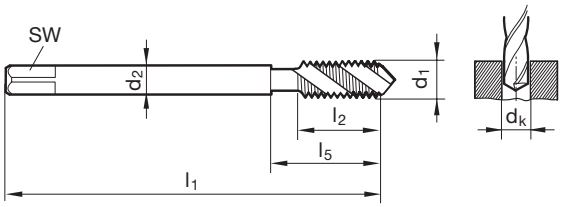
Konekierretapit BSP-kierteille

Materiaali	HSS-E
Ø-Toleranssi	X
Pinta	A
Malli	VA R45
Muoto	C
Sisäinen jäähdytys	

NEW

P	•
M	•
K	○
N	○
S	○
H	

Leikkuuarvosivu 231



DIN 2184-1 DIN 5156 Artikkelinro. **395**

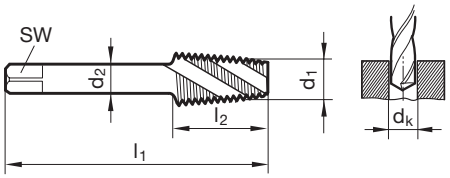
d1	P	d2	SW	dk	l1	l2	l5	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28,000	6,000	4,900	6,80	90,000	11,000	30,000	7,723
G1/8	28,000	7,000	5,500	8,80	90,000	11,000	35,000	9,728
G1/4	19,000	11,000	9,000	11,80	100,000	14,000	40,000	13,157
G3/8	19,000	12,000	9,000	15,25	100,000	14,000	44,000	16,662
G1/2	14,000	16,000	12,000	19,00	125,000	18,000	44,000	20,955
G5/8	14,000	18,000	14,500	21,00	125,000	18,000	48,000	22,911
G3/4	14,000	20,000	16,000	24,50	140,000	20,000	53,000	26,441
G7/8	14,000	22,000	18,000	28,25	150,000	22,000	53,000	30,201
G1	11,000	25,000	20,000	30,75	160,000	24,000	56,000	33,249

Konekierretapit NPT-kierteille

P	
M	•
K	○
N	○
S	
H	

Leikkuuarvosivu 230

Materiaali	HSS-E	
Ø-Toleranssi		
Pinta		S
Malli	N	N
Muoto	C	C
Sisäinen jäähdytys		



Tehdas stdr. Tehdas stdr.	Artikkelinro.	1087	1088

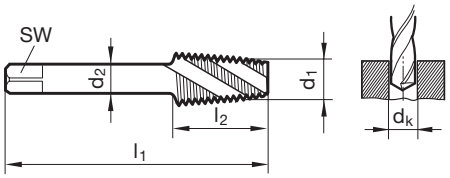
d1	P	d2	SW	dk	l1	l2	l5	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	
1/16	27,000	8,000	6,200	6,25	90,000	14,000	27,000	8,190
1/8	27,000	11,000	9,000	8,50	90,000	15,000	29,000	10,620
1/4	18,000	14,000	11,000	11,20	100,000	21,000	40,000	14,140
3/8	18,000	16,000	12,000	14,40	110,000	21,000	35,000	17,570
1/2	14,000	18,000	14,500	18,00	125,000	27,000	44,000	21,900
3/4	14,000	22,000	18,000	23,40	140,000	27,000	52,000	27,230
1	11,500	25,000	20,000	29,10	170,000	32,000	53,000	34,180

Konekierretapit NPTF-kierteille

P	
M	•
K	○
N	○
S	
H	

Leikkuuarvosivu 230

Materiaali	**HSS-E**
Ø-Toleranssi	
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	



Tehdas stdr. Tehdas stdr. Artikkelinro. **4127**

d1	P	d2	SW	dk	l1	l2	l5	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	
1/16	27,000	8,000	6,200	6,25	90,000	14,000	27,000	8,190
1/8	27,000	11,000	9,000	8,50	90,000	15,000	29,000	10,620
1/4	18,000	14,000	11,000	11,20	100,000	21,000	40,000	14,140
3/8	18,000	16,000	12,000	14,40	110,000	21,000	35,000	17,570
1/2	14,000	18,000	14,500	18,00	125,000	27,000	44,000	21,900
3/4	14,000	22,000	18,000	23,40	140,000	27,000	52,000	27,230
1	11,500	25,000	20,000	29,10	170,000	32,000	53,000	34,180

MANGLAAVAT KIERRETAPIT

M

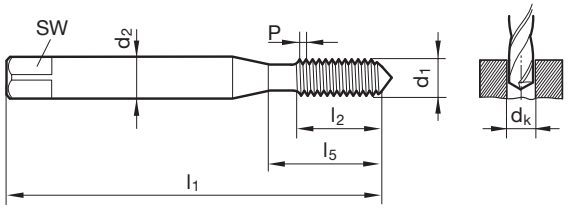
Manglaavat kierretapit, metrinen ISO-kierre

Materiaali	HSS-E-PM	HSS-E	HSS-E-PM
Ø-Toleranssi	6GX	6HX	6HX
Pinta	S	S	S
Malli	N	N	N
Muoto	C	C	C
Sisäinen jäähdytys	✕	✕	✕

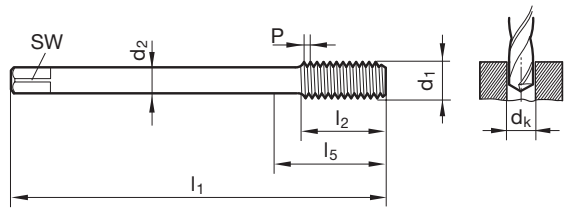
P	•
M	•
K	
N	○
S	
H	

Leikkuuarvosivu 232

~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371 — Artikkelinro. **903** **921** **1255**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M1	0,250	2,500	2,100	0,90	40,000	4,000	
M1,2	0,250	2,500	2,100	1,10	40,000	4,800	
M1,4	0,300	2,500	2,100	1,25	40,000	5,600	
M1,6	0,350	2,500	2,100	1,45	40,000	6,400	
M1,7	0,350	2,500	2,100	1,55	40,000	6,800	
M1,8	0,350	2,500	2,100	1,65	40,000	7,300	
M2	0,400	2,800	2,100	1,85	45,000	8,000	13,500
M2,5	0,450	2,800	2,100	2,30	50,000	9,000	14,500
M3	0,500	3,500	2,700	2,80	56,000	10,000	18,000
M3,5	0,600	4,000	3,000	3,25	56,000	12,000	20,000
M4	0,700	4,500	3,400	3,70	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,65	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,55	80,000	16,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	17,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	20,000	39,000

DIN 2174 ~DIN 376 — Artikkelinro. **952** **925** **1256**

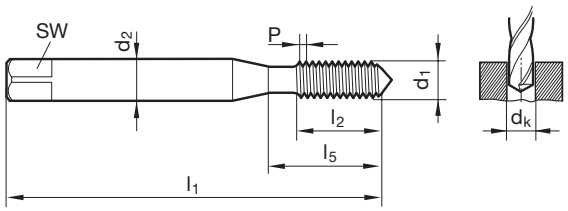
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	11,20	110,000	24,000	49,000
M14	2,000	11,000	9,000	13,10	110,000	26,000	53,000
M16	2,000	12,000	9,000	15,10	110,000	26,000	54,000
M18	2,500	14,000	11,000	16,90	125,000	30,000	62,000
M20	2,500	16,000	12,000	18,90	140,000	32,000	62,000

Manglaavat kierretapit, metrinen ISO-kierre

Materiaali	**HSS-E**
Ø-Toleranssi	6GX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	○
S	
H	

Leikkuuarvosivu 232



DIN 2174 ~DIN 371 Artikkelinro. **920**

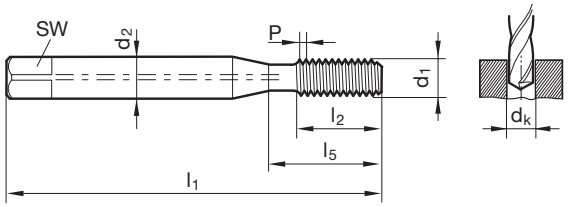
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0,400	2,800	2,100	1,85	45,000	8,000	13,500
M2,5	0,450	2,800	2,100	2,30	50,000	9,000	14,500
M3	0,500	3,500	2,700	2,80	56,000	10,000	18,000
M3,5	0,600	4,000	3,000	3,25	56,000	12,000	20,000
M4	0,700	4,500	3,400	3,70	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,65	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,55	80,000	16,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	17,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	20,000	39,000

Manglaavat kierretapit JK, metrinen ISO-kierre

Materiaali	**TKM**
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	≥ 7
S	○
H	

Leikkuuarvosivu 232



DIN 2174 ~DIN 371/~DIN 376 Artikkelinro. **2518**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0,800	6,000	4,900	4,65	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,55	80,000	11,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	14,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	16,000	39,000
M12	1,750	9,000	7,000	11,20	110,000	18,500	49,000
M16	2,000	12,000	9,000	15,10	110,000	20,000	54,000

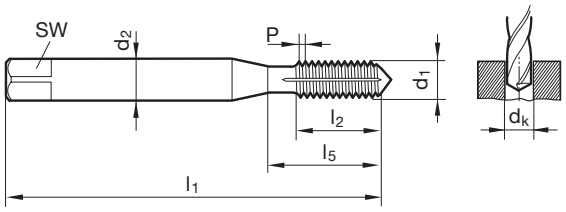
Manglaavat kierretapit, metrinen ISO-kierre

Materiaali	HSS-E		
Ø-Toleranssi	6GX	6HX	6HX
Pinta	S	S	C
Malli	N	N	N
Muoto	C	C	C
Sisäinen jäähdytys	✗	✗	✗

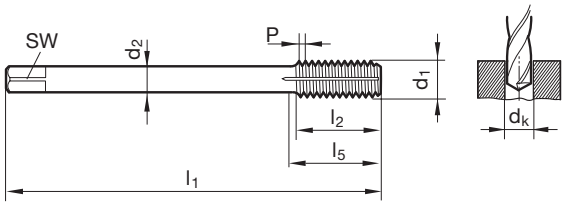
P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 233

~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371	Artikkelinro.	918	919	2012

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,80	56,000	10,000	18,000
M3,5	0,600	4,000	3,000	3,25	56,000	12,000	20,000
M4	0,700	4,500	3,400	3,70	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,65	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,55	80,000	16,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	17,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	20,000	39,000

DIN 2174 ~DIN 376	Artikkelinro.	922	923	2013

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M6	1,000	4,500	3,400	5,55	80,000	16,000	30,000
M8	1,250	6,000	4,900	7,40	90,000	17,000	35,000
M10	1,500	7,000	5,500	9,30	100,000	20,000	39,000
M12	1,750	9,000	7,000	11,20	110,000	24,000	49,000
M14	2,000	11,000	9,000	13,10	110,000	26,000	53,000
M16	2,000	12,000	9,000	15,10	110,000	26,000	54,000
M18	2,500	14,000	11,000	16,90	125,000	30,000	62,000
M20	2,500	16,000	12,000	18,90	140,000	32,000	62,000
M22	2,500	18,000	14,500	20,90	140,000	32,000	62,000
M24	3,000	18,000	14,500	22,70	160,000	36,000	73,000
M27	3,000	20,000	16,000	25,70	160,000	36,000	73,000
M30	3,500	22,000	18,000	28,50	180,000	40,000	85,000
M33	3,500	25,000	20,000	31,50	180,000	40,000	91,000
M36	4,000	28,000	22,000	34,30	200,000	50,000	102,000
M39	4,000	32,000	24,000	37,30	200,000	50,000	107,000

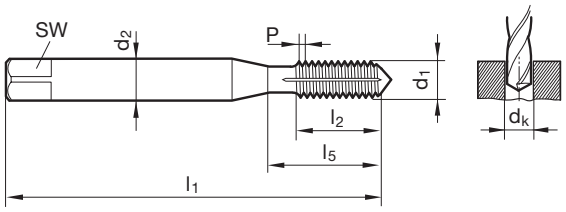
Manglaavat kierretapit, metrinen ISO-kierre

Materiaali	**HSS-E-PM**
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

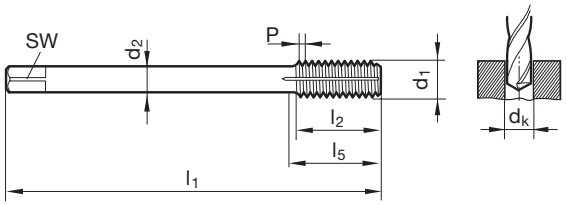
P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 233

~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371 Artikkelinro. **322**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,80	56,000	6,000	18,000
M4	0,700	4,500	3,400	3,70	63,000	7,500	21,000
M5	0,800	6,000	4,900	4,65	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,55	80,000	11,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	14,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	16,000	39,000

DIN 2174 ~DIN 376 Artikkelinro. **339**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	11,20	110,000	18,500	49,000
M16	2,000	12,000	9,000	15,10	110,000	20,000	54,000

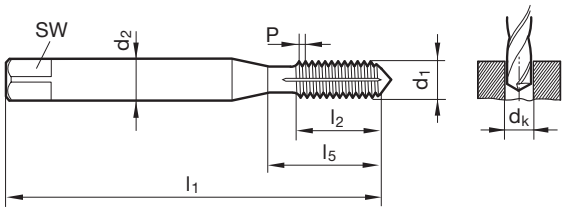
Manglaavat kierretapit, metrinen ISO-kierre

Materiaali	**HSS-E-PM**
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

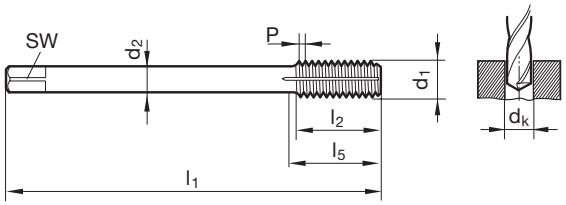
P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 233

~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371 Artikkelinro. **1266**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,80	56,000	10,000	18,000
M4	0,700	4,500	3,400	3,70	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,65	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,55	80,000	16,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	17,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	20,000	39,000

DIN 2174 ~DIN 376 Artikkelinro. **1267**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	11,20	110,000	24,000	49,000
M16	2,000	12,000	9,000	15,10	110,000	26,000	54,000
M20	2,500	16,000	12,000	18,90	140,000	32,000	62,000

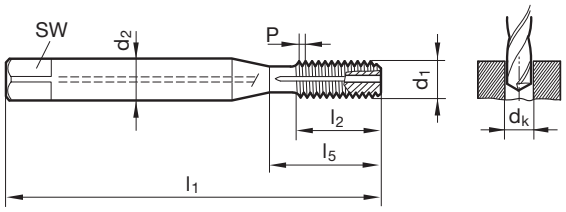
Manglaavat kierretapit JK, metrinen ISO-kierre

P	●
M	●
K	
N	○
S	○
H	

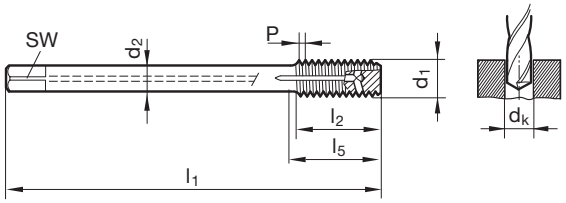
Leikkuuarvosivu 233

Materiaali	HSS-E		
Ø-Toleranssi	6HX	6GX	6HX
Pinta	S	S	C
Malli	N	N	N
Muoto	C	C	C
Sisäinen jäähdytys			

~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371	Artikkelinro.	2442	2443	2446

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0,800	6,000	4,900	4,65	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,55	80,000	11,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	14,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	16,000	39,000

DIN 2174 ~DIN 376	Artikkelinro.	2444	2445	2448

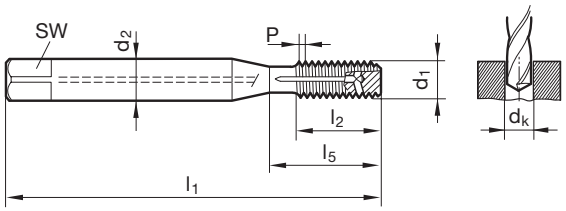
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	11,20	110,000	18,500	49,000
M14	2,000	11,000	9,000	13,10	110,000	20,000	53,000
M16	2,000	12,000	9,000	15,10	110,000	20,000	54,000

Manglaavat kierretapit JK, metrinen ISO-kierre

P	•
M	•
K	
N	≥ 7
S	○
H	

Leikkuuarvosivu 233

Materiaali	**HSS-E**
Ø-Toleranssi	6GX
Pinta	C
Malli	N
Muoto	C
Sisäinen jäähdytys	



DIN 2174 ~DIN 371 Artikkelinro. **2447**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0,800	6,000	4,900	4,65	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,55	80,000	11,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	14,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	16,000	39,000

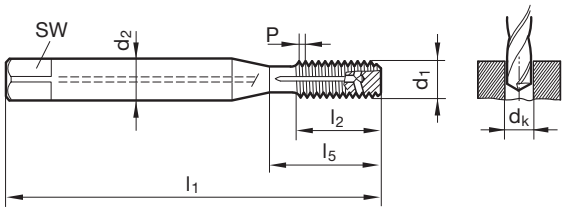
Manglaavat kierretapit JK, metrinen ISO-kierre

Materiaali	**HSS-E-PM**
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

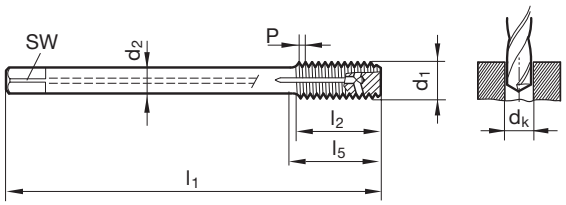
P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 233

~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371 Artikkelinro. **323**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0,800	6,000	4,900	4,65	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,55	80,000	11,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	14,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	16,000	39,000

DIN 2174 ~DIN 376 Artikkelinro. **342**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	11,20	110,000	18,500	49,000
M14	2,000	11,000	9,000	13,10	110,000	20,000	53,000
M16	2,000	12,000	9,000	15,10	110,000	20,000	54,000

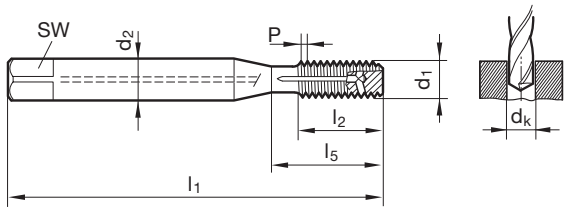
Manglaavat kierretapit JK, metrinen ISO-kierre

P	•
M	•
K	
N	≥ 7
S	•
H	

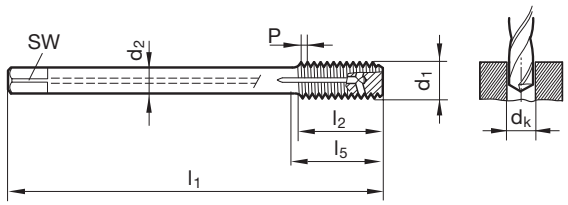
Leikkuuarvosivu 233

Materiaali	HSS-E-PM		
Ø-Toleranssi	6HX	6HX	6HX
Pinta	C	A	S
Malli	N	N	N
Muoto	C	C	E
Sisäinen jäähdytys			

~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371	Artikkelinro.	1270	1717	1725

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,80	56,000	10,000	18,000
M4	0,700	4,500	3,400	3,70	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,65	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,55	80,000	16,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	17,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	20,000	39,000

DIN 2174 ~DIN 376	Artikkelinro.	1271	1719	1727

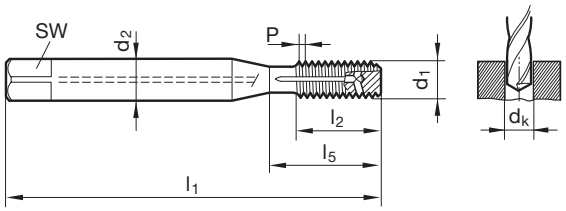
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	11,20	110,000	24,000	49,000
M14	2,000	11,000	9,000	13,10	110,000	26,000	53,000
M16	2,000	12,000	9,000	15,10	110,000	26,000	54,000
M18	2,500	14,000	11,000	16,90	125,000	30,000	62,000
M20	2,500	16,000	12,000	18,90	140,000	32,000	62,000

Manglaavat kierretapit JK, metrinen ISO-kierre

Materiaali	**HSS-E-PM**
Ø-Toleranssi	6GX
Pinta	C
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	≥ 7
S	•
H	

Leikkuuarvosivu 233



DIN 2174 ~DIN 371 Artikkelinro. **1713**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0,800	6,000	4,900	4,65	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,55	80,000	16,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	17,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	20,000	39,000

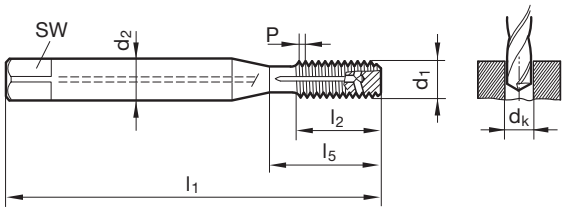
Manglaavat kierretapit JK, metrinen ISO-kierre

Materiaali	HSS-E-PM	
Ø-Toleranssi	6GX	6GX
Pinta	A	S
Malli	N	N
Muoto	C	E
Sisäinen jäähdytys		

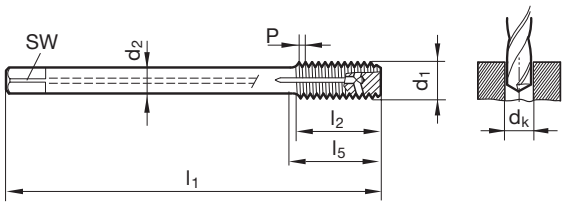
P	•
M	•
K	
N	
S	•
H	

Leikkuuarvosivu 233

~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371 — Artikkelinro. **1718** **1726**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,80	56,000	10,000	18,000
M4	0,700	4,500	3,400	3,70	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,65	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,55	80,000	16,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	17,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	20,000	39,000

DIN 2174 ~DIN 376 — Artikkelinro. **1720** **1728**

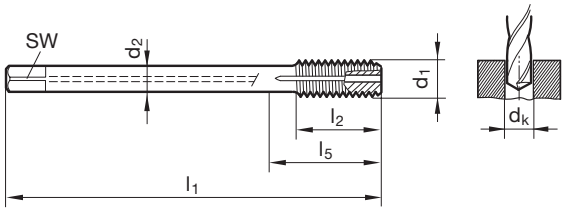
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	11,20	110,000	24,000	49,000
M14	2,000	11,000	9,000	13,10	110,000	26,000	53,000
M16	2,000	12,000	9,000	15,10	110,000	26,000	54,000
M20	2,500	16,000	12,000	18,90	140,000	32,000	62,000

Manglaavat kierretapit JK, metrinen ISO-kierre

Materiaali	**HSS-E-PM**
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 233



Tehdas stdr. Tehdas stdr. Artikkelinro. **4143**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,80	112,000	6,000	18,000
M4	0,700	2,800	2,100	3,70	112,000	7,500	77,000
M5	0,800	3,500	2,700	4,65	125,000	8,500	90,000
M6	1,000	4,500	3,400	5,55	125,000	11,000	90,000
M8	1,250	6,000	4,900	7,40	140,000	14,000	97,000
M10	1,500	7,000	5,500	9,30	160,000	16,000	117,000
M12	1,750	9,000	7,000	11,20	180,000	18,500	133,000
M16	2,000	12,000	9,000	15,10	220,000	20,000	168,000
M20	2,500	16,000	12,000	18,90	280,000	25,000	225,000

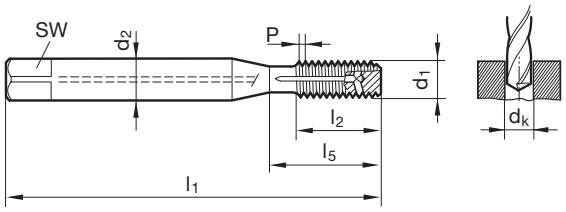
Manglaavat kierretapit JK, metrinen ISO-kierre

Materiaali	**TKM**
Ø-Toleranssi	6HX
Pinta	C
Malli	N
Muoto	C
Sisäinen jäähdytys	

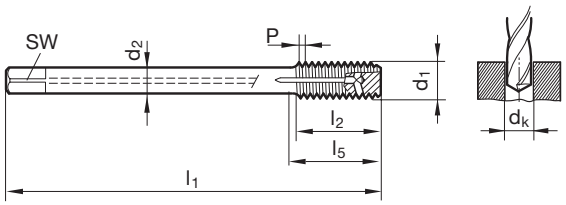
P	•
M	•
K	
N	≥ 7
S	•
H	

Leikkuuarvosivu 233

~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371 Artikkelinro. **1972**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,80	56,000	6,000	18,000
M4	0,700	4,500	3,400	3,70	63,000	7,500	21,000
M5	0,800	6,000	4,900	4,65	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,55	80,000	11,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	14,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	16,000	39,000

DIN 2174 ~DIN 376 Artikkelinro. **1931**

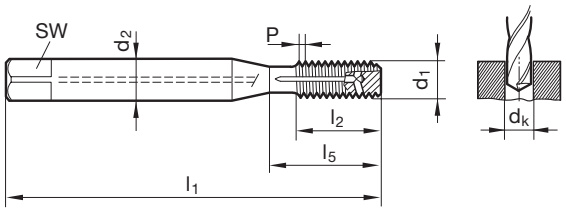
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	11,20	110,000	18,500	49,000
M14	2,000	11,000	9,000	13,10	110,000	20,000	53,000
M16	2,000	12,000	9,000	15,10	110,000	20,000	54,000
M18	2,500	14,000	11,000	16,90	125,000	25,000	62,000
M20	2,500	16,000	12,000	18,90	140,000	25,000	62,000

Manglaavat kierretapit JK, metrinen ISO-kierre

Materiaali	**TKM**
Ø-Toleranssi	6HX
Pinta	C
Malli	N
Muoto	E
Sisäinen jäähdytys	

P	•
M	•
K	
N	≥ 7
S	•
H	

Leikkuuarvosivu 233



DIN 2174 ~DIN 371 Artikkelinro. **1927**

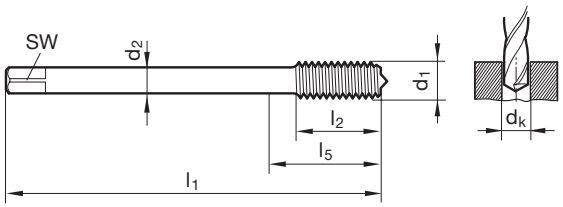
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,80	56,000	6,000	18,000
M4	0,700	4,500	3,400	3,70	63,000	7,500	21,000
M5	0,800	6,000	4,900	4,65	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,55	80,000	11,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	14,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	16,000	39,000

Manglaavat kierretapit, metrinen ISO-hienokierre

Materiaali	**HSS-E**
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	○
S	
H	

Leikkuuarvosivu 232



DIN 2174 ~DIN 374 Artikkelinro. **929**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6,000	4,900	7,55	90,000	16,000	35,000	8,005
M10 x 1	7,000	5,500	9,55	90,000	16,000	35,000	10,005
M14 x 1,5	11,000	9,000	13,30	100,000	20,000	40,000	14,007
M18 x 1	14,000	11,000	17,55	110,000	25,000	44,000	18,005
M18 x 1,5	14,000	11,000	17,30	110,000	25,000	44,000	18,007
M20 x 1	16,000	12,000	19,55	125,000	25,000	44,000	20,005
M20 x 1,5	16,000	12,000	19,30	125,000	25,000	44,000	20,007

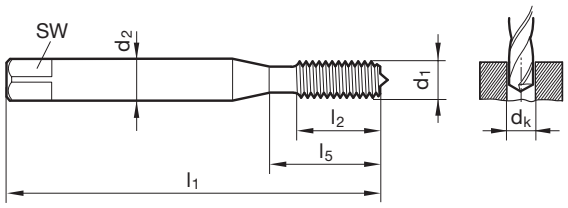
Manglaavat kierretapit, metrinen ISO-hienokierre

Materiaali	**HSS-E-PM**
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

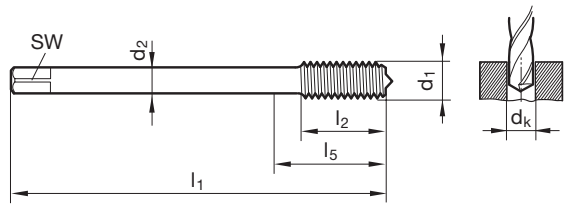
P	•
M	•
K	
N	○
S	
H	

Leikkuuarvosivu 232

~ DIN 371



~ DIN 374



DIN 2174 ~DIN 371 Artikkelinro. **1257**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8,000	6,200	7,55	90,000	16,000	35,000	8,005
M9 x 1	9,000	7,000	8,55	90,000	16,000	35,000	9,005
M10 x 1	10,000	8,000	9,55	90,000	16,000	35,000	10,005

DIN 2174 ~DIN 374 Artikkelinro. **1258**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9,000	7,000	11,55	100,000	20,000	40,000	12,005
M12 x 1,25	9,000	7,000	11,40	100,000	20,000	40,000	12,006
M12 x 1,5	9,000	7,000	11,30	100,000	20,000	40,000	12,007
M14 x 1	11,000	9,000	13,55	100,000	20,000	40,000	14,005
M14 x 1,25	11,000	9,000	13,40	100,000	20,000	40,000	14,006
M14 x 1,5	11,000	9,000	13,30	100,000	20,000	40,000	14,007
M16 x 1	12,000	9,000	15,55	100,000	22,000	44,000	16,005
M16 x 1,5	12,000	9,000	15,30	100,000	22,000	44,000	16,007
M20 x 1	16,000	12,000	19,55	125,000	25,000	44,000	20,005
M20 x 1,5	16,000	12,000	19,30	125,000	25,000	44,000	20,007
M24 x 1,5	18,000	14,500	23,30	140,000	28,000	48,000	24,007
M24 x 2	18,000	14,500	23,10	140,000	28,000	48,000	24,008

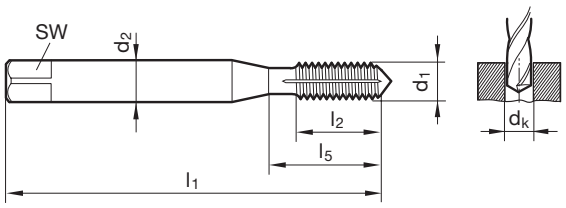
Manglaavat kierretapit, metrinen ISO-hienokierre

Materiaali	**HSS-E**
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

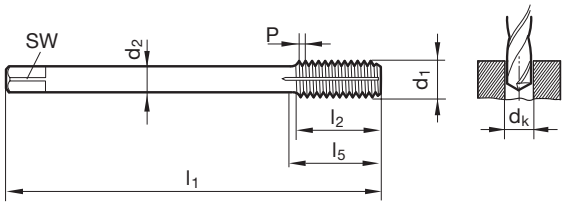
P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 233

~ DIN 371



~ DIN 374



DIN 2174 ~DIN 371 Artikkelinro. **1275**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M6 x 0,75	6,000	4,900	5,65	80,000	13,000	30,000	6,004
M8 x 0,75	8,000	6,200	7,65	80,000	14,000	30,000	8,004
M8 x 1	8,000	6,200	7,55	90,000	16,000	35,000	8,005
M10 x 1	10,000	8,000	9,55	90,000	16,000	35,000	10,005
M10 x 1,25	10,000	8,000	9,40	100,000	20,000	39,000	10,006

DIN 2174 ~DIN 374 Artikkelinro. **927**

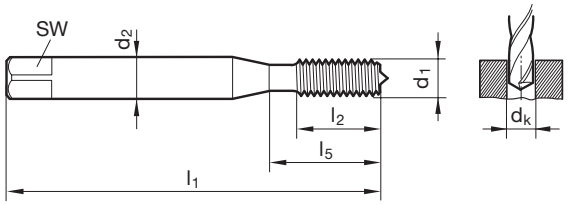
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M6 x 0,75	4,500	3,400	5,65	80,000	13,000	30,000	6,004
M8 x 0,75	6,000	4,900	7,65	80,000	14,000	30,000	8,004
M8 x 1	6,000	4,900	7,55	90,000	16,000	35,000	8,005
M10 x 1	7,000	5,500	9,55	90,000	16,000	35,000	10,005
M10 x 1,25	7,000	5,500	9,40	100,000	20,000	39,000	10,006
M12 x 1	9,000	7,000	11,55	100,000	20,000	40,000	12,005
M12 x 1,25	9,000	7,000	11,40	100,000	20,000	40,000	12,006
M12 x 1,5	9,000	7,000	11,30	100,000	20,000	40,000	12,007
M14 x 1	11,000	9,000	13,55	100,000	20,000	40,000	14,005
M14 x 1,5	11,000	9,000	13,30	100,000	20,000	40,000	14,007
M16 x 1,5	12,000	9,000	15,30	100,000	22,000	44,000	16,007
M18 x 1	14,000	11,000	17,55	110,000	25,000	44,000	18,005
M18 x 1,5	14,000	11,000	17,30	110,000	25,000	44,000	18,007
M20 x 1	16,000	12,000	19,55	125,000	25,000	44,000	20,005
M20 x 1,5	16,000	12,000	19,30	125,000	25,000	44,000	20,007
M22 x 1,5	18,000	14,500	21,30	125,000	25,000	44,000	22,007
M24 x 1,5	18,000	14,500	23,30	140,000	28,000	48,000	24,007

Manglaavat kierretapit, metrinen ISO-hienokierre

Materiaali	**HSS-E-PM**
Ø-Toleranssi	6GX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	○
S	
H	

Leikkuuarvosivu 232



DIN 2174 ~DIN 371 Artikkelinro. **1740**

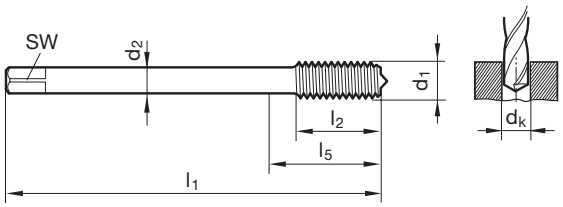
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8,000	6,200	7,55	90,000	16,000	35,000	8,005
M10 x 1	10,000	8,000	9,55	90,000	16,000	35,000	10,005
M10 x 1,25	10,000	8,000	9,40	100,000	20,000	39,000	10,006

Manglaavat kierretapit, metrinen ISO-hienokierre

Materiaali	**HSS-E**
Ø-Toleranssi	6GX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	○
S	
H	

Leikkuuarvosivu 232



DIN 2174 ~DIN 374 Artikkelinro. **928**

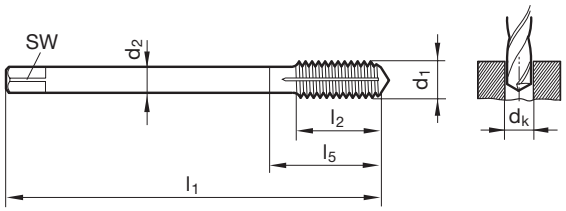
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6,000	4,900	7,55	90,000	16,000	35,000	8,005
M12 x 1,5	9,000	7,000	11,30	100,000	20,000	40,000	12,007
M16 x 1,5	12,000	9,000	15,30	100,000	22,000	44,000	16,007
M18 x 1	14,000	11,000	17,55	110,000	25,000	44,000	18,005
M18 x 1,5	14,000	11,000	17,30	110,000	25,000	44,000	18,007

Manglaavat kierretapit, metrinen ISO-hienokierre

Materiaali	**HSS-E**
Ø-Toleranssi	6HX
Pinta	C
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	≥ 7
S	○
H	

Leikkuuarvosivu 233



DIN 2174 ~DIN 374 Artikkelinro. **2008**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M6 x 0,75	4,500	3,400	5,65	80,000	13,000	30,000	6,004
M8 x 0,75	6,000	4,900	7,65	80,000	14,000	30,000	8,004
M8 x 1	6,000	4,900	7,55	90,000	16,000	35,000	8,005
M10 x 1,25	7,000	5,500	9,40	100,000	20,000	39,000	10,006
M12 x 1,5	9,000	7,000	11,30	100,000	20,000	40,000	12,007
M16 x 1,5	12,000	9,000	15,30	100,000	22,000	44,000	16,007
M20 x 1,5	16,000	12,000	19,30	125,000	25,000	44,000	20,007

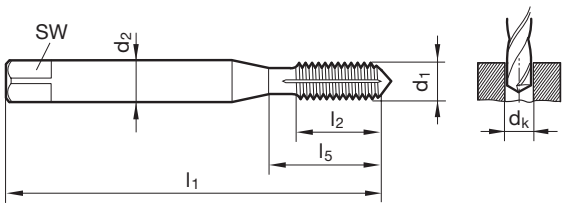
Manglaavat kierretapit, metrinen ISO-hienokierre

Materiaali	**HSS-E**
Ø-Toleranssi	6GX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

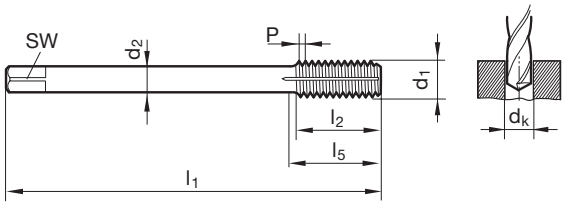
P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 233

~ DIN 371



~ DIN 374



DIN 2174 ~DIN 371 Artikkelinro. **1277**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8,000	6,200	7,55	90,000	16,000	35,000	8,005
M10 x 1	10,000	8,000	9,55	90,000	16,000	35,000	10,005

DIN 2174 ~DIN 374 Artikkelinro. **926**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6,000	4,900	7,55	90,000	16,000	35,000	8,005
M10 x 1	7,000	5,500	9,55	90,000	16,000	35,000	10,005
M12 x 1	9,000	7,000	11,55	100,000	20,000	40,000	12,005
M12 x 1,5	9,000	7,000	11,30	100,000	20,000	40,000	12,007
M14 x 1,5	11,000	9,000	13,30	100,000	20,000	40,000	14,007
M16 x 1	12,000	9,000	15,55	100,000	22,000	44,000	16,005
M16 x 1,5	12,000	9,000	15,30	100,000	22,000	44,000	16,007
M18 x 1,5	14,000	11,000	17,30	110,000	25,000	44,000	18,007
M20 x 1,5	16,000	12,000	19,30	125,000	25,000	44,000	20,007

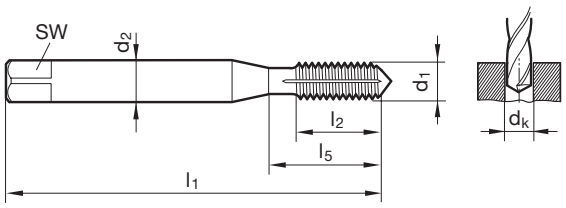
Manglaavat kierretapit, metrinen ISO-hienokierre

Materiaali	**HSS-E-PM**
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

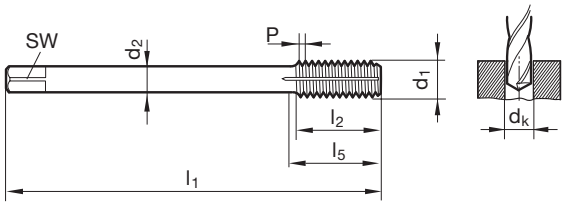
P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 233

~ DIN 371



~ DIN 374



DIN 2174 ~DIN 371 Artikkelinro. **1268**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8,000	6,200	7,55	90,000	16,000	35,000	8,005
M10 x 1	10,000	8,000	9,55	90,000	16,000	35,000	10,005

DIN 2174 ~DIN 374 Artikkelinro. **1269**

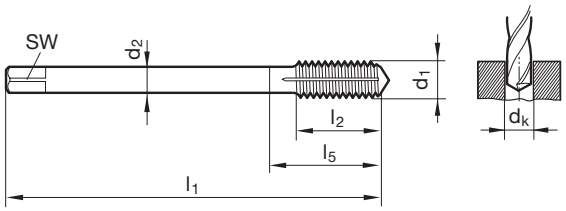
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M12 x 1,25	9,000	7,000	11,40	100,000	20,000	40,000	12,006
M12 x 1,5	9,000	7,000	11,30	100,000	20,000	40,000	12,007
M14 x 1	11,000	9,000	13,55	100,000	20,000	40,000	14,005
M14 x 1,25	11,000	9,000	13,40	100,000	20,000	40,000	14,006
M14 x 1,5	11,000	9,000	13,30	100,000	20,000	40,000	14,007
M16 x 1,5	12,000	9,000	15,30	100,000	22,000	44,000	16,007
M18 x 1,5	14,000	11,000	17,30	110,000	25,000	44,000	18,007
M20 x 1	16,000	12,000	19,55	125,000	25,000	44,000	20,005
M20 x 1,5	16,000	12,000	19,30	125,000	25,000	44,000	20,007
M24 x 2	18,000	14,500	23,10	140,000	28,000	48,000	24,008

Manglaavat kierretapit, metrinen ISO-hienokierre

Materiaali	HSS-E-PM
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 233



DIN 2174 ~DIN 374 Artikkelinro. **333**

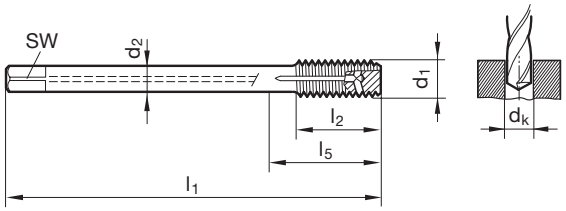
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6,000	4,900	7,55	90,000	11,000	35,000	8,005
M10 x 1	7,000	5,500	9,55	90,000	11,000	35,000	10,005
M12 x 1	9,000	7,000	11,55	100,000	11,000	40,000	12,005
M12 x 1,5	9,000	7,000	11,30	100,000	16,000	40,000	12,007
M14 x 1,5	11,000	9,000	13,30	100,000	15,000	40,000	14,007
M16 x 1,5	12,000	9,000	15,30	100,000	15,000	44,000	16,007
M18 x 1,5	14,000	11,000	17,30	110,000	16,000	44,000	18,007
M20 x 1,5	16,000	12,000	19,30	125,000	16,000	44,000	20,007

Manglaavat kierretapit JK, metrinen ISO-hienokierre

Materiaali	HSS-E-PM
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 233



DIN 2174 ~DIN 374 Artikkelinro. **338**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6,000	4,900	7,55	90,000	11,000	35,000	8,005
M10 x 1	7,000	5,500	9,55	90,000	11,000	35,000	10,005
M12 x 1,5	9,000	7,000	11,30	100,000	16,000	40,000	12,007
M14 x 1,5	11,000	9,000	13,30	100,000	15,000	40,000	14,007
M16 x 1,5	12,000	9,000	15,30	100,000	15,000	44,000	16,007

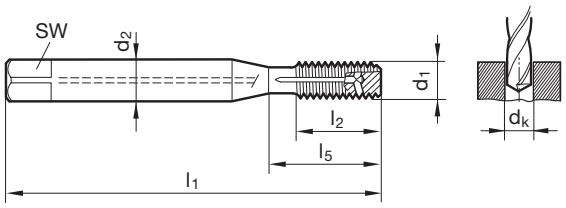
Manglaavat kierretapit JK, metrinen ISO-hienokierre

P	•
M	•
K	
N	≥ 7
S	•
H	

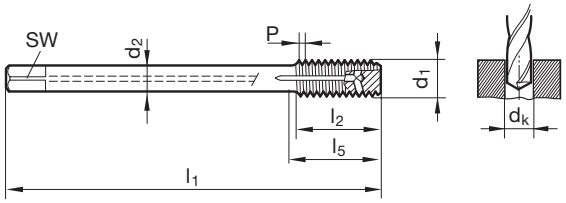
Leikkuuarvosivu 233

Materiaali	HSS-E-PM		
Ø-Toleranssi	6HX	6HX	6HX
Pinta	C	A	S
Malli	N	N	N
Muoto	C	C	E
Sisäinen jäähdytys			

~ DIN 371



~ DIN 374



DIN 2174 ~DIN 371	Artikkelinro.	1272	1721	1729

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8,000	6,200	7,55	90,000	16,000	35,000	8,005
M9 x 1	9,000	7,000	8,55	90,000	16,000	35,000	9,005
M10 x 1	10,000	8,000	9,55	90,000	16,000	35,000	10,005
M10 x 1,25	10,000	8,000	9,40	100,000	20,000	39,000	10,006

DIN 2174 ~DIN 374	Artikkelinro.	1273	1723	1731

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9,000	7,000	11,55	100,000	20,000	40,000	12,005
M12 x 1,25	9,000	7,000	11,40	100,000	20,000	40,000	12,006
M12 x 1,5	9,000	7,000	11,30	100,000	20,000	40,000	12,007
M14 x 1	11,000	9,000	13,55	100,000	20,000	40,000	14,005
M14 x 1,25	11,000	9,000	13,40	100,000	20,000	40,000	14,006
M14 x 1,5	11,000	9,000	13,30	100,000	20,000	40,000	14,007
M16 x 1,5	12,000	9,000	15,30	100,000	22,000	44,000	16,007
M18 x 1,5	14,000	11,000	17,30	110,000	25,000	44,000	18,007
M20 x 1	16,000	12,000	19,55	125,000	25,000	44,000	20,005
M20 x 1,5	16,000	12,000	19,30	125,000	25,000	44,000	20,007
M22 x 1,5	18,000	14,500	21,30	125,000	25,000	44,000	22,007
M24 x 1,5	18,000	14,500	23,30	140,000	28,000	48,000	24,007

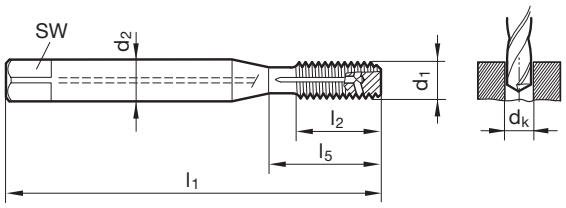
Manglaavat kierretapit JK, metrinen ISO-hienokierre

P	•
M	•
K	
N	≥ 7
S	•
H	

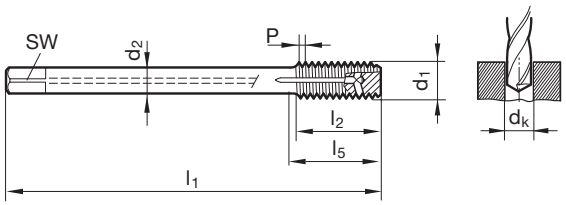
Leikkuuarvosivu 233

Materiaali	HSS-E-PM	
Ø-Toleranssi	6GX	6GX
Pinta	C	S
Malli	N	N
Muoto	C	E
Sisäinen jäähdytys		

~ DIN 371



~ DIN 374



DIN 2174 ~DIN 371 — Artikkelinro. **1715** **1730**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8,000	6,200	7,55	90,000	16,000	35,000	8,005
M10 x 1	10,000	8,000	9,55	90,000	16,000	35,000	10,005
M10 x 1,25	10,000	8,000	9,40	100,000	20,000	39,000	10,006

DIN 2174 ~DIN 374 — Artikkelinro. **1716** **1732**

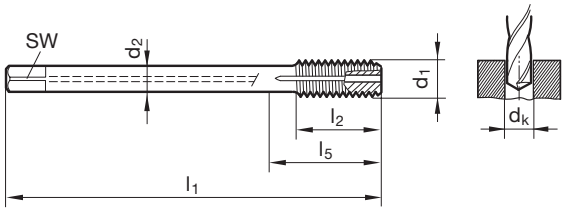
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9,000	7,000	11,55	100,000	20,000	40,000	12,005
M12 x 1,5	9,000	7,000	11,30	100,000	20,000	40,000	12,007
M14 x 1,5	11,000	9,000	13,30	100,000	20,000	40,000	14,007
M16 x 1,5	12,000	9,000	15,30	100,000	22,000	44,000	16,007
M18 x 1,5	14,000	11,000	17,30	110,000	25,000	44,000	18,007
M20 x 1,5	16,000	12,000	19,30	125,000	25,000	44,000	20,007
M24 x 1,5	18,000	14,500	23,30	140,000	28,000	48,000	24,007

Manglaavat kierretapit JK, metrinen ISO-hienokierre

Materiaali	HSS-E-PM
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 233



Tehdas stdr. Tehdas stdr. Artikkelinro. **4145**

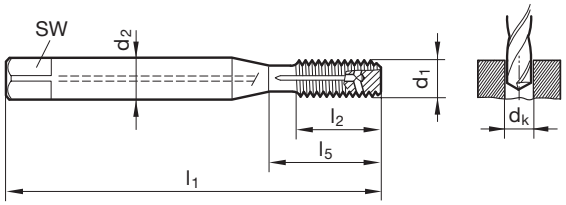
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6,000	4,900	7,55	140,000	14,000	97,000	8,005
M10 x 1	7,000	5,500	9,55	160,000	16,000	117,000	10,005
M10 x 1,25	7,000	5,500	9,40	160,000	16,000	117,000	10,006
M12 x 1	9,000	7,000	11,55	180,000	18,500	133,000	12,005
M12 x 1,5	9,000	7,000	11,30	180,000	18,500	133,000	12,007
M14 x 1,5	11,000	9,000	13,30	220,000	20,000	168,000	14,007
M16 x 1,5	12,000	9,000	15,30	220,000	20,000	168,000	16,007

Manglaavat kierretapit JK, metrinen ISO-hienokierre

Materiaali	**TKM**
Ø-Toleranssi	6HX
Pinta	C
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	≥ 7
S	•
H	

Leikkuuarvosivu 233



DIN 2174 ~DIN 371/~DIN 376 Artikkelinro. **1581**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M10 x 1	10,000	8,000	9,55	90,000	11,000	35,000	10,005
M12 x 1	9,000	7,000	11,55	100,000	15,000	40,000	12,005
M12 x 1,5	9,000	7,000	11,30	100,000	15,000	40,000	12,007
M14 x 1	11,000	9,000	13,55	100,000	15,000	40,000	14,005
M14 x 1,25	11,000	9,000	13,40	100,000	15,000	40,000	14,006
M14 x 1,5	11,000	9,000	13,30	100,000	15,000	40,000	14,007
M16 x 1,5	12,000	9,000	15,30	100,000	15,000	44,000	16,007
M18 x 1,5	14,000	11,000	17,30	110,000	15,000	44,000	18,007
M20 x 1,5	16,000	12,000	19,30	125,000	15,000	44,000	20,007
M24 x 1,5	18,000	14,500	23,30	140,000	15,000	48,000	24,007

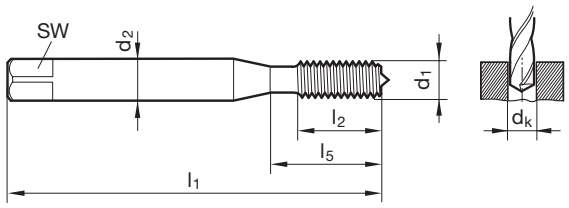
Manglaavat kierretapit UNC-kierteille

Materiaali	HSS-E	
Ø-Toleranssi	2BX	2BX
Pinta	S	S
Malli	N	N
Muoto	C	C
Sisäinen jäähdytys		

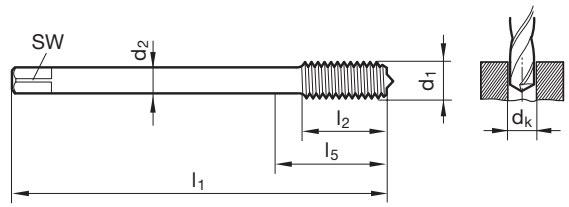
P	•
M	•
K	
N	○
S	
H	

Leikkuuarvosivu 232/233

~ DIN 371



~ DIN 376



DIN 2184-1 ~DIN 371 Artikkelinro. **2273** **1582**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
4 - 40	3,500	2,700	2,55	56,000	11,000	18,000	2,845
5 - 40	3,500	2,700	2,90	56,000	11,000	18,000	3,175
6 - 32	4,000	3,000	3,15	56,000	12,000	20,000	3,505
8 - 32	4,500	3,400	3,80	63,000	12,000	21,000	4,166
10 - 24	6,000	4,900	4,35	70,000	14,000	25,000	4,826
12 - 24	6,000	4,900	5,00	80,000	16,000	30,000	5,486
1/4 - 20	7,000	5,500	5,75	80,000	16,000	30,000	6,350
5/16 - 18	8,000	6,200	7,30	90,000	18,000	35,000	7,938
3/8 - 16	10,000	8,000	8,80	100,000	20,000	39,000	9,525

DIN 2184-1 ~DIN 376 Artikkelinro. **2274** **1583**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
7/16 - 14	8,000	6,200	10,30	100,000	22,000	42,000	11,113
1/2 - 13	9,000	7,000	11,80	110,000	25,000	49,000	12,700
9/16 - 12	11,000	9,000	13,30	110,000	28,000	53,000	14,288
5/8 - 11	12,000	9,000	14,80	110,000	30,000	53,000	15,875
3/4 - 10	14,000	11,000	17,90	125,000	33,000	62,000	19,050
7/8 - 9	18,000	14,500	21,00	140,000	35,000	62,000	22,225

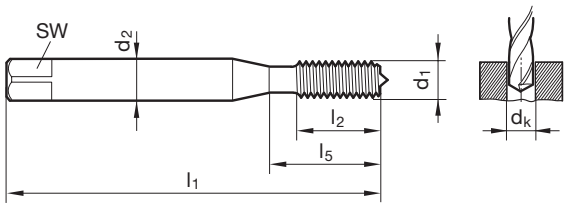
Manglaavat kierretapit UNF-kierteille

P	•
M	•
K	
N	○
S	
H	

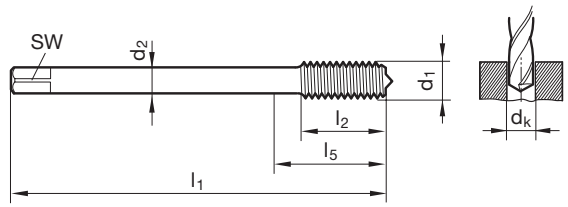
Leikkuuarvosivu 232/233

Materiaali	HSS-E	
Ø-Toleranssi	2BX	2BX
Pinta	S	S
Malli	N	N
Muoto	C	C
Sisäinen jäähdytys		

~ DIN 371



~ DIN 376



DIN 2184-1 ~DIN 371 — Artikkelinro. **1283** **1584**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
4 - 48	3,500	2,700	2,60	56,000	10,000	18,000	2,845
5 - 44	3,500	2,700	2,90	56,000	10,000	18,000	3,175
6 - 40	4,000	3,000	3,20	56,000	11,000	20,000	3,505
8 - 36	4,500	3,400	3,85	63,000	12,000	21,000	4,166
10 - 32	6,000	4,900	4,45	70,000	14,000	25,000	4,826
12 - 28	6,000	4,900	5,10	80,000	16,000	30,000	5,486
1/4 - 28	7,000	5,500	5,95	80,000	16,000	30,000	6,350
5/16 - 24	8,000	6,200	7,45	90,000	18,000	35,000	7,938
3/8 - 24	10,000	8,000	9,05	90,000	18,000	35,000	9,525

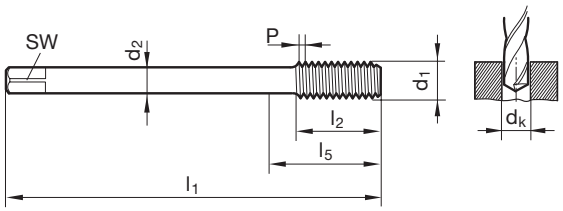
DIN 2184-1 ~DIN 374 — Artikkelinro. **2275** **1585**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
10 - 32	3,500	2,700	4,45	70,000	14,000	25,000	4,826
12 - 28	4,000	3,000	5,10	80,000	16,000	30,000	5,486
1/4 - 28	4,500	3,400	5,95	80,000	16,000	30,000	6,350
5/16 - 24	6,000	4,900	7,45	90,000	18,000	35,000	7,938
3/8 - 24	7,000	5,500	9,05	90,000	18,000	35,000	9,525
7/16 - 20	8,000	6,200	10,55	100,000	22,000	42,000	11,113
1/2 - 20	9,000	7,000	12,10	100,000	20,000	40,000	12,700
9/16 - 18	11,000	9,000	13,65	100,000	22,000	40,000	14,288
5/8 - 18	12,000	9,000	15,25	100,000	22,000	44,000	15,875
3/4 - 16	14,000	11,000	18,35	110,000	25,000	44,000	19,050
7/8 - 14	18,000	14,500	21,40	125,000	25,000	44,000	22,225
1 - 12	18,000	14,500	24,45	140,000	28,000	50,000	25,400

Manglaavat kierretapit BSP-kierteille

Materiaali	HSS-E	
Ø-Toleranssi	X	X
Pinta	S	S
Malli	N	N
Muoto	C	C
Sisäinen jäähdytys		

P	•	Leikkuuarvosivu 232/233
M	•	
K		
N	○	
S		
H		



DIN 2184-1 DIN 2189 — Artikkelinro. **966** **1586**

d1	P	d2	SW	dk	l1	l2	l5	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28,000	6,000	4,900	7,30	90,000	18,000	30,000	7,723
G1/8	28,000	7,000	5,500	9,30	90,000	18,000	35,000	9,728
G1/4	19,000	11,000	9,000	12,50	100,000	20,000	40,000	13,157
G3/8	19,000	12,000	9,000	16,00	100,000	22,000	44,000	16,662
G1/2	14,000	16,000	12,000	20,00	125,000	25,000	44,000	20,955
G3/4	14,000	20,000	16,000	25,50	140,000	28,000	53,000	26,441
G1	11,000	25,000	20,000	32,00	160,000	30,000	56,000	33,249
G1 1/4	11,000	32,000	24,000	40,75	170,000	30,000	57,000	41,910

Ruostumaton teräs

KIERRE-JYRSIMET M

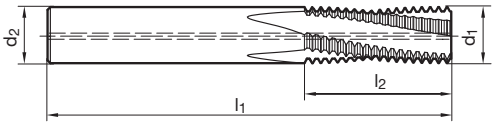
Kierrejyrsimet ilman viistettä metrisille ISO-kierteille

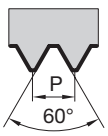
2xD

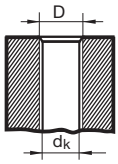
P	•
M	○
K	•
N	•
S	○
H	≤55

Leikkuuarvosivu 234

Materiaali	TKM			
Pinta	C	C	C	C
Malli	TM SP	TM SP	TM SP	TM SP
Sisäinen jäähdytys				
Varren muoto	HA	HB	HA	HB
		NEW		NEW







Tehdas stdr.	Artikkelinro.	3737	3743	4132	4133

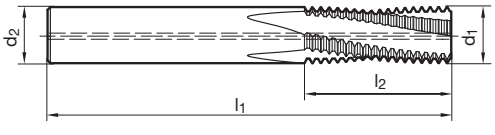
D	P	d1	d2	dk	l1	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm		
M6	1,000	4,800	6,000	5,00	54,000	13,500	3	6,000
M8	1,250	6,400	8,000	6,80	62,000	18,100	3	8,000
M8 x 1	1,000	6,400	8,000	7,00	62,000	17,500	3	8,005
M10	1,500	7,950	10,000	8,50	74,000	21,800	3	10,000
M10 x 1	1,000	7,950	10,000	9,00	74,000	21,500	3	10,005
M10 x 1,25	1,250	7,950	10,000	8,80	74,000	21,900	3	10,006
M12	1,750	9,950	10,000	10,20	74,000	25,400	4	12,000
M12 x 1,5	1,500	9,950	10,000	10,50	74,000	26,300	4	12,007
M14	2,000	11,200	12,000	12,00	90,000	31,000	4	14,000
M14 x 1,5	1,500	11,200	12,000	12,50	90,000	30,800	4	14,007
M16	2,000	12,800	14,000	14,00	90,000	35,000	4	16,000
M16 x 1,5	1,500	12,800	14,000	14,50	90,000	33,800	4	16,007
M20	2,500	14,950	16,000	17,50	102,000	41,300	4	20,000
M20 x 1,5	1,500	14,950	16,000	18,50	102,000	42,800	4	20,007

Kierrejyrsimet ilman viistettä metrisille ISO-kierteille

P	•
M	○
K	•
N	•
S	○
H	≤55

Leikkuuarvosivu 234

Materiaali	TKM	
Pinta	C	C
Malli	TM SP	TM SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW



Tehdas stdr.	Artikkelinro.	3735	3740

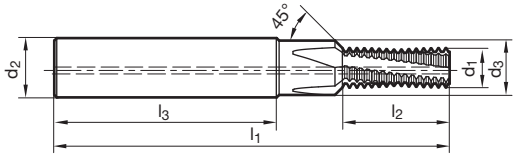
D	P	d1	d2	dk	l1	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm		
M6	1,000	4,800	6,000	5,00	54,000	16,500	3	6,000
M8	1,250	6,400	8,000	6,80	62,000	21,900	3	8,000
M10	1,500	7,950	10,000	8,50	74,000	26,300	3	10,000
M12	1,750	9,950	10,000	10,20	74,000	32,400	4	12,000
M14	2,000	11,200	12,000	12,00	90,000	37,000	4	14,000
M16	2,000	12,800	14,000	14,00	90,000	43,000	4	16,000
M20	2,500	14,950	16,000	17,50	102,000	48,800	4	20,000

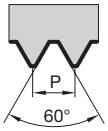
Viisteelliset kierrejyrsimet metrisille ISO-kierteille

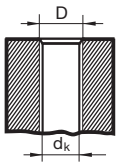
		Materiaali	TKM	
		Pinta	C	C
		Malli	TMC SP	TMC SP
		Sisäinen jäähdytys		
		Varren muoto	HA	HB
P	•			
M	•			
K	•			
N	•			
S	•			
H	≤55			

Leikkuuarvosivu 234

NEW







Tehdas stdr. Artikkelinro. **3525** **3543**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0,500	2,300	6,000	3,400	2,50	48,000	36,000	5,300	3	3,000
M4	0,700	3,000	6,000	4,500	3,30	48,000	36,000	7,400	3	4,000
M5	0,800	4,000	6,000	5,500	4,20	54,000	36,000	9,200	3	5,000
M6	1,000	4,800	8,000	6,600	5,00	62,000	36,000	10,500	3	6,000
M8	1,250	6,400	10,000	9,000	6,80	74,000	40,000	13,100	3	8,000
M10	1,500	7,950	12,000	11,000	8,50	80,000	45,000	17,300	4	10,000
M12	1,750	9,950	14,000	13,500	10,20	90,000	45,000	20,100	4	12,000
M14	2,000	11,200	16,000	15,500	12,00	102,000	48,000	25,000	4	14,000
M16	2,000	12,800	18,000	17,500	14,00	102,000	48,000	27,000	4	16,000
M20	2,500	14,500	20,000	21,500	17,50	125,000	50,000	33,800	4	20,000

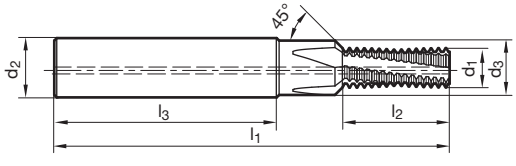
Viisteelliset kierrejyrsimet metrisille ISO-kierteille

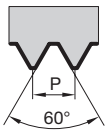
2xD

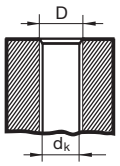
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 235

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr. Artikkelinro. **3526** **3544**

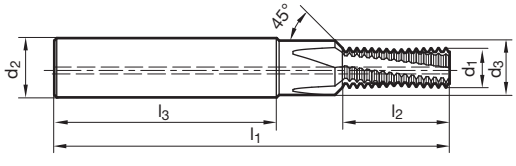
D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0,500	2,300	6,000	3,400	2,50	48,000	36,000	6,800	3	3,000
M4	0,700	3,000	6,000	4,500	3,30	48,000	36,000	8,800	3	4,000
M5	0,800	4,000	6,000	5,500	4,20	54,000	36,000	10,800	3	5,000
M6	1,000	4,800	8,000	6,600	5,00	62,000	36,000	13,500	3	6,000
M8	1,250	6,400	10,000	9,000	6,80	74,000	40,000	18,100	3	8,000
M10	1,500	7,950	12,000	11,000	8,50	80,000	45,000	21,800	4	10,000
M12	1,750	9,950	14,000	13,500	10,20	90,000	45,000	25,400	4	12,000
M14	2,000	11,200	16,000	15,500	12,00	102,000	48,000	31,000	4	14,000
M16	2,000	12,800	18,000	17,500	14,00	102,000	48,000	35,000	4	16,000
M20	2,500	14,500	20,000	21,500	17,50	125,000	50,000	41,300	4	20,000

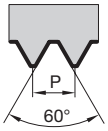
Viisteelliset kierrejyrsimet metrisille ISO-kierteille

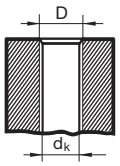
		Materiaali	TKM	
		Pinta	C	C
		Malli	TMC SP	TMC SP
		Sisäinen jäähdytys		
		Varren muoto	HA	HB
P	•			
M	•			
K	•			
N	•			
S	•			
H	≤55			

Leikkuuarvosivu 235

NEW







Tehdas stdr. Artikkelinro. **3759** **3760**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0,500	2,300	6,000	3,400	2,50	48,000	36,000	7,800	3	3,000
M4	0,700	3,000	6,000	4,500	3,30	48,000	35,600	10,900	3	4,000
M5	0,800	4,000	6,000	5,500	4,20	54,000	36,000	13,200	3	5,000
M6	1,000	4,800	8,000	6,600	5,00	62,000	36,000	16,500	3	6,000
M8	1,250	6,400	10,000	9,000	6,80	74,000	40,000	21,900	3	8,000
M10	1,500	7,950	12,000	11,000	8,50	80,000	45,000	26,300	4	10,000
M12	1,750	9,950	14,000	13,500	10,20	90,000	45,000	32,400	4	12,000
M14	2,000	11,200	16,000	15,500	12,00	102,000	48,000	37,000	4	14,000
M16	2,000	12,800	18,000	17,500	14,00	102,000	48,000	43,000	4	16,000
M20	2,500	14,500	20,000	21,500	17,50	125,000	50,000	48,800	4	20,000

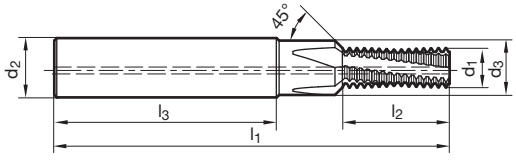
Viisteelliset kierrejyrsimet metrisille ISO-hienokierteille

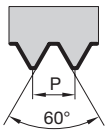
P	•
M	•
K	•
N	•
S	•
H	≤55

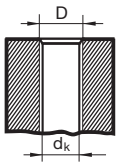
Leikkuuarvosivu 234

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB

NEW







Tehdas stdr.	Artikkelinro.	3527	3545

D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm	mm		
M4 x 0,5	0,500	3,000	6,000	4,500	3,50	48,000	36,000	7,300	3	4,003
M5 x 0,5	0,500	4,000	6,000	5,500	4,50	54,000	36,000	8,800	3	5,003
M6 x 0,5	0,500	4,800	8,000	6,600	5,50	62,000	36,000	9,800	3	6,003
M6 x 0,75	0,750	4,800	8,000	6,600	5,20	62,000	36,000	10,100	3	6,004
M8 x 0,75	0,750	6,400	10,000	9,000	7,20	74,000	40,000	13,100	3	8,004
M8 x 1	1,000	6,400	10,000	9,000	7,00	74,000	40,000	13,500	3	8,005
M10 x 1	1,000	7,950	12,000	11,000	9,00	80,000	45,000	16,500	4	10,005
M10 x 1,25	1,250	7,950	12,000	11,000	8,80	80,000	45,000	16,900	4	10,006
M12 x 1	1,000	9,950	14,000	13,500	11,00	90,000	45,000	19,500	4	12,005
M12 x 1,5	1,500	9,950	14,000	13,500	10,50	90,000	45,000	20,300	4	12,007
M14 x 1,5	1,500	11,200	16,000	15,500	12,50	102,000	48,000	23,300	4	14,007
M16 x 1,5	1,500	12,800	18,000	17,500	14,50	102,000	48,000	26,300	4	16,007

Viisteelliset kierrejyrsimet metrisille ISO-hienokierteille

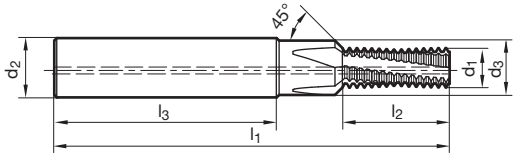
2xD

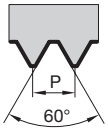
P	•
M	•
K	•
N	•
S	•
H	≤55

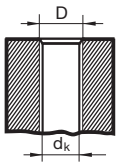
Leikkuuarvosivu 235

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB

NEW







Tehdas stdr.	Artikkelinro.	3528	3546

D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm	mm		
M4 x 0,5	0,500	3,000	6,000	4,500	3,50	48,000	36,000	8,800	3	4,003
M5 x 0,5	0,500	4,000	6,000	5,500	4,50	54,000	36,000	10,800	3	5,003
M6 x 0,5	0,500	4,800	8,000	6,600	5,50	62,000	36,000	12,800	3	6,003
M6 x 0,75	0,750	4,800	8,000	6,600	5,20	62,000	36,000	13,100	3	6,004
M8 x 0,75	0,750	6,400	10,000	9,000	7,20	74,000	40,000	16,900	3	8,004
M8 x 1	1,000	6,400	10,000	9,000	7,00	74,000	40,000	17,500	3	8,005
M10 x 1	1,000	7,950	12,000	11,000	9,00	80,000	45,000	21,500	4	10,005
M10 x 1,25	1,250	7,950	12,000	11,000	8,80	80,000	45,000	21,900	4	10,006
M12 x 1	1,000	9,950	14,000	13,500	11,00	90,000	45,000	25,500	4	12,005
M12 x 1,5	1,500	9,950	14,000	13,500	10,50	90,000	45,000	26,300	4	12,007
M14 x 1,5	1,500	11,200	16,000	15,500	12,50	102,000	48,000	30,800	4	14,007
M16 x 1,5	1,500	12,800	18,000	17,500	14,50	102,000	48,000	33,800	4	16,007

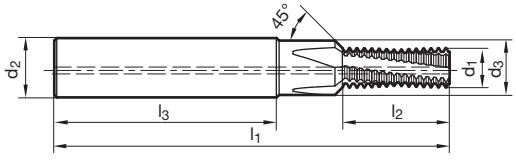
Viisteelliset kierrejyrsimet metrisille ISO-hienokierteille

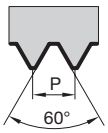
2,5xD

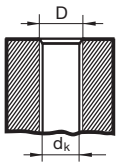
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 235

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3762	3763

D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm	mm		
M4 x 0,5	0,500	3,000	6,000	4,500	3,50	48,000	36,000	10,300	3	4,003
M5 x 0,5	0,500	4,000	6,000	5,500	4,50	54,000	36,000	12,800	3	5,003
M6 x 0,5	0,500	4,800	8,000	6,600	5,50	62,000	36,000	15,300	3	6,003
M6 x 0,75	0,750	4,800	8,000	6,600	5,20	62,000	36,000	15,400	3	6,004
M8 x 0,75	0,750	6,400	10,000	9,000	7,20	74,000	40,000	20,600	3	8,004
M8 x 1	1,000	6,400	10,000	9,000	7,00	74,000	40,000	20,500	3	8,005
M10 x 1	1,000	7,950	12,000	11,000	9,00	80,000	45,000	25,500	4	10,005
M10 x 1,25	1,250	7,950	12,000	11,000	8,80	80,000	45,000	25,600	4	10,006
M12 x 1	1,000	9,950	14,000	13,500	11,00	90,000	45,000	30,500	4	12,005
M12 x 1,5	1,500	9,950	14,000	13,500	10,50	90,000	45,000	30,800	4	12,007
M14 x 1,5	1,500	11,200	16,000	15,500	12,50	102,000	48,000	38,300	4	14,007
M16 x 1,5	1,500	12,800	18,000	17,500	14,50	102,000	48,000	41,300	4	16,007

Kierrejyrsimet ilman viistettä UNC-kierteille

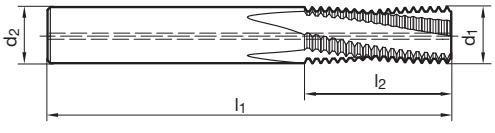
2xD

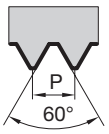
P	•
M	○
K	•
N	•
S	○
H	≤55

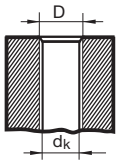
Leikkuuarvosivu 234

Materiaali	TKM	
Pinta	C	C
Malli	TM SP	TM SP
Sisäinen jäähdytys		
Varren muoto	HA	HB

NEW







Tehdas stdr.	Artikkelinro.	4134	4135

D	d1	d2	dk	l1	l2	Z	koodinro.
	mm	mm	mm	mm	mm		
10 - 24	3,400	6,000	3,90	54,000	11,100	3	4,826
12 - 24	4,100	6,000	4,50	54,000	12,200	3	5,486
1/4 - 20	4,700	6,000	5,10	54,000	14,600	3	6,350
5/16 - 18	6,100	8,000	6,60	64,000	17,600	3	7,938
3/8 - 16	7,600	8,000	8,00	64,000	21,400	3	9,525
7/16 - 14	9,000	10,000	9,40	74,000	24,500	3	11,113
1/2 - 13	9,950	10,000	10,80	74,000	28,300	4	12,700
9/16 - 12	11,400	12,000	12,20	90,000	30,700	4	14,288
5/8 - 11	12,700	14,000	13,50	90,000	35,800	4	15,875

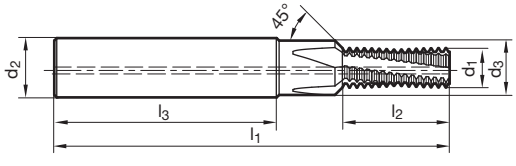
Viisteelliset kierrejyrsimet UNC-kierteille

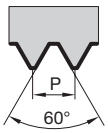
P	•
M	•
K	•
N	•
S	•
H	≤55

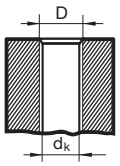
Leikkuuarvosivu 234

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB

NEW







Tehdas stdr.	Artikkelinro.	3516	3534

D	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 20	4,800	8,000	6,600	5,10	62,000	36,000	12,100	3	6,350
5/16 - 18	5,950	10,000	9,000	6,60	74,000	40,000	14,800	3	7,938
3/8 - 16	7,100	12,000	11,000	8,00	80,000	45,000	16,700	4	9,525
7/16 - 14	7,950	12,000	11,000	9,40	80,000	45,000	19,000	4	11,113
1/2 - 13	9,950	14,000	13,500	10,80	90,000	45,000	22,500	4	12,700

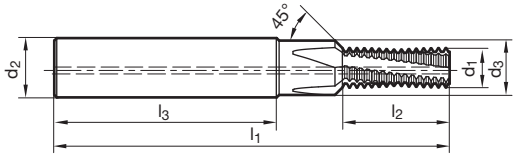
Viisteelliset kierrejyrsimet UNC-kierteille

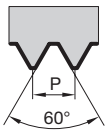
2xD

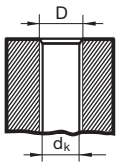
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 235

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr. Artikkelinro. **3517** **3535**

D	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 20	4,800	8,000	6,600	5,10	62,000	36,000	14,600	3	6,350
5/16 - 18	5,950	10,000	9,000	6,60	74,000	40,000	17,600	3	7,938
3/8 - 16	7,100	12,000	11,000	8,00	80,000	45,000	21,400	4	9,525
7/16 - 14	7,950	12,000	11,000	9,40	80,000	45,000	24,500	4	11,113
1/2 - 13	9,950	14,000	13,500	10,80	90,000	45,000	28,300	4	12,700

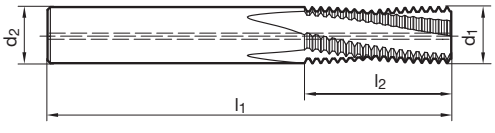
Kierrejyrsimet ilman viistettä UNF-kierteille

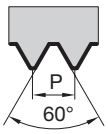
2xD

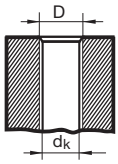
P	•
M	○
K	•
N	•
S	○
H	≤55

Leikkuuarvosivu 234

Materiaali	TKM	
Pinta	C	C
Malli	TM SP	TM SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	4136	4137

D	d1	d2	dk	l1	l2	Z	koodinro.
	mm	mm	mm	mm	mm		
10 - 32	3,800	6,000	4,10	54,000	11,500	3	4,826
12 - 28	4,300	6,000	4,60	54,000	12,200	3	5,486
1/4 - 28	5,100	6,000	5,50	54,000	14,100	3	6,350
5/16 - 24	6,300	8,000	6,90	64,000	17,500	3	7,938
3/8 - 24	7,800	8,000	8,50	64,000	20,600	3	9,525
7/16 - 20	9,400	10,000	9,90	74,000	24,800	3	11,113
1/2 - 20	9,950	10,000	11,50	74,000	27,300	4	12,700
9/16 - 18	11,400	12,000	12,90	90,000	30,300	4	14,288
5/8 - 18	12,700	14,000	14,50	90,000	33,200	4	15,875

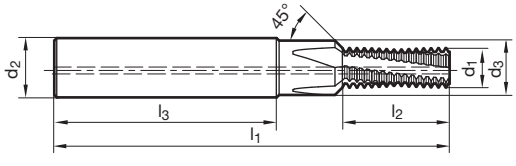
Viisteelliset kierrejyrsimet UNF-kierteille

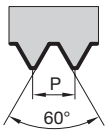
P	•
M	•
K	•
N	•
S	•
H	≤55

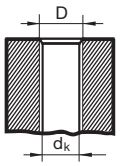
Leikkuuarvosivu 234

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB

NEW







Tehdas stdr.	Artikkelinro.	3518	3536

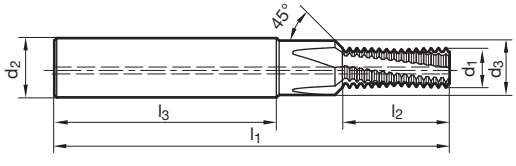
D	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 28	4,800	8,000	6,600	5,50	62,000	36,000	11,300	3	6,350
5/16 - 24	5,950	10,000	9,000	6,90	74,000	40,000	13,200	3	7,938
3/8 - 24	7,950	12,000	11,000	8,50	80,000	45,000	16,400	4	9,525
7/16 - 20	7,950	12,000	11,000	9,90	80,000	45,000	18,400	4	11,113
1/2 - 20	9,950	14,000	13,500	11,50	90,000	45,000	21,000	4	12,700

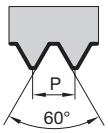
Viisteelliset kierrejyrsimet UNF-kierteille

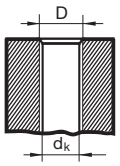
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 235

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3519	3537

D	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 28	4,800	8,000	6,600	5,50	62,000	36,000	14,100	3	6,350
5/16 - 24	5,950	10,000	9,000	6,90	74,000	40,000	17,500	3	7,938
3/8 - 24	7,950	12,000	11,000	8,50	80,000	45,000	20,600	4	9,525
7/16 - 20	7,950	12,000	11,000	9,90	80,000	45,000	24,800	4	11,113
1/2 - 20	9,950	14,000	13,500	11,50	90,000	45,000	27,300	4	12,700

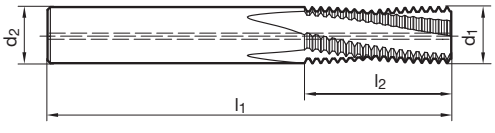
Kierrejyrsimet ilman viistettä BSP-kierteille

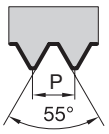
2xD

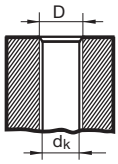
P	•
M	○
K	•
N	•
S	○
H	≤55

Leikkuuarvosivu 234

Materiaali	TKM	
Pinta	C	C
Malli	TM SP	TM SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3745	3748

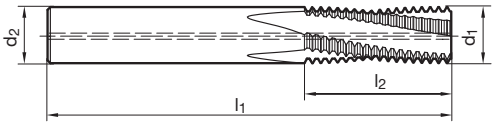
D	P	d1	d2	dk	l1	l2	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm		
G1/8	28,000	7,950	8,000	8,80	64,000	21,300	3	9,728
G1/4	19,000	10,500	12,000	11,80	90,000	28,700	4	13,157
G3/8	19,000	13,600	14,000	15,25	90,000	35,400	4	16,662

Kierrejyrsimet ilman viistettä BSP-kierteille

P	•
M	○
K	•
N	•
S	○
H	≤55

Leikkuuarvosivu 234

Materiaali	TKM	
Pinta	C	C
Malli	TM SP	TM SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW



Tehdas stdr.	Artikkelinro.	3746	3750

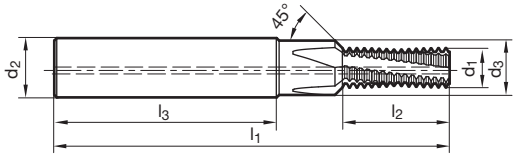
D	P	d1	d2	dk	l1	l2	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm		
G1/8	28,000	7,950	8,000	8,80	64,000	24,900	3	9,728
G1/4	19,000	10,500	12,000	11,80	90,000	35,400	4	13,157
G3/8	19,000	13,600	14,000	15,25	90,000	43,500	4	16,662

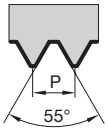
Viisteelliset kierrejyrsimet BSP-kierteille

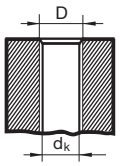
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 234

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3514	3529

D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28,000	7,950	12,000	11,000	8,80	80,000	45,000	15,900	4	9,728
G1/4	19,000	9,950	14,000	13,900	11,80	90,000	45,000	22,100	4	13,157
G3/8	19,000	13,600	18,000	17,500	15,25	102,000	48,000	27,400	4	16,662

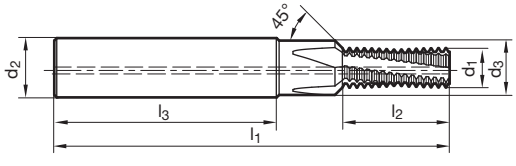
Viisteelliset kierrejyrsimet BSP-kierteille

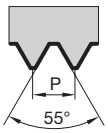
2xD

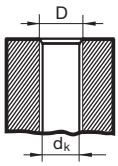
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 235

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr. Artikkelinro. **3515** **3533**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28,000	7,950	12,000	11,000	8,80	80,000	45,000	21,300	4	9,728
G1/4	19,000	9,950	14,000	13,900	11,80	90,000	45,000	28,700	4	13,157
G3/8	19,000	13,600	18,000	17,500	15,25	102,000	48,000	35,400	4	16,662

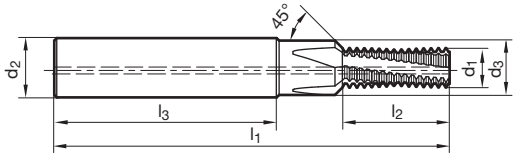
Viisteelliset kierrejyrsimet BSP-kierteille

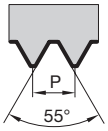
2,5xD

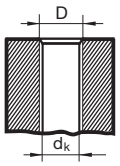
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 235

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3765	3766

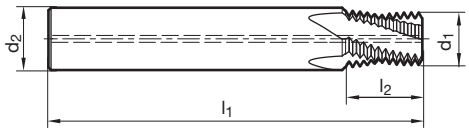
D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28,000	7,950	12,000	11,000	8,80	80,000	45,000	24,900	4	9,728
G1/4	19,000	9,950	14,000	13,900	11,80	90,000	45,000	35,400	4	13,157
G3/8	19,000	13,600	18,000	17,500	15,25	102,000	48,000	43,500	4	16,662

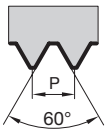
Kierrejyrsimet ilman viistettä NPT-kierteille

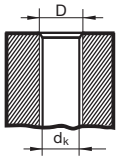
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 234

Materiaali	TKM	
Pinta	C	C
Malli	TM SP	TM SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3753	3754

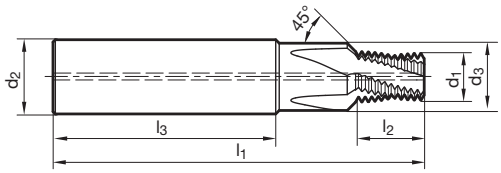
D	P	d1	d2	dk	l1	l2	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm		
1/16	27,000	5,900	8,000	6,15	54,000	9,900	3	8,190
1/8	27,000	7,300	8,000	8,40	64,000	9,900	3	10,620
1/4	18,000	9,950	12,000	11,10	72,000	19,000	4	14,140
3/8	18,000	12,500	14,000	14,30	80,000	14,800	4	17,570

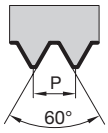
Viisteelliset kierrejyrsimet NPT-kierteille

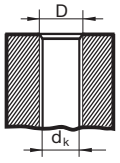
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 234

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3520	3538

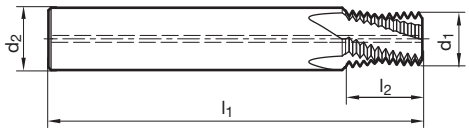
D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
1/8	27,000	7,300	12,000	11,000	8,40	70,000	45,000	9,900	4	10,620
1/4	18,000	9,950	16,000	14,500	11,10	80,000	48,000	14,800	4	14,140
3/8	18,000	12,500	18,000	17,500	14,30	80,000	48,000	14,800	4	17,570

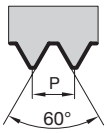
Kierrejyrsimet ilman viistettä NPTF-kierteille

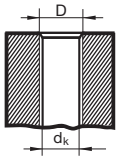
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 234

Materiaali	TKM	
Pinta	C	C
Malli	TM SP	TM SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3756	3757

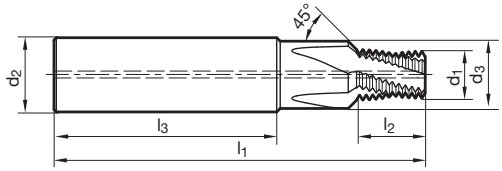
D	P	d1	d2	dk	l1	l2	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm		
1/16	27,000	5,900	8,000	6,15	54,000	9,900	3	8,190
1/8	27,000	7,300	8,000	8,40	64,000	9,900	3	10,620
1/4	18,000	9,950	12,000	11,10	72,000	19,000	4	14,140
3/8	18,000	12,500	14,000	14,30	80,000	14,800	4	17,570

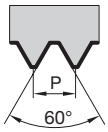
Viisteelliset kierrejyrsimet NPTF-kierteille

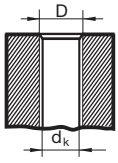
		Materiaali	TKM	
		Pinta	C	C
		Malli	TMC SP	TMC SP
		Sisäinen jäähdytys		
		Varren muoto	HA	HB
P	•			
M	•			
K	•			
N	•			
S	•			
H	≤55			

Leikkuuarvosivu 234

NEW







Tehdas stdr.	Artikkelinro.	3521	3539

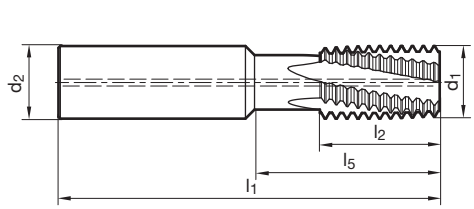
D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
1/8	27,000	7,300	12,000	11,000	8,40	70,000	45,000	9,900	4	10,620
1/4	18,000	9,950	16,000	14,500	11,10	80,000	48,000	14,800	4	14,140
3/8	18,000	12,500	18,000	17,500	14,30	80,000	48,000	14,800	4	17,570

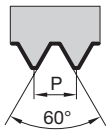
Kierrejyrsimet metrisille ISO-kierteille

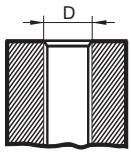
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 235

Materiaali	TKM	
Pinta	C	C
Malli	TMU SP	TMU SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3541	3556

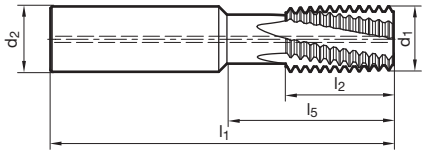
P	D	d1	d2	l1	l5	l2	Z	koodinro.
mm		mm	mm	mm	mm	mm		
0,500	≥ 10	7,950	8,000	64,000		20,000	4	8,050
1,000	≥ 12	9,950	10,000	70,000	25,000	16,000	4	10,100
1,250	≥ 12	9,950	10,000	70,000	25,000	16,000	4	10,125
1,500	≥ 12	9,950	10,000	70,000	25,000	16,000	4	10,150
1,000	≥ 14	11,950	12,000	80,000	31,000	20,000	4	12,100
1,250	≥ 14	11,950	12,000	80,000	31,000	20,000	4	12,125
1,500	≥ 14	11,950	12,000	80,000	31,000	20,000	4	12,150
1,000	≥ 18	15,950	16,000	90,000	40,000	25,000	5	16,100
1,500	≥ 18	15,950	16,000	90,000	40,000	25,000	5	16,150
2,000	≥ 18	15,950	16,000	90,000	40,000	25,000	5	16,200
3,000	≥ 24	17,950	18,000	102,000	50,000	33,000	5	18,300
1,000	≥ 24	19,950	20,000	105,000	50,000	33,000	5	20,100
1,500	≥ 26	19,950	20,000	105,000	50,000	33,000	5	20,150
2,000	≥ 27	19,950	20,000	105,000	50,000	33,000	5	20,200
2,500	≥ 30	19,950	20,000	105,000	50,000	33,000	5	20,250
3,000	≥ 30	19,950	20,000	105,000	50,000	33,000	5	20,300
3,500	≥ 30	19,950	20,000	105,000	50,000	33,000	5	20,350

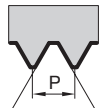
Kierrejyrsimet ulkokierteelle

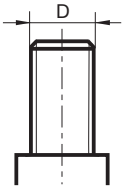
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 235

Materiaali	TKM	
Pinta	C	C
Malli	TMU SP	TMU SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	4162	4163

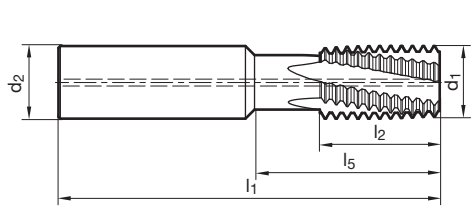
P	D	d1	d2	l1	l5	l2	Z	koodinro.
mm		mm	mm	mm	mm	mm		
0,500	≥ 3	9,950	10,000	70,000	25,000	16,000	4	10,050
0,750	≥ 5	9,950	10,000	70,000	25,000	16,000	4	10,075
1,000	≥ 6	11,950	12,000	80,000	31,000	20,000	4	12,100
1,250	≥ 8	11,950	12,000	80,000	31,000	20,000	4	12,125
1,500	≥ 10	11,950	12,000	80,000	31,000	20,000	4	12,150
1,500	≥ 10	15,950	16,000	90,000	40,000	25,000	5	16,150
2,000	≥ 14	15,950	16,000	90,000	40,000	25,000	5	16,200
2,500	≥ 18	15,950	16,000	90,000	40,000	25,000	5	16,250
3,000	≥ 24	19,950	20,000	105,000	50,000	33,000	5	20,300

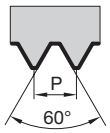
Kierrejyrsimet UN-kierteille

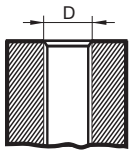
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 235

Materiaali	TKM	
Pinta	C	C
Malli	TMU UN	TMU UN
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3595	3596

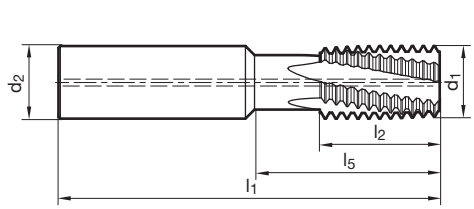
P	D	d1	d2	l1	l5	l2	Z	koodinro.
G/inch		mm	mm	mm	mm	mm		
24,000	≥ 1/2	9,950	10,000	70,000	25,000	16,000	4	10,240
24,000	≥ 1/2	9,950	10,000	70,000	25,000	16,000	4	10,240
10,000	≥ 3/4	11,950	12,000	80,000	31,000	20,000	4	12,100
16,000	≥ 5/8	11,950	12,000	80,000	31,000	20,000	4	12,160
18,000	≥ 5/8	11,950	12,000	80,000	31,000	20,000	4	12,180
20,000	≥ 11/16	11,950	12,000	80,000	31,000	20,000	4	12,200
24,000	≥ 5/8	11,950	12,000	80,000	31,000	20,000	4	12,240
12,000	≥ 7/8	15,950	16,000	90,000	40,000	25,000	5	16,120
14,000	≥ 7/8	15,950	16,000	90,000	40,000	25,000	5	16,140
16,000	≥ 7/8	15,950	16,000	90,000	40,000	25,000	5	16,160
18,000	≥ 7/8	15,950	16,000	90,000	40,000	25,000	5	16,180
20,000	≥ 13/16	15,950	16,000	90,000	40,000	25,000	5	16,200
7,000	≥ 1	19,950	20,000	105,000	50,000	33,000	5	20,070
8,000	≥ 1	19,950	20,000	105,000	50,000	33,000	5	20,080
12,000	≥ 1	19,950	20,000	105,000	50,000	33,000	5	20,120
14,000	≥ 1	19,950	20,000	105,000	50,000	33,000	5	20,140
16,000	≥ 1	19,950	20,000	105,000	50,000	33,000	5	20,160

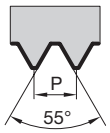
Kierrejyrsimet BSP-kierteille

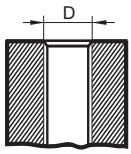
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 235

Materiaali	TKM	
Pinta	C	C
Malli	TM SP	TM SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr. Artikkelinro. **3542** **3557**

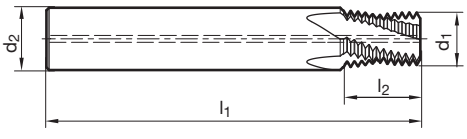
P	D	d1	d2	l1	l5	l2	Z	koodinro.
G/inch		mm	mm	mm	mm	mm		
19,000	≥ 1/4	9,950	10,000	70,000	25,000	16,000	4	10,190
14,000	≥ 1/2	15,950	16,000	90,000	40,000	25,000	5	16,140
11,000	≥ 1	19,950	20,000	105,000	50,000	33,000	5	20,110

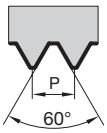
Kierrejyrsimet NPT-kierteille

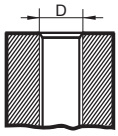
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 235

Materiaali	TKM	
Pinta	C	C
Malli	TM SP	TM SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3768	3769

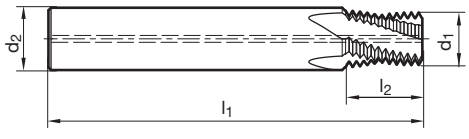
P	D	d1	d2	l1	l2	Z	koodinro.
G/inch		mm	mm	mm	mm		
14,000	≥ 1/2	14,500	16,000	90,000	19,050	5	21,900
11,500	≥ 1	18,500	20,000	90,000	23,190	5	34,180

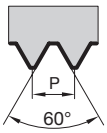
Kierrejyrsimet NPTF-kierteille

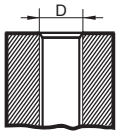
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 235

Materiaali	TKM	
Pinta	C	C
Malli	TM SP	TM SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3772	3773

P	D	d1	d2	l1	l2	Z	koodinro.
G/inch		mm	mm	mm	mm		
14,000	≥ 1/2	14,500	16,000	90,000	19,050	5	21,900
11,500	≥ 1	18,500	20,000	90,000	23,190	5	34,180

Mikro-kierrejyrsimet

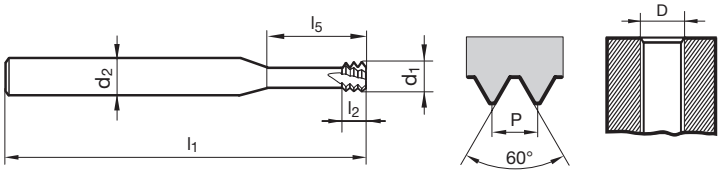
3xD

P	•
M	•
K	•
N	•
S	•
H	

Leikkuuarvosivu 235

Materiaali	**TKM**
Pinta	C
Malli	SP M
Kierteet	3,0
Varren muoto	HA

NEW



Tehdas stdr. Artikkelinro. **4226**

D	P	d1	d2	l1	l2	l5	Z	koodinro.
	mm	mm	mm	mm	mm	mm		
M1,6	0,350	1,200	3,000	39,000	1,100	4,800	3	1,600
M1,8	0,350	1,400	3,000	39,000	1,100	5,400	3	1,800
M2	0,400	1,550	3,000	39,000	1,200	6,000	4	2,000
M2,5	0,450	1,950	3,000	39,000	1,400	7,500	4	2,500
M3	0,500	2,400	6,000	58,000	1,500	9,500	4	3,000
M3,5	0,600	2,800	6,000	58,000	1,800	11,000	4	3,500
M4	0,700	3,200	6,000	58,000	2,100	12,500	4	4,000
M5	0,800	4,000	6,000	58,000	2,400	16,000	4	5,000
M6	1,000	4,800	6,000	58,000	3,000	20,000	4	6,000
M8	1,250	5,950	6,000	58,000	3,800	24,000	4	8,000
M10	1,500	7,800	8,000	73,000	4,500	33,000	4	10,000
M12	1,750	9,000	10,000	84,000	5,300	38,000	4	12,000
M16	2,000	11,800	10,000	84,000	6,000	35,000	5	16,000

Mikro-kierrejyrsimet

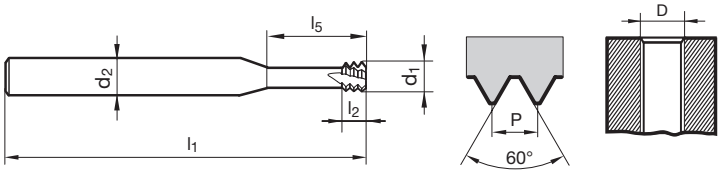
3xD

P	•
M	•
K	•
N	•
S	•
H	

Leikkuuarvosivu 235

Materiaali	**TKM**
Pinta	C
Malli	SP G
Kierteet	3,0
Varren muoto	HA

NEW



Tehdas stdr. Artikkelinro. **4228**

D	P	d1	d2	l1	l2	l5	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm		
G1/8	28,000	6,200	8,000	64,000	2,700	19,500	4	9,728
G3/8	19,000	9,950	10,000	73,000	4,000	25,000	4	16,662
G7/8	14,000	11,950	12,000	84,000	5,400	37,000	4	30,201
G2	11,000	15,950	16,000	105,000	6,900	44,000	5	59,614

Mikro-kierrejyrsimet

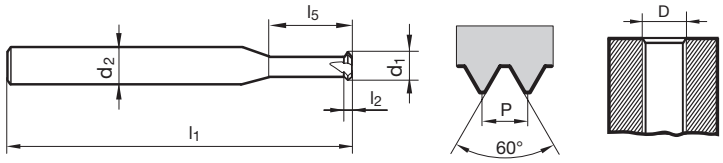
3xD

P	•
M	•
K	•
N	•
S	•
H	

Leikkuuarvosivu 235

Materiaali	**TKM**
Pinta	C
Malli	SP M/MF
Kierteet	1,0
Varren muoto	HA

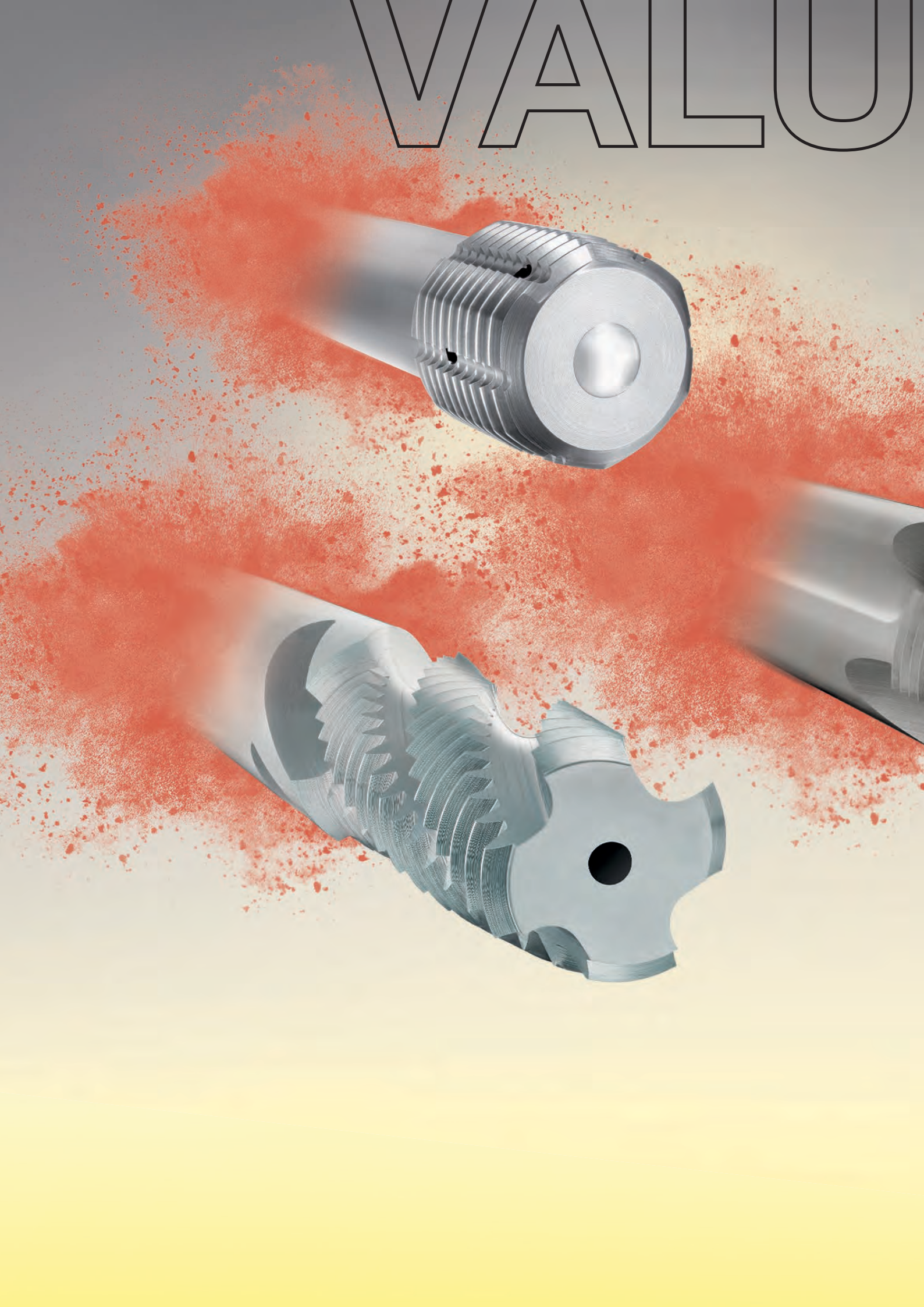
NEW



Tehdas stdr. Artikkelinro. **4225**

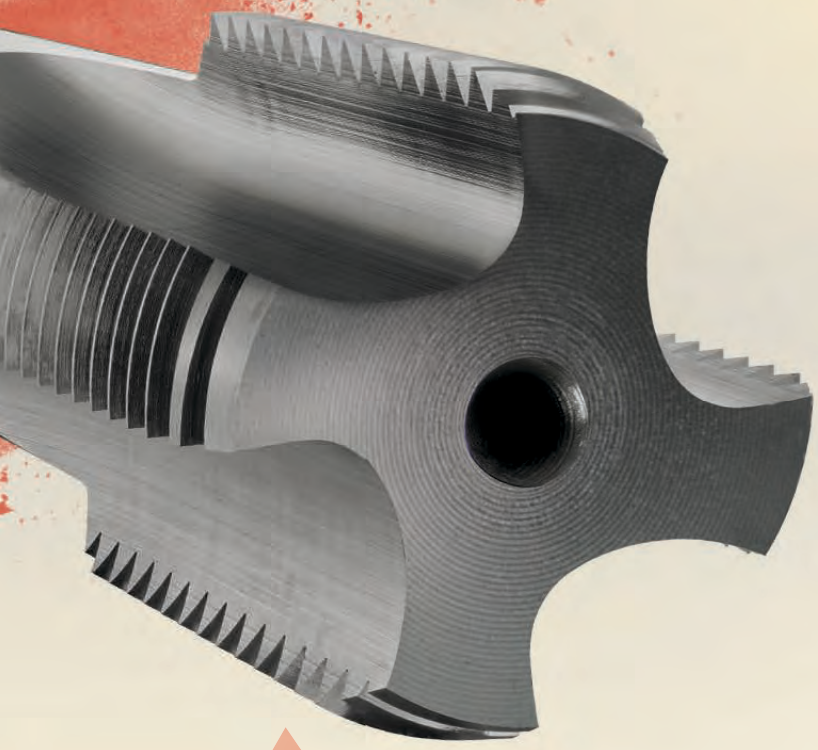
D	P	d1	d2	l1	l2	l5	Z	koodinro.
	mm	mm	mm	mm	mm	mm		
M1,4 - M1,8	0,350	1,050	3,000	39,000	0,400	3,800	3	1,800
M2 - M2,4	0,400	1,500	3,000	39,000	0,400	7,000	3	2,400
M2,5 - M3	0,500	2,000	3,000	39,000	0,500	9,000	4	3,000
M3,5 - M4,5	0,750	2,800	6,000	58,000	0,800	14,000	4	4,500
M5 - M7	1,000	4,000	6,000	58,000	1,000	19,000	4	7,000
M8 - M10	1,500	6,400	8,000	64,000	1,500	24,000	5	10,000

VALU



RAUTA

HARMAAVALU/ TAOTTAVA/ PALLOGRAFIIT-TIVALURAUTA



K

Valuraudat, kuten harmaavalurauta (EN-GJL-250), pallografiitti- ja adusoituvalurauta sekä kuluttavat erikoisvalurautaseokset

VALURAUTA

M

ISO 2/6H

No 1

M3 - M30
Art. nro. 1918/1919
alkaen sivu 356

M3 - M30
Art. nro. 807/819
alkaen sivu 356

ISO 3/6G

No 1

M3 - M10
Art. nro. 2311
alkaen sivu 364

M3 - M20
Art. nro. 1858/1859
alkaen sivu 362

MF

ISO 2/6H

No 1

M4x0,5 - M30x1,5
Art. nro. 169
alkaen sivu 365

M4x0,5 - M30x1,5
Art. nro. 831
alkaen sivu 365

ISO 3/6G

No 1

M5x0,5 - M20x1,5
Art. nro. 1861/1860
alkaen sivu 368

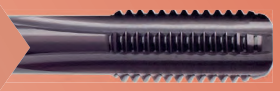
ilman jäähdytyskanavia

jäähdytyskanavilla

No 1 PARAS TYÖKALU

QUICKFINDER

UNC	UNF	G	LÄPIREIKÄ
2B	2B	-	



HSS-E, TiAlN, muoto C

No 1
No. 2 - 3/4
Art. nro. 1979/1984
alkaen sivu 370

No 1
No. 4 - 1
Art. nro. 1989
alkaen sivu 372

No 1
G1/16 - G2
Art. nro. 961
alkaen sivu 374

HSS-E, nitrattu, muoto C

TKM

TKM, TiAlN, muoto C

TKM

TKM, kirkas, muoto C

VALURAUTA

ilman jäähdytyskanavia

M

ISO 2/6H

No 1
M3 - M30
Art. nro. 1918/1919
alkaen sivu 356

M3 - M30
Art. nro. 807/819
alkaen sivu 356

ISO 3/6G

No 1
M4x0,5 - M30x1,5
Art. nro. 169
alkaen sivu 365

M4x0,5 - M30x1,5
Art. nro. 831
alkaen sivu 365

MF

ISO 2/6H

No 1
M5 - M20
Art. nro. 318/319
alkaen sivu 358

No 1
M5 - M10
Art. nro. 2506
alkaen sivu 363

M3 - M20
Art. nro. 969/1883
alkaen sivu 362

ISO 3/6G

No 1
M8x1 - M24x1,5
Art. nro. 347
alkaen sivu 366

No 1
M5x0,5 - M20x1,5
Art. nro. 972/974
alkaen sivu 368

jäähdytyskanavilla

No 1 PARAS TYÖKALU

QUICKFINDER

UNC	UNF	G	POHJAREIKÄ
2B	2B	-	

HSS-E, TiAlN, muoto C

No 1
No. 2 - 3/4
Art. nro. 1979/1984
alkaen sivu 370

No 1
No. 4 - 1
Art. nro. 1989
alkaen sivu 372

G1/16 - G2
Art. nro. 961
alkaen sivu 374

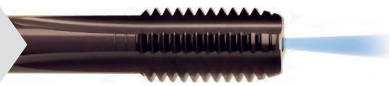
HSS-E, nitrattu, muoto C

No 1
No. 10 - 7/8
Art. nro. 1085/1086
alkaen sivu 371

No 1
No. 10 - 7/8
Art. nro. 1082
alkaen sivu 373

HSS-E, TiAlN, muoto C

TKM



TKM, TiAlN, muoto C

TKM

TKM, kirkas, muoto C

VALURAUTA

kierretapit ilman öljyuria

kierretapit öljyurilla

jäähdytyskanavilla

M

6HX

No 1
M1 - M20
Art. nro. 921/925
alkaen sivu 376

M3 - M39
Art. nro. 919/923
alkaen sivu 379

No 1
M3 - M39
Art. nro. 2012/2013
alkaen sivu 379

No 1
M3 - M20
Art. nro. 1270/1271
alkaen sivu 385

No 1
M3 - M20
Art. nro. 1725/1727
alkaen sivu385

No 1
M3 - M39
Art. nro. 1972/1931
alkaen sivu 389

6GX

No 1
M2 - M10
Art. nro. 920
alkaen sivu 377

No 1
M3 - M39
Art. nro. 918/922
alkaen sivu 379

No 1
M5 - M10
Art. nro. 1713
alkaen sivu 386

No 1
M3 - M20
Art. nro. 1726/1728
alkaen sivu 387

MF

6HX

No 1
M8x1 - M20x1,5
Art. nro. 929
alkaen sivu 391

M6x0,75 - M24x1,5
Art. nro. 1275/927
alkaen sivu 395

No 1
M6x0,75 - M20x1,5
Art. nro. 2008
alkaen sivu 396

No 1
M8x1 - M24x1,5
Art. nro. 1272/1273
alkaen sivu 401

No 1
M8x1 - M24x1,5
Art. nro. 1729/1731
alkaen sivu 401

No 1
M10x1 - M24x1,5
Art. nro. 1581
alkaen sivu 404

6GX

No 1
M8x1 - M18x1,5
Art. nro. 928
alkaen sivu 393

No 1
M8x1 - M20x1,5
Art. nro. 1277/926
alkaen sivu 397

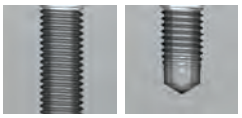
No 1
M8x1 - M24x1,5
Art. nro. 1715/1716
alkaen sivu 402

No 1
M8x1 - M24x1,5
Art. nro. 1730/1732
alkaen sivu 402

No 1 PARAS TYÖKALU

QUICKFINDER

UNC	UNF	G
2BX	2BX	-



LÄPIREIKÄ
POHJAREIKÄ

No 1
Nr. 4 - 7/8
Art. nro. 2273/2274
alkaen sivu 405

No 1
Nr. 4 - 1
Art. nro. 1283/2275
alkaen sivu 406

No 1
G1/16 - G1 1/4
Art. nro. 966
alkaen sivu 407

HSS-E, TiN, muoto C

No 1
Nr. 4 - 7/8
Art. nro. 1582/1583
alkaen sivu 405

No 1
Nr. 4 - 1
Art. nro. 1584/1585
alkaen sivu 406

No 1
G1/16 - G3/4
Art. nro. 1586
alkaen sivu 408

HSS-E, TiN, muoto C

HSS-E, TiCN, muoto C

MUOTO C

HSS-E-PM, TiCN, muoto C

MUOTO E

HSS-E-PM, TiN, muoto E

TKM

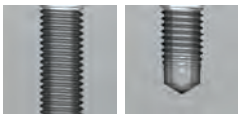
TKM, TiCN, muoto C

VALURAUTA

	M UNIVERSAL	MF UNIVERSAL
1,5xD	No 1 M3 - M20 Art. nro. 3525 alkaen sivu 413	No 1 M4x0,5 - M16x1,5 Art. nro. 3527 alkaen sivu 416
2xD	No 1 M3 - M20 Art. nro. 3526 alkaen sivu 414	No 1 M4x0,5 - M16x1,5 Art. nro. 3528 alkaen sivu 417
2,5xD	No 1 M3 - M20 Art. nro. 3759 alkaen sivu 415	No 1 M4x0,5 - M16x1,5 Art. nro. 3762 alkaen sivu 418
3xD	No 1 M1,6 - M16 Art. nro. 4226 alkaen sivu 440	
universal	No 1 Ø8xP0,5 - Ø20xP3,5 Art. nro. 3541 alkaen sivu 434	No 1 Ø8xP0,5 - Ø20xP3,5 Art. nro. 3541 alkaen sivu 434

No 1 PARAS TYÖKALU

QUICKFINDER

UNC	UNF	G	LÄPIREIKÄ POHJAREIKÄ
UNIVERSAL	UNIVERSAL	-	

Harmaavalu-, pallogra-fiittivalu- ja adusoituva-lurauta

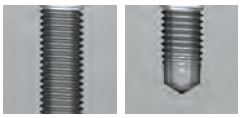
No 1 1/4 - 1/2 Art. nro. 3516 alkaen sivu 420	No 1 1/4 - 1/2 Art. nro. 3518 alkaen sivu 423	No 1 1/8 - 3/8 Art. nro. 3514 alkaen sivu 429	 TKM, TiCN
No 1 1/4 - 1/2 Art. nro. 3517 alkaen sivu 421	No 1 1/4 - 1/2 Art. nro. 3519 alkaen sivu 424	No 1 1/8 - 3/8 Art. nro. 3515 alkaen sivu 430	 TKM, TiCN
			 TKM, TiCN
			 TKM, TiCN
No 1 Ø10xUN24 - Ø20xUN7 Art. nro. 3595 alkaen sivu 436	No 1 Ø10xUN24 - Ø20xUN7 Art. nro. 3595 alkaen sivu 436	No 1 Ø10xG19 - Ø20xG11 Art. nro. 3542 alkaen sivu 437	 TKM, TiCN

VALURAUTA

	M	MF
	UNIVERSAL	UNIVERSAL
1,5xD	No 1 M3 - M16 Art. nro. 3777 alkaen sivu 443	No 1 M4x0,5 - M16x1,5 Art. nro. 3789 alkaen sivu 446
	M3 - M16 Art. nro. 3776 alkaen sivu 443	M4x0,5 - M16x1,5 Art. nro. 3788 alkaen sivu 446
2xD	No 1 M3 - M16 Art. nro. 3781 alkaen sivu 444	No 1 M4x0,5 - M16x1,5 Art. nro. 3793 alkaen sivu 447
	M3 - M16 Art. nro. 3780 alkaen sivu 444	M4x0,5 - M16x1,5 Art. nro. 3792 alkaen sivu 447
2,5xD	No 1 M3 - M16 Art. nro. 3785 alkaen sivu 445	
	M3 - M16 Art. nro. 3784 alkaen sivu 445	

No 1 PARAS TYÖKALU

QUICKFINDER

UNC	UNF	G	
UNIVERSAL	UNIVERSAL	-	 LÄPIREIKÄ POHJAREIKÄ

TKM, TiCN

TKM, TiCN

No 1
1/4 - 5/8
Art. nro. 4139
alkaen sivu 448

No 1
1/4 - 5/8
Art. nro. 4141
alkaen sivu 449

TKM, TiCN

TKM, TiCN

TKM, TiCN

TKM, TiCN

KOMPASSI

K

HARMAA-, PALLOGRAFIITTI- JA ADUSOITUVALUR.

LÄPIREIKÄ

	Kierteen syvyys		≤3xD					
	Materiaali		HSS-E				TKM	
	Malli/Muoto		GG/C	GG/C	GGT/C	GG/C	H/C	H/C
	Pinta		●	S	S	A	○	A
	Jäähdytys		☒	☒	☒	☒	säteitt.	säteitt.
	Varren halkaisija		h9	h9	h9	h9	h6	h6
	Kierteen malli	**Toleranssi**	**Artikkelinro. / sivu**					
	M	4H						
		6H			1875/1876 357			
		6HX	807/819 356	930/931 356		1918/1919 356	1858/1859 362	2311 364
		6G						
	MF	6H						
		6HX	831 365	932 365		169 365	1861/1860 368	
		6G						
	UNC	2B	1979/1984 370					
		2BX						
	UNF	2B	1989 372					
		2BX						
	G		961 374					
	BSW							
	NPT							
	NPTF							
	EG M	6H Mod.						
	MJ	4HX						
	MJF	4HX						
	UNJC	3BX						
	UNJF	3BX						
	PG							
		Jäähdytysneste:	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△

= No 1

○ = Ilma
● = Öljy
○ = Emulsio
△ = Jäähdytysaine
☐ = Pisaravoitelu (MQL)

	Materiaaliryhmä	Vetomurtoluujuus	Materiaaliesimerkkejä	Materiaalinro.	Suositeltu leikkuunopeus vc m/min					
K	valurauta	300 HB	EN-GJL-150 EN-GJL-250 EN-GJL-300	0.6015 0.6025 0.6030	**15**	**20**	**20**	**25**	**45**	**45**
	Pallografiitti ja adusoitu valu	350 HB	EN-GJS-400-15 EN-GJS-600-3 EN-GJS-700-2	0.7040 0.7060 0.7070	**10**	**15**	**15**	**20**	**35**	**35**
	ADI GGV	1000 N/mm² 350 HB	EN-GJS1000-5 EN-GJV250 EN-GJV400		8	**12**	**12**	**15**	30	**30**

K

HARMAA-, PALLOGRAFIITTI- JA ADUSOITUVALUR.

POHJAREIKÄ

		Kierteen syvyys	≤3xD					
		Materiaali	HSS-E					
		Malli/Muoto	GG/C	GG/C	GGT/C	GG/C	GG/C	GGT/C
		Pinta	○	S	S	A	○	A
		Jäähdytys	☒	☒	☒	☒	aksiaal.	aksiaal.
		Varren halkaisija	h9	h9	h9	h9	h9	h9
	Kierteen malli	**Toleranssi**	**Artikkelinro. / sivu**					
	M	4H						
		6H			1875/1876 357			
		6HX	807/819 356	930/931 356		1918/1919 356	1890/1897 358	318/319 358
		6G						
	MF	6H						
		6HX	831 365	932 365		169 365	1904 366	347 366
		6G						
	UNC	2B	1979/1984 370					1085/1086 371
		2BX						
	UNF	2B	1989 372					1082 373
		2BX						
	G		961 374					
	BSW							
	NPT							
	NPTF							
	EG M	6H Mod.						
	MJ	4HX						
	MJF	4HX						
	UNJC	3BX						
	UNJF	3BX						
	PG							
		Jäähdytysneste:	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△

= No 1

○ = Ilma
● = Öljy
○ = Emulsio
△ = Jäähdytysaine
☐ = Pisaravoitelu (MQL)

	Materiaaliryhmä	Vetomurtoluujuus	Materiaaliesimerkkejä	Materiaalinro.	Suositeltu leikkuunopeus vc m/min					
K	valurauta	300 HB	EN-GJL-150 EN-GJL-250 EN-GJL-300	0.6015 0.6025 0.6030	**15**	**20**	**20**	**25**	**15**	**25**
	Pallografiitti ja adusoitu valu	350 HB	EN-GJS-400-15 EN-GJS-600-3 EN-GJS-700-2	0.7040 0.7060 0.7070	**10**	**15**	**15**	**20**	**10**	**20**
	ADI GGV	1000 N/mm² 350 HB	EN-GJS1000-5 EN-GJV250 EN-GJV400		8	**12**	**12**	**15**	8	**15**

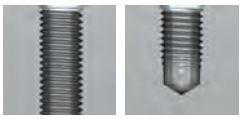
≤3xD

HSS-E-PM					VHM	
H/C	H/C	H/C	H/E	H/C	H/C	H/E
C	C	C	C	○	A	○
aksiaal.	aksiaal.	aksiaal.	aksiaal.	aksiaal.	aksiaal.	aksiaal.
h9	h9	h9	h9	h6	h6	h6
Artikkelinro. / sivu						
778 360	779 361	302/297 359	1091/4165 359	969/1883 362	2506 363	1008 364
		1090 367	1007 367	972/974 368		1009 369
○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△/□	○/●/△

Suositeltu leikkuunopeus vc m/min						
25	25	30	30	45	45	45
20	20	20	20	35	35	35
15	15	15	15	30	30	30

K

HARMAA-, PALLOGRAFIITTI- JA ADUSOITUVALUR.



LÄPIREIÄT JA POHJAREIÄT

Kierteen syvyys			≤1,5xD			≤3xD	
Materiaali			HSS-E	HSS-E-PM	VHM	HSS-E	
Malli/Muoto			N/C	N/C	N/C	N/C	N/C
Pinta			S	S	S	S	C
Jäähdytys			☒	☒	aksiaal.	☒	☒
Varren halkaisija			h9	h9	h6	h9	h9
Kierteen malli	**Toleranssi**		**Artikkelinro. / sivu**				
M	4H						
	6H						
	6HX		921/925 376	1255/1256 376	2518 378	919/923 379	2012/2013 379
	6GX		920 377	903/952 376		918/922 379	
MF	6H						
	6HX		929 391	1257/1258 394		1275/927 395	2008 396
	6GX		928 393	1740 392		1277/926 397	
UNC	2B						
	2BX		2273/2274 405			1582/1583 405	
UNF	2B						
	2BX		1283/2275 406			1584/1585 406	
G			966 407			1586 408	
BSW							
NPT							
NPTF							
EG M	6H Mod.						
MJ	4HX						
MJF	4HX						
UNJC	3BX						
UNJF	3BX						
PG							
		Jäähdytysneste:	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△

= No 1

○ = Ilma
● = Öljy
○ = Emulsio
△ = Jäähdytysaine
☐ = Pisaravoitelu (MQL)

	Materiaaliryhmä	Vetomurtolujuus	Materiaaliesimerkkejä	Materiaalinro.	Suositeltu leikkuunopeus vc m/min				
K	valurauta	300 HB	EN-GJL-150	0.6015	-	-	-	-	-
			EN-GJL-250	0.6025					
			EN-GJL-300	0.6030					
	Pallografiitti ja adusoitu valu	350 HB	EN-GJS-400-15	0.7040	-	-	-	-	-
			EN-GJS-600-3	0.7060	**15**	**15**	**40**	**15**	**20**
			EN-GJS-700-2	0.7070					
	ADI GGV	1000 N/mm²	EN-GJS1000-5		**15**	**15**	**40**	**15**	**20**
		350 HB	EN-GJV250		-	-	-	-	-
			EN-GJV400						

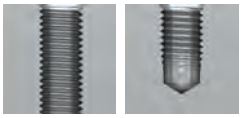
≤3xD

HSS-E		HSS-E-PM							VHM	
N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/E	N/C	N/E
S	C	S	S	S	S	C	A	S	C	C
aksiaal.	säteitt.	☒	☒	säteitt.	aksiaal.	säteitt.	säteitt.	aksiaal.	säteitt.	säteitt.
h9	h9	h9	h9	h9	h9	h9	h9	h9	h6	h6
Artikkelinro. / sivu										
2442/2444 382	2446/2448 382	322/339 380	1266/1267 381	323/342 384	4143 388	1270/1271 385	1717/1719 385	1725/1727 385	1972/1931 389	1927 390
2443/2445 382	2447 383					1713 386	1718/1720 387	1726/1728 387		
		333 399	1268/1269 398	338 400	4145 403	1272/1273 401	1721/1723 401	1729/1731 401	1581 404	
						1715/1716 402		1730/1732 402		
○/●/△	○/●/△/□	○/●/△	○/●/△	○/●/△/□	○/●/△	○/●/△/□	○/●/△/□	○/●/△	○/●/△/□	○/●/△/□

Suositeltu leikkuunopeus vc m/min										
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
15	**20**	**15**	**15**	**15**	**15**	**25**	**25**	**15**	**40**	**40**
15	**20**	**15**	**15**	**15**	**15**	**20**	**20**	**15**	**40**	**40**
-	-	-	-	-	-	-	-	-	-	-

K

HARMAA-, PALLOGRAFIITTI- JA ADUSOITUVALUR.



LÄPIREIÄT JA POHJAREIÄT

Kierteen syvyys	≤2xD				≤2,5xD		≤1,5xD	
Materiaali		TKM						
Malli	TM SP	TM SP	TM SP	TM SP	TM SP	TM SP	TMC SP	TMC SP
Pinta	C	C	C	C	C	C	C	C
Jäähdytys	☒	☒	aksiaal.	aksiaal.	aksiaal.	aksiaal.	aksiaal.	aksiaal.
Varren muoto	HA	HB	HA	HB	HA	HB	HA	HA
Nousu	27°	27°	27°	27°	27°	27°	10°	10°

Kierteen malli	Artikkelinro. / sivu							
M	4132 411	4133 411	3737 410	3743 410	3735 412	3740 412	3525 413	3543 413
MF			3737 410	3743 410			3527 416	3545 416
UNC			4134 419	4135 419			3516 420	3534 420
UNF			4136 422	4137 422			3518 423	3536 423
G			3745 427	3748 427	3746 428	3750 428	3514 429	3529 429
BSW								
NPT			3753 425	3754 425			3520 426	3538 426
NPTF			3756 432	3757 432			3521 433	3539 433
EG M	EG-kierteet voidaan kaiken mallisilla ja kokoisilla kierrejyrsimillä							
MJ								
MJF								
UNJC								
UNJF								
PG								
Jäähdytysneste:	○/●	○/●	○/●	○/●	○/●	○/●	○/●	○/●

= No 1

○ = Ilma
● = Öljy
○ = Emulsio
△ = Jäähdytysaine
☐ = Pisaravoitelu (MQL)

	Materiaaliryhmä	Kovuus	Materiaaliesimerkkejä	Materiaalinro.	Käyttösuositus							
K	valurauta	300 HB	EN-GJL-150 EN-GJL-250 EN-GJL-300	0.6015 0.6025 0.6030	++	++	++	++	++	++	++	++
	Pallografiitti ja adusoitu valu	350 HB	EN-GJS-400-15 EN-GJS-600-3 EN-GJS-700-2	0.7040 0.7060 0.7070	++	++	++	++	++	++	++	++
	ADI GGV	1000 N/mm² 350 HB	EN-GJS1000-5 EN-GJV250 EN-GJV400		++	++	++	++	++	++	++	++

≤2xD		≤2,5xD		universal				≤3xD		≤1,5xD		≤2xD		≤2,5xD	
TKM															
TMC SP	TMC SP	TMC SP	TMC SP	TMU SP	TMU SP	TMU SP	TMU SP	MTM 3 SP	MTM 1 SP	DTMC SP	DTMC SP	DTMC SP	DTMC SP	DTMC SP	DTMC SP
C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
aksiaal.	aksiaal.	aksiaal.	aksiaal.	aksiaal.	aksiaal.	aksiaal.	aksiaal.	☒	☒	☒	säteitt.	☒	säteitt.	☒	säteitt.
HA	HB	HA	HB	HA	HB	HA	HB	HA	HA	HA	HA	HA	HA	HA	HA
10°	10°	27°	27°	15°	15°	15°	15°	15°	15°	27°	27°	27°	27°	27°	27°
Artikkelinro. / sivu															
3526 414	3544 414	3759 415	3760 415	3541 434	3556 434	4162 435	4163 435	4226 440	4225 442	3776 443	3777 443	3780 444	3781 444	3784 445	3785 445
3528 417	3546 417	3762 418	3763 418	3541 434	3556 434	4162 435	4163 435		4225 442	3788 446	3789 446	3792 447	3793 447		
3517 421	3535 421			3595 436	3596 436								4139 448		
3519 424	3537 424			3595 436	3596 436								4141 449		
3515 430	3533 430	3765 431	3766 431	3542 437	3557 437	3542 437	3557 437	4228 441							
				3768 438	3769 438										
				3772 439	3773 439										
EG-kierteet voidaan kaiken mallisilla ja kokoisilla kierrejyrsimillä															
○/●	○/●	○/●	○/●	○/●	○/●	○/●	○/●	○/●	○/●	○/●	○/●	○/●	○/●	○/●	○/●

Käyttösuositus															
++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++
++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++
++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++

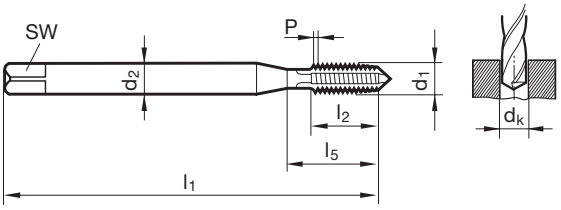
Konekierretapit, metrinen ISO-kierre

Materiaali	HSS-E		
Ø-Toleranssi	6HX	6HX	6HX
Pinta	●	A	S
Malli	GG	GG	GG
Muoto	C	C	C
Sisäinen jäähdytys			

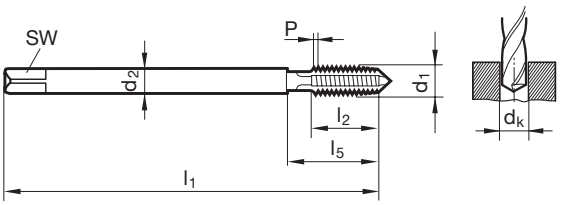
P
M
K •
N
S
H

Leikkuuarvosivu 349/350

DIN 371



DIN 376



DIN 2184-1 DIN 371 Artikkelinro. **807** **1918** **930**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,50	56,000	10,000	18,000
M3,5	0,600	4,000	3,000	2,90	56,000	12,000	20,000
M4	0,700	4,500	3,400	3,30	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,20	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,00	80,000	16,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	17,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	20,000	39,000

DIN 2184-1 DIN 376 Artikkelinro. **819** **1919** **931**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	2,200		2,50	56,000	10,000	18,000
M4	0,700	2,800	2,100	3,30	63,000	12,000	21,000
M5	0,800	3,500	2,700	4,20	70,000	14,000	25,000
M6	1,000	4,500	3,400	5,00	80,000	16,000	30,000
M8	1,250	6,000	4,900	6,80	90,000	17,000	35,000
M10	1,500	7,000	5,500	8,50	100,000	20,000	39,000
M12	1,750	9,000	7,000	10,20	110,000	24,000	49,000
M14	2,000	11,000	9,000	12,00	110,000	26,000	53,000
M16	2,000	12,000	9,000	14,00	110,000	26,000	54,000
M18	2,500	14,000	11,000	15,50	125,000	30,000	62,000
M20	2,500	16,000	12,000	17,50	140,000	32,000	62,000
M22	2,500	18,000	14,500	19,50	140,000	32,000	62,000
M24	3,000	18,000	14,500	21,00	160,000	36,000	73,000
M27	3,000	20,000	16,000	24,00	160,000	36,000	73,000
M30	3,500	22,000	18,000	26,50	180,000	40,000	85,000

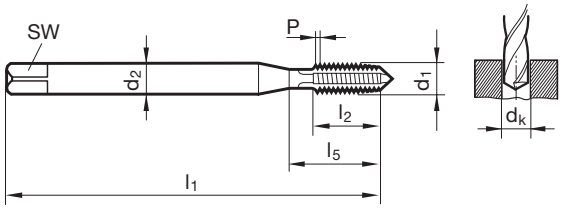
Konekierretapit, metrinen ISO-kierre

Materiaali	**HSS-E**
Ø-Toleranssi	ISO2/6H
Pinta	S
Malli	GGT
Muoto	C
Sisäinen jäähdytys	

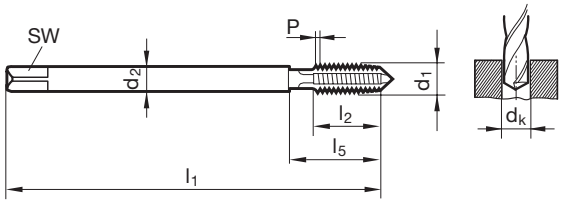
P	
M	
K	•
N	
S	
H	

Leikkuuarvosivu 349/350

DIN 371



DIN 376



DIN 2184-1 DIN 371 Artikkelinro. **1875**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,50	56,000	10,000	18,000
M3,5	0,600	4,000	3,000	2,90	56,000	12,000	20,000
M4	0,700	4,500	3,400	3,30	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,20	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,00	80,000	16,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	17,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	20,000	39,000

DIN 2184-1 DIN 376 Artikkelinro. **1876**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	2,200		2,50	56,000	10,000	18,000
M4	0,700	2,800	2,100	3,30	63,000	12,000	21,000
M5	0,800	3,500	2,700	4,20	70,000	14,000	25,000
M6	1,000	4,500	3,400	5,00	80,000	16,000	30,000
M8	1,250	6,000	4,900	6,80	90,000	17,000	35,000
M10	1,500	7,000	5,500	8,50	100,000	20,000	39,000
M12	1,750	9,000	7,000	10,20	110,000	24,000	49,000
M14	2,000	11,000	9,000	12,00	110,000	26,000	53,000
M16	2,000	12,000	9,000	14,00	110,000	26,000	54,000

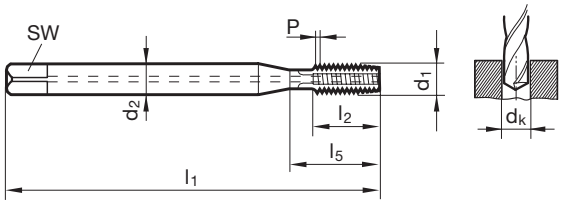
Jäähdytyskanavatapit, metrinen ISO kierre

Materiaali	HSS-E	
Ø-Toleranssi	6HX	6HX
Pinta	●	A
Malli	GG	GG
Muoto	C	C
Sisäinen jäähdytys		

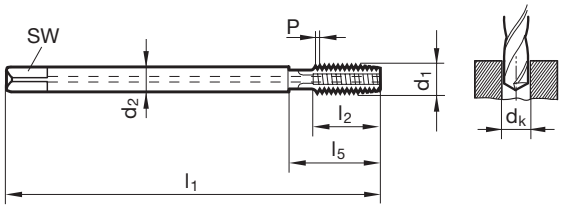
P	
M	
K	•
N	
S	
H	

Leikkuuarvosivu 350

DIN 371



DIN 376



DIN 2184-1 DIN 371 — Artikkelinro. **1890** **318**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0,800	6,000	4,900	4,20	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,00	80,000	16,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	17,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	20,000	39,000

DIN 2184-1 DIN 376 — Artikkelinro. **1897** **319**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	10,20	110,000	24,000	49,000
M14	2,000	11,000	9,000	12,00	110,000	26,000	53,000
M16	2,000	12,000	9,000	14,00	110,000	26,000	54,000
M18	2,500	14,000	11,000	15,50	125,000	30,000	62,000
M20	2,500	16,000	12,000	17,50	140,000	32,000	62,000

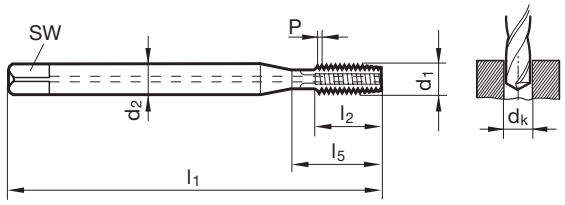
Jäähdytyskanavatapit, metrinen ISO kierre

P	≤ 1200
M	
K	•
N	≥ 7
S	
H	

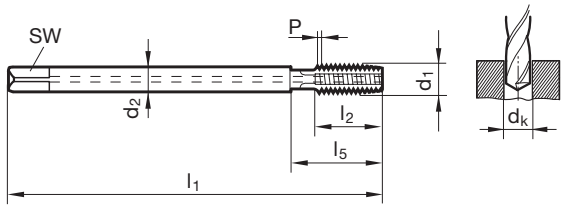
Leikkuuarvosivu 351

Materiaali	HSS-E-PM	
Ø-Toleranssi	6HX	6HX
Pinta	C	C
Malli	H	H
Muoto	C	E
Sisäinen jäähdytys		

DIN 371



DIN 376



DIN 2184-1 DIN 371 — Artikkelinro. **302** **1091**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0,800	6,000	4,900	4,20	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,00	80,000	16,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	17,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	20,000	39,000

DIN 2184-1 DIN 376 — Artikkelinro. **297** **4165**

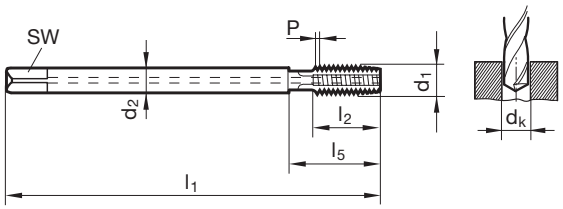
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M10	1,500	7,000	5,500	8,50	100,000	20,000	39,000
M12	1,750	9,000	7,000	10,20	110,000	24,000	49,000
M14	2,000	11,000	9,000	12,00	110,000	26,000	53,000
M16	2,000	12,000	9,000	14,00	110,000	26,000	54,000
M20	2,500	16,000	12,000	17,50	140,000	32,000	62,000

Jäähdytyskanavatapit, metrinen ISO kierre

Materiaali	HSS-E
Ø-Toleranssi	6HX
Pinta	C
Malli	H
Muoto	C
Sisäinen jäähdytys	

P	≤ 1200
M	
K	•
N	≥ 7
S	
H	

Leikkuuarvosivu 351



DIN 2184-1 DIN 376 Artikkelinro. **778**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M16	2,000	12,000	9,000	14,00	110,000	26,000	54,000
M20	2,500	16,000	12,000	17,50	140,000	32,000	62,000
M24	3,000	18,000	14,500	21,00	160,000	36,000	73,000
M27	3,000	20,000	16,000	24,00	160,000	36,000	73,000
M30	3,500	22,000	18,000	26,50	180,000	40,000	85,000
M33	3,500	25,000	20,000	29,50	180,000	40,000	91,000
M36	4,000	28,000	22,000	32,00	200,000	50,000	102,000
M39	4,000	32,000	24,000	35,00	200,000	50,000	107,000

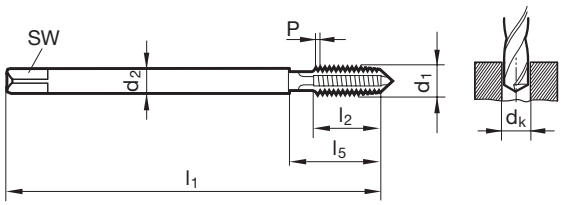
Jäähdytyskanavatapit, metrinen ISO kierre

Materiaali	**HSS-E**
Ø-Toleranssi	6HX
Pinta	C
Malli	H
Muoto	C
Sisäinen jäähdytys	

P	≤ 1200
M	
K	•
N	≥ 7
S	
H	

Leikkuuarvosivu 351

NEW



Tehdas stdr. ~DIN 376 Artikkelinro. **779**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M16	2,000	12,000	9,000	14,00	160,000	26,000	100,000
M20	2,500	16,000	12,000	17,50	180,000	32,000	120,000
M24	3,000	18,000	14,500	21,00	200,000	36,000	120,000
M27	3,000	20,000	16,000	24,00	225,000	36,000	145,000
M30	3,500	22,000	18,000	26,50	250,000	40,000	160,000
M33	3,500	25,000	20,000	29,50	275,000	40,000	170,000
M36	4,000	28,000	22,000	32,00	300,000	50,000	180,000
M39	4,000	32,000	24,000	35,00	325,000	50,000	210,000

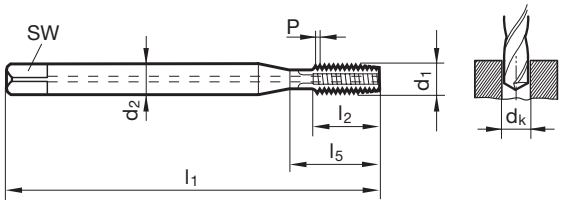
Jäähdytyskanavatapit, metrinen ISO kierre

Materiaali	TKM	
Ø-Toleranssi	6HX	6HX
Pinta	◯	◯
Malli	H	H
Muoto	C	C
Sisäinen jäähdytys		

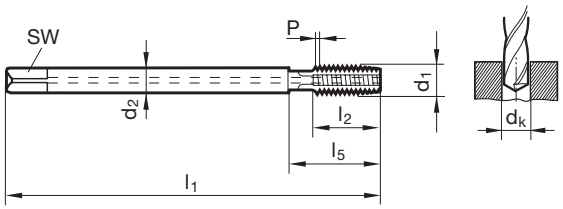
P	
M	
K	•
N	≥ 7
S	
H	

Leikkuuarvosivu 349/351

DIN 371



DIN 376



DIN 2184-1 DIN 371 — Artikkelinro. **969** **1858**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,50	56,000	8,000	18,000
M4	0,700	4,500	3,400	3,30	63,000	10,000	21,000
M5	0,800	6,000	4,900	4,20	70,000	10,000	25,000
M6	1,000	6,000	4,900	5,00	80,000	12,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	16,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	18,000	39,000

DIN 2184-1 DIN 376 — Artikkelinro. **1883** **1859**

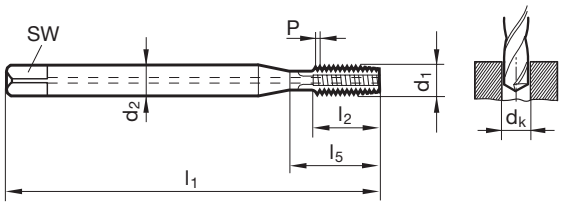
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	10,20	110,000	22,000	49,000
M14	2,000	11,000	9,000	12,00	110,000	22,000	53,000
M16	2,000	12,000	9,000	14,00	110,000	22,000	54,000
M18	2,500	14,000	11,000	15,50	125,000	24,000	45,000
M20	2,500	16,000	12,000	17,50	140,000	25,000	45,000

Jäähdytyskanavatapit, metrinen ISO kierre

Materiaali	TKM
Ø-Toleranssi	6HX
Pinta	A
Malli	H
Muoto	C
Sisäinen jäähdytys	

P	
M	
K	•
N	
S	
H	

Leikkuuarvosivu 351



DIN 2184-1 DIN 371 Artikkelinro. **2506**

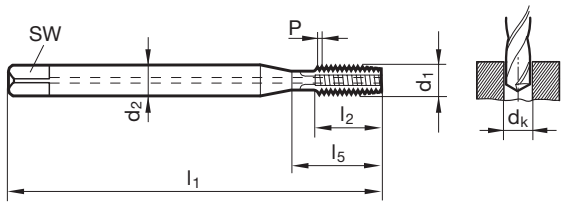
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0,800	6,000	4,900	4,20	70,000	10,000	25,000
M6	1,000	6,000	4,900	5,00	80,000	12,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	16,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	18,000	39,000

Jäähdytyskanavatapit, metrinen ISO kierre

P	
M	
K	•
N	
S	
H	

Leikkuuarvosivu 349/351

Materiaali	TKM		
Ø-Toleranssi	6HX	6HX	6HX
Pinta	A	○	A
Malli	H	H	N R15
Muoto	C	E	C
Sisäinen jäähdytys			



DIN 2184-1 DIN 371 Artikkelinro. **2311** **1008** **2510**

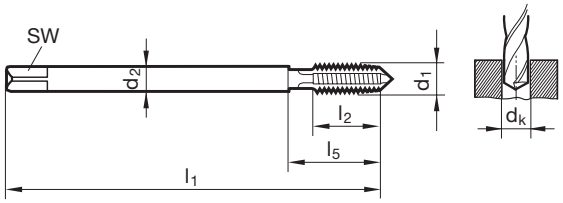
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,50	56,000	8,000	18,000
M4	0,700	4,500	3,400	3,30	63,000	10,000	21,000
M5	0,800	6,000	4,900	4,20	70,000	10,000	25,000
M6	1,000	6,000	4,900	5,00	80,000	12,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	16,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	18,000	39,000

Konekierretapit, metrinen ISO-hienokierre

Materiaali	HSS-E		
Ø-Toleranssi	6HX	6HX	6HX
Pinta	●	S	A
Malli	GG	GG	GG
Muoto	C	C	C
Sisäinen jäähdytys	✕	✕	✕

P	
M	
K	•
N	
S	
H	

Leikkuuarvosivu 349/351



DIN 2184-1 DIN 374 — Artikkelinro. **831** **932** **169**

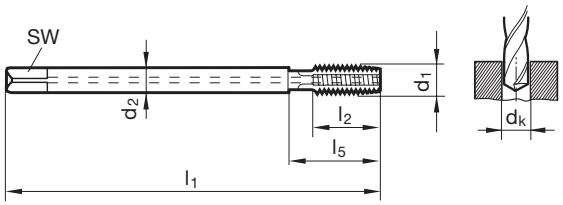
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M4 x 0,5	2,800	2,100	3,50	63,000	8,000	21,000	4,003
M5 x 0,5	3,500	2,700	4,50	70,000	10,000	25,000	5,003
M8 x 1	6,000	4,900	7,00	90,000	16,000	35,000	8,005
M10 x 1	7,000	5,500	9,00	90,000	16,000	35,000	10,005
M10 x 1,25	7,000	5,500	8,80	100,000	20,000	39,000	10,006
M12 x 1	9,000	7,000	11,00	100,000	20,000	40,000	12,005
M12 x 1,25	9,000	7,000	10,80	100,000	20,000	40,000	12,006
M12 x 1,5	9,000	7,000	10,50	100,000	20,000	40,000	12,007
M14 x 1,25	11,000	9,000	12,80	100,000	20,000	40,000	14,006
M14 x 1,5	11,000	9,000	12,50	100,000	20,000	40,000	14,007
M16 x 1,5	12,000	9,000	14,50	100,000	22,000	44,000	16,007
M18 x 1,5	14,000	11,000	16,50	110,000	25,000	44,000	18,007
M20 x 1,5	16,000	12,000	18,50	125,000	25,000	44,000	20,007
M22 x 1,5	18,000	14,500	20,50	125,000	25,000	44,000	22,007
M24 x 1,5	18,000	14,500	22,50	140,000	28,000	48,000	24,007
M30 x 1,5	22,000	18,000	28,50	150,000	28,000	53,000	30,007

Jäähdytyskanavatapit, metrinen ISO hienokierre

Materiaali	HSS-E	
Ø-Toleranssi	6HX	6HX
Pinta	●	A
Malli	GG	GG
Muoto	C	C
Sisäinen jäähdytys		

P	
M	
K	•
N	
S	
H	

Leikkuuarvosivu 350/351



DIN 2184-1 DIN 374 Artikkelinro. **1904** **347**

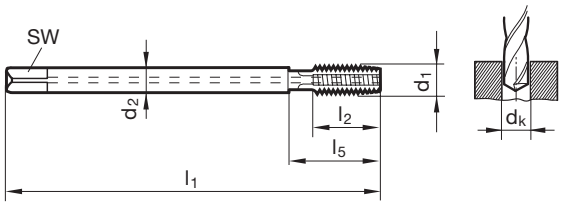
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6,000	4,900	7,00	90,000	16,000	35,000	8,005
M10 x 1	7,000	5,500	9,00	90,000	16,000	35,000	10,005
M12 x 1	9,000	7,000	11,00	100,000	20,000	40,000	12,005
M12 x 1,5	9,000	7,000	10,50	100,000	20,000	40,000	12,007
M14 x 1,5	11,000	9,000	12,50	100,000	20,000	40,000	14,007
M16 x 1,5	12,000	9,000	14,50	100,000	22,000	44,000	16,007
M18 x 1,5	14,000	11,000	16,50	110,000	25,000	44,000	18,007
M20 x 1,5	16,000	12,000	18,50	125,000	25,000	44,000	20,007
M22 x 1,5	18,000	14,500	20,50	125,000	25,000	44,000	22,007
M24 x 1,5	18,000	14,500	22,50	140,000	28,000	48,000	24,007

Jäähdytyskanavatapit, metrinen ISO hienokierre

P	≤ 1200
M	
K	•
N	≥ 7
S	
H	

Leikkuuarvosivu 351

Materiaali	HSS-E-PM	
Ø-Toleranssi	6HX	6HX
Pinta	C	C
Malli	H	H
Muoto	C	E
Sisäinen jäähdytys		



DIN 2184-1 DIN 374 — Artikkelinro. **1090** **1007**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M5 x 0,5	3,500	2,700	4,50	70,000	10,000	25,000	5,003
M6 x 0,5	4,500	3,400	5,50	80,000	13,000	30,000	6,003
M6 x 0,75	4,500	3,400	5,20	80,000	13,000	30,000	6,004
M8 x 0,75	6,000	4,900	7,20	80,000	14,000	30,000	8,004
M8 x 1	6,000	4,900	7,00	90,000	16,000	35,000	8,005
M9 x 1	7,000	5,500	8,00	90,000	16,000	35,000	9,005
M10 x 1	7,000	5,500	9,00	90,000	16,000	35,000	10,005
M10 x 1,25	7,000	5,500	8,80	100,000	20,000	39,000	10,006
M12 x 1	9,000	7,000	11,00	100,000	20,000	40,000	12,005
M12 x 1,25	9,000	7,000	10,80	100,000	20,000	40,000	12,006
M12 x 1,5	9,000	7,000	10,50	100,000	20,000	40,000	12,007
M14 x 1	11,000	9,000	13,00	100,000	20,000	40,000	14,005
M14 x 1,25	11,000	9,000	12,80	100,000	20,000	40,000	14,006
M14 x 1,5	11,000	9,000	12,50	100,000	20,000	40,000	14,007
M16 x 1	12,000	9,000	15,00	100,000	22,000	44,000	16,005
M16 x 1,5	12,000	9,000	14,50	100,000	22,000	44,000	16,007

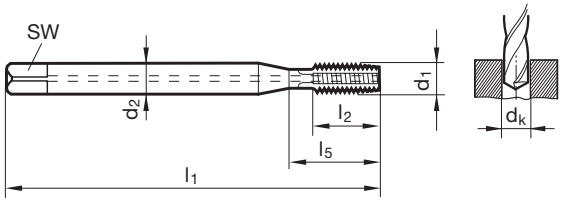
Jäähdytyskanavatapit, metrinen ISO hienokierre

P		
M		
K	•	
N	≥ 7	
S		
H		

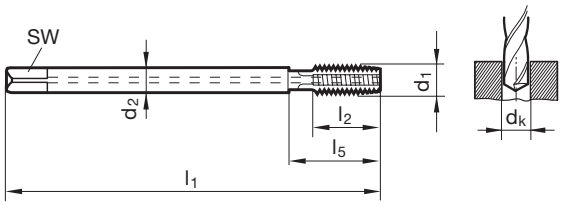
Leikkuuarvosivu 349/351

Materiaali	TKM	
Ø-Toleranssi	6HX	6HX
Pinta	◯	◯
Malli	H	H
Muoto	C	C
Sisäinen jäähdytys		

DIN 371



DIN 374



DIN 2184-1 DIN 371 — Artikkelinro. **972** **1861**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M5 x 0,5	6,000	4,900	4,50	70,000	10,000	25,000	5,003
M8 x 1	8,000	6,200	7,00	90,000	16,000	35,000	8,005
M10 x 1	10,000	8,000	9,00	90,000	18,000	35,000	10,005

DIN 2184-1 DIN 374 — Artikkelinro. **974** **1860**

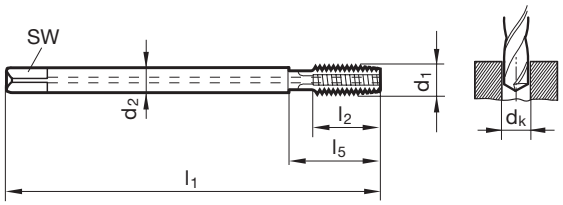
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M12 x 1,5	9,000	7,000	10,50	100,000	22,000	40,000	12,007
M14 x 1,5	11,000	9,000	12,50	100,000	22,000	40,000	14,007
M16 x 1,5	12,000	9,000	14,50	100,000	22,000	44,000	16,007
M18 x 1,5	14,000	11,000	16,50	110,000	24,000	45,000	18,007
M20 x 1,5	16,000	12,000	18,50	125,000	25,000	45,000	20,007

Jäähdytyskanavatapit, metrinen ISO hienokierre

Materiaali	**TKM**
Ø-Toleranssi	6HX
Pinta	◯
Malli	H
Muoto	E
Sisäinen jäähdytys	

P	
M	
K	•
N	≥ 7
S	
H	

Leikkuuarvosivu 351



DIN 2184-1 ~DIN 371/~DIN 374 Artikkelinro. **1009**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M10 x 1	10,000	8,000	9,00	90,000	18,000	35,000	10,005
M12 x 1	9,000	7,000	11,00	100,000	22,000	40,000	12,005
M12 x 1,5	9,000	7,000	10,50	100,000	22,000	40,000	12,007
M14 x 1,5	11,000	9,000	12,50	100,000	22,000	40,000	14,007
M16 x 1,5	12,000	9,000	14,50	100,000	22,000	44,000	16,007

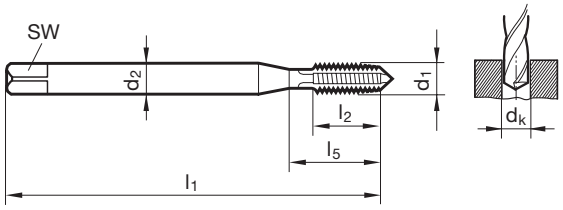
Konekierretapit UNC-kierteille

Materiaali	HSS-E
Ø-Toleranssi	2B
Pinta	●
Malli	GG
Muoto	C
Sisäinen jäähdytys	

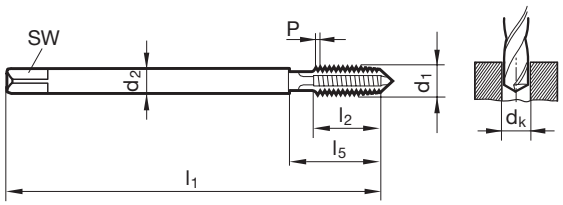
P	
M	
K	•
N	
S	
H	

Leikkuuarvosivu 349/350

~ DIN 371



~ DIN 376



DIN 2184-1 ~DIN 371 Artikkelinro. **1979**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
2 - 56	2,800	2,100	1,85	45,000	9,000	14,500	2,184
3 - 48	2,800	2,100	2,10	50,000	9,000	14,500	2,515
5 - 40	3,500	2,700	2,65	56,000	11,000	18,000	3,175
8 - 32	4,500	3,400	3,50	63,000	12,000	21,000	4,166
10 - 24	6,000	4,900	3,90	70,000	14,000	25,000	4,826
12 - 24	6,000	4,900	4,50	80,000	16,000	30,000	5,486
1/4 - 20	7,000	5,500	5,10	80,000	16,000	30,000	6,350
5/16 - 18	8,000	6,200	6,60	90,000	18,000	35,000	7,938
3/8 - 16	10,000	8,000	8,00	100,000	20,000	39,000	9,525

DIN 2184-1 ~DIN 376 Artikkelinro. **1984**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
7/16 - 14	8,000	6,200	9,40	100,000	22,000	42,000	11,113
1/2 - 13	9,000	7,000	10,80	110,000	25,000	49,000	12,700
9/16 - 12	11,000	9,000	12,20	110,000	28,000	53,000	14,288
5/8 - 11	12,000	9,000	13,50	110,000	30,000	53,000	15,875
3/4 - 10	14,000	11,000	16,50	125,000	33,000	62,000	19,050

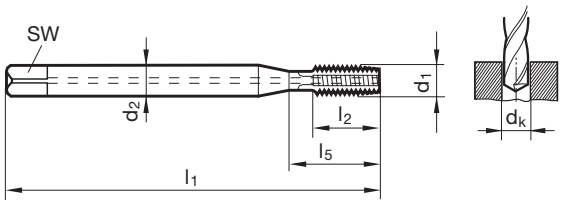
Jäähdytyskanavatapit UNC-kierteille

Materiaali	**HSS-E**
Ø-Toleranssi	2B
Pinta	A
Malli	GG
Muoto	C
Sisäinen jäähdytys	

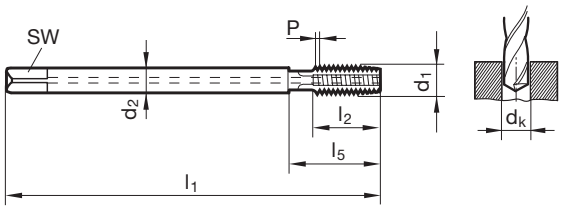
P	
M	
K	•
N	
S	
H	

Leikkuuarvosivu 350

~ DIN 371



~ DIN 376



DIN 2184-1 ~DIN 371 Artikkelinro. **1085**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
10 - 24	6,000	4,900	3,90	70,000	14,000	25,000	4,826
12 - 24	6,000	4,900	4,50	80,000	16,000	30,000	5,486
1/4 - 20	7,000	5,500	5,10	80,000	16,000	30,000	6,350
5/16 - 18	8,000	6,200	6,60	90,000	18,000	35,000	7,938
3/8 - 16	10,000	8,000	8,00	100,000	20,000	39,000	9,525

DIN 2184-1 ~DIN 376 Artikkelinro. **1086**

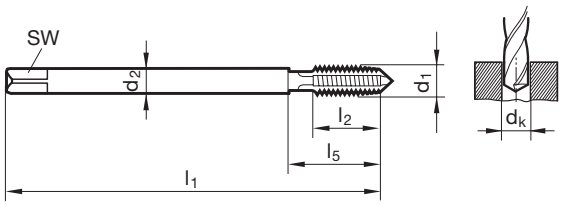
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
7/16 - 14	8,000	6,200	9,40	100,000	22,000	42,000	11,113
1/2 - 13	9,000	7,000	10,80	110,000	25,000	49,000	12,700
5/8 - 11	12,000	9,000	13,50	110,000	30,000	53,000	15,875
3/4 - 10	14,000	11,000	16,50	125,000	33,000	62,000	19,050
7/8 - 9	18,000	14,500	19,50	140,000	35,000	62,000	22,225

Konekierretapit UNF-kierteille

Materiaali	**HSS-E**
Ø-Toleranssi	2B
Pinta	●
Malli	GG
Muoto	C
Sisäinen jäähdytys	

P	
M	
K	•
N	
S	
H	

Leikkuuarvosivu 349/350



DIN 2184-1 ~DIN 374 Artikkelinro. **1989**

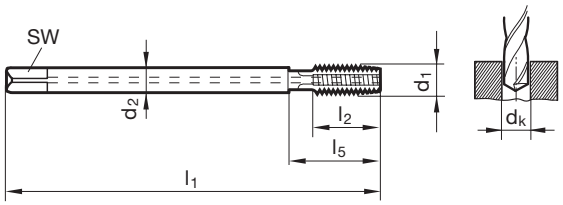
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
4 - 48	2,200		2,40	56,000	10,000	18,000	2,845
8 - 36	2,800	2,100	3,50	63,000	12,000	21,000	4,166
1/4 - 28	4,500	3,400	5,50	80,000	16,000	30,000	6,350
5/16 - 24	6,000	4,900	6,90	90,000	18,000	35,000	7,938
3/8 - 24	7,000	5,500	8,50	90,000	18,000	35,000	9,525
7/16 - 20	8,000	6,200	9,90	100,000	22,000	42,000	11,113
1/2 - 20	9,000	7,000	11,50	100,000	20,000	40,000	12,700
9/16 - 18	11,000	9,000	12,90	100,000	22,000	40,000	14,288
3/4 - 16	14,000	11,000	17,50	110,000	25,000	44,000	19,050
7/8 - 14	18,000	14,500	20,40	125,000	25,000	44,000	22,225
1 - 12	18,000	14,500	23,25	140,000	28,000	50,000	25,400

Jäähdytyskanavatapit UNF-kierteille

Materiaali	**HSS-E**
Ø-Toleranssi	2B
Pinta	A
Malli	GG
Muoto	C
Sisäinen jäähdytys	

P	
M	
K	•
N	
S	
H	

Leikkuuarvosivu 350



DIN 2184-1 ~DIN 374 Artikkelinro. **1082**

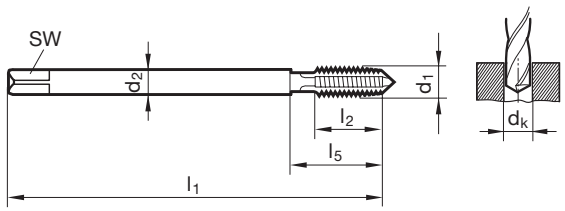
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
10 - 32	3,500	2,700	4,10	70,000	14,000	25,000	4,826
12 - 28	4,000	3,000	4,60	80,000	16,000	30,000	5,486
1/4 - 28	4,500	3,400	5,50	80,000	16,000	30,000	6,350
5/16 - 24	6,000	4,900	6,90	90,000	18,000	35,000	7,938
3/8 - 24	7,000	5,500	8,50	90,000	18,000	35,000	9,525
7/16 - 20	8,000	6,200	9,90	100,000	22,000	42,000	11,113
1/2 - 20	9,000	7,000	11,50	100,000	20,000	40,000	12,700
5/8 - 18	12,000	9,000	14,50	100,000	22,000	44,000	15,875
3/4 - 16	14,000	11,000	17,50	110,000	25,000	44,000	19,050
7/8 - 14	18,000	14,500	20,40	125,000	25,000	44,000	22,225

Konekierretapit BSP-kierteille

Materiaali	HSS-E
Ø-Toleranssi	
Pinta	●
Malli	GG
Muoto	C
Sisäinen jäähdytys	

P	
M	
K	•
N	
S	
H	

Leikkuuarvosivu 349/350



DIN 2184-1 DIN 5156 Artikkelinro. **961**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
G1/16	6,000	4,900	6,80	90,000	18,000	30,000	7,723
G1/8	7,000	5,500	8,80	90,000	18,000	35,000	9,728
G1/4	11,000	9,000	11,80	100,000	20,000	40,000	13,157
G3/8	12,000	9,000	15,25	100,000	22,000	44,000	16,662
G1/2	16,000	12,000	19,00	125,000	25,000	44,000	20,955
G5/8	18,000	14,500	21,00	125,000	25,000	48,000	22,911
G3/4	20,000	16,000	24,50	140,000	28,000	53,000	26,441
G7/8	22,000	18,000	28,25	150,000	28,000	53,000	30,201
G1	25,000	20,000	30,75	160,000	30,000	56,000	33,249
G1 1/8	28,000	22,000	35,50	170,000	30,000	56,000	37,897
G1 1/4	32,000	24,000	39,50	170,000	30,000	57,000	41,910
G1 3/8	36,000	29,000	41,75	180,000	32,000	60,000	44,323
G1 1/2	36,000	29,000	45,25	190,000	32,000	60,000	47,803
G1 3/4	40,000	32,000	51,00	190,000	40,000	93,000	53,746
G2	45,000	35,000	57,00	220,000	40,000	95,000	59,614

Harmaavalu-, pallografiittivalu- ja adusoituvalurauta

MANGLAAVAT KIERRETAPIT

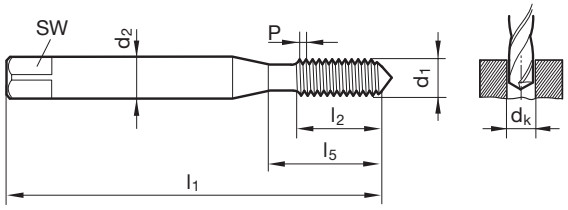
K

Manglaavat kierretapit, metrinen ISO-kierre

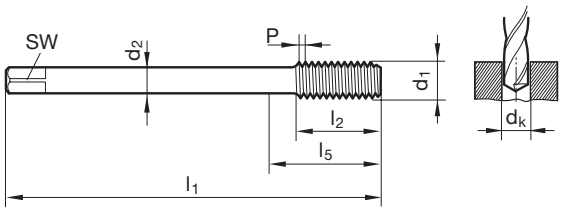
P	•	Leikkuuarvosivu 352
M	•	
K		
N	○	
S		
H		

Materiaali	HSS-E-PM	HSS-E	HSS-E-PM
Ø-Toleranssi	6GX	6HX	6HX
Pinta	S	S	S
Malli	N	N	N
Muoto	C	C	C
Sisäinen jäähdytys	✕	✕	✕

~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371	Artikkelinro.	903	921	1255

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M1	0,250	2,500	2,100	0,90	40,000	4,000	
M1,2	0,250	2,500	2,100	1,10	40,000	4,800	
M1,4	0,300	2,500	2,100	1,25	40,000	5,600	
M1,6	0,350	2,500	2,100	1,45	40,000	6,400	
M1,7	0,350	2,500	2,100	1,55	40,000	6,800	
M1,8	0,350	2,500	2,100	1,65	40,000	7,300	
M2	0,400	2,800	2,100	1,85	45,000	8,000	13,500
M2,5	0,450	2,800	2,100	2,30	50,000	9,000	14,500
M3	0,500	3,500	2,700	2,80	56,000	10,000	18,000
M3,5	0,600	4,000	3,000	3,25	56,000	12,000	20,000
M4	0,700	4,500	3,400	3,70	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,65	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,55	80,000	16,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	17,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	20,000	39,000

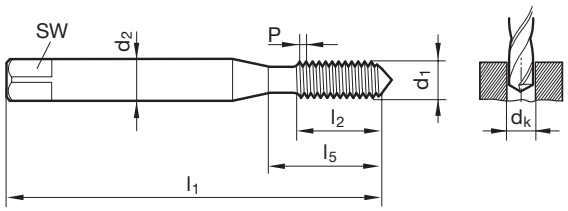
DIN 2174 ~DIN 376	Artikkelinro.	952	925	1256

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	11,20	110,000	24,000	49,000
M14	2,000	11,000	9,000	13,10	110,000	26,000	53,000
M16	2,000	12,000	9,000	15,10	110,000	26,000	54,000
M18	2,500	14,000	11,000	16,90	125,000	30,000	62,000
M20	2,500	16,000	12,000	18,90	140,000	32,000	62,000

Manglaavat kierretapit, metrinen ISO-kierre

Materiaali	**HSS-E**
Ø-Toleranssi	6GX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•	Leikkuuarvosivu 352
M	•	
K		
N	○	
S		
H		



DIN 2174 ~DIN 371 Artikkelinro. **920**

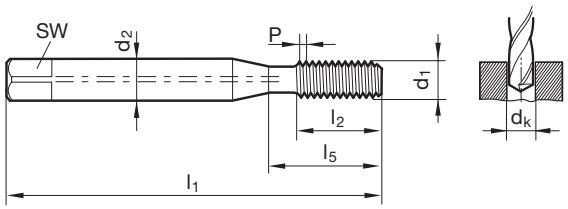
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0,400	2,800	2,100	1,85	45,000	8,000	13,500
M2,5	0,450	2,800	2,100	2,30	50,000	9,000	14,500
M3	0,500	3,500	2,700	2,80	56,000	10,000	18,000
M3,5	0,600	4,000	3,000	3,25	56,000	12,000	20,000
M4	0,700	4,500	3,400	3,70	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,65	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,55	80,000	16,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	17,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	20,000	39,000

Manglaavat kierretapit JK, metrinen ISO-kierre

Materiaali	**TKM**
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	≥ 7
S	○
H	

Leikkuuarvosivu 352



DIN 2174 ~DIN 371/~DIN 376 Artikkelinro. **2518**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0,800	6,000	4,900	4,65	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,55	80,000	11,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	14,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	16,000	39,000
M12	1,750	9,000	7,000	11,20	110,000	18,500	49,000
M16	2,000	12,000	9,000	15,10	110,000	20,000	54,000

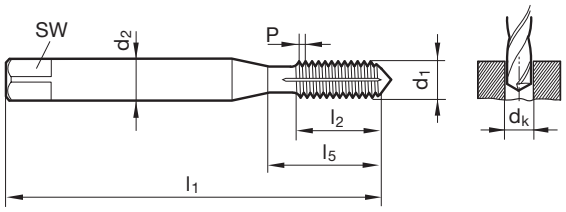
Manglaavat kierretapit, metrinen ISO-kierre

Materiaali	HSS-E		
Ø-Toleranssi	6GX	6HX	6HX
Pinta	S	S	C
Malli	N	N	N
Muoto	C	C	C
Sisäinen jäähdytys	✕	✕	✕

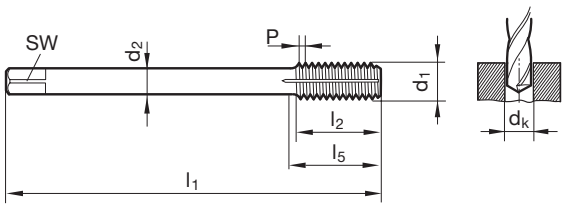
P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 352

~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371 — Artikkelinro. **918** **919** **2012**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,80	56,000	10,000	18,000
M3,5	0,600	4,000	3,000	3,25	56,000	12,000	20,000
M4	0,700	4,500	3,400	3,70	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,65	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,55	80,000	16,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	17,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	20,000	39,000

DIN 2174 ~DIN 376 — Artikkelinro. **922** **923** **2013**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M6	1,000	4,500	3,400	5,55	80,000	16,000	30,000
M8	1,250	6,000	4,900	7,40	90,000	17,000	35,000
M10	1,500	7,000	5,500	9,30	100,000	20,000	39,000
M12	1,750	9,000	7,000	11,20	110,000	24,000	49,000
M14	2,000	11,000	9,000	13,10	110,000	26,000	53,000
M16	2,000	12,000	9,000	15,10	110,000	26,000	54,000
M18	2,500	14,000	11,000	16,90	125,000	30,000	62,000
M20	2,500	16,000	12,000	18,90	140,000	32,000	62,000
M22	2,500	18,000	14,500	20,90	140,000	32,000	62,000
M24	3,000	18,000	14,500	22,70	160,000	36,000	73,000
M27	3,000	20,000	16,000	25,70	160,000	36,000	73,000
M30	3,500	22,000	18,000	28,50	180,000	40,000	85,000
M33	3,500	25,000	20,000	31,50	180,000	40,000	91,000
M36	4,000	28,000	22,000	34,30	200,000	50,000	102,000
M39	4,000	32,000	24,000	37,30	200,000	50,000	107,000

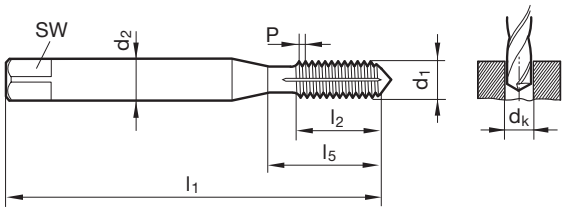
Manglaavat kierretapit, metrinen ISO-kierre

Materiaali	**HSS-E-PM**
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

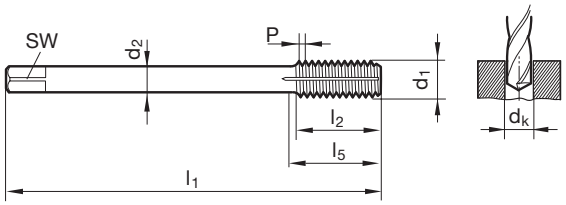
P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 353

~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371 Artikkelinro. **322**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,80	56,000	6,000	18,000
M4	0,700	4,500	3,400	3,70	63,000	7,500	21,000
M5	0,800	6,000	4,900	4,65	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,55	80,000	11,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	14,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	16,000	39,000

DIN 2174 ~DIN 376 Artikkelinro. **339**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	11,20	110,000	18,500	49,000
M16	2,000	12,000	9,000	15,10	110,000	20,000	54,000

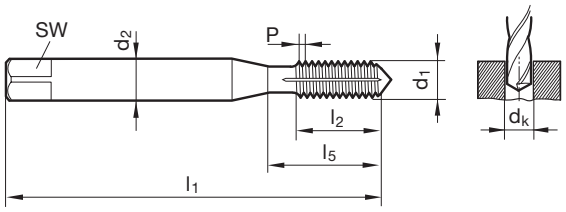
Manglaavat kierretapit, metrinen ISO-kierre

Materiaali	HSS-E-PM
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

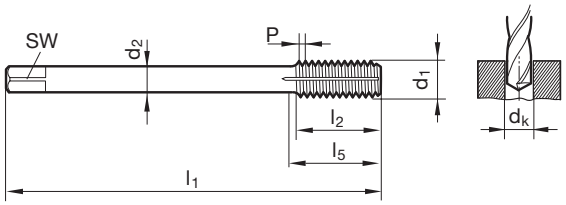
P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 353

~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371 Artikkelinro. **1266**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,80	56,000	10,000	18,000
M4	0,700	4,500	3,400	3,70	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,65	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,55	80,000	16,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	17,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	20,000	39,000

DIN 2174 ~DIN 376 Artikkelinro. **1267**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	11,20	110,000	24,000	49,000
M16	2,000	12,000	9,000	15,10	110,000	26,000	54,000
M20	2,500	16,000	12,000	18,90	140,000	32,000	62,000

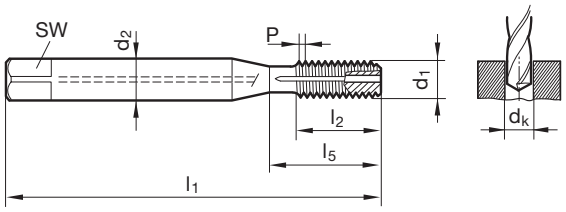
Manglaavat kierretapit JK, metrinen ISO-kierre

Materiaali	HSS-E		
Ø-Toleranssi	6HX	6GX	6HX
Pinta	S	S	C
Malli	N	N	N
Muoto	C	C	C
Sisäinen jäähdytys			

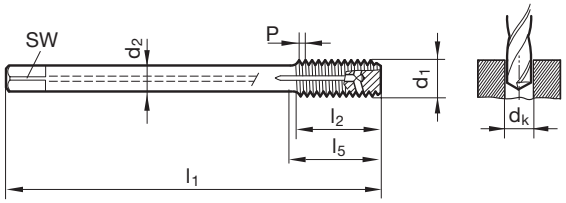
P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 353

~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371 — Artikkelinro. **2442** **2443** **2446**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0,800	6,000	4,900	4,65	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,55	80,000	11,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	14,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	16,000	39,000

DIN 2174 ~DIN 376 — Artikkelinro. **2444** **2445** **2448**

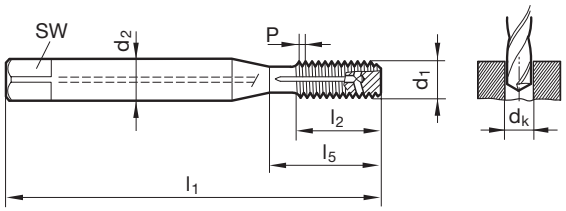
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	11,20	110,000	18,500	49,000
M14	2,000	11,000	9,000	13,10	110,000	20,000	53,000
M16	2,000	12,000	9,000	15,10	110,000	20,000	54,000

Manglaavat kierretapit JK, metrinen ISO-kierre

Materiaali	**HSS-E**
Ø-Toleranssi	6GX
Pinta	C
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	≥ 7
S	○
H	

Leikkuuarvosivu 353



DIN 2174 ~DIN 371 Artikkelinro. **2447**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0,800	6,000	4,900	4,65	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,55	80,000	11,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	14,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	16,000	39,000

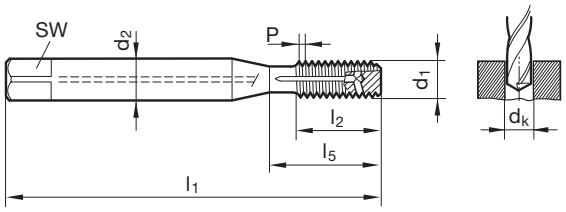
Manglaavat kierretapit JK, metrinen ISO-kierre

Materiaali	**HSS-E-PM**
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

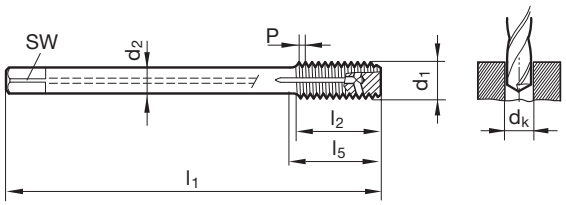
P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 353

~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371 Artikkelinro. **323**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0,800	6,000	4,900	4,65	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,55	80,000	11,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	14,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	16,000	39,000

DIN 2174 ~DIN 376 Artikkelinro. **342**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	11,20	110,000	18,500	49,000
M14	2,000	11,000	9,000	13,10	110,000	20,000	53,000
M16	2,000	12,000	9,000	15,10	110,000	20,000	54,000

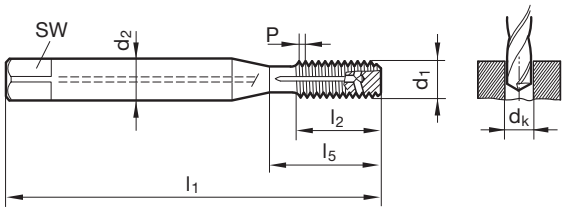
Manglaavat kierretapit JK, metrinen ISO-kierre

P	•
M	•
K	
N	≥ 7
S	•
H	

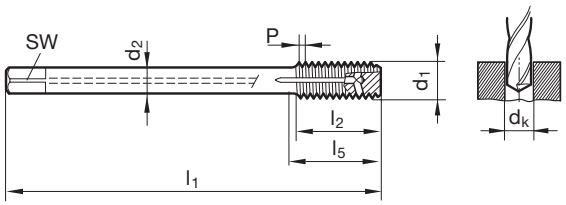
Leikkuuarvosivu 353

Materiaali	HSS-E-PM		
Ø-Toleranssi	6HX	6HX	6HX
Pinta	C	A	S
Malli	N	N	N
Muoto	C	C	E
Sisäinen jäähdytys			

~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371	Artikkelinro.	1270	1717	1725

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,80	56,000	10,000	18,000
M4	0,700	4,500	3,400	3,70	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,65	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,55	80,000	16,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	17,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	20,000	39,000

DIN 2174 ~DIN 376	Artikkelinro.	1271	1719	1727

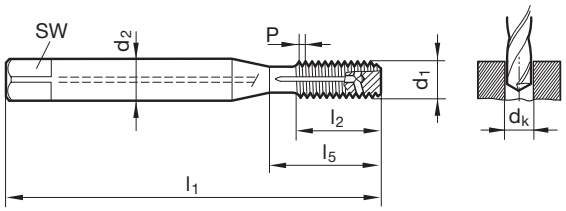
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	11,20	110,000	24,000	49,000
M14	2,000	11,000	9,000	13,10	110,000	26,000	53,000
M16	2,000	12,000	9,000	15,10	110,000	26,000	54,000
M18	2,500	14,000	11,000	16,90	125,000	30,000	62,000
M20	2,500	16,000	12,000	18,90	140,000	32,000	62,000

Manglaavat kierretapit JK, metrinen ISO-kierre

Materiaali	HSS-E-PM
Ø-Toleranssi	6GX
Pinta	C
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	≥ 7
S	•
H	

Leikkuuarvosivu 353



DIN 2174 ~DIN 371 Artikkelinro. **1713**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0,800	6,000	4,900	4,65	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,55	80,000	16,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	17,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	20,000	39,000

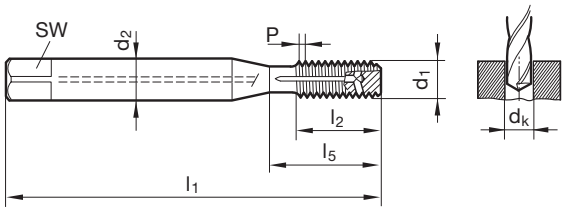
Manglaavat kierretapit JK, metrinen ISO-kierre

P	•
M	•
K	
N	
S	•
H	

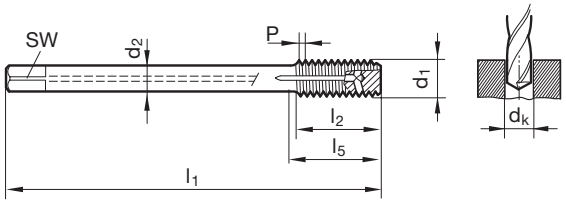
Leikkuuarvosivu 353

Materiaali	HSS-E-PM	
Ø-Toleranssi	6GX	6GX
Pinta	A	S
Malli	N	N
Muoto	C	E
Sisäinen jäähdytys		

~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371 — Artikkelinro. **1718** **1726**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,80	56,000	10,000	18,000
M4	0,700	4,500	3,400	3,70	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,65	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,55	80,000	16,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	17,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	20,000	39,000

DIN 2174 ~DIN 376 — Artikkelinro. **1720** **1728**

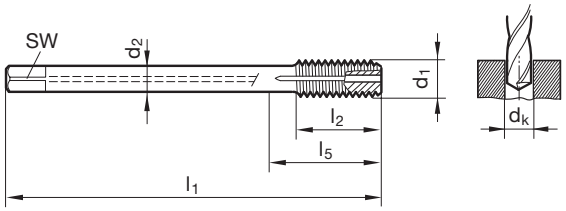
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	11,20	110,000	24,000	49,000
M14	2,000	11,000	9,000	13,10	110,000	26,000	53,000
M16	2,000	12,000	9,000	15,10	110,000	26,000	54,000
M20	2,500	16,000	12,000	18,90	140,000	32,000	62,000

Manglaavat kierretapit JK, metrinen ISO-kierre

Materiaali	HSS-E-PM
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 353



Tehdas stdr. Tehdas stdr. Artikkelinro. **4143**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,80	112,000	6,000	18,000
M4	0,700	2,800	2,100	3,70	112,000	7,500	77,000
M5	0,800	3,500	2,700	4,65	125,000	8,500	90,000
M6	1,000	4,500	3,400	5,55	125,000	11,000	90,000
M8	1,250	6,000	4,900	7,40	140,000	14,000	97,000
M10	1,500	7,000	5,500	9,30	160,000	16,000	117,000
M12	1,750	9,000	7,000	11,20	180,000	18,500	133,000
M16	2,000	12,000	9,000	15,10	220,000	20,000	168,000
M20	2,500	16,000	12,000	18,90	280,000	25,000	225,000

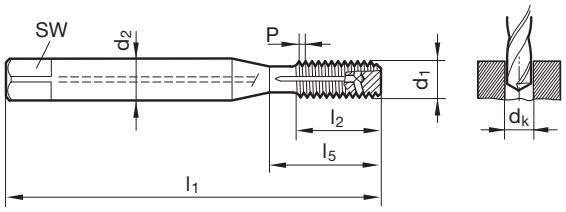
Manglaavat kierretapit JK, metrinen ISO-kierre

Materiaali	**TKM**
Ø-Toleranssi	6HX
Pinta	C
Malli	N
Muoto	C
Sisäinen jäähdytys	

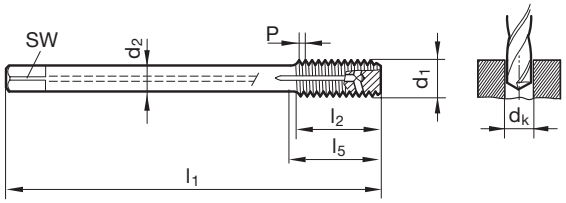
P	•
M	•
K	
N	≥ 7
S	•
H	

Leikkuuarvosivu 353

~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371 Artikkelinro. **1972**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,80	56,000	6,000	18,000
M4	0,700	4,500	3,400	3,70	63,000	7,500	21,000
M5	0,800	6,000	4,900	4,65	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,55	80,000	11,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	14,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	16,000	39,000

DIN 2174 ~DIN 376 Artikkelinro. **1931**

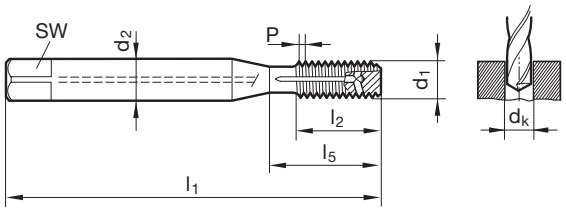
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	11,20	110,000	18,500	49,000
M14	2,000	11,000	9,000	13,10	110,000	20,000	53,000
M16	2,000	12,000	9,000	15,10	110,000	20,000	54,000
M18	2,500	14,000	11,000	16,90	125,000	25,000	62,000
M20	2,500	16,000	12,000	18,90	140,000	25,000	62,000

Manglaavat kierretapit JK, metrinen ISO-kierre

Materiaali	**TKM**
Ø-Toleranssi	6HX
Pinta	C
Malli	N
Muoto	E
Sisäinen jäähdytys	

P	•
M	•
K	
N	≥ 7
S	•
H	

Leikkuuarvosivu 353



DIN 2174 ~DIN 371 Artikkelinro. **1927**

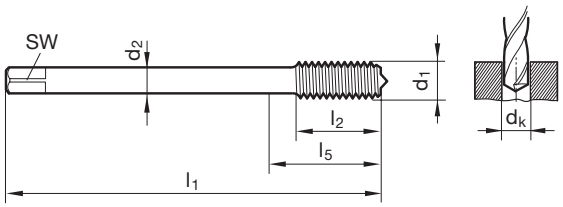
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,80	56,000	6,000	18,000
M4	0,700	4,500	3,400	3,70	63,000	7,500	21,000
M5	0,800	6,000	4,900	4,65	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,55	80,000	11,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	14,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	16,000	39,000

Manglaavat kierretapit, metrinen ISO-hienokierre

Materiaali	**HSS-E**
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	○
S	
H	

Leikkuuarvosivu 352



DIN 2174 ~DIN 374 Artikkelinro. **929**

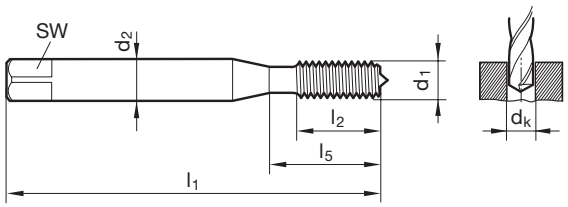
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6,000	4,900	7,55	90,000	16,000	35,000	8,005
M10 x 1	7,000	5,500	9,55	90,000	16,000	35,000	10,005
M14 x 1,5	11,000	9,000	13,30	100,000	20,000	40,000	14,007
M18 x 1	14,000	11,000	17,55	110,000	25,000	44,000	18,005
M18 x 1,5	14,000	11,000	17,30	110,000	25,000	44,000	18,007
M20 x 1	16,000	12,000	19,55	125,000	25,000	44,000	20,005
M20 x 1,5	16,000	12,000	19,30	125,000	25,000	44,000	20,007

Manglaavat kierretapit, metrinen ISO-hienokierre

Materiaali	HSS-E-PM
Ø-Toleranssi	6GX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	○
S	
H	

Leikkuuarvosivu 352



DIN 2174 ~DIN 371 Artikkelinro. **1740**

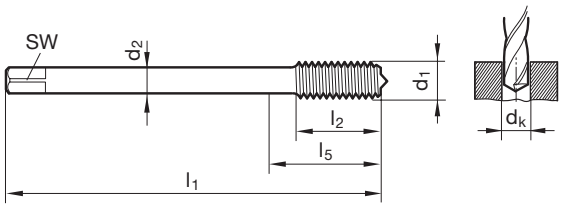
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8,000	6,200	7,55	90,000	16,000	35,000	8,005
M10 x 1	10,000	8,000	9,55	90,000	16,000	35,000	10,005
M10 x 1,25	10,000	8,000	9,40	100,000	20,000	39,000	10,006

Manglaavat kierretapit, metrinen ISO-hienokierre

Materiaali	**HSS-E**
Ø-Toleranssi	6GX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	○
S	
H	

Leikkuuarvosivu 352



DIN 2174 ~DIN 374 Artikkelinro. **928**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6,000	4,900	7,55	90,000	16,000	35,000	8,005
M12 x 1,5	9,000	7,000	11,30	100,000	20,000	40,000	12,007
M16 x 1,5	12,000	9,000	15,30	100,000	22,000	44,000	16,007
M18 x 1	14,000	11,000	17,55	110,000	25,000	44,000	18,005
M18 x 1,5	14,000	11,000	17,30	110,000	25,000	44,000	18,007

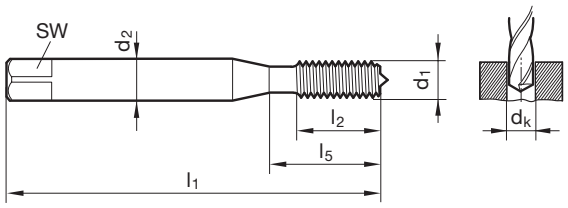
Manglaavat kierretapit, metrinen ISO-hienokierre

Materiaali	**HSS-E-PM**
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

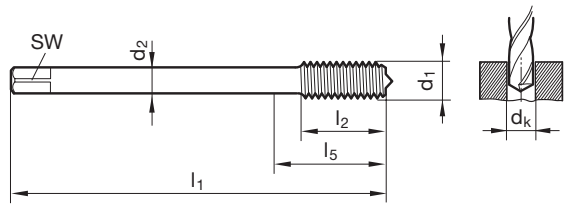
P	•
M	•
K	
N	○
S	
H	

Leikkuuarvosivu 352

~ DIN 371



~ DIN 374



DIN 2174 ~DIN 371 Artikkelinro. **1257**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8,000	6,200	7,55	90,000	16,000	35,000	8,005
M9 x 1	9,000	7,000	8,55	90,000	16,000	35,000	9,005
M10 x 1	10,000	8,000	9,55	90,000	16,000	35,000	10,005

DIN 2174 ~DIN 374 Artikkelinro. **1258**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9,000	7,000	11,55	100,000	20,000	40,000	12,005
M12 x 1,25	9,000	7,000	11,40	100,000	20,000	40,000	12,006
M12 x 1,5	9,000	7,000	11,30	100,000	20,000	40,000	12,007
M14 x 1	11,000	9,000	13,55	100,000	20,000	40,000	14,005
M14 x 1,25	11,000	9,000	13,40	100,000	20,000	40,000	14,006
M14 x 1,5	11,000	9,000	13,30	100,000	20,000	40,000	14,007
M16 x 1	12,000	9,000	15,55	100,000	22,000	44,000	16,005
M16 x 1,5	12,000	9,000	15,30	100,000	22,000	44,000	16,007
M20 x 1	16,000	12,000	19,55	125,000	25,000	44,000	20,005
M20 x 1,5	16,000	12,000	19,30	125,000	25,000	44,000	20,007
M24 x 1,5	18,000	14,500	23,30	140,000	28,000	48,000	24,007
M24 x 2	18,000	14,500	23,10	140,000	28,000	48,000	24,008

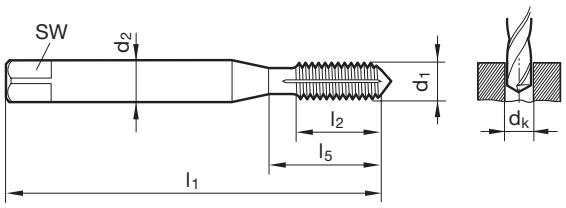
Manglaavat kierretapit, metrinen ISO-hienokierre

Materiaali	**HSS-E**
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

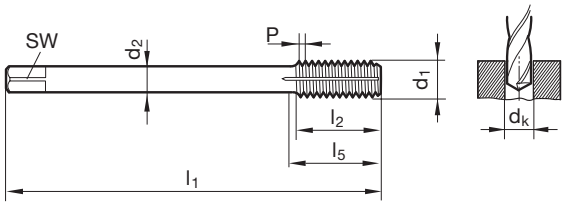
P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 352

~ DIN 371



~ DIN 374



DIN 2174 ~DIN 371 Artikkelinro. **1275**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M6 x 0,75	6,000	4,900	5,65	80,000	13,000	30,000	6,004
M8 x 0,75	8,000	6,200	7,65	80,000	14,000	30,000	8,004
M8 x 1	8,000	6,200	7,55	90,000	16,000	35,000	8,005
M10 x 1	10,000	8,000	9,55	90,000	16,000	35,000	10,005
M10 x 1,25	10,000	8,000	9,40	100,000	20,000	39,000	10,006

DIN 2174 ~DIN 374 Artikkelinro. **927**

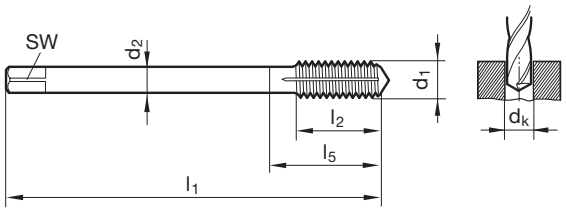
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M6 x 0,75	4,500	3,400	5,65	80,000	13,000	30,000	6,004
M8 x 0,75	6,000	4,900	7,65	80,000	14,000	30,000	8,004
M8 x 1	6,000	4,900	7,55	90,000	16,000	35,000	8,005
M10 x 1	7,000	5,500	9,55	90,000	16,000	35,000	10,005
M10 x 1,25	7,000	5,500	9,40	100,000	20,000	39,000	10,006
M12 x 1	9,000	7,000	11,55	100,000	20,000	40,000	12,005
M12 x 1,25	9,000	7,000	11,40	100,000	20,000	40,000	12,006
M12 x 1,5	9,000	7,000	11,30	100,000	20,000	40,000	12,007
M14 x 1	11,000	9,000	13,55	100,000	20,000	40,000	14,005
M14 x 1,5	11,000	9,000	13,30	100,000	20,000	40,000	14,007
M16 x 1,5	12,000	9,000	15,30	100,000	22,000	44,000	16,007
M18 x 1	14,000	11,000	17,55	110,000	25,000	44,000	18,005
M18 x 1,5	14,000	11,000	17,30	110,000	25,000	44,000	18,007
M20 x 1	16,000	12,000	19,55	125,000	25,000	44,000	20,005
M20 x 1,5	16,000	12,000	19,30	125,000	25,000	44,000	20,007
M22 x 1,5	18,000	14,500	21,30	125,000	25,000	44,000	22,007
M24 x 1,5	18,000	14,500	23,30	140,000	28,000	48,000	24,007

Manglaavat kierretapit, metrinen ISO-hienokierre

Materiaali	HSS-E
Ø-Toleranssi	6HX
Pinta	C
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	≥ 7
S	○
H	

Leikkuuarvosivu 352



DIN 2174 ~DIN 374 Artikkelinro. **2008**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M6 x 0,75	4,500	3,400	5,65	80,000	13,000	30,000	6,004
M8 x 0,75	6,000	4,900	7,65	80,000	14,000	30,000	8,004
M8 x 1	6,000	4,900	7,55	90,000	16,000	35,000	8,005
M10 x 1,25	7,000	5,500	9,40	100,000	20,000	39,000	10,006
M12 x 1,5	9,000	7,000	11,30	100,000	20,000	40,000	12,007
M16 x 1,5	12,000	9,000	15,30	100,000	22,000	44,000	16,007
M20 x 1,5	16,000	12,000	19,30	125,000	25,000	44,000	20,007

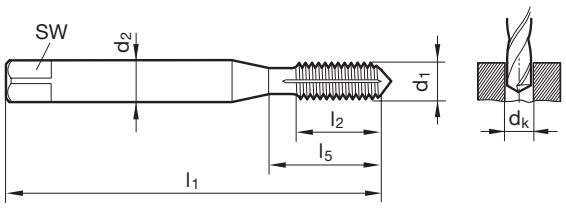
Manglaavat kierretapit, metrinen ISO-hienokierre

Materiaali	**HSS-E**
Ø-Toleranssi	6GX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

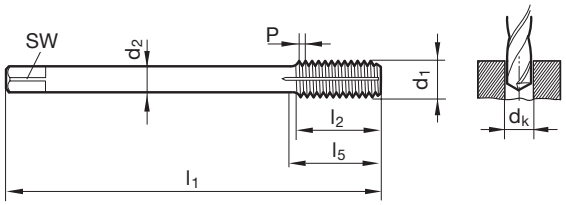
P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 352

~ DIN 371



~ DIN 374



DIN 2174 ~DIN 371 Artikkelinro. **1277**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8,000	6,200	7,55	90,000	16,000	35,000	8,005
M10 x 1	10,000	8,000	9,55	90,000	16,000	35,000	10,005

DIN 2174 ~DIN 374 Artikkelinro. **926**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6,000	4,900	7,55	90,000	16,000	35,000	8,005
M10 x 1	7,000	5,500	9,55	90,000	16,000	35,000	10,005
M12 x 1	9,000	7,000	11,55	100,000	20,000	40,000	12,005
M12 x 1,5	9,000	7,000	11,30	100,000	20,000	40,000	12,007
M14 x 1,5	11,000	9,000	13,30	100,000	20,000	40,000	14,007
M16 x 1	12,000	9,000	15,55	100,000	22,000	44,000	16,005
M16 x 1,5	12,000	9,000	15,30	100,000	22,000	44,000	16,007
M18 x 1,5	14,000	11,000	17,30	110,000	25,000	44,000	18,007
M20 x 1,5	16,000	12,000	19,30	125,000	25,000	44,000	20,007

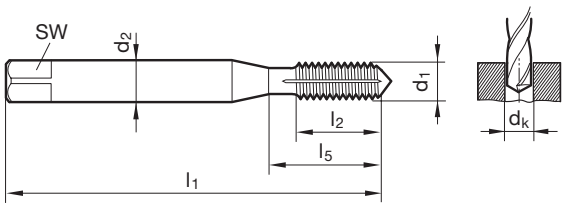
Manglaavat kierretapit, metrinen ISO-hienokierre

Materiaali	**HSS-E-PM**
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

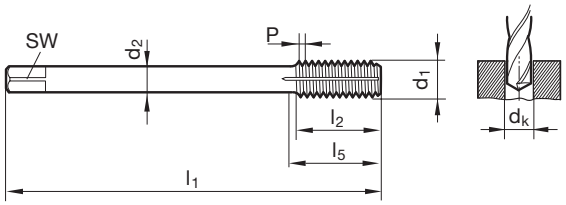
P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 353

~ DIN 371



~ DIN 374



DIN 2174 ~DIN 371 Artikkelinro. **1268**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8,000	6,200	7,55	90,000	16,000	35,000	8,005
M10 x 1	10,000	8,000	9,55	90,000	16,000	35,000	10,005

DIN 2174 ~DIN 374 Artikkelinro. **1269**

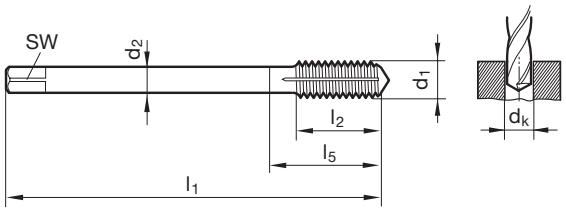
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M12 x 1,25	9,000	7,000	11,40	100,000	20,000	40,000	12,006
M12 x 1,5	9,000	7,000	11,30	100,000	20,000	40,000	12,007
M14 x 1	11,000	9,000	13,55	100,000	20,000	40,000	14,005
M14 x 1,25	11,000	9,000	13,40	100,000	20,000	40,000	14,006
M14 x 1,5	11,000	9,000	13,30	100,000	20,000	40,000	14,007
M16 x 1,5	12,000	9,000	15,30	100,000	22,000	44,000	16,007
M18 x 1,5	14,000	11,000	17,30	110,000	25,000	44,000	18,007
M20 x 1	16,000	12,000	19,55	125,000	25,000	44,000	20,005
M20 x 1,5	16,000	12,000	19,30	125,000	25,000	44,000	20,007
M24 x 2	18,000	14,500	23,10	140,000	28,000	48,000	24,008

Manglaavat kierretapit, metrinen ISO-hienokierre

Materiaali	HSS-E-PM
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 353



DIN 2174 ~DIN 374 Artikkelinro. **333**

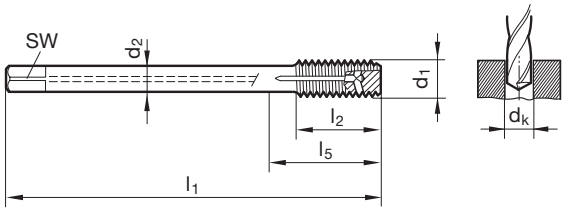
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6,000	4,900	7,55	90,000	11,000	35,000	8,005
M10 x 1	7,000	5,500	9,55	90,000	11,000	35,000	10,005
M12 x 1	9,000	7,000	11,55	100,000	11,000	40,000	12,005
M12 x 1,5	9,000	7,000	11,30	100,000	16,000	40,000	12,007
M14 x 1,5	11,000	9,000	13,30	100,000	15,000	40,000	14,007
M16 x 1,5	12,000	9,000	15,30	100,000	15,000	44,000	16,007
M18 x 1,5	14,000	11,000	17,30	110,000	16,000	44,000	18,007
M20 x 1,5	16,000	12,000	19,30	125,000	16,000	44,000	20,007

Manglaavat kierretapit JK, metrinen ISO-hienokierre

Materiaali	HSS-E-PM
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 353



DIN 2174 ~DIN 374 Artikkelinro. **338**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6,000	4,900	7,55	90,000	11,000	35,000	8,005
M10 x 1	7,000	5,500	9,55	90,000	11,000	35,000	10,005
M12 x 1,5	9,000	7,000	11,30	100,000	16,000	40,000	12,007
M14 x 1,5	11,000	9,000	13,30	100,000	15,000	40,000	14,007
M16 x 1,5	12,000	9,000	15,30	100,000	15,000	44,000	16,007

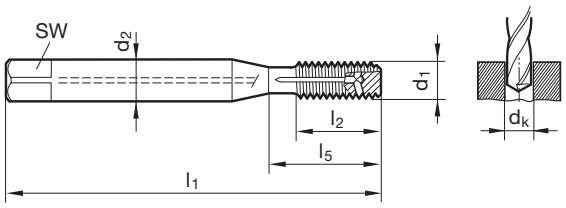
Manglaavat kierretapit JK, metrinen ISO-hienokierre

P	•
M	•
K	
N	≥ 7
S	•
H	

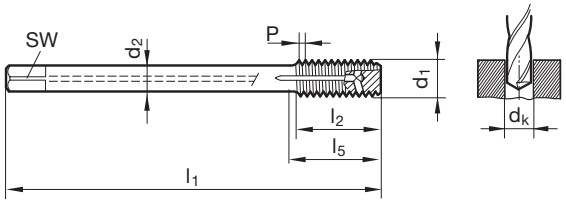
Leikkuuarvosivu 353

Materiaali	HSS-E-PM		
Ø-Toleranssi	6HX	6HX	6HX
Pinta	C	A	S
Malli	N	N	N
Muoto	C	C	E
Sisäinen jäähdytys			

~ DIN 371



~ DIN 374



DIN 2174 ~DIN 371 — Artikkelinro. **1272** **1721** **1729**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8,000	6,200	7,55	90,000	16,000	35,000	8,005
M9 x 1	9,000	7,000	8,55	90,000	16,000	35,000	9,005
M10 x 1	10,000	8,000	9,55	90,000	16,000	35,000	10,005
M10 x 1,25	10,000	8,000	9,40	100,000	20,000	39,000	10,006

DIN 2174 ~DIN 374 — Artikkelinro. **1273** **1723** **1731**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9,000	7,000	11,55	100,000	20,000	40,000	12,005
M12 x 1,25	9,000	7,000	11,40	100,000	20,000	40,000	12,006
M12 x 1,5	9,000	7,000	11,30	100,000	20,000	40,000	12,007
M14 x 1	11,000	9,000	13,55	100,000	20,000	40,000	14,005
M14 x 1,25	11,000	9,000	13,40	100,000	20,000	40,000	14,006
M14 x 1,5	11,000	9,000	13,30	100,000	20,000	40,000	14,007
M16 x 1,5	12,000	9,000	15,30	100,000	22,000	44,000	16,007
M18 x 1,5	14,000	11,000	17,30	110,000	25,000	44,000	18,007
M20 x 1	16,000	12,000	19,55	125,000	25,000	44,000	20,005
M20 x 1,5	16,000	12,000	19,30	125,000	25,000	44,000	20,007
M22 x 1,5	18,000	14,500	21,30	125,000	25,000	44,000	22,007
M24 x 1,5	18,000	14,500	23,30	140,000	28,000	48,000	24,007

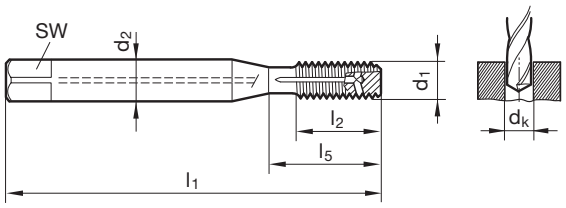
Manglaavat kierretapit JK, metrinen ISO-hienokierre

Materiaali	HSS-E-PM	
Ø-Toleranssi	6GX	6GX
Pinta	C	S
Malli	N	N
Muoto	C	E
Sisäinen jäähdytys		

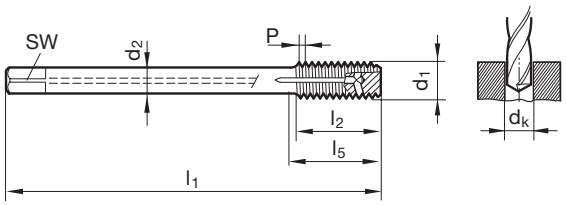
P	•
M	•
K	
N	≥ 7
S	•
H	

Leikkuuarvosivu 353

~ DIN 371



~ DIN 374



DIN 2174 ~DIN 371 — Artikkelinro. **1715** **1730**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8,000	6,200	7,55	90,000	16,000	35,000	8,005
M10 x 1	10,000	8,000	9,55	90,000	16,000	35,000	10,005
M10 x 1,25	10,000	8,000	9,40	100,000	20,000	39,000	10,006

DIN 2174 ~DIN 374 — Artikkelinro. **1716** **1732**

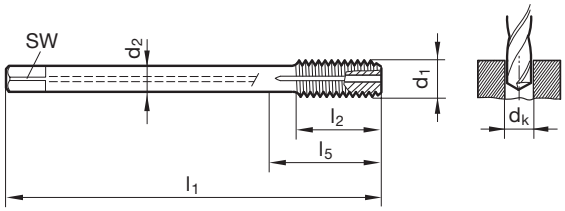
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9,000	7,000	11,55	100,000	20,000	40,000	12,005
M12 x 1,5	9,000	7,000	11,30	100,000	20,000	40,000	12,007
M14 x 1,5	11,000	9,000	13,30	100,000	20,000	40,000	14,007
M16 x 1,5	12,000	9,000	15,30	100,000	22,000	44,000	16,007
M18 x 1,5	14,000	11,000	17,30	110,000	25,000	44,000	18,007
M20 x 1,5	16,000	12,000	19,30	125,000	25,000	44,000	20,007
M24 x 1,5	18,000	14,500	23,30	140,000	28,000	48,000	24,007

Manglaavat kierretapit JK, metrinen ISO-hienokierre

Materiaali	HSS-E-PM
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 353



Tehdas stdr. Tehdas stdr. Artikkelinro. **4145**

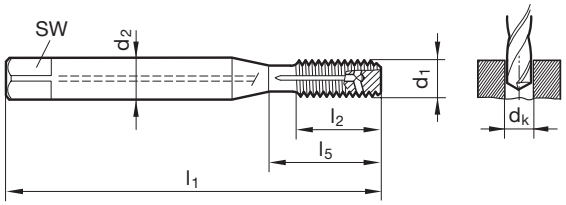
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6,000	4,900	7,55	140,000	14,000	97,000	8,005
M10 x 1	7,000	5,500	9,55	160,000	16,000	117,000	10,005
M10 x 1,25	7,000	5,500	9,40	160,000	16,000	117,000	10,006
M12 x 1	9,000	7,000	11,55	180,000	18,500	133,000	12,005
M12 x 1,5	9,000	7,000	11,30	180,000	18,500	133,000	12,007
M14 x 1,5	11,000	9,000	13,30	220,000	20,000	168,000	14,007
M16 x 1,5	12,000	9,000	15,30	220,000	20,000	168,000	16,007

Manglaavat kierretapit JK, metrinen ISO-hienokierre

Materiaali	**TKM**
Ø-Toleranssi	6HX
Pinta	C
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	≥ 7
S	•
H	

Leikkuuarvosivu 353



DIN 2174 ~DIN 371/~DIN 376 Artikkelinro. **1581**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M10 x 1	10,000	8,000	9,55	90,000	11,000	35,000	10,005
M12 x 1	9,000	7,000	11,55	100,000	15,000	40,000	12,005
M12 x 1,5	9,000	7,000	11,30	100,000	15,000	40,000	12,007
M14 x 1	11,000	9,000	13,55	100,000	15,000	40,000	14,005
M14 x 1,25	11,000	9,000	13,40	100,000	15,000	40,000	14,006
M14 x 1,5	11,000	9,000	13,30	100,000	15,000	40,000	14,007
M16 x 1,5	12,000	9,000	15,30	100,000	15,000	44,000	16,007
M18 x 1,5	14,000	11,000	17,30	110,000	15,000	44,000	18,007
M20 x 1,5	16,000	12,000	19,30	125,000	15,000	44,000	20,007
M24 x 1,5	18,000	14,500	23,30	140,000	15,000	48,000	24,007

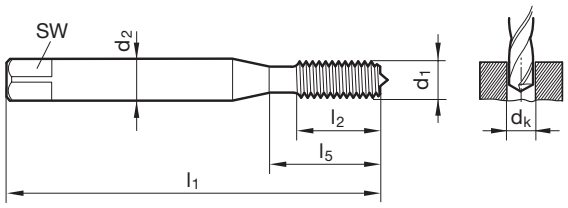
Manglaavat kierretapit UNC-kierteille

Materiaali	HSS-E	
Ø-Toleranssi	2BX	2BX
Pinta	S	S
Malli	N	N
Muoto	C	C
Sisäinen jäähdytys		

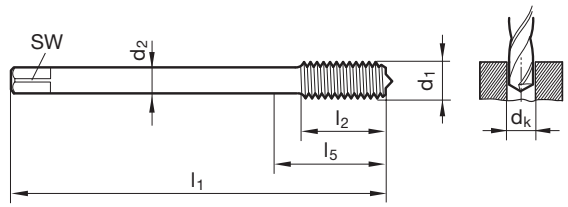
P	•
M	•
K	
N	○
S	
H	

Leikkuuarvosivu 352

~ DIN 371



~ DIN 376



DIN 2184-1 ~DIN 371 Artikkelinro. **2273** **1582**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
4 - 40	3,500	2,700	2,55	56,000	11,000	18,000	2,845
5 - 40	3,500	2,700	2,90	56,000	11,000	18,000	3,175
6 - 32	4,000	3,000	3,15	56,000	12,000	20,000	3,505
8 - 32	4,500	3,400	3,80	63,000	12,000	21,000	4,166
10 - 24	6,000	4,900	4,35	70,000	14,000	25,000	4,826
12 - 24	6,000	4,900	5,00	80,000	16,000	30,000	5,486
1/4 - 20	7,000	5,500	5,75	80,000	16,000	30,000	6,350
5/16 - 18	8,000	6,200	7,30	90,000	18,000	35,000	7,938
3/8 - 16	10,000	8,000	8,80	100,000	20,000	39,000	9,525

DIN 2184-1 ~DIN 376 Artikkelinro. **2274** **1583**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
7/16 - 14	8,000	6,200	10,30	100,000	22,000	42,000	11,113
1/2 - 13	9,000	7,000	11,80	110,000	25,000	49,000	12,700
9/16 - 12	11,000	9,000	13,30	110,000	28,000	53,000	14,288
5/8 - 11	12,000	9,000	14,80	110,000	30,000	53,000	15,875
3/4 - 10	14,000	11,000	17,90	125,000	33,000	62,000	19,050
7/8 - 9	18,000	14,500	21,00	140,000	35,000	62,000	22,225

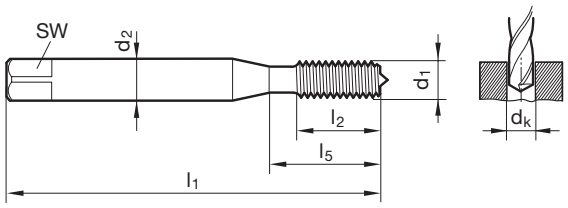
Manglaavat kierretapit UNF-kierteille

Materiaali	HSS-E	
Ø-Toleranssi	2BX	2BX
Pinta	S	S
Malli	N	N
Muoto	C	C
Sisäinen jäähdytys		

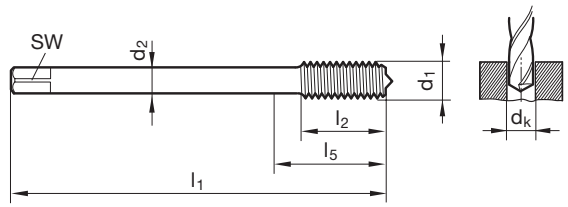
P	•
M	•
K	
N	○
S	
H	

Leikkuuarvosivu 352

~ DIN 371



~ DIN 374



DIN 2184-1 ~DIN 371 Artikkelinro. **1283** **1584**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
4 - 48	3,500	2,700	2,60	56,000	10,000	18,000	2,845
5 - 44	3,500	2,700	2,90	56,000	10,000	18,000	3,175
6 - 40	4,000	3,000	3,20	56,000	11,000	20,000	3,505
8 - 36	4,500	3,400	3,85	63,000	12,000	21,000	4,166
10 - 32	6,000	4,900	4,45	70,000	14,000	25,000	4,826
12 - 28	6,000	4,900	5,10	80,000	16,000	30,000	5,486
1/4 - 28	7,000	5,500	5,95	80,000	16,000	30,000	6,350
5/16 - 24	8,000	6,200	7,45	90,000	18,000	35,000	7,938
3/8 - 24	10,000	8,000	9,05	90,000	18,000	35,000	9,525

DIN 2184-1 ~DIN 374 Artikkelinro. **2275** **1585**

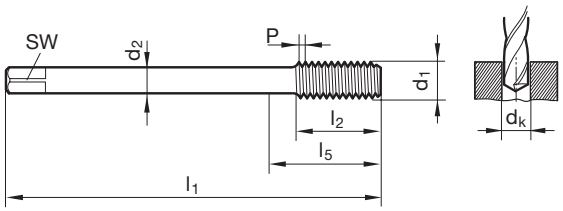
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
10 - 32	0,794	3,500	2,700	4,45	70,000	14,000	25,000
1/4 - 28	0,907	4,500	3,400	5,95	80,000	16,000	30,000
12 - 28	0,907	4,000	3,000	5,10	80,000	16,000	30,000
3/8 - 24	1,058	7,000	5,500	9,05	90,000	18,000	35,000
5/16 - 24	1,058	6,000	4,900	7,45	90,000	18,000	35,000
1/2 - 20	1,270	9,000	7,000	12,10	100,000	20,000	40,000
5/8 - 18	1,411	12,000	9,000	15,25	100,000	22,000	44,000
7/16 - 20	1,270	8,000	6,200	10,55	100,000	22,000	42,000
9/16 - 18	1,411	11,000	9,000	13,65	100,000	22,000	40,000
3/4 - 16	1,587	14,000	11,000	18,35	110,000	25,000	44,000
7/8 - 14	1,814	18,000	14,500	21,40	125,000	25,000	44,000
1 - 12	2,117	18,000	14,500	24,45	140,000	28,000	50,000

Manglaavat kierretapit BSP-kierteille

Materiaali	HSS-E
Ø-Toleranssi	X
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	○
S	
H	

Leikkuuarvosivu 352



DIN 2184-1 DIN 2189 Artikkelinro. **966**

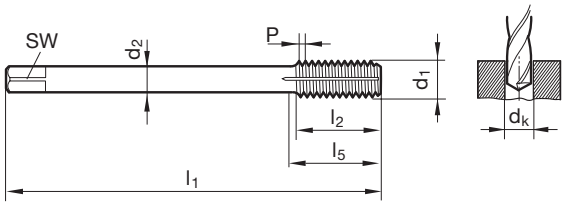
d1	P	d2	SW	dk	l1	l2	l5	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28,000	6,000	4,900	7,30	90,000	18,000	30,000	7,723
G1/8	28,000	7,000	5,500	9,30	90,000	18,000	35,000	9,728
G1/4	19,000	11,000	9,000	12,50	100,000	20,000	40,000	13,157
G3/8	19,000	12,000	9,000	16,00	100,000	22,000	44,000	16,662
G1/2	14,000	16,000	12,000	20,00	125,000	25,000	44,000	20,955
G3/4	14,000	20,000	16,000	25,50	140,000	28,000	53,000	26,441
G1	11,000	25,000	20,000	32,00	160,000	30,000	56,000	33,249
G1 1/4	11,000	32,000	24,000	40,75	170,000	30,000	57,000	41,910

Manglaavat kierretapit BSP-kierteille

Materiaali	HSS-E
Ø-Toleranssi	X
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 352



DIN 2184-1 DIN 2189 Artikkelinro. **1586**

d1	P	d2	SW	dk	l1	l2	l5	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28,000	6,000	4,900	7,30	90,000	18,000	30,000	7,723
G1/8	28,000	7,000	5,500	9,30	90,000	18,000	35,000	9,728
G1/4	19,000	11,000	9,000	12,50	100,000	20,000	40,000	13,157
G3/8	19,000	12,000	9,000	16,00	100,000	22,000	44,000	16,662
G1/2	14,000	16,000	12,000	20,00	125,000	25,000	44,000	20,955
G3/4	14,000	20,000	16,000	25,50	140,000	28,000	53,000	26,441

Harmaavalu-, pallografiittivalu- ja adusoituvaluraudat

KIERRE-JYRSIMET

K

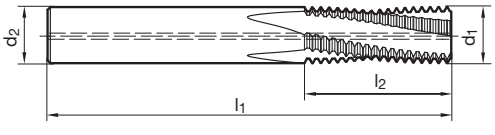
Kierrejyrsimet ilman viistettä metrisille ISO-kierteille

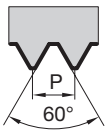
2xD

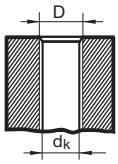
P	•
M	○
K	•
N	•
S	○
H	≤55

Leikkuuarvosivu 354

Materiaali	TKM		
Pinta	C	C	◯
Malli	TM SP	TM SP	TM SP
Sisäinen jäähdytys			
Varren muoto	HA	HB	HA
		NEW	







Tehdas stdr.	Artikkelinro.	3737	3743	3734

D	P	d1	d2	dk	l1	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm		
M6	1,000	4,800	6,000	5,00	54,000	13,500	3	6,000
M8	1,250	6,400	8,000	6,80	62,000	18,100	3	8,000
M8 x 1	1,000	6,400	8,000	7,00	62,000	17,500	3	8,005
M10	1,500	7,950	10,000	8,50	74,000	21,800	3	10,000
M10 x 1	1,000	7,950	10,000	9,00	74,000	21,500	3	10,005
M10 x 1,25	1,250	7,950	10,000	8,80	74,000	21,900	3	10,006
M12	1,750	9,950	10,000	10,20	74,000	25,400	4	12,000
M12 x 1,5	1,500	9,950	10,000	10,50	74,000	26,300	4	12,007
M14	2,000	11,200	12,000	12,00	90,000	31,000	4	14,000
M14 x 1,5	1,500	11,200	12,000	12,50	90,000	30,800	4	14,007
M16	2,000	12,800	14,000	14,00	90,000	35,000	4	16,000
M16 x 1,5	1,500	12,800	14,000	14,50	90,000	33,800	4	16,007
M20	2,500	14,950	16,000	17,50	102,000	41,300	4	20,000
M20 x 1,5	1,500	14,950	16,000	18,50	102,000	42,800	4	20,007

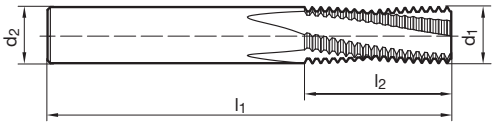
Kierrejyrsimet ilman viistettä metrisille ISO-kierteille

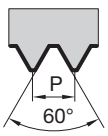
2xD

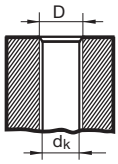
P	•
M	○
K	•
N	•
S	○
H	≤55

Leikkuuarvosivu 354

Materiaali	TKM	
Pinta	C	C
Malli	TM SP	TM SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	4132	4133

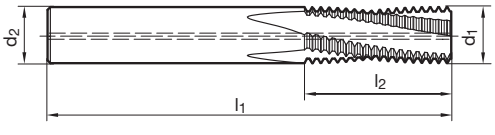
D	P	d1	d2	dk	l1	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm		
M6	1,000	4,800	6,000	5,00	54,000	13,500	3	6,000
M8	1,250	6,400	8,000	6,80	62,000	18,100	3	8,000
M10	1,500	7,950	10,000	8,50	74,000	21,800	3	10,000
M12	1,750	9,950	10,000	10,20	74,000	25,400	4	12,000
M14	2,000	11,200	12,000	12,00	90,000	31,000	4	14,000
M16	2,000	12,800	14,000	14,00	90,000	35,000	4	16,000
M20	2,500	14,950	16,000	17,50	102,000	41,300	4	20,000

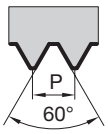
Kierrejyrsimet ilman viistettä metrisille ISO-kierteille

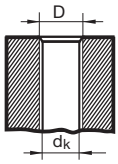
P	•
M	○
K	•
N	•
S	○
H	≤55

Leikkuuarvosivu 354

Materiaali	TKM	
Pinta	C	C
Malli	TM SP	TM SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr. Artikkelinro. **3735** **3740**

D	P	d1	d2	dk	l1	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm		
M6	1,000	4,800	6,000	5,00	54,000	16,500	3	6,000
M8	1,250	6,400	8,000	6,80	62,000	21,900	3	8,000
M10	1,500	7,950	10,000	8,50	74,000	26,300	3	10,000
M12	1,750	9,950	10,000	10,20	74,000	32,400	4	12,000
M14	2,000	11,200	12,000	12,00	90,000	37,000	4	14,000
M16	2,000	12,800	14,000	14,00	90,000	43,000	4	16,000
M20	2,500	14,950	16,000	17,50	102,000	48,800	4	20,000

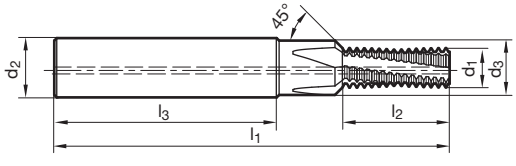
Viisteelliset kierrejyrsimet metrisille ISO-kierteille

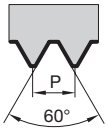
P	•
M	•
K	•
N	•
S	•
H	≤55

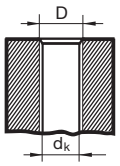
Leikkuuarvosivu 354

Materiaali	TKM		
Pinta	C	C	○
Malli	TMC SP	TMC SP	TMC SP
Sisäinen jäähdytys			
Varren muoto	HA	HB	HA

NEW







Tehdas stdr. Artikkelinro. **3525** **3543** **3510**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0,500	2,300	6,000	3,400	2,50	48,000	36,000	5,300	3	3,000
M4	0,700	3,000	6,000	4,500	3,30	48,000	36,000	7,400	3	4,000
M5	0,800	4,000	6,000	5,500	4,20	54,000	36,000	9,200	3	5,000
M6	1,000	4,800	8,000	6,600	5,00	62,000	36,000	10,500	3	6,000
M8	1,250	6,400	10,000	9,000	6,80	74,000	40,000	13,100	3	8,000
M10	1,500	7,950	12,000	11,000	8,50	80,000	45,000	17,300	4	10,000
M12	1,750	9,950	14,000	13,500	10,20	90,000	45,000	20,100	4	12,000
M14	2,000	11,200	16,000	15,500	12,00	102,000	48,000	25,000	4	14,000
M16	2,000	12,800	18,000	17,500	14,00	102,000	48,000	27,000	4	16,000
M20	2,500	14,500	20,000	21,500	17,50	125,000	50,000	33,800	4	20,000

Viisteelliset kierrejyrsimet metrisille ISO-kierteille

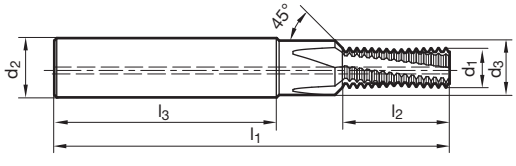
2xD

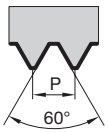
P	•
M	•
K	•
N	•
S	•
H	≤55

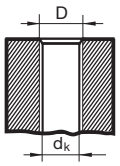
Leikkuuarvosivu 355

Materiaali	TKM		
Pinta	C	C	○
Malli	TMC SP	TMC SP	TMC SP
Sisäinen jäähdytys			
Varren muoto	HA	HB	HA

NEW







Tehdas stdr.	Artikkelinro.	3526	3544	3511

D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0,500	2,300	6,000	3,400	2,50	48,000	36,000	6,800	3	3,000
M4	0,700	3,000	6,000	4,500	3,30	48,000	36,000	8,800	3	4,000
M5	0,800	4,000	6,000	5,500	4,20	54,000	36,000	10,800	3	5,000
M6	1,000	4,800	8,000	6,600	5,00	62,000	36,000	13,500	3	6,000
M8	1,250	6,400	10,000	9,000	6,80	74,000	40,000	18,100	3	8,000
M10	1,500	7,950	12,000	11,000	8,50	80,000	45,000	21,800	4	10,000
M12	1,750	9,950	14,000	13,500	10,20	90,000	45,000	25,400	4	12,000
M14	2,000	11,200	16,000	15,500	12,00	102,000	48,000	31,000	4	14,000
M16	2,000	12,800	18,000	17,500	14,00	102,000	48,000	35,000	4	16,000
M20	2,500	14,500	20,000	21,500	17,50	125,000	50,000	41,300	4	20,000

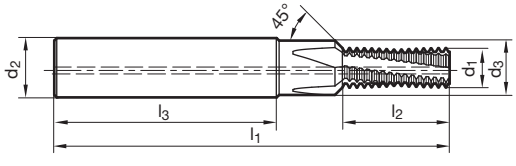
Viisteelliset kierrejyrsimet metrisille ISO-kierteille

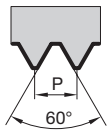
2,5xD

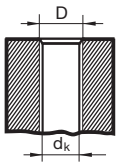
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 355

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3759	3760

D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0,500	2,300	6,000	3,400	2,50	48,000	36,000	7,800	3	3,000
M4	0,700	3,000	6,000	4,500	3,30	48,000	35,600	10,900	3	4,000
M5	0,800	4,000	6,000	5,500	4,20	54,000	36,000	13,200	3	5,000
M6	1,000	4,800	8,000	6,600	5,00	62,000	36,000	16,500	3	6,000
M8	1,250	6,400	10,000	9,000	6,80	74,000	40,000	21,900	3	8,000
M10	1,500	7,950	12,000	11,000	8,50	80,000	45,000	26,300	4	10,000
M12	1,750	9,950	14,000	13,500	10,20	90,000	45,000	32,400	4	12,000
M14	2,000	11,200	16,000	15,500	12,00	102,000	48,000	37,000	4	14,000
M16	2,000	12,800	18,000	17,500	14,00	102,000	48,000	43,000	4	16,000
M20	2,500	14,500	20,000	21,500	17,50	125,000	50,000	48,800	4	20,000

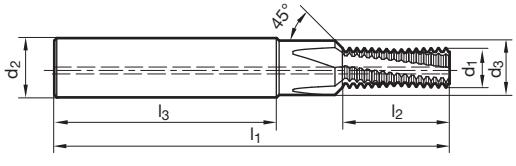
Viisteelliset kierrejyrsimet metrisille ISO-hienokierteille

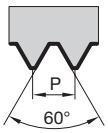
1,5xD

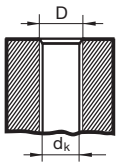
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 354

Materiaali	TKM		
Pinta	C	C	○
Malli	TMC SP	TMC SP	TMC SP
Sisäinen jäähdytys			
Varren muoto	HA	HB	HA
		NEW	







Tehdas stdr.	Artikkelinro.	3527	3545	3512

D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm	mm		
M4 x 0,5	0,500	3,000	6,000	4,500	3,50	48,000	36,000	7,300	3	4,003
M5 x 0,5	0,500	4,000	6,000	5,500	4,50	54,000	36,000	8,800	3	5,003
M6 x 0,5	0,500	4,800	8,000	6,600	5,50	62,000	36,000	9,800	3	6,003
M6 x 0,75	0,750	4,800	8,000	6,600	5,20	62,000	36,000	10,100	3	6,004
M8 x 0,75	0,750	6,400	10,000	9,000	7,20	74,000	40,000	13,100	3	8,004
M8 x 1	1,000	6,400	10,000	9,000	7,00	74,000	40,000	13,500	3	8,005
M10 x 1	1,000	7,950	12,000	11,000	9,00	80,000	45,000	16,500	4	10,005
M10 x 1,25	1,250	7,950	12,000	11,000	8,80	80,000	45,000	16,900	4	10,006
M12 x 1	1,000	9,950	14,000	13,500	11,00	90,000	45,000	19,500	4	12,005
M12 x 1,5	1,500	9,950	14,000	13,500	10,50	90,000	45,000	20,300	4	12,007
M14 x 1,5	1,500	11,200	16,000	15,500	12,50	102,000	48,000	23,300	4	14,007
M16 x 1,5	1,500	12,800	18,000	17,500	14,50	102,000	48,000	26,300	4	16,007

Viisteelliset kierrejyrsimet metrisille ISO-hienokierteille

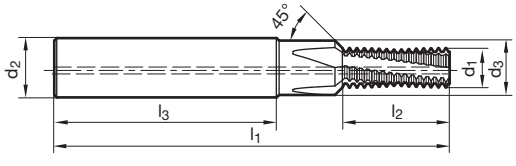
2xD

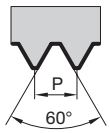
P	•
M	•
K	•
N	•
S	•
H	≤55

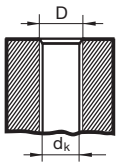
Leikkuuarvosivu 355

Materiaali	TKM		
Pinta	C	C	○
Malli	TMC SP	TMC SP	TMC SP
Sisäinen jäähdytys			
Varren muoto	HA	HB	HA

NEW







Tehdas stdr.	Artikkelinro.	3528	3546	3513

D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm	mm		
M4 x 0,5	0,500	3,000	6,000	4,500	3,50	48,000	36,000	8,800	3	4,003
M5 x 0,5	0,500	4,000	6,000	5,500	4,50	54,000	36,000	10,800	3	5,003
M6 x 0,5	0,500	4,800	8,000	6,600	5,50	62,000	36,000	12,800	3	6,003
M6 x 0,75	0,750	4,800	8,000	6,600	5,20	62,000	36,000	13,100	3	6,004
M8 x 0,75	0,750	6,400	10,000	9,000	7,20	74,000	40,000	16,900	3	8,004
M8 x 1	1,000	6,400	10,000	9,000	7,00	74,000	40,000	17,500	3	8,005
M10 x 1	1,000	7,950	12,000	11,000	9,00	80,000	45,000	21,500	4	10,005
M10 x 1,25	1,250	7,950	12,000	11,000	8,80	80,000	45,000	21,900	4	10,006
M12 x 1	1,000	9,950	14,000	13,500	11,00	90,000	45,000	25,500	4	12,005
M12 x 1,5	1,500	9,950	14,000	13,500	10,50	90,000	45,000	26,300	4	12,007
M14 x 1,5	1,500	11,200	16,000	15,500	12,50	102,000	48,000	30,800	4	14,007
M16 x 1,5	1,500	12,800	18,000	17,500	14,50	102,000	48,000	33,800	4	16,007

Viisteelliset kierrejyrsimet metrisille ISO-hienokierteille

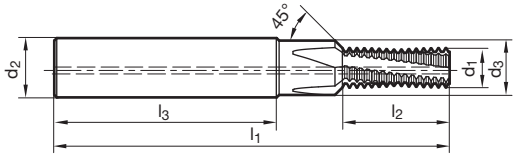
2,5xD

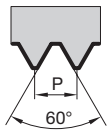
P	•
M	•
K	•
N	•
S	•
H	≤55

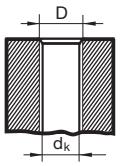
Leikkuuarvosivu 355

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB

NEW







Tehdas stdr. Artikkelinro. **3762** **3763**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm	mm		
M4 x 0,5	0,500	3,000	6,000	4,500	3,50	48,000	36,000	10,300	3	4,003
M5 x 0,5	0,500	4,000	6,000	5,500	4,50	54,000	36,000	12,800	3	5,003
M6 x 0,5	0,500	4,800	8,000	6,600	5,50	62,000	36,000	15,300	3	6,003
M6 x 0,75	0,750	4,800	8,000	6,600	5,20	62,000	36,000	15,400	3	6,004
M8 x 0,75	0,750	6,400	10,000	9,000	7,20	74,000	40,000	20,600	3	8,004
M8 x 1	1,000	6,400	10,000	9,000	7,00	74,000	40,000	20,500	3	8,005
M10 x 1	1,000	7,950	12,000	11,000	9,00	80,000	45,000	25,500	4	10,005
M10 x 1,25	1,250	7,950	12,000	11,000	8,80	80,000	45,000	25,600	4	10,006
M12 x 1	1,000	9,950	14,000	13,500	11,00	90,000	45,000	30,500	4	12,005
M12 x 1,5	1,500	9,950	14,000	13,500	10,50	90,000	45,000	30,800	4	12,007
M14 x 1,5	1,500	11,200	16,000	15,500	12,50	102,000	48,000	38,300	4	14,007
M16 x 1,5	1,500	12,800	18,000	17,500	14,50	102,000	48,000	41,300	4	16,007

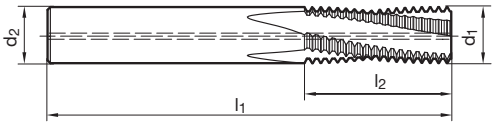
Kierrejyrsimet ilman viistettä UNC-kierteille

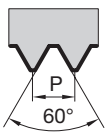
2xD

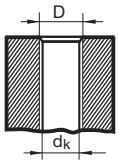
P	•
M	○
K	•
N	•
S	○
H	≤55

Leikkuuarvosivu 354

Materiaali	TKM	
Pinta	C	C
Malli	TM SP	TM SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	4134	4135

D	d1	d2	dk	l1	l2	Z	koodinro.
	mm	mm	mm	mm	mm		
10 - 24	3,400	6,000	3,90	54,000	11,100	3	4,826
12 - 24	4,100	6,000	4,50	54,000	12,200	3	5,486
1/4 - 20	4,700	6,000	5,10	54,000	14,600	3	6,350
5/16 - 18	6,100	8,000	6,60	64,000	17,600	3	7,938
3/8 - 16	7,600	8,000	8,00	64,000	21,400	3	9,525
7/16 - 14	9,000	10,000	9,40	74,000	24,500	3	11,113
1/2 - 13	9,950	10,000	10,80	74,000	28,300	4	12,700
9/16 - 12	11,400	12,000	12,20	90,000	30,700	4	14,288
5/8 - 11	12,700	14,000	13,50	90,000	35,800	4	15,875

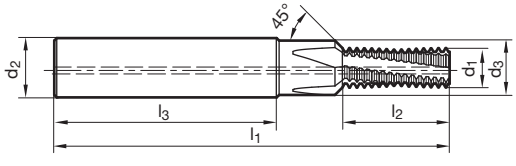
Viisteelliset kierrejyrsimet UNC-kierteille

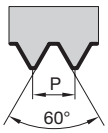
P	•
M	•
K	•
N	•
S	•
H	≤55

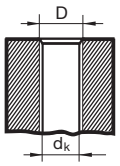
Leikkuuarvosivu 354

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB

NEW







Tehdas stdr.	Artikkelinro.	3516	3534

D	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 20	4,800	8,000	6,600	5,10	62,000	36,000	12,100	3	6,350
5/16 - 18	5,950	10,000	9,000	6,60	74,000	40,000	14,800	3	7,938
3/8 - 16	7,100	12,000	11,000	8,00	80,000	45,000	16,700	4	9,525
7/16 - 14	7,950	12,000	11,000	9,40	80,000	45,000	19,000	4	11,113
1/2 - 13	9,950	14,000	13,500	10,80	90,000	45,000	22,500	4	12,700

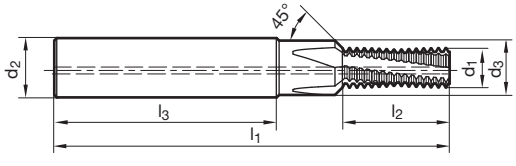
Viisteelliset kierrejyrsimet UNC-kierteille

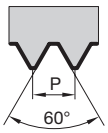
2xD

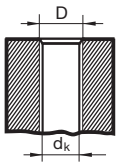
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 355

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr. Artikkelinro. **3517** **3535**

D	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 20	4,800	8,000	6,600	5,10	62,000	36,000	14,600	3	6,350
5/16 - 18	5,950	10,000	9,000	6,60	74,000	40,000	17,600	3	7,938
3/8 - 16	7,100	12,000	11,000	8,00	80,000	45,000	21,400	4	9,525
7/16 - 14	7,950	12,000	11,000	9,40	80,000	45,000	24,500	4	11,113
1/2 - 13	9,950	14,000	13,500	10,80	90,000	45,000	28,300	4	12,700

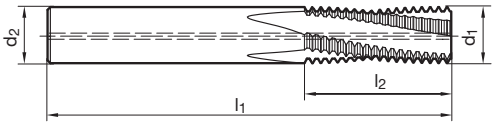
Kierrejyrsimet ilman viistettä UNF-kierteille

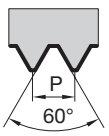
2xD

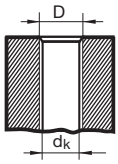
P	•
M	○
K	•
N	•
S	○
H	≤55

Leikkuuarvosivu 354

Materiaali	TKM	
Pinta	C	C
Malli	TM SP	TM SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	4136	4137

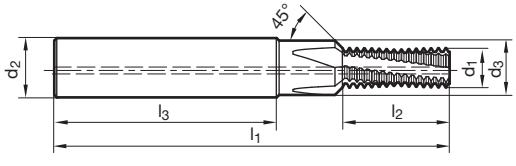
D	d1	d2	dk	l1	l2	Z	koodinro.
	mm	mm	mm	mm	mm		
10 - 32	3,800	6,000	4,10	54,000	11,500	3	4,826
12 - 28	4,300	6,000	4,60	54,000	12,200	3	5,486
1/4 - 28	5,100	6,000	5,50	54,000	14,100	3	6,350
5/16 - 24	6,300	8,000	6,90	64,000	17,500	3	7,938
3/8 - 24	7,800	8,000	8,50	64,000	20,600	3	9,525
7/16 - 20	9,400	10,000	9,90	74,000	24,800	3	11,113
1/2 - 20	9,950	10,000	11,50	74,000	27,300	4	12,700
9/16 - 18	11,400	12,000	12,90	90,000	30,300	4	14,288
5/8 - 18	12,700	14,000	14,50	90,000	33,200	4	15,875

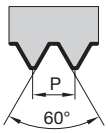
Viisteelliset kierrejyrsimet UNF-kierteille

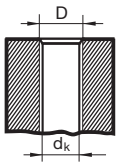
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 354

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr. Artikkelinro. **3518** **3536**

D	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 28	4,800	8,000	6,600	5,50	62,000	36,000	11,300	3	6,350
5/16 - 24	5,950	10,000	9,000	6,90	74,000	40,000	13,200	3	7,938
3/8 - 24	7,950	12,000	11,000	8,50	80,000	45,000	16,400	4	9,525
7/16 - 20	7,950	12,000	11,000	9,90	80,000	45,000	18,400	4	11,113
1/2 - 20	9,950	14,000	13,500	11,50	90,000	45,000	21,000	4	12,700

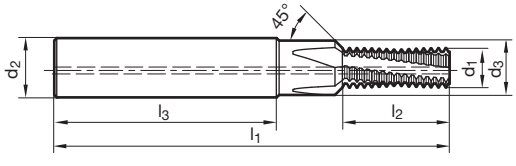
Viisteelliset kierrejyrsimet UNF-kierteille

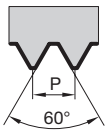
2xD

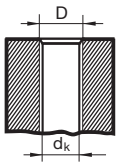
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 355

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3519	3537

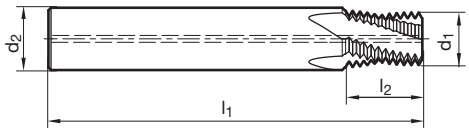
D	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 28	4,800	8,000	6,600	5,50	62,000	36,000	14,100	3	6,350
5/16 - 24	5,950	10,000	9,000	6,90	74,000	40,000	17,500	3	7,938
3/8 - 24	7,950	12,000	11,000	8,50	80,000	45,000	20,600	4	9,525
7/16 - 20	7,950	12,000	11,000	9,90	80,000	45,000	24,800	4	11,113
1/2 - 20	9,950	14,000	13,500	11,50	90,000	45,000	27,300	4	12,700

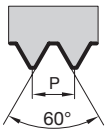
Kierrejyrsimet ilman viistettä NPT-kierteille

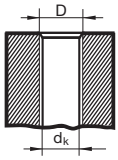
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 354

Materiaali	TKM	
Pinta	C	C
Malli	TM SP	TM SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3753	3754

D	P	d1	d2	dk	l1	l2	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm		
1/16	27,000	5,900	8,000	6,15	54,000	9,900	3	8,190
1/8	27,000	7,300	8,000	8,40	64,000	9,900	3	10,620
1/4	18,000	9,950	12,000	11,10	72,000	19,000	4	14,140
3/8	18,000	12,500	14,000	14,30	80,000	14,800	4	17,570

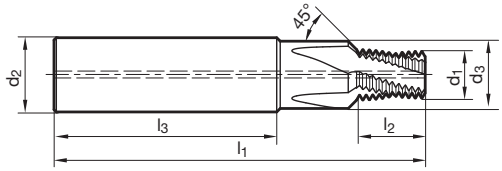
Viisteelliset kierrejyrsimet NPT-kierteille

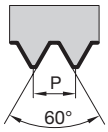
Materiaali		TKM	
Pinta		C	C
Malli		TMC SP	TMC SP
Sisäinen jäähdytys			
Varren muoto		HA	HB

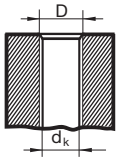
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 354

NEW







Tehdas stdr.	Artikkelinro.	3520	3538

D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
1/8	27,000	7,300	12,000	11,000	8,40	70,000	45,000	9,900	4	10,620
1/4	18,000	9,950	16,000	14,500	11,10	80,000	48,000	14,800	4	14,140
3/8	18,000	12,500	18,000	17,500	14,30	80,000	48,000	14,800	4	17,570

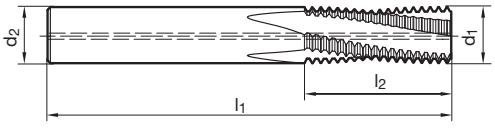
Kierrejyrsimet ilman viistettä BSP-kierteille

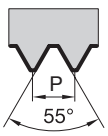
2xD

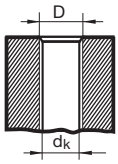
P	•
M	○
K	•
N	•
S	○
H	≤55

Leikkuuarvosivu 354

Materiaali	TKM	
Pinta	C	C
Malli	TM SP	TM SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3745	3748

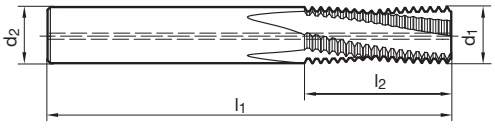
D	P	d1	d2	dk	l1	l2	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm		
G1/8	28,000	7,950	8,000	8,80	64,000	21,300	3	9,728
G1/4	19,000	10,500	12,000	11,80	90,000	28,700	4	13,157
G3/8	19,000	13,600	14,000	15,25	90,000	35,400	4	16,662

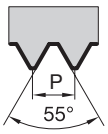
Kierrejyrsimet ilman viistettä BSP-kierteille

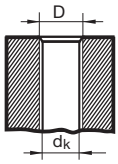
P	•
M	○
K	•
N	•
S	○
H	≤55

Leikkuuarvosivu 354

Materiaali	TKM	
Pinta	C	C
Malli	TM SP	TM SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3746	3750

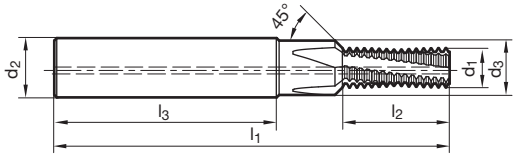
D	P	d1	d2	dk	l1	l2	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm		
G1/8	28,000	7,950	8,000	8,80	64,000	24,900	3	9,728
G1/4	19,000	10,500	12,000	11,80	90,000	35,400	4	13,157
G3/8	19,000	13,600	14,000	15,25	90,000	43,500	4	16,662

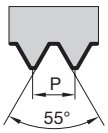
Viisteelliset kierrejyrsimet BSP-kierteille

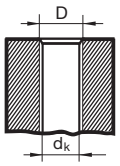
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 354

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3514	3529

D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28,000	7,950	12,000	11,000	8,80	80,000	45,000	15,900	4	9,728
G1/4	19,000	9,950	14,000	13,900	11,80	90,000	45,000	22,100	4	13,157
G3/8	19,000	13,600	18,000	17,500	15,25	102,000	48,000	27,400	4	16,662

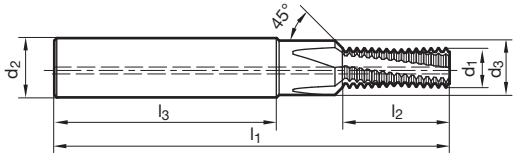
Viisteelliset kierrejyrsimet BSP-kierteille

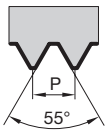
2xD

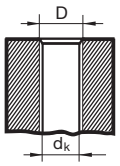
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 355

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr. Artikkelinro. **3515** **3533**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28,000	7,950	12,000	11,000	8,80	80,000	45,000	21,300	4	9,728
G1/4	19,000	9,950	14,000	13,900	11,80	90,000	45,000	28,700	4	13,157
G3/8	19,000	13,600	18,000	17,500	15,25	102,000	48,000	35,400	4	16,662

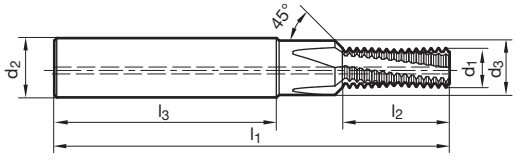
Viisteelliset kierrejyrsimet BSP-kierteille

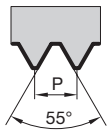
2,5xD

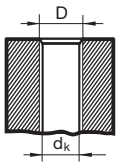
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 355

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr. Artikkelinro. **3765** **3766**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28,000	7,950	12,000	11,000	8,80	80,000	45,000	24,900	4	9,728
G1/4	19,000	9,950	14,000	13,900	11,80	90,000	45,000	35,400	4	13,157
G3/8	19,000	13,600	18,000	17,500	15,25	102,000	48,000	43,500	4	16,662

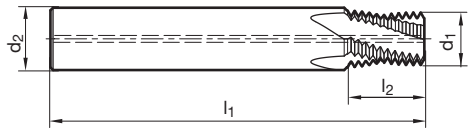
Kierrejyrsimet ilman viistettä NPTF-kierteille

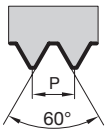
Materiaali		TKM	
Pinta		C	C
Malli		TM SP	TM SP
Sisäinen jäähdytys			
Varren muoto		HA	HB

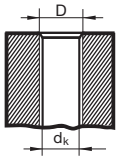
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 354

NEW







Tehdas stdr.	Artikkelinro.	3756	3757

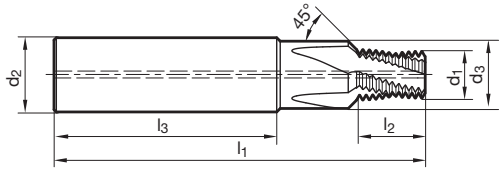
D	P	d1	d2	dk	l1	l2	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm		
1/16	27,000	5,900	8,000	6,15	54,000	9,900	3	8,190
1/8	27,000	7,300	8,000	8,40	64,000	9,900	3	10,620
1/4	18,000	9,950	12,000	11,10	72,000	19,000	4	14,140
3/8	18,000	12,500	14,000	14,30	80,000	14,800	4	17,570

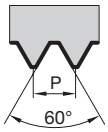
Viisteelliset kierrejyrsimet NPTF-kierteille

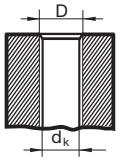
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 354

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3521	3539

D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
1/8	27,000	7,300	12,000	11,000	8,40	70,000	45,000	9,900	4	10,620
1/4	18,000	9,950	16,000	14,500	11,10	80,000	48,000	14,800	4	14,140
3/8	18,000	12,500	18,000	17,500	14,30	80,000	48,000	14,800	4	17,570

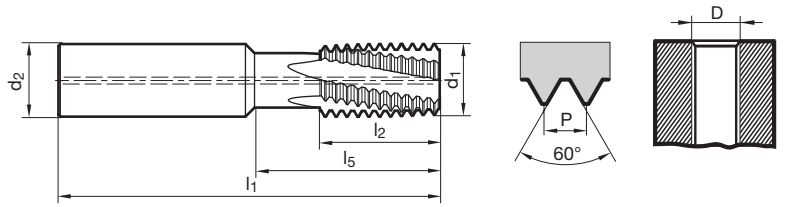
Kierrejyrsimet metrisille ISO-kierteille

Materiaali	TKM		
Pinta	C	C	○
Malli	TMU SP	TMU SP	TMU SP
Sisäinen jäähdytys			
Varren muoto	HA	HB	HA

NEW

P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 355



Tehdas stdr.	Artikkelinro.	3541	3556	3523

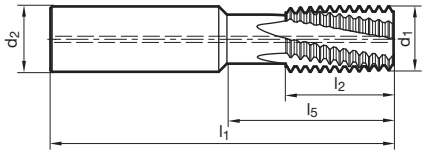
P	D	d1	d2	l1	l5	l2	Z	koodinro.
mm		mm	mm	mm	mm	mm		
0,500	≥ 10	7,950	8,000	64,000		20,000	4	8,050
1,000	≥ 12	9,950	10,000	70,000	25,000	16,000	4	10,100
1,250	≥ 12	9,950	10,000	70,000	25,000	16,000	4	10,125
1,500	≥ 12	9,950	10,000	70,000	25,000	16,000	4	10,150
1,000	≥ 14	11,950	12,000	80,000	31,000	20,000	4	12,100
1,250	≥ 14	11,950	12,000	80,000	31,000	20,000	4	12,125
1,500	≥ 14	11,950	12,000	80,000	31,000	20,000	4	12,150
1,000	≥ 18	15,950	16,000	90,000	40,000	25,000	5	16,100
1,500	≥ 18	15,950	16,000	90,000	40,000	25,000	5	16,150
2,000	≥ 18	15,950	16,000	90,000	40,000	25,000	5	16,200
3,000	≥ 24	17,950	18,000	102,000	50,000	33,000	5	18,300
1,000	≥ 24	19,950	20,000	105,000	50,000	33,000	5	20,100
1,500	≥ 26	19,950	20,000	105,000	50,000	33,000	5	20,150
2,000	≥ 27	19,950	20,000	105,000	50,000	33,000	5	20,200
2,500	≥ 30	19,950	20,000	105,000	50,000	33,000	5	20,250
3,000	≥ 30	19,950	20,000	105,000	50,000	33,000	5	20,300
3,500	≥ 30	19,950	20,000	105,000	50,000	33,000	5	20,350

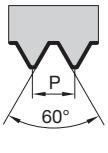
Kierrejyrsimet ulkokierteelle

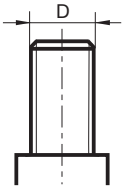
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 355

Materiaali	TKM	
Pinta	C	C
Malli	TMU SP	TMU SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr. Artikkelinro. **4162** **4163**

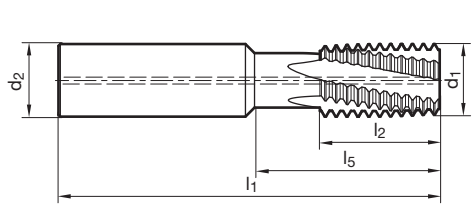
P	D	d1	d2	l1	l5	l2	Z	koodinro.
mm		mm	mm	mm	mm	mm		
0,500	≥ 3	9,950	10,000	70,000	25,000	16,000	4	10,050
0,750	≥ 5	9,950	10,000	70,000	25,000	16,000	4	10,075
1,000	≥ 6	11,950	12,000	80,000	31,000	20,000	4	12,100
1,250	≥ 8	11,950	12,000	80,000	31,000	20,000	4	12,125
1,500	≥ 10	11,950	12,000	80,000	31,000	20,000	4	12,150
1,500	≥ 10	15,950	16,000	90,000	40,000	25,000	5	16,150
2,000	≥ 14	15,950	16,000	90,000	40,000	25,000	5	16,200
2,500	≥ 18	15,950	16,000	90,000	40,000	25,000	5	16,250
3,000	≥ 24	19,950	20,000	105,000	50,000	33,000	5	20,300

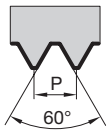
Kierrejyrsimet UN-kierteille

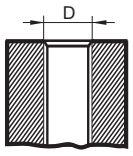
Materiaali	TKM	
Pinta	C	C
Malli	TMU UN	TMU UN
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW

P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 355







Tehdas stdr.	Artikkelinro.	3595	3596

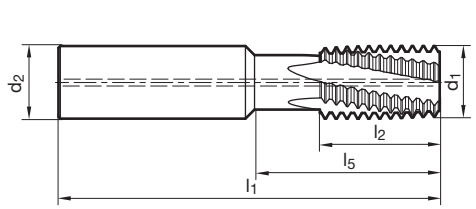
P	D	d1	d2	l1	l5	l2	Z	koodinro.
G/inch		mm	mm	mm	mm	mm		
24,000	≥ 1/2	9,950	10,000	70,000	25,000	16,000	4	10,240
24,000	≥ 1/2	9,950	10,000	70,000	25,000	16,000	4	10,240
10,000	≥ 3/4	11,950	12,000	80,000	31,000	20,000	4	12,100
16,000	≥ 5/8	11,950	12,000	80,000	31,000	20,000	4	12,160
18,000	≥ 5/8	11,950	12,000	80,000	31,000	20,000	4	12,180
20,000	≥ 11/16	11,950	12,000	80,000	31,000	20,000	4	12,200
24,000	≥ 5/8	11,950	12,000	80,000	31,000	20,000	4	12,240
12,000	≥ 7/8	15,950	16,000	90,000	40,000	25,000	5	16,120
14,000	≥ 7/8	15,950	16,000	90,000	40,000	25,000	5	16,140
16,000	≥ 7/8	15,950	16,000	90,000	40,000	25,000	5	16,160
18,000	≥ 7/8	15,950	16,000	90,000	40,000	25,000	5	16,180
20,000	≥ 13/16	15,950	16,000	90,000	40,000	25,000	5	16,200
7,000	≥ 1	19,950	20,000	105,000	50,000	33,000	5	20,070
8,000	≥ 1	19,950	20,000	105,000	50,000	33,000	5	20,080
12,000	≥ 1	19,950	20,000	105,000	50,000	33,000	5	20,120
14,000	≥ 1	19,950	20,000	105,000	50,000	33,000	5	20,140
16,000	≥ 1	19,950	20,000	105,000	50,000	33,000	5	20,160

Kierrejyrsimet BSP-kierteille

P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 355

Materiaali	TKM		
Pinta	C	C	○
Malli	TM SP	TM SP	TM SP
Sisäinen jäähdytys			
Varren muoto	HA	HB	HA
		NEW	



Tehdas stdr.	Artikkelinro.	3542	3557	3524

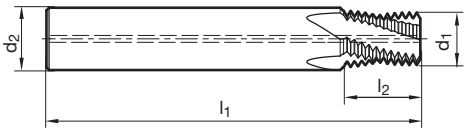
P	D	d1	d2	l1	l5	l2	Z	koodinro.
G/inch		mm	mm	mm	mm	mm		
19,000	≥ 1/4	9,950	10,000	70,000	25,000	16,000	4	10,190
14,000	≥ 1/2	15,950	16,000	90,000	40,000	25,000	5	16,140
11,000	≥ 1	19,950	20,000	105,000	50,000	33,000	5	20,110

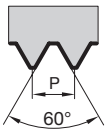
Kierrejyrsimet NPT-kierteille

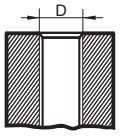
		Materiaali	TKM	
		Pinta	C	C
		Malli	TM SP	TM SP
		Sisäinen jäähdytys		
		Varren muoto	HA	HB
P	•			
M	•			
K	•			
N	•			
S	•			
H	≤55			

Leikkuuarvosivu 355

NEW







Tehdas stdr.	Artikkelinro.	3768	3769

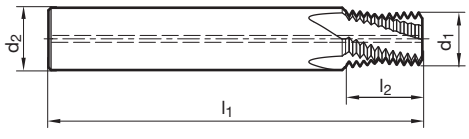
P	D	d1	d2	l1	l2	Z	koodinro.
G/inch		mm	mm	mm	mm		
14,000	≥ 1/2	14,500	16,000	90,000	19,050	5	21,900
11,500	≥ 1	18,500	20,000	90,000	23,190	5	34,180

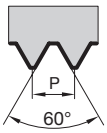
Kierrejyrsimet NPTF-kierteille

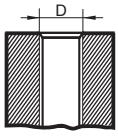
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 355

Materiaali	TKM	
Pinta	C	C
Malli	TM SP	TM SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3772	3773

P	D	d1	d2	l1	l2	Z	koodinro.
G/inch		mm	mm	mm	mm		
14,000	≥ 1/2	14,500	16,000	90,000	19,050	5	21,900
11,500	≥ 1	18,500	20,000	90,000	23,190	5	34,180

Mikro-kierrejyrsimet

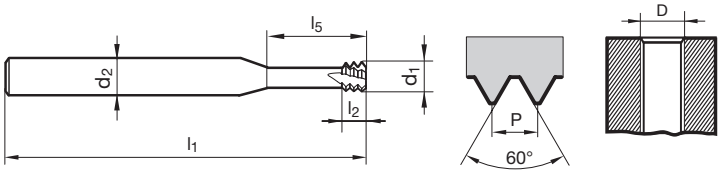
3xD

Materiaali	TKM
Pinta	C
Malli	SP M
Kierteet	3,0
Varren muoto	HA

P	•
M	•
K	•
N	•
S	•
H	

Leikkuuarvosivu 355

NEW



Tehdas stdr. Artikkelinro. **4226**

D	P	d1	d2	l1	l2	l5	Z	koodinro.
	mm	mm	mm	mm	mm	mm		
M1,6	0,350	1,200	3,000	39,000	1,100	4,800	3	1,600
M1,8	0,350	1,400	3,000	39,000	1,100	5,400	3	1,800
M2	0,400	1,550	3,000	39,000	1,200	6,000	4	2,000
M2,5	0,450	1,950	3,000	39,000	1,400	7,500	4	2,500
M3	0,500	2,400	6,000	58,000	1,500	9,500	4	3,000
M3,5	0,600	2,800	6,000	58,000	1,800	11,000	4	3,500
M4	0,700	3,200	6,000	58,000	2,100	12,500	4	4,000
M5	0,800	4,000	6,000	58,000	2,400	16,000	4	5,000
M6	1,000	4,800	6,000	58,000	3,000	20,000	4	6,000
M8	1,250	5,950	6,000	58,000	3,800	24,000	4	8,000
M10	1,500	7,800	8,000	73,000	4,500	33,000	4	10,000
M12	1,750	9,000	10,000	84,000	5,300	38,000	4	12,000
M16	2,000	11,800	10,000	84,000	6,000	35,000	5	16,000

Mikro-kierrejyrsimet

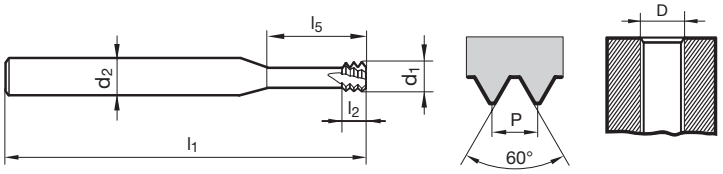
3xD

P	•
M	•
K	•
N	•
S	•
H	

Leikkuuarvosivu 355

Materiaali	**TKM**
Pinta	C
Malli	SP G
Kierteet	3,0
Varren muoto	HA

NEW



Tehdas stdr. Artikkelinro. **4228**

D	P	d1	d2	l1	l2	l5	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm		
G1/8	28,000	6,200	8,000	64,000	2,700	19,500	4	9,728
G3/8	19,000	9,950	10,000	73,000	4,000	25,000	4	16,662
G7/8	14,000	11,950	12,000	84,000	5,400	37,000	4	30,201
G2	11,000	15,950	16,000	105,000	6,900	44,000	5	59,614

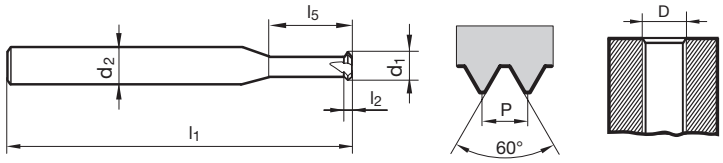
Mikro-kierrejyrsimet

P	•
M	•
K	•
N	•
S	•
H	

Leikkuuarvosivu 355

Materiaali	**TKM**
Pinta	C
Malli	SP M/MF
Kierteet	1,0
Varren muoto	HA

NEW



Tehdas stdr. Artikkelinro. **4225**

D	P	d1	d2	l1	l2	l5	Z	koodinro.
	mm	mm	mm	mm	mm	mm		
M1,4 - M1,8	0,350	1,050	3,000	39,000	0,400	3,800	3	1,800
M2 - M2,4	0,400	1,500	3,000	39,000	0,400	7,000	3	2,400
M2,5 - M3	0,500	2,000	3,000	39,000	0,500	9,000	4	3,000
M3,5 - M4,5	0,750	2,800	6,000	58,000	0,800	14,000	4	4,500
M5 - M7	1,000	4,000	6,000	58,000	1,000	19,000	4	7,000
M8 - M10	1,500	6,400	8,000	64,000	1,500	24,000	5	10,000

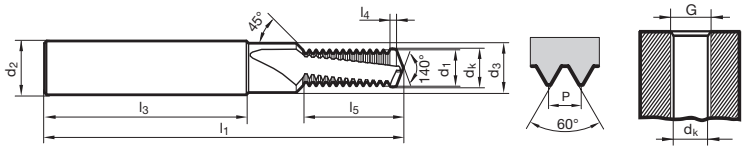
Poraavat kierrejyrsimet metrisille ISO-kierteille

1,5xD

P	
M	
K	○
N	●
S	
H	

Leikkuuarvosivu 355

Materiaali	TKM			
Pinta	◯	◯	Ⓒ	Ⓒ
Malli	DTMC SP	DTMC SP	DTMC SP	DTMC SP
Sisäinen jäähdytys	✕	≡	✕	≡
Varren muoto	HA	HA	HA	HA



Tehdas stdr.	Artikkelinro.	3774	3775	3776	3777

D	P	d1	d2	d3	dk	l1	l3	l4	l5	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0,500	2,400	6,000	3,400	2,500	48,000	36,000	0,500	5,500	2	3,000
M4	0,700	3,200	6,000	4,500	3,300	48,000	36,000	0,700	6,900	2	4,000
M4	0,700	3,200	6,000	4,500	4,000	48,000	36,000	0,700	6,900	2	4,000
M5	0,800	4,000	6,000	5,500	4,200	54,000	36,000	0,800	8,800	2	5,000
M5	0,800	4,000	6,000	5,500	5,000	54,000	36,000	0,800	8,800	2	5,000
M6	1,000	4,750	8,000	6,600	5,000	62,000	36,000	1,000	10,900	2	6,000
M6	1,000	4,750	8,000	6,600	6,000	62,000	36,000	1,000	10,900	2	6,000
M8	1,250	6,350	10,000	9,000	6,800	74,000	40,000	1,250	13,700	2	8,000
M8	1,250	6,350	10,000	9,000	8,000	74,000	40,000	1,250	13,700	2	8,000
M10	1,500	7,950	12,000	11,000	10,000	80,000	45,000	1,500	18,000	2	10,000
M10	1,500	7,950	12,000	11,000	8,500	80,000	45,000	1,500	18,000	2	10,000
M12	1,750	9,950	14,000	13,500	10,200	90,000	45,000	1,500	20,900	2	12,000
M12	1,750	9,950	14,000	13,500	12,000	90,000	45,000	1,500	20,900	2	12,000
M14	2,000	11,200	16,000	15,500	12,000	102,000	48,000	1,500	23,700	2	14,000
M14	2,000	11,200	16,000	15,500	14,000	102,000	48,000	1,500	23,700	2	14,000
M16	2,000	13,200	18,000	17,500	16,000	102,000	48,000	1,500	26,000	2	16,000
M16	2,000	13,200	18,000	17,500	14,000	102,000	48,000	1,500	26,000	2	16,000

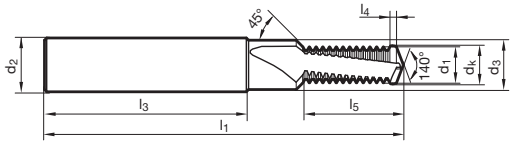
Poraavat kierrejyrsimet metrisille ISO-kierteille

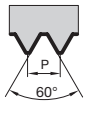
2xD

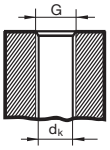
P	
M	
K	○
N	●
S	
H	

Leikkuuarvosivu 355

Materiaali	TKM			
Pinta	○	○	C	C
Malli	DTMC SP	DTMC SP	DTMC SP	DTMC SP
Sisäinen jäähdytys	✕		✕	
Varren muoto	HA	HA	HA	HA







Tehdas stdr.	Artikkelinro.	3778	3779	3780	3781

D	P	d1	d2	d3	dk	l1	l3	l4	l5	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0,500	2,400	6,000	3,400	2,500	48,000	36,000	0,500	7,000	2	3,000
M4	0,700	3,200	6,000	4,500	3,300	48,000	36,000	0,700	9,000	2	4,000
M4	0,700	3,200	6,000	4,500	4,000	48,000	36,000	0,700	9,000	2	4,000
M5	0,800	4,000	6,000	5,500	4,200	54,000	36,000	0,800	11,200	2	5,000
M5	0,800	4,000	6,000	5,500	5,000	54,000	36,000	0,800	11,200	2	5,000
M6	1,000	4,750	8,000	6,600	5,000	62,000	36,000	1,000	13,900	2	6,000
M6	1,000	4,750	8,000	6,600	6,000	62,000	36,000	1,000	13,900	2	6,000
M8	1,250	6,350	10,000	9,000	6,800	74,000	40,000	1,250	18,700	2	8,000
M8	1,250	6,350	10,000	9,000	8,000	74,000	40,000	1,250	18,700	2	8,000
M10	1,500	7,950	12,000	11,000	8,500	80,000	45,000	1,500	22,500	2	10,000
M10	1,500	7,950	12,000	11,000	10,000	80,000	45,000	1,500	22,500	2	10,000
M12	1,750	9,950	14,000	13,500	10,200	90,000	45,000	1,500	26,100	2	12,000
M12	1,750	9,950	14,000	13,500	12,000	90,000	45,000	1,500	26,100	2	12,000
M14	2,000	11,200	16,000	15,500	12,000	102,000	48,000	1,500	31,700	2	14,000
M14	2,000	11,200	16,000	15,500	14,000	102,000	48,000	1,500	31,700	2	14,000
M16	2,000	13,200	18,000	17,500	16,000	102,000	48,000	1,500	36,000	2	16,000
M16	2,000	13,200	18,000	17,500	14,000	102,000	48,000	1,500	36,000	2	16,000

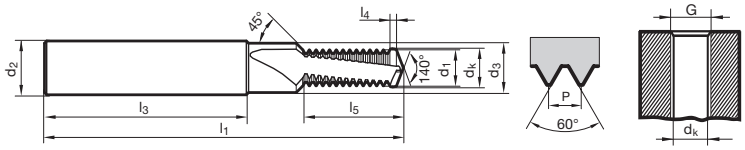
Poraavat kierrejyrsimet metrisille ISO-kierteille

2,5xD

P	
M	
K	○
N	●
S	
H	

Leikkuuarvosivu 355

Materiaali	TKM			
Pinta	○	○	C	C
Malli	DTMC SP	DTMC SP	DTMC SP	DTMC SP
Sisäinen jäähdytys	✕		✕	
Varren muoto	HA	HA	HA	HA



Tehdas stdr.	Artikkelinro.	3782	3783	3784	3785

D	P	d1	d2	d3	dk	l1	l3	l4	l5	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0,500	2,400	6,000	3,400	2,500	48,000	36,000	0,500	8,500	2	3,000
M4	0,700	3,200	6,000	4,500	3,300	48,000	36,000	0,700	11,100	2	4,000
M5	0,800	4,000	6,000	5,500	4,200	54,000	36,000	0,800	13,600	2	5,000
M6	1,000	4,750	8,000	6,600	5,000	62,000	36,000	1,000	16,900	2	6,000
M8	1,250	6,350	10,000	9,000	6,800	74,000	40,000	1,250	22,500	2	8,000
M10	1,500	7,950	12,000	11,000	8,500	80,000	45,000	1,500	27,000	2	10,000
M12	1,750	9,950	14,000	13,500	10,200	90,000	45,000	1,500	31,400	2	12,000
M14	2,000	11,200	16,000	15,500	12,000	102,000	48,000	1,500	39,700	2	14,000
M16	2,000	13,200	18,000	17,500	14,000	102,000	48,000	1,500	46,000	2	16,000

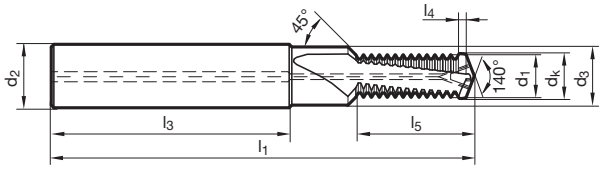
Poraavat kierrejyrsimet metrisille ISO-hienokierteille

1,5xD

P	
M	
K	○
N	●
S	
H	

Leikkuuarvosivu 355

Materiaali	TKM		
Pinta	◯	C	C
Malli	DTMC SP	DTMC SP	DTMC SP
Sisäinen jäähdytys			
Varren muoto	HA	HA	HA



Tehdas stdr.	Artikkelinro.	3787	3788	3789

D	P	d1	d2	d3	dk	l1	l3	l4	l5	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm	mm	mm		
M4 x 0,5	0,500	3,200	6,000	4,500	3,500	48,000	36,000	0,500	6,600	2	4,003
M5 x 0,5	0,500	4,000	6,000	5,500	4,500	54,000	36,000	0,500	8,300	2	5,003
M 6 X0,75	0,750	4,750	8,000	6,600	5,200	62,000	36,000	0,750	9,900	2	6,004
M8 x 0,75	0,750	6,350	10,000	9,000	7,200	74,000	40,000	0,750	14,100	2	8,004
M8 x 1	1,000	6,350	10,000	9,000	7,000	74,000	40,000	1,000	14,300	2	8,005
M10 x 1	1,000	7,950	12,000	11,000	9,000	80,000	45,000	1,000	16,600	2	10,005
M10 x 1,25	1,250	7,950	12,000	11,000	8,800	80,000	45,000	1,250	16,600	2	10,006
M12 x 1	1,000	9,950	14,000	13,500	11,000	90,000	45,000	1,000	20,000	2	12,005
M12 x 1,5	1,500	9,950	14,000	13,500	10,500	90,000	45,000	1,500	21,400	2	12,007
M14 x 1,5	1,500	11,200	16,000	15,500	12,500	102,000	48,000	1,500	23,300	2	14,007
M16 x 1,5	1,500	13,200	18,000	17,500	14,500	102,000	48,000	1,500	26,600	2	16,007

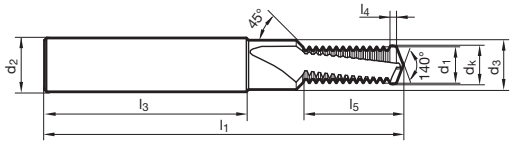
Poraavat kierrejyrsimet metrisille ISO-hienokierteille

2xD

P	
M	
K	○
N	●
S	
H	

Leikkuuarvosivu 355

Materiaali	TKM			
Pinta	○	○	Ⓒ	Ⓒ
Malli	DTMC SP	DTMC SP	DTMC SP	DTMC SP
Sisäinen jäähdytys	✕		✕	
Varren muoto	HA	HA	HA	HA



Tehdas stdr.	Artikkelinro.	3790	3791	3792	3793

D	P	d1	d2	d3	dk	l1	l3	l4	l5	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm	mm	mm		
M4 x 0,5	0,500	3,200	6,000	4,500	3,500	48,000	36,000	0,500	8,600	2	4,003
M5 x 0,5	0,500	4,000	6,000	5,500	4,500	54,000	36,000	0,500	10,800	2	5,003
M 6 X0,75	0,750	4,750	8,000	6,600	5,200	62,000	36,000	0,750	12,900	2	6,004
M8 x 0,75	0,750	6,350	10,000	9,000	7,200	74,000	40,000	0,750	17,100	2	8,004
M8 x 1	1,000	6,350	10,000	9,000	7,000	74,000	40,000	1,000	17,300	2	8,005
M10 x 1	1,000	7,950	12,000	11,000	9,000	80,000	45,000	1,000	21,600	2	10,005
M10 x 1,25	1,250	7,950	12,000	11,000	8,800	80,000	45,000	1,250	21,600	2	10,006
M12 x 1	1,000	9,950	14,000	13,500	11,000	90,000	45,000	1,000	26,000	2	12,005
M12 x 1,5	1,500	9,950	14,000	13,500	10,500	90,000	45,000	1,500	27,400	2	12,007
M14 x 1,5	1,500	11,200	16,000	15,500	12,500	102,000	48,000	1,500	30,800	2	14,007
M16 x 1,5	1,500	13,200	18,000	17,500	14,500	102,000	48,000	1,500	34,100	2	16,007

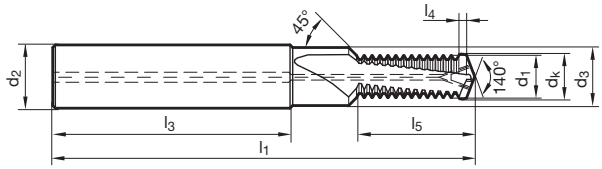
Poraavat kierrejyrsimet UNC-kierteille

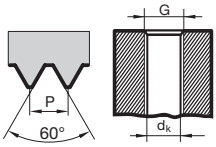
2xD

P	
M	
K	•
N	•
S	
H	

Leikkuuarvosivu 355

Materiaali	TKM	
Pinta	◯	C
Malli	DTMC SP	DTMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HA





Tehdas stdr.	Artikkelinro.	4138	4139

D	P	d1	d2	d3	dk	l1	l3	l4	l5	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm	mm	mm		
1/4 - 20	1,270	5,000	8,000	6,600	5,100	62,000	36,000	1,300	14,900	2	6,350
5/16 - 18	1,411	6,250	10,000	9,000	6,600	74,000	40,000	1,500	18,100	2	7,938
3/8 - 16	1,587	7,500	12,000	11,000	8,000	80,000	45,000	1,500	22,100	2	9,525
7/16 - 14	1,814	8,800	12,000	11,000	9,400	80,000	45,000	1,500	25,000	2	11,113
1/2 - 13	1,954	10,200	14,000	13,500	10,800	90,000	45,000	1,500	26,900	2	12,700
9/16 - 12	2,117	11,600	16,000	15,500	12,200	102,000	48,000	1,500	31,200	2	14,288
5/8 - 11	2,309	13,000	18,000	17,500	13,500	102,000	48,000	1,500	36,300	2	15,875

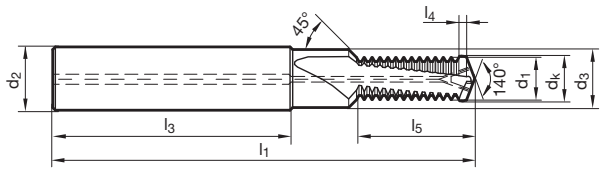
Poraavat kierrejyrsimet UNF-kierteille

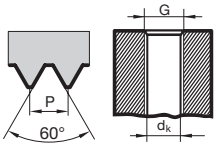
2xD

P	
M	
K	•
N	•
S	
H	

Leikkuuarvosivu 355

Materiaali	TKM	
Pinta	◯	C
Malli	DTMC SP	DTMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HA



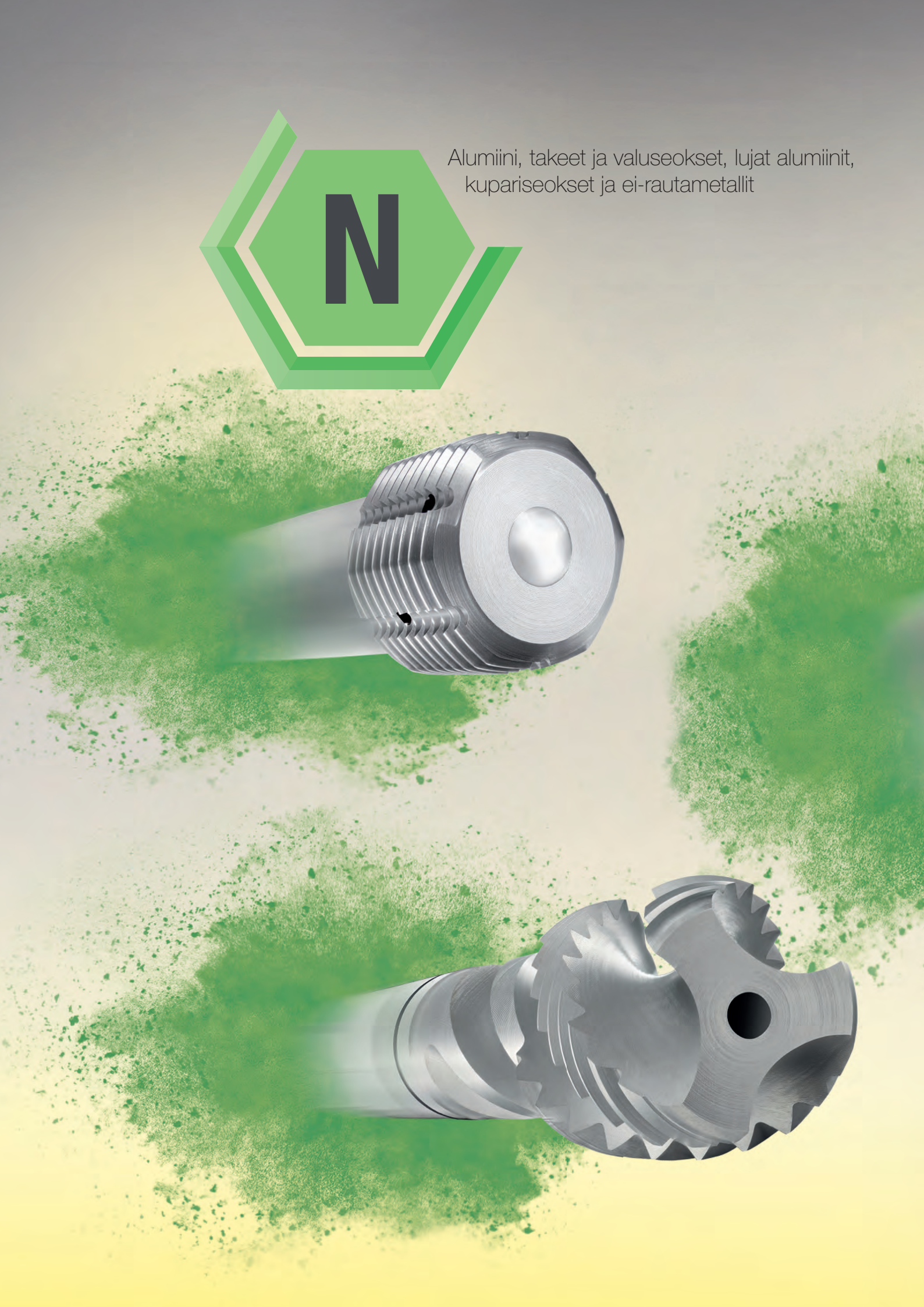


Tehdas stdr.	Artikkelinro.	4140	4141

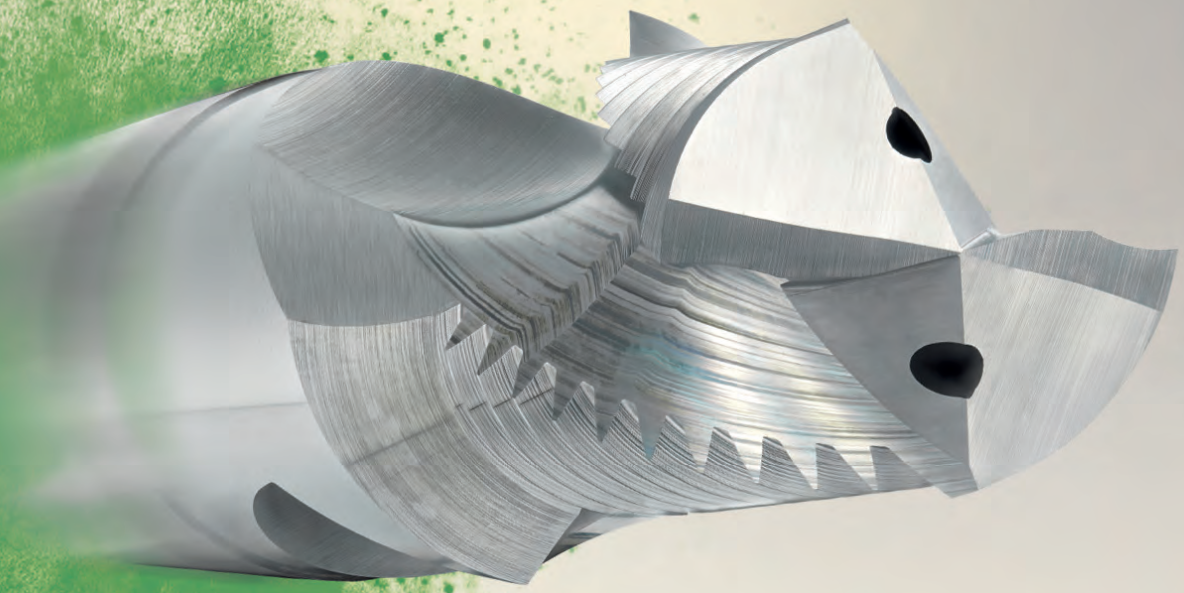
D	P	d1	d2	d3	dk	l1	l3	l4	l5	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm	mm	mm		
1/4 - 28	0,907	5,000	8,000	6,600	5,500	62,000	36,000	1,000	12,800	2	6,350
5/16 - 24	1,058	6,250	10,000	9,000	6,900	74,000	40,000	1,100	18,200	2	7,938
3/8 - 24	1,058	7,950	12,000	11,000	8,500	80,000	45,000	1,100	20,600	2	9,525
7/16 - 20	1,270	9,500	12,000	11,000	9,900	80,000	45,000	1,300	24,700	2	11,113
1/2 - 20	1,270	10,200	14,000	13,500	11,500	90,000	45,000	1,300	27,500	2	12,700
9/16 - 18	1,411	11,600	16,000	15,500	12,900	102,000	48,000	1,500	30,600	2	14,288
5/8 - 18	1,411	13,000	18,000	17,500	14,500	102,000	48,000	1,500	33,700	2	15,875

N

Alumiini, takeet ja valuseokset, lujat alumiinit, kupariseokset ja ei-rautametallit



ALUMIINI



EI-RAUTAMETALLIT MUOVIT

N ALUMIINI, EI-RAUTAMETALLIT, MUOVIT

	M		MF	
	ISO 2/6H	ISO 3/6G	ISO 2/6H	ISO 3/6G
Alumiini ≤ 6% Si	No 1 M2 - M24 Art. nro. 805/817 alkaen sivu 472			
	M2 - M30 Art. nro. 1870/1872 alkaen sivu 473		No 1 M5x0,5 - M24x2 Art. nro. 1873 alkaen sivu 487	
Alumiini ≥ 6% Si	No 1 M3 - M20 Art. nro. 1858/1859 alkaen sivu 476		No 1 M5x0,5 - M20x1,5 Art. nro. 1861/1860 alkaen sivu 491	
lyhytlastuiset ei-ferriittiset metallit	No 1 M3 - M10 Art. nro. 800 alkaen sivu 482	No 1 M3 - M10 Art. nro. 1084 alkaen sivu 482		
	No 1 M3 - M20 Art. nro. 1858/1859 alkaen sivu 476		No 1 M5x0,5 - M20x1,5 Art. nro. 1861/1860 alkaen sivu 491	

No 1 PARAS TYÖKALU

QUICKFINDER

UNC	UNF	G	LÄPIREIKÄ
2B	2B	-	

HSS-E, kirkas, muoto B

No 1
Nr. 4 - 1
Art. nro. 1980/1985
alkaen sivu 498

No 1
Nr. 10 - 3/8
Art. nro. 1990
alkaen sivu 500

No 1
G1/16 - G7/8
Art. nro. 967
alkaen sivu 502

Form B, kirkas

TKM

TKM, kirkas, muoto C

HSS-E, kirkas, muoto E

TKM

TKM, kirkas, muoto C

Alumiini, ei-rautametallit ja muovit

N ALUMIINI, EI-RAUTAMETALLIT, MUOVIT

Alumiini ≤ 6% Si

M		MF	
ISO 2/6H	ISO 3/6G	ISO 2/6H	ISO 3/6G
No 1 M1,6 - M24 Art. nro. 812/824 alkaen sivu 474			
M3 - M30 Art. nro. 814/825 alkaen sivu 475			

Alumiini ≥ 6% Si

M		MF	
No 1 M5 - M20 Art. nro. 302/297 alkaen sivu 479		No 1 M5x0,5 - M16x1,5 Art. nro. 1090 alkaen sivu 496	
No 1 M3 - M20 Art. nro. 969/1883 alkaen sivu 476		No 1 M5x0,5 - M20x1,5 Art. nro. 972/974 alkaen sivu 491	

lyhytlastuiset ei-ferriittiset metallit

M		MF	
No 1 M3 - M10 Art. nro. 800 alkaen sivu 482	No 1 M3 - M10 Art. nro. 1084 alkaen sivu 482		
No 1 M3 - M20 Art. nro. 969/1883 alkaen sivu 476		No 1 M5x0,5 - M20x1,5 Art. nro. 972/974 alkaen sivu 491	

No 1 PARAS TYÖKALU

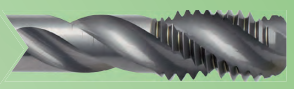
QUICKFINDER

UNC	UNF	G	POHJAREIKÄ
2B	2B	-	

HSS-E, kirkas, muoto C

No 1
Nr. 2 - 7/8
Art. nro. 1981/1986
alkaen sivu 499

No 1
Nr. 1/4 - 1
Art. nro. 2867
alkaen sivu 501



HSS-E, kirkas, muoto C

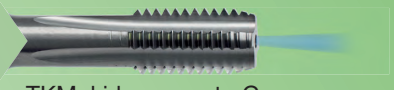
HSS-E-PM, TiCN, muoto C

TKM

TKM, kirkas, muoto C

HSS-E, kirkas, muoto E

TKM



TKM, kirkas, muoto C

Alumiini, ei-rautametallit ja muovit

N ALUMIINI, EI-RAUTAMETALLIT, MUOVIT

kierretapit ilman öljyuria

kierretapit öljyurilla

jäähdytyskanavilla

M

ISO 2/6HX

No 1
M1 - M20
Art. nro. 1347/1566
alkaen sivu 506

M1 - M20
Art. nro. 921/925
alkaen sivu 506

M3 - M39
Art. nro. 919/923
alkaen sivu 510

No 1
M3 - M39
Art. nro. 2012/2013
alkaen sivu 510

No 1
M5 - M20
Art. nro. 2515
alkaen sivu 517

No 1
M3 - M20
Art. nro. 1725/1727
alkaen sivu 516

No 1
M3 - M20
Art. nro. 1972/1931
alkaen sivu 522

ISO 3/6GX

No 1
M2 - M20
Art. nro. 1565/1567
alkaen sivu 508

M2 - M10
Art. nro. 920
alkaen sivu 507

No 1
M3 - M39
Art. nro. 918/922
alkaen sivu 510

No 1
M5 - M20
Art. nro. 4146
alkaen sivu 520

No 1
M3 - M20
Art. nro. 1726/1728
alkaen sivu 519

MF

ISO 2/6HX

No 1
M8x1 - M10x1
Art. nro. 1568
alkaen sivu 526

M8x1 - M20x1,5
Art. nro. 929
alkaen sivu 524

M6x0,75 - M24x1,5
Art. nro. 1275/927
alkaen sivu 530

No 1
M6x0,75 - M20x1,5
Art. nro. 2008
alkaen sivu 531

No 1
M8x1 - M16x1,5
Art. nro. 4147
alkaen sivu 537

No 1
M8x1 - M24x1,5
Art. nro. 1729/1731
alkaen sivu 536

No 1
M10x1 - M24x1,5
Art. nro. 1581
alkaen sivu 541

ISO 3/6GX

No 1
M8x1 - M24x1,5
Art. nro. 1569/1580
alkaen sivu 529

M8x1 - M18x1,5
Art. nro. 928
alkaen sivu 528

No 1
M8x1 - M20x1,5
Art. nro. 1277/926
alkaen sivu 532

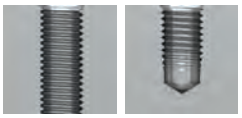
No 1
M8x1 - M16x1,5
Art. nro. 4151
alkaen sivu 539

No 1
M8x1 - M24x1,5
Art. nro. 1730/1732
alkaen sivu 538

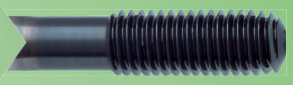
No 1 PARAS TYÖKALU

QUICKFINDER

UNC	UNF	G
2BX	2BX	-



LÄPIREIKÄ
POHJAREIKÄ



HSS-E-PM, Carbo, muoto C

No 1
Nr. 4 - 7/8
Art. nro. 2273/2274
alkaen sivu 542

No 1
Nr. 4 - 1
Art. nro. 1283/2275
alkaen sivu 543

No 1
G1/16 - G1 1/4
Art. nro. 966
alkaen sivu 544

HSS-E, TiN, muoto C

No 1
Nr. 4 - 7/8
Art. nro. 1582/1583
alkaen sivu 542

No 1
Nr. 4 - 1
Art. nro. 1584/1585
alkaen sivu 543

No 1
G1/16 - G3/4
Art. nro. 1586
alkaen sivu 545

HSS-E, TiN, muoto C

HSS-E, TiCN, muoto C

MUOTO C

No 1
G1/16 - G1
Art. nro. 4152
alkaen sivu 546

HSS-E, Carbo, muoto C

MUOTO E

HSS-E-PM, TiN, muoto E

TKM

TKM, TiAlN, muoto C

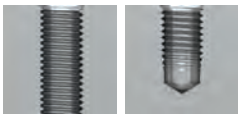
N ALUMIINI, EI-RAUTAMETALLIT, MUOVIT

	M UNIVERSAL	MF UNIVERSAL
1,5xD	No 1 M3 - M20 Art. nro. 3510 alkaen sivu 551	No 1 M4x0,5 - M16x1,5 Art. nro. 3512 alkaen sivu 554
2xD	No 1 M3 - M20 Art. nro. 3511 alkaen sivu 552	No 1 M4x0,5 - M16x1,5 Art. nro. 3513 alkaen sivu 555
2,5xD	No 1 M3 - M20 Art. nro. 3759 alkaen sivu 553	No 1 M4x0,5 - M16x1,5 Art. nro. 3762 alkaen sivu 556
3xD	No 1 M1,6 - M16 Art. nro. 4226 alkaen sivu 578	
universal	No 1 Ø8xP0,5 - Ø20xP3,5 Art. nro. 3523 alkaen sivu 572	No 1 Ø8xP0,5 - Ø20xP3,5 Art. nro. 3523 alkaen sivu 572

No 1 PARAS TYÖKALU

QUICKFINDER

UNC	UNF	G
UNIVERSAL	UNIVERSAL	-



LÄPIREIKÄ
POHJAREIKÄ

No 1	No 1	No 1	
1/4 - 1/2 Art. nro. 3516 alkaen sivu 558	1/4 - 1/2 Art. nro. 3518 alkaen sivu 561	1/8 - 3/8 Art. nro. 3514 alkaen sivu 565	TKM, kirkas
No 1	No 1	No 1	
1/4 - 1/2 Art. nro. 3517 alkaen sivu 559	1/4 - 1/2 Art. nro. 3519 alkaen sivu 562	1/8 - 3/8 Art. nro. 3515 alkaen sivu 566	TKM, kirkas
			TKM, TiCN
			TKM, TiCN
No 1	No 1	No 1	
Ø10xUN24 - Ø20xUN7 Art. nro. 3595 alkaen sivu 574	Ø10xUN24 - Ø20xUN7 Art. nro. 3595 alkaen sivu 574	Ø10xG19 - Ø20xG11 Art. nro. 3542 alkaen sivu 575	TKM, kirkas

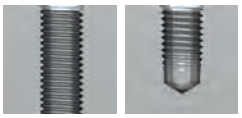
N ALUMIINI, EI-RAUTAMETALLIT, MUOVIT

	M UNIVERSAL	MF UNIVERSAL
1,5xD	No 1 M3 - M16 Art. nro. 3775 alkaen sivu 581	No 1 M4x0,5 - M16x1,5 Art. nro. 3787 alkaen sivu 584
1,5xD	M3 - M16 Art. nro. 3774 alkaen sivu 581	
2xD	No 1 M3 - M16 Art. nro. 3779 alkaen sivu 582	No 1 M4x0,5 - M16x1,5 Art. nro. 3791 alkaen sivu 585
2xD	M3 - M16 Art. nro. 3778 alkaen sivu 582	M4x0,5 - M16x1,5 Art. nro. 3790 alkaen sivu 585
2,5xD	No 1 M3 - M16 Art. nro. 3783 alkaen sivu 583	
2,5xD	M3 - M16 Art. nro. 3782 alkaen sivu 583	

No 1 PARAS TYÖKALU

QUICKFINDER

UNC	UNF	G
UNIVERSAL	UNIVERSAL	-



LÄPIREIKÄ
POHJAREIKÄ

TKM, kirkas

TKM, kirkas

TKM, kirkas

TKM, kirkas

TKM, kirkas

TKM, kirkas

N

KOMPASSI

N	Kierteen syvyys	≤3xD				
ALUMIINI, EI-RAUTAMETALLIT JA MUOVIT	Materiaali	HSS-E			TKM	
	Malli/Muoto	AI / B	VA / B	MS / E	H /C	NL15 /D
	Pinta	◯	◯	◯	◯	◯
	Jäähdytys	☒	☒	☒	säteitt.	säteitt.
	Varren halkaisija	h9	h9	h9	h9	h9
LÄPIREIKÄ						

Kierteen malli	Toleranssi	Artikkelinro. / sivu				
M	4H					
	6H	805/817 472	1870/1872 473	800 482		
	6HX				1858/1859 476	
	6G			1084 482		
MF	6H		1873 487			
	6HX				1861/1860 491	975/976 495
	6G					
UNC	2B		1980/1985 498			
	2BX					
UNF	2B		1990 500			
	2BX					
G			967 502			
BSW						
NPT						
NPTF						
EG M	6H Mod.					
MJ	4HX					
MJF	4HX					
UNJC	3BX					
UNJF	3BX					
PG						
Jäähdytysneste:		◯/●/△	◯/●/△	◯/●/△	◯/●/△	◯/●/△

= No 1

◯ = Ilma
● = Öljy
◯ = Emulsio
△ = Jäähdytysaine
☐ = Pisaravoitelu (MQL)

	Materiaaliryhmä	Vetomurtoluujuus	Materiaaliesimerkkejä	Materiaalinro.	Suositeltu leikkuunopeus vc m/min				
N	Alumiini, Al-takeet	≤450 N/mm²	Al99,5H AlMgSi1 AlZn4,5Mg	3.0250 32315 3.4335	**15**	**15**	-	-	-
	Alumiini valuseokset	≤600 N/mm²	GD-AlSi5Cu1Mg GD-AlSi8Cu3 G-AlSi9Mg G-AlSi12	3.2134 3.2162 3.2373 3.2581	-	-	-	**50**	**50**
	Magnesiumseokset	≤500 N/mm²	GDMgAl8Zn1	3.5812.08	-	-	-	**50**	**50**
	Kupari ja kupariseokset	yhtlastuinen	CuZn20 CuZn37Pb0,5	2.0250 2.0332	**15**	**15**	-	-	-
		pitkälastuinen	CuZn39Pb2 CuZn43Pb2	2.0380 2.0410	-	-	**20**	**50**	**50**
	Erikoiskupariseokset	≤1400 N/mm²	Ampco		-	-	2	-	-

N

ALUMIINI, EI-RAUTAMETALLIT JA MUOVIT

Kierteen syvyys	≤3xD				
Materiaali	HSS-E				
Malli/Muoto	Al R45 / C	NR40 / C	MS / E	NAZ / E	
Pinta	○	○	○	A+M	
Jäähdytys	☒	☒	☒	aksiaal.	
Varren halkaisija	h9	h9	h9	h9	

POHJAREIKÄ

Kierteen malli	Toleranssi	Artikkelinro. / sivu			
M	4H				
	6H	812/824 474	814/825 475	800 482	2899 484
	6HX				
	6G			1084 482	
MF	6H		936 488		
	6HX				
	6G				
UNC	2B		1981/1986 499		
	2BX				
UNF	2B		2867 501		
	2BX				
G			939 503		
BSW					
NPT					
NPTF					
EG M	6H Mod.				
MJ	4HX				
MJF	4HX				
UNJC	3BX				
UNJF	3BX				
PG					
Jäähdytysneste:		○/●/△	○/●/△	○/●/△	○/●/△

= No 1

○ = Ilma
● = Öljy
○ = Emulsio
△ = Jäähdytysaine
☐ = Pisaravoitelu (MQL)

	Materiaaliryhmä	Vetomurtolujuus	Materiaaliesimerkkejä	Materiaalinro.	Suositeltu leikkuunopeus vc m/min			
N	Alumiini, Al-takeet	≤450 N/mm²	Al99,5H AlMgSi1 AlZn4,5Mg	3.0250 32315 3.4335	**15**	**15**	-	-
	Alumiini valuseokset	≤600 N/mm²	GD-AlSi5Cu1Mg GD-AlSi8Cu3 G-AlSi9Mg G-AlSi12	3.2134 3.2162 3.2373 3.2581	-	-	-	-
	Magnesiumseokset	≤500 N/mm²	GDMgAl8Zn1	3.5812.08	-	-	-	**20**
	Kupari ja kupariseokset	yhtylastuinen	CuZn20 CuZn37Pb0,5	2.0250 2.0332	**15**	**15**	-	-
		pitkälastuinen	CuZn39Pb2 CuZn43Pb2	2.0380 2.0410	-	-	**20**	-
	Erikoiskupariseokset	≤1400 N/mm²	Ampco		-	-	2	-

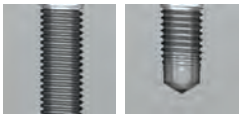
≤3xD

HSS-E		HSS-E-PM						TKM		
H / C	H / C	H / C	H / E	NR50 / C	NR50 / C	VA R50/C	VA R50/C	H / C	H / E	HR 15 / C
C	C	C	C	S	C	S	C	○	○	○
aksiaal.	aksiaal.	aksiaal.	aksiaal.	☒	aksiaal.	☒	aksiaal.	aksiaal.	aksiaal.	aksiaal.
h9	h9	h9	h9	h9	h9	h6	h6	h6	h6	h6
	ylipitkä					synkro-tapit	synkro-tapit			
Artikkelinro. / sivu										
				767/1098 485	1152/1293 485					
778 480	779 481	302/297 479	1091/4165 479			761/763 486	1139/1142 486	969/1883 476	1008 477	971 478
				1100 489	1294 489					
		1090 496	1007 497			764 490	1144 490	972/974 491	1009 492	977/978 493
						4159 504				
○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△

Suositeltu leikkuunopeus vc m/min										
-	-	-	-	-	-	-	-	-	-	-
25	**25**	**30**	**30**	**20**	**25**	**25**	**25**	**50**	**50**	**50**
-	-	-	-	-	-	-	-	**50**	**50**	**50**
-	-	-	-	**20**	**25**	**25**	**25**	-	-	-
-	-	-	-	-	-	-	-	**50**	**50**	**50**
-	-	-	-	-	-	-	-	-	-	-

N

ALUMIINI, EI-RAUTAMETALLIT JA MUOVIT



LÄPIREIÄT JA POHJAREIÄT

Kierteen syvyys		**1,5xD**			
Materiaali		**HSS-E**	**HSS-E-PM**		TKM
Malli/Muoto		N / C	N / C	N / C	N / C
Pinta		(S)	(S)	(Cb)	(S)
Jäähdytys		☒	☒	☒	aksiaal.
Varren halkaisija		h9	h9	h9	h6
Kierteen malli	**Toleranssi**	**Artikkelinro. / sivu**			
M	4H				
	6H				
	6HX	921/925 506	1255/1256 506	1347/1556 506	2518 509
	6GX	920 507	903/952 508	1565/1567 508	
MF	6H				
	6HX	929 524	1257/1258 525	1568 526	
	6GX	928 528	1740 527	1569/1580 529	
UNC	2B				
	2BX	2273/2274 542			
UNF	2B				
	2BX	1283/2275 543			
G		966 544			
BSW					
NPT					
NPTF					
EG M	6H Mod.				
MJ	4HX				
MJF	4HX				
UNJC	3BX				
UNJF	3BX				
PG					
	Jäähdytysneste:	○/●/△	○/●/△	○/●/△	○/●/△

= No 1

○ = Ilma
● = Öljy
○ = Emulsio
△ = Jäähdytysaine
☐ = Pisaravoitelu (MQL)

	Materiaaliryhmä	Vetomurtolujuus	Materiaaliesimerkkejä	Materiaalinro.	Suositeltu leikkuunopeus vc m/min			
N	Alumiini, Al-takeet	≤450 N/mm²	Al99,5H AlMgSi1 AlZn4,5Mg	3.0250 32315 3.4335	20	20	**30**	**45**
	Alumiini valuseokset	≤600 N/mm²	GD-AlSi5Cu1Mg GD-AlSi8Cu3 G-AlSi9Mg G-AlSi12	3.2134 3.2162 3.2373 3.2581	**20**	**20**	**30**	**45**
	Magnesiumseokset	≤500 N/mm²	GDMgAl8Zn1	3.5812.08	-	-	-	-
	Kupari ja kupariseokset	yhtlastuinen	CuZn20 CuZn37Pb0,5	2.0250 2.0332	20	20	**30**	**45**
		pitkälastuinen	CuZn39Pb2 CuZn43Pb2	2.0380 2.0410	-	-	-	-
	Erikoiskupariseokset	≤1400 N/mm²	Ampco		-	-	-	-

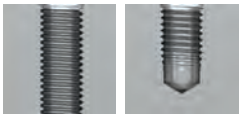
≤3xD

HSS-E					HSS-E-PM						TKM	
N / C	N / C	N / C	N / C	N / C	N / C	N / C	N / C	N / C	N / C	N / E	N / C	N / E
S	C	S+	C	Cb	S	S	S	S	C	S	C	C
☒	☒	aksiaal.	säteitt.	aksiaal.	☒	☒	säteitt.	aksiaal.	säteitt.	aksiaal.	säteitt.	säteitt.
h9	h9	h9	h9	h9	h9	h9	h9	h9	h9	h9	h6	h6
Artikkelinro. / sivu												
919/923 510	2012/2013 510	2442/2444 513	2446/2448 513	2515 517	322/339 511	1266/1267 512	323/342 515	4143 521	1270/1271 516	1725/1727 516	1972/1931 522	1927 523
918/922 510		2443/2445 513	2447 514	4146 520					1713 518	1726/1728 519		
1275/927 530	2008 531			4147 537	333 533	1268/1269 534	338 535	4145 540	1272/1273 536	1729/1731 536	1581 541	
1277/926 532				4151 539					1715/1716 538	1730/1732 538		
1582/1583 542												
1584/1585 543												
1586 545				4152 546								
○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△

Suositeltu leikkuunopeus vc m/min												
20	**25**	20	**25**	**30**	20	20	20	20	**20**	20	**45**	**45**
20	**25**	**20**	**25**	**30**	**20**	**20**	**20**	**20**	**25**	**20**	**45**	**45**
-	-	-	-	-	-	-	-	-	-	-	-	-
20	25	20	25	30	20	20	20	20	20	20	**45**	**45**
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-

N

ALUMIINI, EI-RAUTAMETALLIT JA MUOVIT



LÄPIREIÄT JA POHJAREIÄT

	Kierteen syvyys	≤2xD					≤2,5xD	
	Materiaali	TKM						
	Malli	TM SP	TM SP	TM SP	TM SP	TM SP	TM SP	TM SP
	Pinta	C	C	○	C	C	C	C
	Jäähdytys	☒	☒	aksiaal.	aksiaal.	aksiaal.	aksiaal.	aksiaal.
	Varren muoto	HA	HB	HA	HA	HB	HA	HB
	Nousu	27°	27°	27°	27°	27°	27°	27°

Kierteen malli	Artikkelinro. / sivu						
M	4132 549	4133 549	3734 548	3737 548	3743 548	3735 550	3740 550
MF			3734 548	3737 548	3743 548		
UNC				4134 557	4135 557		
UNF				4136 560	4137 560		
G				3745 563	3748 563	3746 564	3750 564
BSW							
NPT				3753 568	3754 568		
NPTF				3756 570	3757 570		
EG M	EG-kierteet voidaan kaiken mallisilla ja kokoisilla kierrejyrsimillä						
MJ							
MJF							
UNJC							
UNJF							
PG							
Jäähdytysneste:	○/●	○/●	○/●	○/●	○/●	○/●	○/●

= No 1

○ = Ilma
● = Öljy
○ = Emulsio
△ = Jäähdytysaine
☐ = Pisaravoitelu (MQL)

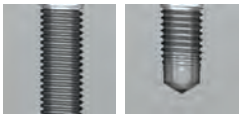
	Materiaaliryhmä	Vetomurtoluujuus	Materiaaliesimerkkejä	Materiaalinro.	Käyttösuositus						
N	Alumiini, Al-takeet	≤450 N/mm²	Al99,5H AlMgSi1 AlZn4,5Mg	3.0250 32315 3.4335	+	+	++	+	+	+	+
	Alumiini valuseokset	≤600 N/mm²	GD-AlSi5Cu1Mg GD-AlSi8Cu3	3.2134 3.2162	+	+	++	+	+	+	+
			G-AlSi9Mg G-AlSi12	3.2373 3.2581	++	++	+	++	++	++	++
	Magnesiumseokset	≤500 N/mm²	GDMgAl8Zn1	3.5812.08	++	++	+	++	++	++	++
	Kupari ja kupariseokset	yhtälastuinen	CuZn20 CuZn37Pb0,5	2.0250 2.0332	+	+	++	+	+	+	+
		pitkälastuinen	CuZn39Pb2 CuZn43Pb2	2.0380 2.0410	+	+	++	+	+	+	+
	Erikoiskupariseokset	≤1400 N/mm²	Ampco		+	+	+	+	+	+	+

≤1,5xD			≤2xD			≤2,5xD	
TKM							
TMC SP	TMC SP	TMC SP	TMC SP	TMC SP	TMC SP	TMC SP	TMC SP
○	C	C	○	C	C	C	C
aksiaal.	aksiaal.	aksiaal.	aksiaal.	aksiaal.	aksiaal.	aksiaal.	aksiaal.
HA	HA	HB	HA	HA	HB	HA	HB
10°	10°	10°	10°	10°	10°	27°	27°
Artikkelinro. / sivu							
3510 551	3525 551	3543 551	3511 552	3526 552	3544 552	3759 553	3760 553
3512 554	3527 554	3545 554	3513 555	3528 555	3546 555	3762 556	3763 556
	3516 558	3534 558		3517 559	3535 559		
	3518 561	3536 561		3519 562	3537 562		
	3514 565	3529 565		3515 566	3533 566	3765 567	3766 567
	3520 569	3538 569					
	3521 571	3539 571					
EG-kierteet voidaan kaiken mallisilla ja kokoisilla kierrejyrsimillä							
○/●	○/●	○/●	○/●	○/●	○/●	○/●	○/●

Käyttösuositus							
++	+	+	++	+	+	+	+
++	+	+	++	+	+	+	+
+	++	++	+	++	++	++	++
+	++	++	+	++	++	++	++
++	+	+	++	+	+	+	+
++	+	+	++	+	+	+	+
+	+	+	+	+	+	+	+

N

ALUMIINI, EI-RAUTAMETALLIT JA MUOVIT



LÄPIREIÄT JA POHJAREIÄT

Kierteen syvyys	universal					≤3xD	
Materiaali	TKM						
Malli	TMU SP	TMU SP	TMU SP	TMU SP	TMU SP	MTM 3 SP	MTM 1 SP
Pinta	○	C	C	C	C	C	C
Jäähdytys	aksiaal.	aksiaal.	aksiaal.	aksiaal.	aksiaal.	☒	☒
Varren muoto	HA	HA	HB	HA	HB	HA	HA
Nousu	15°	15°	15°	15°	15°	15°	15°

Kierteen malli	Artikkelinro. / sivu						
M	3523 572	3541 572	3556 572	4162 573	4163 573	4226 578	4225 580
MF	3523 572	3541 572	3556 572	4162 573	4163 573		4225 580
UNC		3595 574	3596 574				
UNF		3595 574	3596 574				
G	3524 575	3542 575	3557 575	3542 575	3557 575	4228 579	
BSW							
NPT		3769 576	3768 576				
NPTF		3772 577	3773 577				
EG M	EG-kierteet voidaan kaiken mallisilla ja kokoisilla kierrejyrsimillä						
MJ							
MJF							
UNJC							
UNJF							
PG							
Jäähdytysneste:	○/●	○/●	○/●	○/●	○/●	○/●	○/●

= No 1

○ = Ilma
● = Öljy
○ = Emulsio
△ = Jäähdytysaine
☐ = Pisaravoitelu (MQL)

	Materiaaliryhmä	Vetomurtolujuus	Materiaaliesimerkkejä	Materiaalinro.	Käyttösuositus						
N	Alumiini, Al-takeet	≤450 N/mm²	Al99,5H AlMgSi1 AlZn4,5Mg	3.0250 32315 3.4335	++	+	+	+	+	++	++
	Alumiini valuseokset	≤600 N/mm²	GD-AlSi5Cu1Mg GD-AlSi8Cu3	3.2134 3.2162	++	+	+	+	+	++	++
			G-AlSi9Mg G-AlSi12	3.2373 3.2581	+	++	++	++	++	++	++
	Magnesiumseokset	≤500 N/mm²	GDMgAl8Zn1	3.5812.08	+	++	++	++	++	++	++
	Kupari ja kupariseokset	yhtylastuinen	CuZn20 CuZn37Pb0,5	2.0250 2.0332	++	+	+	+	+	++	++
		pitkälastuinen	CuZn39Pb2 CuZn43Pb2	2.0380 2.0410	++	+	+	+	+	++	++
	Erikoiskupariseokset	≤1400 N/mm²	Ampco		+	+	+	+	+	++	++

≤1,5xD				≤2xD				≤2,5xD			
TKM											
DTMC SP	DTMC SP	DTMC SP	DTMC SP	DTMC SP	DTMC SP	DTMC SP	DTMC SP	DTMC SP	DTMC SP	DTMC SP	DTMC SP
◯	◯	C	C	◯	◯	C	C	◯	◯	C	C
☒	säteitt.	☒	säteitt.	☒	säteitt.	☒	säteitt.	☒	säteitt.	☒	säteitt.
HA	HA	HA	HA	HA	HA	HA	HA	HA	HA	HA	HA
27°	27°	27°	27°	27°	27°	27°	27°	27°	27°	27°	27°
Artikkelinro. / sivu											
3774 581	3775 581	3776 581	3777 581	3778 582	3779 582	3780 582	3781 582	3782 583	3783 583	3784 583	3785 583
	3787 584	3788 584	3789 584	3790 585	3791 585	3792 585	3793 585				
				4138 586			4139 586				
				4140 587			4141 587				
EG-kierteet voidaan kaiken mallisilla ja kokoisilla kierrejyrsimillä											
◯/●	◯/●	◯/●	◯/●	◯/●	◯/●	◯/●	◯/●	◯/●	◯/●	◯/●	◯/●

Käyttösuositus											
++	++	+	+	++	++	+	+	++	++	+	+
++	++	+	+	++	++	+	+	++	++	+	+
+	+	++	++	+	+	++	++	+	+	++	++
+	+	++	++	+	+	++	++	+	+	++	++
++	++	+	+	++	++	+	+	++	++	+	+
++	++	+	+	++	++	+	+	++	++	+	+
+	+	+	+	+	+	+	+	+	+	+	+

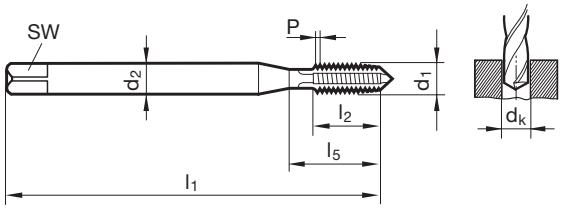
Konekierretapit, metrinen ISO-kierre

Materiaali	**HSS-E**
Ø-Toleranssi	ISO2/6H
Pinta	◯
Malli	AI
Muoto	B
Sisäinen jäähdytys	

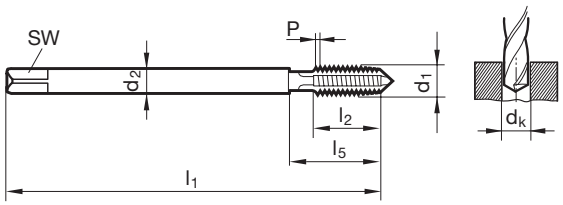
P	
M	
K	
N	•
S	
H	

Leikkuuarvosivu 463

DIN 371



DIN 376



DIN 2184-1 DIN 371 Artikkelinro. **805**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0,400	2,800	2,100	1,60	45,000	8,000	13,500
M2,2	0,450	2,800	2,100	1,75	45,000	9,000	14,500
M2,5	0,450	2,800	2,100	2,05	50,000	9,000	14,500
M2,6	0,450	2,800	2,100	2,15	50,000	9,000	14,500
M3	0,500	3,500	2,700	2,50	56,000	10,000	18,000
M4	0,700	4,500	3,400	3,30	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,20	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,00	80,000	16,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	17,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	20,000	39,000

DIN 2184-1 DIN 376 Artikkelinro. **817**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	10,20	110,000	24,000	49,000
M14	2,000	11,000	9,000	12,00	110,000	26,000	53,000
M16	2,000	12,000	9,000	14,00	110,000	26,000	54,000
M18	2,500	14,000	11,000	15,50	125,000	30,000	62,000
M20	2,500	16,000	12,000	17,50	140,000	32,000	62,000
M22	2,500	18,000	14,500	19,50	140,000	32,000	62,000
M24	3,000	18,000	14,500	21,00	160,000	36,000	73,000

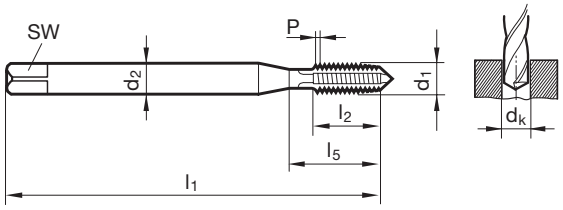
Konekierretapit, metrinen ISO-kierre

Materiaali	**HSS-E**
Ø-Toleranssi	ISO2/6H
Pinta	◯
Malli	N
Muoto	B
Sisäinen jäähdytys	⊠

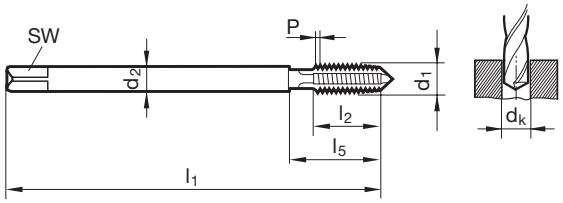
P	≤ 1000
M	•
K	
N	•
S	
H	

Leikkuuarvosivu 463

DIN 371



DIN 376



DIN 2184-1 DIN 371 Artikkelinro. **1870**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0,400	2,800	2,100	1,60	45,000	8,000	13,500
M2,5	0,450	2,800	2,100	2,05	50,000	9,000	14,500
M3	0,500	3,500	2,700	2,50	56,000	10,000	18,000
M3,5	0,600	4,000	3,000	2,90	56,000	12,000	20,000
M4	0,700	4,500	3,400	3,30	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,20	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,00	80,000	16,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	17,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	20,000	39,000

DIN 2184-1 DIN 376 Artikkelinro. **1872**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	2,200		2,50	56,000	10,000	18,000
M4	0,700	2,800	2,100	3,30	63,000	12,000	21,000
M5	0,800	3,500	2,700	4,20	70,000	14,000	25,000
M6	1,000	4,500	3,400	5,00	80,000	16,000	30,000
M8	1,250	6,000	4,900	6,80	90,000	17,000	35,000
M10	1,500	7,000	5,500	8,50	100,000	20,000	39,000
M12	1,750	9,000	7,000	10,20	110,000	24,000	49,000
M14	2,000	11,000	9,000	12,00	110,000	26,000	53,000
M16	2,000	12,000	9,000	14,00	110,000	26,000	54,000
M18	2,500	14,000	11,000	15,50	125,000	30,000	62,000
M20	2,500	16,000	12,000	17,50	140,000	32,000	62,000
M24	3,000	18,000	14,500	21,00	160,000	36,000	73,000
M30	3,500	22,000	18,000	26,50	180,000	40,000	85,000

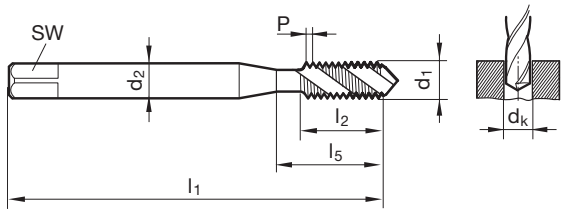
Konekierretapit, metrinen ISO-kierre

Materiaali	HSS-E
Ø-Toleranssi	ISO2/6H
Pinta	◯
Malli	Al R45
Muoto	C
Sisäinen jäähdytys	

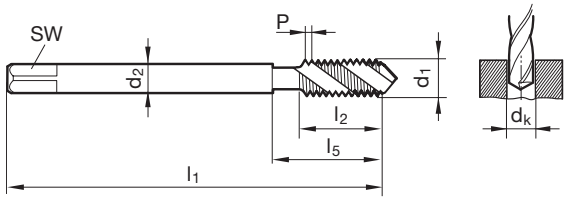
P	
M	
K	
N	•
S	
H	

Leikkuuarvosivu 464

DIN 371



DIN 376



DIN 2184-1 DIN 371 Artikkelinro. **812**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M1,6	0,350	2,500	2,100	1,25	40,000	4,500	
M2	0,400	2,800	2,100	1,60	45,000	4,500	13,500
M2,2	0,450	2,800	2,100	1,75	45,000	5,000	14,500
M2,3	0,400	2,800	2,100	1,90	45,000	4,500	14,500
M2,5	0,450	2,800	2,100	2,05	50,000	5,000	14,500
M2,6	0,450	2,800	2,100	2,15	50,000	5,000	14,500
M3	0,500	3,500	2,700	2,50	56,000	6,000	18,000
M3,5	0,600	4,000	3,000	2,90	56,000	7,000	20,000
M4	0,700	4,500	3,400	3,30	63,000	7,500	21,000
M5	0,800	6,000	4,900	4,20	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,00	80,000	11,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	14,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	16,000	39,000

DIN 2184-1 DIN 376 Artikkelinro. **824**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	2,200		2,50	56,000	6,000	18,000
M4	0,700	2,800	2,100	3,30	63,000	7,500	21,000
M5	0,800	3,500	2,700	4,20	70,000	8,500	25,000
M6	1,000	4,500	3,400	5,00	80,000	11,000	30,000
M8	1,250	6,000	4,900	6,80	90,000	14,000	35,000
M10	1,500	7,000	5,500	8,50	100,000	16,000	39,000
M12	1,750	9,000	7,000	10,20	110,000	18,500	49,000
M14	2,000	11,000	9,000	12,00	110,000	20,000	53,000
M16	2,000	12,000	9,000	14,00	110,000	20,000	54,000
M20	2,500	16,000	12,000	17,50	140,000	25,000	62,000
M24	3,000	18,000	14,500	21,00	160,000	30,000	73,000

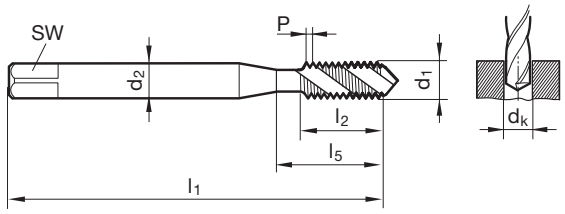
Konekierretapit, metrinen ISO-kierre

Materiaali	**HSS-E**
Ø-Toleranssi	ISO2/6H
Pinta	◯
Malli	VA R40
Muoto	C
Sisäinen jäähdytys	☒

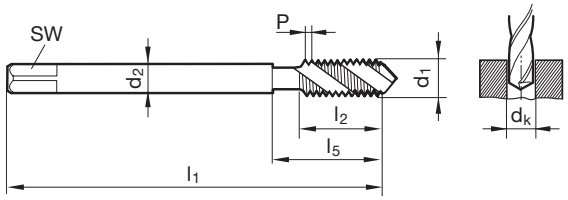
P	
M	•
K	
N	•
S	
H	

Leikkuuarvosivu 464

DIN 371



DIN 376



DIN 2184-1 DIN 371 Artikkelinro. **814**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,50	56,000	6,000	18,000
M4	0,700	4,500	3,400	3,30	63,000	7,500	21,000
M5	0,800	6,000	4,900	4,20	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,00	80,000	11,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	14,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	16,000	39,000

DIN 2184-1 DIN 376 Artikkelinro. **825**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	10,20	110,000	18,500	49,000
M14	2,000	11,000	9,000	12,00	110,000	20,000	53,000
M16	2,000	12,000	9,000	14,00	110,000	20,000	54,000
M18	2,500	14,000	11,000	15,50	125,000	25,000	62,000
M20	2,500	16,000	12,000	17,50	140,000	25,000	62,000
M22	2,500	18,000	14,500	19,50	140,000	27,000	62,000
M24	3,000	18,000	14,500	21,00	160,000	30,000	73,000
M30	3,500	22,000	18,000	26,50	180,000	35,000	85,000

Jäähdytyskanavatapit, metrinen ISO kierre

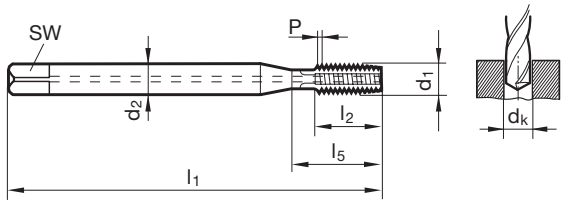
h6

P	
M	
K	•
N	≥ 7
S	
H	

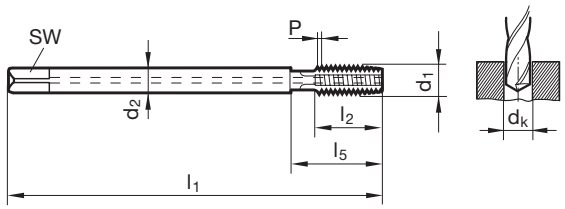
Leikkuuarvosivu 463/465

Materiaali	TKM	
Ø-Toleranssi	6HX	6HX
Pinta	◯	◯
Malli	H	H
Muoto	C	C
Sisäinen jäähdytys		

DIN 371



DIN 376



DIN 2184-1 DIN 371 — Artikkelinro. **969** **1858**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,50	56,000	8,000	18,000
M4	0,700	4,500	3,400	3,30	63,000	10,000	21,000
M5	0,800	6,000	4,900	4,20	70,000	10,000	25,000
M6	1,000	6,000	4,900	5,00	80,000	12,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	16,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	18,000	39,000

DIN 2184-1 DIN 376 — Artikkelinro. **1883** **1859**

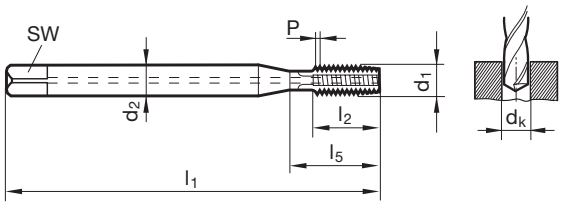
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	10,20	110,000	22,000	49,000
M14	2,000	11,000	9,000	12,00	110,000	22,000	53,000
M16	2,000	12,000	9,000	14,00	110,000	22,000	54,000
M18	2,500	14,000	11,000	15,50	125,000	24,000	45,000
M20	2,500	16,000	12,000	17,50	140,000	25,000	45,000

Jäähdytyskanavatapit, metrinen ISO kierre

P	
M	
K	•
N	≥ 7
S	
H	

Leikkuuarvosivu 465

Materiaali	**TKM**
Ø-Toleranssi	6HX
Pinta	◯
Malli	H
Muoto	E
Sisäinen jäähdytys	



DIN 2184-1 DIN 371 Artikkelinro. **1008**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,50	56,000	8,000	18,000
M4	0,700	4,500	3,400	3,30	63,000	10,000	21,000
M5	0,800	6,000	4,900	4,20	70,000	10,000	25,000
M6	1,000	6,000	4,900	5,00	80,000	12,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	16,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	18,000	39,000

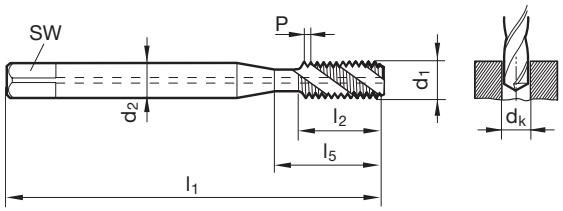
Jäähdytyskanavatapit, metrinen ISO kierre

h6

P	
M	
K	○
N	≥ 7
S	
H	

Leikkuuarvosivu 465

Materiaali	**TKM**
Ø-Toleranssi	6HX
Pinta	◯
Malli	N R15
Muoto	C
Sisäinen jäähdytys	



DIN 2184-1 DIN 371 Artikkelinro. **971**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,50	56,000	8,000	18,000
M4	0,700	4,500	3,400	3,30	63,000	10,000	21,000
M5	0,800	6,000	4,900	4,20	70,000	10,000	25,000
M6	1,000	6,000	4,900	5,00	80,000	12,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	16,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	18,000	39,000

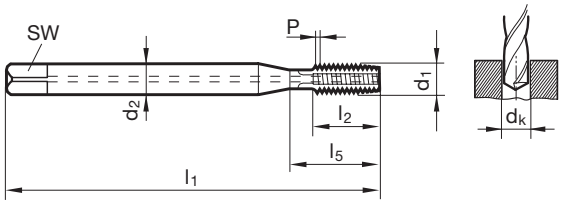
Jäähdytyskanavatapit, metrinen ISO kierre

P	≤ 1200
M	
K	•
N	≥ 7
S	
H	

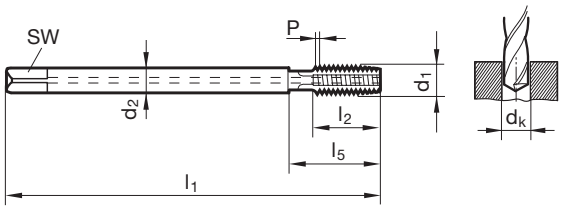
Leikkuuarvosivu 465

Materiaali	HSS-E-PM	
Ø-Toleranssi	6HX	6HX
Pinta	C	C
Malli	H	H
Muoto	C	E
Sisäinen jäähdytys		

DIN 371



DIN 376



DIN 2184-1 DIN 371 — Artikkelinro. **302** **1091**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0,800	6,000	4,900	4,20	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,00	80,000	16,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	17,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	20,000	39,000

DIN 2184-1 DIN 376 — Artikkelinro. **297** **4165**

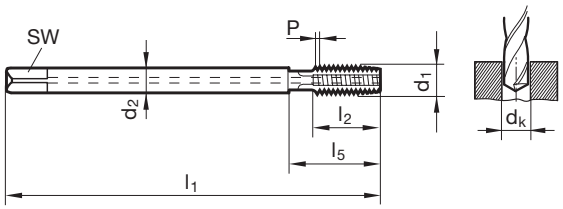
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M10	1,500	7,000	5,500	8,50	100,000	20,000	39,000
M12	1,750	9,000	7,000	10,20	110,000	24,000	49,000
M14	2,000	11,000	9,000	12,00	110,000	26,000	53,000
M16	2,000	12,000	9,000	14,00	110,000	26,000	54,000
M20	2,500	16,000	12,000	17,50	140,000	32,000	62,000

Jäähdytyskanavatapit, metrinen ISO kierre

Materiaali	HSS-E
Ø-Toleranssi	6HX
Pinta	C
Malli	H
Muoto	C
Sisäinen jäähdytys	

P	≤ 1200
M	
K	•
N	≥ 7
S	
H	

Leikkuuarvosivu 465



DIN 2184-1 DIN 376 Artikkelinro. **778**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M16	2,000	12,000	9,000	14,00	110,000	26,000	54,000
M20	2,500	16,000	12,000	17,50	140,000	32,000	62,000
M24	3,000	18,000	14,500	21,00	160,000	36,000	73,000
M27	3,000	20,000	16,000	24,00	160,000	36,000	73,000
M30	3,500	22,000	18,000	26,50	180,000	40,000	85,000
M33	3,500	25,000	20,000	29,50	180,000	40,000	91,000
M36	4,000	28,000	22,000	32,00	200,000	50,000	102,000
M39	4,000	32,000	24,000	35,00	200,000	50,000	107,000

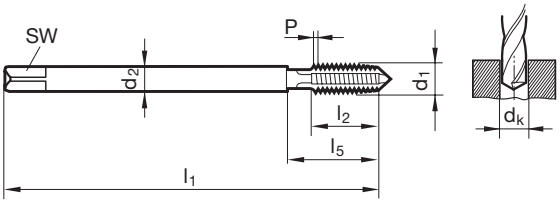
Jäähdytyskanavatapit, metrinen ISO kierre

Materiaali	HSS-E
Ø-Toleranssi	6HX
Pinta	C
Malli	H
Muoto	C
Sisäinen jäähdytys	

P	≤ 1200
M	
K	•
N	≥ 7
S	
H	

Leikkuuarvosivu 465

NEW



Tehdas stdr. Artikkelinro. **779**

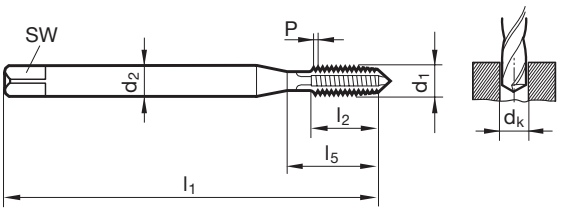
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M16	2,000	12,000	9,000	14,00	160,000	26,000	100,000
M20	2,500	16,000	12,000	17,50	180,000	32,000	120,000
M24	3,000	18,000	14,500	21,00	200,000	36,000	120,000
M27	3,000	20,000	16,000	24,00	225,000	36,000	145,000
M30	3,500	22,000	18,000	26,50	250,000	40,000	160,000
M33	3,500	25,000	20,000	29,50	275,000	40,000	170,000
M36	4,000	28,000	22,000	32,00	300,000	50,000	180,000
M39	4,000	32,000	24,000	35,00	325,000	50,000	210,000

Konekierretapit, metrinen ISO-kierre

P	
M	
K	○
N	≥ 7
S	
H	

Leikkuuarvosivu 463/464

Materiaali	HSS-E	
Ø-Toleranssi	ISO2/6H	ISO3/6G
Pinta	◯	◯
Malli	Ms	Ms
Muoto	E	E
Sisäinen jäähdytys	☒	☒



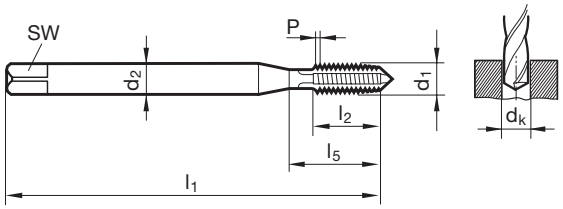
DIN 2184-1 DIN 371 Artikkelinro. **800** **1084**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,50	56,000	10,000	18,000
M4	0,700	4,500	3,400	3,30	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,20	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,00	80,000	16,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	17,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	20,000	39,000

Konekierretapit, metrinen ISO-kierre

Materiaali	**HSS-E**
Ø-Toleranssi	ISO2/6H
Pinta	●
Malli	H AZ
Muoto	C
Sisäinen jäähdytys	⊠

P	
M	
K	
N	○
S	
H	



DIN 2184-1 DIN 371 Artikkelinro. **788**

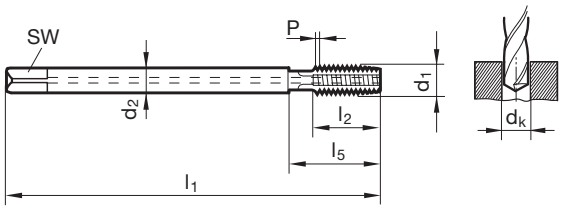
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0,400	2,800	2,100	1,60	45,000	8,000	13,500
M2,2	0,450	2,800	2,100	1,75	45,000	9,000	14,500
M2,5	0,450	2,800	2,100	2,05	50,000	9,000	14,500
M3	0,500	3,500	2,700	2,50	56,000	10,000	18,000
M3,5	0,600	4,000	3,000	2,90	56,000	12,000	20,000
M4	0,700	4,500	3,400	3,30	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,20	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,00	80,000	16,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	17,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	20,000	39,000

Jäähdytyskanavatapit, metrinen ISO kierre

Materiaali	**HSS-E**
Ø-Toleranssi	ISO2/6H
Pinta	A+M
Malli	N AZ
Muoto	E
Sisäinen jäähdytys	

P	
M	
K	
N	○
S	
H	

Leikkuuarvosivu 464



DIN 2184-1 DIN 376 Artikkelinro. **2899**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0,800	3,500	2,700	4,20	70,000	14,000	25,000
M6	1,000	4,500	3,400	5,00	80,000	16,000	30,000
M8	1,250	6,000	4,900	6,80	90,000	17,000	35,000
M10	1,500	7,000	5,500	8,50	100,000	20,000	39,000
M12	1,750	9,000	7,000	10,20	110,000	24,000	49,000

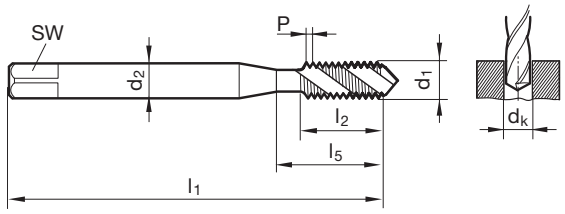
Konekierretapit, metrinen ISO-kierre

Materiaali	HSS-E-PM	
Ø-Toleranssi	ISO2/6H	ISO2/6H
Pinta	S	C
Malli	N R50	N R50
Muoto	C	C
Sisäinen jäähdytys		

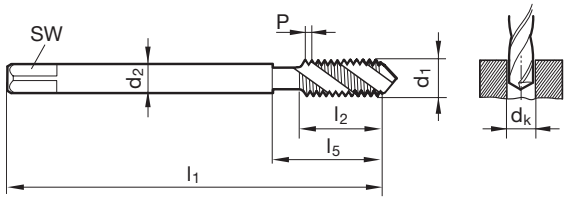
P	•
M	•
K	○
N	•
S	○
H	

Leikkuuarvosivu 465

DIN 371



DIN 376



DIN 2184-1 DIN 371 — Artikkelinro. **767** **1152**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,50	56,000	6,000	18,000
M4	0,700	4,500	3,400	3,30	63,000	7,500	21,000
M5	0,800	6,000	4,900	4,20	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,00	80,000	11,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	14,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	16,000	39,000

DIN 2184-1 DIN 376 — Artikkelinro. **1098** **1293**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	10,20	110,000	18,500	49,000
M14	2,000	11,000	9,000	12,00	110,000	20,000	53,000
M16	2,000	12,000	9,000	14,00	110,000	20,000	54,000
M20	2,500	16,000	12,000	17,50	140,000	25,000	62,000

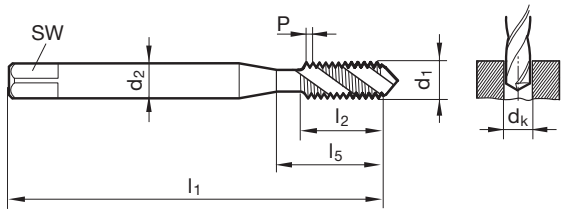
Konekierretapit, metrinen ISO-kierre

Materiaali	HSS-E-PM	
Ø-Toleranssi	6HX	6HX
Pinta	S	C
Malli	VA R50	VA R50
Muoto	C	C
Sisäinen jäähdytys		

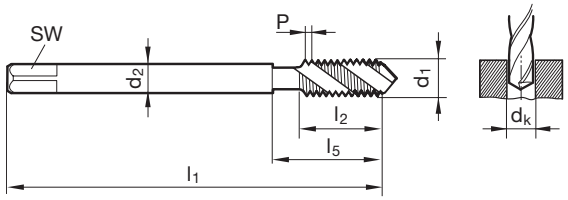
P	•
M	•
K	○
N	•
S	○
H	

Leikkuuarvosivu 465

DIN 371



DIN 376



DIN 2184-1 DIN 371 — Artikkelinro. **761** **1139**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,50	56,000	2,500	18,000
M4	0,700	4,500	3,400	3,30	63,000	3,500	21,000
M5	0,800	6,000	4,900	4,20	70,000	4,000	25,000
M6	1,000	6,000	4,900	5,00	80,000	5,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	6,300	35,000
M10	1,500	10,000	8,000	8,50	100,000	7,500	39,000

DIN 2184-1 DIN 376 — Artikkelinro. **763** **1142**

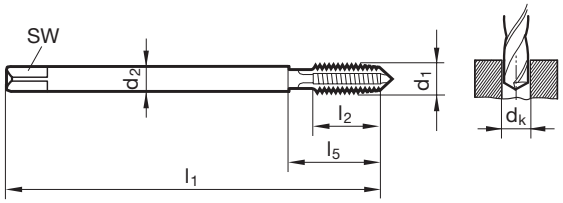
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	10,20	110,000	8,800	63,000
M14	2,000	11,000	9,000	12,00	110,000	10,000	58,000
M16	2,000	12,000	9,000	14,00	110,000	10,000	58,000
M20	2,500	16,000	12,000	17,50	140,000	12,500	85,000

Konekierretapit, metrinen ISO-hienokierre

Materiaali	**HSS-E**
Ø-Toleranssi	ISO2/6H
Pinta	◯
Malli	N
Muoto	B
Sisäinen jäähdytys	⊠

P	≤ 1000
M	•
K	
N	•
S	
H	

Leikkuuarvosivu 463



DIN 2184-1 DIN 374 Artikkelinro. **1873**

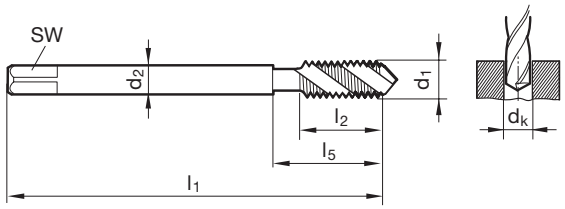
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M5 x 0,5	3,500	2,700	4,50	70,000	10,000	25,000	5,003
M6 x 0,75	4,500	3,400	5,20	80,000	13,000	30,000	6,004
M7 x 0,75	5,500	4,300	6,20	80,000	13,000	30,000	7,004
M8 x 0,75	6,000	4,900	7,20	80,000	14,000	30,000	8,004
M8 x 1	6,000	4,900	7,00	90,000	16,000	35,000	8,005
M10 x 1	7,000	5,500	9,00	90,000	16,000	35,000	10,005
M12 x 1	9,000	7,000	11,00	100,000	20,000	40,000	12,005
M12 x 1,5	9,000	7,000	10,50	100,000	20,000	40,000	12,007
M14 x 1,5	11,000	9,000	12,50	100,000	20,000	40,000	14,007
M16 x 1,5	12,000	9,000	14,50	100,000	22,000	44,000	16,007
M18 x 1,5	14,000	11,000	16,50	110,000	25,000	44,000	18,007
M20 x 1,5	16,000	12,000	18,50	125,000	25,000	44,000	20,007
M24 x 1,5	18,000	14,500	22,50	140,000	28,000	48,000	24,007
M24 x 2	18,000	14,500	22,00	140,000	28,000	48,000	24,008

Konekierretapit, metrinen ISO-hienokierre

Materiaali	HSS-E-PM
Ø-Toleranssi	ISO2/6H
Pinta	◯
Malli	VA R40
Muoto	C
Sisäinen jäähdytys	⊠

P	
M	•
K	
N	•
S	
H	

Leikkuuarvosivu 464



DIN 2184-1 DIN 374 Artikkelinro. **936**

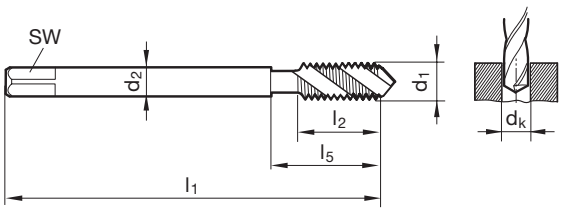
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6,000	4,900	7,00	90,000	11,000	35,000	8,005
M10 x 1	7,000	5,500	9,00	90,000	11,000	35,000	10,005
M12 x 1	9,000	7,000	11,00	100,000	11,000	40,000	12,005
M12 x 1,5	9,000	7,000	10,50	100,000	16,000	40,000	12,007
M14 x 1,5	11,000	9,000	12,50	100,000	15,000	40,000	14,007
M16 x 1,5	12,000	9,000	14,50	100,000	15,000	44,000	16,007
M18 x 1,5	14,000	11,000	16,50	110,000	16,000	44,000	18,007
M20 x 1,5	16,000	12,000	18,50	125,000	16,000	44,000	20,007

Konekierretapit, metrinen ISO-hienokierre

P	•
M	•
K	○
N	○
S	○
H	

Leikkuuarvosivu 465

Materiaali	HSS-E-PM	
Ø-Toleranssi	ISO2/6H	ISO2/6H
Pinta	S	C
Malli	N R50	N R50
Muoto	C	C
Sisäinen jäähdytys		



DIN 2184-1 DIN 374 — Artikkelinro. **1100** **1294**

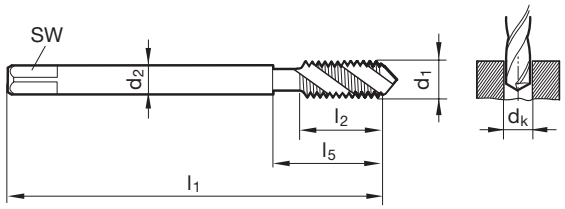
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6,000	4,900	7,00	90,000	11,000	35,000	8,005
M10 x 1	7,000	5,500	9,00	90,000	11,000	35,000	10,005
M12 x 1	9,000	7,000	11,00	100,000	11,000	40,000	12,005
M12 x 1,5	9,000	7,000	10,50	100,000	16,000	40,000	12,007
M14 x 1,5	11,000	9,000	12,50	100,000	15,000	40,000	14,007
M16 x 1,5	12,000	9,000	14,50	100,000	15,000	44,000	16,007
M18 x 1,5	14,000	11,000	16,50	110,000	16,000	44,000	18,007
M20 x 1,5	16,000	12,000	18,50	125,000	16,000	44,000	20,007

Konekierretapit, metrinen ISO-hienokierre

Materiaali	HSS-E-PM	
Ø-Toleranssi	6HX	6HX
Pinta	S	C
Malli	VA R50	VA R50
Muoto	C	C
Sisäinen jäähdytys		

P	•
M	•
K	○
N	•
S	○
H	

Leikkuuarvosivu 465



DIN 2184-1 DIN 374 — Artikkelinro. **764** **1144**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6,000	4,900	7,00	90,000	5,000	44,000	8,005
M8 x 1	6,000	4,900	7,00	90,000	5,000	47,000	8,005
M10 x 1	7,000	5,500	9,00	90,000	5,000	47,000	10,005
M10 x 1	7,000	5,500	9,00	90,000	5,000	44,000	10,005
M12 x 1	9,000	7,000	11,00	100,000	5,000	53,000	12,005
M12 x 1,5	9,000	7,000	10,50	100,000	7,500	53,000	12,007
M14 x 1,5	11,000	9,000	12,50	100,000	7,500	48,000	14,007
M16 x 1,5	12,000	9,000	14,50	100,000	7,500	48,000	16,007
M18 x 1,5	14,000	11,000	16,50	110,000	7,500	58,000	18,007
M20 x 1,5	16,000	12,000	18,50	125,000	7,500	70,000	20,007

Jäähdytyskanavatapit, metrinen ISO hienokierre

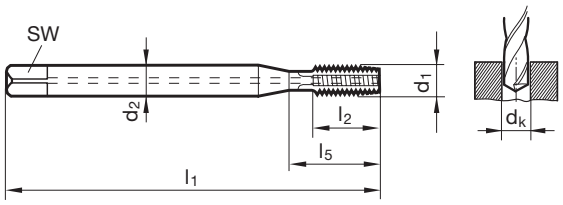
h6

P	
M	
K	•
N	≥ 7
S	
H	

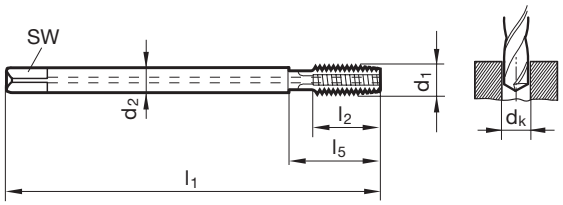
Leikkuuarvosivu 463/465

Materiaali	TKM	
Ø-Toleranssi	6HX	6HX
Pinta	◯	◯
Malli	H	H
Muoto	C	C
Sisäinen jäähdytys		

DIN 371



DIN 374



DIN 2184-1 DIN 371 — Artikkelinro. **972** **1861**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M5 x 0,5	6,000	4,900	4,50	70,000	10,000	25,000	5,003
M8 x 1	8,000	6,200	7,00	90,000	16,000	35,000	8,005
M10 x 1	10,000	8,000	9,00	90,000	18,000	35,000	10,005

DIN 2184-1 DIN 374 — Artikkelinro. **974** **1860**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M12 x 1,5	9,000	7,000	10,50	100,000	22,000	40,000	12,007
M14 x 1,5	11,000	9,000	12,50	100,000	22,000	40,000	14,007
M16 x 1,5	12,000	9,000	14,50	100,000	22,000	44,000	16,007
M18 x 1,5	14,000	11,000	16,50	110,000	24,000	45,000	18,007
M20 x 1,5	16,000	12,000	18,50	125,000	25,000	45,000	20,007

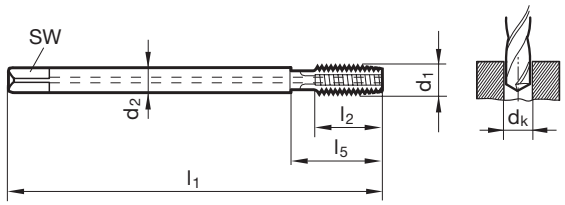
Jäähdytyskanavatapit, metrinen ISO hienokierre

h6

P	
M	
K	•
N	≥ 7
S	
H	

Leikkuuarvosivu 465

Materiaali	**TKM**
Ø-Toleranssi	6HX
Pinta	◯
Malli	H
Muoto	E
Sisäinen jäähdytys	



DIN 2184-1 ~DIN 371/~DIN 374 Artikkelinro. **1009**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M10 x 1	10,000	8,000	9,00	90,000	18,000	35,000	10,005
M12 x 1	9,000	7,000	11,00	100,000	22,000	40,000	12,005
M12 x 1,5	9,000	7,000	10,50	100,000	22,000	40,000	12,007
M14 x 1,5	11,000	9,000	12,50	100,000	22,000	40,000	14,007
M16 x 1,5	12,000	9,000	14,50	100,000	22,000	44,000	16,007

Jäähdytyskanavatapit, metrinen ISO hienokierre

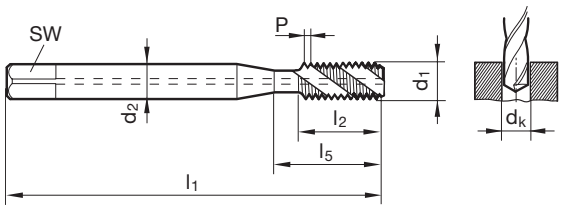
h6

P	
M	
K	○
N	≥ 7
S	
H	

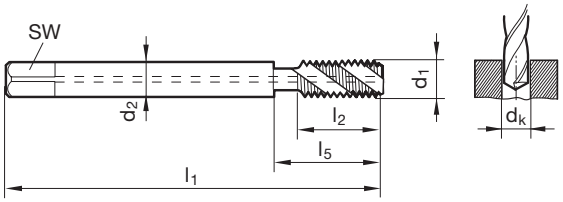
Leikkuuarvosivu 465

Materiaali	**TKM**
Ø-Toleranssi	6HX
Pinta	◯
Malli	N R15
Muoto	C
Sisäinen jäähdytys	

~ DIN 371



DIN 374



DIN 2184-1 DIN 371 Artikkelinro. **977**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M4 x 0,5	4,500	3,400	3,50	63,000	10,000	21,000	4,003
M5 x 0,5	6,000	4,900	4,50	70,000	10,000	25,000	5,003
M6 x 0,5	6,000	4,900	5,50	80,000	12,000	30,000	6,003
M8 x 1	8,000	6,200	7,00	90,000	16,000	35,000	8,005
M10 x 1	10,000	8,000	9,00	90,000	18,000	35,000	10,005

DIN 2184-1 DIN 374 Artikkelinro. **978**

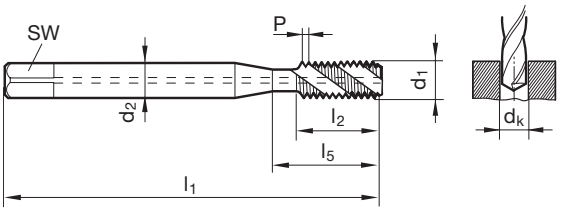
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M12 x 1,5	9,000	7,000	10,50	100,000	22,000	40,000	12,007
M14 x 1,5	11,000	9,000	12,50	100,000	22,000	40,000	14,007
M16 x 1,5	12,000	9,000	14,50	100,000	22,000	44,000	16,007
M18 x 1,5	14,000	11,000	16,50	110,000	24,000	45,000	18,007
M20 x 1,5	16,000	12,000	18,50	125,000	25,000	45,000	20,007

Jäähdytyskanavatapit, metrinen ISO kierre

h6

Materiaali	**TKM**
Ø-Toleranssi	6HX
Pinta	M
Malli	N R15
Muoto	C
Sisäinen jäähdytys	

P	
M	
K	
N	≥ 7
S	
H	



DIN 2184-1 DIN 371 Artikkelinro. **2516**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M5	6,000	4,900	4,20	70,000	10,000	25,000	5,000
M6	6,000	4,900	5,00	80,000	12,000	30,000	6,000
M8	8,000	6,200	6,80	90,000	16,000	35,000	8,000
M10	10,000	8,000	8,50	100,000	18,000	39,000	10,000

Jäähdytyskanavatapit, metrinen ISO hienokierre

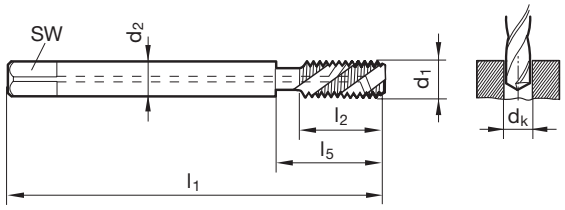
h6

P	
M	
K	
N	≥ 7
S	
H	

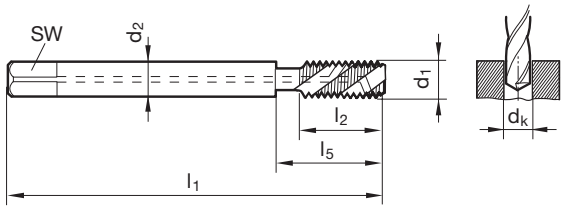
Leikkuuarvosivu 463

Materiaali	**TKM**
Ø-Toleranssi	6HX
Pinta	◯
Malli	N L15
Muoto	D
Sisäinen jäähdytys	

~ DIN 371



DIN 374



DIN 2184-1 DIN 371 Artikkelinro. **975**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M4 x 0,5	4,500	3,400	3,50	63,000	10,000	21,000	4,003
M5 x 0,5	6,000	4,900	4,50	70,000	10,000	25,000	5,003
M6 x 0,5	6,000	4,900	5,50	80,000	12,000	30,000	6,003
M8 x 1	8,000	6,200	7,00	90,000	16,000	35,000	8,005
M10 x 1	10,000	8,000	9,00	90,000	18,000	35,000	10,005

DIN 2184-1 DIN 374 Artikkelinro. **976**

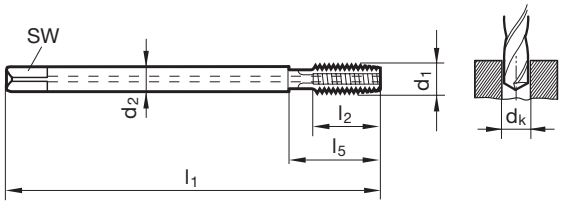
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M12 x 1,5	9,000	7,000	10,50	100,000	22,000	40,000	12,007
M14 x 1,5	11,000	9,000	12,50	100,000	22,000	40,000	14,007
M16 x 1,5	12,000	9,000	14,50	100,000	22,000	44,000	16,007
M18 x 1,5	14,000	11,000	16,50	110,000	24,000	45,000	18,007

Jäähdytyskanavatapit, metrinen ISO hienokierre

Materiaali	HSS-E-PM
Ø-Toleranssi	6HX
Pinta	C
Malli	H
Muoto	C
Sisäinen jäähdytys	

P	≤ 1200
M	
K	•
N	≥ 7
S	
H	

Leikkuuarvosivu 464



DIN 2184-1 DIN 374 Artikkelinro. **1090**

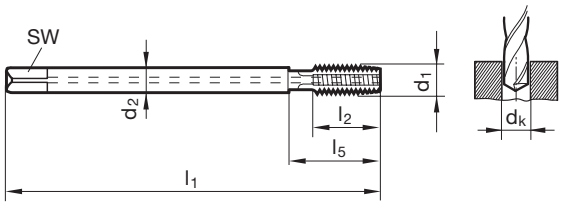
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M5 x 0,5	3,500	2,700	4,50	70,000	10,000	25,000	5,003
M6 x 0,5	4,500	3,400	5,50	80,000	13,000	30,000	6,003
M6 x 0,75	4,500	3,400	5,20	80,000	13,000	30,000	6,004
M8 x 0,75	6,000	4,900	7,20	80,000	14,000	30,000	8,004
M8 x 1	6,000	4,900	7,00	90,000	16,000	35,000	8,005
M10 x 1	7,000	5,500	9,00	90,000	16,000	35,000	10,005
M10 x 1,25	7,000	5,500	8,80	100,000	20,000	39,000	10,006
M12 x 1	9,000	7,000	11,00	100,000	20,000	40,000	12,005
M12 x 1,25	9,000	7,000	10,80	100,000	20,000	40,000	12,006
M12 x 1,5	9,000	7,000	10,50	100,000	20,000	40,000	12,007
M14 x 1,5	11,000	9,000	12,50	100,000	20,000	40,000	14,007
M16 x 1,5	12,000	9,000	14,50	100,000	22,000	44,000	16,007

Jäähdytyskanavatapit, metrinen ISO hienokierre

Materiaali	HSS-E-PM
Ø-Toleranssi	6HX
Pinta	C
Malli	H
Muoto	E
Sisäinen jäähdytys	

P	≤ 1200
M	
K	•
N	≥ 7
S	
H	

Leikkuuarvosivu 465



DIN 2184-1 DIN 374 Artikkelinro. **1007**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6,000	4,900	7,00	90,000	16,000	35,000	8,005
M9 x 1	7,000	5,500	8,00	90,000	16,000	35,000	9,005
M10 x 1	7,000	5,500	9,00	90,000	16,000	35,000	10,005
M10 x 1,25	7,000	5,500	8,80	100,000	20,000	39,000	10,006
M12 x 1	9,000	7,000	11,00	100,000	20,000	40,000	12,005
M12 x 1,25	9,000	7,000	10,80	100,000	20,000	40,000	12,006
M12 x 1,5	9,000	7,000	10,50	100,000	20,000	40,000	12,007
M14 x 1	11,000	9,000	13,00	100,000	20,000	40,000	14,005
M14 x 1,25	11,000	9,000	12,80	100,000	20,000	40,000	14,006
M14 x 1,5	11,000	9,000	12,50	100,000	20,000	40,000	14,007
M16 x 1	12,000	9,000	15,00	100,000	22,000	44,000	16,005
M16 x 1,5	12,000	9,000	14,50	100,000	22,000	44,000	16,007

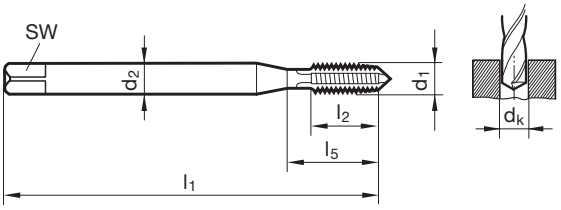
Konekierretapit UNC-kierteille

Materiaali	**HSS-E**
Ø-Toleranssi	2B
Pinta	◯
Malli	N
Muoto	B
Sisäinen jäähdytys	⊠

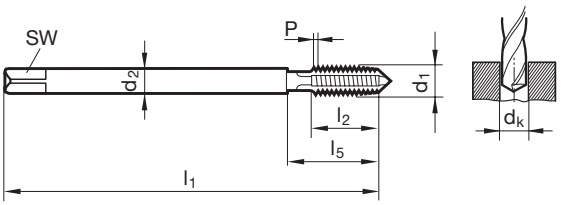
P	≤ 1000
M	•
K	
N	•
S	
H	

Leikkuuarvosivu 463

~ DIN 371



~ DIN 376



DIN 2184-1 ~DIN 371 Artikkelinro. **1980**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
4 - 40	3,500	2,700	2,35	56,000	11,000	18,000	2,845
6 - 32	4,000	3,000	2,85	56,000	12,000	20,000	3,505
8 - 32	4,500	3,400	3,50	63,000	12,000	21,000	4,166
10 - 24	6,000	4,900	3,90	70,000	14,000	25,000	4,826
12 - 24	6,000	4,900	4,50	80,000	16,000	30,000	5,486
1/4 - 20	7,000	5,500	5,10	80,000	16,000	30,000	6,350
5/16 - 18	8,000	6,200	6,60	90,000	18,000	35,000	7,938
3/8 - 16	10,000	8,000	8,00	100,000	20,000	39,000	9,525

DIN 2184-1 ~DIN 376 Artikkelinro. **1985**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
1/2 - 13	9,000	7,000	10,80	110,000	25,000	49,000	12,700
9/16 - 12	11,000	9,000	12,20	110,000	28,000	53,000	14,288
5/8 - 11	12,000	9,000	13,50	110,000	30,000	53,000	15,875
3/4 - 10	14,000	11,000	16,50	125,000	33,000	62,000	19,050
7/8 - 9	18,000	14,500	19,50	140,000	35,000	62,000	22,225
1 - 8	18,000	14,500	22,25	160,000	38,000	73,000	25,400

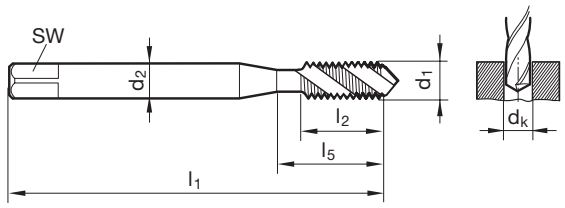
Konekierretapit UNC-kierteille

Materiaali	**HSS-E**
Ø-Toleranssi	2B
Pinta	◯
Malli	VA R40
Muoto	C
Sisäinen jäähdytys	☒

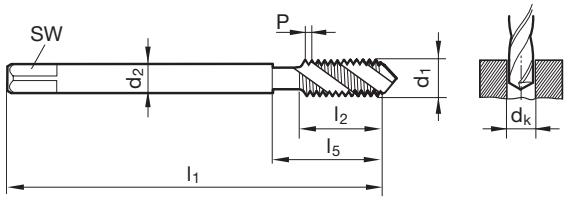
P	
M	•
K	
N	•
S	
H	

Leikkuuarvosivu 464

~ DIN 371



~ DIN 376



DIN 2184-1 ~DIN 371 Artikkelinro. **1981**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
2 - 56	2,800	2,100	1,85	45,000	5,000	14,500	2,184
4 - 40	3,500	2,700	2,35	56,000	7,000	18,000	2,845
5 - 40	3,500	2,700	2,65	56,000	7,000	18,000	3,175
6 - 32	4,000	3,000	2,85	56,000	8,000	20,000	3,505
8 - 32	4,500	3,400	3,50	63,000	8,000	21,000	4,166
10 - 24	6,000	4,900	3,90	70,000	11,000	25,000	4,826
12 - 24	6,000	4,900	4,50	80,000	11,000	30,000	5,486
1/4 - 20	7,000	5,500	5,10	80,000	13,000	30,000	6,350
5/16 - 18	8,000	6,200	6,60	90,000	14,000	35,000	7,938
3/8 - 16	10,000	8,000	8,00	100,000	16,000	39,000	9,525

DIN 2184-1 ~DIN 376 Artikkelinro. **1986**

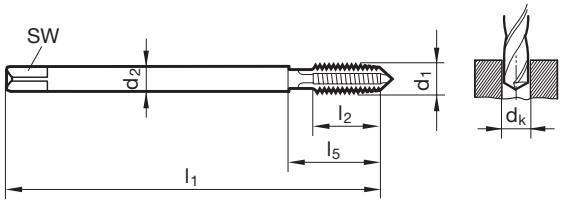
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
7/16 - 14	8,000	6,200	9,40	100,000	18,000	42,000	11,113
1/2 - 13	9,000	7,000	10,80	110,000	20,000	49,000	12,700
9/16 - 12	11,000	9,000	12,20	110,000	21,000	53,000	14,288
5/8 - 11	12,000	9,000	13,50	110,000	24,000	53,000	15,875
3/4 - 10	14,000	11,000	16,50	125,000	25,000	62,000	19,050
7/8 - 9	18,000	14,500	19,50	140,000	28,000	62,000	22,225

Konekierretapit UNF-kierteille

Materiaali	HSS-E
Ø-Toleranssi	2B
Pinta	◯
Malli	N
Muoto	B
Sisäinen jäähdytys	

P	≤ 1000
M	•
K	
N	•
S	
H	

Leikkuuarvosivu 463



DIN 2184-1 ~DIN 374 Artikkelinro. **1990**

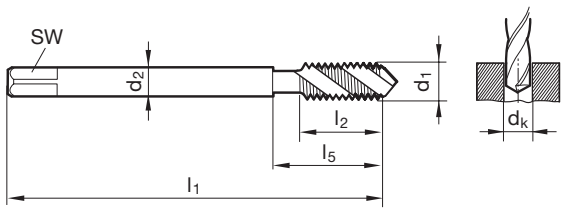
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
10 - 32	3,500	2,700	4,10	70,000	14,000	25,000	4,826
1/4 - 28	4,500	3,400	5,50	80,000	16,000	30,000	6,350
5/16 - 24	6,000	4,900	6,90	90,000	18,000	35,000	7,938
3/8 - 24	7,000	5,500	8,50	90,000	18,000	35,000	9,525

Konekierretapit UNF-kierteille

Materiaali	**HSS-E**
Ø-Toleranssi	2B
Pinta	◯
Malli	VA R40
Muoto	C
Sisäinen jäähdytys	

P	
M	•
K	
N	•
S	
H	

Leikkuuarvosivu 464



DIN 2184-1 ~DIN 374 Artikkelinro. **2867**

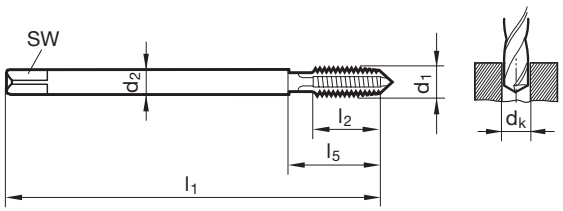
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
1/4 - 28	4,500	3,400	5,50	80,000	9,000	30,000	6,350
5/16 - 24	6,000	4,900	6,90	90,000	11,000	35,000	7,938
3/8 - 24	7,000	5,500	8,50	90,000	11,000	35,000	9,525
1/2 - 20	9,000	7,000	11,50	100,000	13,000	40,000	12,700
7/8 - 14	18,000	14,500	20,40	125,000	19,000	44,000	22,225
1 - 12	18,000	14,500	23,25	140,000	22,000	50,000	25,400

Konekierretapit BSP-kierteille

Materiaali	HSS-E
Ø-Toleranssi	
Pinta	◯
Malli	N
Muoto	B
Sisäinen jäähdytys	⊠

P	≤ 1000
M	•
K	
N	•
S	
H	

Leikkuuarvosivu 463



DIN 2184-1 DIN 5156 Artikkelinro. **967**

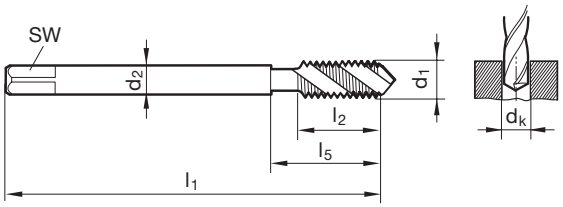
d1	P	d2	SW	dk	l1	l2	l5	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28,000	6,000	4,900	6,80	90,000	18,000	30,000	7,723
G1/8	28,000	7,000	5,500	8,80	90,000	18,000	35,000	9,728
G1/4	19,000	11,000	9,000	11,80	100,000	20,000	40,000	13,157
G3/8	19,000	12,000	9,000	15,25	100,000	22,000	44,000	16,662
G1/2	14,000	16,000	12,000	19,00	125,000	25,000	44,000	20,955
G3/4	14,000	20,000	16,000	24,50	140,000	28,000	53,000	26,441
G7/8	14,000	22,000	18,000	28,25	150,000	28,000	53,000	30,201

Konekierretapit BSP-kierteille

Materiaali	HSS-E-PM
Ø-Toleranssi	
Pinta	◯
Malli	VA R40
Muoto	C
Sisäinen jäähdytys	

P	
M	•
K	
N	•
S	
H	

Leikkuuarvosivu 464



DIN 2184-1 DIN 5156 Artikkelinro. **939**

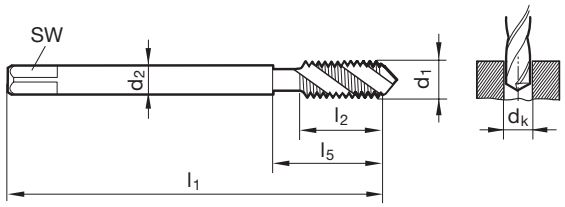
d1	P	d2	SW	dk	l1	l2	l5	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/8	28,000	7,000	5,500	8,80	90,000	11,000	35,000	9,728
G1/4	19,000	11,000	9,000	11,80	100,000	14,000	40,000	13,157
G3/8	19,000	12,000	9,000	15,25	100,000	14,000	44,000	16,662
G1/2	14,000	16,000	12,000	19,00	125,000	18,000	44,000	20,955

Konekierretapit BSP-kierteille

Materiaali	HSS-E-PM
Ø-Toleranssi	
Pinta	S
Malli	VA R50
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	○
N	•
S	○
H	

Leikkuuarvosivu 465



DIN 2184-1 DIN 5156 Artikkelinro. **4159**

d1	P	d2	SW	dk	l1	l2	l5	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28,000	6,000	4,900	6,80	90,000	4,500	47,000	7,723
G1/8	28,000	7,000	5,500	8,80	90,000	4,500	47,000	9,728
G1/4	19,000	11,000	9,000	11,80	100,000	6,700	48,000	13,157
G3/8	19,000	12,000	9,000	15,25	100,000	6,700	48,000	16,662
G1/2	14,000	16,000	12,000	19,00	125,000	9,100	70,000	20,955

Alumiini, ei-rautametallit ja muovit

MANGLAAVAT KIERRETAPIT

N

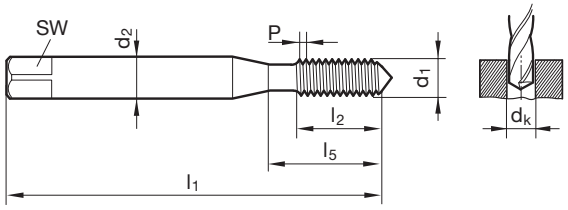
Manglaavat kierretapit, metrinen ISO-kierre

Materiaali	HSS-E	HSS-E-PM	
Ø-Toleranssi	6HX	6HX	6HX
Pinta	S	S	Cb
Malli	N	N	N
Muoto	C	C	C
Sisäinen jäähdytys			

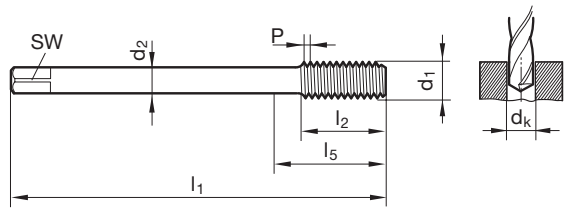
P	•
M	•
K	
N	○
S	
H	

Leikkuuarvosivu 466

~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371	Artikkelinro.	921	1255	1347

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M1	0,250	2,500	2,100	0,90	40,000	4,000	
M1,2	0,250	2,500	2,100	1,10	40,000	4,800	
M1,4	0,300	2,500	2,100	1,25	40,000	5,600	
M1,6	0,350	2,500	2,100	1,45	40,000	6,400	
M1,7	0,350	2,500	2,100	1,55	40,000	6,800	
M1,8	0,350	2,500	2,100	1,65	40,000	7,300	
M2	0,400	2,800	2,100	1,85	45,000	8,000	13,500
M2,5	0,450	2,800	2,100	2,30	50,000	9,000	14,500
M3	0,500	3,500	2,700	2,80	56,000	10,000	18,000
M3,5	0,600	4,000	3,000	3,25	56,000	12,000	20,000
M4	0,700	4,500	3,400	3,70	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,65	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,55	80,000	16,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	17,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	20,000	39,000

DIN 2174 ~DIN 376	Artikkelinro.	925	1256	1566

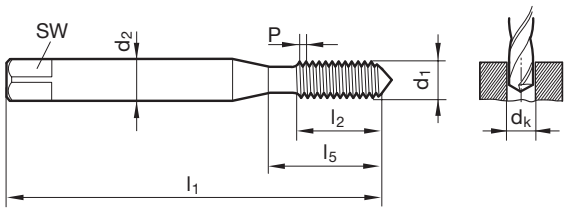
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	11,20	110,000	24,000	49,000
M14	2,000	11,000	9,000	13,10	110,000	26,000	53,000
M16	2,000	12,000	9,000	15,10	110,000	26,000	54,000
M18	2,500	14,000	11,000	16,90	125,000	30,000	62,000
M20	2,500	16,000	12,000	18,90	140,000	32,000	62,000

Manglaavat kierretapit, metrinen ISO-kierre

Materiaali	HSS-E
Ø-Toleranssi	6GX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	○
S	
H	

Leikkuuarvosivu 466



DIN 2174 ~DIN 371 Artikkelinro. **920**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0,400	2,800	2,100	1,85	45,000	8,000	13,500
M2,5	0,450	2,800	2,100	2,30	50,000	9,000	14,500
M3	0,500	3,500	2,700	2,80	56,000	10,000	18,000
M3,5	0,600	4,000	3,000	3,25	56,000	12,000	20,000
M4	0,700	4,500	3,400	3,70	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,65	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,55	80,000	16,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	17,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	20,000	39,000

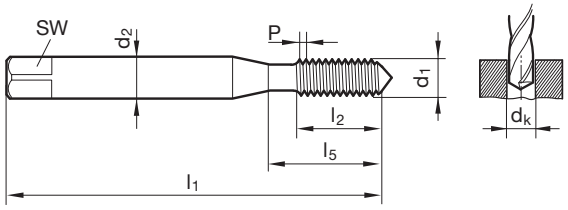
Manglaavat kierretapit, metrinen ISO-kierre

Materiaali	HSS-E-PM	
Ø-Toleranssi	6GX	6GX
Pinta	S	Cb
Malli	N	N
Muoto	C	C
Sisäinen jäähdytys		

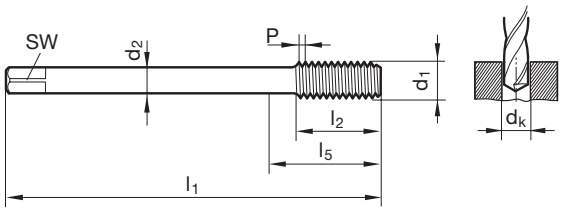
P	•
M	•
K	
N	○
S	
H	

Leikkuuarvosivu 466

~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371 — Artikkelinro. **903** **1565**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0,400	2,800	2,100	1,85	45,000	8,000	13,500
M2,5	0,450	2,800	2,100	2,30	50,000	9,000	14,500
M3	0,500	3,500	2,700	2,80	56,000	10,000	18,000
M4	0,700	4,500	3,400	3,70	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,65	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,55	80,000	16,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	17,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	20,000	39,000

DIN 2174 ~DIN 376 — Artikkelinro. **952** **1567**

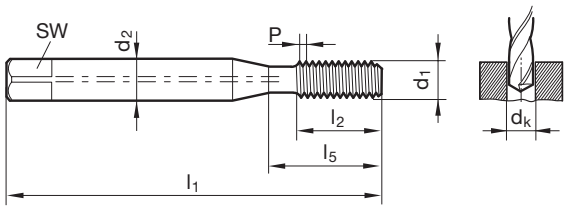
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	11,20	110,000	24,000	49,000
M14	2,000	11,000	9,000	13,10	110,000	26,000	53,000
M16	2,000	12,000	9,000	15,10	110,000	26,000	54,000
M20	2,500	16,000	12,000	18,90	140,000	32,000	62,000

Manglaavat kierretapit JK, metrinen ISO-kierre

P	•
M	•
K	
N	≥ 7
S	○
H	

Leikkuuarvosivu 466

Materiaali	**TKM**
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	



DIN 2174 ~DIN 371/~DIN 376 Artikkelinro. **2518**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0,800	6,000	4,900	4,65	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,55	80,000	11,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	14,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	16,000	39,000
M12	1,750	9,000	7,000	11,20	110,000	18,500	49,000
M16	2,000	12,000	9,000	15,10	110,000	20,000	54,000

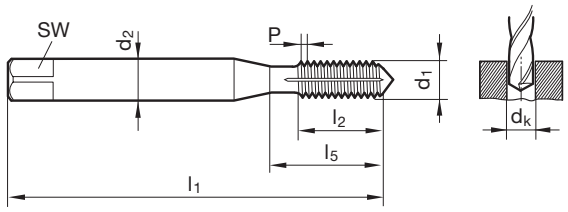
Manglaavat kierretapit, metrinen ISO-kierre

Materiaali	HSS-E		
Ø-Toleranssi	6GX	6HX	6HX
Pinta	S	S	C
Malli	N	N	N
Muoto	C	C	C
Sisäinen jäähdytys	✕	✕	✕

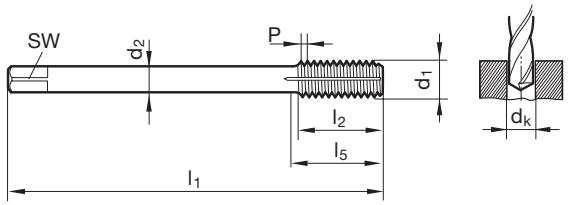
P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 467

~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371	Artikkelinro.	918	919	2012

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,80	56,000	10,000	18,000
M3,5	0,600	4,000	3,000	3,25	56,000	12,000	20,000
M4	0,700	4,500	3,400	3,70	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,65	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,55	80,000	16,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	17,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	20,000	39,000

DIN 2174 ~DIN 376	Artikkelinro.	922	923	2013

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M6	1,000	4,500	3,400	5,55	80,000	16,000	30,000
M8	1,250	6,000	4,900	7,40	90,000	17,000	35,000
M10	1,500	7,000	5,500	9,30	100,000	20,000	39,000
M12	1,750	9,000	7,000	11,20	110,000	24,000	49,000
M14	2,000	11,000	9,000	13,10	110,000	26,000	53,000
M16	2,000	12,000	9,000	15,10	110,000	26,000	54,000
M18	2,500	14,000	11,000	16,90	125,000	30,000	62,000
M20	2,500	16,000	12,000	18,90	140,000	32,000	62,000
M22	2,500	18,000	14,500	20,90	140,000	32,000	62,000
M24	3,000	18,000	14,500	22,70	160,000	36,000	73,000
M27	3,000	20,000	16,000	25,70	160,000	36,000	73,000
M30	3,500	22,000	18,000	28,50	180,000	40,000	85,000
M33	3,500	25,000	20,000	31,50	180,000	40,000	91,000
M36	4,000	28,000	22,000	34,30	200,000	50,000	102,000
M39	4,000	32,000	24,000	37,30	200,000	50,000	107,000

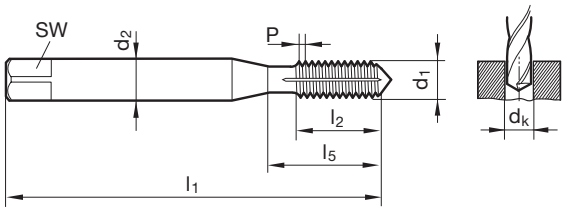
Manglaavat kierretapit, metrinen ISO-kierre

Materiaali	HSS-E-PM
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

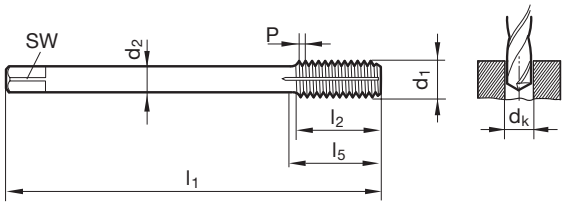
P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 467

~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371 Artikkelinro. **322**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,80	56,000	6,000	18,000
M4	0,700	4,500	3,400	3,70	63,000	7,500	21,000
M5	0,800	6,000	4,900	4,65	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,55	80,000	11,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	14,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	16,000	39,000

DIN 2174 ~DIN 376 Artikkelinro. **339**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	11,20	110,000	18,500	49,000
M16	2,000	12,000	9,000	15,10	110,000	20,000	54,000

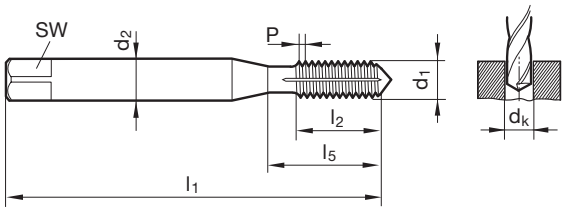
Manglaavat kierretapit, metrinen ISO-kierre

Materiaali	**HSS-E-PM**
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

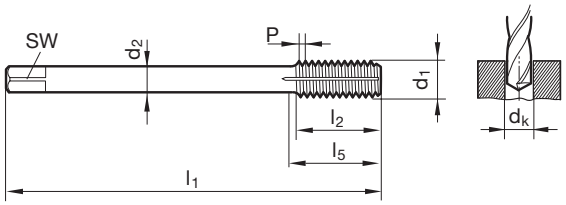
P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 467

~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371 Artikkelinro. **1266**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,80	56,000	10,000	18,000
M4	0,700	4,500	3,400	3,70	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,65	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,55	80,000	16,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	17,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	20,000	39,000

DIN 2174 ~DIN 376 Artikkelinro. **1267**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	11,20	110,000	24,000	49,000
M16	2,000	12,000	9,000	15,10	110,000	26,000	54,000
M20	2,500	16,000	12,000	18,90	140,000	32,000	62,000

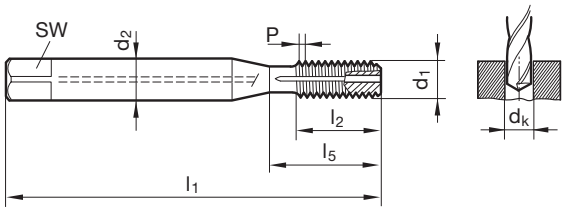
Manglaavat kierretapit JK, metrinen ISO-kierre

Materiaali	HSS-E		
Ø-Toleranssi	6HX	6GX	6HX
Pinta	S	S	C
Malli	N	N	N
Muoto	C	C	C
Sisäinen jäähdytys			

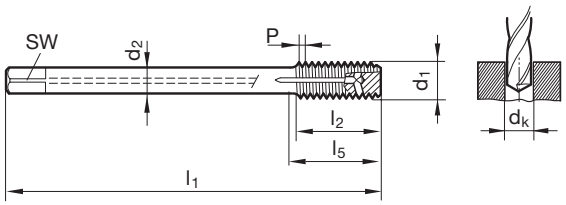
P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 467

~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371 — Artikkelinro. **2442** **2443** **2446**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0,800	6,000	4,900	4,65	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,55	80,000	11,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	14,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	16,000	39,000

DIN 2174 ~DIN 376 — Artikkelinro. **2444** **2445** **2448**

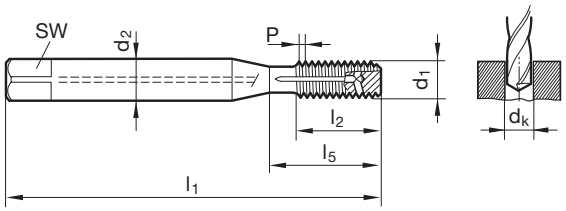
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	11,20	110,000	18,500	49,000
M14	2,000	11,000	9,000	13,10	110,000	20,000	53,000
M16	2,000	12,000	9,000	15,10	110,000	20,000	54,000

Manglaavat kierretapit JK, metrinen ISO-kierre

Materiaali	**HSS-E**
Ø-Toleranssi	6GX
Pinta	C
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	≥ 7
S	○
H	

Leikkuuarvosivu 467



DIN 2174 ~DIN 371 Artikkelinro. **2447**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0,800	6,000	4,900	4,65	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,55	80,000	11,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	14,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	16,000	39,000

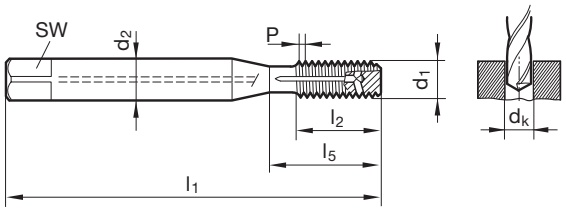
Manglaavat kierretapit JK, metrinen ISO-kierre

Materiaali	HSS-E-PM
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

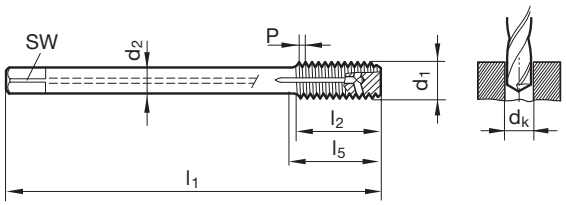
P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 467

~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371 Artikkelinro. **323**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0,800	6,000	4,900	4,65	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,55	80,000	11,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	14,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	16,000	39,000

DIN 2174 ~DIN 376 Artikkelinro. **342**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	11,20	110,000	18,500	49,000
M14	2,000	11,000	9,000	13,10	110,000	20,000	53,000
M16	2,000	12,000	9,000	15,10	110,000	20,000	54,000

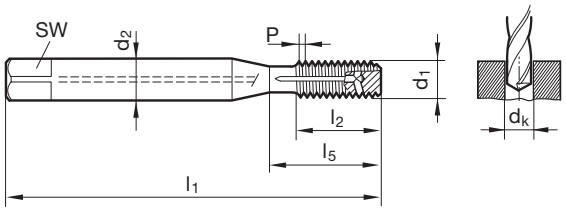
Manglaavat kierretapit JK, metrinen ISO-kierre

Materiaali	HSS-E-PM	
Ø-Toleranssi	6HX	6HX
Pinta	C	S
Malli	N	N
Muoto	C	E
Sisäinen jäähdytys		

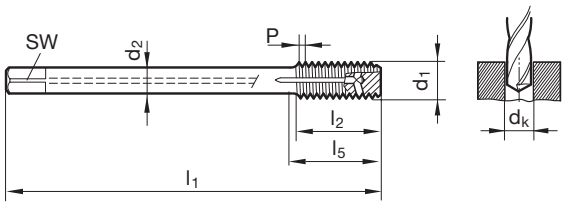
P	•
M	•
K	
N	≥ 7
S	•
H	

Leikkuuarvosivu 467

~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371 — Artikkelinro. **1270** **1725**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,80	56,000	10,000	18,000
M4	0,700	4,500	3,400	3,70	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,65	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,55	80,000	16,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	17,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	20,000	39,000

DIN 2174 ~DIN 376 — Artikkelinro. **1271** **1727**

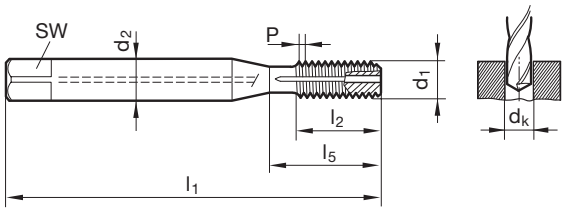
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	11,20	110,000	24,000	49,000
M14	2,000	11,000	9,000	13,10	110,000	26,000	53,000
M16	2,000	12,000	9,000	15,10	110,000	26,000	54,000
M18	2,500	14,000	11,000	16,90	125,000	30,000	62,000
M20	2,500	16,000	12,000	18,90	140,000	32,000	62,000

Manglaavat kierretapit JK, metrinen ISO-kierre

Materiaali	**HSS-E**
Ø-Toleranssi	6HX
Pinta	Cb
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	
M	
K	
N	•
S	
H	

Leikkuuarvosivu 467



DIN 2174 ~DIN 371/~DIN 376 Artikkelinro. **2515**

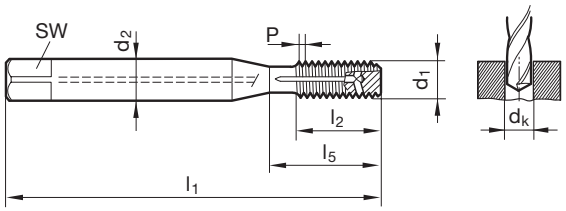
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0,800	6,000	4,900	4,65	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,55	80,000	11,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	14,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	16,000	39,000
M12	1,750	9,000	7,000	11,20	110,000	18,500	49,000
M16	2,000	12,000	9,000	15,10	110,000	20,000	54,000
M20	2,500	16,000	12,000	18,90	140,000	25,000	62,000

Manglaavat kierretapit JK, metrinen ISO-kierre

Materiaali	HSS-E-PM
Ø-Toleranssi	6GX
Pinta	C
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	≥ 7
S	•
H	

Leikkuuarvosivu 467



DIN 2174 ~DIN 371 Artikkelinro. **1713**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0,800	6,000	4,900	4,65	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,55	80,000	16,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	17,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	20,000	39,000

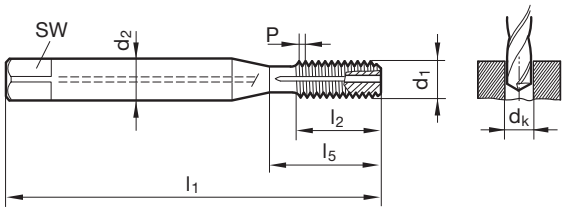
Manglaavat kierretapit JK, metrinen ISO-kierre

Materiaali	HSS-E-PM
Ø-Toleranssi	6GX
Pinta	S
Malli	N
Muoto	E
Sisäinen jäähdytys	

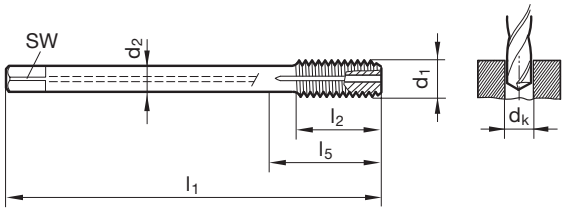
P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 467

~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371 Artikkelinro. **1726**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,80	56,000	10,000	18,000
M4	0,700	4,500	3,400	3,70	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,65	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,55	80,000	16,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	17,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	20,000	39,000

DIN 2174 ~DIN 376 Artikkelinro. **1728**

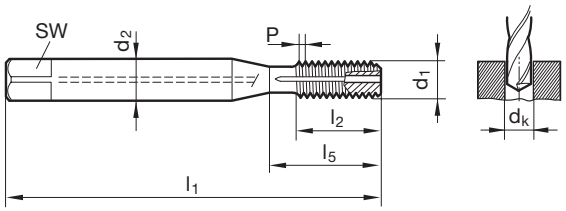
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	11,20	110,000	24,000	49,000
M14	2,000	11,000	9,000	13,10	110,000	26,000	53,000
M16	2,000	12,000	9,000	15,10	110,000	26,000	54,000
M20	2,500	16,000	12,000	18,90	140,000	32,000	62,000

Manglaavat kierretapit JK, metrinen ISO-kierre

Materiaali	**HSS-E**
Ø-Toleranssi	6GX
Pinta	Cb
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	
M	
K	
N	•
S	
H	

Leikkuuarvosivu 467



DIN 2174 ~DIN 371/~DIN 376 Artikkelinro. **4146**

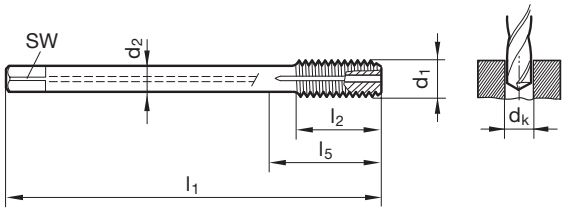
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0,800	6,000	4,900	4,65	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,55	80,000	11,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	14,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	16,000	39,000
M12	1,750	9,000	7,000	11,20	110,000	18,500	49,000
M16	2,000	12,000	9,000	15,10	110,000	20,000	54,000
M20	2,500	16,000	12,000	18,90	140,000	25,000	62,000

Manglaavat kierretapit JK, metrinen ISO-kierre

Materiaali	**HSS-E-PM**
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 467



Tehdas stdr. Tehdas stdr. Artikkelinro. **4143**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,80	112,000	6,000	18,000
M4	0,700	2,800	2,100	3,70	112,000	7,500	77,000
M5	0,800	3,500	2,700	4,65	125,000	8,500	90,000
M6	1,000	4,500	3,400	5,55	125,000	11,000	90,000
M8	1,250	6,000	4,900	7,40	140,000	14,000	97,000
M10	1,500	7,000	5,500	9,30	160,000	16,000	117,000
M12	1,750	9,000	7,000	11,20	180,000	18,500	133,000
M16	2,000	12,000	9,000	15,10	220,000	20,000	168,000
M20	2,500	16,000	12,000	18,90	280,000	25,000	225,000

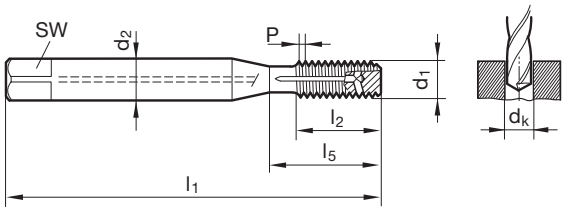
Manglaavat kierretapit JK, metrinen ISO-kierre

Materiaali	**TKM**
Ø-Toleranssi	6HX
Pinta	C
Malli	N
Muoto	C
Sisäinen jäähdytys	

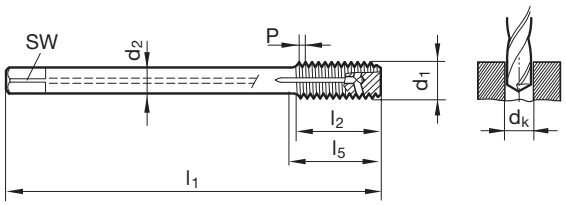
P	•
M	•
K	
N	≥ 7
S	•
H	

Leikkuuarvosivu 467

~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371 Artikkelinro. **1972**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,80	56,000	6,000	18,000
M4	0,700	4,500	3,400	3,70	63,000	7,500	21,000
M5	0,800	6,000	4,900	4,65	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,55	80,000	11,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	14,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	16,000	39,000

DIN 2174 ~DIN 376 Artikkelinro. **1931**

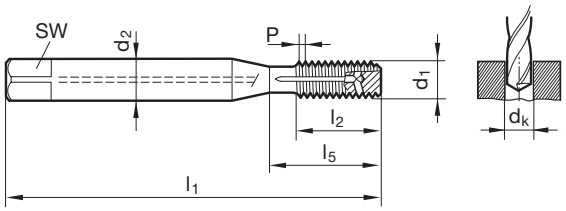
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	11,20	110,000	18,500	49,000
M14	2,000	11,000	9,000	13,10	110,000	20,000	53,000
M16	2,000	12,000	9,000	15,10	110,000	20,000	54,000
M18	2,500	14,000	11,000	16,90	125,000	25,000	62,000
M20	2,500	16,000	12,000	18,90	140,000	25,000	62,000

Manglaavat kierretapit JK, metrinen ISO-kierre

Materiaali	**TKM**
Ø-Toleranssi	6HX
Pinta	C
Malli	N
Muoto	E
Sisäinen jäähdytys	

P	•
M	•
K	
N	≥ 7
S	•
H	

Leikkuuarvosivu 467



DIN 2174 ~DIN 371 Artikkelinro. **1927**

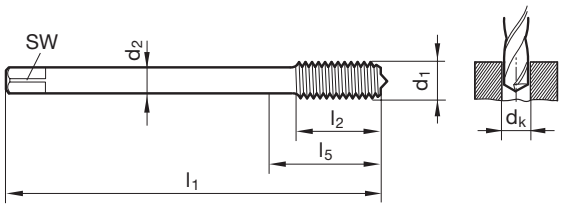
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,80	56,000	6,000	18,000
M4	0,700	4,500	3,400	3,70	63,000	7,500	21,000
M5	0,800	6,000	4,900	4,65	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,55	80,000	11,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	14,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	16,000	39,000

Manglaavat kierretapit, metrinen ISO-hienokierre

Materiaali	HSS-E
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	○
S	
H	

Leikkuuarvosivu 466



DIN 2174 ~DIN 374 Artikkelinro. **929**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6,000	4,900	7,55	90,000	16,000	35,000	8,005
M10 x 1	7,000	5,500	9,55	90,000	16,000	35,000	10,005
M14 x 1,5	11,000	9,000	13,30	100,000	20,000	40,000	14,007
M18 x 1	14,000	11,000	17,55	110,000	25,000	44,000	18,005
M18 x 1,5	14,000	11,000	17,30	110,000	25,000	44,000	18,007
M20 x 1	16,000	12,000	19,55	125,000	25,000	44,000	20,005
M20 x 1,5	16,000	12,000	19,30	125,000	25,000	44,000	20,007

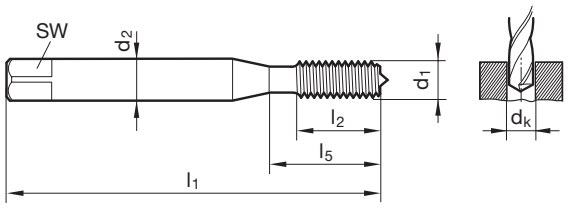
Manglaavat kierretapit, metrinen ISO-hienokierre

Materiaali	HSS-E-PM
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

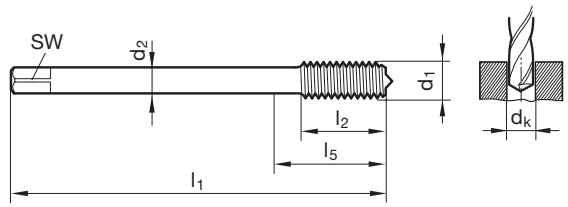
P	•
M	•
K	
N	○
S	
H	

Leikkuuarvosivu 466

~ DIN 371



~ DIN 374



DIN 2174 ~DIN 371 Artikkelinro. **1257**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8,000	6,200	7,55	90,000	16,000	35,000	8,005
M9 x 1	9,000	7,000	8,55	90,000	16,000	35,000	9,005
M10 x 1	10,000	8,000	9,55	90,000	16,000	35,000	10,005

DIN 2174 ~DIN 374 Artikkelinro. **1258**

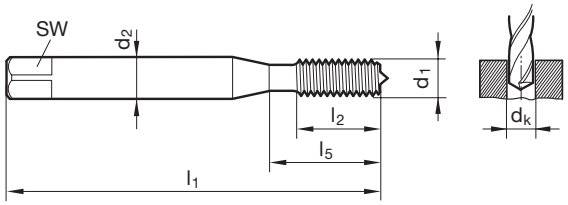
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9,000	7,000	11,55	100,000	20,000	40,000	12,005
M12 x 1,25	9,000	7,000	11,40	100,000	20,000	40,000	12,006
M12 x 1,5	9,000	7,000	11,30	100,000	20,000	40,000	12,007
M14 x 1	11,000	9,000	13,55	100,000	20,000	40,000	14,005
M14 x 1,25	11,000	9,000	13,40	100,000	20,000	40,000	14,006
M14 x 1,5	11,000	9,000	13,30	100,000	20,000	40,000	14,007
M16 x 1	12,000	9,000	15,55	100,000	22,000	44,000	16,005
M16 x 1,5	12,000	9,000	15,30	100,000	22,000	44,000	16,007
M20 x 1	16,000	12,000	19,55	125,000	25,000	44,000	20,005
M20 x 1,5	16,000	12,000	19,30	125,000	25,000	44,000	20,007
M24 x 1,5	18,000	14,500	23,30	140,000	28,000	48,000	24,007
M24 x 2	18,000	14,500	23,10	140,000	28,000	48,000	24,008

Manglaavat kierretapit, metrinen ISO-hienokierre

Materiaali	**HSS-E-PM**
Ø-Toleranssi	6HX
Pinta	Cb
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	
M	
K	
N	•
S	
H	

Leikkuuarvosivu 466



DIN 2174 ~DIN 371 Artikkelinro. **1568**

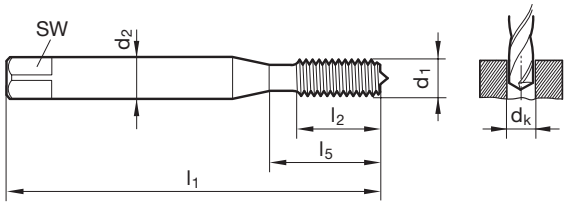
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8,000	6,200	7,55	90,000	16,000	35,000	8,005
M10 x 1	10,000	8,000	9,55	90,000	16,000	35,000	10,005

Manglaavat kierretapit, metrinen ISO-hienokierre

Materiaali	**HSS-E-PM**
Ø-Toleranssi	6GX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	○
S	
H	

Leikkuuarvosivu 466



DIN 2174 ~DIN 371 Artikkelinro. **1740**

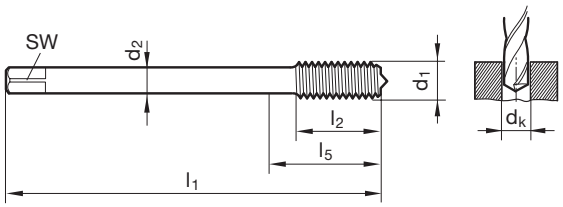
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8,000	6,200	7,55	90,000	16,000	35,000	8,005
M10 x 1	10,000	8,000	9,55	90,000	16,000	35,000	10,005
M10 x 1,25	10,000	8,000	9,40	100,000	20,000	39,000	10,006

Manglaavat kierretapit, metrinen ISO-hienokierre

Materiaali	**HSS-E**
Ø-Toleranssi	6GX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	○
S	
H	

Leikkuuarvosivu 466



DIN 2174 ~DIN 374 Artikkelinro. **928**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6,000	4,900	7,55	90,000	16,000	35,000	8,005
M12 x 1,5	9,000	7,000	11,30	100,000	20,000	40,000	12,007
M16 x 1,5	12,000	9,000	15,30	100,000	22,000	44,000	16,007
M18 x 1	14,000	11,000	17,55	110,000	25,000	44,000	18,005
M18 x 1,5	14,000	11,000	17,30	110,000	25,000	44,000	18,007

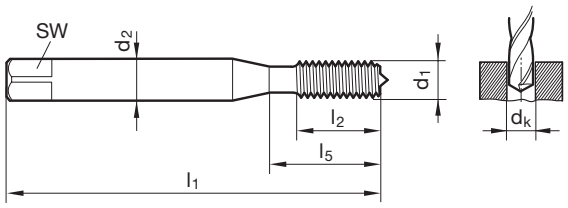
Manglaavat kierretapit, metrinen ISO-hienokierre

Materiaali	HSS-E-PM
Ø-Toleranssi	6GX
Pinta	Cb
Malli	N
Muoto	C
Sisäinen jäähdytys	

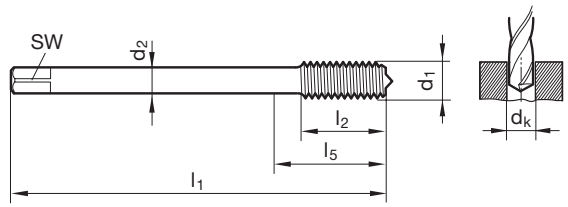
P	
M	
K	
N	•
S	
H	

Leikkuuarvosivu 466

~ DIN 371



~ DIN 374



DIN 2174 ~DIN 371 Artikkelinro. **1569**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8,000	6,200	7,55	90,000	16,000	35,000	8,005
M10 x 1	10,000	8,000	9,55	90,000	16,000	35,000	10,005

DIN 2174 ~DIN 374 Artikkelinro. **1580**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9,000	7,000	11,55	100,000	20,000	40,000	12,005
M12 x 1,5	9,000	7,000	11,30	100,000	20,000	40,000	12,007
M14 x 1,5	11,000	9,000	13,30	100,000	20,000	40,000	14,007
M16 x 1,5	12,000	9,000	15,30	100,000	22,000	44,000	16,007
M20 x 1,5	16,000	12,000	19,30	125,000	25,000	44,000	20,007
M24 x 1,5	18,000	14,500	23,30	140,000	28,000	48,000	24,007

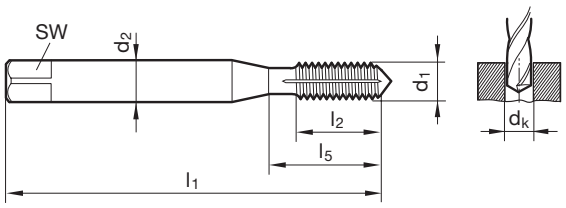
Manglaavat kierretapit, metrinen ISO-hienokierre

Materiaali	**HSS-E**
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

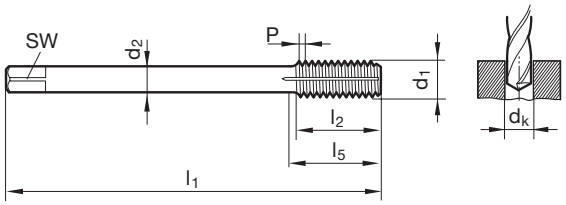
P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 467

~ DIN 371



~ DIN 374



DIN 2174 ~DIN 371 Artikkelinro. **1275**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M6 x 0,75	6,000	4,900	5,65	80,000	13,000	30,000	6,004
M8 x 0,75	8,000	6,200	7,65	80,000	14,000	30,000	8,004
M8 x 1	8,000	6,200	7,55	90,000	16,000	35,000	8,005
M10 x 1	10,000	8,000	9,55	90,000	16,000	35,000	10,005
M10 x 1,25	10,000	8,000	9,40	100,000	20,000	39,000	10,006

DIN 2174 ~DIN 374 Artikkelinro. **927**

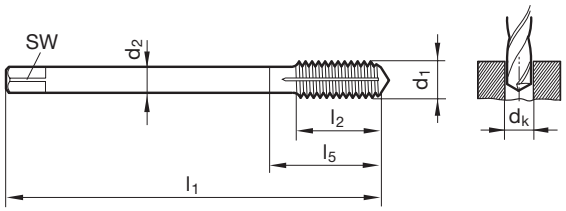
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M6 x 0,75	4,500	3,400	5,65	80,000	13,000	30,000	6,004
M8 x 0,75	6,000	4,900	7,65	80,000	14,000	30,000	8,004
M8 x 1	6,000	4,900	7,55	90,000	16,000	35,000	8,005
M10 x 1	7,000	5,500	9,55	90,000	16,000	35,000	10,005
M10 x 1,25	7,000	5,500	9,40	100,000	20,000	39,000	10,006
M12 x 1	9,000	7,000	11,55	100,000	20,000	40,000	12,005
M12 x 1,25	9,000	7,000	11,40	100,000	20,000	40,000	12,006
M12 x 1,5	9,000	7,000	11,30	100,000	20,000	40,000	12,007
M14 x 1	11,000	9,000	13,55	100,000	20,000	40,000	14,005
M14 x 1,5	11,000	9,000	13,30	100,000	20,000	40,000	14,007
M16 x 1,5	12,000	9,000	15,30	100,000	22,000	44,000	16,007
M18 x 1	14,000	11,000	17,55	110,000	25,000	44,000	18,005
M18 x 1,5	14,000	11,000	17,30	110,000	25,000	44,000	18,007
M20 x 1	16,000	12,000	19,55	125,000	25,000	44,000	20,005
M20 x 1,5	16,000	12,000	19,30	125,000	25,000	44,000	20,007
M22 x 1,5	18,000	14,500	21,30	125,000	25,000	44,000	22,007
M24 x 1,5	18,000	14,500	23,30	140,000	28,000	48,000	24,007

Manglaavat kierretapit, metrinen ISO-hienokierre

Materiaali	**HSS-E**
Ø-Toleranssi	6HX
Pinta	C
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	≥ 7
S	○
H	

Leikkuuarvosivu 467



DIN 2174 ~DIN 374 Artikkelinro. **2008**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M6 x 0,75	4,500	3,400	5,65	80,000	13,000	30,000	6,004
M8 x 0,75	6,000	4,900	7,65	80,000	14,000	30,000	8,004
M8 x 1	6,000	4,900	7,55	90,000	16,000	35,000	8,005
M10 x 1,25	7,000	5,500	9,40	100,000	20,000	39,000	10,006
M12 x 1,5	9,000	7,000	11,30	100,000	20,000	40,000	12,007
M16 x 1,5	12,000	9,000	15,30	100,000	22,000	44,000	16,007
M20 x 1,5	16,000	12,000	19,30	125,000	25,000	44,000	20,007

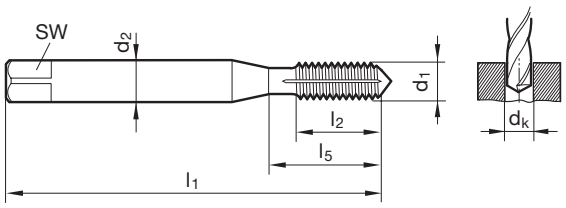
Manglaavat kierretapit, metrinen ISO-hienokierre

Materiaali	**HSS-E**
Ø-Toleranssi	6GX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

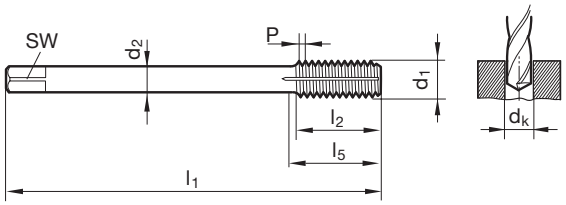
P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 467

~ DIN 371



~ DIN 374



DIN 2174 ~DIN 371 Artikkelinro. **1277**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8,000	6,200	7,55	90,000	16,000	35,000	8,005
M10 x 1	10,000	8,000	9,55	90,000	16,000	35,000	10,005

DIN 2174 ~DIN 374 Artikkelinro. **926**

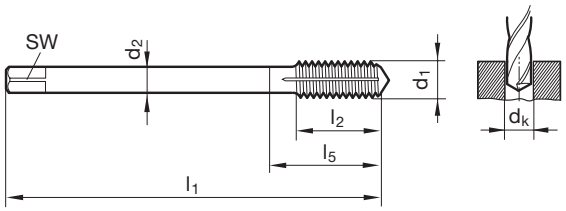
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6,000	4,900	7,55	90,000	16,000	35,000	8,005
M10 x 1	7,000	5,500	9,55	90,000	16,000	35,000	10,005
M12 x 1	9,000	7,000	11,55	100,000	20,000	40,000	12,005
M12 x 1,5	9,000	7,000	11,30	100,000	20,000	40,000	12,007
M14 x 1,5	11,000	9,000	13,30	100,000	20,000	40,000	14,007
M16 x 1	12,000	9,000	15,55	100,000	22,000	44,000	16,005
M16 x 1,5	12,000	9,000	15,30	100,000	22,000	44,000	16,007
M18 x 1,5	14,000	11,000	17,30	110,000	25,000	44,000	18,007
M20 x 1,5	16,000	12,000	19,30	125,000	25,000	44,000	20,007

Manglaavat kierretapit, metrinen ISO-hienokierre

Materiaali	HSS-E-PM
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 467



DIN 2174 ~DIN 374 Artikkelinro. **333**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6,000	4,900	7,55	90,000	11,000	35,000	8,005
M10 x 1	7,000	5,500	9,55	90,000	11,000	35,000	10,005
M12 x 1	9,000	7,000	11,55	100,000	11,000	40,000	12,005
M12 x 1,5	9,000	7,000	11,30	100,000	16,000	40,000	12,007
M14 x 1,5	11,000	9,000	13,30	100,000	15,000	40,000	14,007
M16 x 1,5	12,000	9,000	15,30	100,000	15,000	44,000	16,007
M18 x 1,5	14,000	11,000	17,30	110,000	16,000	44,000	18,007
M20 x 1,5	16,000	12,000	19,30	125,000	16,000	44,000	20,007

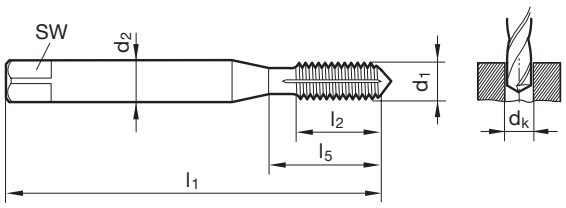
Manglaavat kierretapit, metrinen ISO-hienokierre

Materiaali	HSS-E-PM
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

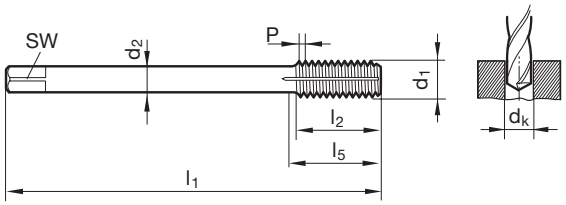
P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 467

~ DIN 371



~ DIN 374



DIN 2174 ~DIN 371 Artikkelinro. **1268**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8,000	6,200	7,55	90,000	16,000	35,000	8,005
M10 x 1	10,000	8,000	9,55	90,000	16,000	35,000	10,005

DIN 2174 ~DIN 374 Artikkelinro. **1269**

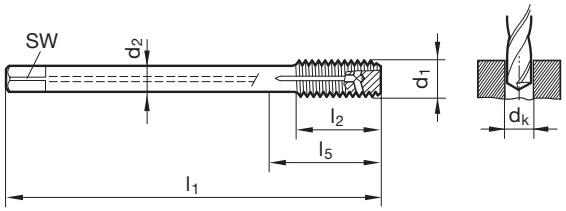
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M12 x 1,25	9,000	7,000	11,40	100,000	20,000	40,000	12,006
M12 x 1,5	9,000	7,000	11,30	100,000	20,000	40,000	12,007
M14 x 1	11,000	9,000	13,55	100,000	20,000	40,000	14,005
M14 x 1,25	11,000	9,000	13,40	100,000	20,000	40,000	14,006
M14 x 1,5	11,000	9,000	13,30	100,000	20,000	40,000	14,007
M16 x 1,5	12,000	9,000	15,30	100,000	22,000	44,000	16,007
M18 x 1,5	14,000	11,000	17,30	110,000	25,000	44,000	18,007
M20 x 1	16,000	12,000	19,55	125,000	25,000	44,000	20,005
M20 x 1,5	16,000	12,000	19,30	125,000	25,000	44,000	20,007
M24 x 2	18,000	14,500	23,10	140,000	28,000	48,000	24,008

Manglaavat kierretapit JK, metrinen ISO-hienokierre

Materiaali	HSS-E-PM
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 467



DIN 2174 ~DIN 374 Artikkelinro. **338**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6,000	4,900	7,55	90,000	11,000	35,000	8,005
M10 x 1	7,000	5,500	9,55	90,000	11,000	35,000	10,005
M12 x 1,5	9,000	7,000	11,30	100,000	16,000	40,000	12,007
M14 x 1,5	11,000	9,000	13,30	100,000	15,000	40,000	14,007
M16 x 1,5	12,000	9,000	15,30	100,000	15,000	44,000	16,007

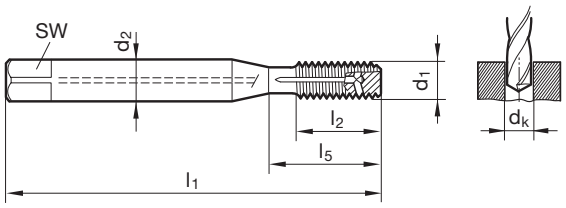
Manglaavat kierretapit JK, metrinen ISO-hienokierre

Materiaali	HSS-E-PM	
Ø-Toleranssi	6HX	6HX
Pinta	C	S
Malli	N	N
Muoto	C	E
Sisäinen jäähdytys		

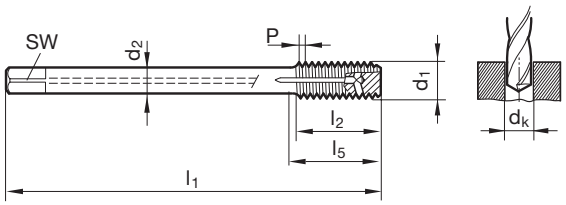
P	•
M	•
K	
N	≥ 7
S	•
H	

Leikkuuarvosivu 467

~ DIN 371



~ DIN 374



DIN 2174 ~DIN 371 — Artikkelinro. **1272** **1729**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8,000	6,200	7,55	90,000	16,000	35,000	8,005
M9 x 1	9,000	7,000	8,55	90,000	16,000	35,000	9,005
M10 x 1	10,000	8,000	9,55	90,000	16,000	35,000	10,005
M10 x 1,25	10,000	8,000	9,40	100,000	20,000	39,000	10,006

DIN 2174 ~DIN 374 — Artikkelinro. **1273** **1731**

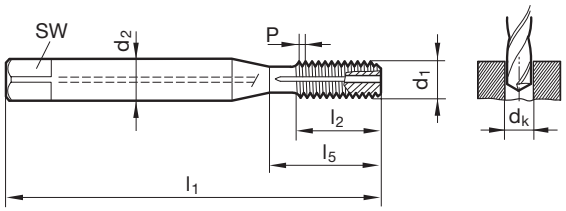
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9,000	7,000	11,55	100,000	20,000	40,000	12,005
M12 x 1,25	9,000	7,000	11,40	100,000	20,000	40,000	12,006
M12 x 1,5	9,000	7,000	11,30	100,000	20,000	40,000	12,007
M14 x 1	11,000	9,000	13,55	100,000	20,000	40,000	14,005
M14 x 1,25	11,000	9,000	13,40	100,000	20,000	40,000	14,006
M14 x 1,5	11,000	9,000	13,30	100,000	20,000	40,000	14,007
M16 x 1,5	12,000	9,000	15,30	100,000	22,000	44,000	16,007
M18 x 1,5	14,000	11,000	17,30	110,000	25,000	44,000	18,007
M20 x 1	16,000	12,000	19,55	125,000	25,000	44,000	20,005
M20 x 1,5	16,000	12,000	19,30	125,000	25,000	44,000	20,007
M22 x 1,5	18,000	14,500	21,30	125,000	25,000	44,000	22,007
M24 x 1,5	18,000	14,500	23,30	140,000	28,000	48,000	24,007

Manglaavat kierretapit JK, metrinen ISO-hienokierre

Materiaali	**HSS-E**
Ø-Toleranssi	6HX
Pinta	Cb
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	
M	
K	
N	•
S	
H	

Leikkuuarvosivu 467



DIN 2174 ~DIN 371/~DIN 374 Artikkelinro. **4147**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8,000	6,200	7,55	90,000	11,000	35,000	8,005
M10 x 1	10,000	8,000	9,55	90,000	11,000	35,000	10,005
M10 x 1,25	10,000	8,000	9,40	100,000	14,000	39,000	10,006
M12 x 1	9,000	7,000	11,55	100,000	11,000	40,000	12,005
M12 x 1,5	9,000	7,000	11,30	100,000	16,000	40,000	12,007
M14 x 1,5	11,000	9,000	13,30	100,000	15,000	40,000	14,007
M16 x 1,5	12,000	9,000	15,30	100,000	15,000	44,000	16,007

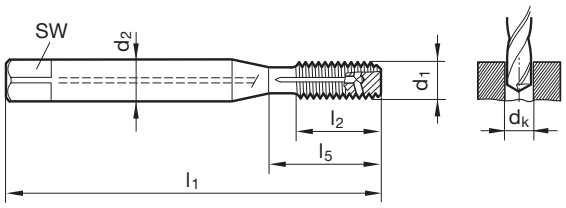
Manglaavat kierretapit JK, metrinen ISO-hienokierre

Materiaali	HSS-E-PM	
Ø-Toleranssi	6GX	6GX
Pinta	C	S
Malli	N	N
Muoto	C	E
Sisäinen jäähdytys		

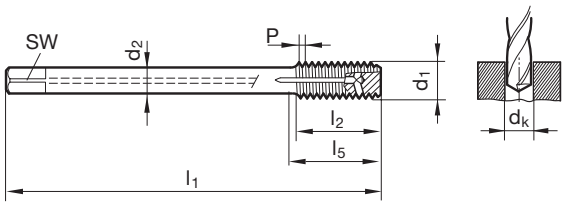
P	•
M	•
K	
N	≥ 7
S	•
H	

Leikkuuarvosivu 467

~ DIN 371



~ DIN 374



DIN 2174 ~DIN 371 — Artikkelinro. **1715** **1730**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8,000	6,200	7,55	90,000	16,000	35,000	8,005
M10 x 1	10,000	8,000	9,55	90,000	16,000	35,000	10,005
M10 x 1,25	10,000	8,000	9,40	100,000	20,000	39,000	10,006

DIN 2174 ~DIN 374 — Artikkelinro. **1716** **1732**

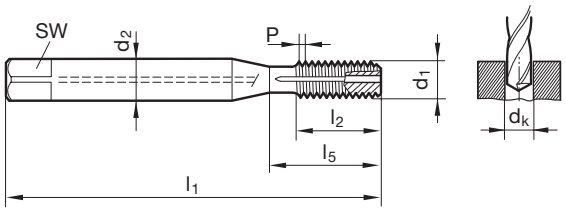
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9,000	7,000	11,55	100,000	20,000	40,000	12,005
M12 x 1,5	9,000	7,000	11,30	100,000	20,000	40,000	12,007
M14 x 1,5	11,000	9,000	13,30	100,000	20,000	40,000	14,007
M16 x 1,5	12,000	9,000	15,30	100,000	22,000	44,000	16,007
M18 x 1,5	14,000	11,000	17,30	110,000	25,000	44,000	18,007
M20 x 1,5	16,000	12,000	19,30	125,000	25,000	44,000	20,007
M24 x 1,5	18,000	14,500	23,30	140,000	28,000	48,000	24,007

Manglaavat kierretapit JK, metrinen ISO-hienokierre

Materiaali	**HSS-E**
Ø-Toleranssi	6GX
Pinta	Cb
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	
M	
K	
N	•
S	
H	

Leikkuuarvosivu 467



DIN 2174 ~DIN 371/~DIN 374 Artikkelinro. **4151**

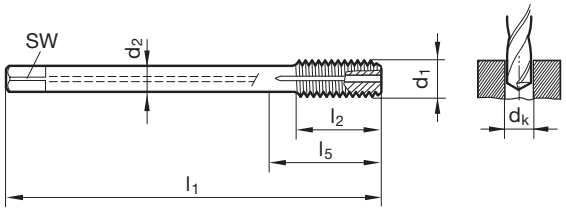
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8,000	6,200	7,55	90,000	11,000	35,000	8,005
M10 x 1	10,000	8,000	9,55	90,000	11,000	35,000	10,005
M10 x 1,25	10,000	8,000	9,40	100,000	14,000	39,000	10,006
M12 x 1	9,000	7,000	11,55	100,000	11,000	40,000	12,005
M12 x 1,5	9,000	7,000	11,30	100,000	16,000	40,000	12,007
M14 x 1,5	11,000	9,000	13,30	100,000	15,000	40,000	14,007
M16 x 1,5	12,000	9,000	15,30	100,000	15,000	44,000	16,007

Manglaavat kierretapit JK, metrinen ISO-hienokierre

Materiaali	HSS-E-PM
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 467



Tehdas stdr. Artikkelinro. **4145**

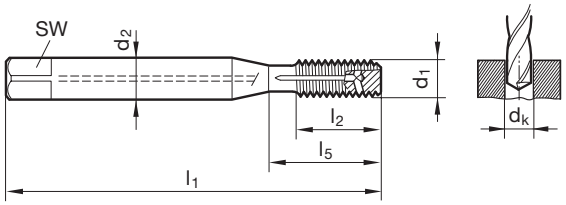
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6,000	4,900	7,55	140,000	14,000	97,000	8,005
M10 x 1	7,000	5,500	9,55	160,000	16,000	117,000	10,005
M10 x 1,25	7,000	5,500	9,40	160,000	16,000	117,000	10,006
M12 x 1	9,000	7,000	11,55	180,000	18,500	133,000	12,005
M12 x 1,5	9,000	7,000	11,30	180,000	18,500	133,000	12,007
M14 x 1,5	11,000	9,000	13,30	220,000	20,000	168,000	14,007
M16 x 1,5	12,000	9,000	15,30	220,000	20,000	168,000	16,007

Manglaavat kierretapit JK, metrinen ISO-hienokierre

Materiaali	**TKM**
Ø-Toleranssi	6HX
Pinta	C
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	≥ 7
S	•
H	

Leikkuuarvosivu 467



DIN 2174 ~DIN 371/~DIN 376 Artikkelinro. **1581**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M10 x 1	10,000	8,000	9,55	90,000	11,000	35,000	10,005
M12 x 1	9,000	7,000	11,55	100,000	15,000	40,000	12,005
M12 x 1,5	9,000	7,000	11,30	100,000	15,000	40,000	12,007
M14 x 1	11,000	9,000	13,55	100,000	15,000	40,000	14,005
M14 x 1,25	11,000	9,000	13,40	100,000	15,000	40,000	14,006
M14 x 1,5	11,000	9,000	13,30	100,000	15,000	40,000	14,007
M16 x 1,5	12,000	9,000	15,30	100,000	15,000	44,000	16,007
M18 x 1,5	14,000	11,000	17,30	110,000	15,000	44,000	18,007
M20 x 1,5	16,000	12,000	19,30	125,000	15,000	44,000	20,007
M24 x 1,5	18,000	14,500	23,30	140,000	15,000	48,000	24,007

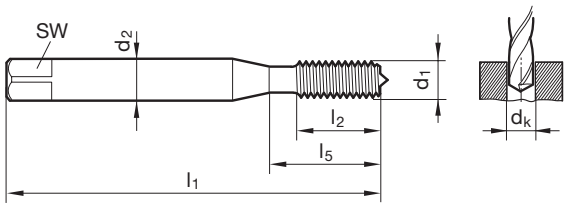
Manglaavat kierretapit UNC-kierteille

Materiaali	HSS-E	
Ø-Toleranssi	2BX	2BX
Pinta	S	S
Malli	N	N
Muoto	C	C
Sisäinen jäähdytys		

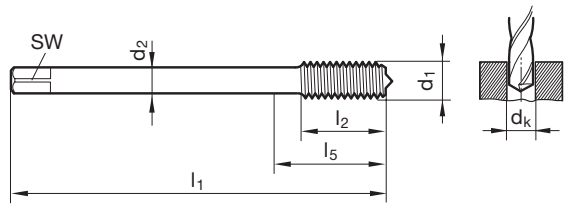
P	•
M	•
K	
N	○
S	
H	

Leikkuuarvosivu 466/467

~ DIN 371



~ DIN 374



DIN 2184-1 ~DIN 371 Artikkelinro. **2273** **1582**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
4 - 40	3,500	2,700	2,55	56,000	11,000	18,000	2,845
5 - 40	3,500	2,700	2,90	56,000	11,000	18,000	3,175
6 - 32	4,000	3,000	3,15	56,000	12,000	20,000	3,505
8 - 32	4,500	3,400	3,80	63,000	12,000	21,000	4,166
10 - 24	6,000	4,900	4,35	70,000	14,000	25,000	4,826
12 - 24	6,000	4,900	5,00	80,000	16,000	30,000	5,486
1/4 - 20	7,000	5,500	5,75	80,000	16,000	30,000	6,350
5/16 - 18	8,000	6,200	7,30	90,000	18,000	35,000	7,938
3/8 - 16	10,000	8,000	8,80	100,000	20,000	39,000	9,525

DIN 2184-1 ~DIN 376 Artikkelinro. **2274** **1583**

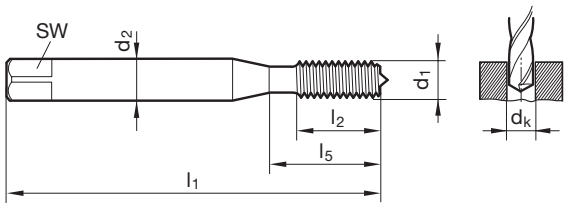
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
7/16 - 14	8,000	6,200	10,30	100,000	22,000	42,000	11,113
1/2 - 13	9,000	7,000	11,80	110,000	25,000	49,000	12,700
9/16 - 12	11,000	9,000	13,30	110,000	28,000	53,000	14,288
5/8 - 11	12,000	9,000	14,80	110,000	30,000	53,000	15,875
3/4 - 10	14,000	11,000	17,90	125,000	33,000	62,000	19,050
7/8 - 9	18,000	14,500	21,00	140,000	35,000	62,000	22,225

Manglaavat kierretapit UNF-kierteille

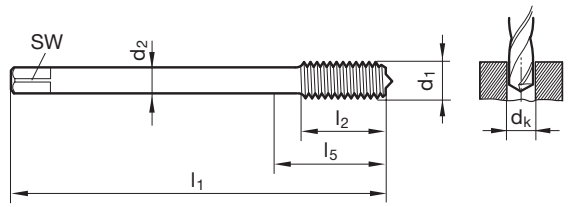
P	•	Leikkuuarvosivu 466/467
M	•	
K		
N	○	
S		
H		

Materiaali	HSS-E	
Ø-Toleranssi	2BX	2BX
Pinta	S	S
Malli	N	N
Muoto	C	C
Sisäinen jäähdytys		

~ DIN 371



~ DIN 374



DIN 2184-1 ~DIN 371	Artikkelinro.	1283	1584

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
4 - 48	3,500	2,700	2,60	56,000	10,000	18,000	2,845
5 - 44	3,500	2,700	2,90	56,000	10,000	18,000	3,175
6 - 40	4,000	3,000	3,20	56,000	11,000	20,000	3,505
8 - 36	4,500	3,400	3,85	63,000	12,000	21,000	4,166
10 - 32	6,000	4,900	4,45	70,000	14,000	25,000	4,826
12 - 28	6,000	4,900	5,10	80,000	16,000	30,000	5,486
1/4 - 28	7,000	5,500	5,95	80,000	16,000	30,000	6,350
5/16 - 24	8,000	6,200	7,45	90,000	18,000	35,000	7,938
3/8 - 24	10,000	8,000	9,05	90,000	18,000	35,000	9,525

DIN 2184-1 ~DIN 374	Artikkelinro.	1585	2275

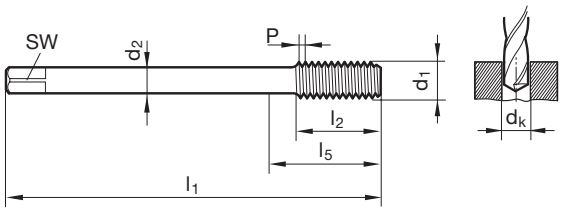
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
10 - 32	3,500	2,700	4,45	70,000	14,000	25,000	4,826
12 - 28	4,000	3,000	5,10	80,000	16,000	30,000	5,486
1/4 - 28	4,500	3,400	5,95	80,000	16,000	30,000	6,350
5/16 - 24	6,000	4,900	7,45	90,000	18,000	35,000	7,938
3/8 - 24	7,000	5,500	9,05	90,000	18,000	35,000	9,525
7/16 - 20	8,000	6,200	10,55	100,000	22,000	42,000	11,113
1/2 - 20	9,000	7,000	12,10	100,000	20,000	40,000	12,700
9/16 - 18	11,000	9,000	13,65	100,000	22,000	40,000	14,288
5/8 - 18	12,000	9,000	15,25	100,000	22,000	44,000	15,875
3/4 - 16	14,000	11,000	18,35	110,000	25,000	44,000	19,050
7/8 - 14	18,000	14,500	21,40	125,000	25,000	44,000	22,225
1 - 12	18,000	14,500	24,45	140,000	28,000	50,000	25,400

Manglaavat kierretapit BSP-kierteille

Materiaali	HSS-E
Ø-Toleranssi	
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	○
S	
H	

Leikkuuarvosivu 466



DIN 2184-1 DIN 2189 Artikkelinro. **966**

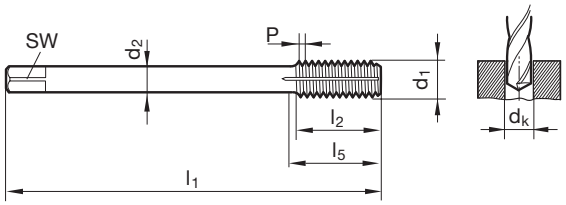
d1	P	d2	SW	dk	l1	l2	l5	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28,000	6,000	4,900	7,30	90,000	18,000	30,000	7,723
G1/8	28,000	7,000	5,500	9,30	90,000	18,000	35,000	9,728
G1/4	19,000	11,000	9,000	12,50	100,000	20,000	40,000	13,157
G3/8	19,000	12,000	9,000	16,00	100,000	22,000	44,000	16,662
G1/2	14,000	16,000	12,000	20,00	125,000	25,000	44,000	20,955
G3/4	14,000	20,000	16,000	25,50	140,000	28,000	53,000	26,441
G1	11,000	25,000	20,000	32,00	160,000	30,000	56,000	33,249
G1 1/4	11,000	32,000	24,000	40,75	170,000	30,000	57,000	41,910

Manglaavat kierretapit BSP-kierteille

Materiaali	HSS-E
Ø-Toleranssi	
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 467



DIN 2184-1 DIN 2189 Artikkelinro. **1586**

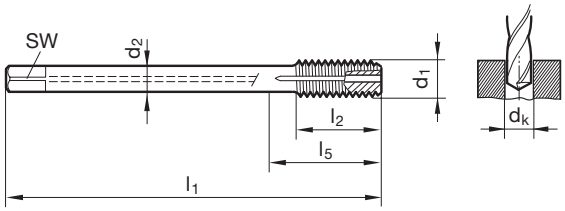
d1	P	d2	SW	dk	l1	l2	l5	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28,000	6,000	4,900	7,30	90,000	18,000	30,000	7,723
G1/8	28,000	7,000	5,500	9,30	90,000	18,000	35,000	9,728
G1/4	19,000	11,000	9,000	12,50	100,000	20,000	40,000	13,157
G3/8	19,000	12,000	9,000	16,00	100,000	22,000	44,000	16,662
G1/2	14,000	16,000	12,000	20,00	125,000	25,000	44,000	20,955
G3/4	14,000	20,000	16,000	25,50	140,000	28,000	53,000	26,441

Manglaavat kierretapit BSP-kierteille

Materiaali	HSS-E
Ø-Toleranssi	
Pinta	Cb
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	
M	
K	
N	•
S	
H	

Leikkuuarvosivu 467



DIN 2184-1 DIN 2189 Artikkelinro. **4152**

d1	P	d2	SW	dk	l1	l2	l5	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28,000	6,000	4,900	7,30	90,000	11,000	30,000	7,723
G1/8	28,000	7,000	5,500	9,30	90,000	11,000	35,000	9,728
G1/4	19,000	11,000	9,000	12,50	100,000	14,000	40,000	13,157
G3/8	19,000	12,000	9,000	16,00	100,000	14,000	44,000	16,662
G1/2	14,000	16,000	12,000	20,00	125,000	18,000	44,000	20,955
G3/4	14,000	20,000	16,000	25,50	140,000	20,000	53,000	26,441
G1	11,000	25,000	20,000	32,00	160,000	24,000	56,000	33,249

Alumiini, ei-rautametallit ja muovit

KIERRE-JYRSIMET

N

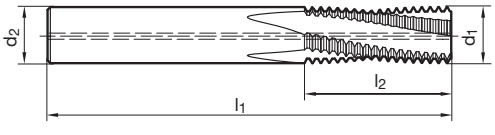
Kierrejyrsimet ilman viistettä metrisille ISO-kierteille

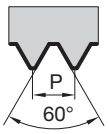
2xD

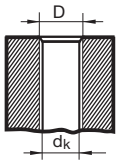
P	•
M	○
K	•
N	•
S	○
H	≤55

Leikkuuarvosivu 468

Materiaali	TKM		
Pinta	C	C	○
Malli	TM SP	TM SP	TM SP
Sisäinen jäähdytys			
Varren muoto	HA	HB	HA
		NEW	







Tehdas stdr.	Artikkelinro.	3737	3743	3734

D	P	d1	d2	dk	l1	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm		
M6	1,000	4,800	6,000	5,00	54,000	13,500	3	6,000
M8	1,250	6,400	8,000	6,80	62,000	18,100	3	8,000
M8 x 1	1,000	6,400	8,000	7,00	62,000	17,500	3	8,005
M10	1,500	7,950	10,000	8,50	74,000	21,800	3	10,000
M10 x 1	1,000	7,950	10,000	9,00	74,000	21,500	3	10,005
M10 x 1,25	1,250	7,950	10,000	8,80	74,000	21,900	3	10,006
M12	1,750	9,950	10,000	10,20	74,000	25,400	4	12,000
M12 x 1,5	1,500	9,950	10,000	10,50	74,000	26,300	4	12,007
M14	2,000	11,200	12,000	12,00	90,000	31,000	4	14,000
M14 x 1,5	1,500	11,200	12,000	12,50	90,000	30,800	4	14,007
M16	2,000	12,800	14,000	14,00	90,000	35,000	4	16,000
M16 x 1,5	1,500	12,800	14,000	14,50	90,000	33,800	4	16,007
M20	2,500	14,950	16,000	17,50	102,000	41,300	4	20,000
M20 x 1,5	1,500	14,950	16,000	18,50	102,000	42,800	4	20,007

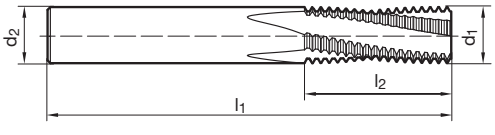
Kierrejyrsimet ilman viistettä metrisille ISO-kierteille

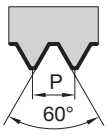
2xD

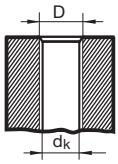
P	•
M	○
K	•
N	•
S	○
H	≤55

Leikkuuarvosivu 468

Materiaali	TKM	
Pinta	C	C
Malli	TM SP	TM SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	4132	4133

D	P	d1	d2	dk	l1	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm		
M6	1,000	4,800	6,000	5,00	54,000	13,500	3	6,000
M8	1,250	6,400	8,000	6,80	62,000	18,100	3	8,000
M10	1,500	7,950	10,000	8,50	74,000	21,800	3	10,000
M12	1,750	9,950	10,000	10,20	74,000	25,400	4	12,000
M14	2,000	11,200	12,000	12,00	90,000	31,000	4	14,000
M16	2,000	12,800	14,000	14,00	90,000	35,000	4	16,000
M20	2,500	14,950	16,000	17,50	102,000	41,300	4	20,000

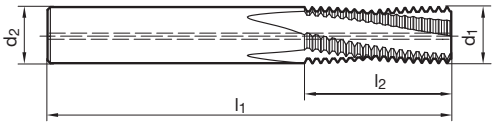
Kierrejyrsimet ilman viistettä metrisille ISO-kierteille

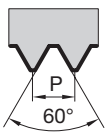
2,5xD

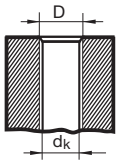
P	•
M	○
K	•
N	•
S	○
H	≤55

Leikkuuarvosivu 468

Materiaali	TKM	
Pinta	C	C
Malli	TM SP	TM SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3735	3740

D	P	d1	d2	dk	l1	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm		
M6	1,000	4,800	6,000	5,00	54,000	16,500	3	6,000
M8	1,250	6,400	8,000	6,80	62,000	21,900	3	8,000
M10	1,500	7,950	10,000	8,50	74,000	26,300	3	10,000
M12	1,750	9,950	10,000	10,20	74,000	32,400	4	12,000
M14	2,000	11,200	12,000	12,00	90,000	37,000	4	14,000
M16	2,000	12,800	14,000	14,00	90,000	43,000	4	16,000
M20	2,500	14,950	16,000	17,50	102,000	48,800	4	20,000

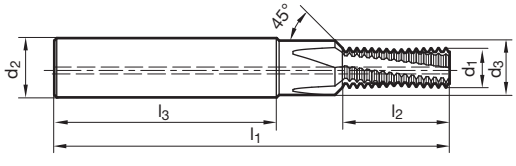
Viisteelliset kierrejyrsimet metrisille ISO-kierteille

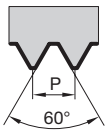
1,5xD

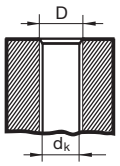
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 469

Materiaali	TKM		
Pinta	C	C	○
Malli	TMC SP	TMC SP	TMC SP
Sisäinen jäähdytys			
Varren muoto	HA	HB	HA
		NEW	







Tehdas stdr.	Artikkelinro.	3525	3543	3510

D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0,500	2,300	6,000	3,400	2,50	48,000	36,000	5,300	3	3,000
M4	0,700	3,000	6,000	4,500	3,30	48,000	36,000	7,400	3	4,000
M5	0,800	4,000	6,000	5,500	4,20	54,000	36,000	9,200	3	5,000
M6	1,000	4,800	8,000	6,600	5,00	62,000	36,000	10,500	3	6,000
M8	1,250	6,400	10,000	9,000	6,80	74,000	40,000	13,100	3	8,000
M10	1,500	7,950	12,000	11,000	8,50	80,000	45,000	17,300	4	10,000
M12	1,750	9,950	14,000	13,500	10,20	90,000	45,000	20,100	4	12,000
M14	2,000	11,200	16,000	15,500	12,00	102,000	48,000	25,000	4	14,000
M16	2,000	12,800	18,000	17,500	14,00	102,000	48,000	27,000	4	16,000
M20	2,500	14,500	20,000	21,500	17,50	125,000	50,000	33,800	4	20,000

Viisteelliset kierrejyrsimet metrisille ISO-kierteille

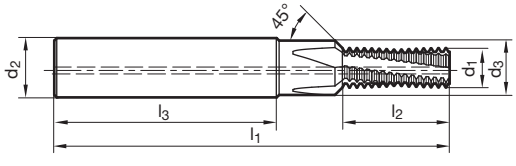
2xD

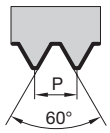
P	•
M	•
K	•
N	•
S	•
H	≤55

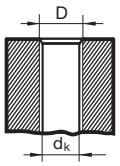
Leikkuuarvosivu 469

Materiaali	TKM		
Pinta	C	C	
Malli	TMC SP	TMC SP	TMC SP
Sisäinen jäähdytys			
Varren muoto	HA	HB	HA

NEW







Tehdas stdr.	Artikkelinro.	3526	3544	3511

D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0,500	2,300	6,000	3,400	2,50	48,000	36,000	6,800	3	3,000
M4	0,700	3,000	6,000	4,500	3,30	48,000	36,000	8,800	3	4,000
M5	0,800	4,000	6,000	5,500	4,20	54,000	36,000	10,800	3	5,000
M6	1,000	4,800	8,000	6,600	5,00	62,000	36,000	13,500	3	6,000
M8	1,250	6,400	10,000	9,000	6,80	74,000	40,000	18,100	3	8,000
M10	1,500	7,950	12,000	11,000	8,50	80,000	45,000	21,800	4	10,000
M12	1,750	9,950	14,000	13,500	10,20	90,000	45,000	25,400	4	12,000
M14	2,000	11,200	16,000	15,500	12,00	102,000	48,000	31,000	4	14,000
M16	2,000	12,800	18,000	17,500	14,00	102,000	48,000	35,000	4	16,000
M20	2,500	14,500	20,000	21,500	17,50	125,000	50,000	41,300	4	20,000

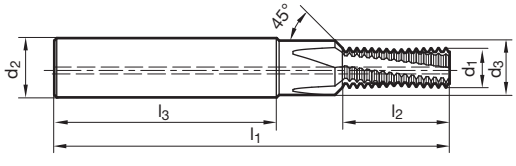
Viisteelliset kierrejyrsimet metrisille ISO-kierteille

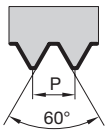
2,5xD

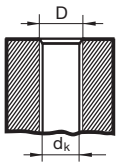
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 469

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3759	3760

D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0,500	2,300	6,000	3,400	2,50	48,000	36,000	7,800	3	3,000
M4	0,700	3,000	6,000	4,500	3,30	48,000	35,600	10,900	3	4,000
M5	0,800	4,000	6,000	5,500	4,20	54,000	36,000	13,200	3	5,000
M6	1,000	4,800	8,000	6,600	5,00	62,000	36,000	16,500	3	6,000
M8	1,250	6,400	10,000	9,000	6,80	74,000	40,000	21,900	3	8,000
M10	1,500	7,950	12,000	11,000	8,50	80,000	45,000	26,300	4	10,000
M12	1,750	9,950	14,000	13,500	10,20	90,000	45,000	32,400	4	12,000
M14	2,000	11,200	16,000	15,500	12,00	102,000	48,000	37,000	4	14,000
M16	2,000	12,800	18,000	17,500	14,00	102,000	48,000	43,000	4	16,000
M20	2,500	14,500	20,000	21,500	17,50	125,000	50,000	48,800	4	20,000

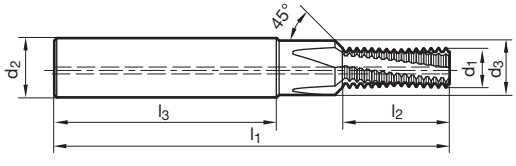
Viisteelliset kierrejyrsimet metrisille ISO-hienokierteille

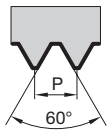
1,5xD

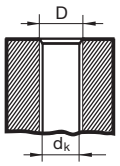
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 469

Materiaali	TKM		
Pinta	C	C	○
Malli	TMC SP	TMC SP	TMC SP
Sisäinen jäähdytys			
Varren muoto	HA	HB	HA
		NEW	







Tehdas stdr. Artikkelinro. **3527** **3545** **3512**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm	mm		
M4 x 0,5	0,500	3,000	6,000	4,500	3,50	48,000	36,000	7,300	3	4,003
M5 x 0,5	0,500	4,000	6,000	5,500	4,50	54,000	36,000	8,800	3	5,003
M6 x 0,5	0,500	4,800	8,000	6,600	5,50	62,000	36,000	9,800	3	6,003
M6 x 0,75	0,750	4,800	8,000	6,600	5,20	62,000	36,000	10,100	3	6,004
M8 x 0,75	0,750	6,400	10,000	9,000	7,20	74,000	40,000	13,100	3	8,004
M8 x 1	1,000	6,400	10,000	9,000	7,00	74,000	40,000	13,500	3	8,005
M10 x 1	1,000	7,950	12,000	11,000	9,00	80,000	45,000	16,500	4	10,005
M10 x 1,25	1,250	7,950	12,000	11,000	8,80	80,000	45,000	16,900	4	10,006
M12 x 1	1,000	9,950	14,000	13,500	11,00	90,000	45,000	19,500	4	12,005
M12 x 1,5	1,500	9,950	14,000	13,500	10,50	90,000	45,000	20,300	4	12,007
M14 x 1,5	1,500	11,200	16,000	15,500	12,50	102,000	48,000	23,300	4	14,007
M16 x 1,5	1,500	12,800	18,000	17,500	14,50	102,000	48,000	26,300	4	16,007

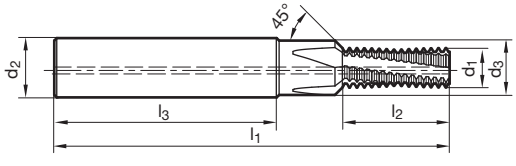
Viisteelliset kierrejyrsimet metrisille ISO-hienokierteille

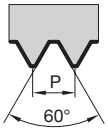
2xD

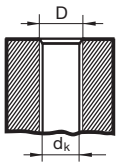
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 469

Materiaali	TKM		
Pinta	C	C	○
Malli	TMC SP	TMC SP	TMC SP
Sisäinen jäähdytys			
Varren muoto	HA	HB	HA
		NEW	







Tehdas stdr.	Artikkelinro.	3528	3546	3513

D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm	mm		
M4 x 0,5	0,500	3,000	6,000	4,500	3,50	48,000	36,000	8,800	3	4,003
M5 x 0,5	0,500	4,000	6,000	5,500	4,50	54,000	36,000	10,800	3	5,003
M6 x 0,5	0,500	4,800	8,000	6,600	5,50	62,000	36,000	12,800	3	6,003
M6 x 0,75	0,750	4,800	8,000	6,600	5,20	62,000	36,000	13,100	3	6,004
M8 x 0,75	0,750	6,400	10,000	9,000	7,20	74,000	40,000	16,900	3	8,004
M8 x 1	1,000	6,400	10,000	9,000	7,00	74,000	40,000	17,500	3	8,005
M10 x 1	1,000	7,950	12,000	11,000	9,00	80,000	45,000	21,500	4	10,005
M10 x 1,25	1,250	7,950	12,000	11,000	8,80	80,000	45,000	21,900	4	10,006
M12 x 1	1,000	9,950	14,000	13,500	11,00	90,000	45,000	25,500	4	12,005
M12 x 1,5	1,500	9,950	14,000	13,500	10,50	90,000	45,000	26,300	4	12,007
M14 x 1,5	1,500	11,200	16,000	15,500	12,50	102,000	48,000	30,800	4	14,007
M16 x 1,5	1,500	12,800	18,000	17,500	14,50	102,000	48,000	33,800	4	16,007

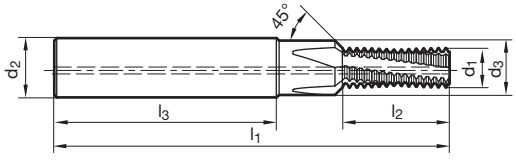
Viisteelliset kierrejyrsimet metrisille ISO-hienokierteille

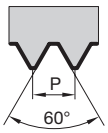
2,5xD

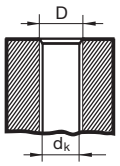
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 469

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr. Artikkelinro. **3762** **3763**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm	mm		
M4 x 0,5	0,500	3,000	6,000	4,500	3,50	48,000	36,000	10,300	3	4,003
M5 x 0,5	0,500	4,000	6,000	5,500	4,50	54,000	36,000	12,800	3	5,003
M6 x 0,5	0,500	4,800	8,000	6,600	5,50	62,000	36,000	15,300	3	6,003
M6 x 0,75	0,750	4,800	8,000	6,600	5,20	62,000	36,000	15,400	3	6,004
M8 x 0,75	0,750	6,400	10,000	9,000	7,20	74,000	40,000	20,600	3	8,004
M8 x 1	1,000	6,400	10,000	9,000	7,00	74,000	40,000	20,500	3	8,005
M10 x 1	1,000	7,950	12,000	11,000	9,00	80,000	45,000	25,500	4	10,005
M10 x 1,25	1,250	7,950	12,000	11,000	8,80	80,000	45,000	25,600	4	10,006
M12 x 1	1,000	9,950	14,000	13,500	11,00	90,000	45,000	30,500	4	12,005
M12 x 1,5	1,500	9,950	14,000	13,500	10,50	90,000	45,000	30,800	4	12,007
M14 x 1,5	1,500	11,200	16,000	15,500	12,50	102,000	48,000	38,300	4	14,007
M16 x 1,5	1,500	12,800	18,000	17,500	14,50	102,000	48,000	41,300	4	16,007

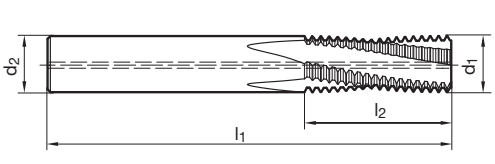
Kierrejyrsimet ilman viistettä UNC-kierteille

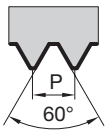
2xD

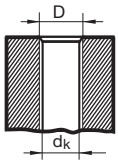
P	•
M	○
K	•
N	•
S	○
H	≤55

Leikkuuarvosivu 468

Materiaali	TKM	
Pinta	C	C
Malli	TM SP	TM SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	4134	4135

D	d1	d2	dk	l1	l2	Z	koodinro.
	mm	mm	mm	mm	mm		
10 - 24	3,400	6,000	3,90	54,000	11,100	3	4,826
12 - 24	4,100	6,000	4,50	54,000	12,200	3	5,486
1/4 - 20	4,700	6,000	5,10	54,000	14,600	3	6,350
5/16 - 18	6,100	8,000	6,60	64,000	17,600	3	7,938
3/8 - 16	7,600	8,000	8,00	64,000	21,400	3	9,525
7/16 - 14	9,000	10,000	9,40	74,000	24,500	3	11,113
1/2 - 13	9,950	10,000	10,80	74,000	28,300	4	12,700
9/16 - 12	11,400	12,000	12,20	90,000	30,700	4	14,288
5/8 - 11	12,700	14,000	13,50	90,000	35,800	4	15,875

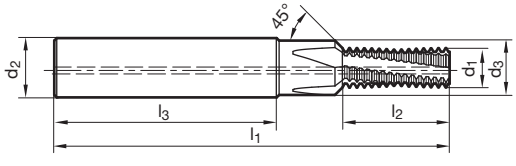
Viisteelliset kierrejyrsimet UNC-kierteille

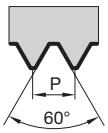
P	•
M	•
K	•
N	•
S	•
H	≤55

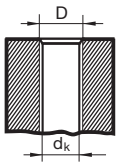
Leikkuuarvosivu 469

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB

NEW







Tehdas stdr.	Artikkelinro.	3516	3534

D	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 20	4,800	8,000	6,600	5,10	62,000	36,000	12,100	3	6,350
5/16 - 18	5,950	10,000	9,000	6,60	74,000	40,000	14,800	3	7,938
3/8 - 16	7,100	12,000	11,000	8,00	80,000	45,000	16,700	4	9,525
7/16 - 14	7,950	12,000	11,000	9,40	80,000	45,000	19,000	4	11,113
1/2 - 13	9,950	14,000	13,500	10,80	90,000	45,000	22,500	4	12,700

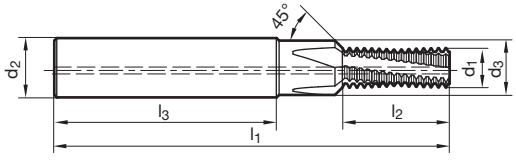
Viisteelliset kierrejyrsimet UNC-kierteille

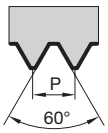
2xD

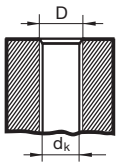
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 469

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3517	3535

D	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 20	4,800	8,000	6,600	5,10	62,000	36,000	14,600	3	6,350
5/16 - 18	5,950	10,000	9,000	6,60	74,000	40,000	17,600	3	7,938
3/8 - 16	7,100	12,000	11,000	8,00	80,000	45,000	21,400	4	9,525
7/16 - 14	7,950	12,000	11,000	9,40	80,000	45,000	24,500	4	11,113
1/2 - 13	9,950	14,000	13,500	10,80	90,000	45,000	28,300	4	12,700

Kierrejyrsimet ilman viistettä UNF-kierteille

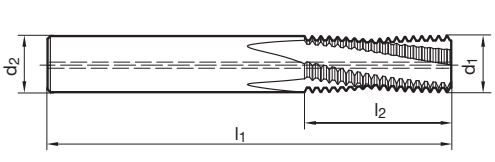
2xD

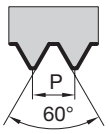
P	•
M	○
K	•
N	•
S	○
H	≤55

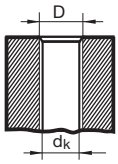
Leikkuuarvosivu 468

Materiaali	TKM	
Pinta	C	C
Malli	TM SP	TM SP
Sisäinen jäähdytys		
Varren muoto	HA	HB

NEW







Tehdas stdr.	Artikkelinro.	4136	4137

D	d1	d2	dk	l1	l2	Z	koodinro.
	mm	mm	mm	mm	mm		
10 - 32	3,800	6,000	4,10	54,000	11,500	3	4,826
12 - 28	4,300	6,000	4,60	54,000	12,200	3	5,486
1/4 - 28	5,100	6,000	5,50	54,000	14,100	3	6,350
5/16 - 24	6,300	8,000	6,90	64,000	17,500	3	7,938
3/8 - 24	7,800	8,000	8,50	64,000	20,600	3	9,525
7/16 - 20	9,400	10,000	9,90	74,000	24,800	3	11,113
1/2 - 20	9,950	10,000	11,50	74,000	27,300	4	12,700
9/16 - 18	11,400	12,000	12,90	90,000	30,300	4	14,288
5/8 - 18	12,700	14,000	14,50	90,000	33,200	4	15,875

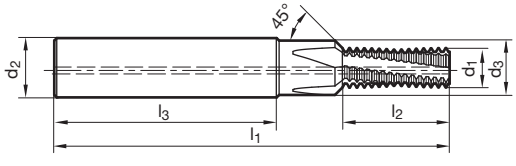
Viisteelliset kierrejyrsimet UNF-kierteille

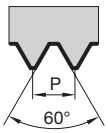
P	•
M	•
K	•
N	•
S	•
H	≤55

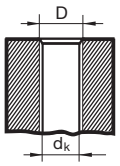
Leikkuuarvosivu 469

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB

NEW







Tehdas stdr.	Artikkelinro.	3518	3536

D	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 28	4,800	8,000	6,600	5,50	62,000	36,000	11,300	3	6,350
5/16 - 24	5,950	10,000	9,000	6,90	74,000	40,000	13,200	3	7,938
3/8 - 24	7,950	12,000	11,000	8,50	80,000	45,000	16,400	4	9,525
7/16 - 20	7,950	12,000	11,000	9,90	80,000	45,000	18,400	4	11,113
1/2 - 20	9,950	14,000	13,500	11,50	90,000	45,000	21,000	4	12,700

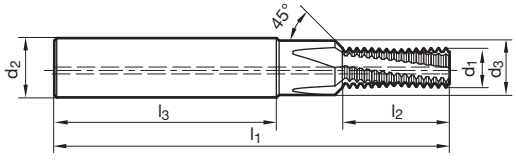
Viisteelliset kierrejyrsimet UNF-kierteille

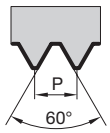
2xD

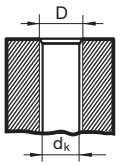
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 469

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3519	3537

D	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 28	4,800	8,000	6,600	5,50	62,000	36,000	14,100	3	6,350
5/16 - 24	5,950	10,000	9,000	6,90	74,000	40,000	17,500	3	7,938
3/8 - 24	7,950	12,000	11,000	8,50	80,000	45,000	20,600	4	9,525
7/16 - 20	7,950	12,000	11,000	9,90	80,000	45,000	24,800	4	11,113
1/2 - 20	9,950	14,000	13,500	11,50	90,000	45,000	27,300	4	12,700

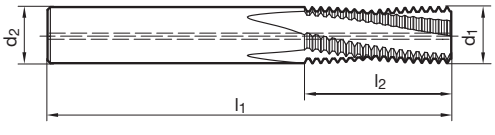
Kierrejyrsimet ilman viistettä BSP-kierteille

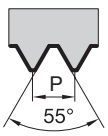
2xD

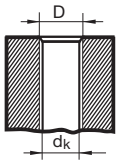
P	•
M	○
K	•
N	•
S	○
H	≤55

Leikkuuarvosivu 468

Materiaali	TKM	
Pinta	C	C
Malli	TM SP	TM SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3745	3748

D	P	d1	d2	dk	l1	l2	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm		
G1/8	28,000	7,950	8,000	8,80	64,000	21,300	3	9,728
G1/4	19,000	10,500	12,000	11,80	90,000	28,700	4	13,157
G3/8	19,000	13,600	14,000	15,25	90,000	35,400	4	16,662

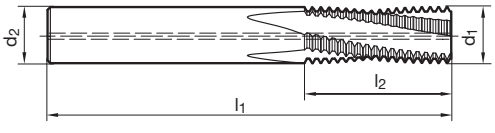
Kierrejyrsimet ilman viistettä BSP-kierteille

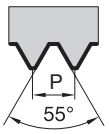
2,5xD

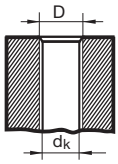
P	•
M	○
K	•
N	•
S	○
H	≤55

Leikkuuarvosivu 468

Materiaali	TKM	
Pinta	C	C
Malli	TM SP	TM SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3746	3750

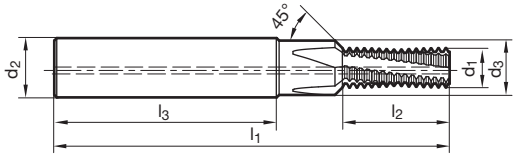
D	P	d1	d2	dk	l1	l2	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm		
G1/8	28,000	7,950	8,000	8,80	64,000	24,900	3	9,728
G1/4	19,000	10,500	12,000	11,80	90,000	35,400	4	13,157
G3/8	19,000	13,600	14,000	15,25	90,000	43,500	4	16,662

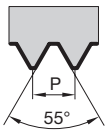
Viisteelliset kierrejyrsimet BSP-kierteille

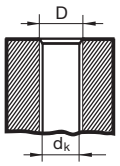
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 469

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3514	3529

D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28,000	7,950	12,000	11,000	8,80	80,000	45,000	15,900	4	9,728
G1/4	19,000	9,950	14,000	13,900	11,80	90,000	45,000	22,100	4	13,157
G3/8	19,000	13,600	18,000	17,500	15,25	102,000	48,000	27,400	4	16,662

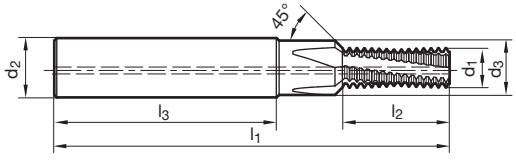
Viisteelliset kierrejyrsimet BSP-kierteille

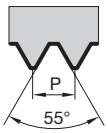
2xD

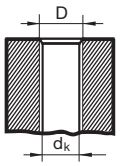
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 469

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3515	3533

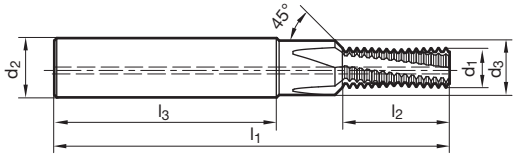
D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28,000	7,950	12,000	11,000	8,80	80,000	45,000	21,300	4	9,728
G1/4	19,000	9,950	14,000	13,900	11,80	90,000	45,000	28,700	4	13,157
G3/8	19,000	13,600	18,000	17,500	15,25	102,000	48,000	35,400	4	16,662

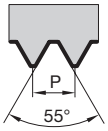
Viisteelliset kierrejyrsimet BSP-kierteille

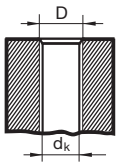
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 469

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr. Artikkelinro. **3765** **3766**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28,000	7,950	12,000	11,000	8,80	80,000	45,000	24,900	4	9,728
G1/4	19,000	9,950	14,000	13,900	11,80	90,000	45,000	35,400	4	13,157
G3/8	19,000	13,600	18,000	17,500	15,25	102,000	48,000	43,500	4	16,662

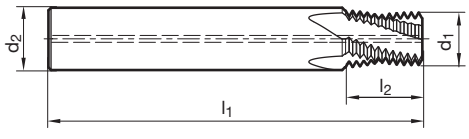
Kierrejyrsimet ilman viistettä NPT-kierteille

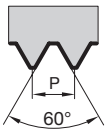
Materiaali		TKM	
Pinta		C	C
Malli		TM SP	TM SP
Sisäinen jäähdytys			
Varren muoto		HA	HB

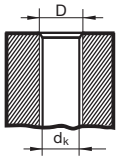
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 468

NEW







Tehdas stdr.	Artikkelinro.	3753	3754

D	P	d1	d2	dk	l1	l2	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm		
1/16	27,000	5,900	8,000	6,15	54,000	9,900	3	8,190
1/8	27,000	7,300	8,000	8,40	64,000	9,900	3	10,620
1/4	18,000	9,950	12,000	11,10	72,000	19,000	4	14,140
3/8	18,000	12,500	14,000	14,30	80,000	14,800	4	17,570

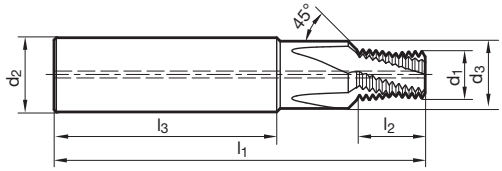
Viisteelliset kierrejyrsimet NPT-kierteille

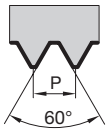
Materiaali	TKM		
Pinta	C	C	
Malli	TMC SP	TMC SP	
Sisäinen jäähdytys			
Varren muoto	HA	HB	

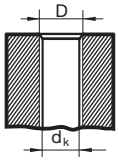
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 469

NEW







Tehdas stdr.	Artikkelinro.	3520	3538

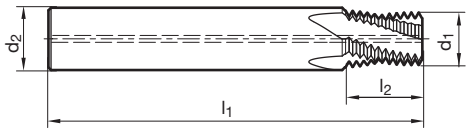
D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
1/8	27,000	7,300	12,000	11,000	8,40	70,000	45,000	9,900	4	10,620
1/4	18,000	9,950	16,000	14,500	11,10	80,000	48,000	14,800	4	14,140
3/8	18,000	12,500	18,000	17,500	14,30	80,000	48,000	14,800	4	17,570

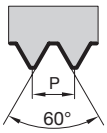
Kierrejyrsimet ilman viistettä NPTF-kierteille

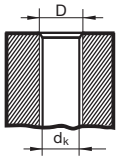
Materiaali		TKM	
Pinta		C	C
Malli		TM SP	TM SP
Sisäinen jäähdytys			
Varren muoto		HA	HB
			NEW

P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 468







Tehdas stdr.	Artikkelinro.	3756	3757

D	P	d1	d2	dk	l1	l2	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm		
1/16	27,000	5,900	8,000	6,15	54,000	9,900	3	8,190
1/8	27,000	7,300	8,000	8,40	64,000	9,900	3	10,620
1/4	18,000	9,950	12,000	11,10	72,000	19,000	4	14,140
3/8	18,000	12,500	14,000	14,30	80,000	14,800	4	17,570

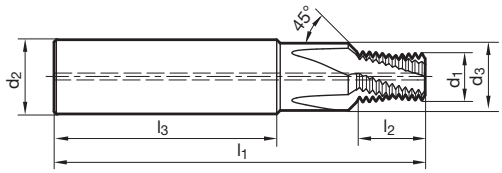
Viisteelliset kierrejyrsimet NPTF-kierteille

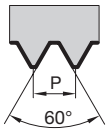
Materiaali		TKM	
Pinta		C	C
Malli		TMC SP	TMC SP
Sisäinen jäähdytys			
Varren muoto		HA	HB

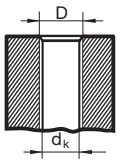
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 469

NEW







Tehdas stdr.	Artikkelinro.	3521	3539

D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
1/8	27,000	7,300	12,000	11,000	8,40	70,000	45,000	9,900	4	10,620
1/4	18,000	9,950	16,000	14,500	11,10	80,000	48,000	14,800	4	14,140
3/8	18,000	12,500	18,000	17,500	14,30	80,000	48,000	14,800	4	17,570

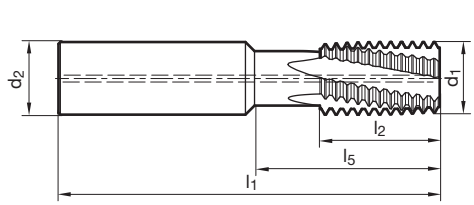
Kierrejyrsimet metrisille ISO-kierteille

Materiaali	TKM		
Pinta	C	C	○
Malli	TMU SP	TMU SP	TMU SP
Sisäinen jäähdytys			
Varren muoto	HA	HB	HA

NEW

P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 470



Tehdas stdr.	Artikkelinro.	3541	3556	3523

P	D	d1	d2	l1	l5	l2	Z	koodinro.
mm		mm	mm	mm	mm	mm		
0,500	≥ 10	7,950	8,000	64,000		20,000	4	8,050
1,000	≥ 12	9,950	10,000	70,000	25,000	16,000	4	10,100
1,250	≥ 12	9,950	10,000	70,000	25,000	16,000	4	10,125
1,500	≥ 12	9,950	10,000	70,000	25,000	16,000	4	10,150
1,000	≥ 14	11,950	12,000	80,000	31,000	20,000	4	12,100
1,250	≥ 14	11,950	12,000	80,000	31,000	20,000	4	12,125
1,500	≥ 14	11,950	12,000	80,000	31,000	20,000	4	12,150
1,000	≥ 18	15,950	16,000	90,000	40,000	25,000	5	16,100
1,500	≥ 18	15,950	16,000	90,000	40,000	25,000	5	16,150
2,000	≥ 18	15,950	16,000	90,000	40,000	25,000	5	16,200
3,000	≥ 24	17,950	18,000	102,000	50,000	33,000	5	18,300
1,000	≥ 24	19,950	20,000	105,000	50,000	33,000	5	20,100
1,500	≥ 26	19,950	20,000	105,000	50,000	33,000	5	20,150
2,000	≥ 27	19,950	20,000	105,000	50,000	33,000	5	20,200
2,500	≥ 30	19,950	20,000	105,000	50,000	33,000	5	20,250
3,000	≥ 30	19,950	20,000	105,000	50,000	33,000	5	20,300
3,500	≥ 30	19,950	20,000	105,000	50,000	33,000	5	20,350

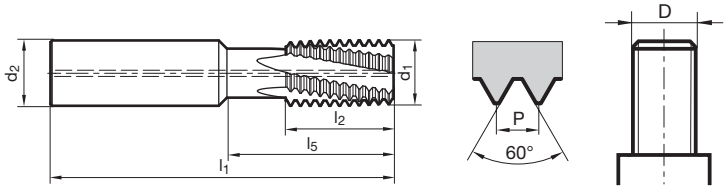
Kierrejyrsimet ulkokierteelle

Materiaali		TKM	
Pinta		C	C
Malli		TMU SP	TMU SP
Sisäinen jäähdytys			
Varren muoto		HA	HB

P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 470

NEW



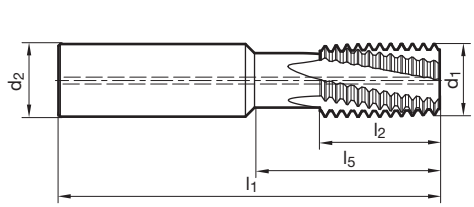
Tehdas stdr.	Artikkelinro.	4162	4163

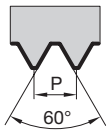
P	D	d1	d2	l1	l5	l2	Z	koodinro.
mm		mm	mm	mm	mm	mm		
0,500	≥ 3	9,950	10,000	70,000	25,000	16,000	4	10,050
0,750	≥ 5	9,950	10,000	70,000	25,000	16,000	4	10,075
1,000	≥ 6	11,950	12,000	80,000	31,000	20,000	4	12,100
1,250	≥ 8	11,950	12,000	80,000	31,000	20,000	4	12,125
1,500	≥ 10	11,950	12,000	80,000	31,000	20,000	4	12,150
1,500	≥ 10	15,950	16,000	90,000	40,000	25,000	5	16,150
2,000	≥ 14	15,950	16,000	90,000	40,000	25,000	5	16,200
2,500	≥ 18	15,950	16,000	90,000	40,000	25,000	5	16,250
3,000	≥ 24	19,950	20,000	105,000	50,000	33,000	5	20,300

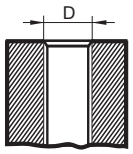
Kierrejyrsimet UN-kierteille

P	•	Leikkuuarvosivu 470
M	•	
K	•	
N	•	
S	•	
H	≤55	

Materiaali	TKM	
Pinta	C	C
Malli	TMU UN	TMU UN
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







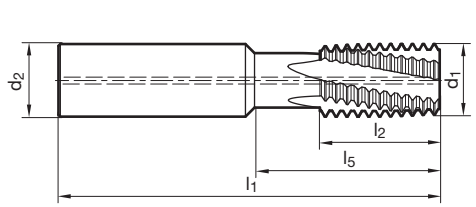
Tehdas stdr.	Artikkelinro.	3595	3596

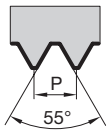
P	D	d1	d2	l1	l5	l2	Z	koodinro.
G/inch		mm	mm	mm	mm	mm		
24,000	≥ 1/2	9,950	10,000	70,000	25,000	16,000	4	10,240
24,000	≥ 1/2	9,950	10,000	70,000	25,000	16,000	4	10,240
10,000	≥ 3/4	11,950	12,000	80,000	31,000	20,000	4	12,100
16,000	≥ 5/8	11,950	12,000	80,000	31,000	20,000	4	12,160
18,000	≥ 5/8	11,950	12,000	80,000	31,000	20,000	4	12,180
20,000	≥ 11/16	11,950	12,000	80,000	31,000	20,000	4	12,200
24,000	≥ 5/8	11,950	12,000	80,000	31,000	20,000	4	12,240
12,000	≥ 7/8	15,950	16,000	90,000	40,000	25,000	5	16,120
14,000	≥ 7/8	15,950	16,000	90,000	40,000	25,000	5	16,140
16,000	≥ 7/8	15,950	16,000	90,000	40,000	25,000	5	16,160
18,000	≥ 7/8	15,950	16,000	90,000	40,000	25,000	5	16,180
20,000	≥ 13/16	15,950	16,000	90,000	40,000	25,000	5	16,200
7,000	≥ 1	19,950	20,000	105,000	50,000	33,000	5	20,070
8,000	≥ 1	19,950	20,000	105,000	50,000	33,000	5	20,080
12,000	≥ 1	19,950	20,000	105,000	50,000	33,000	5	20,120
14,000	≥ 1	19,950	20,000	105,000	50,000	33,000	5	20,140
16,000	≥ 1	19,950	20,000	105,000	50,000	33,000	5	20,160

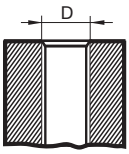
Kierrejyrsimet BSP-kierteille

P	•	Leikkuuarvosivu 470
M	•	
K	•	
N	•	
S	•	
H	≤55	

Materiaali	TKM		
Pinta	C	C	○
Malli	TM SP	TM SP	TM SP
Sisäinen jäähdytys			
Varren muoto	HA	HB	HA
		NEW	







Tehdas stdr.	Artikkelinro.	3542	3557	3524

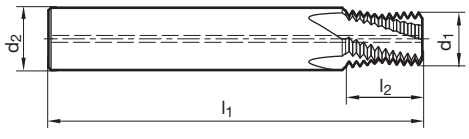
P	D	d1	d2	l1	l5	l2	Z	koodinro.
G/inch		mm	mm	mm	mm	mm		
19,000	≥ 1/4	9,950	10,000	70,000	25,000	16,000	4	10,190
14,000	≥ 1/2	15,950	16,000	90,000	40,000	25,000	5	16,140
11,000	≥ 1	19,950	20,000	105,000	50,000	33,000	5	20,110

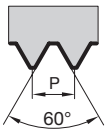
Kierrejyrsimet NPT-kierteille

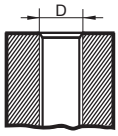
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 470

Materiaali	TKM	
Pinta	C	C
Malli	TM SP	TM SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3768	3769

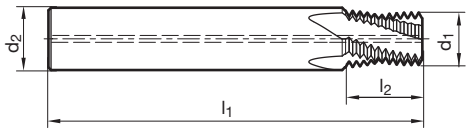
P	D	d1	d2	l1	l2	Z	koodinro.
G/inch		mm	mm	mm	mm		
14,000	≥ 1/2	14,500	16,000	90,000	19,050	5	21,900
11,500	≥ 1	18,500	20,000	90,000	23,190	5	34,180

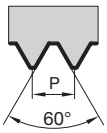
Kierrejyrsimet NPTF-kierteille

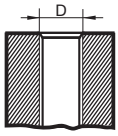
		Materiaali	TKM	
		Pinta	C	C
		Malli	TM SP	TM SP
		Sisäinen jäähdytys		
		Varren muoto	HA	HB
P	•			
M	•			
K	•			
N	•			
S	•			
H	≤55			

Leikkuuarvosivu 470

NEW







Tehdas stdr. Artikkelinro. **3772** **3773**

P	D	d1	d2	l1	l2	Z	koodinro.
G/inch		mm	mm	mm	mm		
14,000	≥ 1/2	14,500	16,000	90,000	19,050	5	21,900
11,500	≥ 1	18,500	20,000	90,000	23,190	5	34,180

Mikro-kierrejyrsimet

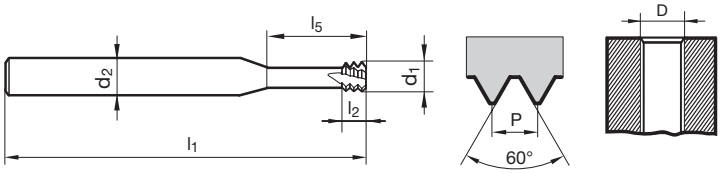
3xD

P	•
M	•
K	•
N	•
S	•
H	

Leikkuuarvosivu 470

Materiaali	**TKM**
Pinta	C
Malli	SP M
Kierteet	3,0
Varren muoto	HA

NEW



Tehdas stdr. Artikkelinro. **4226**

D	P	d1	d2	l1	l2	l5	Z	koodinro.
	mm	mm	mm	mm	mm	mm		
M1,6	0,350	1,200	3,000	39,000	1,100	4,800	3	1,600
M1,8	0,350	1,400	3,000	39,000	1,100	5,400	3	1,800
M2	0,400	1,550	3,000	39,000	1,200	6,000	4	2,000
M2,5	0,450	1,950	3,000	39,000	1,400	7,500	4	2,500
M3	0,500	2,400	6,000	58,000	1,500	9,500	4	3,000
M3,5	0,600	2,800	6,000	58,000	1,800	11,000	4	3,500
M4	0,700	3,200	6,000	58,000	2,100	12,500	4	4,000
M5	0,800	4,000	6,000	58,000	2,400	16,000	4	5,000
M6	1,000	4,800	6,000	58,000	3,000	20,000	4	6,000
M8	1,250	5,950	6,000	58,000	3,800	24,000	4	8,000
M10	1,500	7,800	8,000	73,000	4,500	33,000	4	10,000
M12	1,750	9,000	10,000	84,000	5,300	38,000	4	12,000
M16	2,000	11,800	10,000	84,000	6,000	35,000	5	16,000

Mikro-kierrejyrsimet

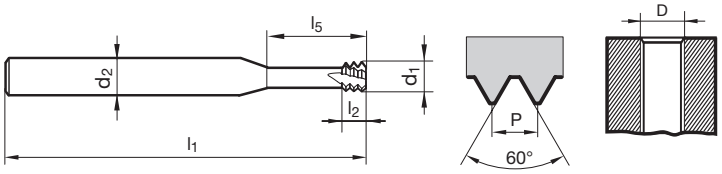
3xD

P	•
M	•
K	•
N	•
S	•
H	

Leikkuuarvosivu 470

Materiaali	**TKM**
Pinta	C
Malli	SP G
Kierteet	3,0
Varren muoto	HA

NEW



Tehdas stdr. Artikkelinro. **4228**

D	P	d1	d2	l1	l2	l5	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm		
G1/8	28,000	6,200	8,000	64,000	2,700	19,500	4	9,728
G3/8	19,000	9,950	10,000	73,000	4,000	25,000	4	16,662
G7/8	14,000	11,950	12,000	84,000	5,400	37,000	4	30,201
G2	11,000	15,950	16,000	105,000	6,900	44,000	5	59,614

Mikro-kierrejyrsimet

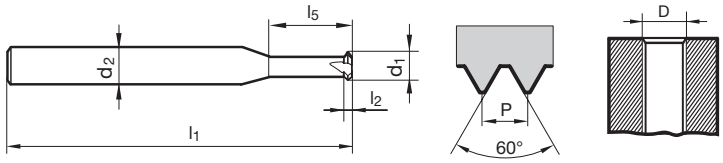
3xD

P	•
M	•
K	•
N	•
S	•
H	

Leikkuuarvosivu 470

Materiaali	**TKM**
Pinta	C
Malli	SP M/MF
Kierteet	1,0
Varren muoto	HA

NEW



Tehdas stdr. Artikkelinro. **4225**

D	P	d1	d2	l1	l2	l5	Z	koodinro.
	mm	mm	mm	mm	mm	mm		
M1,4 - M1,8	0,350	1,050	3,000	39,000	0,400	3,800	3	1,800
M2 - M2,4	0,400	1,500	3,000	39,000	0,400	7,000	3	2,400
M2,5 - M3	0,500	2,000	3,000	39,000	0,500	9,000	4	3,000
M3,5 - M4,5	0,750	2,800	6,000	58,000	0,800	14,000	4	4,500
M5 - M7	1,000	4,000	6,000	58,000	1,000	19,000	4	7,000
M8 - M10	1,500	6,400	8,000	64,000	1,500	24,000	5	10,000

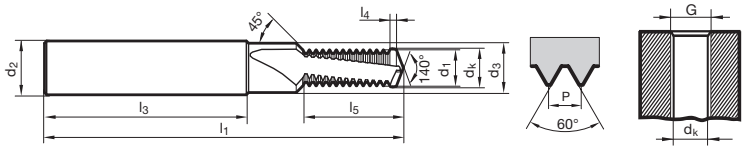
Poraavat kierrejyrsimet metrisille ISO-kierteille

1,5xD

P	
M	
K	○
N	●
S	
H	

Leikkuuarvosivu 471

Materiaali	TKM			
Pinta	○	○	C	C
Malli	DTMC SP	DTMC SP	DTMC SP	DTMC SP
Sisäinen jäähdytys	✕		✕	
Varren muoto	HA	HA	HA	HA



Tehdas stdr.	Artikkelinro.	3774	3775	3776	3777

D	P	d1	d2	d3	dk	l1	l3	l4	l5	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0,500	2,400	6,000	3,400	2,50	48,000	36,000	0,500	5,500	2	3,000
M4	0,700	3,200	6,000	4,500	3,30	48,000	36,000	0,700	6,900	2	4,000
M5	0,800	4,000	6,000	5,500	4,20	54,000	36,000	0,800	8,800	2	5,000
M6	1,000	4,750	8,000	6,600	5,00	62,000	36,000	1,000	10,900	2	6,000
M8	1,250	6,350	10,000	9,000	6,80	74,000	40,000	1,250	13,700	2	8,000
M10	1,500	7,950	12,000	11,000	8,50	80,000	45,000	1,500	18,000	2	10,000
M12	1,750	9,950	14,000	13,500	10,20	90,000	45,000	1,500	20,900	2	12,000
M14	2,000	11,200	16,000	15,500	12,00	102,000	48,000	1,500	23,700	2	14,000
M16	2,000	13,200	18,000	17,500	14,00	102,000	48,000	1,500	26,000	2	16,000

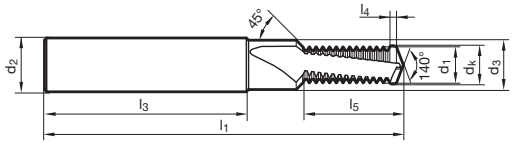
Poraavat kierrejyrsimet metrisille ISO-kierteille

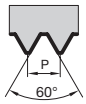
2xD

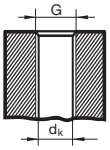
P	
M	
K	○
N	●
S	
H	

Leikkuuarvosivu 471

Materiaali	TKM			
Pinta	○	○	C	C
Malli	DTMC SP	DTMC SP	DTMC SP	DTMC SP
Sisäinen jäähdytys	✕		✕	
Varren muoto	HA	HA	HA	HA







Tehdas stdr. Artikkelinro. **3778** **3779** **3780** **3781**

D	P	d1	d2	d3	dk	l1	l3	l4	l5	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0,500	2,400	6,000	3,400	2,50	48,000	36,000	0,500	7,000	2	3,000
M4	0,700	3,200	6,000	4,500	3,30	48,000	36,000	0,700	9,000	2	4,000
M5	0,800	4,000	6,000	5,500	4,20	54,000	36,000	0,800	11,200	2	5,000
M6	1,000	4,750	8,000	6,600	5,00	62,000	36,000	1,000	13,900	2	6,000
M8	1,250	6,350	10,000	9,000	6,80	74,000	40,000	1,250	18,700	2	8,000
M10	1,500	7,950	12,000	11,000	8,50	80,000	45,000	1,500	22,500	2	10,000
M12	1,750	9,950	14,000	13,500	10,20	90,000	45,000	1,500	26,100	2	12,000
M14	2,000	11,200	16,000	15,500	12,00	102,000	48,000	1,500	31,700	2	14,000
M16	2,000	13,200	18,000	17,500	14,00	102,000	48,000	1,500	36,000	2	16,000

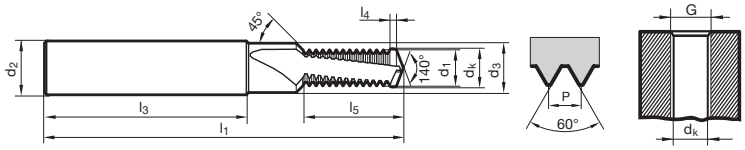
Poraavat kierrejyrsimet metrisille ISO-kierteille

2,5xD

P	
M	
K	○
N	●
S	
H	

Leikkuuarvosivu 471

Materiaali	TKM			
Pinta	◯	◯	Ⓒ	Ⓒ
Malli	DTMC SP	DTMC SP	DTMC SP	DTMC SP
Sisäinen jäähdytys	✕	≡	✕	≡
Varren muoto	HA	HA	HA	HA



Tehdas stdr.	Artikkelinro.	**3782**	**3783**	**3784**	**3785**

D	P	d1	d2	d3	dk	l1	l3	l4	l5	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0,500	2,400	6,000	3,400	2,500	48,000	36,000	0,500	8,500	2	3,000
M4	0,700	3,200	6,000	4,500	3,300	48,000	36,000	0,700	11,100	2	4,000
M5	0,800	4,000	6,000	5,500	4,200	54,000	36,000	0,800	13,600	2	5,000
M6	1,000	4,750	8,000	6,600	5,000	62,000	36,000	1,000	16,900	2	6,000
M8	1,250	6,350	10,000	9,000	6,800	74,000	40,000	1,250	22,500	2	8,000
M10	1,500	7,950	12,000	11,000	8,500	80,000	45,000	1,500	27,000	2	10,000
M12	1,750	9,950	14,000	13,500	10,200	90,000	45,000	1,500	31,400	2	12,000
M14	2,000	11,200	16,000	15,500	12,000	102,000	48,000	1,500	39,700	2	14,000
M16	2,000	13,200	18,000	17,500	14,000	102,000	48,000	1,500	46,000	2	16,000

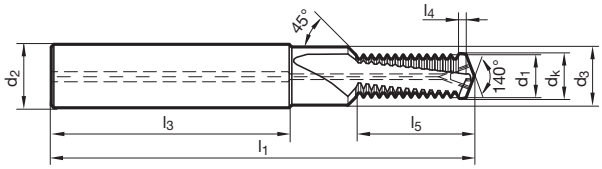
Poraavat kierrejyrsimet metrisille ISO-hienokierteille

1,5xD

P	
M	
K	○
N	●
S	
H	

Leikkuuarvosivu 471

Materiaali	TKM		
Pinta	◯	C	C
Malli	DTMC SP	DTMC SP	DTMC SP
Sisäinen jäähdytys			
Varren muoto	HA	HA	HA



Tehdas stdr. Artikkelinro. **3787** **3788** **3789**

D	P	d1	d2	d3	dk	l1	l3	l4	l5	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm	mm	mm		
M4 x 0,5	0,500	3,200	6,000	4,500	3,500	48,000	36,000	0,500	6,600	2	4,003
M5 x 0,5	0,500	4,000	6,000	5,500	4,500	54,000	36,000	0,500	8,300	2	5,003
M 6 X0,75	0,750	4,750	8,000	6,600	5,200	62,000	36,000	0,750	9,900	2	6,004
M8 x 0,75	0,750	6,350	10,000	9,000	7,200	74,000	40,000	0,750	14,100	2	8,004
M8 x 1	1,000	6,350	10,000	9,000	7,000	74,000	40,000	1,000	14,300	2	8,005
M10 x 1	1,000	7,950	12,000	11,000	9,000	80,000	45,000	1,000	16,600	2	10,005
M10 x 1,25	1,250	7,950	12,000	11,000	8,800	80,000	45,000	1,250	16,600	2	10,006
M12 x 1	1,000	9,950	14,000	13,500	11,000	90,000	45,000	1,000	20,000	2	12,005
M12 x 1,5	1,500	9,950	14,000	13,500	10,500	90,000	45,000	1,500	21,400	2	12,007
M14 x 1,5	1,500	11,200	16,000	15,500	12,500	102,000	48,000	1,500	23,300	2	14,007
M16 x 1,5	1,500	13,200	18,000	17,500	14,500	102,000	48,000	1,500	26,600	2	16,007

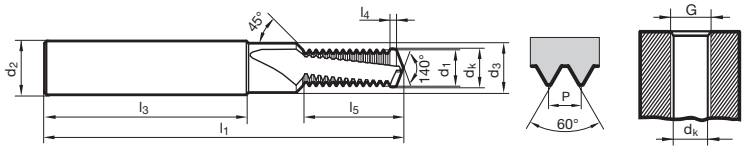
Poraavat kierrejyrsimet metrisille ISO-hienokierteille

2xD

P	
M	
K	○
N	●
S	
H	

Leikkuuarvosivu 471

Materiaali	TKM			
Pinta	○	○	C	C
Malli	DTMC SP	DTMC SP	DTMC SP	DTMC SP
Sisäinen jäähdytys	✕		✕	
Varren muoto	HA	HA	HA	HA



Tehdas stdr.	Artikkelinro.	3790	3791	3792	3793

D	P	d1	d2	d3	dk	l1	l3	l4	l5	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm	mm	mm		
M4 x 0,5	0,500	3,200	6,000	4,500	3,500	48,000	36,000	0,500	8,600	2	4,003
M5 x 0,5	0,500	4,000	6,000	5,500	4,500	54,000	36,000	0,500	10,800	2	5,003
M 6 X0,75	0,750	4,750	8,000	6,600	5,200	62,000	36,000	0,750	12,900	2	6,004
M8 x 0,75	0,750	6,350	10,000	9,000	7,200	74,000	40,000	0,750	17,100	2	8,004
M8 x 1	1,000	6,350	10,000	9,000	7,000	74,000	40,000	1,000	17,300	2	8,005
M10 x 1	1,000	7,950	12,000	11,000	9,000	80,000	45,000	1,000	21,600	2	10,005
M10 x 1,25	1,250	7,950	12,000	11,000	8,800	80,000	45,000	1,250	21,600	2	10,006
M12 x 1	1,000	9,950	14,000	13,500	11,000	90,000	45,000	1,000	26,000	2	12,005
M12 x 1,5	1,500	9,950	14,000	13,500	10,500	90,000	45,000	1,500	27,400	2	12,007
M14 x 1,5	1,500	11,200	16,000	15,500	12,500	102,000	48,000	1,500	30,800	2	14,007
M16 x 1,5	1,500	13,200	18,000	17,500	14,500	102,000	48,000	1,500	34,100	2	16,007

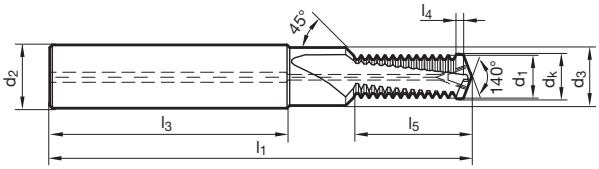
Poraavat kierrejyrsimet UNC-kierteille

2xD

P	
M	
K	•
N	•
S	
H	

Leikkuuarvosivu 471

Materiaali	TKM	
Pinta	◯	C
Malli	DTMC SP	DTMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HA



Tehdas stdr. Artikkelinro. **4138** **4139**

D	P	d1	d2	d3	dk	l1	l3	l4	l5	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	mm	mm		
1/4 - 20	20,000	5,000	8,000	6,600	5,100	62,000	36,000	1,300	14,900	2	6,350
5/16 - 18	18,000	6,250	10,000	9,000	6,600	74,000	40,000	1,500	18,100	2	7,938
3/8 - 16	16,000	7,500	12,000	11,000	8,000	80,000	45,000	1,500	22,100	2	9,525
7/16 - 14	14,000	8,800	12,000	11,000	9,400	80,000	45,000	1,500	25,000	2	11,113
1/2 - 13	13,000	10,200	14,000	13,500	10,800	90,000	45,000	1,500	26,900	2	12,700
9/16 - 12	12,000	11,600	16,000	15,500	12,200	102,000	48,000	1,500	31,200	2	14,288
5/8 - 11	11,000	13,000	18,000	17,500	13,500	102,000	48,000	1,500	36,300	2	15,875

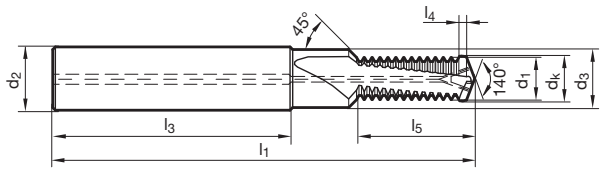
Poraavat kierrejyrsimet UNF-kierteille

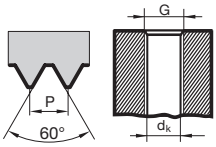
2xD

P	
M	
K	•
N	•
S	
H	

Leikkuuarvosivu 471

Materiaali	TKM	
Pinta	○	C
Malli	DTMC SP	DTMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HA





Tehdas stdr. Artikkelinro. **4140** **4141**

D	P	d1	d2	d3	dk	l1	l3	l4	l5	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	mm	mm		
1/4 - 28	28,000	5,000	8,000	6,600	5,500	62,000	36,000	1,000	12,800	2	6,350
5/16 - 24	24,000	6,250	10,000	9,000	6,900	74,000	40,000	1,100	18,200	2	7,938
3/8 - 24	24,000	7,950	12,000	11,000	8,500	80,000	45,000	1,100	20,600	2	9,525
7/16 - 20	20,000	9,500	12,000	11,000	9,900	80,000	45,000	1,300	24,700	2	11,113
1/2 - 20	20,000	10,200	14,000	13,500	11,500	90,000	45,000	1,300	27,500	2	12,700
9/16 - 18	18,000	11,600	16,000	15,500	12,900	102,000	48,000	1,500	30,600	2	14,288
5/8 - 18	18,000	13,000	18,000	17,500	14,500	102,000	48,000	1,500	33,700	2	15,875

TITAAN

S

Nikkeli-, rauta- ja kobolttipohjaiset kuumalujat erikoisseokset, titaani ja titaaniseokset

ERIKOIS- SUPER- JA TITAANISEOKSET

S TITAAN, ERIKOISSEOKSET

titaan

nikkeli

M

ISO 2/6H

No 1
M3 - M16
Art. nro. 2901
alkaen sivu 602

No 1
M3 - M16
Art. nro. 2909
alkaen sivu 604

No 1
M3 - M16
Art. nro. 2916
alkaen sivu 602

No 1
M3 - M16
Art. nro. 2920
alkaen sivu 604

ISO 3/6G

MF

ISO 2/6H

No 1
M3x0,35 - M10x1,25
Art. nro. 2903
alkaen sivu 606

No 1
M3x0,35 - M10x1,25
Art. nro. 2910
alkaen sivu 608

No 1
M3x0,35 - M10x1,25
Art. nro. 2917
alkaen sivu 606

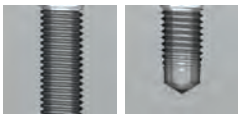
No 1
M3x0,35 - M10x1,25
Art. nro. 2921
alkaen sivu 608

ISO 3/6G

No 1 PARAS TYÖKALU

QUICKFINDER

UNC	UNF	G
2B	2B	-



LÄPIREIÄT
POHJAREIÄT

No 1
Nr. 6 - 3/8
Art. nro. 2905
alkaen sivu 610

Läpireikä
HSS-E-PM, TiCN, muoto B

No 1
Nr. 4 - 5/8
Art. nro. 2912
alkaen sivu 612

No 1
Nr. 4 - 5/8
Art. nro. 2914
alkaen sivu 617

Pohjareikä
HSS-E-PM, TiCN, muoto C

No 1
Nr. 6 - 3/8
Art. nro. 2918
alkaen sivu 610

No 1
Nr. 6 - 3/8
Art. nro. 2919
alkaen sivu 614

Läpireikä
HSS-E-PM, TiAlN, muoto B

No 1
Nr. 4 - 5/8
Art. nro. 2922
alkaen sivu 612

No 1
Nr. 4 - 5/8
Art. nro. 2923
alkaen sivu 616

Pohjareikä
HSS-E-PM, TiAlN, muoto C

S TITAAN, ERIKOISSEOKSET

jäähdytyskanavilla

M		MF	
6HX	6GX	6HX	6GX
No 1 M3 - M20 Art. nro. 1270/1271 alkaen sivu 623	No 1 M5 - M10 Art. nro. 1713 alkaen sivu 624	No 1 M8x1 - M24x1,5 Art. nro. 1272/1273 alkaen sivu 632	No 1 M8x1 - M24x1,5 Art. nro. 1715/1716 alkaen sivu 633
No 1 M3 - M20 Art. nro. 1725/1727 alkaen sivu 623	No 1 M3 - M20 Art. nro. 1726/1728 alkaen sivu 625	No 1 M8x1 - M24x1,5 Art. nro. 1729/1731 alkaen sivu 632	No 1 M8x1 - M24x1,5 Art. nro. 1730/1732 alkaen sivu 633
No 1 M3 - M20 Art. nro. 1972/1931 alkaen sivu 627		No 1 M10x1 - M24x1,5 Art. nro. 1581 alkaen sivu 635	

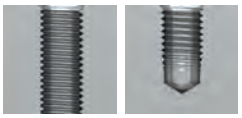
öljyurilla

M3 - M20 Art. nro. 1266/1267 alkaen sivu 621		M8x1 - M24x2 Art. nro. 1268/1269 alkaen sivu 630	

No 1 PARAS TYÖKALU

QUICKFINDER

UNC	UNF	G
2BX	2BX	-



LÄPIREIÄT
POHJAREIÄT

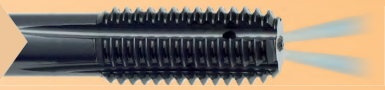
MUOTO C

HSS-E-PM, TiCN, muoto C

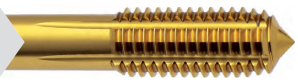
MUOTO E

HSS-E-PM, TiN, muoto E

TKM



TKM, TiCN, muoto C



HSS-E, TiN, muoto C

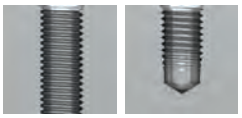
TITAAN, ERIKOISSEOKSET

	M UNIVERSAL	MF UNIVERSAL
1,5xD	No 1 M3 - M20 Art. nro. 3525 alkaen sivu 643	No 1 M4x0,5 - M16x1,5 Art. nro. 3527 alkaen sivu 646
2xD	No 1 M3 - M20 Art. nro. 3526 alkaen sivu 644	No 1 M4x0,5 - M16x1,5 Art. nro. 3528 alkaen sivu 647
2,5xD	No 1 M3 - M20 Art. nro. 3759 alkaen sivu 645	No 1 M4x0,5 - M16x1,5 Art. nro. 3762 alkaen sivu 648
3xD	No 1 M1,6 - M16 Art. nro. 4226 alkaen sivu 637	
universal	No 1 Ø8xP0,5 - Ø30xP3,5 Art. nro. 3541 alkaen sivu 664	No 1 Ø8xP0,5 - Ø30xP3,5 Art. nro. 3541 alkaen sivu 664

No 1 PARAS TYÖKALU

QUICKFINDER

UNC	UNF	G
UNIVERSAL	UNIVERSAL	-



LÄPIREIÄT
POHJAREIÄT

No 1
1/4 - 1/2
Art. nro. 3516
alkaen sivu 650

No 1
1/4 - 1/2
Art. nro. 3518
alkaen sivu 653

No 1
1/8 - 3/8
Art. nro. 3514
alkaen sivu 657

TKM, TiCN

No 1
1/4 - 1/2
Art. nro. 3517
alkaen sivu 651

No 1
1/4 - 1/2
Art. nro. 3519
alkaen sivu 654

No 1
1/8 - 3/8
Art. nro. 3515
alkaen sivu 658

TKM, TiCN

TKM, TiCN

TKM, TiCN

No 1
Ø10xUN24 - Ø20xUN16
Art. nro. 3595
alkaen sivu 666

No 1
Ø10xUN24 - Ø20xUN16
Art. nro. 3595
alkaen sivu 666

No 1
Ø10xG19 - Ø20xG11
Art. nro. 3542
alkaen sivu 667

TKM, TiCN

Erikois-, super- ja Ti-seokset

S

ERIKOIS-, SUPER- JA TITAANISEOK-SET

	Kierteen syvyys	≤3xD	
	Materiaali	HSS-E-PM	
	Malli/Muoto	TiNi/B	TiNi/B
	Pinta	C	A
	Jäähdytys	☒	☒
	Varren halkaisija	h9	h9

LÄPIREIKÄ

Kierteen malli	Toleranssi	Artikkelinro. / sivu	
M	4H		
	6H		
	6HX	2901 602	2916 602
	6GX		
MF	6H		
	6HX	2903 606	2917 606
	6GX		
UNC	2B		
	2BX	2905 610	2918 610
UNF	2B		
	2BX		2919 614
G			
BSW			
NPT			
NPTF			
EG M	6H Mod.		
MJ	4HX	1057 603	
MJF	4HX	1058 607	
UNJC	3BX	1059 611	
UNJF	3BX	1060 615	
PG			
Jäähdytysneste:		●/●/△	●/●/△

= No 1

○ = Ilma
● = Öljy
● = Emulsio
△ = Jäähdytysaine
☐ = Pisaravoitelu (MQL)

	Materiaaliryhmä	Vetomurtoluujuus	Materiaaliesimerkkejä	Materiaalinro.	Suositeltu leikkuunopeus vc m/min	
S	Titaani ja titaaniseokset	≤ 1200 N/mm²	Titaan	3.7025	4	4
			TiAl5Sn2	3.7115		
			TiAl6V4	3.7165		
	Nikkeli-, kobolttti- ja terässeokset	≤ 1400 N/mm²	Hastelloy C4	2.4610	4	4
			Inconel 718	2.4668		
			Nimonic 105	2.4634		

S

ERIKOIS-, SUPER- JA TITAANISEOK-SET

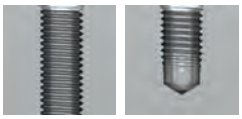
POHJAREIKÄ

Kierteen syvyys		≤3xD	
Materiaali		HSS-E-PM	
Malli/Muoto		Ti R15/C	Ni R10/C (K)
Pinta		C	A
Jäähdytys		☒	☒
Varren halkaisija		h9	h9

Kierteen malli	Toleranssi	Artikkelinro. / sivu	
M	4H		
	6H		
	6HX	2909 604	2920 604
	6G		
MF	6H		
	6HX	2910 608	2921 608
	6G		
UNC	2B		
	2BX	2912 612	2922 612
UNF	2B		
	2BX	2914 617	2923 616
G			
BSW			
NPT			
NPTF			
EG M	6H Mod.		
MJ	4HX	1061 605	1065 605
MJF	4HX	1062 609	1066 609
UNJC	3BX	1063 613	1067 613
UNJF	3BX	1064 618	1068 618
PG			
Jäähdytysneste:		○/●/△	○/●/△

	Materiaaliryhmä	Vetomurtoluujuus	Materiaaliesimerkkejä	Materiaalinro.	Suositeltu leikkuunopeus vc m/min	
S	Titaani ja titaaniseokset	≤ 1200 N/mm²	Titaan TiAl5Sn2 TiAl6V4	3.7025 3.7115 3.7165	4	-
	Nikkeli-, kobolttti- ja terässeokset	≤ 1400 N/mm²	Hastelloy C4 Inconel 718 Nimonic 105	2.4610 2.4668 2.4634	-	4

ERIKOIS-, SUPER- JA TITAANISEOK-SET



LÄPIREIÄT JA POHJA-REIÄT

Kierteen syvyys		≤3xD			
Materiaali		HSS-E-PM			
Malli/Muoto		N/C	N/C	N/C	N/C
Pinta		S	S	S	S
Jäähdytys		☒	☒	säteitt.	aksiaal.
Varren halkaisija		h9	h9	h9	h9
Kierteen malli	**Toleranssi**	**Artikkelinro. / sivu**			
M	4H				
	6H				
	6HX	322/339 620	1266/1267 621	323/342 622	4143 626
	6GX				
MF	6H				
	6HX	333 629	1268/1269 630	338 631	4145 634
	6GX				
UNC	2B				
	2BX				
UNF	2B				
	2BX				
G					
BSW					
NPT					
NPTF					
EG M	6H Mod.				
MJ	4HX				
MJF	4HX				
UNJC	3BX				
UNJF	3BX				
PG					
Jäähdytysneste:		○/●/△	○/●/△	○/●/△/□	○/●/△

= No 1

○ = Ilma
● = Öljy
○ = Emulsio
△ = Jäähdytysaine
□ = Pisaravoitelu (MQL)

	Materiaaliryhmä	Vetomurtoluujuus	Materiaaliesimerkkejä	Materiaalinro.	Suositeltu leikkuunopeus vc m/min			
S	Titaani ja titaaniseokset	≤ 1200 N/mm²	Titaan	3.7025	4	4	4	4
			TiAl5Sn2	3.7115				
			TiAl6V4	3.7165				
	Nikkeli-, kobolttti- ja teräs-seokset	≤ 1400 N/mm²	Hastelloy C4	2.4610	4	4	4	4
			Inconel 718	2.4668				
			Nimonic 105	2.4634				

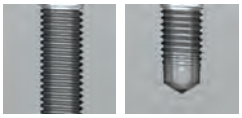
≤3xD

HSS-E-PM			TKM	
N/C	N/C	N/E	N/C	N/E
C	A	S	C	C
säteitt.	säteitt.	aksiaal.	säteitt.	säteitt.
h9	h9	h9	h6	h6
Artikkelinro. / sivu				
1270/1271 623	1717/1719 623	1725/1727 623	1972/1931 627	1927 628
1713 624	1718/1720 625	1726/1728 625		
1272/1273 632	1721/1723 632	1729/1731 632	1581 635	
1715/1716 633		1730/1732 633		
○/●/△/□	○/●/△/□	○/●/△	○/●/△/□	○/●/△/□

Suositeltu leikkuunopeus vc m/min				
4	4	4	10	10
4	4	4	10	10

S

ERIKOIS-, SUPER- JA TITAANISEOK-SET



LÄPIREIÄT JA POHJA-REIÄT

Kierteen syvyys	≤2xD				≤2,5xD		≤1,5xD	
Materiaali		TKM						
Malli	TM SP	TM SP	TM SP	TM SP	TM SP	TM SP	TMC SP	TMC SP
Pinta	C	C	C	C	C	C	C	C
Jäähdytys	☒	☒	aksiaal.	aksiaal.	aksiaal.	aksiaal.	aksiaal.	aksiaal.
Varren muoto	HA	HB	HA	HB	HA	HB	HA	HA
Nousu	27°	27°	27°	27°	27°	27°	10°	10°

Kierteen malli	Artikkelinro. / sivu							
M	4132 641	4133 641	3737 640	3743 640	3735 642	3740 642	3525 643	3543 643
MF			3737 640	3743 640			3527 646	3545 646
UNC			4134 649	4135 649			3516 650	3534 650
UNF			4136 652	4137 652			3518 653	3536 653
G			3745 655	3748 655	3746 656	3750 656	3514 657	3529 657
BSW								
NPT			3753 660	3754 660			3520 661	3538 661
NPTF			3756 662	3757 662			3521 663	3539 663
EG M	EG-kierteet voidaan kaiken mallisilla ja kokoisilla kierrejyrsimillä							
MJ								
MJF								
UNJC								
UNJF								
PG								
Jäähdytysneste:	◌/●	◌/●	◌/●	◌/●	◌/●	◌/●	◌/●	◌/●

= No 1

○ = Ilma
● = Öljy
◌ = Emulsio
△ = Jäähdytysaine
☐ = Pisaravoitelu (MQL)

	Materiaaliryhmä	Kovuus	Materiaaliesimerkkejä	Materiaalinro.	Käyttösuositus							
S	Titaani ja titaaniseokset	≤ 1200 N/mm²	Titaan TiAl5Sn2 TiAl6V4	3.7025 3.7115 3.7165	+	+	+	+	+	+	++	++
	Nikkeli-, kobolttti- ja teräs-seokset	≤ 1400 N/mm²	Hastelloy C4 Inconel 718 Nimonic 105	2.4610 2.4668 2.4634	+	+	+	+	+	+	++	++

≤2xD		≤2,5xD		universal				≤3xD	
TKM									
TMC SP	TMC SP	TMC SP	TMC SP	TMU SP	TMU SP	TMU SP	TMU SP	MTM 3 SP	MTM 1 SP
C	C	C	C	C	C	C	C	C	C
aksiaal.	aksiaal.	aksiaal.	aksiaal.	aksiaal.	aksiaal.	aksiaal.	aksiaal.	☒	☒
HA	HB	HA	HB	HA	HB	HA	HB	HA	HA
10°	10°	27°	27°	15°	15°	15°	15°	15°	15°
Artikkelinro. / sivu									
3526 644	3544 644	3759 645	3760 645	3541 664	3556 664	4162 665	4163 665	4226 637	4225 639
3528 647	3546 647	3762 648	3763 648	3541 664	3556 664	4162 665	4163 665		4225 639
3517 651	3535 651			3595 666	3596 666				
3519 654	3537 654			3595 666	3596 666				
3515 658	3533 658	3765 659	3766 659	3542 667	3557 667	3542 667	3557 667	4228 638	
				3768 668	3769 668				
				3772 669	3773 669				
EG-kierteet voidaan kaiken mallisilla ja kokoisilla kierrejyrsimillä									
○/●	○/●	○/●	○/●	○/●	○/●	○/●	○/●	○/●	○/●

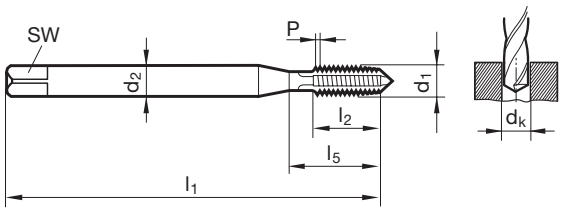
Käyttösuositus									
++	++	++	++	++	++	++	++	++	++
++	++	++	++	++	++	++	++	++	++

Konekierretapit, metrinen ISO-kierre

Materiaali	HSS-E-PM	
Ø-Toleranssi	6HX	6HX
Pinta	C	A
Malli	TiNi	TiNi
Muoto	B	B
Sisäinen jäähdytys		

P	
M	
K	
N	
S	•
H	

Leikkuuarvosivu 596



DIN 2184-1 DIN 371/DIN 376 — Artikkelinro. **2901** **2916**

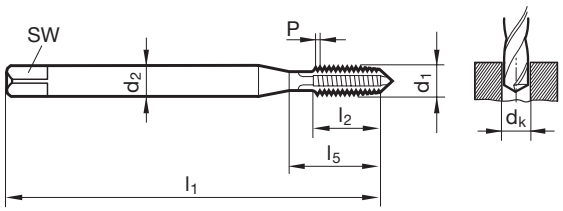
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,50	56,000	10,000	18,000
M4	0,700	4,500	3,400	3,30	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,20	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,00	80,000	16,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	17,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	20,000	39,000
M12	1,750	9,000	7,000	10,20	110,000	24,000	49,000
M16	2,000	12,000	9,000	14,00	110,000	26,000	54,000

Konekierretapit, metrinen ISO-kierre

Materiaali	**HSS-E-PM**
Ø-Toleranssi	4HX
Pinta	C
Malli	TiNi
Muoto	B
Sisäinen jäähdytys	

P	
M	
K	
N	
S	•
H	

Leikkuuarvosivu 596



DIN 2184-1 DIN 371/DIN 376 Artikkelinro. **1057**

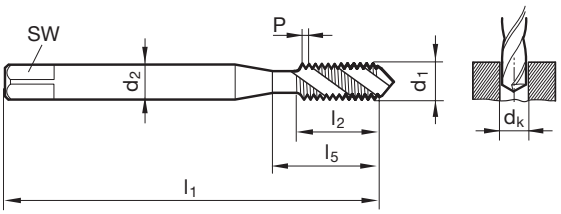
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
MJ3 x 0,5	0,500	3,500	2,700	2,60	56,000	10,000	18,000
M4	0,700	4,500	3,400	3,40	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,30	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,10	80,000	16,000	30,000
M8	1,250	8,000	6,200	6,90	90,000	17,000	35,000
M10	1,500	10,000	8,000	8,60	100,000	20,000	39,000
M12	1,750	9,000	7,000	10,40	110,000	24,000	49,000
M16	2,000	12,000	9,000	14,20	110,000	26,000	54,000

Konekierretapit, metrinen ISO-kierre

P		
M		
K		
N		
S	•	
H		

Leikkuuarvosivu 597

Materiaali	HSS-E-PM	
Ø-Toleranssi	6HX	6HX
Pinta	C	A
Malli	Ti R15	Ni R10
Muoto	C	C (K)
Sisäinen jäähdytys		



DIN 2184-1 DIN 371/DIN 376 Artikkelinro. **2909** **2920**

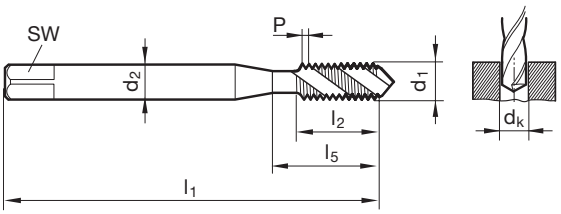
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,50	56,000	10,000	18,000
M4	0,700	4,500	3,400	3,30	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,20	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,00	80,000	16,000	30,000
M8	1,250	8,000	6,200	6,80	90,000	17,000	35,000
M10	1,500	10,000	8,000	8,50	100,000	20,000	39,000
M12	1,750	9,000	7,000	10,20	110,000	24,000	49,000
M16	2,000	12,000	9,000	14,00	110,000	26,000	54,000

Konekierretapit, metrinen ISO-kierre

P	
M	
K	
N	
S	•
H	

Leikkuuarvosivu 597

Materiaali	HSS-E-PM	
Ø-Toleranssi	4HX	4HX
Pinta	C	A
Malli	Ti R15	Ni R10
Muoto	C	C (K)
Sisäinen jäähdytys		



DIN 2184-1 DIN 371/DIN 376 Artikkelinro. **1061** **1065**

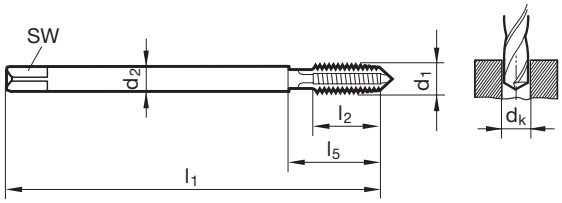
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
MJ3 x 0,5	0,500	3,500	2,700	2,60	56,000	10,000	18,000
M4	0,700	4,500	3,400	3,40	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,30	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,10	80,000	16,000	30,000
M8	1,250	8,000	6,200	6,90	90,000	17,000	35,000
M10	1,500	10,000	8,000	8,60	100,000	20,000	39,000
M12	1,750	9,000	7,000	10,40	110,000	24,000	49,000
M16	2,000	12,000	9,000	14,20	110,000	26,000	54,000

Konekierretapit, metrinen ISO-hienokierre

Materiaali	HSS-E-PM	
Ø-Toleranssi	6HX	6HX
Pinta	C	A
Malli	TiNi	TiNi
Muoto	B	B
Sisäinen jäähdytys		

P	
M	
K	
N	
S	•
H	

Leikkuuarvosivu 596



DIN 2184-1 DIN 371 — Artikkelinro. **2903** **2917**

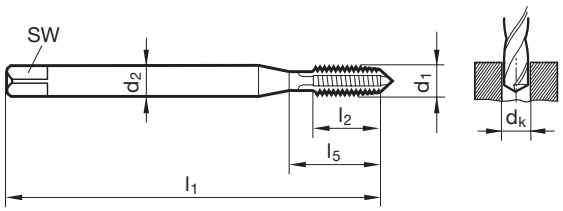
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M3 x 0,35	3,500	2,700	2,65	56,000	6,000	18,000	3,002
M4 x 0,5	4,500	3,400	3,50	63,000	7,500	21,000	4,003
M5 x 0,5	6,000	4,900	4,50	70,000	8,500	25,000	5,003
M6 x 0,5	6,000	4,900	5,50	80,000	11,000	30,000	6,003
M6 x 0,75	6,000	4,900	5,20	80,000	11,000	30,000	6,004
M8 x 0,5	8,000	6,200	7,50	80,000	14,000	30,000	8,003
M8 x 0,75	8,000	6,200	7,20	80,000	14,000	30,000	8,004
M8 x 1	8,000	6,200	7,00	90,000	14,000	35,000	8,005
M10 x 1	10,000	8,000	9,00	90,000	20,000	35,000	10,005
M10 x 1,25	10,000	8,000	8,80	100,000	20,000	39,000	10,006

Konekierretapit, metrinen ISO-hienokierre

Materiaali	**HSS-E-PM**
Ø-Toleranssi	4HX
Pinta	C
Malli	TiNi
Muoto	B
Sisäinen jäähdytys	

P	
M	
K	
N	
S	•
H	

Leikkuuarvosivu 596



DIN 2184-1 DIN 371 Artikkelinro. **1058**

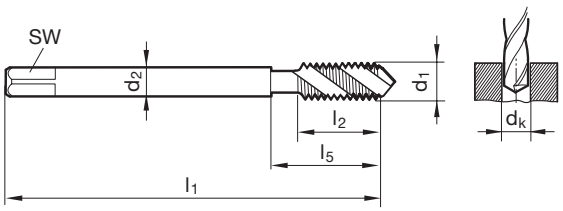
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
MJ6 x 0,5	6,000	4,900	5,60	80,000	11,000	30,000	6,003
MJ6 x 0,75	6,000	4,900	5,40	80,000	11,000	30,000	6,004
MJ8 x 1	8,000	6,200	7,10	90,000	14,000	35,000	8,005
MJ10 x 1	10,000	8,000	9,10	90,000	20,000	35,000	10,005
MJ10 x 1,25	10,000	8,000	8,90	100,000	20,000	39,000	10,006

Konekierretapit, metrinen ISO-hienokierre

P		
M		
K		
N		
S	•	
H		

Leikkuuarvosivu 597

Materiaali	HSS-E-PM	
Ø-Toleranssi	6HX	6HX
Pinta	C	A
Malli	Ti R15	Ni R10
Muoto	C	C (K)
Sisäinen jäähdytys		



DIN 2184-1 DIN 371 Artikkelinro. **2910** **2921**

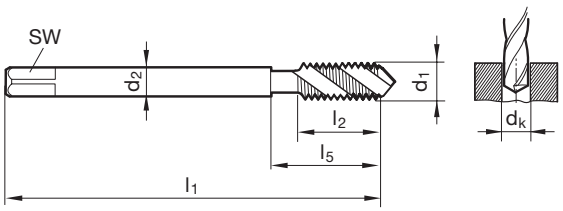
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M3 x 0,35	3,500	2,700	2,65	56,000	6,000	18,000	3,002
M4 x 0,5	4,500	3,400	3,50	63,000	7,500	21,000	4,003
M5 x 0,5	6,000	4,900	4,50	70,000	8,500	25,000	5,003
M6 x 0,5	6,000	4,900	5,50	80,000	11,000	30,000	6,003
M6 x 0,75	6,000	4,900	5,20	80,000	11,000	30,000	6,004
M8 x 0,5	8,000	6,200	7,50	80,000	14,000	30,000	8,003
M8 x 0,75	8,000	6,200	7,20	80,000	14,000	30,000	8,004
M8 x 1	8,000	6,200	7,00	90,000	14,000	35,000	8,005
M10 x 1	10,000	8,000	9,00	90,000	20,000	35,000	10,005
M10 x 1,25	10,000	8,000	8,80	100,000	20,000	39,000	10,006

Konekierretapit, metrinen ISO-hienokierre

P	
M	
K	
N	
S	•
H	

Leikkuuarvosivu 597

Materiaali	HSS-E-PM	
Ø-Toleranssi	4HX	4HX
Pinta	C	A
Malli	Ti R15	Ni R10
Muoto	C	C (K)
Sisäinen jäähdytys		



DIN 2184-1 DIN 371 — Artikkelinro. **1062** **1066**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
MJ6 x 0,5	6,000	4,900	5,60	80,000	11,000	30,000	6,003
MJ6 x 0,75	6,000	4,900	5,40	80,000	11,000	30,000	6,004
MJ8 x 0,5	8,000	6,200	7,60	80,000	14,000	30,000	8,003
MJ8 x 0,75	8,000	6,200	7,40	80,000	14,000	30,000	8,004
MJ8 x 1	8,000	6,200	7,10	90,000	14,000	35,000	8,005
MJ10 x 1	10,000	8,000	9,10	90,000	16,000	35,000	10,005
MJ10 x 1,25	10,000	8,000	8,90	100,000	16,000	39,000	10,006

Konekierretapit UNC-kierteille

P	
M	
K	
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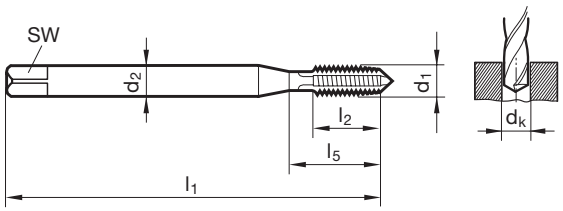
S	•
H	

Leikkuuarvosivu 596

Materiaali	HSS-E-PM	
Ø-Toleranssi	2BX	2BX
Pinta	C	A
Malli	TiNi	TiNi
Muoto	B	B
Sisäinen jäähdytys		



DIN 2184-1 ~DIN 371 Artikkelinro. **2905** **2918**

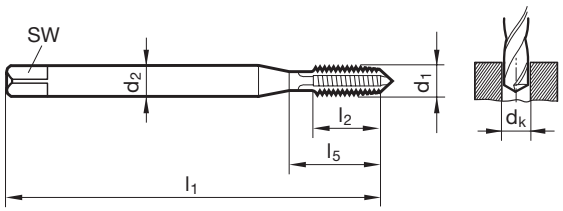
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
6 - 32	4,000	3,000	2,85	56,000	12,000	20,000	3,505
8 - 32	4,500	3,400	3,50	63,000	12,000	21,000	4,166
10 - 24	6,000	4,900	3,90	70,000	14,000	25,000	4,826
12 - 24	6,000	4,900	4,50	80,000	16,000	30,000	5,486
1/4 - 20	7,000	5,500	5,10	80,000	16,000	30,000	6,350
5/16 - 18	8,000	6,200	6,60	90,000	18,000	35,000	7,938
3/8 - 16	10,000	8,000	8,00	100,000	20,000	39,000	9,525

Konekierretapit UNC-kierteille

Materiaali	HSS-E-PM
Ø-Toleranssi	3BX
Pinta	C
Malli	TiNi
Muoto	B
Sisäinen jäähdytys	

P	
M	
K	
N	
S	•
H	

Leikkuuarvosivu 596



DIN 2184-1 ~DIN 371/~DIN 376 Artikkelinro. **1059**

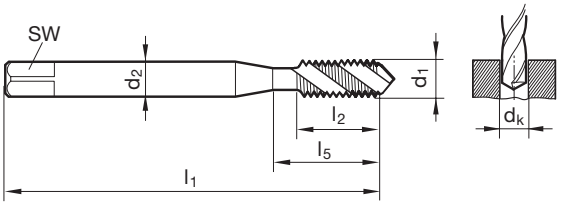
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
6 - 32	4,000	3,000	2,85	56,000	12,000	20,000	3,505
8 - 32	4,500	3,400	3,50	63,000	12,000	21,000	4,166
10 - 24	6,000	4,900	3,90	70,000	14,000	25,000	4,826
12 - 24	6,000	4,900	4,50	80,000	16,000	30,000	5,486
1/4 - 20	7,000	5,500	5,10	80,000	16,000	30,000	6,350
5/16 - 18	8,000	6,200	6,60	90,000	18,000	35,000	7,938
3/8 - 16	10,000	8,000	8,00	100,000	20,000	39,000	9,525
7/16 - 14	8,000	6,200	9,40	100,000	22,000	42,000	11,113
1/2 - 13	9,000	7,000	10,80	110,000	25,000	49,000	12,700
5/8 - 11	12,000	9,000	13,50	110,000	30,000	53,000	15,875

Konekierretapit UNC-kierteille

P	
M	
K	
N	
S	•
H	

Leikkuuarvosivu 597

Materiaali	HSS-E-PM	
Ø-Toleranssi	2BX	2BX
Pinta	C	A
Malli	Ti R15	Ni R10
Muoto	C	C (K)
Sisäinen jäähdytys		



DIN 2184-1 ~DIN 371/~DIN 376 Artikkelinro. **2912** **2922**

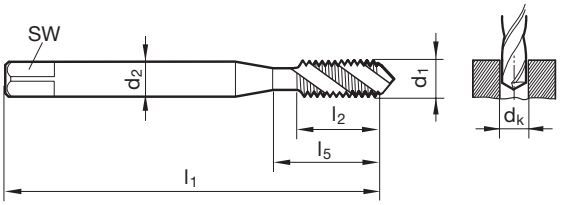
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
4 - 40	3,500	2,700	2,35	56,000	11,000	18,000	2,845
5 - 40	3,500	2,700	2,65	56,000	11,000	18,000	3,175
6 - 32	4,000	3,000	2,85	56,000	12,000	20,000	3,505
8 - 32	4,500	3,400	3,50	63,000	12,000	21,000	4,166
10 - 24	6,000	4,900	3,90	70,000	14,000	25,000	4,826
12 - 24	6,000	4,900	4,50	80,000	16,000	30,000	5,486
1/4 - 20	7,000	5,500	5,10	80,000	16,000	30,000	6,350
5/16 - 18	8,000	6,200	6,60	90,000	18,000	35,000	7,938
3/8 - 16	10,000	8,000	8,00	100,000	20,000	39,000	9,525
7/16 - 14	8,000	6,200	9,40	100,000	22,000	42,000	11,113
1/2 - 13	9,000	7,000	10,80	110,000	25,000	49,000	12,700
5/8 - 11	12,000	9,000	13,50	110,000	30,000	53,000	15,875

Konekierretapit UNC-kierteille

P	
M	
K	
N	
S	•
H	

Leikkuuarvosivu 597

Materiaali	HSS-E-PM	
Ø-Toleranssi	3BX	3BX
Pinta	C	A
Malli	Ti R15	Ni R10
Muoto	C	C (K)
Sisäinen jäähdytys		



DIN 2184-1 ~DIN 371/~DIN 376 — Artikkelinro. **1063** **1067**

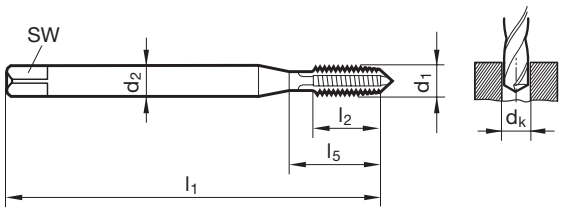
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
6 - 32	4,000	3,000	2,85	56,000	12,000	20,000	3,505
8 - 32	4,500	3,400	3,50	63,000	12,000	21,000	4,166
10 - 24	6,000	4,900	3,90	70,000	14,000	25,000	4,826
12 - 24	6,000	4,900	4,50	80,000	16,000	30,000	5,486
1/4 - 20	7,000	5,500	5,10	80,000	16,000	30,000	6,350
5/16 - 18	8,000	6,200	6,60	90,000	18,000	35,000	7,938
3/8 - 16	10,000	8,000	8,00	100,000	20,000	39,000	9,525
7/16 - 14	8,000	6,200	9,40	100,000	22,000	42,000	11,113
1/2 - 13	9,000	7,000	10,80	110,000	25,000	49,000	12,700
5/8 - 11	12,000	9,000	13,50	110,000	30,000	53,000	15,875

Konekierretapit UNF-kierteille

Materiaali	HSS-E-PM
Ø-Toleranssi	2BX
Pinta	A
Malli	TiNi
Muoto	B
Sisäinen jäähdytys	

P	
M	
K	
N	
S	•
H	

Leikkuuarvosivu 596



DIN 2184-1 ~DIN 371 Artikkelinro. **2919**

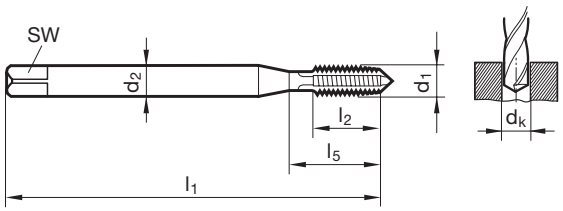
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
6 - 40	4,000	3,000	2,95	56,000	11,000	20,000	3,505
8 - 36	4,500	3,400	3,50	63,000	12,000	21,000	4,166
10 - 32	6,000	4,900	4,10	70,000	14,000	25,000	4,826
12 - 28	6,000	4,900	4,60	80,000	16,000	30,000	5,486
1/4 - 28	7,000	5,500	5,50	80,000	16,000	30,000	6,350
5/16 - 24	8,000	6,200	6,90	90,000	18,000	35,000	7,938
3/8 - 24	10,000	8,000	8,50	90,000	18,000	35,000	9,525

Konekierretapit UNF-kierteille

Materiaali	**HSS-E-PM**
Ø-Toleranssi	3BX
Pinta	C
Malli	TiNi
Muoto	B
Sisäinen jäähdytys	

P	
M	
K	
N	
S	•
H	

Leikkuuarvosivu 596



DIN 2184-1 ~DIN 371/~DIN 374 Artikkelinro. **1060**

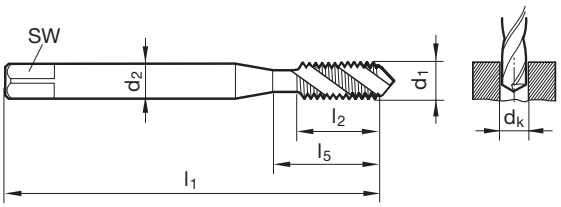
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
6 - 40	4,000	3,000	2,95	56,000	12,000	20,000	3,505
8 - 36	4,500	3,400	3,50	63,000	12,000	21,000	4,166
10 - 32	6,000	4,900	4,10	70,000	14,000	25,000	4,826
12 - 28	6,000	4,900	4,60	80,000	16,000	30,000	5,486
1/4 - 28	7,000	5,500	5,50	80,000	16,000	30,000	6,350
5/16 - 24	8,000	6,200	6,90	90,000	18,000	35,000	7,938
3/8 - 24	10,000	8,000	8,50	100,000	20,000	39,000	9,525
7/16 - 20	8,000	6,200	9,90	100,000	22,000	42,000	11,113
1/2 - 20	9,000	7,000	11,50	100,000	20,000	40,000	12,700
5/8 - 18	12,000	9,000	14,50	100,000	22,000	44,000	15,875

Konekierretapit UNF-kierteille

Materiaali	HSS-E-PM
Ø-Toleranssi	2BX
Pinta	A
Malli	Ni R10
Muoto	C (K)
Sisäinen jäähdytys	

P	
M	
K	
N	
S	•
H	

Leikkuuarvosivu 597



DIN 2184-1 ~DIN 371/~DIN 374 Artikkelinro. **2923**

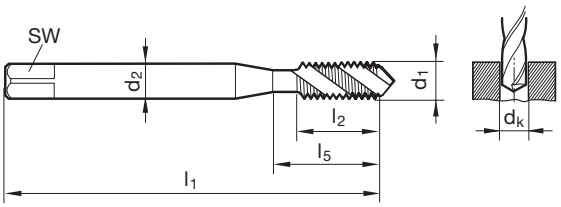
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
4 - 48	3,500	2,700	2,40	56,000	10,000	18,000	2,845
5 - 44	3,500	2,700	2,70	56,000	10,000	18,000	3,175
6 - 40	4,000	3,000	2,95	56,000	11,000	20,000	3,505
8 - 36	4,500	3,400	3,50	63,000	12,000	21,000	4,166
10 - 32	6,000	4,900	4,10	70,000	14,000	25,000	4,826
12 - 28	6,000	4,900	4,60	80,000	16,000	30,000	5,486
1/4 - 28	7,000	5,500	5,50	80,000	16,000	30,000	6,350
5/16 - 24	8,000	6,200	6,90	90,000	18,000	35,000	7,938
3/8 - 24	10,000	8,000	8,50	90,000	18,000	35,000	9,525
7/16 - 20	8,000	6,200	9,90	100,000	22,000	42,000	11,113
1/2 - 20	9,000	7,000	11,50	100,000	20,000	40,000	12,700
5/8 - 18	12,000	9,000	14,50	100,000	22,000	44,000	15,875

Konekierretapit UNF-kierteille

Materiaali	HSS-E-PM
Ø-Toleranssi	2BX
Pinta	C
Malli	Ti R15
Muoto	C
Sisäinen jäähdytys	

P	
M	
K	
N	
S	•
H	

Leikkuuarvosivu 597



DIN 2184-1 ~DIN 371/~DIN 374 Artikkelinro. **2914**

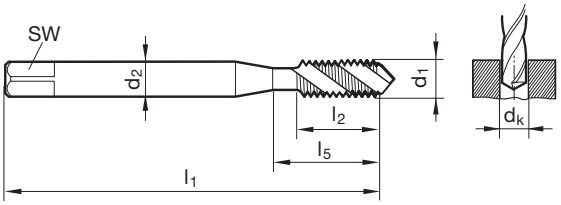
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
4 - 48	3,500	2,700	2,40	56,000	10,000	18,000	2,845
5 - 44	3,500	2,700	2,70	56,000	10,000	18,000	3,175
6 - 40	4,000	3,000	2,95	56,000	11,000	20,000	3,505
8 - 36	4,500	3,400	3,50	63,000	12,000	21,000	4,166
10 - 32	6,000	4,900	4,10	70,000	14,000	25,000	4,826
12 - 28	6,000	4,900	4,60	80,000	16,000	30,000	5,486
1/4 - 28	7,000	5,500	5,50	80,000	16,000	30,000	6,350
5/16 - 24	8,000	6,200	6,90	90,000	18,000	35,000	7,938
3/8 - 24	10,000	8,000	8,50	90,000	18,000	35,000	9,525
7/16 - 20	8,000	6,200	9,90	100,000	22,000	42,000	11,113
1/2 - 20	9,000	7,000	11,50	100,000	20,000	40,000	12,700
5/8 - 18	12,000	9,000	14,50	100,000	22,000	44,000	15,875

Konekierretapit UNF-kierteille

P	
M	
K	
N	
S	•
H	

Leikkuuarvosivu 597

Materiaali	HSS-E-PM	
Ø-Toleranssi	3BX	3BX
Pinta	C	A
Malli	Ti R15	Ni R10
Muoto	C	C (K)
Sisäinen jäähdytys		



DIN 2184-1 ~DIN 371/~DIN 374 Artikkelinro. **1064** **1068**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
6 - 40	4,000	3,000	2,95	56,000	12,000	20,000	3,505
8 - 36	4,500	3,400	3,50	63,000	12,000	21,000	4,166
10 - 32	6,000	4,900	4,10	70,000	14,000	25,000	4,826
12 - 28	6,000	4,900	4,60	80,000	16,000	30,000	5,486
1/4 - 28	7,000	5,500	5,50	80,000	16,000	30,000	6,350
5/16 - 24	8,000	6,200	6,90	90,000	18,000	35,000	7,938
3/8 - 24	10,000	8,000	8,50	100,000	20,000	39,000	9,525
7/16 - 20	8,000	6,200	9,90	100,000	22,000	42,000	11,113
1/2 - 20	9,000	7,000	11,50	100,000	20,000	40,000	12,700
5/8 - 18	12,000	9,000	14,50	100,000	22,000	44,000	15,875

MANGLAAVAT KIERRETAPIT

S

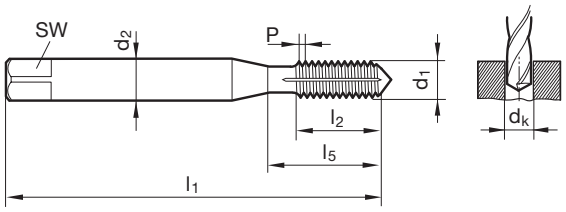
Manglaavat kierretapit, metrinen ISO-kierre

Materiaali	HSS-E-PM
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

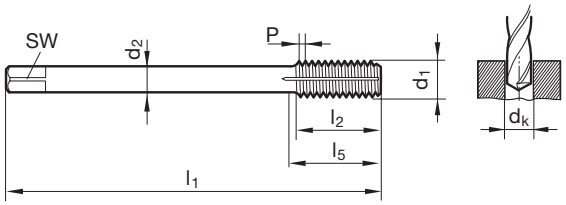
P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 598

~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371 — Artikkelinro. **322**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,80	56,000	6,000	18,000
M4	0,700	4,500	3,400	3,70	63,000	7,500	21,000
M5	0,800	6,000	4,900	4,65	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,55	80,000	11,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	14,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	16,000	39,000

DIN 2174 ~DIN 376 — Artikkelinro. **339**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	11,20	110,000	18,500	49,000
M16	2,000	12,000	9,000	15,10	110,000	20,000	54,000

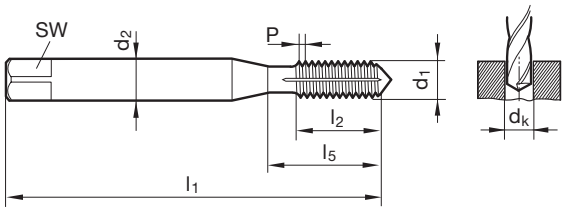
Manglaavat kierretapit, metrinen ISO-kierre

Materiaali	**HSS-E-PM**
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

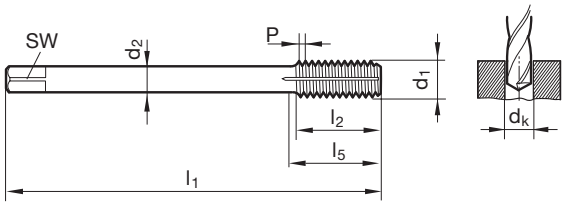
P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 598

~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371 Artikkelinro. **1266**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,80	56,000	10,000	18,000
M4	0,700	4,500	3,400	3,70	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,65	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,55	80,000	16,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	17,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	20,000	39,000

DIN 2174 ~DIN 376 Artikkelinro. **1267**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	11,20	110,000	24,000	49,000
M16	2,000	12,000	9,000	15,10	110,000	26,000	54,000
M20	2,500	16,000	12,000	18,90	140,000	32,000	62,000

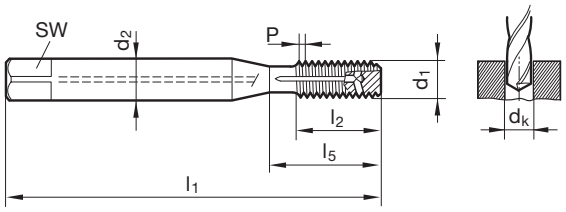
Manglaavat kierretapit JK, metrinen ISO-kierre

Materiaali	HSS-E-PM
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

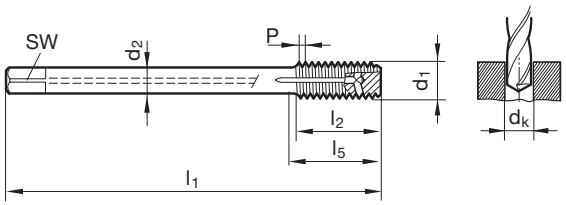
P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 598

~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371 Artikkelinro. **323**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0,800	6,000	4,900	4,65	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,55	80,000	11,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	14,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	16,000	39,000

DIN 2174 ~DIN 376 Artikkelinro. **342**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	11,20	110,000	18,500	49,000
M14	2,000	11,000	9,000	13,10	110,000	20,000	53,000
M16	2,000	12,000	9,000	15,10	110,000	20,000	54,000

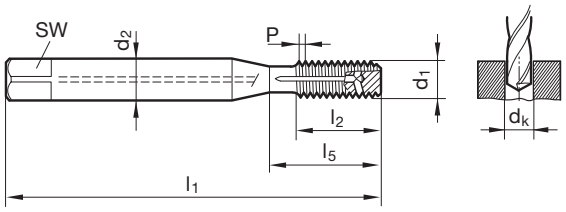
Manglaavat kierretapit JK, metrinen ISO-kierre

P	•
M	•
K	
N	≥ 7
S	•
H	

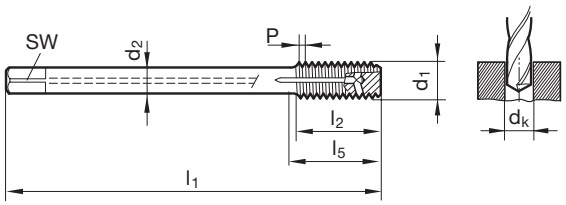
Leikkuuarvosivu 599

Materiaali	HSS-E-PM		
Ø-Toleranssi	6HX	6HX	6HX
Pinta	C	A	S
Malli	N	N	N
Muoto	C	C	E
Sisäinen jäähdytys			

~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371	Artikkelinro.	1270	1717	1725

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,80	56,000	10,000	18,000
M4	0,700	4,500	3,400	3,70	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,65	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,55	80,000	16,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	17,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	20,000	39,000

DIN 2174 ~DIN 376	Artikkelinro.	1271	1719	1727

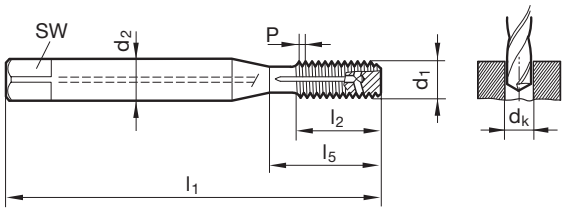
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	11,20	110,000	24,000	49,000
M14	2,000	11,000	9,000	13,10	110,000	26,000	53,000
M16	2,000	12,000	9,000	15,10	110,000	26,000	54,000
M18	2,500	14,000	11,000	16,90	125,000	30,000	62,000
M20	2,500	16,000	12,000	18,90	140,000	32,000	62,000

Manglaavat kierretapit JK, metrinen ISO-kierre

Materiaali	HSS-E-PM
Ø-Toleranssi	6GX
Pinta	C
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	≥ 7
S	•
H	

Leikkuuarvosivu 599



DIN 2174 ~DIN 371 Artikkelinro. **1713**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0,800	6,000	4,900	4,65	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,55	80,000	16,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	17,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	20,000	39,000

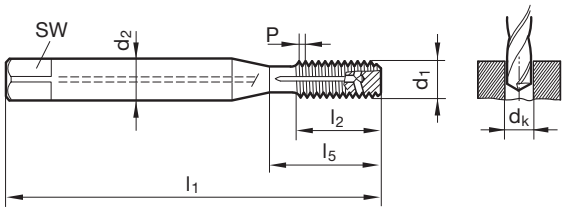
Manglaavat kierretapit JK, metrinen ISO-kierre

Materiaali	HSS-E-PM	
Ø-Toleranssi	6GX	6GX
Pinta	A	S
Malli	N	N
Muoto	C	E
Sisäinen jäähdytys		

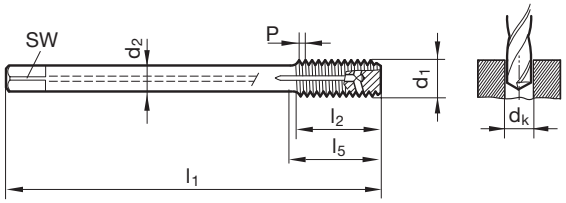
P	•
M	•
K	
N	
S	•
H	

Leikkuuarvosivu 599

~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371 — Artikkelinro. **1718** **1726**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,80	56,000	10,000	18,000
M4	0,700	4,500	3,400	3,70	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,65	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,55	80,000	16,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	17,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	20,000	39,000

DIN 2174 ~DIN 376 — Artikkelinro. **1720** **1728**

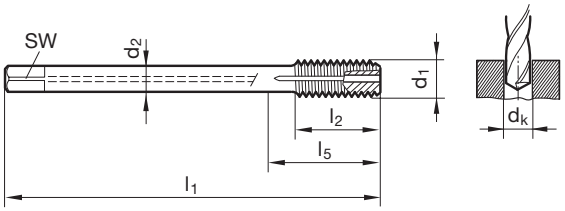
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	11,20	110,000	24,000	49,000
M14	2,000	11,000	9,000	13,10	110,000	26,000	53,000
M16	2,000	12,000	9,000	15,10	110,000	26,000	54,000
M20	2,500	16,000	12,000	18,90	140,000	32,000	62,000

Manglaavat kierretapit JK, metrinen ISO-kierre

Materiaali	**HSS-E-PM**
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 598



Tehdas stdr. Tehdas stdr. Artikkelinro. **4143**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,80	112,000	6,000	18,000
M4	0,700	2,800	2,100	3,70	112,000	7,500	77,000
M5	0,800	3,500	2,700	4,65	125,000	8,500	90,000
M6	1,000	4,500	3,400	5,55	125,000	11,000	90,000
M8	1,250	6,000	4,900	7,40	140,000	14,000	97,000
M10	1,500	7,000	5,500	9,30	160,000	16,000	117,000
M12	1,750	9,000	7,000	11,20	180,000	18,500	133,000
M16	2,000	12,000	9,000	15,10	220,000	20,000	168,000
M20	2,500	16,000	12,000	18,90	280,000	25,000	225,000

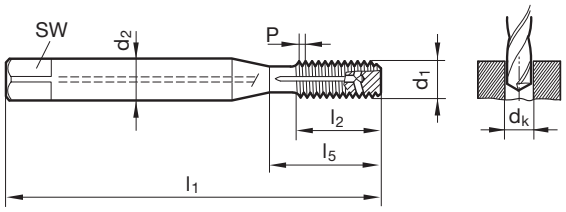
Manglaavat kierretapit JK, metrinen ISO-kierre

Materiaali	**TKM**
Ø-Toleranssi	6HX
Pinta	C
Malli	N
Muoto	C
Sisäinen jäähdytys	

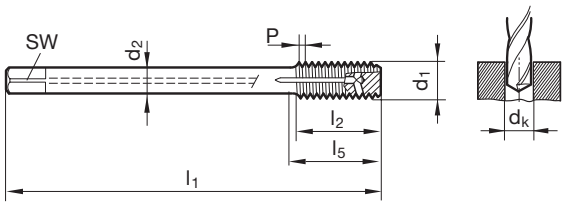
P	•
M	•
K	
N	≥ 7
S	•
H	

Leikkuuarvosivu 599

~ DIN 371



~ DIN 376



DIN 2174 ~DIN 371 Artikkelinro. **1972**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,80	56,000	6,000	18,000
M4	0,700	4,500	3,400	3,70	63,000	7,500	21,000
M5	0,800	6,000	4,900	4,65	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,55	80,000	11,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	14,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	16,000	39,000

DIN 2174 ~DIN 376 Artikkelinro. **1931**

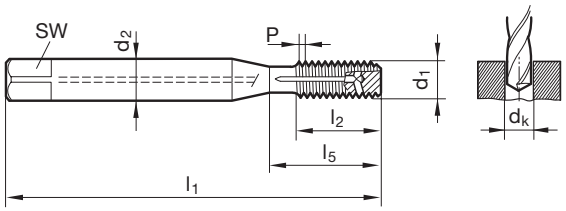
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1,750	9,000	7,000	11,20	110,000	18,500	49,000
M14	2,000	11,000	9,000	13,10	110,000	20,000	53,000
M16	2,000	12,000	9,000	15,10	110,000	20,000	54,000
M18	2,500	14,000	11,000	16,90	125,000	25,000	62,000
M20	2,500	16,000	12,000	18,90	140,000	25,000	62,000

Manglaavat kierretapit JK, metrinen ISO-kierre

Materiaali	**TKM**
Ø-Toleranssi	6HX
Pinta	C
Malli	N
Muoto	E
Sisäinen jäähdytys	

P	•
M	•
K	
N	≥ 7
S	•
H	

Leikkuuarvosivu 599



DIN 2174 ~DIN 371 Artikkelinro. **1927**

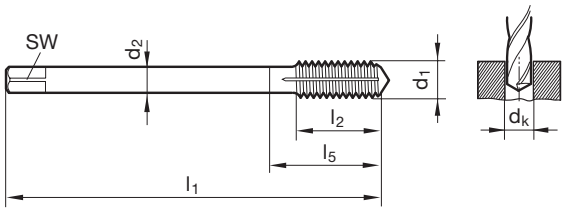
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,80	56,000	6,000	18,000
M4	0,700	4,500	3,400	3,70	63,000	7,500	21,000
M5	0,800	6,000	4,900	4,65	70,000	8,500	25,000
M6	1,000	6,000	4,900	5,55	80,000	11,000	30,000
M8	1,250	8,000	6,200	7,40	90,000	14,000	35,000
M10	1,500	10,000	8,000	9,30	100,000	16,000	39,000

Manglaavat kierretapit, metrinen ISO-hienokierre

P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 598

Materiaali	HSS-E-PM
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	



DIN 2174 ~DIN 374 Artikkelinro. **333**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6,000	4,900	7,55	90,000	11,000	35,000	8,005
M10 x 1	7,000	5,500	9,55	90,000	11,000	35,000	10,005
M12 x 1	9,000	7,000	11,55	100,000	11,000	40,000	12,005
M12 x 1,5	9,000	7,000	11,30	100,000	16,000	40,000	12,007
M14 x 1,5	11,000	9,000	13,30	100,000	15,000	40,000	14,007
M16 x 1,5	12,000	9,000	15,30	100,000	15,000	44,000	16,007
M18 x 1,5	14,000	11,000	17,30	110,000	16,000	44,000	18,007
M20 x 1,5	16,000	12,000	19,30	125,000	16,000	44,000	20,007

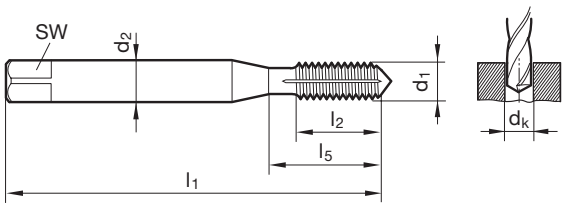
Manglaavat kierretapit, metrinen ISO-hienokierre

Materiaali	HSS-E-PM
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

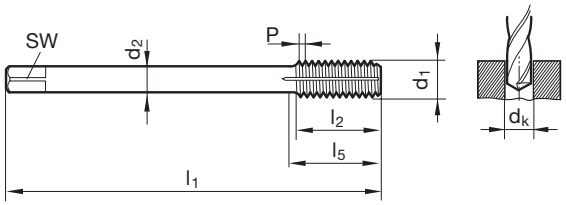
P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 598

~ DIN 371



~ DIN 374



DIN 2174 ~DIN 371 Artikkelinro. **1268**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8,000	6,200	7,55	90,000	16,000	35,000	8,005
M10 x 1	10,000	8,000	9,55	90,000	16,000	35,000	10,005

DIN 2174 ~DIN 374 Artikkelinro. **1269**

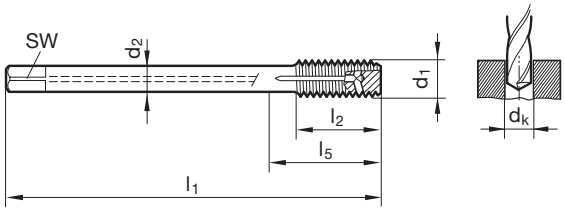
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M12 x 1,25	9,000	7,000	11,40	100,000	20,000	40,000	12,006
M12 x 1,5	9,000	7,000	11,30	100,000	20,000	40,000	12,007
M14 x 1	11,000	9,000	13,55	100,000	20,000	40,000	14,005
M14 x 1,25	11,000	9,000	13,40	100,000	20,000	40,000	14,006
M14 x 1,5	11,000	9,000	13,30	100,000	20,000	40,000	14,007
M16 x 1,5	12,000	9,000	15,30	100,000	22,000	44,000	16,007
M18 x 1,5	14,000	11,000	17,30	110,000	25,000	44,000	18,007
M20 x 1	16,000	12,000	19,55	125,000	25,000	44,000	20,005
M20 x 1,5	16,000	12,000	19,30	125,000	25,000	44,000	20,007
M24 x 2	18,000	14,500	23,10	140,000	28,000	48,000	24,008

Manglaavat kierretapit JK, metrinen ISO-hienokierre

Materiaali	HSS-E-PM
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 598



DIN 2174 ~DIN 374 Artikkelinro. **338**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6,000	4,900	7,55	90,000	11,000	35,000	8,005
M10 x 1	7,000	5,500	9,55	90,000	11,000	35,000	10,005
M12 x 1,5	9,000	7,000	11,30	100,000	16,000	40,000	12,007
M14 x 1,5	11,000	9,000	13,30	100,000	15,000	40,000	14,007
M16 x 1,5	12,000	9,000	15,30	100,000	15,000	44,000	16,007

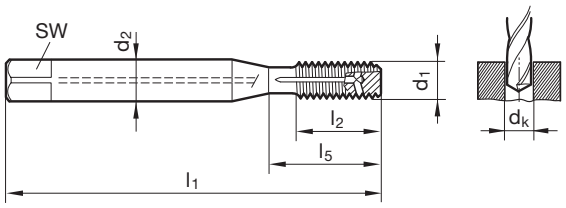
Manglaavat kierretapit JK, metrinen ISO-hienokierre

Materiaali	HSS-E-PM		
Ø-Toleranssi	6HX	6HX	6HX
Pinta	C	A	S
Malli	N	N	N
Muoto	C	C	E
Sisäinen jäähdytys			

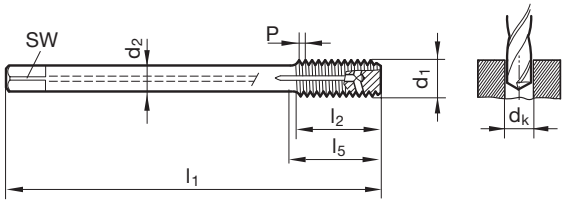
P	•
M	•
K	
N	≥ 7
S	•
H	

Leikkuuarvosivu 599

~ DIN 371



~ DIN 374



DIN 2174 ~DIN 371 — Artikkelinro. **1272** **1721** **1729**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8,000	6,200	7,55	90,000	16,000	35,000	8,005
M9 x 1	9,000	7,000	8,55	90,000	16,000	35,000	9,005
M10 x 1	10,000	8,000	9,55	90,000	16,000	35,000	10,005
M10 x 1,25	10,000	8,000	9,40	100,000	20,000	39,000	10,006

DIN 2174 ~DIN 374 — Artikkelinro. **1273** **1723** **1731**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9,000	7,000	11,55	100,000	20,000	40,000	12,005
M12 x 1,25	9,000	7,000	11,40	100,000	20,000	40,000	12,006
M12 x 1,5	9,000	7,000	11,30	100,000	20,000	40,000	12,007
M14 x 1	11,000	9,000	13,55	100,000	20,000	40,000	14,005
M14 x 1,25	11,000	9,000	13,40	100,000	20,000	40,000	14,006
M14 x 1,5	11,000	9,000	13,30	100,000	20,000	40,000	14,007
M16 x 1,5	12,000	9,000	15,30	100,000	22,000	44,000	16,007
M18 x 1,5	14,000	11,000	17,30	110,000	25,000	44,000	18,007
M20 x 1	16,000	12,000	19,55	125,000	25,000	44,000	20,005
M20 x 1,5	16,000	12,000	19,30	125,000	25,000	44,000	20,007
M22 x 1,5	18,000	14,500	21,30	125,000	25,000	44,000	22,007
M24 x 1,5	18,000	14,500	23,30	140,000	28,000	48,000	24,007

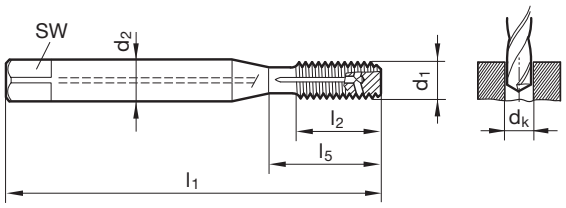
Manglaavat kierretapit JK, metrinen ISO-hienokierre

P	•
M	•
K	
N	≥ 7
S	•
H	

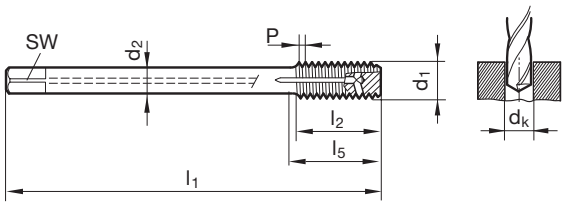
Leikkuuarvosivu 599

Materiaali	HSS-E-PM	
Ø-Toleranssi	6GX	6GX
Pinta	C	S
Malli	N	N
Muoto	C	E
Sisäinen jäähdytys		

~ DIN 371



~ DIN 374



DIN 2174 ~DIN 371 — Artikkelinro. **1715** **1730**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8,000	6,200	7,55	90,000	16,000	35,000	8,005
M10 x 1	10,000	8,000	9,55	90,000	16,000	35,000	10,005
M10 x 1,25	10,000	8,000	9,40	100,000	20,000	39,000	10,006

DIN 2174 ~DIN 374 — Artikkelinro. **1716** **1732**

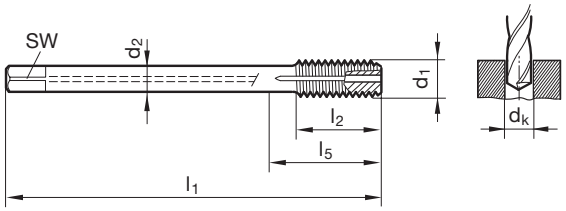
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9,000	7,000	11,55	100,000	20,000	40,000	12,005
M12 x 1,5	9,000	7,000	11,30	100,000	20,000	40,000	12,007
M14 x 1,5	11,000	9,000	13,30	100,000	20,000	40,000	14,007
M16 x 1,5	12,000	9,000	15,30	100,000	22,000	44,000	16,007
M18 x 1,5	14,000	11,000	17,30	110,000	25,000	44,000	18,007
M20 x 1,5	16,000	12,000	19,30	125,000	25,000	44,000	20,007
M24 x 1,5	18,000	14,500	23,30	140,000	28,000	48,000	24,007

Manglaavat kierretapit JK, metrinen ISO-hienokierre

P	•
M	•
K	
N	○
S	○
H	

Leikkuuarvosivu 598

Materiaali	**HSS-E-PM**
Ø-Toleranssi	6HX
Pinta	S
Malli	N
Muoto	C
Sisäinen jäähdytys	



Tehdas stdr. Tehdas stdr. Artikkelinro. **4145**

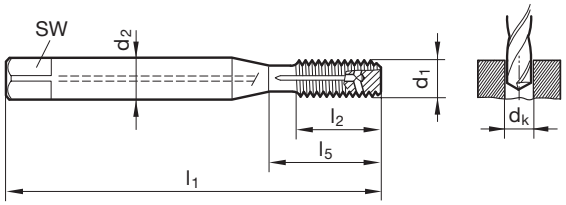
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6,000	4,900	7,55	140,000	14,000	97,000	8,005
M10 x 1	7,000	5,500	9,55	160,000	16,000	117,000	10,005
M10 x 1,25	7,000	5,500	9,40	160,000	16,000	117,000	10,006
M12 x 1	9,000	7,000	11,55	180,000	18,500	133,000	12,005
M12 x 1,5	9,000	7,000	11,30	180,000	18,500	133,000	12,007
M14 x 1,5	11,000	9,000	13,30	220,000	20,000	168,000	14,007
M16 x 1,5	12,000	9,000	15,30	220,000	20,000	168,000	16,007

Manglaavat kierretapit JK, metrinen ISO-hienokierre

Materiaali	**TKM**
Ø-Toleranssi	6HX
Pinta	C
Malli	N
Muoto	C
Sisäinen jäähdytys	

P	•
M	•
K	
N	≥ 7
S	•
H	

Leikkuuarvosivu 599



DIN 2174 ~DIN 371/~DIN 376 Artikkelinro. **1581**

d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M10 x 1	10,000	8,000	9,55	90,000	11,000	35,000	10,005
M12 x 1	9,000	7,000	11,55	100,000	15,000	40,000	12,005
M12 x 1,5	9,000	7,000	11,30	100,000	15,000	40,000	12,007
M14 x 1	11,000	9,000	13,55	100,000	15,000	40,000	14,005
M14 x 1,25	11,000	9,000	13,40	100,000	15,000	40,000	14,006
M14 x 1,5	11,000	9,000	13,30	100,000	15,000	40,000	14,007
M16 x 1,5	12,000	9,000	15,30	100,000	15,000	44,000	16,007
M18 x 1,5	14,000	11,000	17,30	110,000	15,000	44,000	18,007
M20 x 1,5	16,000	12,000	19,30	125,000	15,000	44,000	20,007
M24 x 1,5	18,000	14,500	23,30	140,000	15,000	48,000	24,007

KIERRE-JYRSIMET S

Mikro-kierrejyrsimet

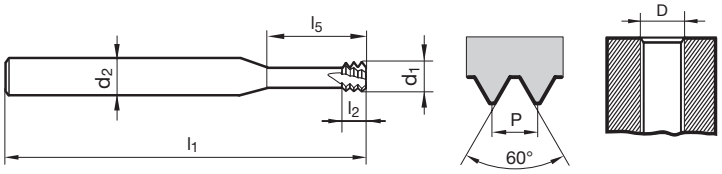
3xD

P	•
M	•
K	•
N	•
S	•
H	

Leikkuuarvosivu 601

Materiaali	**TKM**
Pinta	C
Malli	SP M
Kierteet	3,0
Varren muoto	HA

NEW



Tehdas stdr. Artikkelinro. **4226**

D	P	d1	d2	l1	l2	l5	Z	koodinro.
	mm	mm	mm	mm	mm	mm		
M1,6	0,350	1,200	3,000	39,000	1,100	4,800	3	1,600
M1,8	0,350	1,400	3,000	39,000	1,100	5,400	3	1,800
M2	0,400	1,550	3,000	39,000	1,200	6,000	4	2,000
M2,5	0,450	1,950	3,000	39,000	1,400	7,500	4	2,500
M3	0,500	2,400	6,000	58,000	1,500	9,500	4	3,000
M3,5	0,600	2,800	6,000	58,000	1,800	11,000	4	3,500
M4	0,700	3,200	6,000	58,000	2,100	12,500	4	4,000
M5	0,800	4,000	6,000	58,000	2,400	16,000	4	5,000
M6	1,000	4,800	6,000	58,000	3,000	20,000	4	6,000
M8	1,250	5,950	6,000	58,000	3,800	24,000	4	8,000
M10	1,500	7,800	8,000	73,000	4,500	33,000	4	10,000
M12	1,750	9,000	10,000	84,000	5,300	38,000	4	12,000
M16	2,000	11,800	10,000	84,000	6,000	35,000	5	16,000

Mikro-kierrejyrsimet

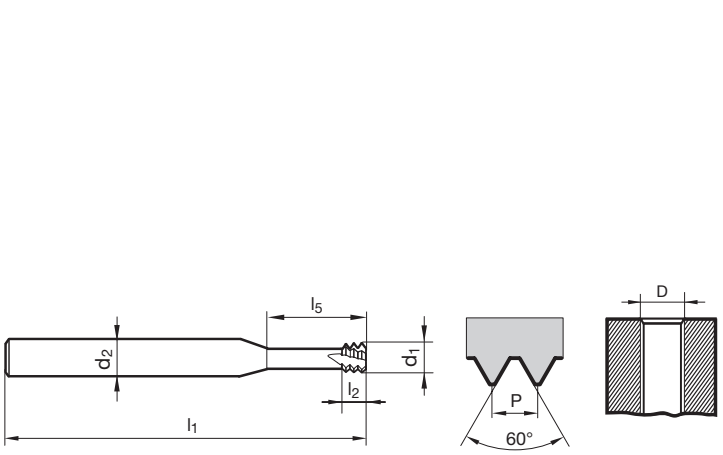
3xD

P	•
M	•
K	•
N	•
S	•
H	

Leikkuuarvosivu 601

Materiaali	**TKM**
Pinta	C
Malli	SP G
Kierteet	3,0
Varren muoto	HA

NEW



Tehdas stdr. Artikkelinro. **4228**

D	P	d1	d2	l1	l2	l5	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm		
G1/8	28,000	6,200	8,000	64,000	2,700	19,500	4	9,728
G3/8	19,000	9,950	10,000	73,000	4,000	25,000	4	16,662
G7/8	14,000	11,950	12,000	84,000	5,400	37,000	4	30,201
G2	11,000	15,950	16,000	105,000	6,900	44,000	5	59,614

Mikro-kierrejyrsimet

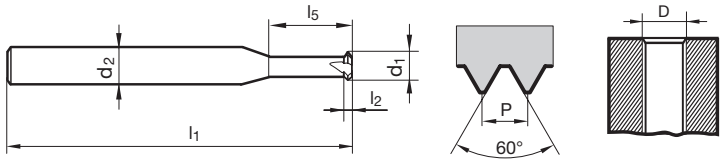
3xD

P	•
M	•
K	•
N	•
S	•
H	

Leikkuuarvosivu 601

Materiaali	**TKM**
Pinta	C
Malli	SP M/MF
Kierteet	1,0
Varren muoto	HA

NEW



Tehdas stdr. Artikkelinro. **4225**

D	P	d1	d2	l1	l2	l5	Z	koodinro.
	mm	mm	mm	mm	mm	mm		
M1,4 - M1,8	0,350	1,050	3,000	39,000	0,400	3,800	3	1,800
M2 - M2,4	0,400	1,500	3,000	39,000	0,400	7,000	3	2,400
M2,5 - M3	0,500	2,000	3,000	39,000	0,500	9,000	4	3,000
M3,5 - M4,5	0,750	2,800	6,000	58,000	0,800	14,000	4	4,500
M5 - M7	1,000	4,000	6,000	58,000	1,000	19,000	4	7,000
M8 - M10	1,500	6,400	8,000	64,000	1,500	24,000	5	10,000

Kierrejyrsimet ilman viistettä metrisille ISO-kierteille

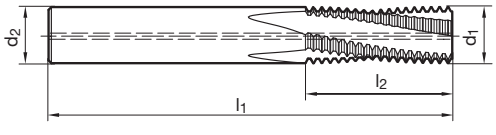
2xD

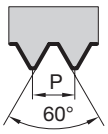
P	•
M	○
K	•
N	•
S	○
H	≤55

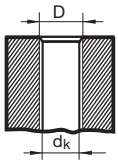
Leikkuuarvosivu 600

Materiaali	TKM		
Pinta	C	C	○
Malli	TM SP	TM SP	TM SP
Sisäinen jäähdytys			
Varren muoto	HA	HB	HA

NEW







Tehdas stdr.	Artikkelinro.	3737	3743	3734

D	P	d1	d2	dk	l1	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm		
M6	1,000	4,800	6,000	5,00	54,000	13,500	3	6,000
M8	1,250	6,400	8,000	6,80	62,000	18,100	3	8,000
M8 x 1	1,000	6,400	8,000	7,00	62,000	17,500	3	8,005
M10	1,500	7,950	10,000	8,50	74,000	21,800	3	10,000
M10 x 1	1,000	7,950	10,000	9,00	74,000	21,500	3	10,005
M10 x 1,25	1,250	7,950	10,000	8,80	74,000	21,900	3	10,006
M12	1,750	9,950	10,000	10,20	74,000	25,400	4	12,000
M12 x 1,5	1,500	9,950	10,000	10,50	74,000	26,300	4	12,007
M14	2,000	11,200	12,000	12,00	90,000	31,000	4	14,000
M14 x 1,5	1,500	11,200	12,000	12,50	90,000	30,800	4	14,007
M16	2,000	12,800	14,000	14,00	90,000	35,000	4	16,000
M16 x 1,5	1,500	12,800	14,000	14,50	90,000	33,800	4	16,007
M20	2,500	14,950	16,000	17,50	102,000	41,300	4	20,000
M20 x 1,5	1,500	14,950	16,000	18,50	102,000	42,800	4	20,007

Kierrejyrsimet ilman viistettä metrisille ISO-kierteille

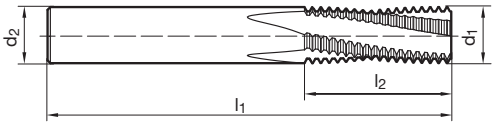
2xD

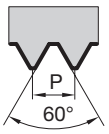
P	•
M	○
K	•
N	•
S	○
H	≤55

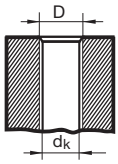
Leikkuuarvosivu 600

Materiaali	TKM	
Pinta	C	C
Malli	TM SP	TM SP
Sisäinen jäähdytys		
Varren muoto	HA	HB

NEW







Tehdas stdr.	Artikkelinro.	4132	4133

D	P	d1	d2	dk	l1	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm		
M6	1,000	4,800	6,000	5,00	54,000	13,500	3	6,000
M8	1,250	6,400	8,000	6,80	62,000	18,100	3	8,000
M10	1,500	7,950	10,000	8,50	74,000	21,800	3	10,000
M12	1,750	9,950	10,000	10,20	74,000	25,400	4	12,000
M14	2,000	11,200	12,000	12,00	90,000	31,000	4	14,000
M16	2,000	12,800	14,000	14,00	90,000	35,000	4	16,000
M20	2,500	14,950	16,000	17,50	102,000	41,300	4	20,000

Kierrejyrsimet ilman viistettä metrisille ISO-kierteille

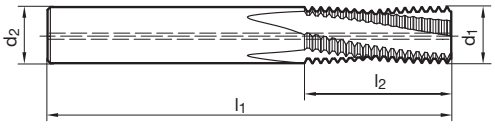
2,5xD

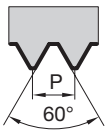
P	•
M	○
K	•
N	•
S	○
H	≤55

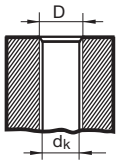
Leikkuuarvosivu 600

Materiaali	TKM	
Pinta	C	C
Malli	TM SP	TM SP
Sisäinen jäähdytys		
Varren muoto	HA	HB

NEW







Tehdas stdr. Artikkelinro. **3735** **3740**

D	P	d1	d2	dk	l1	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm		
M6	1,000	4,800	6,000	5,00	54,000	16,500	3	6,000
M8	1,250	6,400	8,000	6,80	62,000	21,900	3	8,000
M10	1,500	7,950	10,000	8,50	74,000	26,300	3	10,000
M12	1,750	9,950	10,000	10,20	74,000	32,400	4	12,000
M14	2,000	11,200	12,000	12,00	90,000	37,000	4	14,000
M16	2,000	12,800	14,000	14,00	90,000	43,000	4	16,000
M20	2,500	14,950	16,000	17,50	102,000	48,800	4	20,000

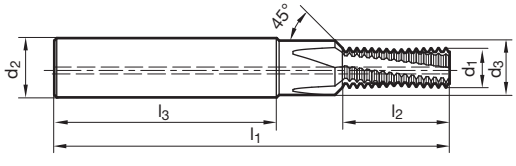
Viisteelliset kierrejyrsimet metrisille ISO-kierteille

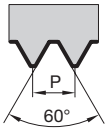
P	•
M	•
K	•
N	•
S	•
H	≤55

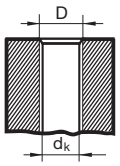
Leikkuuarvosivu 600

Materiaali	TKM		
Pinta	C	C	○
Malli	TMC SP	TMC SP	TMC SP
Sisäinen jäähdytys			
Varren muoto	HA	HB	HA

NEW







Tehdas stdr.	Artikkelinro.	3525	3543	3510

D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0,500	2,300	6,000	3,400	2,50	48,000	36,000	5,300	3	3,000
M4	0,700	3,000	6,000	4,500	3,30	48,000	36,000	7,400	3	4,000
M5	0,800	4,000	6,000	5,500	4,20	54,000	36,000	9,200	3	5,000
M6	1,000	4,800	8,000	6,600	5,00	62,000	36,000	10,500	3	6,000
M8	1,250	6,400	10,000	9,000	6,80	74,000	40,000	13,100	3	8,000
M10	1,500	7,950	12,000	11,000	8,50	80,000	45,000	17,300	4	10,000
M12	1,750	9,950	14,000	13,500	10,20	90,000	45,000	20,100	4	12,000
M14	2,000	11,200	16,000	15,500	12,00	102,000	48,000	25,000	4	14,000
M16	2,000	12,800	18,000	17,500	14,00	102,000	48,000	27,000	4	16,000
M20	2,500	14,500	20,000	21,500	17,50	125,000	50,000	33,800	4	20,000

Viisteelliset kierrejyrsimet metrisille ISO-kierteille

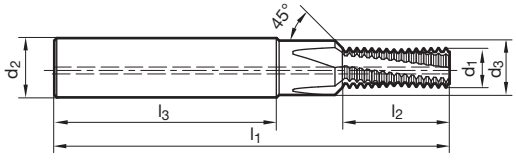
2xD

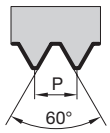
P	•
M	•
K	•
N	•
S	•
H	≤55

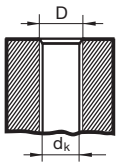
Leikkuuarvosivu 601

Materiaali	TKM		
Pinta	C	C	
Malli	TMC SP	TMC SP	TMC SP
Sisäinen jäähdytys			
Varren muoto	HA	HB	HA

NEW







Tehdas stdr.	Artikkelinro.	3526	3544	3511

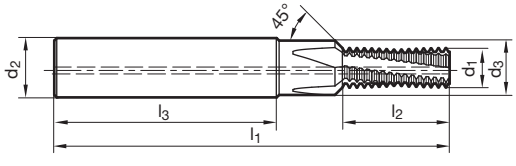
D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0,500	2,300	6,000	3,400	2,50	48,000	36,000	6,800	3	3,000
M4	0,700	3,000	6,000	4,500	3,30	48,000	36,000	8,800	3	4,000
M5	0,800	4,000	6,000	5,500	4,20	54,000	36,000	10,800	3	5,000
M6	1,000	4,800	8,000	6,600	5,00	62,000	36,000	13,500	3	6,000
M8	1,250	6,400	10,000	9,000	6,80	74,000	40,000	18,100	3	8,000
M10	1,500	7,950	12,000	11,000	8,50	80,000	45,000	21,800	4	10,000
M12	1,750	9,950	14,000	13,500	10,20	90,000	45,000	25,400	4	12,000
M14	2,000	11,200	16,000	15,500	12,00	102,000	48,000	31,000	4	14,000
M16	2,000	12,800	18,000	17,500	14,00	102,000	48,000	35,000	4	16,000
M20	2,500	14,500	20,000	21,500	17,50	125,000	50,000	41,300	4	20,000

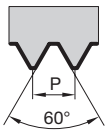
Viisteelliset kierrejyrsimet metrisille ISO-kierteille

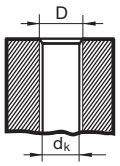
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 601

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3759	3760

D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0,500	2,300	6,000	3,400	2,50	48,000	36,000	7,800	3	3,000
M4	0,700	3,000	6,000	4,500	3,30	48,000	35,600	10,900	3	4,000
M5	0,800	4,000	6,000	5,500	4,20	54,000	36,000	13,200	3	5,000
M6	1,000	4,800	8,000	6,600	5,00	62,000	36,000	16,500	3	6,000
M8	1,250	6,400	10,000	9,000	6,80	74,000	40,000	21,900	3	8,000
M10	1,500	7,950	12,000	11,000	8,50	80,000	45,000	26,300	4	10,000
M12	1,750	9,950	14,000	13,500	10,20	90,000	45,000	32,400	4	12,000
M14	2,000	11,200	16,000	15,500	12,00	102,000	48,000	37,000	4	14,000
M16	2,000	12,800	18,000	17,500	14,00	102,000	48,000	43,000	4	16,000
M20	2,500	14,500	20,000	21,500	17,50	125,000	50,000	48,800	4	20,000

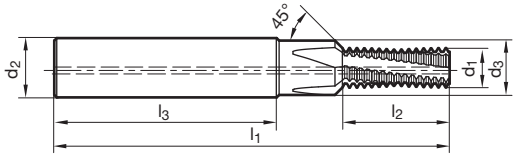
Viisteelliset kierrejyrsimet metrisille ISO-hienokierteille

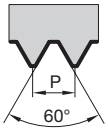
P	•
M	•
K	•
N	•
S	•
H	≤55

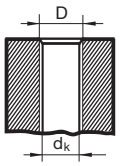
Leikkuuarvosivu 600

Materiaali	TKM		
Pinta	C	C	○
Malli	TMC SP	TMC SP	TMC SP
Sisäinen jäähdytys			
Varren muoto	HA	HB	HA

NEW







Tehdas stdr.	Artikkelinro.	3527	3545	3512

D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm	mm		
M4 x 0,5	0,500	3,000	6,000	4,500	3,50	48,000	36,000	7,300	3	4,003
M5 x 0,5	0,500	4,000	6,000	5,500	4,50	54,000	36,000	8,800	3	5,003
M6 x 0,5	0,500	4,800	8,000	6,600	5,50	62,000	36,000	9,800	3	6,003
M6 x 0,75	0,750	4,800	8,000	6,600	5,20	62,000	36,000	10,100	3	6,004
M8 x 0,75	0,750	6,400	10,000	9,000	7,20	74,000	40,000	13,100	3	8,004
M8 x 1	1,000	6,400	10,000	9,000	7,00	74,000	40,000	13,500	3	8,005
M10 x 1	1,000	7,950	12,000	11,000	9,00	80,000	45,000	16,500	4	10,005
M10 x 1,25	1,250	7,950	12,000	11,000	8,80	80,000	45,000	16,900	4	10,006
M12 x 1	1,000	9,950	14,000	13,500	11,00	90,000	45,000	19,500	4	12,005
M12 x 1,5	1,500	9,950	14,000	13,500	10,50	90,000	45,000	20,300	4	12,007
M14 x 1,5	1,500	11,200	16,000	15,500	12,50	102,000	48,000	23,300	4	14,007
M16 x 1,5	1,500	12,800	18,000	17,500	14,50	102,000	48,000	26,300	4	16,007

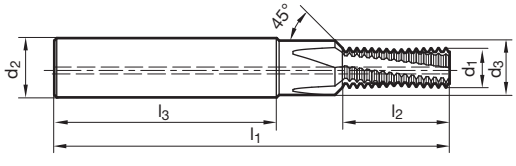
Viisteelliset kierrejyrsimet metrisille ISO-hienokierteille

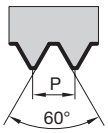
2xD

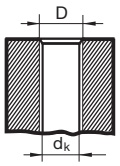
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 601

Materiaali	TKM		
Pinta	C	C	○
Malli	TMC SP	TMC SP	TMC SP
Sisäinen jäähdytys			
Varren muoto	HA	HB	HA
		NEW	







Tehdas stdr.	Artikkelinro.	3528	3546	3513

D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm	mm		
M4 x 0,5	0,500	3,000	6,000	4,500	3,50	48,000	36,000	8,800	3	4,003
M5 x 0,5	0,500	4,000	6,000	5,500	4,50	54,000	36,000	10,800	3	5,003
M6 x 0,5	0,500	4,800	8,000	6,600	5,50	62,000	36,000	12,800	3	6,003
M6 x 0,75	0,750	4,800	8,000	6,600	5,20	62,000	36,000	13,100	3	6,004
M8 x 0,75	0,750	6,400	10,000	9,000	7,20	74,000	40,000	16,900	3	8,004
M8 x 1	1,000	6,400	10,000	9,000	7,00	74,000	40,000	17,500	3	8,005
M10 x 1	1,000	7,950	12,000	11,000	9,00	80,000	45,000	21,500	4	10,005
M10 x 1,25	1,250	7,950	12,000	11,000	8,80	80,000	45,000	21,900	4	10,006
M12 x 1	1,000	9,950	14,000	13,500	11,00	90,000	45,000	25,500	4	12,005
M12 x 1,5	1,500	9,950	14,000	13,500	10,50	90,000	45,000	26,300	4	12,007
M14 x 1,5	1,500	11,200	16,000	15,500	12,50	102,000	48,000	30,800	4	14,007
M16 x 1,5	1,500	12,800	18,000	17,500	14,50	102,000	48,000	33,800	4	16,007

Viisteelliset kierrejyrsimet metrisille ISO-hienokierteille

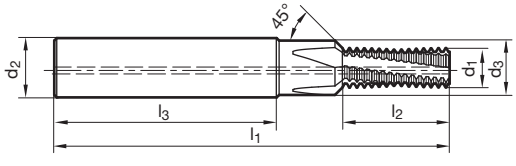
2,5xD

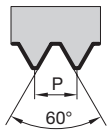
P	•
M	•
K	•
N	•
S	•
H	≤55

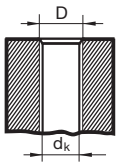
Leikkuuarvosivu 601

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB

NEW







Tehdas stdr. Artikkelinro. **3762** **3763**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm	mm		
M4 x 0,5	0,500	3,000	6,000	4,500	3,50	48,000	36,000	10,300	3	4,003
M5 x 0,5	0,500	4,000	6,000	5,500	4,50	54,000	36,000	12,800	3	5,003
M6 x 0,5	0,500	4,800	8,000	6,600	5,50	62,000	36,000	15,300	3	6,003
M6 x 0,75	0,750	4,800	8,000	6,600	5,20	62,000	36,000	15,400	3	6,004
M8 x 0,75	0,750	6,400	10,000	9,000	7,20	74,000	40,000	20,600	3	8,004
M8 x 1	1,000	6,400	10,000	9,000	7,00	74,000	40,000	20,500	3	8,005
M10 x 1	1,000	7,950	12,000	11,000	9,00	80,000	45,000	25,500	4	10,005
M10 x 1,25	1,250	7,950	12,000	11,000	8,80	80,000	45,000	25,600	4	10,006
M12 x 1	1,000	9,950	14,000	13,500	11,00	90,000	45,000	30,500	4	12,005
M12 x 1,5	1,500	9,950	14,000	13,500	10,50	90,000	45,000	30,800	4	12,007
M14 x 1,5	1,500	11,200	16,000	15,500	12,50	102,000	48,000	38,300	4	14,007
M16 x 1,5	1,500	12,800	18,000	17,500	14,50	102,000	48,000	41,300	4	16,007

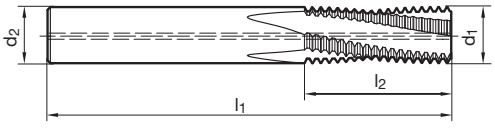
Kierrejyrsimet ilman viistettä UNC-kierteille

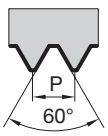
2xD

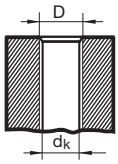
P	•
M	○
K	•
N	•
S	○
H	≤55

Leikkuuarvosivu 600

Materiaali	TKM	
Pinta	C	C
Malli	TM SP	TM SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	4134	4135

D	d1	d2	dk	l1	l2	Z	koodinro.
	mm	mm	mm	mm	mm		
10 - 24	3,400	6,000	3,90	54,000	11,100	3	4,826
12 - 24	4,100	6,000	4,50	54,000	12,200	3	5,486
1/4 - 20	4,700	6,000	5,10	54,000	14,600	3	6,350
5/16 - 18	6,100	8,000	6,60	64,000	17,600	3	7,938
3/8 - 16	7,600	8,000	8,00	64,000	21,400	3	9,525
7/16 - 14	9,000	10,000	9,40	74,000	24,500	3	11,113
1/2 - 13	9,950	10,000	10,80	74,000	28,300	4	12,700
9/16 - 12	11,400	12,000	12,20	90,000	30,700	4	14,288
5/8 - 11	12,700	14,000	13,50	90,000	35,800	4	15,875

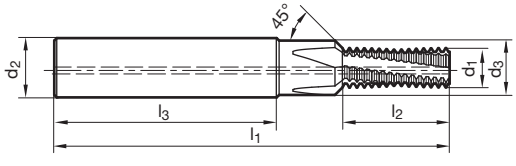
Viisteelliset kierrejyrsimet UNC-kierteille

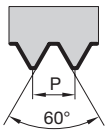
P	•
M	•
K	•
N	•
S	•
H	≤55

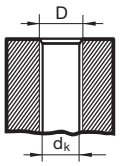
Leikkuuarvosivu 600

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB

NEW







Tehdas stdr. Artikkelinro. **3516** **3534**

D	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 20	4,800	8,000	6,600	5,10	62,000	36,000	12,100	3	6,350
5/16 - 18	5,950	10,000	9,000	6,60	74,000	40,000	14,800	3	7,938
3/8 - 16	7,100	12,000	11,000	8,00	80,000	45,000	16,700	4	9,525
7/16 - 14	7,950	12,000	11,000	9,40	80,000	45,000	19,000	4	11,113
1/2 - 13	9,950	14,000	13,500	10,80	90,000	45,000	22,500	4	12,700

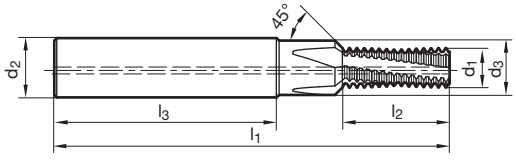
Viisteelliset kierrejyrsimet UNC-kierteille

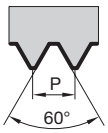
2xD

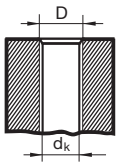
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 601

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3517	3535

D	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 20	4,800	8,000	6,600	5,10	62,000	36,000	14,600	3	6,350
5/16 - 18	5,950	10,000	9,000	6,60	74,000	40,000	17,600	3	7,938
3/8 - 16	7,100	12,000	11,000	8,00	80,000	45,000	21,400	4	9,525
7/16 - 14	7,950	12,000	11,000	9,40	80,000	45,000	24,500	4	11,113
1/2 - 13	9,950	14,000	13,500	10,80	90,000	45,000	28,300	4	12,700

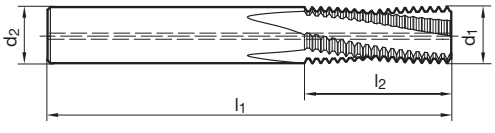
Kierrejyrsimet ilman viistettä UNF-kierteille

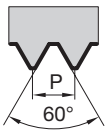
2xD

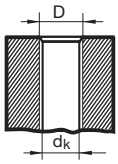
P	•
M	○
K	•
N	•
S	○
H	≤55

Leikkuuarvosivu 600

Materiaali	TKM	
Pinta	C	C
Malli	TM SP	TM SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	4136	4137

D	d1	d2	dk	l1	l2	Z	koodinro.
	mm	mm	mm	mm	mm		
10 - 32	3,800	6,000	4,10	54,000	11,500	3	4,826
12 - 28	4,300	6,000	4,60	54,000	12,200	3	5,486
1/4 - 28	5,100	6,000	5,50	54,000	14,100	3	6,350
5/16 - 24	6,300	8,000	6,90	64,000	17,500	3	7,938
3/8 - 24	7,800	8,000	8,50	64,000	20,600	3	9,525
7/16 - 20	9,400	10,000	9,90	74,000	24,800	3	11,113
1/2 - 20	9,950	10,000	11,50	74,000	27,300	4	12,700
9/16 - 18	11,400	12,000	12,90	90,000	30,300	4	14,288
5/8 - 18	12,700	14,000	14,50	90,000	33,200	4	15,875

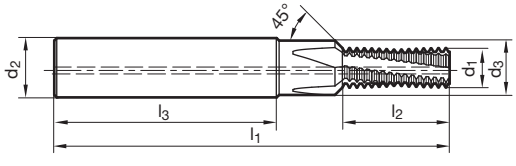
Viisteelliset kierrejyrsimet UNF-kierteille

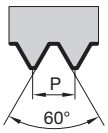
P	•
M	•
K	•
N	•
S	•
H	≤55

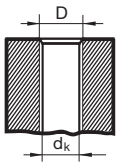
Leikkuuarvosivu 600

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB

NEW







Tehdas stdr. Artikkelinro. **3518** **3536**

D	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 28	4,800	8,000	6,600	5,50	62,000	36,000	11,300	3	6,350
5/16 - 24	5,950	10,000	9,000	6,90	74,000	40,000	13,200	3	7,938
3/8 - 24	7,950	12,000	11,000	8,50	80,000	45,000	16,400	4	9,525
7/16 - 20	7,950	12,000	11,000	9,90	80,000	45,000	18,400	4	11,113
1/2 - 20	9,950	14,000	13,500	11,50	90,000	45,000	21,000	4	12,700

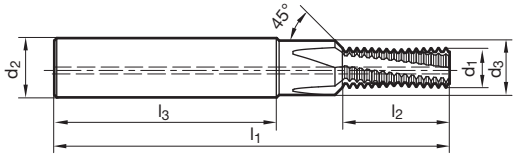
Viisteelliset kierrejyrsimet UNF-kierteille

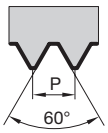
2xD

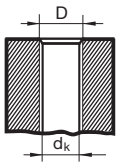
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 601

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr. Artikkelinro. **3519** **3537**

D	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 28	4,800	8,000	6,600	5,50	62,000	36,000	14,100	3	6,350
5/16 - 24	5,950	10,000	9,000	6,90	74,000	40,000	17,500	3	7,938
3/8 - 24	7,950	12,000	11,000	8,50	80,000	45,000	20,600	4	9,525
7/16 - 20	7,950	12,000	11,000	9,90	80,000	45,000	24,800	4	11,113
1/2 - 20	9,950	14,000	13,500	11,50	90,000	45,000	27,300	4	12,700

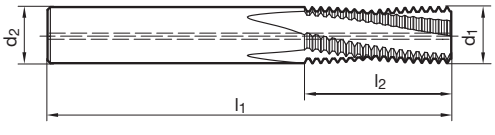
Kierrejyrsimet ilman viistettä BSP-kierteille

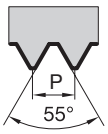
2xD

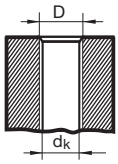
P	•
M	○
K	•
N	•
S	○
H	≤55

Leikkuuarvosivu 600

Materiaali	TKM	
Pinta	C	C
Malli	TM SP	TM SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3745	3748

D	P	d1	d2	dk	l1	l2	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm		
G1/8	28,000	7,950	8,000	8,80	64,000	21,300	3	9,728
G1/4	19,000	10,500	12,000	11,80	90,000	28,700	4	13,157
G3/8	19,000	13,600	14,000	15,25	90,000	35,400	4	16,662

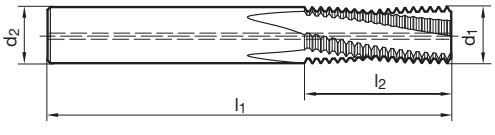
Kierrejyrsimet ilman viistettä BSP-kierteille

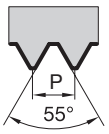
P	•
M	○
K	•
N	•
S	○
H	≤55

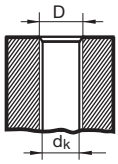
Leikkuuarvosivu 600

Materiaali	TKM	
Pinta	C	C
Malli	TM SP	TM SP
Sisäinen jäähdytys		
Varren muoto	HA	HB

NEW







Tehdas stdr.	Artikkelinro.	3746	3750

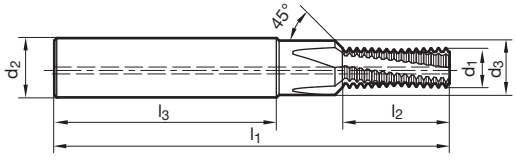
D	P	d1	d2	dk	l1	l2	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm		
G1/8	28,000	7,950	8,000	8,80	64,000	24,900	3	9,728
G1/4	19,000	10,500	12,000	11,80	90,000	35,400	4	13,157
G3/8	19,000	13,600	14,000	15,25	90,000	43,500	4	16,662

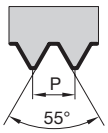
Viisteelliset kierrejyrsimet BSP-kierteille

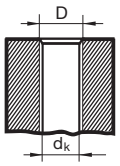
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 600

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr. Artikkelinro. **3514** **3529**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28,000	7,950	12,000	11,000	8,80	80,000	45,000	15,900	4	9,728
G1/4	19,000	9,950	14,000	13,900	11,80	90,000	45,000	22,100	4	13,157
G3/8	19,000	13,600	18,000	17,500	15,25	102,000	48,000	27,400	4	16,662

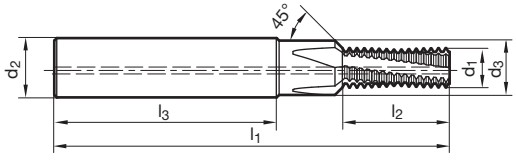
Viisteelliset kierrejyrsimet BSP-kierteille

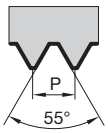
2xD

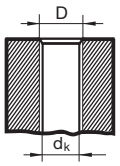
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 601

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr. Artikkelinro. **3515** **3533**

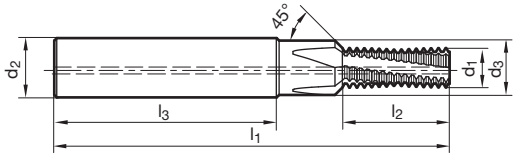
D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28,000	7,950	12,000	11,000	8,80	80,000	45,000	21,300	4	9,728
G1/4	19,000	9,950	14,000	13,900	11,80	90,000	45,000	28,700	4	13,157
G3/8	19,000	13,600	18,000	17,500	15,25	102,000	48,000	35,400	4	16,662

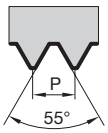
Viisteelliset kierrejyrsimet BSP-kierteille

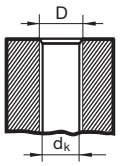
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 601

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3765	3766

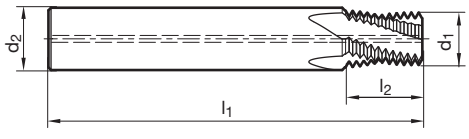
D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28,000	7,950	12,000	11,000	8,80	80,000	45,000	24,900	4	9,728
G1/4	19,000	9,950	14,000	13,900	11,80	90,000	45,000	35,400	4	13,157
G3/8	19,000	13,600	18,000	17,500	15,25	102,000	48,000	43,500	4	16,662

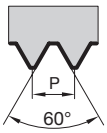
Kierrejyrsimet ilman viistettä NPT-kierteille

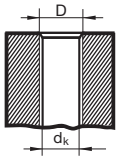
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 600

Materiaali	TKM	
Pinta	C	C
Malli	TM SP	TM SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3753	3754

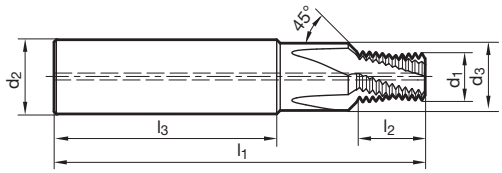
D	P	d1	d2	dk	l1	l2	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm		
1/16	27,000	5,900	8,000	6,15	54,000	9,900	3	8,190
1/8	27,000	7,300	8,000	8,40	64,000	9,900	3	10,620
1/4	18,000	9,950	12,000	11,10	72,000	19,000	4	14,140
3/8	18,000	12,500	14,000	14,30	80,000	14,800	4	17,570

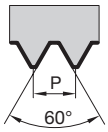
Viisteelliset kierrejyrsimet NPT-kierteille

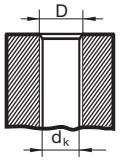
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 600

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3520	3538

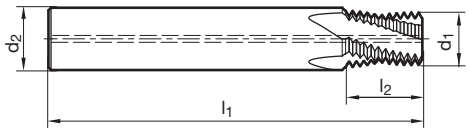
D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
1/8	27,000	7,300	12,000	11,000	8,40	70,000	45,000	9,900	4	10,620
1/4	18,000	9,950	16,000	14,500	11,10	80,000	48,000	14,800	4	14,140
3/8	18,000	12,500	18,000	17,500	14,30	80,000	48,000	14,800	4	17,570

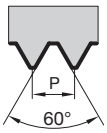
Kierrejyrsimet ilman viistettä NPTF-kierteille

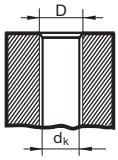
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 600

Materiaali	TKM	
Pinta	C	C
Malli	TM SP	TM SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3756	3757

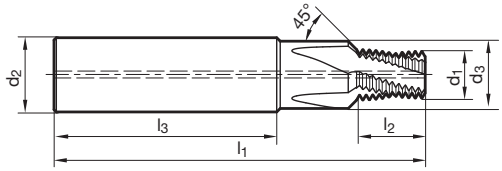
D	P	d1	d2	dk	l1	l2	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm		
1/16	27,000	5,900	8,000	6,15	54,000	9,900	3	8,190
1/8	27,000	7,300	8,000	8,40	64,000	9,900	3	10,620
1/4	18,000	9,950	12,000	11,10	72,000	19,000	4	14,140
3/8	18,000	12,500	14,000	14,30	80,000	14,800	4	17,570

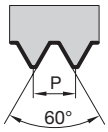
Viisteelliset kierrejyrsimet NPTF-kierteille

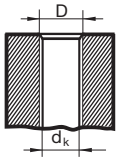
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 600

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3521	3539

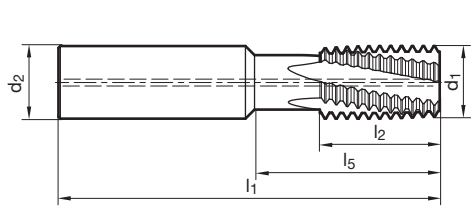
D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
1/8	27,000	7,300	12,000	11,000	8,40	70,000	45,000	9,900	4	10,620
1/4	18,000	9,950	16,000	14,500	11,10	80,000	48,000	14,800	4	14,140
3/8	18,000	12,500	18,000	17,500	14,30	80,000	48,000	14,800	4	17,570

Kierrejyrsimet metrisille ISO-kierteille

Materiaali	TKM		
Pinta	C	C	○
Malli	TMU SP	TMU SP	TMU SP
Sisäinen jäähdytys			
Varren muoto	HA	HB	HA
		NEW	

P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 601



Tehdas stdr.	Artikkelinro.	3541	3556	3523

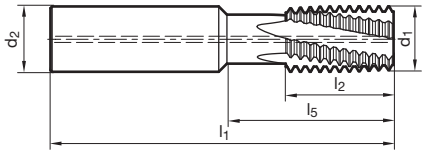
P	D	d1	d2	l1	l5	l2	Z	koodinro.
mm		mm	mm	mm	mm	mm		
0,500	≥ 10	7,950	8,000	64,000		20,000	4	8,050
1,000	≥ 12	9,950	10,000	70,000	25,000	16,000	4	10,100
1,250	≥ 12	9,950	10,000	70,000	25,000	16,000	4	10,125
1,500	≥ 12	9,950	10,000	70,000	25,000	16,000	4	10,150
1,000	≥ 14	11,950	12,000	80,000	31,000	20,000	4	12,100
1,250	≥ 14	11,950	12,000	80,000	31,000	20,000	4	12,125
1,500	≥ 14	11,950	12,000	80,000	31,000	20,000	4	12,150
1,000	≥ 18	15,950	16,000	90,000	40,000	25,000	5	16,100
1,500	≥ 18	15,950	16,000	90,000	40,000	25,000	5	16,150
2,000	≥ 18	15,950	16,000	90,000	40,000	25,000	5	16,200
3,000	≥ 24	17,950	18,000	102,000	50,000	33,000	5	18,300
1,000	≥ 24	19,950	20,000	105,000	50,000	33,000	5	20,100
1,500	≥ 26	19,950	20,000	105,000	50,000	33,000	5	20,150
2,000	≥ 27	19,950	20,000	105,000	50,000	33,000	5	20,200
2,500	≥ 30	19,950	20,000	105,000	50,000	33,000	5	20,250
3,000	≥ 30	19,950	20,000	105,000	50,000	33,000	5	20,300
3,500	≥ 30	19,950	20,000	105,000	50,000	33,000	5	20,350

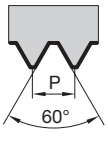
Kierrejyrsimet ulkokierteelle

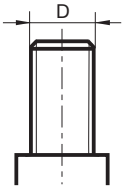
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 601

Materiaali	TKM	
Pinta	C	C
Malli	TMU SP	TMU SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr. Artikkelinro. **4162** **4163**

P	D	d1	d2	l1	l5	l2	Z	koodinro.
mm		mm	mm	mm	mm	mm		
0,500	≥ 3	9,950	10,000	70,000	25,000	16,000	4	10,050
0,750	≥ 5	9,950	10,000	70,000	25,000	16,000	4	10,075
1,000	≥ 6	11,950	12,000	80,000	31,000	20,000	4	12,100
1,250	≥ 8	11,950	12,000	80,000	31,000	20,000	4	12,125
1,500	≥ 10	11,950	12,000	80,000	31,000	20,000	4	12,150
1,500	≥ 10	15,950	16,000	90,000	40,000	25,000	5	16,150
2,000	≥ 14	15,950	16,000	90,000	40,000	25,000	5	16,200
2,500	≥ 18	15,950	16,000	90,000	40,000	25,000	5	16,250
3,000	≥ 24	19,950	20,000	105,000	50,000	33,000	5	20,300

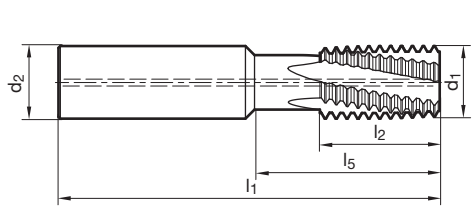
Kierrejyrsimet UN-kierteille

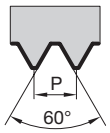
Materiaali	TKM	
Pinta	C	C
Malli	TMU UN	TMU UN
Sisäinen jäähdytys		
Varren muoto	HA	HB

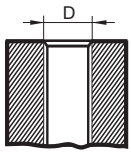
NEW

P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 601







Tehdas stdr. Artikkelinro. **3595** **3596**

P	D	d1	d2	l1	l5	l2	Z	koodinro.
G/inch		mm	mm	mm	mm	mm		
24,000	≥ 1/2	9,950	10,000	70,000	25,000	16,000	4	10,240
24,000	≥ 1/2	9,950	10,000	70,000	25,000	16,000	4	10,240
10,000	≥ 3/4	11,950	12,000	80,000	31,000	20,000	4	12,100
16,000	≥ 5/8	11,950	12,000	80,000	31,000	20,000	4	12,160
18,000	≥ 5/8	11,950	12,000	80,000	31,000	20,000	4	12,180
20,000	≥ 11/16	11,950	12,000	80,000	31,000	20,000	4	12,200
24,000	≥ 5/8	11,950	12,000	80,000	31,000	20,000	4	12,240
12,000	≥ 7/8	15,950	16,000	90,000	40,000	25,000	5	16,120
14,000	≥ 7/8	15,950	16,000	90,000	40,000	25,000	5	16,140
16,000	≥ 7/8	15,950	16,000	90,000	40,000	25,000	5	16,160
18,000	≥ 7/8	15,950	16,000	90,000	40,000	25,000	5	16,180
20,000	≥ 13/16	15,950	16,000	90,000	40,000	25,000	5	16,200
7,000	≥ 1	19,950	20,000	105,000	50,000	33,000	5	20,070
8,000	≥ 1	19,950	20,000	105,000	50,000	33,000	5	20,080
12,000	≥ 1	19,950	20,000	105,000	50,000	33,000	5	20,120
14,000	≥ 1	19,950	20,000	105,000	50,000	33,000	5	20,140
16,000	≥ 1	19,950	20,000	105,000	50,000	33,000	5	20,160

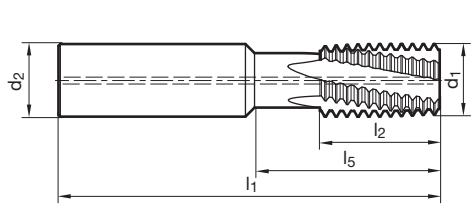
Kierrejyrsimet BSP-kierteille

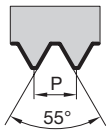
Materiaali	TKM		
Pinta	C	C	○
Malli	TM SP	TM SP	TM SP
Sisäinen jäähdytys			
Varren muoto	HA	HB	HA

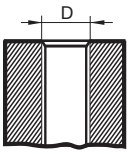
NEW

P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 601







Tehdas stdr.	Artikkelinro.	3542	3557	3524

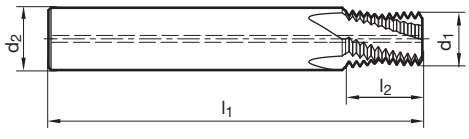
P	D	d1	d2	l1	l5	l2	Z	koodinro.
G/inch		mm	mm	mm	mm	mm		
19,000	≥ 1/4	9,950	10,000	70,000	25,000	16,000	4	10,190
14,000	≥ 1/2	15,950	16,000	90,000	40,000	25,000	5	16,140
11,000	≥ 1	19,950	20,000	105,000	50,000	33,000	5	20,110

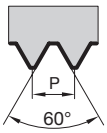
Kierrejyrsimet NPT-kierteille

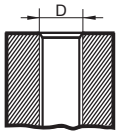
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 601

Materiaali	TKM	
Pinta	C	C
Malli	TM SP	TM SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3768	3769

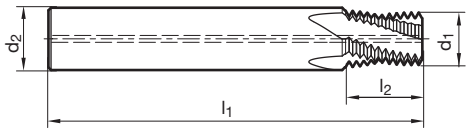
P	D	d1	d2	l1	l2	Z	koodinro.
G/inch		mm	mm	mm	mm		
14,000	≥ 1/2	14,500	16,000	90,000	19,050	5	21,900
11,500	≥ 1	18,500	20,000	90,000	23,190	5	34,180

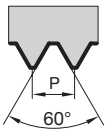
Kierrejyrsimet NPTF-kierteille

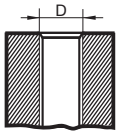
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 601

Materiaali	TKM	
Pinta	C	C
Malli	TM SP	TM SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3772	3773

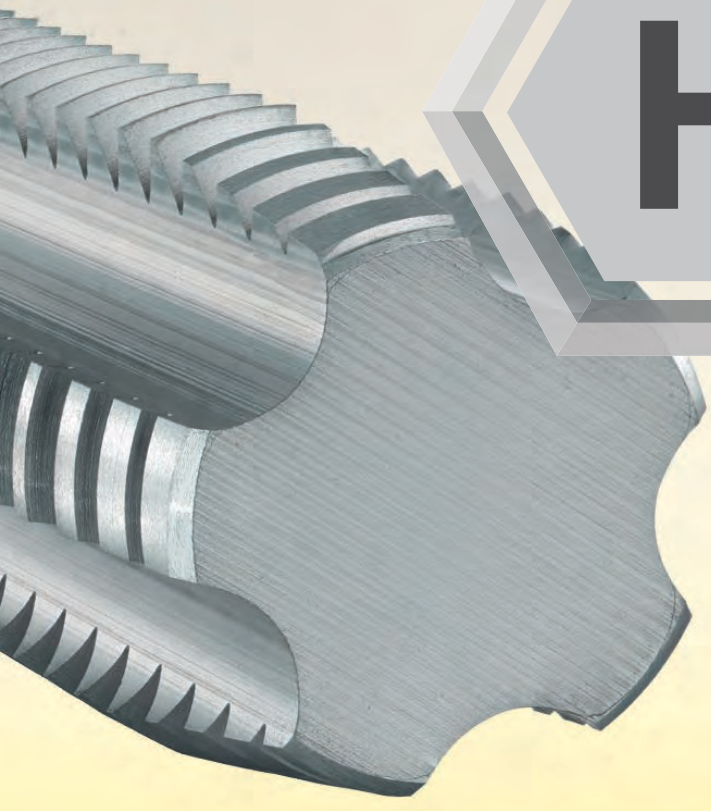
P	D	d1	d2	l1	l2	Z	koodinro.
G/inch		mm	mm	mm	mm		
14,000	≥ 1/2	14,500	16,000	90,000	19,050	5	21,900
11,500	≥ 1	18,500	20,000	90,000	23,190	5	34,180

KARKAISTU

KARKAISTU TERÄS

Lujat teräkset, karkaistut teräkset, kokillivalu

H



H KARKAISTU TERÄS

M		MF	
ISO2/6H	ISO3/6G	ISO2/6H	ISO3/6G

45 – 55 HRC

M		MF	
No 1 M3 - M16 Art. nro. 1201 alkaen sivu 680		No 1 M8x1 - M12x1,5 Art. nro. 4161 alkaen sivu 682	

55 – 62 HRC

M		MF	
No 1 M3 - M16 Art. nro. 2944 alkaen sivu 681		No 1 M6x0,5 - M12x1,5 Art. nro. 1161 alkaen sivu 683	

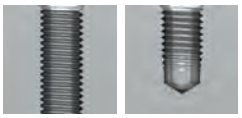
alkureikäpora

M		MF	
No 1 Art. nro. 1946 alkaen sivu 677		No 1 Art. nro. 1946 alkaen sivu 677	

No 1 PARAS TYÖKALU

QUICKFINDER

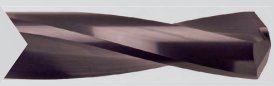
UNC	UNF	G
2B	2B	-



L Ä P I R E I Ä T
P O H J A R E I Ä T

HSS-E-PM, TiCN, muoto D

TKM, TiCN, muoto D



TKM, TiAlN

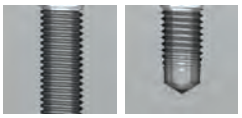
H KARKAISTU TERÄS

	M UNIVERSAL	MF UNIVERSAL
max. 55 HRC 1.5xD	No 1 M3 - M20 Art. nro. 3525 alkaen sivu 685	No 1 M4x0,5 - M16x1,5 Art. nro. 3527 alkaen sivu 687
max. 55 HRC 2xD	No 1 M3 - M20 Art. nro. 3526 alkaen sivu 686	No 1 M4x0,5 - M16x1,5 Art. nro. 3528 alkaen sivu 688
max. 65 HRC 3xD	No 1 M2 - M12 Art. nro. 4227 alkaen sivu 703	
alkureikäpora	No 1 Art. nro. 1946 alkaen sivu 677	No 1 Art. nro. 1946 alkaen sivu 677

No 1 PARAS TYÖKALU

QUICKFINDER

UNC	UNF	G
UNIVERSAL	UNIVERSAL	-



L Ä P I R E I Ä T
P O H J A R E I Ä T

No 1
1/4 - 1/2
Art. nro. 3516
alkaen sivu 689

No 1
1/4 - 1/2
Art. nro. 3518
alkaen sivu 691

No 1
1/8 - 3/8
Art. nro. 3514
alkaen sivu 693

TKM, TiCN

No 1
1/4 - 1/2
Art. nro. 3517
alkaen sivu 690

No 1
1/4 - 1/2
Art. nro. 3519
alkaen sivu 692

No 1
1/8 - 3/8
Art. nro. 3515
alkaen sivu 694

TKM, TiCN

TKM, TiCN

TKM, TiAlN

H KARKAISTU TERÄS	Kierteen syvyys	≤1,5xD	≤3xD	
	Materiaali	HSS-E	TKM	
	Malli/Muoto	H/D	H/D	H
	Pinta	C	C	A
	Jäähdytys	☒	☒	☒
	Varren halkaisija	h9	h9	HA
LÄPIREIKÄ		45 ... 55 HRC	≤ 65 HRC	Alkureikäpora

Kierteen malli	Toleranssi	Artikkelinro. / sivu		
M	4H			
	6H		2944 681	1946 677
	6HX	1201 680		1946 677
	6G			
MF	6H		1161 683	1946 677
	6HX	4161 682		1946 677
	6G			
UNC	2B			
	2BX			
UNF	2B			
	2BX			
G				
BSW				
NPT				
NPTF				
EG M	6H Mod.			
MJ	4HX			
MJF	4HX			
UNJC	3BX			
UNJF	3BX			
PG				
Jäähdytysneste:		●/△	●/△	○/●

= No 1

○ = Ilma
● = Öljy
○ = Emulsio
△ = Jäähdytysaine
☐ = Pisaravoitelu (MQL)

	Materiaaliryhmä	Kovuus	Materiaaliesimerkkejä	Materiaalinro.	Käyttösuositus		
H	Lujat teräkset, karkaistut teräkset	45 - 55 HRC	Hardox 500		3	-	
		55 - 62 HRC			-	2	

Alkureiän erikoishalkaisija kovatyöstöön Gühring nro. 2944:llä

Kierteen koko	Kierteen alkureiän Ø		Kierteen alkureiän halkaisija			
			min.		max.	
	~ DIN 336 mm	nro. 2944:lla mm	~ DIN 336 mm	nro. 2944:lla mm	~ DIN 336 mm	nro. 2944:lla mm
M3	2,50	2,60	2,495	2,559	2,599	2,699
M4	3,30	3,40	3,242	3,342	3,422	3,522
M5	4,20	4,30	4,134	4,234	4,334	4,434
M6	5,00	5,10	4,917	5,017	5,153	5,253
M8	6,80	6,90	6,647	6,747	6,912	7,012
M10	8,50	8,60	8,376	8,476	8,676	8,776
M12	10,20	10,40	10,106	10,206	10,441	10,541
M16	12,00	14,10	13,835	15,935	14,210	16,310

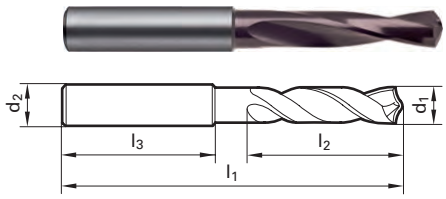
Alkureiän erikoishalkaisija kovatyöstöön Gühring nro. 1161:llä

Kierteen koko	Kierteen alkureiän Ø		Kierteen alkureiän halkaisija			
			min.		max.	
	~ DIN 336 mm	nro. 1161:lla mm	~ DIN 336 mm	nro. 1161:lla mm	~ DIN 336 mm	nro. 1161:lla mm
M6x0,5	5,50	5,60	5,459	5,559	5,599	5,699
M8x1	7,00	7,10	6,917	7,017	7,153	7,253
M10x1	9,00	9,10	8,917	9,017	9,153	9,253
M12x1	11,00	11,10	10,917	11,017	11,153	11,253
M12x1,5	10,50	10,60	10,376	10,476	10,676	10,776

Artikkelinro.	**1946**
Materiaali	**Kovametalli**
KM-laatu	K
Malli	H
Pintakäsittely	A
DIN	DIN 6537
Varren muoto	HA

Gühring-pora kierteitten alkureille karkaistuihin materiaaleihin!

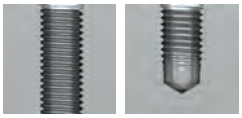
Gühring‘ in karkaistuille materiaaleille tarkoitettu km-pora mahdollistaa hyvien reikien tekemisen teräksiin, joiden ko-vuus on jopa 62HRC. Pyöristetyt leikkuiden kulmat tekevät työkalusta erittäin jäykän ja varmistavat mahdollisimman onnistuneen lastuamisen. Lastu-uran muoto on optimoitu karkaistujen aineiden työstöön sekä lastunpoistoon. Gühringin karkaistujenaineidenpora on saatavilla vakiotyökaluna lieriövarrella ~ DIN 6535 HA, halkaisija-alueella 3,0 - 12,0 mm.



d1	d2	l1	l2	l3
mm	mm	mm	mm	mm
2,600	6,000	62,00	20,00	36,00
3,000	6,000	62,00	20,00	36,00
3,400	6,000	62,00	20,00	36,00
4,000	6,000	66,00	24,00	36,00
4,300	6,000	66,00	24,00	36,00
5,000	6,000	66,00	28,00	36,00
5,100	6,000	66,00	28,00	36,00
5,600	6,000	66,00	28,00	36,00
6,000	6,000	66,00	28,00	36,00
6,900	8,000	79,00	34,00	36,00
7,100	8,000	79,00	34,00	36,00
8,000	8,000	79,00	41,00	36,00
8,600	10,000	89,00	47,00	40,00
9,100	10,000	89,00	47,00	40,00
10,000	10,000	89,00	47,00	40,00
10,400	12,000	102,00	55,00	45,00
10,600	12,000	102,00	55,00	45,00
11,100	12,000	102,00	55,00	45,00
12,000	12,000	102,00	55,00	45,00
14,100	16,000	115,00	65,00	48,00

3 x D leikkunopeudet Gühring nro. 1946:lla

	Kovuus	HRC 40…48	HRC 48 … 62
	Leikkuunopeus v_c	40 m/min	30 m/min
poran Ø (mm)	Syöttö	f (mm/kierr.):	f (mm/kierr.):
	2,6	0,032	0,025
	3,4	0,040	0,032
	4,3	0,050	0,040
	5,1	0,050	0,040
	5,6	0,050	0,040
	6,9	0,070	0,055
	7,1	0,070	0,055
	8,6	0,090	0,070
	9,1	0,090	0,070
	10,4	0,110	0,090
	10,5	0,110	0,090
	11,0	0,120	0,100
	14,1	0,120	0,100

KARKAISTU TERÄS	Kierteen syvyys	**≤1,5xD**	
	Materiaali		
	Malli	TMC SP	TMC SP
	Pinta	C	C
	Jäähdytys	aksiaal.	aksiaal.
	Varren muoto	HA	HA
	Nousu	10°	10°
 LÄPIREIÄT JA POHJA-REIÄT			
	Kierteen malli	**Artikkelinro. / sivu**	
	M	3525 685	3543 685
	MF	3527 687	3545 687
	UNC	3516 689	3534 689
	UNF	3518 691	3536 691
	G	3514 693	3529 693
	BSW		
	NPT	3520 695	3538 695
	NPTF	3521 696	3539 696
	EG M		
	MJ		
	MJF		
	UNJC		
	UNJF		
	PG		
	Jäähdytysneste:	○/●	○/●

= No 1

○ = Ilma
● = Öljy
◍ = Emulsio
△ = Jäähdytysaine
☐ = Pisaravoitelu (MQL)

	Materiaaliryhmä	Kovuus	Materiaaliesi-merkkejä	Materiaa-linro.	**Käyttösuositus**	
H	Lujat teräkset, karkaistut teräkset	45 - 55 HRC	Hardox 500		++	++
		55 - 62 HRC			-	-

≤2xD		universal				≤3xD	
TKM							
TMC SP	TMC SP	TMU SP	TMU SP	TMU SP	TMU SP	MTM 3 SP	H
C	C	C	C	C	C	C	A
aksiaal.	aksiaal.	aksiaal.	aksiaal.	aksiaal.	aksiaal.	☒	☒
HA	HB	HA	HB	HA	HB	HA	HA
10°	10°	15°	15°	15°	15°	15°	15°
				Kierrejyrsin	Kierrejyrsin		
Artikkelinro. / sivu							
3526 686	3544 686	3541 697	3556 697	4162 698	4163 698	4227 703	1946 677
3528 688	3546 688	3541 697	3556 697	4162 698	4163 698		1946 677
3517 690	3535 690	3595 699	3596 699				
3519 692	3537 692	3595 699	3596 699				
3515 694	3533 694	3542 700	3557 700	3542 700	3557 700		
		3768 701	3769 701				
		3772 702	3773 702				
EG-kierteet voidaan kaiken mallisilla ja kokoisilla kierrejyrsimillä							
○/●	○/●	○/●	○/●	○/●	○/●	○	○/●

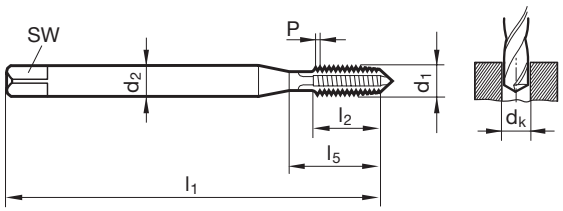
Käyttösuositus							
++	++	+	+	+	+	++	++
-	-	-	-	-	-	++	++

Konekierretapit, metrinen ISO-kierre

Materiaali	HSS-E-PM
Ø-Toleranssi	6HX
Pinta	C
Malli	H
Muoto	D
Sisäinen jäähdytys	

P	
M	
K	
N	
S	
H	45-55

Leikkuuarvosivu 676



DIN 2184-1 DIN 371 Artikkelinro. **1201**

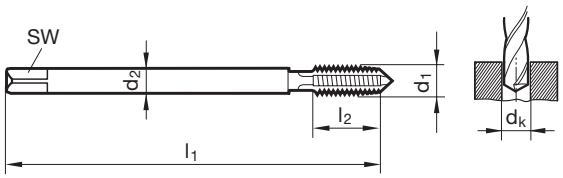
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,60	56,000	10,000	18,000
M4	0,700	4,500	3,400	3,40	63,000	12,000	21,000
M5	0,800	6,000	4,900	4,30	70,000	14,000	25,000
M6	1,000	6,000	4,900	5,10	80,000	16,000	30,000
M8	1,250	8,000	6,200	6,90	90,000	17,000	35,000
M10	1,500	10,000	8,000	8,60	100,000	20,000	39,000
M12	1,750	12,000	9,000	10,40	110,000	24,000	49,000
M14	2,000	11,000	11,000	12,10	110,000	26,000	53,000
M16	2,000	12,000	12,000	14,10	110,000	26,000	54,000

Konekierretapit, metrinen ISO-kierre

Materiaali	**TKM**
Ø-Toleranssi	ISO2/6H
Pinta	C
Malli	H
Muoto	D
Sisäinen jäähdytys	

P	
M	
K	
N	
S	
H	≤62

Leikkuuarvosivu 676



Tehdas stdr. ~DIN 371 Artikkelinro. **2944**

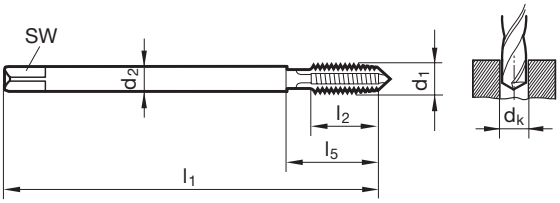
d1	P	d2	SW	dk	l1	l2
	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,60	56,000	12,000
M4	0,700	4,500	3,400	3,40	63,000	14,000
M5	0,800	6,000	4,900	4,30	70,000	17,000
M6	1,000	6,000	4,900	5,10	80,000	20,000
M8	1,250	8,000	6,200	6,90	90,000	20,000
M10	1,500	10,000	8,000	8,60	100,000	24,000
M12	1,750	12,000	9,000	10,40	110,000	28,000
M16	2,000	16,000	12,000	14,10	110,000	40,000

Konekierretapit, metrinen ISO-hienokierre

Materiaali	HSS-E-PM
Ø-Toleranssi	6HX
Pinta	C
Malli	H
Muoto	D
Sisäinen jäähdytys	

P	
M	
K	
N	
S	
H	45-55

Leikkuuarvosivu 676



DIN 2184-1 DIN 371 Artikkelinro. **4161**

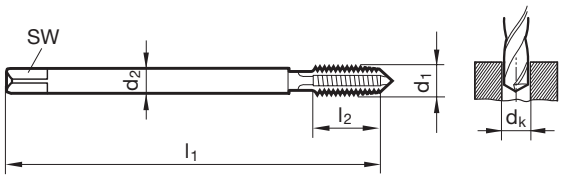
d1	d2	SW	dk	l1	l2	l5	koodinro.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8,000	6,200	7,10	90,000	16,000	35,000	8,005
M10 x 1	10,000	8,000	9,10	90,000	16,000	35,000	10,005
M12 x 1	12,000	9,000	11,10	100,000	20,000	40,000	12,005
M12 x 1,5	12,000	9,000	10,60	100,000	20,000	40,000	12,007

Konekierretapit, metrinen ISO-hienokierre

Materiaali	**TKM**
Ø-Toleranssi	ISO2/6H
Pinta	C
Malli	H
Muoto	D
Sisäinen jäähdytys	

P	
M	
K	
N	
S	
H	≤62

Leikkuuarvosivu 676



Tehdas stdr. ~DIN 371 Artikkelinro. **1161**

d1	d2	SW	dk	l1	l2	koodinro.
	mm	mm	mm	mm	mm	
M6 x 0,5	6,000	4,900	5,60	80,000	15,000	6,003
M8 x 1	8,000	6,200	7,10	90,000	18,000	8,005
M10 x 1	10,000	8,000	9,10	90,000	22,000	10,005
M12 x 1	12,000	9,000	11,10	100,000	25,000	12,005
M12 x 1,5	12,000	9,000	10,60	100,000	28,000	12,007

KIERRE-JYRSIMET H

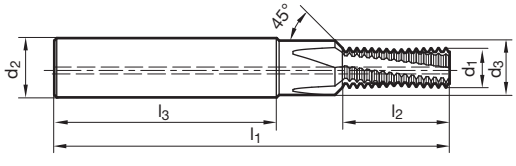
Viisteelliset kierrejyrsimet metrisille ISO-kierteille

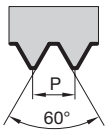
P	•
M	•
K	•
N	•
S	•
H	≤55

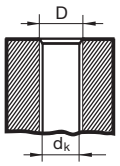
Leikkuuarvosivu 678

Materiaali	**TKM**	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB

NEW







Tehdas stdr. Artikkelinro. **3525** **3543**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0,500	2,300	6,000	3,400	2,50	48,000	36,000	5,300	3	3,000
M4	0,700	3,000	6,000	4,500	3,30	48,000	36,000	7,400	3	4,000
M5	0,800	4,000	6,000	5,500	4,20	54,000	36,000	9,200	3	5,000
M6	1,000	4,800	8,000	6,600	5,00	62,000	36,000	10,500	3	6,000
M8	1,250	6,400	10,000	9,000	6,80	74,000	40,000	13,100	3	8,000
M10	1,500	7,950	12,000	11,000	8,50	80,000	45,000	17,300	4	10,000
M12	1,750	9,950	14,000	13,500	10,20	90,000	45,000	20,100	4	12,000
M14	2,000	11,200	16,000	15,500	12,00	102,000	48,000	25,000	4	14,000
M16	2,000	12,800	18,000	17,500	14,00	102,000	48,000	27,000	4	16,000
M20	2,500	14,500	20,000	21,500	17,50	125,000	50,000	33,800	4	20,000

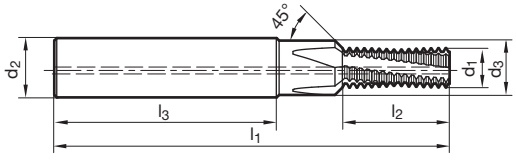
Viisteelliset kierrejyrsimet metrisille ISO-kierteille

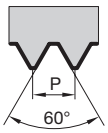
2xD

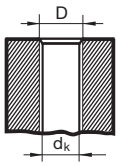
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 679

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr. Artikkelinro. **3526** **3544**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0,500	2,300	6,000	3,400	2,50	48,000	36,000	6,800	3	3,000
M4	0,700	3,000	6,000	4,500	3,30	48,000	36,000	8,800	3	4,000
M5	0,800	4,000	6,000	5,500	4,20	54,000	36,000	10,800	3	5,000
M6	1,000	4,800	8,000	6,600	5,00	62,000	36,000	13,500	3	6,000
M8	1,250	6,400	10,000	9,000	6,80	74,000	40,000	18,100	3	8,000
M10	1,500	7,950	12,000	11,000	8,50	80,000	45,000	21,800	4	10,000
M12	1,750	9,950	14,000	13,500	10,20	90,000	45,000	25,400	4	12,000
M14	2,000	11,200	16,000	15,500	12,00	102,000	48,000	31,000	4	14,000
M16	2,000	12,800	18,000	17,500	14,00	102,000	48,000	35,000	4	16,000
M20	2,500	14,500	20,000	21,500	17,50	125,000	50,000	41,300	4	20,000

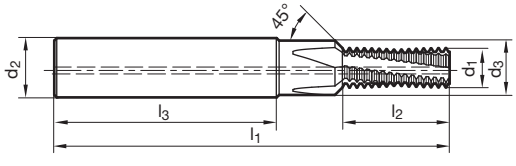
Viisteelliset kierrejyrsimet metrisille ISO-hienokierteille

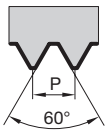
P	•
M	•
K	•
N	•
S	•
H	≤55

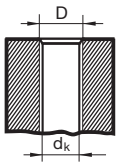
Leikkuuarvosivu 678

Materiaali	**TKM**	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB

NEW







Tehdas stdr.	Artikkelinro.	**3527**	**3545**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm	mm		
M4 x 0,5	0,500	3,000	6,000	4,500	3,50	48,000	36,000	7,300	3	4,003
M5 x 0,5	0,500	4,000	6,000	5,500	4,50	54,000	36,000	8,800	3	5,003
M6 x 0,5	0,500	4,800	8,000	6,600	5,50	62,000	36,000	9,800	3	6,003
M6 x 0,75	0,750	4,800	8,000	6,600	5,20	62,000	36,000	10,100	3	6,004
M8 x 0,75	0,750	6,400	10,000	9,000	7,20	74,000	40,000	13,100	3	8,004
M8 x 1	1,000	6,400	10,000	9,000	7,00	74,000	40,000	13,500	3	8,005
M10 x 1	1,000	7,950	12,000	11,000	9,00	80,000	45,000	16,500	4	10,005
M10 x 1,25	1,250	7,950	12,000	11,000	8,80	80,000	45,000	16,900	4	10,006
M12 x 1	1,000	9,950	14,000	13,500	11,00	90,000	45,000	19,500	4	12,005
M12 x 1,5	1,500	9,950	14,000	13,500	10,50	90,000	45,000	20,300	4	12,007
M14 x 1,5	1,500	11,200	16,000	15,500	12,50	102,000	48,000	23,300	4	14,007
M16 x 1,5	1,500	12,800	18,000	17,500	14,50	102,000	48,000	26,300	4	16,007

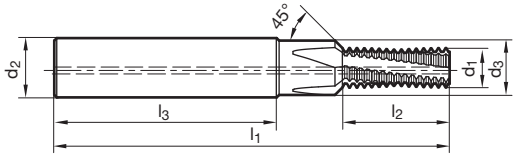
Viisteelliset kierrejyrsimet metrisille ISO-hienokierteille

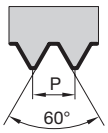
2xD

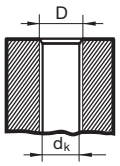
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 679

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr. Artikkelinro. **3528** **3546**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm	mm		
M4 x 0,5	0,500	3,000	6,000	4,500	3,50	48,000	36,000	8,800	3	4,003
M5 x 0,5	0,500	4,000	6,000	5,500	4,50	54,000	36,000	10,800	3	5,003
M6 x 0,5	0,500	4,800	8,000	6,600	5,50	62,000	36,000	12,800	3	6,003
M6 x 0,75	0,750	4,800	8,000	6,600	5,20	62,000	36,000	13,100	3	6,004
M8 x 0,75	0,750	6,400	10,000	9,000	7,20	74,000	40,000	16,900	3	8,004
M8 x 1	1,000	6,400	10,000	9,000	7,00	74,000	40,000	17,500	3	8,005
M10 x 1	1,000	7,950	12,000	11,000	9,00	80,000	45,000	21,500	4	10,005
M10 x 1,25	1,250	7,950	12,000	11,000	8,80	80,000	45,000	21,900	4	10,006
M12 x 1	1,000	9,950	14,000	13,500	11,00	90,000	45,000	25,500	4	12,005
M12 x 1,5	1,500	9,950	14,000	13,500	10,50	90,000	45,000	26,300	4	12,007
M14 x 1,5	1,500	11,200	16,000	15,500	12,50	102,000	48,000	30,800	4	14,007
M16 x 1,5	1,500	12,800	18,000	17,500	14,50	102,000	48,000	33,800	4	16,007

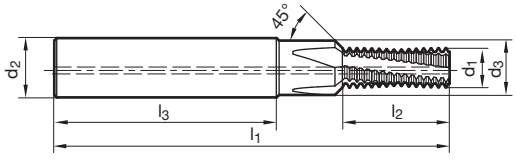
Viisteelliset kierrejyrsimet UNC-kierteille

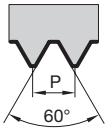
P	•
M	•
K	•
N	•
S	•
H	≤55

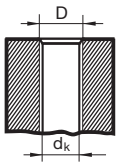
Leikkuuarvosivu 678

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB

NEW







Tehdas stdr.	Artikkelinro.	3516	3534

D	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 20	4,800	8,000	6,600	5,10	62,000	36,000	12,100	3	6,350
5/16 - 18	5,950	10,000	9,000	6,60	74,000	40,000	14,800	3	7,938
3/8 - 16	7,100	12,000	11,000	8,00	80,000	45,000	16,700	4	9,525
7/16 - 14	7,950	12,000	11,000	9,40	80,000	45,000	19,000	4	11,113
1/2 - 13	9,950	14,000	13,500	10,80	90,000	45,000	22,500	4	12,700

Viisteelliset kierrejyrsimet UNC-kierteille

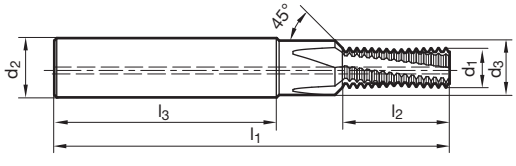
2xD

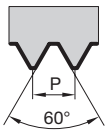
P	•
M	•
K	•
N	•
S	•
H	≤55

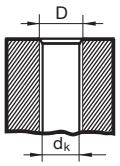
Leikkuuarvosivu 679

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB

NEW







Tehdas stdr.	Artikkelinro.	3517	3535

D	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 20	4,800	8,000	6,600	5,10	62,000	36,000	14,600	3	6,350
5/16 - 18	5,950	10,000	9,000	6,60	74,000	40,000	17,600	3	7,938
3/8 - 16	7,100	12,000	11,000	8,00	80,000	45,000	21,400	4	9,525
7/16 - 14	7,950	12,000	11,000	9,40	80,000	45,000	24,500	4	11,113
1/2 - 13	9,950	14,000	13,500	10,80	90,000	45,000	28,300	4	12,700

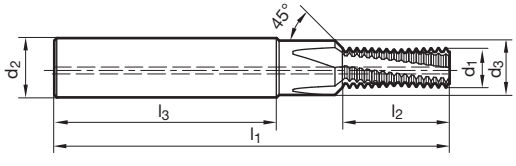
Viisteelliset kierrejyrsimet UNF-kierteille

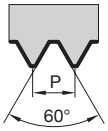
P	•
M	•
K	•
N	•
S	•
H	≤55

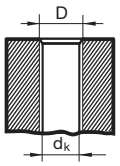
Leikkuuarvosivu 678

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB

NEW







Tehdas stdr.	Artikkelinro.	3518	3536

D	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 28	4,800	8,000	6,600	5,50	62,000	36,000	11,300	3	6,350
5/16 - 24	5,950	10,000	9,000	6,90	74,000	40,000	13,200	3	7,938
3/8 - 24	7,950	12,000	11,000	8,50	80,000	45,000	16,400	4	9,525
7/16 - 20	7,950	12,000	11,000	9,90	80,000	45,000	18,400	4	11,113
1/2 - 20	9,950	14,000	13,500	11,50	90,000	45,000	21,000	4	12,700

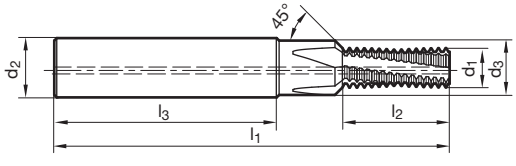
Viisteelliset kierrejyrsimet UNF-kierteille

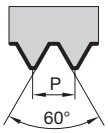
P	•
M	•
K	•
N	•
S	•
H	≤55

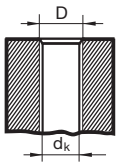
Leikkuuarvosivu 679

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB

NEW







Tehdas stdr.	Artikkelinro.	3519	3537

D	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 28	4,800	8,000	6,600	5,50	62,000	36,000	14,100	3	6,350
5/16 - 24	5,950	10,000	9,000	6,90	74,000	40,000	17,500	3	7,938
3/8 - 24	7,950	12,000	11,000	8,50	80,000	45,000	20,600	4	9,525
7/16 - 20	7,950	12,000	11,000	9,90	80,000	45,000	24,800	4	11,113
1/2 - 20	9,950	14,000	13,500	11,50	90,000	45,000	27,300	4	12,700

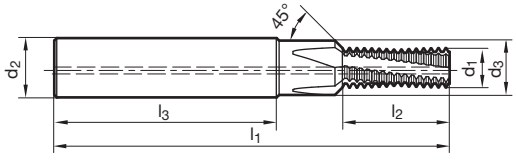
Viisteelliset kierrejyrsimet BSP-kierteille

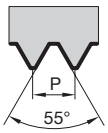
P	•
M	•
K	•
N	•
S	•
H	≤55

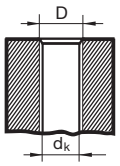
Leikkuuarvosivu 678

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB

NEW







Tehdas stdr. Artikkelinro. **3514** **3529**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28,000	7,950	12,000	11,000	8,80	80,000	45,000	15,900	4	9,728
G1/4	19,000	9,950	14,000	13,900	11,80	90,000	45,000	22,100	4	13,157
G3/8	19,000	13,600	18,000	17,500	15,25	102,000	48,000	27,400	4	16,662

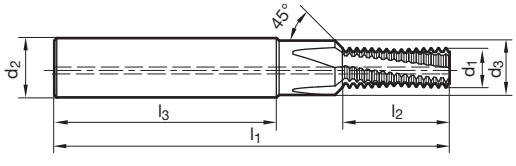
Viisteelliset kierrejyrsimet BSP-kierteille

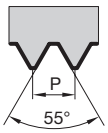
2xD

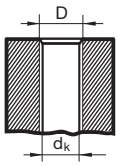
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 679

Materiaali	TKM	
Pinta	C	C
Malli	TMC SP	TMC SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr. Artikkelinro. **3515** **3533**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28,000	7,950	12,000	11,000	8,80	80,000	45,000	21,300	4	9,728
G1/4	19,000	9,950	14,000	13,900	11,80	90,000	45,000	28,700	4	13,157
G3/8	19,000	13,600	18,000	17,500	15,25	102,000	48,000	35,400	4	16,662

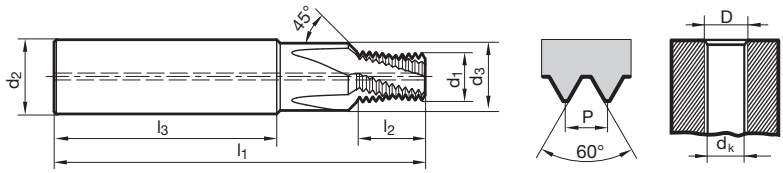
Viisteelliset kierrejyrsimet NPT-kierteille

Materiaali		TKM	
Pinta		C	C
Malli		TMC SP	TMC SP
Sisäinen jäähdytys			
Varren muoto		HA	HB

P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 678

NEW



Tehdas stdr.	Artikkelinro.	3520	3538

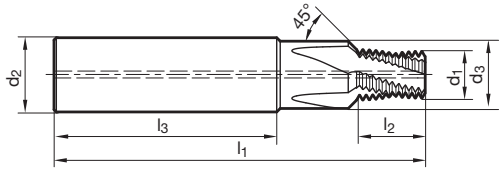
D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
1/8	27,000	7,300	12,000	11,000	8,40	70,000	45,000	9,900	4	10,620
1/4	18,000	9,950	16,000	14,500	11,10	80,000	48,000	14,800	4	14,140
3/8	18,000	12,500	18,000	17,500	14,30	80,000	48,000	14,800	4	17,570

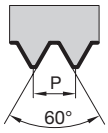
Viisteelliset kierrejyrsimet NPTF-kierteille

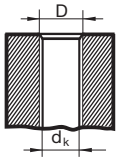
Materiaali		TKM	
Pinta		C	C
Malli		TMC SP	TMC SP
Sisäinen jäähdytys			
Varren muoto		HA	HB
			NEW

P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 678







Tehdas stdr.	Artikkelinro.	3521	3539

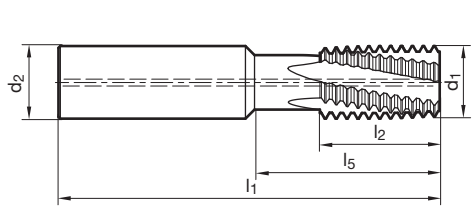
D	P	d1	d2	d3	dk	l1	l3	l2	Z	koodinro.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
1/8	27,000	7,300	12,000	11,000	8,40	70,000	45,000	9,900	4	10,620
1/4	18,000	9,950	16,000	14,500	11,10	80,000	48,000	14,800	4	14,140
3/8	18,000	12,500	18,000	17,500	14,30	80,000	48,000	14,800	4	17,570

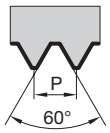
Kierrejyrsimet metrisille ISO-kierteille

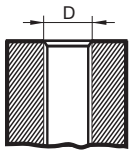
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 679

Materiaali	TKM	
Pinta	C	C
Malli	TMU SP	TMU SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3541	3556

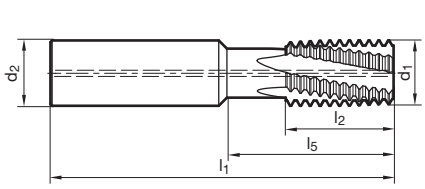
P	D	d1	d2	l1	l5	l2	Z	koodinro.
mm		mm	mm	mm	mm	mm		
0,500	≥ 10	7,950	8,000	64,000		20,000	4	8,050
1,000	≥ 12	9,950	10,000	70,000	25,000	16,000	4	10,100
1,250	≥ 12	9,950	10,000	70,000	25,000	16,000	4	10,125
1,500	≥ 12	9,950	10,000	70,000	25,000	16,000	4	10,150
1,000	≥ 14	11,950	12,000	80,000	31,000	20,000	4	12,100
1,250	≥ 14	11,950	12,000	80,000	31,000	20,000	4	12,125
1,500	≥ 14	11,950	12,000	80,000	31,000	20,000	4	12,150
1,000	≥ 18	15,950	16,000	90,000	40,000	25,000	5	16,100
1,500	≥ 18	15,950	16,000	90,000	40,000	25,000	5	16,150
2,000	≥ 18	15,950	16,000	90,000	40,000	25,000	5	16,200
3,000	≥ 24	17,950	18,000	102,000	50,000	33,000	5	18,300
1,000	≥ 24	19,950	20,000	105,000	50,000	33,000	5	20,100
1,500	≥ 26	19,950	20,000	105,000	50,000	33,000	5	20,150
2,000	≥ 27	19,950	20,000	105,000	50,000	33,000	5	20,200
2,500	≥ 30	19,950	20,000	105,000	50,000	33,000	5	20,250
3,000	≥ 30	19,950	20,000	105,000	50,000	33,000	5	20,300
3,500	≥ 30	19,950	20,000	105,000	50,000	33,000	5	20,350

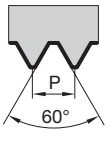
Kierrejyrsimet ulkokierteelle

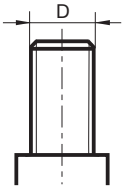
Materiaali	TKM	
Pinta	C	C
Malli	TMU SP	TMU SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW

P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 679







Tehdas stdr. Artikkelinro. **4162** **4163**

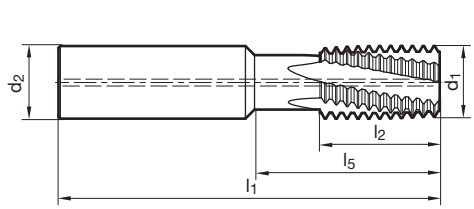
P	D	d1	d2	l1	l5	l2	Z	koodinro.
mm		mm	mm	mm	mm	mm		
0,500	≥ 3	9,950	10,000	70,000	25,000	16,000	4	10,050
0,750	≥ 5	9,950	10,000	70,000	25,000	16,000	4	10,075
1,000	≥ 6	11,950	12,000	80,000	31,000	20,000	4	12,100
1,250	≥ 8	11,950	12,000	80,000	31,000	20,000	4	12,125
1,500	≥ 10	11,950	12,000	80,000	31,000	20,000	4	12,150
1,500	≥ 10	15,950	16,000	90,000	40,000	25,000	5	16,150
2,000	≥ 14	15,950	16,000	90,000	40,000	25,000	5	16,200
2,500	≥ 18	15,950	16,000	90,000	40,000	25,000	5	16,250
3,000	≥ 24	19,950	20,000	105,000	50,000	33,000	5	20,300

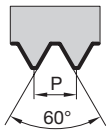
Kierrejyrsimet UN-kierteille

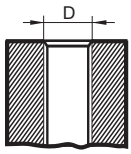
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 679

Materiaali	TKM	
Pinta	C	C
Malli	TMU UN	TMU UN
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3595	3596

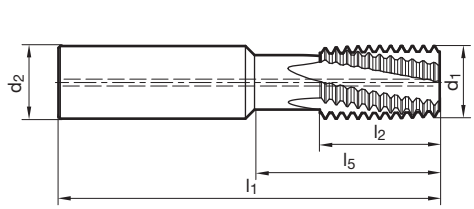
P	D	d1	d2	l1	l5	l2	Z	koodinro.
G/inch		mm	mm	mm	mm	mm		
24,000	≥ 1/2	9,950	10,000	70,000	25,000	16,000	4	10,240
24,000	≥ 1/2	9,950	10,000	70,000	25,000	16,000	4	10,240
10,000	≥ 3/4	11,950	12,000	80,000	31,000	20,000	4	12,100
16,000	≥ 5/8	11,950	12,000	80,000	31,000	20,000	4	12,160
18,000	≥ 5/8	11,950	12,000	80,000	31,000	20,000	4	12,180
20,000	≥ 11/16	11,950	12,000	80,000	31,000	20,000	4	12,200
24,000	≥ 5/8	11,950	12,000	80,000	31,000	20,000	4	12,240
12,000	≥ 7/8	15,950	16,000	90,000	40,000	25,000	5	16,120
14,000	≥ 7/8	15,950	16,000	90,000	40,000	25,000	5	16,140
16,000	≥ 7/8	15,950	16,000	90,000	40,000	25,000	5	16,160
18,000	≥ 7/8	15,950	16,000	90,000	40,000	25,000	5	16,180
20,000	≥ 13/16	15,950	16,000	90,000	40,000	25,000	5	16,200
7,000	≥ 1	19,950	20,000	105,000	50,000	33,000	5	20,070
8,000	≥ 1	19,950	20,000	105,000	50,000	33,000	5	20,080
12,000	≥ 1	19,950	20,000	105,000	50,000	33,000	5	20,120
14,000	≥ 1	19,950	20,000	105,000	50,000	33,000	5	20,140
16,000	≥ 1	19,950	20,000	105,000	50,000	33,000	5	20,160

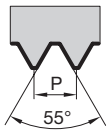
Kierrejyrsimet BSP-kierteille

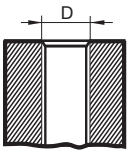
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 679

Materiaali	TKM	
Pinta	C	C
Malli	TM SP	TM SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3542	3557

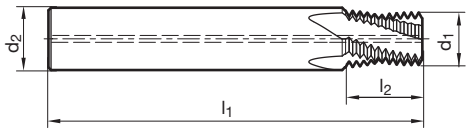
P	D	d1	d2	l1	l5	l2	Z	koodinro.
G/inch		mm	mm	mm	mm	mm		
19,000	≥ 1/4	9,950	10,000	70,000	25,000	16,000	4	10,190
14,000	≥ 1/2	15,950	16,000	90,000	40,000	25,000	5	16,140
11,000	≥ 1	19,950	20,000	105,000	50,000	33,000	5	20,110

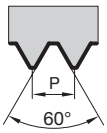
Kierrejyrsimet NPT-kierteille

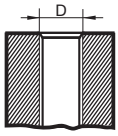
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 679

Materiaali	TKM	
Pinta	C	C
Malli	TM SP	TM SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3768	3769

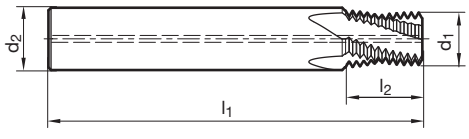
P	D	d1	d2	l1	l2	Z	koodinro.
G/inch		mm	mm	mm	mm		
14,000	≥ 1/2	14,500	16,000	90,000	19,050	5	21,900
11,500	≥ 1	18,500	20,000	90,000	23,190	5	34,180

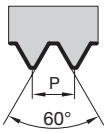
Kierrejyrsimet NPTF-kierteille

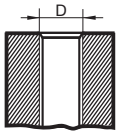
P	•
M	•
K	•
N	•
S	•
H	≤55

Leikkuuarvosivu 679

Materiaali	TKM	
Pinta	C	C
Malli	TM SP	TM SP
Sisäinen jäähdytys		
Varren muoto	HA	HB
		NEW







Tehdas stdr.	Artikkelinro.	3772	3773

P	D	d1	d2	l1	l2	Z	koodinro.
G/inch		mm	mm	mm	mm		
14,000	≥ 1/2	14,500	16,000	90,000	19,050	5	21,900
11,500	≥ 1	18,500	20,000	90,000	23,190	5	34,180

Mikro-kierrejyrsimet

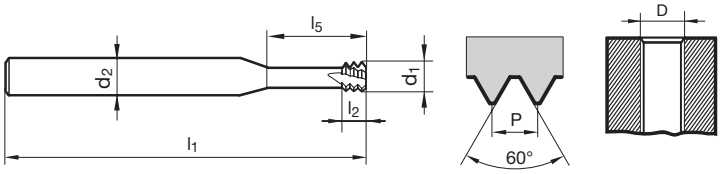
3xD

P	
M	
K	
N	
S	○
H	●

Leikkuuarvosivu 679

Materiaali	**TKM**
Pinta	A
Malli	SP M
Kierteet	3,0
Varren muoto	HA

NEW



Tehdas stdr. Artikkelinro. **4227**

D	P	d1	d2	l1	l2	l5	Z	koodinro.
	mm	mm	mm	mm	mm	mm		
M2	0,400	1,550	3,000	39,000	1,200	6,000	4	2,000
M2,5	0,450	1,950	3,000	39,000	1,400	7,500	4	2,500
M3	0,500	2,350	6,000	58,000	1,500	9,500	4	3,000
M4	0,700	3,100	6,000	58,000	2,100	12,500	4	4,000
M5	0,800	3,800	6,000	58,000	2,400	16,000	4	5,000
M6	1,000	4,800	6,000	58,000	3,000	20,000	4	6,000
M8	1,250	5,950	6,000	58,000	3,800	24,000	4	8,000
M10	1,500	7,800	8,000	64,000	4,500	23,000	4	10,000
M12	1,750	9,000	10,000	73,000	5,300	26,000	5	12,000

KIERR

KÄSI-KIERTAPIT

ELEUAT

RE-

Kierreleuat
Käsikierretapit

Materiaaliryhmä	Vetomurtolujuus MPa (N/mm2)	Kovuus HB	Leikkuunopeus vc (m/min)	
			HSS	HSS-E
Rakenneteräkset	≤ 800	–	8 - 12	–
Automaattiteräkset	≤ 1000	–	10 - 14	–
Seostamattomat hiiletysteräkset	≤ 750	–	6 - 10	–
Seostamattomat nuorrutusteräkset	≤ 850	–	6 - 10	–
Hiiletysteräkset	≥ 850 … 1200	–	–	5 - 8
Nuorrutusteräkset	≥ 850 … 1200	–	–	5 - 8
Työkaluteräkset	≤ 1000	–	–	5 - 8
Pikateräkset	≥ 650 … 1000	–	–	5 - 8
Ruostumattomat sekä haponkest. teräkset, rikitetyt	≤ 850	–	–	4 - 6
austeniittiset	≤ 850	–	–	4 - 6
martensiittiset	≤ 850	–	–	4 - 6
Rakenneteräkset	≤ 800	–	8 - 12	–
Automaattiteräkset	≤ 1000	–	10 - 14	–
Hiiletysteräkset	≤ 1000	–	6 - 10	–
Nuorrutusteräkset	≤ 1200	–	6 - 10	–
Nitratut teräkset	≤ 1200	–	–	5 - 8
Pallografiittivalu	–	≤ 240	5 - 8	–
Alumiini ja Al-seokset	≤ 400	–	10 - 20	–
Al-takeet	≤ 400	–	10 - 20	–
Al-valuseokset ≤ 10 % Si	≤ 600	–	10 - 15	–
> 10 % Si	≤ 600	–	10 - 12	–
Valurauta	–	≤ 240	5 - 8	–
Pallografiittivalu	–	≤ 240	5 - 8	–
Pehmeä valurauta	–	< 300	5 - 8	–
Messinki, lyhytlastuinen	≤ 600	–	5 - 8	–
pitkälastuinen	≤ 600	–	20 - 30	–
Muovit	–	–	12 - 18	–
Magnesiumseokset	≤ 450	–	10 - 20	–
Titaani ja Ti-seokset	≤ 1200	–	–	2 - 6
Ni-seokset	≤ 1200	–	–	2 - 6

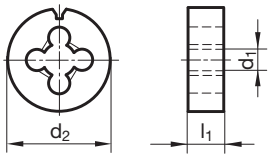
Materiaaliryhmä	Materiaaliesimerkki	Kierukkakulma	Voiteluaine
Rakenneteräkset	St 37-2, St 50-2 jne.	17 - 22°	Leikkuuöljy
Automaattiteräkset	9 S Mn 28, 9 S MnPb 28 jne.	17 - 22°	Leikkuuöljy
Hiiletysteräkset	C 15, Ck 15, 16 MnCr 5 jne.	17 - 22°	Leikkuuöljy, erikoisöljy
Nuorrutusteräkset	C 35 Pb, C 45 jne.	13 - 18°	Leikkuuöljy, erikoisöljy
Ruostumattomat ja haponkestävät teräkset	x12 CrMoS 17, x12 CrNiS 188 jne.	13 - 18°	Erikoisleikkuuöljy
Harmaavalurauta	GG 15, GG25	8 - 12°	Leikkuuöljy, petroli
Messinki, lyhytlastuinen, Ms58	CuZn 39 Pb 2, CuZn 40 Pb 2	10 - 12°	Leikkuuöljy
Messinki, pitkälastuinen, Ms60	CuZn 20, CuZn 37	3 - 7°	Leikkuuöljy
Al-seokset, pitkälastuiset	AlCuMg 1, AlMg 3 Si	23 - 28°	Erikoisleikkuuneste, petroli
Al-seokset, lyhytlastuiset	GD-AlSI 8 Cu 3, GD AlSi 12	13 - 18°	Erikoisleikkuuneste, petroli

Automaattikierreleuat, metrinen ISO-kierre

6g | R | WN | B

P	≤ 1000
M	
K	•
N	•
S	
H	

Materiaali	HSS
Pinta	◯
	>M 2,6
Etuviisteen pituus	1,75xP



Tehdas stdr. Artikkelinro. **121**

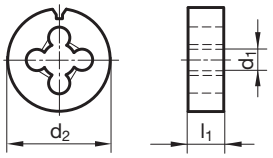
d1	P	d2	l1	Työstettävä kappale-Ø	koodinro.
	mm	mm	mm	mm	
M3	0,500	16,000	5,000	2,92	3,010
M4	0,700	20,000	5,000	3,91	4,020
M5	0,800	16,000	5,000	4,90	5,010
M5	0,800	20,000	7,000	4,90	5,020
M6	1,000	16,000	5,000	5,88	6,010
M6	1,000	20,000	7,000	5,88	6,020
M8	1,250	25,000	9,000	7,87	8,000
M10	1,500	30,000	11,000	9,85	10,000
M12	1,750	38,000	14,000	11,83	12,000

Automaattikierreleuat, metrinen ISO-kierre

6g | R | WN | B

P	≤ 1000
M	
K	•
N	•
S	
H	

Materiaali	HSS
Pinta	◯
	>M 2,6
Etuviisteen pituus	1,75xP



Tehdas stdr. Artikkelinro. **125**

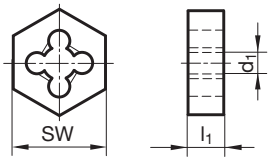
d1	P	d2	l1	Työstettävä kappale-Ø	koodinro.
	mm	mm	mm	mm	
M2	0,400	16,000	3,500	1,94	2,000
M3	0,500	20,000	3,500	2,92	3,000
M5	0,800	20,000	7,000	4,90	5,000
M6	1,000	20,000	7,000	5,88	6,000
M8	1,250	25,000	9,000	7,87	8,000
M10	1,500	30,000	11,000	9,85	10,000

Kierreleuat, metrinen ISO-kierre

6g | R | DIN 382

P	≤ 1000
M	
K	•
N	•
S	
H	

Materiaali	HSS
Pinta	◯
Etuviisteen pituus	1,75xP



DIN 382 Artikkelinro. **139**

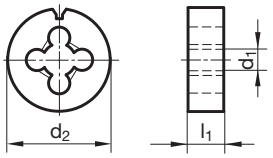
d1	P	SW	l1	Työstettävä kappale-Ø	koodinro.
	mm	mm	mm	mm	
M5	0,800	18,000	7,000	4,90	5,000
M6	1,000	18,000	7,000	5,88	6,000
M8	1,250	21,000	9,000	7,87	8,000
M10	1,500	27,000	11,000	9,85	10,000
M12	1,750	36,000	14,000	11,83	12,000
M16	2,000	41,000	18,000	15,82	16,000
M20	2,500	41,000	18,000	19,79	20,000
M24	3,000	50,000	22,000	23,77	24,000
M52	5,000	85,000	36,000	51,66	52,000

Kierreleuat, metrinen ISO-kierre

6g | R | DIN EN 22568 | B

P	≤ 1000
M	
K	•
N	•
S	
H	

Materiaali	HSS	
Pinta	◯	◯
		>M 2,6
Etuviisteen pituus	1,75xP	1,75xP



DIN EN 22568	Artikkelinro.	151	153

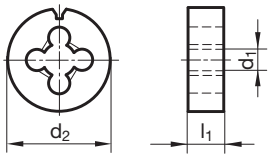
d1	P	d2	l1	Työstettävä kappale-Ø	koodinro.
	mm	mm	mm	mm	
M1	0,250	16,000	5,000	0,97	1,000
M1,2	0,250	16,000	5,000	1,17	1,200
M1,4	0,300	16,000	5,000	1,36	1,400
M1,6	0,350	16,000	5,000	1,54	1,600
M2	0,400	16,000	5,000	1,94	2,000
M2,3	0,400	16,000	5,000	2,25	2,300
M2,5	0,450	16,000	5,000	2,43	2,500
M2,6	0,450	16,000	5,000	2,54	2,600
M3	0,500	20,000	5,000	2,92	3,000
M3,5	0,600	20,000	5,000	3,41	3,500
M4	0,700	20,000	5,000	3,91	4,000
M5	0,800	20,000	7,000	4,90	5,000
M6	1,000	20,000	7,000	5,88	6,000
M7	1,000	25,000	9,000	6,88	7,000
M8	1,250	25,000	9,000	7,87	8,000
M10	1,500	30,000	11,000	9,85	10,000
M12	1,750	38,000	14,000	11,83	12,000
M14	2,000	38,000	14,000	13,82	14,000
M16	2,000	45,000	18,000	15,82	16,000
M18	2,500	45,000	18,000	17,79	18,000
M20	2,500	45,000	18,000	19,79	20,000
M24	3,000	55,000	22,000	23,77	24,000
M30	3,500	65,000	25,000	29,73	30,000

Kierreleuat, metrinen ISO-kierre

6g	R	DIN EN 22568	B

P	≤ 1000
M	
K	•
N	•
S	
H	

Materiaali	**HSS**
Pinta	◯
	>M 2,6
Etuviisteen pituus	1,75xP



DIN EN 22568 Artikkelinro. **152**

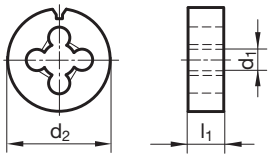
d1	P	d2	l1	Työstettävä kappale-Ø	koodinro.
	mm	mm	mm	mm	
M3	0,500	20,000	5,000	2,92	3,000
M3,5	0,600	20,000	5,000	3,41	3,500
M4	0,700	20,000	5,000	3,91	4,000
M5	0,800	20,000	7,000	4,90	5,000
M6	1,000	20,000	7,000	5,88	6,000
M7	1,000	25,000	9,000	6,88	7,000
M8	1,250	25,000	9,000	7,87	8,000
M9	1,250	25,000	9,000	8,87	9,000
M10	1,500	30,000	11,000	9,85	10,000
M12	1,750	38,000	14,000	11,83	12,000
M14	2,000	38,000	14,000	13,82	14,000
M16	2,000	45,000	18,000	15,82	16,000
M18	2,500	45,000	18,000	17,79	18,000
M20	2,500	45,000	18,000	19,79	20,000
M22	2,500	55,000	22,000	21,79	22,000
M24	3,000	55,000	22,000	23,77	24,000
M27	3,000	65,000	25,000	26,77	27,000
M30	3,500	65,000	25,000	29,73	30,000

Kierreleuat, metrinen ISO-kierre

6g | R | DIN EN 22568 | B

P	≤ 1200
M	•
K	
N	
S	
H	

Materiaali	**HSS-E**
Pinta	●
	>M 2,6
Etuviisteen pituus	1,75xP



DIN EN 22568 Artikkelinro. **130**

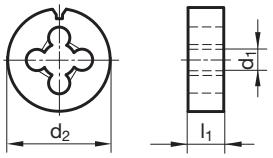
d1	P	d2	l1	Työstettävä kappale-Ø	koodinro.
	mm	mm	mm	mm	
M2	0,400	16,000	3,500	1,94	2,000
M2,2	0,450	16,000	3,500	2,13	2,200
M2,5	0,450	16,000	5,000	2,43	2,500
M3	0,500	16,000	5,000	2,92	3,010
M3	0,500	20,000	5,000	2,92	3,020
M4	0,700	16,000	5,000	3,91	4,010
M4	0,700	20,000	5,000	3,91	4,020
M5	0,800	20,000	7,000	4,90	5,000
M6	1,000	20,000	7,000	5,88	6,000
M8	1,250	25,000	9,000	7,87	8,000
M10	1,500	30,000	11,000	9,85	10,000
M12	1,750	38,000	14,000	11,83	12,000
M14	2,000	38,000	14,000	13,82	14,000
M16	2,000	45,000	18,000	15,82	16,000
M20	2,500	45,000	18,000	19,79	20,000

Kierreleuat, metrinen ISO-kierre

6g | L | DIN EN 22568 | B

P	≤ 1000
M	
K	•
N	•
S	
H	

Materiaali	**HSS**
Pinta	◯
	>M 2,6
Etuviisteen pituus	1,75xP



DIN EN 22568 Artikkelinro. **156**

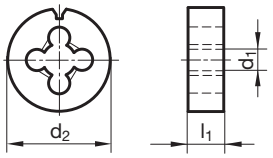
d1	P	d2	l1	Työstettävä kappale-Ø	koodinro.
	mm	mm	mm	mm	
M3	0,500	20,000	5,000	2,92	3,000
M4	0,700	20,000	5,000	3,91	4,000
M5	0,800	20,000	7,000	4,90	5,000
M6	1,000	20,000	7,000	5,88	6,000
M8	1,250	25,000	9,000	7,87	8,000
M10	1,500	30,000	11,000	9,85	10,000
M12	1,750	38,000	14,000	11,83	12,000
M14	2,000	38,000	14,000	13,82	14,000
M16	2,000	45,000	18,000	15,82	16,000
M20	2,500	45,000	18,000	19,79	20,000

Kierreleuat, metrinen ISO-hienokierre

6g | R | DIN EN 22568 | B

P	≤ 1000
M	
K	•
N	•
S	
H	

Materiaali	HSS	
Pinta	◯	◯
		>M 2,6
Etuviisteen pituus	1,75xP	1,75xP



DIN EN 22568 Artikkelinro. **161** **162**

d1	d2	l1	Työstettävä kappale-Ø	koodinro.
	mm	mm	mm	
M3 x 0,35	20,000	5,000	2,94	3,002
M4 x 0,5	20,000	5,000	3,92	4,003
M5 x 0,5	20,000	5,000	4,92	5,003
M6 x 0,5	20,000	5,000	5,92	6,003
M6 x 0,75	20,000	7,000	5,91	6,004
M7 x 0,5	25,000	9,000	6,92	7,003
M7 x 0,75	25,000	9,000	6,91	7,004
M8 x 0,5	25,000	9,000	7,92	8,003
M8 x 0,75	25,000	9,000	7,91	8,004
M8 x 1	25,000	9,000	7,88	8,005
M9 x 0,75	25,000	9,000	8,91	9,004
M9 x 1	25,000	9,000	8,88	9,005
M10 x 0,75	30,000	11,000	9,91	10,004
M10 x 1	30,000	11,000	9,88	10,005
M10 x 1,25	30,000	11,000	9,87	10,006
M11 x 1	30,000	11,000	10,88	11,005
M12 x 0,75	38,000	10,000	11,91	12,004
M12 x 1	38,000	10,000	11,88	12,005
M12 x 1,25	38,000	10,000	11,87	12,006
M12 x 1,5	38,000	10,000	11,85	12,007
M13 x 1	38,000	10,000	12,88	13,005
M14 x 1	38,000	10,000	13,88	14,005
M14 x 1,25	38,000	10,000	13,87	14,006
M14 x 1,5	38,000	10,000	13,85	14,007
M15 x 1	38,000	10,000	14,88	15,005
M16 x 1	45,000	14,000	15,88	16,005
M16 x 1,5	45,000	14,000	15,85	16,007
M17 x 1	45,000	14,000	16,88	17,005
M18 x 1	45,000	14,000	17,88	18,005
M18 x 1,5	45,000	14,000	17,85	18,007
M20 x 1	45,000	14,000	19,88	20,005
M20 x 1,5	45,000	14,000	19,85	20,007
M20 x 2	45,000	14,000	19,82	20,008
M22 x 1	55,000	16,000	21,88	22,005
M22 x 1,5	55,000	16,000	21,85	22,007
M24 x 1,5	55,000	16,000	23,85	24,007

DIN EN 22568 Artikkelinro. **161** **162**

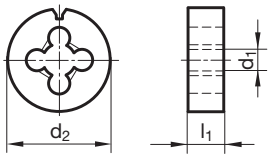
d1	d2	l1	Työstettävä kappale-Ø	koodinro.
	mm	mm	mm	
M24 x 2	55,000	16,000	23,82	24,008
M25 x 1,5	55,000	16,000	24,85	25,007
M26 x 1,5	55,000	16,000	25,85	26,007
M27 x 1,5	65,000	18,000	26,85	27,007
M27 x 2	65,000	18,000	26,82	27,008
M28 x 1,5	65,000	18,000	27,85	28,007
M30 x 1,5	65,000	18,000	29,85	30,007
M30 x 2	65,000	18,000	29,82	30,008

Kierreleuat UNC-kierteille

2a | R | DIN EN 22568 | B

P	≤ 1000
M	
K	•
N	•
S	
H	

Materiaali	HSS
Pinta	◯
Etuviisteen pituus	1,75xP



DIN EN 22568 Artikkelinro. **182**

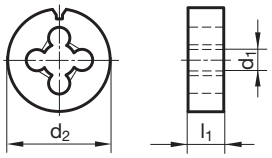
d1	d2	l1	Työstettävä kappale-Ø	koodinro.
	mm	mm	mm	
8 - 32	20,000	7,000	4,07	4,166
10 - 24	20,000	7,000	4,71	4,826
1/4 - 20	20,000	7,000	6,22	6,350
5/16 - 18	25,000	9,000	7,80	7,938
3/8 - 16	30,000	11,000	9,37	9,525
7/16 - 14	30,000	11,000	10,95	11,113
1/2 - 13	38,000	14,000	12,52	12,700
5/8 - 11	45,000	18,000	15,68	15,875
3/4 - 10	45,000	18,000	18,84	19,050

Kierreleuat UNF-kierteille

2a | R | DIN EN 22568 | B

P	≤ 1000
M	
K	•
N	•
S	
H	

Materiaali	HSS
Pinta	◯
Etuviisteen pituus	1,75xP



DIN EN 22568 Artikkelinro. **185**

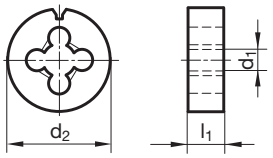
d1	d2	l1	Työstettävä kappale-Ø	koodinro.
	mm	mm	mm	
10 - 32	20,000	7,000	4,73	4,826
1/4 - 28	20,000	7,000	6,24	6,350
5/16 - 24	25,000	9,000	7,82	7,938
3/8 - 24	30,000	11,000	9,41	9,525
7/16 - 20	30,000	11,000	10,98	11,113
1/2 - 20	38,000	10,000	12,56	12,700
9/16 - 18	38,000	10,000	14,14	14,288
5/8 - 18	45,000	14,000	15,73	15,875
3/4 - 16	45,000	14,000	18,89	19,050
7/8 - 14	55,000	16,000	22,05	22,225

Kierreleuat BSP-kierteille

R | DIN EN 24231 | B

P	≤ 1000
M	
K	•
N	•
S	
H	

Materiaali	HSS	
Pinta	◯	◯
Etuviisteen pituus	1,75xP	1,75xP



DIN EN 24231 — Artikkelinro. **175** **176**

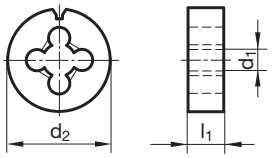
d1	P	d2	l1	Työstettävä kappale-Ø	koodinro.
	G/inch	mm	mm	mm	
G1/8	28,000	30,000	11,000	9,62	9,728
G1/4	19,000	38,000	10,000	13,03	13,157
G3/8	19,000	45,000	14,000	16,54	16,662
G1/2	14,000	45,000	14,000	20,81	20,955
G5/8	14,000	55,000	16,000	22,77	22,911
G3/4	14,000	55,000	16,000	26,30	26,441
G1	11,000	65,000	18,000	33,07	33,249
G1 1/4	11,000	75,000	20,000	41,73	41,910
G1 1/2	11,000	90,000	22,000	47,62	47,803

Kierreleuat R-kierteille BSPT

R | DIN EN 24230 | B

P	≤ 1000
M	
K	•
N	•
S	
H	

Materiaali	HSS
Pinta	◯
Etuviisteen pituus	1,75xP



DIN EN 24230 Artikkelinro. **198**

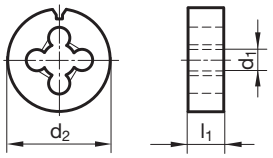
d1	P	d2	l1	Työstettävä kappale-Ø	koodinro.
	G/inch	mm	mm	mm	
R1/8	28	30,000	11,000	9,48	9,728
R1/4	19	38,000	14,000	12,78	13,157
R3/8	19	45,000	14,000	16,26	16,662
R1/2	14	45,000	18,000	20,44	20,955

Kierreleuat NPT-kierteille

R | DIN EN 22568 | B

P	≤ 1000
M	
K	•
N	•
S	
H	

Materiaali	HSS
Pinta	◯
Etuviisteen pituus	1,75xP



DIN EN 22568 Artikkelinro. **191**

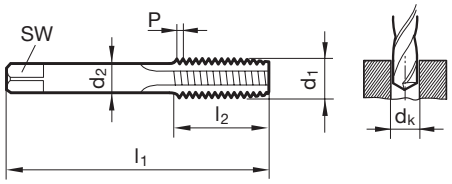
d1	P	d2	l1	Työstettävä kappale-Ø	koodinro.
	G/inch	mm	mm	mm	
1/8	27,000	30,000	11,000	9,93	10,620
1/4	18,000	38,000	14,000	13,18	14,140
3/8	18,000	45,000	14,000	16,60	17,570
1/2	14,000	45,000	18,000	20,63	21,900
3/4	14,000	55,000	22,000	25,95	27,230

Käsikierretapit, metrinen ISO-kierre

ISO2/6H | R

P	≤ 800
M	
K	
N	○
S	
H	

Materiaali	HSS			
Pinta	○	○	○	○
Malli	N	N	N	N
Kuvaus	Sarja	V	M	F



DIN 352	Artikkelinro.	861	862	863	864

d1	P	d2	SW	dk	l1	l2
	mm	mm	mm	mm	mm	mm
M1	0,250	2,500	2,100	0,75	32,000	5,500
M1,1	0,250	2,500	2,100	0,85	32,000	5,500
M1,2	0,250	2,500	2,100	0,95	32,000	5,500
M1,4	0,300	2,500	2,100	1,10	32,000	7,000
M1,6	0,350	2,500	2,100	1,25	32,000	8,000
M1,7	0,350	2,500	2,100	1,35	32,000	8,000
M1,8	0,350	2,500	2,100	1,45	32,000	8,000
M2	0,400	2,800	2,100	1,60	36,000	8,000
M2,2	0,450	2,800	2,100	1,75	36,000	9,000
M2,3	0,400	2,800	2,100	1,90	36,000	9,000
M2,5	0,450	2,800	2,100	2,05	40,000	9,000
M2,6	0,450	2,800	2,100	2,15	40,000	9,000
M3	0,500	3,500	2,700	2,50	40,000	10,000
M3,5	0,600	4,000	3,000	2,90	45,000	12,000
M4	0,700	4,500	3,400	3,30	45,000	12,000
M4,5	0,750	6,000	4,900	3,70	50,000	14,000
M5	0,800	6,000	4,900	4,20	50,000	14,000
M6	1,000	6,000	4,900	5,00	56,000	16,000
M7	1,000	6,000	4,900	6,00	56,000	16,000
M8	1,250	6,000	4,900	6,80	63,000	17,000
M9	1,250	7,000	5,500	7,80	63,000	17,000
M10	1,500	7,000	5,500	8,50	70,000	20,000
M11	1,500	8,000	6,200	9,50	70,000	20,000
M12	1,750	9,000	7,000	10,20	75,000	24,000
M14	2,000	11,000	9,000	12,00	80,000	26,000
M16	2,000	12,000	9,000	14,00	80,000	26,000
M18	2,500	14,000	11,000	15,50	95,000	30,000
M20	2,500	16,000	12,000	17,50	95,000	32,000
M22	2,500	18,000	14,500	19,50	100,000	32,000
M24	3,000	18,000	14,500	21,00	110,000	36,000
M27	3,000	20,000	16,000	24,00	110,000	36,000
M30	3,500	22,000	18,000	26,50	125,000	40,000
M36	4,000	28,000	22,000	32,00	150,000	50,000
M42	4,500	32,000	24,000	37,50	150,000	56,000
M45	4,500	36,000	29,000	40,50	160,000	58,000
M60	5,500	45,000	35,000	54,50	200,000	70,000

DIN 352 Artikkelinro. **861** **862** **863** **864**

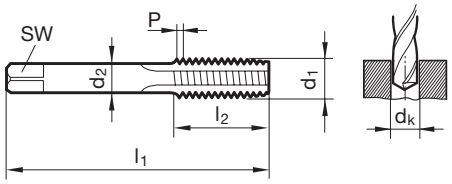
d1	P	d2	SW	dk	l1	l2
	mm	mm	mm	mm	mm	mm
M64	6,000	50,000	39,000	58,00	220,000	75,000
M68	6,000	50,000	39,000	62,00	220,000	75,000

Käsikierretapit, metrinen ISO-kierre

ISO2/6H | R

P	≤ 800
M	
K	
N	○
S	
H	

Materiaali	HSS		
Pinta	◯	◯	◯
Malli	N	N	N
Kuvaus	Sarja	V	F



DIN 352	Artikkelinro.	882	883	864

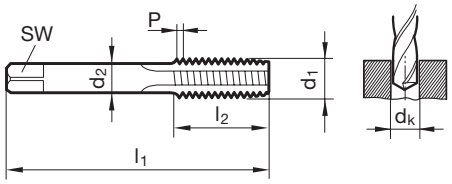
d1	P	d2	SW	dk	l1	l2
	mm	mm	mm	mm	mm	mm
M1	0,250	2,500	2,100	0,75	32,000	5,500
M1,1	0,250	2,500	2,100	0,85	32,000	5,500
M1,2	0,250	2,500	2,100	0,95	32,000	5,500
M1,4	0,300	2,500	2,100	1,10	32,000	7,000
M1,6	0,350	2,500	2,100	1,25	32,000	8,000
M1,7	0,350	2,500	2,100	1,35	32,000	8,000
M1,8	0,350	2,500	2,100	1,45	32,000	8,000
M2	0,400	2,800	2,100	1,60	36,000	8,000
M2,2	0,450	2,800	2,100	1,75	36,000	9,000
M2,3	0,400	2,800	2,100	1,90	36,000	9,000
M2,5	0,450	2,800	2,100	2,05	40,000	9,000
M2,6	0,450	2,800	2,100	2,15	40,000	9,000
M3	0,500	3,500	2,700	2,50	40,000	10,000
M3,5	0,600	4,000	3,000	2,90	45,000	12,000
M4	0,700	4,500	3,400	3,30	45,000	12,000
M4,5	0,750	6,000	4,900	3,70	50,000	14,000
M5	0,800	6,000	4,900	4,20	50,000	14,000
M6	1,000	6,000	4,900	5,00	56,000	16,000
M7	1,000	6,000	4,900	6,00	56,000	16,000
M8	1,250	6,000	4,900	6,80	63,000	17,000
M9	1,250	7,000	5,500	7,80	63,000	17,000
M10	1,500	7,000	5,500	8,50	70,000	20,000
M11	1,500	8,000	6,200	9,50	70,000	20,000
M12	1,750	9,000	7,000	10,20	75,000	24,000
M14	2,000	11,000	9,000	12,00	80,000	26,000
M16	2,000	12,000	9,000	14,00	80,000	26,000
M18	2,500	14,000	11,000	15,50	95,000	30,000
M20	2,500	16,000	12,000	17,50	95,000	32,000
M22	2,500	18,000	14,500	19,50	100,000	32,000
M24	3,000	18,000	14,500	21,00	110,000	36,000
M27	3,000	20,000	16,000	24,00	110,000	36,000
M30	3,500	22,000	18,000	26,50	125,000	40,000
M36	4,000	28,000	22,000	32,00	150,000	50,000
M42	4,500	32,000	24,000	37,50	150,000	56,000
M45	4,500	36,000	29,000	40,50	160,000	58,000

Käsikierretapit, metrinen ISO-kierre

ISO2/6H | L

P	≤ 800
M	
K	
N	○
S	
H	

Materiaali	HSS			
Pinta	◯	◯	◯	◯
Malli	N	N-LH	N-LH	N-LH
Kuvaus	Sarja	V	M	F



DIN 352 — Artikkelinro. **904** **905** **906** **907**

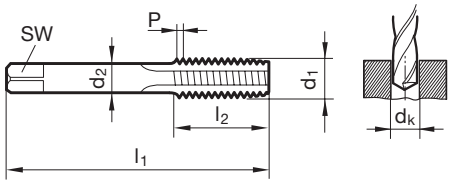
d1	P	d2	SW	dk	l1	l2
	mm	mm	mm	mm	mm	mm
M2	0,400	2,800	2,100	1,60	36,000	8,000
M2,2	0,450	2,800	2,100	1,75	36,000	9,000
M2,5	0,450	2,800	2,100	2,05	40,000	9,000
M3	0,500	3,500	2,700	2,50	40,000	10,000
M4	0,700	4,500	3,400	3,30	45,000	12,000
M5	0,800	6,000	4,900	4,20	50,000	14,000
M6	1,000	6,000	4,900	5,00	56,000	16,000
M8	1,250	6,000	4,900	6,80	63,000	17,000
M10	1,500	7,000	5,500	8,50	70,000	20,000
M12	1,750	9,000	7,000	10,20	75,000	24,000
M14	2,000	11,000	9,000	12,00	80,000	26,000
M16	2,000	12,000	9,000	14,00	80,000	26,000
M18	2,500	14,000	11,000	15,50	95,000	30,000

Käsikierretapit, metrinen ISO-kierre

ISO2/6H R

P	≤ 1000
M	•
K	•
N	•
S	
H	

Materiaali	HSS-E			
Pinta	○	○	○	○
Malli	VA	VA	VA	VA
Kuvaus	Sarja	V	M	F



DIN 352	Artikkelinro.	853	854	855	856

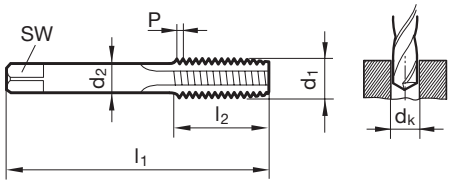
d1	P	d2	SW	dk	l1	l2
	mm	mm	mm	mm	mm	mm
M2	0,400	2,800	2,100	1,60	36,000	8,000
M2,5	0,450	2,800	2,100	2,05	40,000	9,000
M3	0,500	3,500	2,700	2,50	40,000	10,000
M4	0,700	4,500	3,400	3,30	45,000	12,000
M5	0,800	6,000	4,900	4,20	50,000	14,000
M6	1,000	6,000	4,900	5,00	56,000	16,000
M8	1,250	6,000	4,900	6,80	63,000	17,000
M10	1,500	7,000	5,500	8,50	70,000	20,000
M12	1,750	9,000	7,000	10,20	75,000	24,000
M16	2,000	12,000	9,000	14,00	80,000	26,000
M20	2,500	16,000	12,000	17,50	95,000	32,000

Käsikierretapit, metrinen ISO-kierre

ISO2/6H R

P	•
M	•
K	•
N	•
S	
H	

Materiaali	HSS-E			
Pinta	●	●	●	●
Malli	H	H	H	H
Kuvaus	Sarja	V	M	F



DIN 352 Artikkelinro. **857** **858** **859** **860**

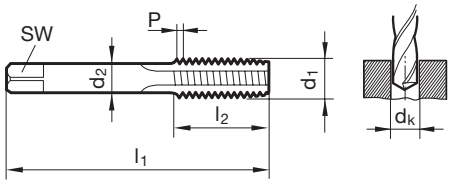
d1	P	d2	SW	dk	l1	l2
	mm	mm	mm	mm	mm	mm
M2	0,400	2,800	2,100	1,60	36,000	6,400
M2	0,400	2,800	2,100	1,60	36,000	8,000
M2,5	0,450	2,800	2,100	2,05	40,000	7,000
M2,5	0,450	2,800	2,100	2,05	40,000	9,000
M3	0,500	3,500	2,700	2,50	40,000	8,000
M3	0,500	3,500	2,700	2,50	40,000	10,000
M3,5	0,600	4,000	3,000	2,90	45,000	12,000
M4	0,700	4,500	3,400	3,30	45,000	9,000
M4	0,700	4,500	3,400	3,30	45,000	12,000
M5	0,800	6,000	4,900	4,20	50,000	14,000
M5	0,800	6,000	4,900	4,20	50,000	11,000
M6	1,000	6,000	4,900	5,00	56,000	16,000
M6	1,000	6,000	4,900	5,00	56,000	12,000
M8	1,250	6,000	4,900	6,80	63,000	17,000
M8	1,250	6,000	4,900	6,80	63,000	11,000
M10	1,500	7,000	5,500	8,50	70,000	20,000
M10	1,500	7,000	5,500	8,50	70,000	14,000
M12	1,750	9,000	7,000	10,20	75,000	24,000
M12	1,750	9,000	7,000	10,20	75,000	18,000
M14	2,000	11,000	9,000	12,00	80,000	26,000
M14	2,000	11,000	9,000	12,00	80,000	19,000
M16	2,000	12,000	9,000	14,00	80,000	26,000
M16	2,000	12,000	9,000	14,00	80,000	18,000
M18	2,500	14,000	11,000	15,50	95,000	30,000
M18	2,500	14,000	11,000	15,50	95,000	21,000
M20	2,500	16,000	12,000	17,50	95,000	32,000
M20	2,500	16,000	12,000	17,50	95,000	22,000

Käsikierretapit, metrinen ISO-kierre

ISO2/6H R

P	•
M	•
K	•
N	•
S	
H	

Materiaali	HSS-E-PM			
Pinta	●	●	●	●
Malli	H	H	H	H
Kuvaus	Sarja	V	M	F



DIN 352 Artikkelinro. **1818** **1819** **1820** **1821**

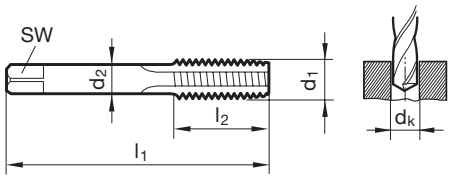
d1	P	d2	SW	dk	l1	l2
	mm	mm	mm	mm	mm	mm
M3	0,500	3,500	2,700	2,50	40,000	8,000
M3	0,500	3,500	2,700	2,50	40,000	10,000
M4	0,700	4,500	3,400	3,30	45,000	12,000
M4	0,700	4,500	3,400	3,30	45,000	9,000
M5	0,800	6,000	4,900	4,20	50,000	14,000
M5	0,800	6,000	4,900	4,20	50,000	11,000
M6	1,000	6,000	4,900	5,00	56,000	16,000
M6	1,000	6,000	4,900	5,00	56,000	12,000
M8	1,250	6,000	4,900	6,80	63,000	17,000
M8	1,250	6,000	4,900	6,80	63,000	11,000
M10	1,500	7,000	5,500	8,50	70,000	20,000
M10	1,500	7,000	5,500	8,50	70,000	14,000
M12	1,750	9,000	7,000	10,20	75,000	24,000
M12	1,750	9,000	7,000	10,20	75,000	18,000

Käsikierretapit, metrinen ISO-hienokierre

ISO2/6H | R

P	≤ 800
M	
K	
N	○
S	
H	

Materiaali	HSS		
Pinta	◯	◯	◯
Malli	N	N	N
Kuvaus	Sarja	V	F



DIN 2181 — Artikkelinro. **884** **885** **886**

d1	d2	SW	dk	l1	l2	koodinro.
	mm	mm	mm	mm	mm	
M2 x 0,25	2,800	2,100	1,75	36,000	8,000	2,001
M2,2 x 0,25	2,800	2,100	1,95	36,000	9,000	2,201
M2,3 x 0,25	2,800	2,100	2,05	36,000	9,000	2,301
M2,6 x 0,35	2,800	2,100	2,25	40,000	9,000	2,602
M3 x 0,35	3,500	2,700	2,65	40,000	8,000	3,002
M4 x 0,35	4,500	3,400	3,65	45,000	9,000	4,002
M4 x 0,5	4,500	3,400	3,50	45,000	9,000	4,003
M5 x 0,5	6,000	4,900	4,50	50,000	11,000	5,003
M6 x 0,5	6,000	4,900	5,50	56,000	12,000	6,003
M6 x 0,75	6,000	4,900	5,20	56,000	12,000	6,004
M7 x 0,75	6,000	4,900	6,20	56,000	14,000	7,004
M8 x 0,5	6,000	4,900	7,50	56,000	14,000	8,003
M8 x 0,75	6,000	4,900	7,20	56,000	14,000	8,004
M8 x 1	6,000	4,900	7,00	63,000	17,000	8,005
M9 x 1	7,000	5,500	8,00	63,000	17,000	9,005
M10 x 0,75	7,000	5,500	9,20	63,000	18,000	10,004
M10 x 1	7,000	5,500	9,00	63,000	18,000	10,005
M10 x 1,25	7,000	5,500	8,80	70,000	20,000	10,006
M11 x 1	8,000	6,200	10,00	63,000	18,000	11,005
M12 x 1	9,000	7,000	11,00	70,000	18,000	12,005
M12 x 1,25	9,000	7,000	10,80	70,000	20,000	12,006
M12 x 1,5	9,000	7,000	10,50	70,000	20,000	12,007
M14 x 1	11,000	9,000	13,00	70,000	20,000	14,005
M14 x 1,25	11,000	9,000	12,80	70,000	20,000	14,006
M14 x 1,5	11,000	9,000	12,50	70,000	20,000	14,007
M15 x 1	12,000	9,000	14,00	70,000	20,000	15,005
M15 x 1,5	12,000	9,000	13,50	70,000	20,000	15,007
M16 x 1	12,000	9,000	15,00	70,000	20,000	16,005
M16 x 1,5	12,000	9,000	14,50	70,000	20,000	16,007
M18 x 1	14,000	11,000	17,00	80,000	22,000	18,005
M18 x 1,5	14,000	11,000	16,50	80,000	22,000	18,007
M18 x 2	14,000	11,000	16,00	80,000	22,000	18,008
M20 x 1	16,000	12,000	19,00	80,000	22,000	20,005
M20 x 1,5	16,000	12,000	18,50	80,000	22,000	20,007
M20 x 2	16,000	12,000	18,00	80,000	22,000	20,008
M22 x 1	18,000	14,500	21,00	80,000	22,000	22,005

DIN 2181 Artikkelinro. **884** **885** **886**

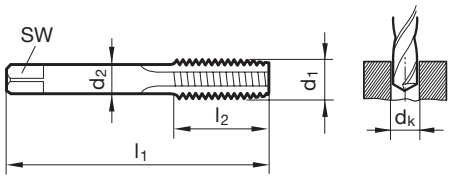
d1	d2	SW	dk	l1	l2	koodinro.
	mm	mm	mm	mm	mm	
M22 x 1,5	18,000	14,500	20,50	80,000	22,000	22,007
M22 x 2	18,000	14,500	20,00	80,000	22,000	22,008
M24 x 1	18,000	14,500	23,00	90,000	22,000	24,005
M24 x 1,5	18,000	14,500	22,50	90,000	22,000	24,007
M24 x 2	18,000	14,500	22,00	90,000	22,000	24,008
M26 x 1,5	18,000	14,500	24,50	90,000	22,000	26,007
M27 x 1,5	20,000	16,000	25,50	90,000	22,000	27,007
M27 x 2	20,000	16,000	25,00	90,000	22,000	27,008
M30 x 1	22,000	18,000	29,00	90,000	22,000	30,005
M30 x 1,5	22,000	18,000	28,50	90,000	22,000	30,007
M30 x 2	22,000	18,000	28,00	90,000	22,000	30,008
M32 x 1,5	22,000	18,000	30,50	90,000	22,000	32,007
M34 x 1,5	28,000	22,000	32,50	100,000	25,000	34,007
M35 x 1,5	28,000	22,000	33,50	100,000	25,000	35,007
M36 x 1,5	28,000	22,000	34,50	100,000	25,000	36,007
M38 x 1,5	28,000	22,000	36,50	100,000	25,000	38,007
M45 x 1,5	36,000	29,000	43,50	110,000	25,000	45,007
M52 x 1,5	40,000	32,000	50,50	140,000	32,000	52,007

Käsikierretapit UNC-kierteille

2B R

P	≤ 800
M	
K	
N	○
S	
H	

Materiaali	HSS			
Pinta	○	○	○	○
Malli	N	N	N	N
Kuvaus	Sarja	V	M	F



~DIN 352	Artikkelinro.	981	982	983	984

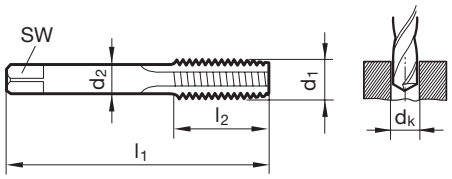
d1	d2	SW	dk	l1	l2	koodinro.
	mm	mm	mm	mm	mm	
1 - 64	2,800	2,100	1,55	36,000	8,000	1,854
2 - 56	2,800	2,100	1,85	36,000	9,000	2,184
3 - 48	2,800	2,100	2,10	40,000	9,000	2,515
4 - 40	3,500	2,700	2,35	40,000	11,000	2,845
5 - 40	4,000	2,700	2,65	40,000	11,000	3,175
5 - 40	3,500	2,700	2,65	40,000	11,000	3,175
6 - 32	4,000	3,000	2,85	45,000	12,000	3,505
8 - 32	4,500	3,400	3,50	45,000	12,000	4,166
10 - 24	6,000	4,900	3,90	50,000	14,000	4,826
12 - 24	6,000	4,900	4,50	56,000	16,000	5,486
1/4 - 20	6,000	4,900	5,10	56,000	16,000	6,350
5/16 - 18	6,000	4,900	6,60	63,000	18,000	7,938
3/8 - 16	7,000	5,500	8,00	70,000	20,000	9,525
7/16 - 14	8,000	6,200	9,40	70,000	22,000	11,113
1/2 - 13	9,000	7,000	10,80	75,000	25,000	12,700
9/16 - 12	11,000	9,000	12,20	80,000	28,000	14,288
5/8 - 11	12,000	9,000	13,50	80,000	30,000	15,875
3/4 - 10	16,000	11,000	16,50	95,000	33,000	19,050
3/4 - 10	14,000	11,000	16,50	95,000	33,000	19,050
7/8 - 9	18,000	14,500	19,50	100,000	35,000	22,225
1 - 8	18,000	14,500	22,25	110,000	38,000	25,400
1 1/8 - 7	22,000	18,000	25,00	125,000	44,000	28,575
1 1/4 - 7	22,000	18,000	28,00	125,000	44,000	31,750
1 3/8 - 6	28,000	22,000	30,75	150,000	50,000	34,925
1 1/2 - 6	32,000	22,000	34,00	150,000	50,000	38,100
1 3/4 - 5	36,000	29,000	39,50	160,000	58,000	44,450
2 - 4 1/2	40,000	32,000	45,00	180,000	65,000	50,800

Käsikierretapit UNF-kierteille

2B R

P	≤ 800
M	
K	
N	○
S	
H	

Materiaali	HSS		
Pinta	◯	◯	◯
Malli	N	N	N
Kuvaus	Sarja	V	F



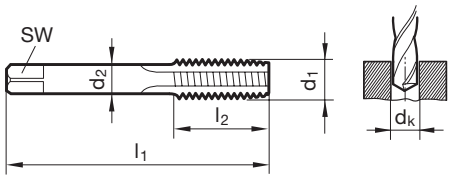
~DIN 2181	Artikkelinro.	985	986	987

d1	d2	SW	dk	l1	l2	koodinro.
	mm	mm	mm	mm	mm	
1 - 72	2,800	2,100	1,55	36,000	8,000	1,854
2 - 64	2,800	2,100	1,85	36,000	9,000	2,184
3 - 56	2,800	2,100	2,15	40,000	9,000	2,515
4 - 48	3,500	2,700	2,40	40,000	8,000	2,845
5 - 44	3,500	2,700	2,70	40,000	8,000	3,175
5 - 44	4,000	2,700	2,70	40,000	8,000	3,175
6 - 40	4,000	3,000	2,95	45,000	9,000	3,505
8 - 36	4,500	3,400	3,50	45,000	10,000	4,166
8 - 36	4,500	3,400	3,50	45,000	12,000	4,166
10 - 32	6,000	4,900	4,10	50,000	14,000	4,826
12 - 28	6,000	4,900	4,60	56,000	16,000	5,486
1/4 - 28	6,000	4,900	5,50	56,000	17,000	6,350
5/16 - 24	6,000	4,900	6,90	63,000	17,000	7,938
3/8 - 24	7,000	5,500	8,50	63,000	18,000	9,525
7/16 - 20	8,000	6,200	9,90	70,000	20,000	11,113
7/16 - 20	8,000	6,200	9,90	70,000	18,000	11,113
1/2 - 20	9,000	7,000	11,50	70,000	20,000	12,700
9/16 - 18	11,000	9,000	12,90	70,000	20,000	14,288
5/8 - 18	12,000	9,000	14,50	70,000	20,000	15,875
3/4 - 16	16,000	11,000	17,50	80,000	22,000	19,050
3/4 - 16	14,000	11,000	17,50	80,000	22,000	19,050
7/8 - 14	18,000	14,500	20,40	80,000	22,000	22,225
1 - 12	18,000	14,500	23,25	90,000	22,000	25,400

Käsikierretapit BSW-kierteille

Materiaali	HSS			
Pinta	◯	◯	◯	◯
Malli	N	N	N	N
Kuvaus	Sarja	V	M	F

P	≤ 800
M	
K	
N	○
S	
H	



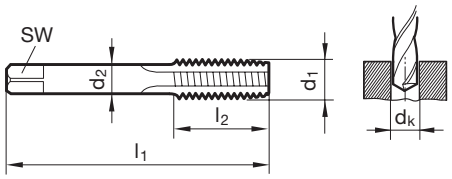
~DIN 352	Artikkelinro.	954	955	956	957

d1	P	d2	SW	dk	l1	l2	koodinro.
	G/inch	mm	mm	mm	mm	mm	
W3/32	48,000	2,800	2,100	1,80	40,000	9,000	2,381
W1/8	40,000	3,500	2,700	2,50	40,000	11,000	3,175
W1/8	40,000	4,000	2,700	2,50	40,000	11,000	3,175
W5/32	32,000	4,500	3,400	3,20	45,000	12,000	3,969
W3/16	24,000	6,000	4,900	3,60	50,000	14,000	4,762
W7/32	24,000	6,000	4,900	4,50	56,000	16,000	5,556
W1/4	20,000	6,000	4,900	5,10	56,000	16,000	6,350
W5/16	18,000	6,000	4,900	6,50	63,000	18,000	7,938
W3/8	16,000	7,000	5,500	7,90	70,000	20,000	9,525
W7/16	14,000	8,000	6,200	9,20	70,000	22,000	11,113
W1/2	12,000	9,000	7,000	10,50	75,000	25,000	12,700
W9/16	12,000	11,000	9,000	12,00	80,000	28,000	14,287
W5/8	11,000	12,000	9,000	13,50	80,000	30,000	15,876
W3/4	10,000	16,000	11,000	16,25	95,000	33,000	19,051
W1	8,000	18,000	14,500	22,00	110,000	38,000	25,401
W1 1/2	6,000	32,000	22,000	33,50	150,000	50,000	38,101
W1 5/8	5,000	32,000	24,000	35,50	150,000	58,000	41,277
W1 3/4	5,000	36,000	29,000	39,00	160,000	58,000	44,452
W2	4,500	40,000	32,000	44,50	180,000	65,000	50,802

Käsikierretapit BSP-kierteille

P	≤ 800
M	
K	
N	○
S	
H	

Materiaali	HSS		
Pinta	◯	◯	◯
Malli	N	N	N
Kuvaus	Sarja	V	F



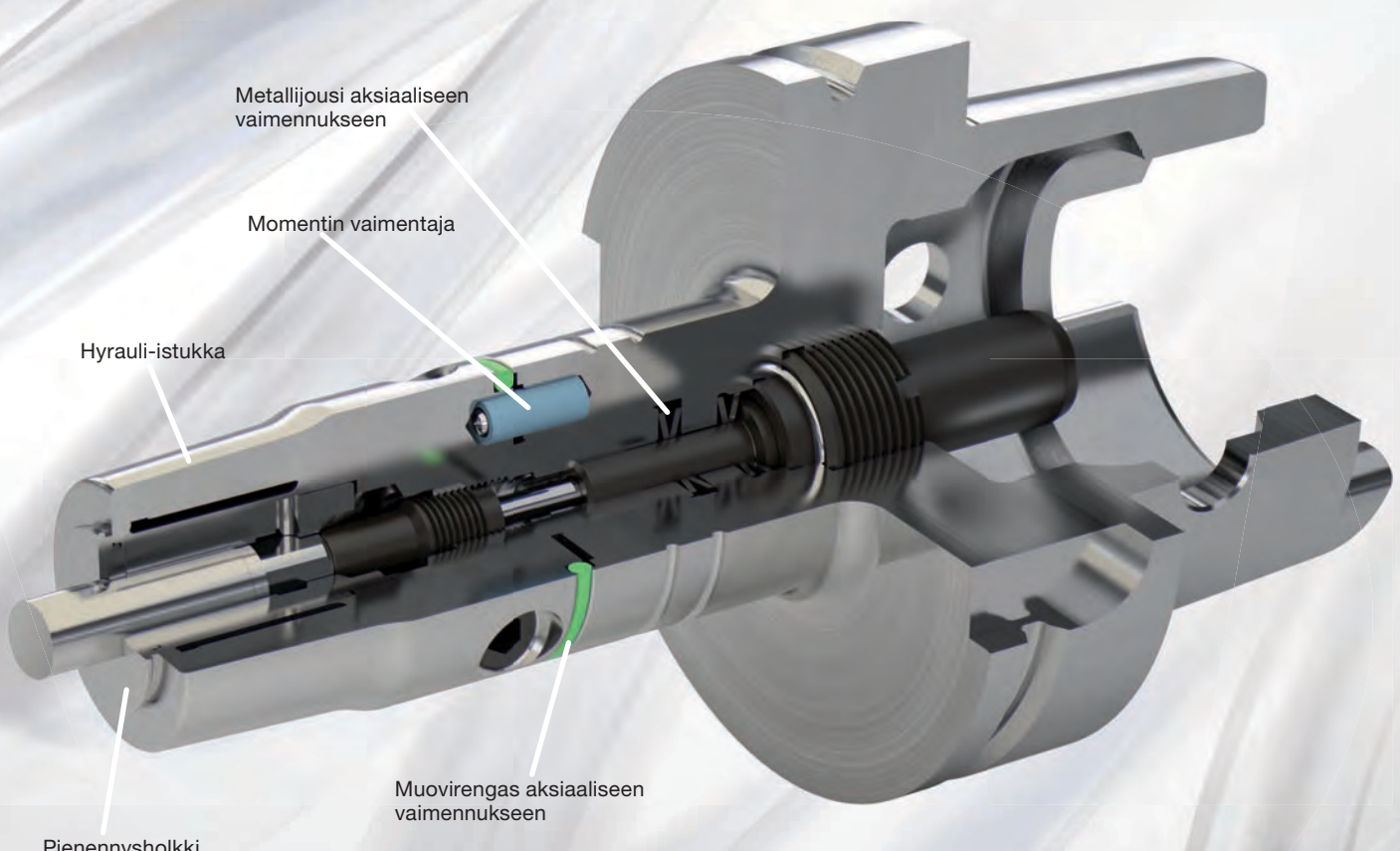
DIN 5157 — Artikkelinro. **958** **959** **960**

d1	P	d2	SW	dk	l1	l2	koodinro.
	G/inch	mm	mm	mm	mm	mm	
G1/8	28,000	7,000	5,500	8,80	63,000	20,000	9,728
G1/8	28,000	7,000	5,500	8,80	63,000	18,000	9,728
G1/4	19,000	11,000	9,000	11,80	70,000	20,000	13,157
G3/8	19,000	12,000	9,000	15,25	70,000	20,000	16,662
G3/8	19,000	12,000	9,000	15,25	70,000	22,000	16,662
G1/2	14,000	16,000	12,000	19,00	80,000	22,000	20,955
G5/8	14,000	18,000	14,500	21,00	80,000	22,000	22,911
G3/4	14,000	20,000	16,000	24,50	90,000	22,000	26,441
G1	11,000	25,000	20,000	30,75	100,000	25,000	33,249
G1 1/4	11,000	32,000	24,000	39,50	125,000	40,000	41,910
G1 3/8	11,000	36,000	29,000	41,75	125,000	40,000	44,323
G1 1/2	11,000	36,000	29,000	45,25	140,000	40,000	47,803
G1 3/4	11,000	40,000	32,000	51,00	140,000	40,000	53,746
G2	11,000	45,000	35,000	57,00	160,000	40,000	59,614

IERTEY TYSIS TUKAT

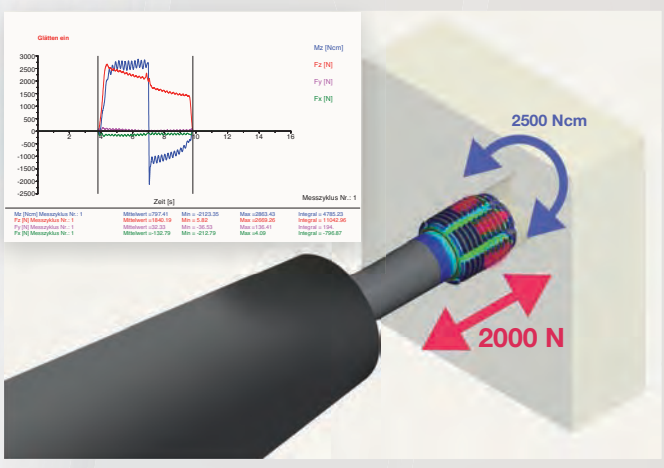
GUHROSYNC

HELPPO TIE TÄYDELLISEEN KIERTEESEEN

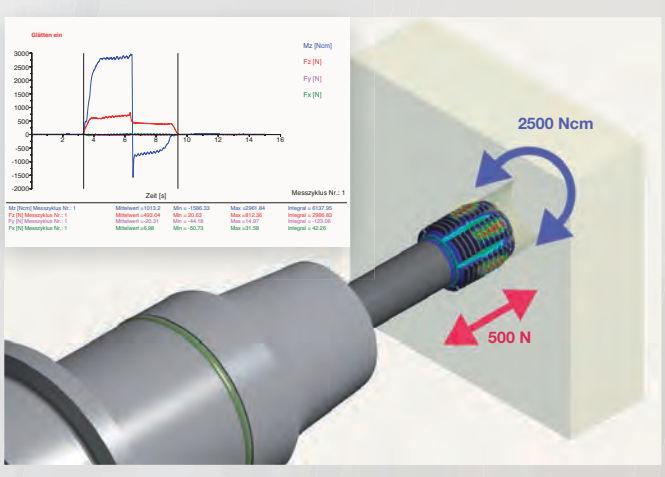


Älykäs suunnittelu:
Huolimatta vaimennus ja pehmennyselementeistä (aksiaalisten ja radiaalisten voimien pienentäminen kierteytyksessä), tilaa on myös perinteiselle ja pisara voitelu järjestelmälle sekä pituuden säätöruuville.

Pitkäkestoisen metallijousen ja muovisten vaimennuselementtien yhdistelmä pientää huomattavasti aksiaalisia ja radiaalisia voimia.



Rigid chuck

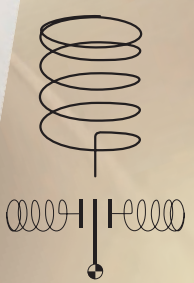


GUHROSync

PARANTUNUT TYÖKALUN KESTOIKÄ

PAREMPI KIERTEEN LAATU

PAREMPI PROSESSIN LUOTETTAVUUS



Nähtävissä: Jousi symboli GÜHROSync'ssä näyttää aksiaalisen ja radiaalisen voiman vaikutuksen.

AKSIAALISTEN JA RADIAALISTEN VOIMIEN PIENENTYMINEN

KOMPENSOI SYNKRONISAATIOVIRHEITÄ

NOPEA JA TARKKA TYOKALUN PITUUDEN ASETUS

MODULAARINEN SUUNNITTELU VAKIO JA ERIKOIS TYÖKALUILLE

PIDEMPI TYÖKALUN KESTOIKÄ

LYHYEMPI TYÖKIERTO

PAREMPI KIERTEEN LAATU

PAREMPI PROSESSIN LUOTETTAVUUS

PARASTA MOLEMMISTA JÄRJESTELMISTÄ

HYDRAULI- & SYNKROKIERTEYTYSISTUKOIDEN
EDUT YHDESSÄ TYÖKALUPITIMESSÄ

GUHROSync Synkro-kierteytysistukat

Kuristeistukat

4736 HSK-A

4726 TSG 3000 HSK-A

4758 HSK-C

4738 ISO-kartio

Hydrauliset synkrokierteytysistukat lisätyllä kiinnitysvoimalla

4221 MAS-BT

4299 HSK-A

4267 HSK-C

4213 ISO-kartio

4949 Nesteen syöttöputki HSK-A perinteiselle jäähdytykselle

Hydrauliset synkrokierteytysistukat

4601 HSK-A

4925 Vetopultit ISO-kartio

4926

Hydrauliset synkrokierteytysistukat

4576 ISO-kartio

4927 Vetopultit MAS/BT

4928

Hydrauliset synkrokierteytysistukat

4577 MAS-BT

4525

Hydro-Ø 12 / Ø 20
Lieriövartiset hydrauliset synkrokierteytysistukat Ø 20 jäähdytyskanavalla

4364

Säätöruuvit „taso“ synkroistukoille perinteisellä jäähdytyksellä

4605 Pienennysholkki tiivistetty

4606 GÜHROJET pienennysholkit

Kierretappi:
varren halkaisija x nelikantti

4949
Nesteen syöttöputki HSK-A perinteiselle jäähdytykselle (automaattinen työkaluvaihto)

4927
4928
Vetopultit BT

4925
4926
Vetopultit ISO-kartio

4949
Nesteen syöttöputki HSK-A perinteiselle jäähdytykselle (automaattinen työkaluvaihto)

4949
Nesteen syöttöputki HSK-A perinteiselle jäähdytykselle (automaattinen työkaluvaihto)

4328
Pikavaihtoistukka HSK-A jäähdytyskanavalla

4233
Whistle-Notch MAS/BT pitimet

4322
Whistle-Notch ISO-kartio pitimet

4329
Weldon
4334
Whistle-Notch HSK-A pitimet
4343
Peruspidin HSK-A

4327
Synkroistukka HSK-A jäähdytyskanavalla

4340
Pikavaihtoistukka ilman jäähdytyskanavaa

4342
Pikavaihtoistukka jäähdytyskanavalla

4326
Lieriövartinen synkroistukka jäähdytyskanavalla

4206
Adapteri pikavaihtoistukkaan

4364
Säätöruuvit „taso“ synkroistukoille jäähdytyskanavalla

4308
Kierreholkki

4335
Tiiviste kiinnitysmuttereille

Kierretappi

Kierretappi

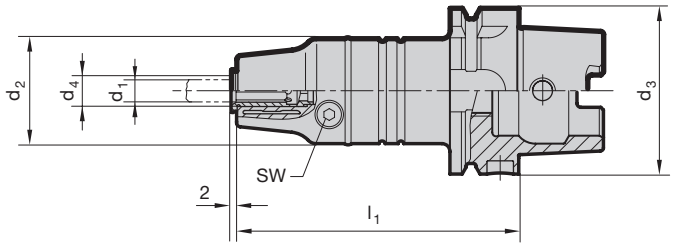
Tuote tietoa

- HSK-A ISO 12164-1/DIN 69893-1 mukaan
- kompensoi synkronointivirheitä
- varmistaa kierteen hyvän laadun ja optimaalisen työkalun kestoiän
- minimaalinen pituuden kompensointi jännityksessä ja tiivistyksessä synkrokaran ja tapin välillä
- vähentää mahdollisia aksiaalisen voimien lisääntymistä minimiin
- sopii hydrauliseen kiinitykseen käytettäessä pienennysholkkeja
- pituuden säätöruuvi sallii 3mm säädön
- sopii läpijäähdytykselle, tunnistaa mustasta värirenkaasta
- max. nestepaine 80 bar

Toimitus

- sisältää 6-kulma-avaimen art.no. 4912
- sisältää avaimen säätöruuveille

- tilaa säätöruuvi „taso“ art.no. 4364 erikseen
- tilaa pienennysholkit art.no. 4505 tai 4506erikseen
- for-conventi-istukknr. 4949 Satz Nrm. työkaluvaihto



GÜHROSync

Artikkelinro. **4601**

HSK-A d_3	d_4 mm	for shank Ø d_1 x VKT	kierteelle	d_2 mm	l_1 mm	tension/ compr. ± mm	SW	kg	**Koodinro.**
63	12.00	2.8-10	M3-M12	40	106.5	0.3	4	1.5	12.063
63	20.00	6-16	M8-M20	40	120.5	0.3	5	1.6	20.063
100	12.00	2.8-10	M3-M12	40	113.0	0.3	4	2.8	12.100
100	20.00	6-16	M8-M20	40	127.0	0.3	5	2.9	20.100

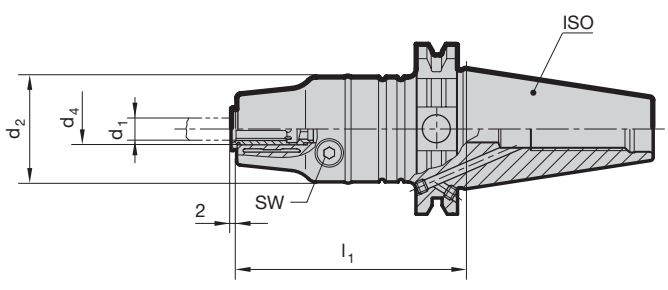
Tuote tietoa

- ISO kartio DIN ISO 7388-1 muoto AD ilman jäähdytysneste olaketta
- ISO kartio DIN ISO 7388-1 muoto AD/AF (AD/B)
- malli B, kierresokat porauksissa
- kompensoi synkronointivirheitä
- varmistaa kierteen hyvän laadun ja optimaalisen työkalun kestoiän
- minimaalinen pituuden kompensointi jännityksessä ja tiivistyksessä synkrokaran ja tapin välillä
- vähentää mahdollisia aksiaalisen voimien lisääntymistä minimiin
- sopii hydrauliseen kiinitykseen käytettäessä pienennysholkkeja
- pituuden säätöruuvi sallii 3mm säädön
- sopii läpijäähdytykselle, tunnistaa mustasta värirenkaasta
- max. nestepaine 80 bar

Toimitus

- sisältää 6-kulma-avaimen art.no. 4912
- sisältää avaimen säätöruuveille

- tilaa säätöruuvi „taso“ art.no. 4364 erikseen
- tilaa pienennysholkit art.no. 4505 tai 4506erikseen
- otilaa vetopultit, art.no. 4925 tai 4926, erikseen



GÜHROSync

Artikkelinro. **4576**

SK	d_4 mm	for shank Ø d_1	kierteelle	d_2 mm	l_1 mm	tension/ compr. ± mm	SW	kg	**Koodinro.**
30	12.00	2.8-10	M3-M12	40	81	0.3	4	0.8	12,030
30	20.00	6-16	M8-M20	40	95	0.3	5	0.9	20,030
40	12.00	2.8-10	M3-M12	40	85	0.3	4	1.3	12,040
40	20.00	6-16	M8-M20	40	99	0.3	5	1.4	20,040

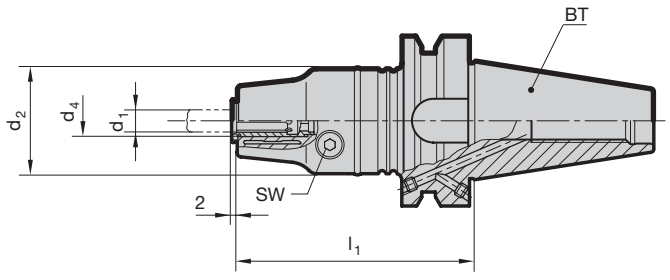
Tuote tietoa

- MAS/BT30 DIN ISO 7388-2 muoto JD muk. ilman nesteen syöttöä kauluksesta
- MAS/BT40 DIN ISO 7388-2 muoto JD/JF (muoto AD/B)
- MAS/BT40 JIS B 6339-2 muoto JD/JF (muoto AD/B)
- malli B, kierresokat porauksissa
- kompensoi synkronointivirheitä
- varmistaa kierteen hyvän laadun ja optimaalisen työkalun kestoiän
- minimaalinen pituuden kompensointi jännityksessä ja tiivistyksessä synkrokaran ja tapin välillä
- vähentää mahdollisia aksiaalisen voimien lisääntymistä minimiin
- sopii hydrauliseen kiinitykseen käytettäessä pienennysholkkeja
- pituuden säätöruuvi sallii 3mm säädön
- sopii läpijäähdytykselle, tunnistaa mustasta värirenkaasta
- max. nestepaine 80 bar

Toimitus

- sisältää 6-kulma-avaimen art.no. 4912
- sisältää avaimen säätöruuveille

- tilaa säätöruuvi „taso“ art.no. 4364 erikseen
- tilaa pienennysholkit art.no. 4505 tai 4506erikseen
- tilaa vetopultit, art.no. 4925 tai 4926, erikseen



GÜHROSync

Artikkelinro. **4577**

BT	d_4 mm	for shank Ø d_1	kierteelle	d_2 mm	l_1 mm	tension/ compr. ± mm	SW	kg	Koodinro.
30	12.00	2.8-10	M3-M12	40	81	0.3	4	0.8	12,030
30	20.00	6-16	M8-M20	40	95	0.3	5	0.9	20,030
40	12.00	2.8-10	M3-M12	40	85	0.3	4	1.3	12,040
40	20.00	6-16	M8-M20	40	99	0.3	5	1.4	20,040

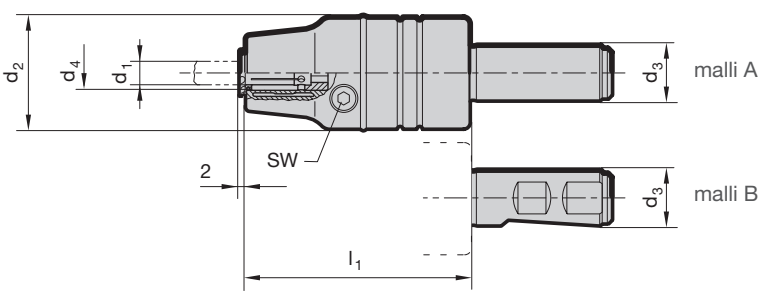
Tuote tietoa

- kompensoi synkronointivirheitä
- varmistaa kierteen hyvän laadun ja optimaalisen työkalun kestoiän
- minimaalinen pituuden kompensointi jännityksessä ja tiivistyksessä synkrokaran ja tapin välillä
- vähentää mahdollisia aksiaalisen voimien lisääntymistä minimiin
- sopii hydrauliseen kiinitykseen käytettäessä pienennysholkkeja
- pituuden säätöruuvi sallii 3mm säädön
- pitimen varsi DIN 1835 mukaan, soveltuu hyrauli-, kuriste- ja voimaistukoille
- sopii läpijäähdytykselle, tunnistaa mustasta värirenkaasta
- max. nestepaine 80 bar

Toimitus

- sisältää 6-kulma-avaimen art.no. 4912
- sisältää avaimen säätöruuveille

- tilaa säätöruuvi „taso“ art.no. 4364 erikseen
- tilaa pienennysholkit art.no. 4505 tai 4506erikseen



GÜHROSync

Artikkelinro. **4525**

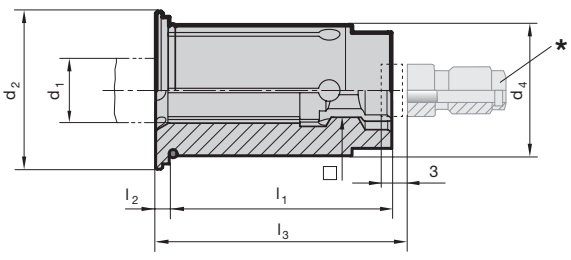
d_3 h6 mm	d_4 mm	malli	for shank Ø d_1	kierteelle	d_2 mm	l_1 mm	tension/ compr. ± mm	SW	kg	Koodinro.
20	12.00	A	2.8-10	M3-M12	40	80	0.3	4	0.7	12,020
20	20.00	A	6-16	M8-M20	40	94	0.3	5	0.8	20,020
25	12.00	B	2.8-10	M3-M12	40	80	0.3	4	0.7	12,025
25	20.00	B	6-16	M8-M20	40	94	0.3	5	0.8	20,025

Tuote tietoa

- sopii tappien joiden varressa nelikantti kiinnitämiseen GÜHROSync- ja holkki-istukoihin
- kiinnitys-Ø työkalun varren toleransseille h6-h9
- otsapinta suljettu, siksi vuotovapaa JK kierretyökaluille
- hyvä kiinitys
- tapinpään säätöruuvi
- pituuden säätöruuvi sallii 3mm säädön

Toimitus

- tilaa säätöruuvi „taso“ art.no. 4364 erikseen
- tilaa MQL asetusruuvit art.no. 4305 erikseen



Artikkelinro. **4605**

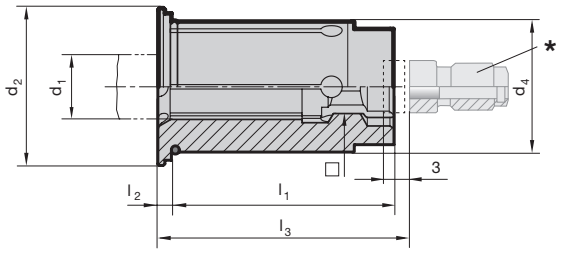
d_4 mm	d_1 mm	□ mm	Standardi	d_1 inch	□ inch	d_2 mm	l_1 mm	l_2 mm	l_3 mm	*tilaa säätö-ruuvi	kierteelle	Koodinro.
12.00	2.800	2.100	DIN	-	-	16.50	29.00	2.00	-	-	M2 / M4	2,812
12.00	3.500	2.700	DIN	-	-	16.50	29.00	2.00	-	-	M3 / M4.5 / M5	3,512
12.00	4.000	3.200	JIS	-	-	16.50	29.00	2.00	-	-	M3	4,012
12.00	4.500	3.400	DIN	-	-	16.50	29.00	2.00	26.00	4364 5.020	M4 / M6	4,512
12.00	4.928	3.861	ANSI	0.194	0.152	16.50	29.00	2.00	26.00	4364 5.020	10-24 & 10-32	4,912
12.00	5.000	4.000	JIS	-	-	16.50	29.00	2.00	26.00	4364 5.020	M4	5,012
12.00	5.500	4.500	JIS	-	-	16.50	29.00	2.00	26.00	4364 5.020	M5	5,512
12.00	5.588	4.191	ANSI	0.220	0.165	16.50	29.00	2.00	26.00	4364 5.020	12-24 & 12-28	15,512
12.00	6.000	4.500	JIS	-	-	16.50	29.00	2.00	26.00	4364 5.020	M6	16,012
12.00	6.000	4.900	DIN	-	-	16.50	29.00	2.00	26.00	4364 6.020	M4.5 / M5 / M6 / M8	6,012
12.00	6.200	5.000	JIS	-	-	16.50	29.00	2.00	26.00	4364 6.020	M7 / M8	6,212
12.00	6.477	4.851	ANSI	0.255	0.191	16.50	29.00	2.00	26.00	4364 6.020	1/4-20 & 1/4-28	6,412
12.00	7.000	5.500	DIN / JIS	-	-	16.50	29.00	2.00	26.00	4364 7.020	M7 / M9 / M10	7,012
12.00	7.938	5.944	ANSI	0.3125	0.234	16.50	29.00	2.00	31.00	4364 7.020	1/16-27	7,912
12.00	8.000	6.200	DIN	-	-	16.50	29.00	2.00	31.00	4364 8.020	M8 / M11	8,012
12.00	8.000	6.500	JIS	-	-	16.50	29.00	2.00	31.00	4364 8.020	M11	18,012
12.00	8.077	6.045	ANSI	0.318	0.238	16.50	29.00	2.00	31.00	4364 7.020	5/16-18 & 5/16-24	28,012
12.00	8.204	6.147	ANSI	0.323	0.242	16.50	29.00	2.00	31.00	4364 7.020	7/16-14 & 7/16-20	8,212
12.00	8.500	6.500	JIS	-	-	16.50	29.00	2.00	31.00	4364 8.020	M12	8,512
12.00	9.000	7.000	DIN	-	-	16.50	29.00	2.00	32.00	4364 9.020	M9 / M12	9,012
12.00	9.322	6.985	ANSI	0.367	0.275	16.50	29.00	2.00	32.00	4364 9.020	1/2-13 & 1/2-20	9,312
12.00	9.677	7.264	ANSI	0.381	0.286	16.50	29.00	2.00	33.00	4364 9.020	3/8-16 & 3/8-24	9,612
12.00	10.000	8.000	DIN	-	-	16.50	29.00	2.00	36.00	4364 10.020	M10	10,012

Tuote tietoa

- sopii tappien joiden varressa nelikantti kiinnitämiseen GÜHROSync- ja holkki-istukoihin
- kiinnitys-Ø työkalun varren toleransseille h6-h9
- otsapinta suljettu, siksi vuotovapaa JK kierretyökaluille
- hyvä kiinitys
- tapinpään säätöruuvi
- pituuden säätöruuvi sallii 3mm säädön

Toimitus

- tilaa säätöruuvi „taso“ art.no. 4364 erikseen
- tilaa MQL asetusruuvit art.no. 4305 erikseen



Artikkelinro. **4605**

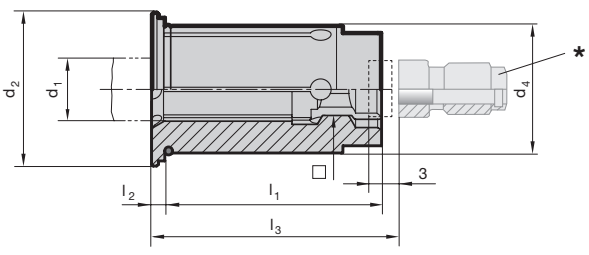
d_4 mm	d_1 mm	□ mm	Standardi	d_1 inch	□ inch	d_2 mm	l_1 mm	l_2 mm	l_3 mm	* tilaa säätö-ruuvi	kierteelle	**Koodinro.**
20.00	6.000	4.500	JIS	-	-	24.10	34.00	2.00	26.00	4364 6.032	M6	26,020
20.00	6.000	4.900	DIN	-	-	24.10	34.00	2.00	26.00	4364 6.032	M4.5/M5/M6/M8	6,020
20.00	6.200	5.000	JIS	-	-	24.10	34.00	2.00	26.00	4364 6.032	M7 / M8	6,220
20.00	6.477	4.851	ANSI	0.255	0.191	24.10	34.00	2.00	26.00	4364 6.032	1/4-20 & 1/4-28	6,420
20.00	7.000	5.500	DIN / JIS	-	-	24.10	34.00	2.00	26.00	4364 7.032	M7 / M9 / M10	7,020
20.00	7.938	5.944	ANSI	0.3125	0.234	24.10	34.00	2.00	31.00	4364 7.032	1/16-27	7,920
20.00	8.000	6.200	DIN	-	-	24.10	34.00	2.00	31.00	4364 8.032	M8 / M11	8,020
20.00	8.000	6.500	JIS	-	-	24.10	34.00	2.00	31.00	4364 8.032	M11	18,020
20.00	8.077	6.045	ANSI	0.318	0.238	24.10	34.00	2.00	31.00	4364 8.032	5/16-18 & 5/16-24	28,020
20.00	8.204	6.147	ANSI	0.323	0.242	24.10	34.00	2.00	31.00	4364 8.032	7/16-14 & 7/16-20	8,220
20.00	8.500	6.500	JIS	-	-	24.10	34.00	2.00	31.00	4364 8.032	M12	8,520
20.00	9.000	7.000	DIN	-	-	24.10	34.00	2.00	32.00	4364 9.032	M9 / M12	9,020
20.00	9.322	6.985	ANSI	0.367	0.275	24.10	34.00	2.00	32.00	4364 8.032	1/2-13 & 1/2-20	9,320
20.00	9.677	7.264	ANSI	0.381	0.286	24.10	34.00	2.00	33.00	4364 9.032	3/8-16 & 3/8-24	9,620
20.00	10.000	8.000	DIN	-	-	24.10	34.00	2.00	36.00	4364 10.032	M10	10,020
20.00	10.500	8.000	JIS	-	-	24.10	34.00	2.00	36.00	4364 10.032	M14	10,520
20.00	10.897	8.179	ANSI	0.4290	0.3220	24.10	34.00	2.00	35.00	4364 10.032	9/16-12 & 9/16-18	10,820
20.00	11.000	9.000	DIN	-	-	24.10	34.00	2.00	37.00	4364 11.032	M14	11,020
20.00	12.000	9.000	DIN	-	-	24.10	34.00	2.00	37.00	4364 11.032	M12 / M16	12,020
20.00	12.192	9.144	ANSI	0.480	0.36	24.10	34.00	2.00	36.00	4364 11.032	5/8-11 & 5/8-18	12,120
20.00	12.500	10.000	JIS	-	-	24.10	34.00	2.00	38.00	4364 11.032	M16	12,520
20.00	13.000	10.000	JIS	-	-	24.10	34.00	2.00	38.00	4364 11.032	M17	13,020
20.00	14.000	11.000	DIN / JIS	-	-	24.10	34.00	2.00	39.00	4364 11.032	M18	14,020
20.00	14.288	10.693	ANSI	0.5625	0.421	24.10	34.00	2.00	38.00	4364 11.032	1/4-18	14,220
20.00	14.986	11.227	ANSI	0.590	0.442	24.10	34.00	2.00	39.00	4364 11.032	3/4-10 & 3/4-16	14,920
20.00	15.000	12.000	JIS	-	-	24.10	34.00	2.00	40.00	4364 16.032	M20	15,020
20.00	16.000	12.000	DIN	-	-	24.10	34.00	2.00	41.00	4364 16.032	M20	16,020

Tuote tietoa

- sopii tappien joiden varressa nelikantti kiinnitämiseen GÜHROSync- ja holkki-istukoihin
- kiinnitys-Ø työkalun varren toleransseille h6-h9
- hyvä kiinitys pienenysholkkeihin GÜHRO-Synch istukoihin
- jäähdytysurilla ulkoiselle jäähdytykselle, prosessin ja työkalun parempi toiminta
- kertyvä purse peseytyy jatkuvasti pois
- tapinpään säätöruuvi
- pituuden säätöruuvi sallii 3mm säädön

Toimitus

- tilaa MQL asetusruuvit art.no. 4305 erikseen
- tilaa säätöruuvi „taso“ art.no. 4364 erikseen



GÜHROJET

Artikkelinro. **4606**

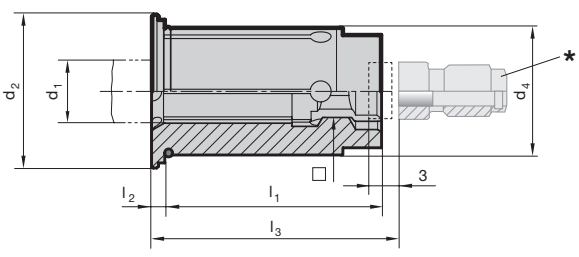
d_4 mm	d_1 mm	□ mm	Standardi	d_1 inch	□ inch	d_2 mm	l_1 mm	l_2 mm	l_3 mm	* tilaa säätö-ruuvi	kierteelle	**Koodinro.**
12.00	2.800	2.100	DIN	-	-	16.50	29.00	2.00	-	-	M2 / M4	2.812
12.00	3.500	2.700	DIN	-	-	16.50	29.00	2.00	-	-	M3 / M4.5 / M5	3.512
12.00	4.000	3.200	JIS	-	-	16.50	29.00	2.00	-	-	M3	4.012
12.00	4.500	3.400	DIN	-	-	16.50	29.00	2.00	-	-	M4 / M6	4.512
12.00	4.928	3.861	ANSI	0.194	0.152	16.50	29.00	2.00	-	-	10-24 & 10-32	4.912
12.00	5.000	4.000	JIS	-	-	16.50	29.00	2.00	-	-	M4	5.012
12.00	5.500	4.500	JIS	-	-	16.50	29.00	2.00	-	-	M5	5.512
12.00	5.588	4.191	ANSI	0.220	0.165	16.50	29.00	2.00	-	-	12-24 & 12-28	15.512
12.00	6.000	4.500	JIS	-	-	16.50	29.00	2.00	26.00	6.020	M6	16.012
12.00	6.000	4.900	DIN	-	-	16.50	29.00	2.00	26.00	6.020	M4.5 / M5 / M6 / M8	6.012
12.00	6.200	5.000	JIS	-	-	16.50	29.00	2.00	26.00	6.020	M7 / M8	6.212
12.00	6.477	4.851	ANSI	0.255	0.191	16.50	29.00	2.00	26.00	6.020	1/4-20 & 1/4-28	6.412
12.00	7.000	5.500	DIN / JIS	-	-	16.50	29.00	2.00	26.00	7.020	M7 / M9 / M10	7.012
12.00	7.938	5.944	ANSI	0.3125	0.234	16.50	29.00	2.00	31.00	7.020	1/16-27	7.912
12.00	8.000	6.200	DIN	-	-	16.50	29.00	2.00	31.00	8.020	M8 / M11	8.012
12.00	8.000	6.500	JIS	-	-	16.50	29.00	2.00	31.00	8.020	M11	18.012
12.00	8.077	6.045	ANSI	0.318	0.238	16.50	29.00	2.00	31.00	7.020	5/16-18 & 5/16-24	28.012
12.00	8.204	6.147	ANSI	0.323	0.242	16.50	29.00	2.00	31.00	8.020	7/16-14 & 7/16-20	8.212
12.00	8.500	6.500	JIS	-	-	16.50	29.00	2.00	31.00	8.020	M12	8.512
12.00	9.000	7.000	DIN	-	-	16.50	29.00	2.00	32.00	9.020	M9 / M12	9.012
12.00	9.322	6.985	ANSI	0.367	0.275	16.50	29.00	2.00	32.00	9.020	1/2-13 & 1/2-20	9.312
12.00	9.677	7.264	ANSI	0.381	0.286	16.50	29.00	2.00	33.00	9.020	3/8-16 & 3/8-24	9.612
12.00	10.000	8.000	DIN	-	-	16.50	29.00	2.00	36.00	10.020	M10	10.012

Tuote tietoa

- sopii tappien joiden varressa nelikantti kiinnitämiseen GÜHROSync- ja holkki-istukoihin
- kiinnitys-Ø työkalun varren toleransseille h6-h9
- hyvä kiinitys pienenysholkkeihin GÜHRO-Synch istukoihin
- jäähdytysurilla ulkoiselle jäähdytykselle, prosessin ja työkalun parempi toiminta
- kertyvä purse peseytyy jatkuvasti pois
- tapinpään säätöruuvi
- pituuden säätöruuvi sallii 3mm säädön

Toimitus

- tilaa MQL asetusruuvit art.no. 4305 erikseen
- tilaa säätöruuvi „taso“ art.no. 4364 erikseen



GÜHROJET

Artikkelinro. **4606**

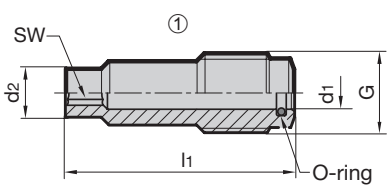
d_4 mm	d_1 mm	□ mm	Standardi	d_1 inch	□ inch	d_2 mm	l_1 mm	l_2 mm	l_3 mm	* tilaa säätö-ruuvi	kierteelle	**Koodinro.**
20.00	6.000	4.500	JIS	-	-	24.10	34.00	2.00	26.00	6.032	M6	26,020
20.00	6.000	4.900	DIN	-	-	24.10	34.00	2.00	26.00	6.032	M4.5/M5/M6/M8	6,020
20.00	6.200	5.000	JIS	-	-	24.10	34.00	2.00	26.00	6.032	M7 / M8	6,220
20.00	6.477	4.851	ANSI	0.255	0.191	24.10	34.00	2.00	26.00	6.032	1/4-20 & 1/4-28	6,420
20.00	7.000	5.500	DIN / JIS	-	-	24.10	34.00	2.00	26.00	7.032	M7 / M9 / M10	7,020
20.00	7.938	5.944	ANSI	0.3125	0.234	24.10	34.00	2.00	31.00	7.032	1/16-27	7,920
20.00	8.000	6.200	DIN	-	-	24.10	34.00	2.00	31.00	8.032	M8 / M11	8,020
20.00	8.000	6.500	JIS	-	-	24.10	34.00	2.00	31.00	8.032	M11	18,020
20.00	8.077	6.045	ANSI	0.318	0.238	24.10	34.00	2.00	31.00	8.032	5/16-18 & 5/16-24	28,020
20.00	8.204	6.147	ANSI	0.323	0.242	24.10	34.00	2.00	31.00	8.032	7/16-14 & 7/16-20	8,220
20.00	8.500	6.500	JIS	-	-	24.10	34.00	2.00	31.00	8.032	M12	8,520
20.00	9.000	7.000	DIN	-	-	24.10	34.00	2.00	32.00	9.032	M9 / M12	9,020
20.00	9.322	6.985	ANSI	0.367	0.275	24.10	34.00	2.00	32.00	9.032	1/2-13 & 1/2-20	9,320
20.00	9.677	7.264	ANSI	0.381	0.286	24.10	34.00	2.00	33.00	9.032	3/8-16 & 3/8-24	9,620
20.00	10.000	8.000	DIN	-	-	24.10	34.00	2.00	36.00	10.032	M10	10,020
20.00	10.500	8.000	JIS	-	-	24.10	34.00	2.00	36.00	10.032	M14	10,520
20.00	10.897	8.179	ANSI	0.4290	0.3220	24.10	34.00	2.00	35.00	10.032	9/16-12 & 9/16-18	10,820
20.00	11.000	9.000	DIN	-	-	24.10	34.00	2.00	37.00	11.032	M14	11,020
20.00	12.000	9.000	DIN	-	-	24.10	34.00	2.00	37.00	11.032	M12 / M16	12,020
20.00	12.192	9.144	ANSI	0.480	0.36	24.10	34.00	2.00	36.00	11.032	5/8-11 & 5/8-18	12,120
20.00	12.500	10.000	JIS	-	-	24.10	34.00	2.00	38.00	11.032	M16	12,520
20.00	13.000	10.000	JIS	-	-	24.10	34.00	2.00	38.00	11.032	M17	13,020
20.00	14.000	11.000	DIN / JIS	-	-	24.10	34.00	2.00	39.00	14.032	M18	14,020
20.00	14.288	10.693	ANSI	0.5625	0.421	24.10	34.00	2.00	38.00	11.032	1/4-18	14,220
20.00	14.986	11.227	ANSI	0.590	0.442	24.10	34.00	2.00	39.00	11.032	3/4-10 & 3/4-16	14,920
20.00	15.000	12.000	JIS	-	-	24.10	34.00	2.00	40.00	16.032	M20	15,020
20.00	16.000	12.000	DIN	-	-	24.10	34.00	2.00	41.00	16.032	M20	16,020

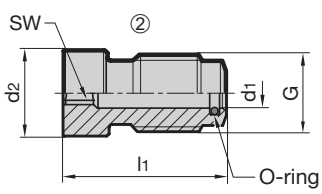
Tuote tietoa

- hydrosynkroistukoille art.no. 4601, 4576, 4577 ja 4525
- synkroistukoille art.no. 4326 ja 4327
- perinteiselle jäähdytyskanavalle
- plaanaus vakio työkaluille varressa
- tapinpään säätöruuvi
- pituuden säätöruuvi sallii 3mm säädön

Toimitus

- O-renkaalaa varma tiivistys



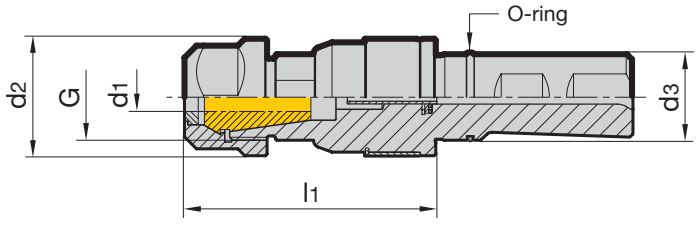


									Artikkelinro.	**4364**
nimellikoko	for tap shank-Ø x □	G	d_1 mm	d_2 mm	l_1 mm	SW	O-ring	image	**Koodinro.**	
ER20 / Hydro12	< Ø6	M8x1	3.6	3.3	28.0	2.0	3.5x1	1	5,020	
ER20 / Hydro12	6x4.9	M8x1	3.6	4.8	26.0	2.5	3.5x1	1	6,020	
ER20 / Hydro12	7x5.5	M8x1	3.6	5.4	25.8	2.5	3.5x1	1	7,020	
ER20 / Hydro12	8x6.2	M8x1	3.6	6.1	20.9	2.5	3.5x1	1	8,020	
ER20 / Hydro12	9x7	M8x1	3.6	6.9	20.3	2.5	3.5x1	1	9,020	
ER20 / Hydro12	10x8	M8x1	3.6	7.8	15.8	2.5	3.5x1	2	10,020	
ER20 / Hydro12	11x9	M8x1	3.6	8.8	14.8	2.5	3.5x1	2	11,020	
ER32 / Hydro20	< Ø6	M10x1	4.1	3.3	33.0	2.0	4x1	1	5,032	
ER32 / Hydro20	6x4.9	M10x1	4.1	4.8	34.0	3.0	4x1	1	6,032	
ER32 / Hydro20	7x5.5	M10x1	4.1	5.4	33.8	3.0	4x1	1	7,032	
ER32 / Hydro20	8x6.2	M10x1	4.1	6.1	28.8	3.0	4x1	1	8,032	
ER32 / Hydro20	9x7	M10x1	4.1	6.9	28.3	3.0	4x1	1	9,032	
ER32 / Hydro20	10x8	M10x1	4.1	7.8	23.8	3.0	4x1	1	10,032	
ER32 / Hydro20	11x9 & 12x9	M10x1	4.1	8.8	22.9	3.0	4x1	1	11,032	
ER32 / Hydro20	14x11	M10x1	4.1	10.8	20.7	3.0	4x1	2	14,032	
ER32 / Hydro20	16x12	M10x1	4.1	11.8	19.7	3.0	4x1	2	16,032	
ER32 / Hydro20	18x14.5 & 20x16	M10x1	4.1	14.3	18.0	3.0	4x1	2	18,032	

Tuote tietoa
- kompensoi synkronointivirheitä
- minimaalinen pituuden kompensointi jännityksessä ja tiivistyksessä synkrokaran ja tapin välillä jotka voivat aiheuttaa voimakkaita kitkavoimia tappiin
- pituuden säätöruuvi sallii 2-3mm säädön
- sopii läpijäähdytykselle
- max. nestepaine 50 bar

Toimitus
- sisältää JK/ER kiinnitysmutterin art.no. 4306 (** kts. momentti)
- sisältää avaimen säätöruuveille

- tilaa säätöruuvi „taso“ art.no. 4364, kierreholkki art.no. 4308, tiiviste art. no. 4335 ja kiinnitysavain art.no. 4913 erikseen



Artikkelinro. **4326**

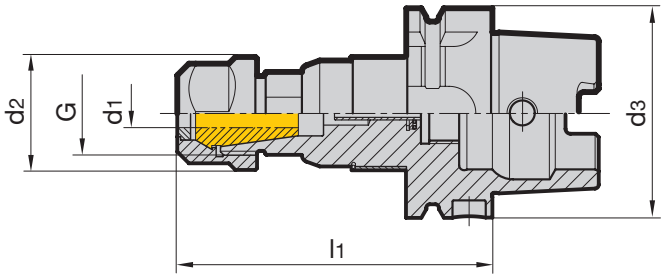
d_3 ~DIN 1835 mm	nimellikoko	kierteelle	d_1 mm	d_2 mm	l_1 mm	tension/ compr. mm	torque* Nm	G	kg	**Koodinro.**
25	ER20	M3.5-M14	4-11.0	34	73	0.15	40	M25x1.5	0.50	20,025
25	ER32	M3.5-M28	4-20.0	50	88	0.15	170	M40x1.5	1.30	32,025

HSK-A SYNKROKIERTEYTYSISTUKAT

Tuote tietoa
- kompensoi synkronointivirheitä
- varmistaa kierteen hyvän laadun ja optimaalisen työkalun kestoiän perinteisillä tapeilla
- minimaalinen pituuden kompensointi jännityksessä ja tiivistyksessä synkrokaran ja tapin välillä jotka voivat aiheuttaa voimakkaita kitkavoimia tappiin
- vähentää mahdollisia aksiaalisen voimien lisääntymistä minimiin
- pituuden säätöruuvi sallii 2-3mm säädön
- sopii läpijäähdytykselle
- max. nestepaine 50 bar
- HSK-A ISO 12164-1/DIN 69893-1 mukaan

Toimitus
- sisältää JK/ER kiinnitysmutterin art.no. 4306 (** kts. momentti)
- sisältää avaimen säätöruuveille

- tilaa säätöruuvi „taso“ art.no. 4364, kierreholkki art.no. 4308, tiiviste art. no. 4335 ja kiinnitysavain art.no. 4913 erikseen
- for-conventi-istukknr. 4949 Satz Nrm. työkaluvaihto



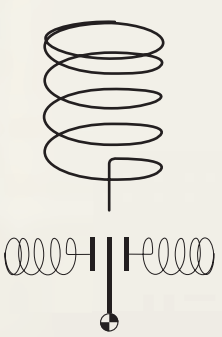
Artikkelinro. **4327**

HSK-A d_3 mm	nimellikoko	kierteelle	d_1 mm	d_2 mm	l_1 mm	tension/ compr. mm	torque* Nm	G	kg	**Koodinro.**
63	ER20	M3.5-M14	4-11.0	34	95.5	0.15	40	M25x1.5	1.00	20,063
63	ER20	M3.5-M14	4-11.0	34	160.0	0.15	40	M25x1.5	1.50	20,163
63	ER32	M3.5-M28	4-20.0	50	109.0	0.15	170	M40x1.5	1.70	32,063
100	ER20	M3.5-M14	4-11.0	34	102.0	0.15	40	M25x1.5	2.50	20,100
100	ER32	M3.5-M28	4-20.0	50	115.5	0.15	170	M40x1.5	2.70	32,100

GÜHROSync kierreistukat + VA-tapit

Helppo tie täydelliseen kierteeseen

GÜHROSync kierreistukat tarjoavat tarjoavat erinomaisen lastunpoiston ja pidemmän työkalun kestoiän johtuen työkalun optimaalisesta kinnityksestä yhdessä VA-tappien kanssa.

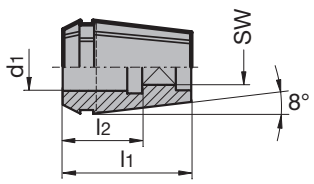


Nähtävissä: Jousi sympoli GÜHROSync'ssä näyttää aksiaalisen ja radiaalisen voiman vaikutuksen.

GÜHROSync

Tuote tietoa

- sopii tappien joiden varressa nelikantti kiinnitämiseen GÜHROSync- ja holkki-istukoihin
- Ø4mm pienemmät kiinnitetään holkilla art.no. 4307 ilman nelikanttia
- Kiristysmomentti, katso lukitusrengas art.no. 4306

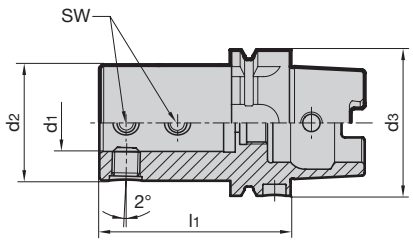


Artikkelinro. **4308**

nimellikoko	for shank Ø d_1 mm	square SW	l_1 mm	l_2 mm	**Koodinro.**
ER16	4.5	3.4	27.5	18	4,516
ER16	5.5	4.3	27.5	18	5,516
ER16	6.0	4.9	27.5	18	6,016
ER16	7.0	5.5	27.5	18	7,016
ER16	8.0	6.2	27.5	22	8,016
ER20	4.0	3.0	31.5	15	4,020
ER20	4.5	3.4	31.5	18	4,520
ER20	5.5	4.3	31.5	18	5,520
ER20	6.0	4.9	31.5	18	6,020
ER20	7.0	5.5	31.5	18	7,020
ER20	8.0	6.2	31.5	22	8,020
ER20	9.0	7.0	31.5	22	9,020
ER20	10.0	8.0	31.5	25	10,020
ER20	11.0	9.0	31.5	25	11,020
ER25	4.5	3.4	34.0	18	4,525
ER25	5.5	4.3	34.0	18	5,525
ER25	6.0	4.9	34.0	18	6,025
ER25	7.0	5.5	34.0	18	7,025
ER25	8.0	6.2	34.0	22	8,025
ER25	9.0	7.0	34.0	22	9,025
ER25	10.0	8.0	34.0	25	10,025
ER25	11.0	9.0	34.0	25	11,025
ER25	12.0	9.0	34.0	25	12,025
ER32	4.0	3.0	40.0	15	4,032
ER32	4.5	3.4	40.0	18	4,532
ER32	5.5	4.3	40.0	18	5,532
ER32	6.0	4.9	40.0	18	6,032
ER32	7.0	5.5	40.0	18	7,032
ER32	8.0	6.2	40.0	22	8,032
ER32	9.0	7.0	40.0	22	9,032
ER32	10.0	8.0	40.0	25	10,032
ER32	11.0	9.0	40.0	25	11,032
ER32	12.0	9.0	40.0	25	12,032
ER32	14.0	11.0	40.0	25	14,032
ER32	16.0	12.0	40.0	25	16,032
ER32	18.0	14.5	40.0	25	18,032
ER32	20.0	16.0	40.0	28	20,032
ER40	7.0	5.5	46.0	18	7,040
ER40	8.0	6.2	46.0	22	8,040
ER40	9.0	7.0	46.0	22	9,040
ER40	10.0	8.0	46.0	25	10,040
ER40	11.0	9.0	46.0	25	11,040
ER40	12.0	9.0	46.0	25	12,040
ER40	14.0	11.0	46.0	25	14,040
ER40	16.0	12.0	46.0	25	16,040
ER40	18.0	14.5	46.0	25	18,040
ER40	20.0	16.0	46.0	28	20,040
ER40	22.0	18.0	46.0	28	22,040

Tuote tietoa
- for quick change chucks and synchro tapping chucks with straight shank (except art.no. 4342)
- HSK-A ISO 12164-1/DIN 69893-1 mukaan

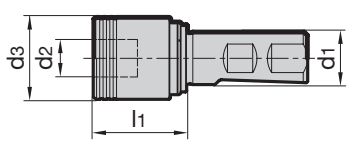
Toimitus
- sisältää kiinitysruuvit art.no. 4903, koodino. 12,001
- tilaa nesteen syöttöputki art.no. 4949 erikseen



						Artikkelinro.	4343
HSK-A d_3	d_1 mm	d_2 mm	l_1 mm	SW	kg	**Koodinro.**	
50	25	50	80	6	0.89	25,050	
63	25	50	82	6	1.26	25,063	
80	25	50	87	6	3.10	25,080	
100	25	50	89	6	4.08	25,100	

PIKAVAIHTO-KIERTEYTYSISTUKKA ILMAN JK

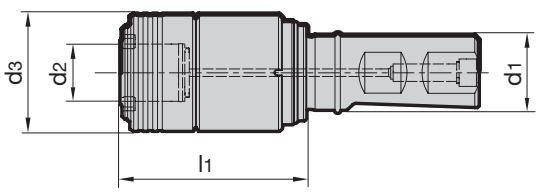
Tuote tietoa
- pikavaihtokierteytysistukoissa on pallo-ohjattu pituuden säädin mikä kompensoi pituusväliä karan syötön ja tapin nousun välillä



							Artikkelinro.	4340
kierteelle	d_1 mm	d_2 mm	d_3 mm	l_1 mm	tension/ compression mm	kg	**Koodinro.**	
M3-M12	25	19	36	39	± 7.5	0.4	19,025	
M8-M20	25	31	53	63	±10.0	0.9	31,025	

Tuote tietoa

- pikavaihtokierteytysistukoissa on pallo-ohjattu pituuden säädin mikä kompensoi pituusväliä karan syötön ja tapin nousun välillä
- jäähdytysnesteen syöttö istukan ja adapterin läpi tapin varren päähän. Kaikki osat ovat tiivistettyjä.
- max. nestepaine 50 bar

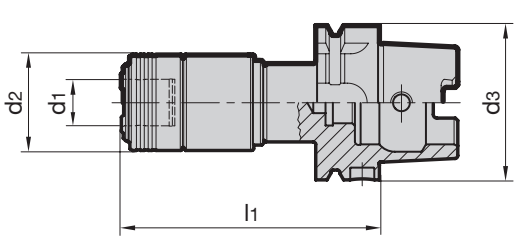


						Artikkelinro.	**4342**
kierteelle	d_1 mm	d_2 mm	d_3 mm	l_1 mm	tension/ compression mm	kg	**Koodinro.**
M3-M12	25	19	39	62	7.5/7.5	0.6	19,025
M8-M20	25	31	60	88	10/10	1.0	31,025

PIKAVAIHTO-KIERTEYTYSISTUKAT, HSK-A JK:LLA

Tuote tietoa

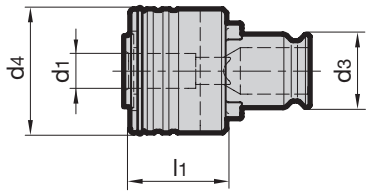
- pikavaihtokierteytysistukoissa on pallo-ohjattu pituuden säädin mikä kompensoi pituusväliä karan syötön ja tapin nousun välillä
- varmistaa kierteen hyvän laadun ja optimaalisen työkalun kestoiän perinteisillä tapeilla
- max. nestepaine 50 bar.
- HSK-A ISO 12164-1/DIN 69893-1 mukaan



						Artikkelinro.	**4328**
HSK-A d_3 mm	kierteelle	d_1 mm	d_2 mm	l_1 mm	tension/ compression ± mm	kg	**Koodinro.**
63	M3-M12	19	39	105	7.5	1.13	19,063
63	M8-M20	31	60	140	10.0	2.28	31,063

Tuote tietoa

- turvallinen työkalun kiinnitys
- sopii HSS tapeille
- kovametallitapeilla on oltava kiinnitysura varressa liikkumisen ehkäisemiseksi
- sopii läpijäähdytykselle max. 50 bar



					Artikkelinro.	4206
kierteelle	shank Ø x sq. d_1 mm	d_3 mm	d_4 mm	l_1 mm		**Koodinro.**
M3-M12	2.2	19	32	25		19,022
M3-M12	2.5 x 2.1	19	32	25		19,025
M3-M12	2.8 x 2.1	19	32	25		19,028
M3-M12	3.5 x 2.7	19	32	25		19,035
M3-M12	4 x 3	19	32	25		19,040
M3-M12	4.5 x 3.4	19	32	25		19,045
M3-M12	5.5 x 4.5	19	32	25		19,055
M3-M12	6 x 4.9	19	32	25		19,060
M3-M12	7 x5.5	19	32	25		19,070
M3-M12	8 x 6.2	19	32	25		19,080
M3-M12	9 x 7	19	32	25		19,090
M3-M12	10 x 8	19	32	25		19,100
M8-M20	6 x 4.9	31	50	34		31,060
M8-M20	7 x 5.5	31	50	34		31,070
M8-M20	8 x 6.2	31	50	34		31,080
M8-M20	9 x 7	31	50	34		31,090
M8-M20	10 x 8	31	50	34		31,100
M8-M20	11 x 9	31	50	34		31,110
M8-M20	12 x 9	31	50	34		31,120
M8-M20	14 x 11	31	50	34		31,140
M8-M20	16 x 12	31	50	34		31,160

GÜHRING MQL-JÄRJESTELMÄT

VAIN SE ÖLJYMÄÄRÄ MIKÄ ON TARPEELLISTA

Yhtenä MQL-teknologian edelläkävijöistä meillä on mittava tieto pisaravoitelusta. Gühring'n vakio MQL-istukoita on toimitettu tuhansittain ympäri maailmaa. Ne on tunnustettu autoteollisuudessa parhaaksi MQL-ratkaisuksi joko yksi- tai kaksi kanavaisina. Suuremmat leikkuunopeudet ja työkalun pidempi kestoikä tulee tarkasta jäähdytyksestä ja parempi pinnanlaatu puhtaasta voiteluaineesta. Työkappaleet ja lastut säilyvät kuivina. Säästät kappaleiden puhdistuksessa samoin kuin jätteen ja jäähdytysnesteen havittämisestä.

1 MQL BY GÜHRING

Tämä merkintä viittaa Gühring'n 1-kanava MQL-teknologiaan

Näkyvä ilmaus 1-kanava järjestelmälle on kullan värinen MQL pituuden säätöruuvi

2 MQL BY GÜHRING

Tämä merkintä viittaa Gühring'n 2-kanava MQL-teknologiaan

Näkyvä ilmaus 2-kanava järjestelmälle on mustan värinen MQL pituuden säätöruuvi

GUHRING

4508 1 MQL BY GÜHRING
Nesteen syöttöputki 1-kanavaiselle MQL-järjestelmälle HSK-A

4511 2 MQL BY GÜHRING
Nesteen syöttöputki 2-kanavaiselle MQL-järjestelmälle HSK-A

4513 1 MQL BY GÜHRING 2 MQL BY GÜHRING
MQL-nesteen syöttökappale (tasaaja)

MQL-kuristeistukat HSK-A autom. työkaluvaihto

4741 1 MQL BY GÜHRING
4614 2 MQL BY GÜHRING
man. Työkaluvaihto

4735 1 MQL BY GÜHRING
4613 2 MQL BY GÜHRING

MQL-hydrauli-istukka HSK-A autom. työkaluvaihto

4210 1 MQL BY GÜHRING
4612 2 MQL BY GÜHRING
man. Työkaluvaihto

4209 1 MQL BY GÜHRING
4611 2 MQL BY GÜHRING

MQL 1-kanava hydraulinen synkroistukka HSK-A autom. työkaluvaihto

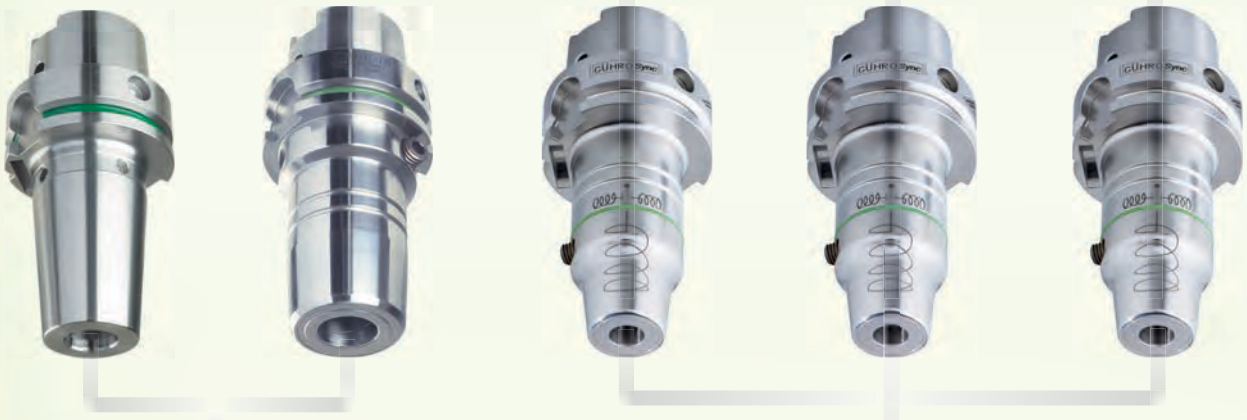
4602 1 MQL BY GÜHRING

MQL 2-kanava hydraulinen synkroistukka HSK-A autom. työkaluvaihto

4603 2 MQL BY GÜHRING

MQL hydraulinen synkroistukka HSK-A man. työkaluvaihto

4604 1 MQL BY GÜHRING 2 MQL BY GÜHRING



4524 1 MQL BY GÜHRING 2 MQL BY GÜHRING
MQL Hydro-Ø 12 / Ø 20 synkroistukka lieriövarrella Ø 20

4305
MQL säätöruuvit sisäkartiolla MQL synkroistukoille

4605
Pienennysholkki, tiivistetty

4606
GÜHROJET pienennysholkit

Kierretappi MQL varrella: varren halkaisija x nelikantti

Nesteen syöttöputki manuaaliselle työkalunvaihdolle

Nesteen syöttöputki automaattiselle työkalunvaihdolle

Nesteen syöttöputki automaattiselle työkalunvaihdolle

4298

MQL synkroistukka HSK-A manuaaliselle työkalunvaihdolle

4330

MQL 1-kanavainen synkroistukka HSK-A automaattiselle työkalunvaihdolle

4341

MQL 2-kanavainen synkroistukka HSK-A automaattiselle työkalunvaihdolle

4305

MQL-säätöruuvi sisäkartiolla MQL-synkroistukalle

4308

Kierreholkki

4335

Tiiviste kiinnitysmuttereille

Kierretappi

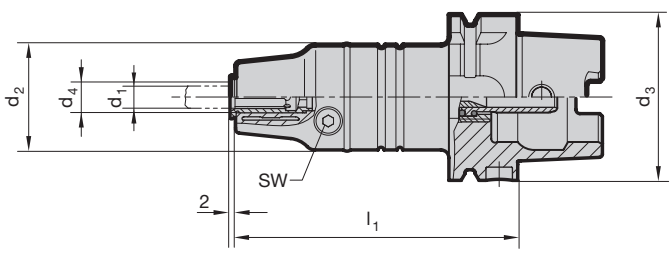
Tuote tietoa

- MQL 1-kanava järjestelmälle
- MQL nestepaine max. 16 bar
- kompensoi synkronointivirheitä
- varmistaa kierteen hyvän laadun ja optimaalisen työkalun kestoiän
- minimaalinen pituuden kompensointi jännityksessä ja tiivistyksessä synkrokaran ja tapin välillä
- vähentää mahdollisia aksiaalisen voimien lisääntymistä minimiin
- sopii hydrauliseen kiinitykseen käytettäessä pienennysholkkeja
- pituuden säätöruuvi sallii 3mm säädön
- Gühring MQL tunnistettavissa vihreästä värirenkaasta

Toimitus

- sisältää 6-kulma-avaimen art.no. 4912
- sisältää MQL nesteputken automaatiselle työkalunvaihdolle art.no. 4508
- sisältää avaimen MQL säätöruuveille

- tilaa MQL asetusruuvit art.no. 4305 erikseen
- tilaa pienennysholkit art.no. 4505 tai 4506erikseen



1 MQL BY GÜHRING

GÜHROSync

Artikkelinro. **4602**

HSK-A d_3	d_4 mm	for shank-Ø d_1	kierteelle	d_2 mm	l_1 mm	tension/ compr. ± mm	SW	kg	**Koodinro.**
63	12.00	2.8-10	M3-M12	40	106.5	0.3	4	1.5	12.063
63	20.00	6-16	M8-M20	40	120.5	0.3	5	1.6	20.063
100	12.00	2.8-10	M3-M12	40	113.0	0.3	4	2.8	12.100
100	20.00	6-16	M8-M20	40	127.0	0.3	5	2.9	20.100

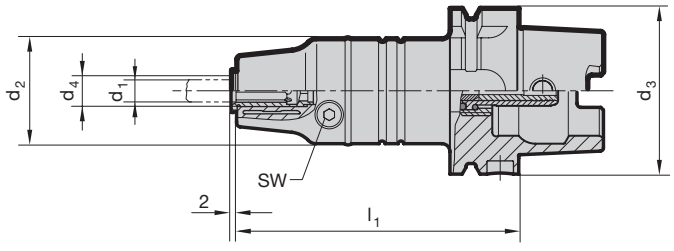
Tuote tietoa

- MQL 2-kanava järjestelmälle
- MQL nestepaine max. 16 bar
- kompensoi synkronointivirheitä
- varmistaa kierteen hyvän laadun ja optimaalisen työkalun kestoiän
- minimaalinen pituuden kompensointi jännityksessä ja tiivistyksessä synkrokaran ja tapin välillä
- vähentää mahdollisia aksiaalisen voimien lisääntymistä minimiin
- sopii hydrauliseen kiinitykseen käytettäessä pienennysholkkeja
- pituuden säätöruuvi sallii 3mm säädön
- Gühring MQL tunnistettavissa vihreästä värirenkaasta

Toimitus

- sisältää 6-kulma-avaimen art.no. 4912
- sisältää MQL nesteputken automaatiselle työkalunvaihdolle art.no. 4511
- sisältää avaimen MQL säätöruuveille

- tilaa MQL asetusruuvit art.no. 4305 erikseen
- tilaa pienennysholkit art.no. 4505 tai 4506erikseen



2 MQL BY GÜHRING

GÜHROSync

Artikkelinro. **4603**

HSK-A d_3	d_4 mm	for shank-Ø d_1	kierteelle	d_2 mm	l_1 mm	tension/ compr. ± mm	SW	kg	**Koodinro.**
63	12.00	2.8-10	M3-M12	40	106.5	0.3	4	1.5	12,063
63	20.00	6-16	M8-M20	40	120.5	0.3	5	1.6	20,063
100	12.00	2.8-10	M3-M12	40	113.0	0.3	4	2.8	12,100
100	20.00	6-16	M8-M20	40	127.0	0.3	5	2.9	20,100

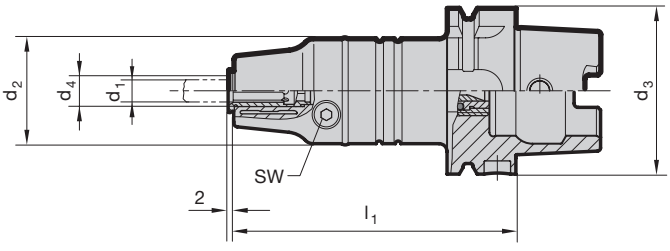
Tuote tietoa

- MQL 1-ja 2-kanava järjestelmille
- MQL nestepaine max. 16 bar
- kompensoi synkronointivirheitä
- varmistaa kierteen hyvän laadun ja optimaalisen työkalun kestoiän
- minimaalinen pituuden kompensointi jännityksessä ja tiivistyksessä synkrokaran ja tapin välillä
- vähentää mahdollisia aksiaalisen voimien lisääntymistä minimiin
- sopii hydrauliseen kiinitykseen käytettäessä pienennysholkkeja
- pituuden säätöruuvi sallii 3mm säädön
- Gühring MQL tunnistettavissa vihreästä värirenkaasta

Toimitus

- sisältää 6-kulma-avaimen art.no. 4912
- sisältää MQL nesteputken manuaaliselle työkalunvaihdolle (tasaaja) art.no. 4513
- sisältää avaimen MQL säätöruuveille

- tilaa MQL asetusruuvit art.no. 4305 erikseen
- tilaa pienennysholkit art.no. 4505 tai 4506erikseen



1 MQL BY GÜHRING

2 MQL BY GÜHRING

GÜHROSync

Artikkelinro. **4604**

HSK-A d_3	d_4 mm	for shank-Ø d_1	kierteelle	d_2 mm	l_1 mm	tension/ compr. ± mm	SW	kg	**Koodinro.**
63	12.00	2.8-10	M3-M12	40	106.5	0.3	4	1.5	12,063
63	20.00	6-16	M8-M20	40	120.5	0.3	5	1.6	20,063
100	12.00	2.8-10	M3-M12	40	113.0	0.3	4	2.8	12,100
100	20.00	6-16	M8-M20	40	127.0	0.3	5	2.9	20,100

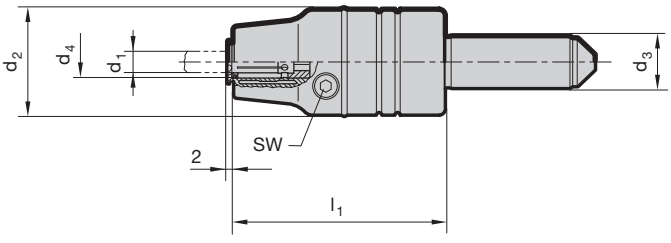
Tuote tietoa

- MQL 1-ja 2-kanava järjestelmille
- MQL nestepaine max. 16 bar
- kompensoi synkronointivirheitä
- varmistaa kierteen hyvän laadun ja optimaalisen työkalun kestoiän
- minimaalinen pituuden kompensointi jännityksessä ja tiivistyksessä synkrokaran ja tapin välillä
- vähentää mahdollisia aksiaalisen voimien lisääntymistä minimiin
- sopii hydrauliseen kiinitykseen käytettäessä pienennysholkkeja
- pituuden säätöruuvi sallii 3mm säädön
- pitimen varsi DIN 1835-A mukaan, soveltuu hyrauli-, kuriste- ja voimaistukoille
- Gühring MQL tunnistettavissa vihreästä värirenkaasta

Toimitus

- sisältää 6-kulma-avaimen art.no. 4912
- sisältää avaimen MQL säätöruuveille

- tilaa MQL asetusruuvit art.no. 4305 erikseen
- tilaa pienennysholkit art.no. 4505 tai 4506erikseen



1 MQL BY GÜHRING

2 MQL BY GÜHRING

GÜHROSync

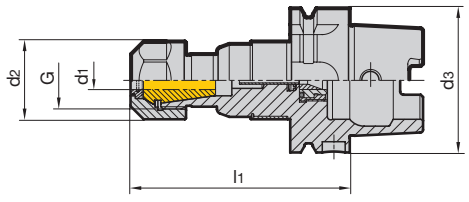
Artikkelinro. 4524

d_3 h6 mm	d_4 mm	for shank-Ø d_1	kierteelle	d_2 mm	l_1 mm	tension/ compr. ± mm	SW	kg	Koodinro.
20	12.00	2.8-10	M3-M12	40	80	0.3	4	0.7	12,020
20	20.00	6-16	M8-M20	40	94	0.3	5	0.8	20,020

Tuote tietoa
- MQL 1-ja 2-kanava järjestelmille
- kompensoi synkronointivirheitä
- minimaalinen pituuden kompensointi jännityksessä ja tiivistyksessä synkrokaran ja tapin välillä jotka voivat aiheuttaa voimakkaita kitkavoimia tappiin
- pituuden säätöruuvi sallii 2-3mm säädön
- MQL nestepaine max. 10 bar
- asennettu MQL nesteen syöttöputki
- Gühring MQL tunnistettavissa vihreästä värirenkaasta

Toimitus
- sisältää MQL nesteputken manuaaliselle työkalunvaihdolle (tasaaja)
- Sisältää JK/ER kiinnitysmutterin art.no. 4306 (** kts. momentti)
- sisältää avaimen MQL säätöruuveille

- tilaa MQL asetusruuvit art.no. 4305 erikseen
- tilaa tiiviste art.no. 4335 erikseen
- tilaa holkki art.no. 4308 erikseen
- tilaa kiristysavain art.no. 4913 ER:lle erikseen



1 MQL BY GÜHRING 2 MQL BY GÜHRING

Artikkelinro.	4298

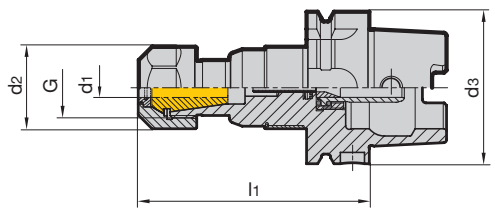
HSK-A d_3	nimellikoko	kierteelle	G	d_1 mm	d_2 mm	l_1 mm	tension/ compr. ± mm	torque* Nm	kg	Koodinro.
63	ER20	M3.5-M14	M25x1.5	4.5-11	34	95.5	0.15	40	1.00	20,063
63	ER32	M3.5-M28	M40x1.5	4.5-20	50	109.0	0.15	170	1.50	32,063

MQL 1-KANAVAINEN SYNKROISTUKKA HSK-A AUTOMAATTISELLE TYÖKALUNVAIHDOLLE

Tuote tietoa
- MQL 1-kanava järjestelmälle
- kompensoi synkronointivirheitä
- minimaalinen pituuden kompensointi jännityksessä ja tiivistyksessä synkrokaran ja tapin välillä jotka voivat aiheuttaa voimakkaita kitkavoimia tappiin
- pituuden säätöruuvi sallii 2-3mm säädön
- MQL nestepaine max. 10 bar
- asennettu MQL nesteen syöttöputki
- Gühring MQL tunnistettavissa vihreästä värirenkaasta

Toimitus
- sisältää MQL nesteputken automaatiselle työkalunvaihdolle
- Sisältää JK/ER kiinnitysmutterin art.no. 4306 (** kts. momentti)
- sisältää avaimen MQL säätöruuveille

- tilaa MQL asetusruuvit art.no. 4305 erikseen
- tilaa tiiviste art.no. 4335 erikseen
- tilaa holkki art.no. 4308 erikseen
- tilaa kiristysavain art.no. 4913 ER:lle erikseen



1 MQL BY GÜHRING

Artikkelinro.	4330

HSK-A d_3	nimellikoko	kierteelle	G	d_1 mm	d_2 mm	l_1 mm	tension/ compr. ± mm	torque* Nm	kg	Koodinro.
63	ER20	M3.5-M14	M25x1.5	4.5-11	34	95.5	0.15	40	1.00	20,063
63	ER32	M3.5-M28	M40x1.5	4.5-20	50	109.0	0.15	170	1.50	32,063
100	ER20	M3.5-M14	M25x1.5	4.5-11	34	102.0	0.15	40	2.40	20,100
100	ER32	M3.5-M28	M40x1.5	4.5-20	50	115.5	0.15	170	3.00	32,100

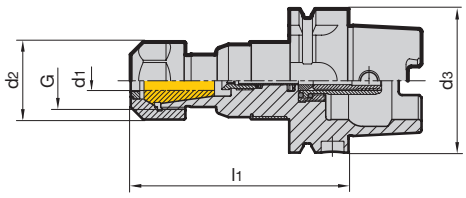
Tuote tietoa

- MQL 2-kanava järjestelmälle
- kompensoi synkronointivirheitä
- minimaalinen pituuden kompensointi jännityksessä ja tiivistyksessä synkrokaran ja tapin välillä jotka voivat aiheuttaa voimakkaita kitkavoimia tappiin
- pituuden säätöruuvi sallii 2-3mm säädön
- MQL nestepaine max. 10 bar
- asennettu MQL nesteen syöttöputki
- Gühring MQL tunnistettavissa vihreästä värirenkaasta

Toimitus

- sisältää MQL nesteputken automaatiselle työkalunvaihdolle
- sisältää JK/ER kiinnitysmutterin art.no. 4306 (** kts. momentti)
- sisältää avaimen MQL säätöruuveille

- tilaa MQL asetusruuvit art.no. 4305 erikseen
- tilaa tiiviste art.no. 4335 erikseen
- tilaa holkki art.no. 4308 erikseen
- tilaa kiristysavain art.no. 4913 ER:lle erikseen



2 MQL BY GÜHRING

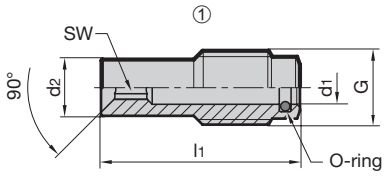
Artikkelinro.										4341
HSK-A d_3	nimellikoko	kierteelle	G	d_1 mm	d_2 mm	l_1 mm	tension/ compr. ± mm	torque* Nm	kg	**Koodinro.**
63	ER20	M3.5-M14	M25x1.5	4.5-11	34	95.5	0.15	40	1.00	20,063
63	ER32	M3.5-M28	M40x1.5	4.5-20	50	109.0	0.15	170	1.50	32,063
100	ER20	M3.5-M14	M25x1.5	4.5-11	34	102.0	0.15	40	2.40	20,100
100	ER32	M3.5-M28	M40x1.5	4.5-20	50	115.5	0.15	170	3.00	32,100

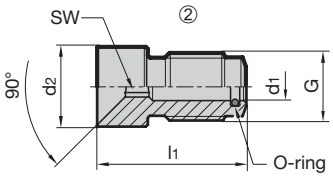
Tuote tietoa

- MQL säätöruuvit sisäkartiolla
- MQL 1-ja 2-kanava järjestelmille
- MQL tapeille ulkoisella kartiolla
- MQL synkroistukoillle art.no. 4602, 4603 ja 4604
- tapinpään säätöruuvi
- pituuden säätöruuvi sallii 3mm säädön

Toimitus

- O-renkaalaa varma tiivistys





1 MQL BY GÜHRING

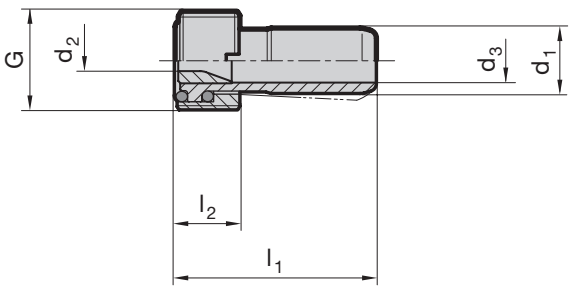
2 MQL BY GÜHRING

Artikkelinro. **4305**

nimellikoko	for tap shank-Ø x □	G	d_1 mm	d_2 mm	l_1 mm	SW	O-ring	image	**Koodinro.**
ER20 / Hydro12	6x4.9	M8x1	3.6	4.8	26.5	2.5	3.5x1	1	6,020
ER20 / Hydro12	7x5.5	M8x1	3.6	5.4	26.5	2.5	3.5x1	1	7,020
ER20 / Hydro12	8x6.2	M8x1	3.6	6.1	21.5	2.5	3.5x1	1	8,020
ER20 / Hydro12	9x7	M8x1	3.6	6.9	21.0	2.5	3.5x1	1	9,020
ER20 / Hydro12	10x8	M8x1	3.6	7.8	17.0	2.5	3.5x1	2	10,020
ER20 / Hydro12	11x9	M8x1	3.6	8.8	16.0	2.5	3.5x1	2	11,020
ER32 / Hydro20	6x4.9	M10x1	4.1	4.8	34.5	3.0	4x1	1	6,032
ER32 / Hydro20	7x5.5	M10x1	4.1	5.4	34.5	3.0	4x1	1	7,032
ER32 / Hydro20	8x6.2	M10x1	4.1	6.1	29.5	3.0	4x1	1	8,032
ER32 / Hydro20	9x7	M10x1	4.1	6.9	29.0	3.0	4x1	1	9,032
ER32 / Hydro20	10x8	M10x1	4.1	7.8	25.0	3.0	4x1	1	10,032
ER32 / Hydro20	11x9 & 12x9	M10x1	4.1	8.8	24.0	3.0	4x1	1	11,032
ER32 / Hydro20	14x11	M10x1	4.1	10.8	22.5	3.0	4x1	2	14,032
ER32 / Hydro20	16x12	M10x1	4.1	11.8	22.0	3.0	4x1	2	16,032
ER32 / Hydro20	18x14.5 & 20x16	M10x1	4.1	14.3	20.5	3.0	4x1	2	18,032

Tuote tietoa

- MQL tehdasstdr. Mukaan
- malli sama kuin DIN 69895
- MQL 1-kanava järjestelmälle
- työkalupitimille automaattinen työkaluvaihto
- mitat d2 ja l1 riippuvat asennusolosuhteista



MQL 1 BY GÜHRING

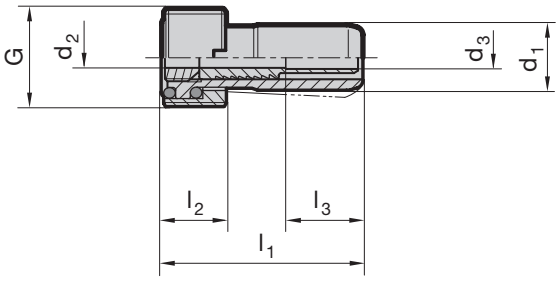
Artikkelinro. **4508**

for HSK-A	d_1 mm	d_2 mm	d_3 mm	l_1 mm	l_2 mm	G	**Koodinro.**
32	6.00	3.00	4.00	26.00	5.50	M10x1	10,032
40	8.00	3.80	5.40	29.50	7.50	M12x1	12,040
50	10.00	3.80	6.40	33.00	9.50	M16x1	16,050
63	12.00	3.80	8.00	36.50	11.50	M18x1	18,063
80	14.00	3.80	10.00	40.00	13.50	M20x1.5	20,080
100	16.00	3.80	12.00	44.00	15.50	M24x1.5	24,100

MQL 2-KANAVAISEN NESTEPUTKISARJA HSK-A

Tuote tietoa

- MQL tehdasstdr. Mukaan
- malli sama kuin DIN 69895
- MQL 2-kanava järjestelmälle
- työkalupitimille automaattinen työkaluvaihto
- „Crashsafe“ version similar to DIN 69090-2 neck design
- mitat d2 ja l1 riippuvat asennusolosuhteista



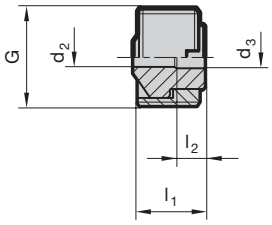
MQL 2 BY GÜHRING

Artikkelinro. **4511**

for HSK-A	d_1 mm	d_2 mm	d_3 mm	l_1 mm	l_2 mm	l_3 mm	G	**Koodinro.**
32	6.00	3.00	4.00	26.00	5.50	-	M10x1	10,032
40	8.00	3.80	5.40	29.50	7.50	-	M12x1	12,040
50	10.00	3.60	4.00	33.00	9.50	21.00	M16x1	16,050
63	12.00	3.60	4.00	36.50	11.50	13.80	M18x1	18,063
80	14.00	3.60	4.00	40.00	13.50	14.00	M20x1.5	20,080
100	16.00	3.60	4.00	44.00	15.50	14.00	M24x1.5	24,100

Tuote tietoa

- MQL tehdasstdr. Mukaan
- JK MQL 1- ja 2-kanavaiselle järjestelmälle
- työkalupitimille manuaalinen työkaluvaihto
- paras MQL tiivistesarja
- mitat d2 ja l1 riippuvat asennusolosuhteista



1 MQL BY GÜHRING

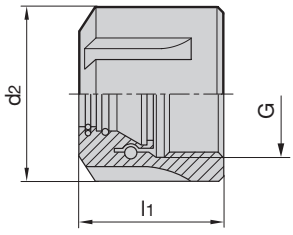
2 MQL BY GÜHRING

Artikkelinro.	4513

for HSK-A	d_2 mm	d_3 mm	l_1 mm	l_2 mm	G	Koodinro.
32	3.00	3.00	6.30	-	M10x1	10,032
40	3.60	4.00	8.30	5.00	M12x1	12,040
50	3.60	4.00	10.30	5.00	M16x1	16,050
50	5.00	5.00	10.30	-	M16x1	16,150
63	3.60	4.00	12.30	5.00	M18x1	18,063
63	6.00	6.00	12.30	-	M18x1	18,163
80	3.60	4.00	14.40	5.00	M20x1.5	20,080
80	8.00	8.00	14.40	-	M20x1.5	20,180
100	3.60	4.00	16.40	5.00	M24x1.5	24,100
100	8.00	8.00	16.40	-	M24x1.5	24,101

Tuote tietoa
- holkeille DIN ISO 15488
- JK/ER sovelluksiin tiivisteellä
- suurempi kiinnitysvoimamalli, ER tai JK/ER,sisältää liukurenkaan

Toimitus
- suurempi kiinnitysvoimamalli, sisältää liukurenkaan
- malli JK/ER: tilaa tiiviste art.no. 4335 erikseen



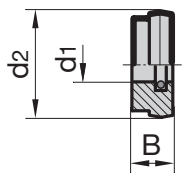
							Artikkelinro.	4306
tilaa tiiviste no. 4335	sisältää liukurenkaan	nimellikoko	d_2 mm	l_1 mm	G	max. torque	**Koodinro.**	
–	–	ER16 mini	22	18.4	M19x1.0	55	16,200	
–	–	ER20 mini	28	19.0	M24x1.0	75	20,200	
–	–	ER25 mini	35	20.0	M30x1.0	100	25,200	
–	–	ER11 (4008E)	19	11.3	M14x0.75	25	11,000	
–	–	ER16 (426E)	28	17.5	M22x1.5	55	16,000	
–	–	ER20 (428E)	34	19.0	M25x1.5	75	20,000	
–	–	ER25 (430E)	42	20.0	M32x1.5	100	25,000	
–	–	ER32 (470E)	50	22.5	M40x1.5	140	32,000	
–	–	ER40 (472E)	63	25.5	M50x1.5	200	40,000	
x	–	IC/ER16 mini	22	22.0	M19x1.0	55	16,300	
x	–	IC/ER20 mini	28	24.0	M24x1.0	75	20,300	
x	–	IC/ER25 mini	35	25.0	M30x1.0	100	25,300	
x	–	IC/ER16	28	22.5	M22x1.5	55	16,600	
x	–	IC/ER20	34	24.0	M25x1.5	75	20,600	
x	–	IC/ER25	42	25.0	M32x1.5	100	25,600	
x	–	IC/ER32	50	27.5	M40x1.5	140	32,600	
x	–	IC/ER40	63	30.5	M50x1.5	200	40,600	
–	x	ER16	28	20.3	M22x1.5	55	16,400	
–	x	ER20	34	21.8	M25x1.5	75	20,400	
–	x	ER25	42	22.4	M32x1.5	100	25,400	
–	x	ER32	50	25.0	M40x1.5	140	32,400	
–	x	ER40	63	28.3	M50x1.5	200	40,400	
x	x	IC/ER16	28	22.7	M22x1.5	55	16,500	
x	x	IC/ER20	34	24.2	M25x1.5	75	20,500	
x	x	IC/ER25	42	25.2	M32x1.5	100	25,500	
x	x	IC/ER32	50	27.4	M40x1.5	140	32,500	
x	x	IC/ER40	63	30.7	M50x1.5	200	40,500	

Tuote tietoa

- tiivisteiden käyttöalue, art.no. 4325, käytetty Ø d1 on seuraavan koon alapuolella esim. Ø 6,3 tilaa tällöin d1=6,5 (ER20) koodino. 6,520)

Tilaus esimerkki:

Ø d1	= 3.5
nimellikoko	= ER 20
art.no./koodino.	= 4335 03,520



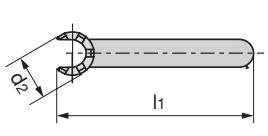
				Artikkelinro. 4335
nimellikoko	d_1 mm	d_2 mm	B mm	**Koodinro.**
ER16	3.0…10 um 0.5 mm stg.	13	4	3,016 - 10,016
ER20	3.0…13 um 0.5 mm stg.	16	4	3,020 - 13,020
ER25	3.0…16 um 0.5 mm stg.	21	4	3,025 - 16,025
ER32	3.0…20 um 0.5 mm stg.	27	4	3,032 - 20,032
ER40	3.5…26 um 0.5 mm stg.	33.5	4	3,540 - 26,040

VÄÄNTÖAVAIN

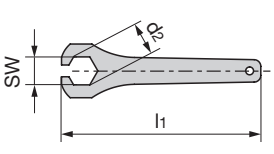
Tuote tietoa

- kinnitysmuttereille
- malli A erikoisavain muttereille DIN 6499 „ mini design „
- malli B avain kuusikulmaisille muttereille
- malli c avain muttereille ulkoisilla urilla

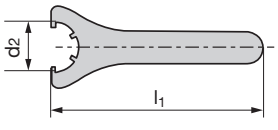
malli A



malli B



malli C



					Artikkelinro. 4913
nimellikoko mm	malli	l_1 mm	for ER d_2 mm	SW	**Koodinro.**
ER16 mini	A	122	22	-	16,200
ER20 mini	A	139	28	-	20,200
ER25 mini	A	143	35	-	25,200
ER11	B	141	19	17	11,000
ER16	B	178	28	25	16,000
ER16	C	161	32	-	16,032
ER20	B	200	34	30	20,000
ER20	C	183	35	-	20,100
ER25	C	210	42	-	25,000
ER32	C	250	50	-	32,000
ER40	C	290	63	-	40,000

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TEKNINEN OSA

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Kierteen alkureikä ja porahalkaisijat	775
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Kierteen alkureiät leikkaaville tapeille

Stdr. metriset ISO kierteet DIN 13

nim. Ø	nousu P mm	alkureiän Ø DIN 336 mm	sydän halk. sisäkierteen 6H* min. mm	sydän halk. sisäkierteen 6H* max. mm
M 1	0,25	**0,75**	0,729	0,785
M 1,1	0,25	**0,85**	0,829	0,885
M 1,2	0,25	**0,95**	0,929	0,985
M 1,4	0,30	**1,10**	1,075	1,142
M 1,6	0,35	**1,25**	1,221	1,321
M 1,8	0,35	**1,45**	1,421	1,521
M 2	0,40	**1,60**	1,567	1,679
M 2,2	0,45	**1,75**	1,713	1,838
M 2,5	0,45	**2,05**	2,013	2,138
M 3	0,50	**2,50**	2,459	2,599
M 3,5	0,60	**2,90**	2,850	3,010
M 4	0,70	**3,30**	3,242	3,422
M 4,5	0,75	**3,70**	3,688	3,878
M 5	0,80	**4,20**	4,134	4,334
M 6	1,00	**5,00**	4,917	5,153
M 7	1,00	**6,00**	5,917	6,153
M 8	1,25	**6,80**	6,647	6,912
M 9	1,25	**7,80**	7,647	7,912
M 10	1,50	**8,50**	8,376	8,676
M 11	1,50	**9,50**	9,376	9,676
M 12	1,75	**10,20**	10,106	10,441
M 14	2,00	**12,00**	11,835	12,210
M 16	2,00	**14,00**	13,835	14,210
M 18	2,50	**15,50**	15,294	15,744
M 20	2,50	**17,50**	17,294	17,744
M 22	2,50	**19,50**	19,294	19,744
M 24	3,00	**21,00**	20,752	21,252
M 27	3,00	**24,00**	23,752	24,252
M 30	3,50	**26,50**	26,211	26,771
M 33	3,50	**29,50**	29,211	29,771
M 36	4,00	**32,00**	31,670	32,270
M 39	4,00	**35,00**	34,670	35,270
M 42	4,50	**37,50**	37,129	37,799
M 45	4,50	**40,50**	40,129	40,799
M 48	5,00	**43,00**	42,587	43,297
M 52	5,00	**47,00**	46,587	47,297
M 56	5,50	**50,50**	50,046	50,796

* M 1,1 saakka M 1,4 sydän halk. sisäkierteen 5H

Metriset ISO hienokierteet DIN 13

nim. x Ø	nousu P mm	alkureiän Ø DIN 336 mm	sydän halk. sisäkierteen 6H min. mm	sydän halk. sisäkierteen 6H max. mm
M 2,5 x	0,35	**2,15**	2,121	2,221
M 3,0 x	0,35	**2,65**	2,621	2,721
M 3,5 x	0,35	**3,15**	3,121	3,221
M 4,0 x	0,50	**3,50**	3,459	3,599
M 4,5 x	0,50	**4,00**	3,959	4,099
M 5,0 x	0,50	**4,50**	4,459	4,599
M 5,5 x	0,50	**5,00**	4,959	5,099
M 6,0 x	0,75	**5,20**	5,188	5,378
M 7,0 x	0,75	**6,20**	6,188	6,378
M 8,0 x	0,50	**7,50**	7,459	7,599
M 8,0 x	0,75	**7,20**	7,188	7,378
M 8,0 x	1,00	**7,00**	6,917	7,153
M 9,0 x	0,75	**8,20**	8,188	8,378
M 9,0 x	1,00	**8,00**	7,917	8,153
M 10 x	0,75	**9,20**	9,188	9,378
M 10 x	1,00	**9,00**	8,917	9,153
M 10 x	1,25	**8,80**	8,647	8,912
M 11 x	0,75	**10,20**	10,188	10,378
M 11 x	1,00	**10,00**	9,917	10,153
M 12 x	1,00	**11,00**	10,917	11,153
M 12 x	1,25	**10,80**	10,647	10,912
M 12 x	1,50	**10,50**	10,376	10,676
M 14 x	1,00	**13,00**	12,917	13,153
M 14 x	1,25	**12,80**	12,647	12,912
M 14 x	1,50	**12,50**	12,376	12,676
M 15 x	1,00	**14,00**	13,917	14,153
M 15 x	1,50	**13,50**	13,376	13,676
M 16 x	1,00	**15,00**	14,917	15,153
M 16 x	1,25	**14,80**	14,647	14,912
M 16 x	1,50	**14,50**	14,376	14,676
M 17 x	1,00	**16,00**	15,917	16,153
M 17 x	1,50	**15,50**	15,376	15,676
M 18 x	1,00	**17,00**	16,917	17,153
M 18 x	1,50	**16,50**	16,376	16,676
M 20 x	1,00	**19,00**	18,917	19,153
M 20 x	1,50	**18,50**	18,376	18,676
M 20 x	2,00	**18,00**	17,835	18,210
M 22 x	1,00	**21,00**	20,917	21,153
M 22 x	1,50	**20,50**	20,376	20,676
M 22 x	2,00	**20,00**	19,835	20,210
M 24 x	1,00	**23,00**	22,917	23,153
M 24 x	1,50	**22,50**	22,376	22,676
M 24 x	2,00	**22,00**	21,835	22,210
M 25 x	1,00	**24,00**	23,917	24,153
M 25 x	1,50	**23,50**	23,376	23,676
M 25 x	2,00	**23,00**	22,835	23,210
M 27 x	1,00	**26,00**	25,917	26,153
M 27 x	1,50	**25,50**	25,376	25,676
M 27 x	2,00	**25,00**	24,835	25,210
M 28 x	1,00	**27,00**	26,917	27,153
M 28 x	1,50	**26,50**	26,376	26,676
M 28 x	2,00	**26,00**	25,835	26,210
M 30 x	1,00	**29,00**	28,917	29,153
M 30 x	1,50	**28,50**	28,376	28,676
M 30 x	2,00	**28,00**	27,835	28,210
M 30 x	3,00	**27,00**	26,752	27,252
M 32 x	1,50	**30,50**	30,376	30,676
M 32 x	2,00	**30,00**	29,835	30,210
M 33 x	1,50	**31,50**	31,376	31,676
M 33 x	2,00	**31,00**	30,835	31,210
M 33 x	3,00	**30,00**	29,752	30,252
M 35 x	1,50	**33,50**	33,376	33,676
M 36 x	1,50	**34,50**	34,376	34,676

UNC kierteet ASME B1.1

nim. Ø	kierteet per tuuma	Kern-loch-(Bohr-)Ø DIN 336 mm	sydän halk. sisäkierteen 2B min. mm	sydän halk. sisäkierteen 2B max. mm
Nr. 1	- 64	**1,55**	1,425	1,580
Nr. 2	- 56	**1,85**	1,694	1,872
Nr. 3	- 48	**2,10**	1,941	2,146
Nr. 4	- 40	**2,35**	2,157	2,385
Nr. 5	- 40	**2,65**	2,487	2,698
Nr. 6	- 32	**2,85**	2,642	2,896
Nr. 8	- 32	**3,50**	3,302	3,531
Nr. 10	- 24	**3,90**	3,683	3,937
Nr. 12	- 24	**4,50**	4,343	4,597
1/4	- 20	**5,10**	4,978	5,258
5/16	- 18	**6,60**	6,401	6,731
3/8	- 16	**8,00**	7,798	8,153
7/16	- 14	**9,40**	9,144	9,550
1/2	- 13	**10,80**	10,592	11,024
9/16	- 12	**12,20**	11,989	12,446
5/8	- 11	**13,50**	13,386	13,868
3/4	- 10	**16,50**	16,307	16,840
7/8	- 9	**19,50**	19,177	19,761
1	- 8	**22,25**	21,971	22,606
1 1/8	- 7	**25,00**	24,638	25,349
1 1/4	- 7	**28,00**	27,813	28,524
1 3/8	- 6	**30,75**	30,353	31,115
1 1/2	- 6	**34,00**	33,528	34,290
1 3/4	- 5	**39,50**	38,938	39,802
2	- 4,5	**45,00**	44,679	45,593

MJ kierteet DIN ISO 5855

nim. Ø	x	nousu P mm	alkureiän Ø DIN 336 mm	sydän halk. sisäkierteen 5H* min. mm	sydän halk. sisäkierteen 5H* max. mm
MJ 3	x	0,50	**2,60**	2,513	2,653
MJ 4	x	0,70	**3,40**	3,318	3,498
MJ 5	x	0,80	**4,30**	4,221	4,421
MJ 6	x	0,50	**5,55**	5,513	5,625
MJ 6	x	0,75	**5,35**	5,269	5,419
MJ 6	x	1,00	**5,10**	5,026	5,216
MJ 8	x	0,50	**7,55**	7,513	7,625
MJ 8	x	0,75	**7,35**	7,269	7,419
MJ 8	x	1,00	**7,10**	7,026	7,216
MJ 8	x	1,25	**6,90**	6,782	6,994
MJ 10	x	1,00	**9,10**	9,026	9,216
MJ 10	x	1,25	**8,90**	8,782	8,994
MJ 10	x	1,50	**8,60**	8,539	8,775
MJ 12	x	1,75	**10,40**	10,295	10,560
MJ 16	x	2,00	**14,20**	14,051	14,351

* MJ 3 x 0,50 saakka MJ 5 x 0,80 sydän halk. sisäkierteen 6H

UNC kierteet ISO 3161

nim. Ø	kierteet per tuuma	alkureiän Ø DIN 336 mm	sydän halk. sisäkierteen 3B min. mm	sydän halk. sisäkierteen 3B max. mm
Nr. 6	- 32	**2,85**	2,733	2,939
Nr. 8	- 32	**3,55**	3,393	3,599
Nr. 10	- 24	**4,00**	3,795	4,064
Nr. 12	- 24	**4,60**	4,455	4,704
1/4	- 20	**5,30**	5,113	5,387
5/16	- 18	**6,75**	6,563	6,833
3/8	- 16	**8,20**	7,978	8,255
7/16	- 14	**9,60**	9,346	9,639
1/2	- 13	**11,00**	10,798	11,095
9/16	- 12	**12,40**	12,228	12,482
5/8	- 11	**13,80**	13,627	13,904

UNF kierteet ISO 3161

nim. Ø	kierteet per tuuma	alkureiän Ø DIN 336 mm	sydän halk. sisäkierteen 3B min. mm	sydän halk. sisäkierteen 3B max. mm
Nr. 6	- 40	**3,00**	2,888	3,053
Nr. 8	- 36	**3,60**	3,480	3,663
Nr. 10	- 32	**4,20**	4,054	4,255
Nr. 12	- 28	**4,75**	4,602	4,816
1/4	- 28	**5,60**	5,466	5,662
5/16	- 24	**7,00**	6,906	7,109
3/8	- 24	**8,60**	8,494	8,679
7/16	- 20	**10,00**	9,876	10,084
1/2	- 20	**11,60**	11,463	11,661
9/16	- 18	**13,00**	12,913	13,122
5/8	- 18	**14,60**	14,501	14,702

Kierteen alkureiät leikkaaville tapeille

UNF kierteet ASME B1.1

nim. Ø tuuma	kierteet per tuuma	alkureiän Ø DIN 336 mm	sydän halk. sisäkierteen 2B min. mm	sydän halk. sisäkierteen 2B max. mm
Nr. 1	72	**1,55**	1,473	1,610
Nr. 2	64	**1,85**	1,755	1,910
Nr. 3	56	**2,15**	2,024	2,197
Nr. 4	48	**2,40**	2,271	2,459
Nr. 5	44	**2,70**	2,550	2,741
Nr. 6	40	**2,95**	2,819	3,023
Nr. 8	36	**3,50**	3,404	3,607
Nr. 10	32	**4,10**	3,962	4,166
Nr. 12	28	**4,60**	4,496	4,724
1/4	28	**5,50**	5,359	5,588
5/16	24	**6,90**	6,782	7,036
3/8	24	**8,50**	8,382	8,636
7/16	20	**9,90**	9,728	10,033
1/2	20	**11,50**	11,328	11,608
9/16	18	**12,90**	12,751	13,081
5/8	18	**14,50**	14,351	14,681
3/4	16	**17,50**	17,323	17,678
7/8	14	**20,40**	20,269	20,650
1	12	**23,25**	23,114	23,571
1 1/8	12	**26,50**	26,289	26,746
1 1/4	12	**29,50**	29,464	29,921
1 3/8	12	**32,75**	32,639	33,096
1 1/2	12	**36,00**	35,814	36,271

BSW (Whitworth) kierteet BS84

nim. Ø tuuma	kierteet per tuuma	alkureiän Ø DIN 336 mm	sydän halk. sisäkierteen min. mm	sydän halk. sisäkierteen max. mm
W 1/16	60	**1,20**	1,045	1,230
W 3/32	48	**1,80**	1,704	1,912
W 1/8	40	**2,50**	2,362	2,591
W 5/32	32	**3,20**	2,952	3,214
W 3/16	24	**3,60**	3,407	3,745
W 7/32	24	**4,50**	4,201	4,539
W 1/4	20	**5,10**	4,724	5,156
W 5/16	18	**6,50**	6,130	6,590
W 3/8	16	**7,90**	7,492	7,987
W 7/16	14	**9,20**	8,789	9,330
W 1/2	12	**10,50**	9,989	10,591
W 9/16	12	**12,00**	11,577	12,179
W 5/8	11	**13,50**	12,918	13,558
W 3/4	10	**16,25**	15,797	16,483
W 7/8	9	**19,25**	18,611	19,353
W 1	8	**22,00**	21,334	22,147
W 1 1/8	7	**24,50**	23,928	24,832
W 1 1/4	7	**27,75**	27,103	28,007
W 1 3/8	6	**30,50**	29,504	30,528
W 1 1/2	6	**33,50**	32,679	33,703
W 1 5/8	5	**35,50**	34,769	35,963
W 1 3/4	5	**39,00**	37,944	39,138
W 2	4,5	**44,50**	43,571	44,877

(Whitworth) kierteet (~ DIN-ISO 228-1)

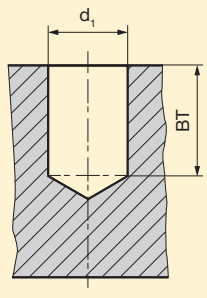
nim. Ø tuuma	kierteet per tuuma	alkureiän Ø DIN 336 mm	sydän halk. sisäkierteen min. mm	sydän halk. sisäkierteen max. mm
G 1/16	28	**6,80**	6,561	6,843
G 1/8	28	**8,80**	8,566	8,848
G 1/4	19	**11,80**	11,445	11,890
G 3/8	19	**15,25**	14,950	15,395
G 1/2	14	**19,00**	18,631	19,172
G 5/8	14	**21,00**	20,587	21,128
G 3/4	14	**24,50**	24,117	24,658
G 7/8	14	**28,25**	27,877	28,418
G 1	11	**30,75**	30,291	30,931
G 1 1/8	11	**35,50**	34,939	35,579
G 1 1/4	11	**39,50**	38,952	39,592
G 1 1/2	11	**45,25**	44,845	45,485
G 1 3/4	11	**51,00**	50,788	51,428
G 2	11	**57,00**	56,656	57,296

Panssariputkikierteet ~ DIN 40430

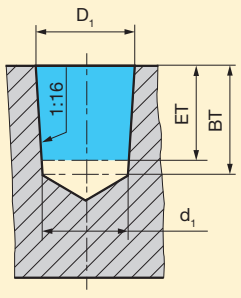
nim. Ø	kierteet per tuuma	alkureiän Ø DIN 336 mm	sydän halk. sisäkierteen min. mm	sydän halk. sisäkierteen max. mm
Pg 7	20	**11,40**	11,280	11,430
Pg 9	18	**14,00**	13,860	14,010
Pg 11	18	**17,30**	17,260	17,410
Pg 13,5	18	**19,00**	19,060	19,210
Pg 16	18	**21,30**	21,160	21,310
Pg 21	16	**26,90**	26,780	27,030
Pg 29	16	**35,50**	35,480	35,730
Pg 36	16	**45,50**	45,480	45,730
Pg 42	16	**52,50**	52,480	52,730
Pg 48	16	**57,80**	57,780	58,030

NPT ANSI B 2.1
Amerikkalainen kartioputkikierre 1:16

Versio A (pyri välttämään)



Versio B



nim. Ø	kierteet per tuuma	alkureiän Ø sylinterimäinen (A) d_1	alkureiän Ø kartiomainen (B) D_1	leikkuusyvyys ET mm	leikkuusyvyys BT (min.) mm
1/16	27	**6,15**	6,39	9,29	10,7
1/8	27	**8,40**	8,74	9,32	10,8
1/4	18	**11,10**	**11,36**	13,52	15,6
3/8	18	**14,30**	**14,80**	13,83	16,0
1/2	14	**17,90**	**18,32**	18,07	20,8
3/4	14	**23,30**	**23,67**	18,55	21,3
1	11,5	**29,00**	**29,69**	22,29	25,6
1 1/4	11,5	**37,70**	**38,45**	22,80	26,1
1 1/2	11,5	**43,70**	**44,52**	22,80	26,1
2	11,5	**55,60**	**56,56**	23,20	26,5
2 1/2	8	**66,30**	**67,62**	31,75	36,3
3	8	**82,30**	**83,52**	33,74	38,5

EG metriset kierteet/hienokierteet (EG M 14 x 1,25) kierre-elementeille DIN 8140

nim. Ø	x nousu P mm	alkureiän Ø mm	sydän halk. sisäkierteen min. mm	sydän halk. sisäkierteen max. mm
EG M 4	0,70	**4,20**	4,152	4,292
EG M 5	0,80	**5,25**	5,174	5,334
EG M 6	1,00	**6,30**	6,217	6,407
EG M 8	1,25	**8,40**	8,271	8,483
EG M10	1,50	**10,50**	10,324	10,560
EG M12	1,75	**12,50**	12,379	12,644
EG M14 x	1,25	**14,40**	14,271	14,483
EG M16	2,00	**16,50**	16,433	16,733

EG UNC (UNC-STI) kierteet kierre-elementeille ASME B18.29.1

nim. Ø	kierteet per tuuma	alkureiän Ø mm	sydän halk. sisäkierteen min. mm	sydän halk. sisäkierteen max. mm
EG Nr. 6	32	**3,80**	3,678	3,879
EG Nr. 8	32	**4,40**	4,338	4,524
EG Nr. 10	24	**5,20**	5,055	5,283
EG Nr. 12	24	**5,80**	5,715	5,944
EG 1/4	20	**6,70**	6,624	6,868
EG 5/16	18	**8,40**	8,242	8,489
EG 3/8	16	**10,00**	9,868	10,127
EG 7/16	14	**11,60**	11,506	11,783
EG 1/2	13	**13,30**	13,122	13,393
EG 9/16	12	**14,90**	14,747	15,032
EG 5/8	11	**16,50**	16,375	16,673

EG UNF (UNF-STI) kierteet kierre-elementeille ASME B18.29.1

nim. Ø	kierteet per tuuma	alkureiän Ø mm	sydän halk. sisäkierteen min. mm	sydän halk. sisäkierteen max. mm
EG Nr. 6	40	**3,70**	3,644	3,818
EG Nr. 8	36	**4,40**	4,321	4,498
EG Nr. 10	32	**5,10**	4,999	5,184
EG Nr. 12	28	**5,70**	5,682	5,809
EG 1/4	28	**6,60**	6,546	6,721
EG 5/16	24	**8,25**	8,166	8,352
EG 3/8	24	**9,80**	9,754	9,931
EG 7/16	20	**11,50**	11,389	11,585
EG 1/2	20	**13,10**	12,974	13,172
EG 9/16	18	**14,70**	14,592	14,798
EG 5/8	18	**16,25**	16,180	16,386

Suositeltavat kierteen alkureiät manglaaveille tapeille

Stdr. metriset ISO kierteet DIN 13

nim. Ø	nousu	alkureiän Ø	alkureiän-Ø		sydän Ø sisäkierteen 7H*	
mm		mm	min. mm	max. mm	min. mm	max. mm
M1	0,25	**0,90**	0,89	0,92	0,729	0,819
M1,2	0,25	**1,10**	1,09	1,12	0,929	1,019
M1,4	0,30	**1,28**	1,27	1,30	1,075	1,181
M1,6	0,35	**1,46**	1,45	1,48	1,221	1,346
M1,7	0,35	**1,56**	1,55	1,58	1,321	1,446
M1,8	0,35	**1,66**	1,65	1,68	1,421	1,546
M 2	0,40	**1,85**	1,84	1,88	1,567	1,679
M 2,2	0,45	**2,00**	2,01	2,05	1,713	1,838
M 2,5	0,45	**2,30**	2,28	2,32	2,013	2,138
M 3	0,50	**2,80**	2,78	2,85	2,459	2,639
M 3,5	0,60	**3,25**	3,23	3,30	2,850	3,050
M 4	0,70	**3,70**	3,68	3,76	3,242	3,466
M 4,5	0,75	**4,20**				
M 5	0,80	**4,65**	4,62	4,71	4,134	4,384
M 6	1,00	**5,55**	5,52	5,62	4,917	5,217
M 7	1,00	**6,55**	6,52	6,62	5,917	6,217
M 8	1,25	**7,40**	7,36	7,47	6,647	6,982
M 9	1,25	**8,40**	8,36	8,47	7,647	7,982
M 10	1,50	**9,30**	9,26	9,38	8,376	8,751
M 11	1,50	**10,30**	10,26	10,38	9,376	9,751
M 12	1,75	**11,20**	11,15	11,29	10,106	10,531
M 14	2,00	**13,10**	13,05	13,20	11,835	12,310
M 16	2,00	**15,10**	15,05	15,20	13,835	14,310
M 18	2,50	**16,90**	16,83	17,02	15,294	15,854
M 20	2,50	**18,90**	18,83	19,02	17,294	17,854
M 22	2,50	**20,90**	20,83	21,02	19,294	19,854
M 24	3,00	**22,70**	22,62	22,80	20,752	21,382
M 27	3,00	**25,70**	25,62	25,80	23,752	24,382
M 30	3,50	**28,50**	28,40	28,60	26,211	26,921
M 33	3,50	**31,50**	31,40	31,60	29,211	29,921
M 36	4,00	**34,30**	34,17	34,40	31,670	32,420
M 39	4,00	**37,30**	37,17	37,40	34,670	35,420
M 42	4,50	**40,10**	39,95	40,20	37,129	37,979

* M 2 saakka M 2,5 sydän halk. sisäkierteen 6H

Metriset ISO hienokierteet DIN 13

nim. x nousu Ø	alkureiän Ø	alkureiän-Ø		sydän Ø sisäkierteen 7H*	
mm	mm	min. mm	max. mm	min. mm	max. mm
M 2,5 x 0,35	**2,35**	2,35	2,38	2,121	2,221
M 3 x 0,35	**2,85**	2,85	2,88	2,621	2,721
M 4 x 0,35	**3,85**	3,85	3,88	3,621	3,721
M 4 x 0,50	**3,80**	3,78	3,83	3,459	3,639
M 5 x 0,50	**4,80**	4,78	4,83	4,459	4,639
M 5,5 x 0,50	**5,30**	5,28	5,33	4,959	5,139
M 6 x 0,75	**5,65**	5,62	5,70	5,188	5,424
M 7 x 0,75	**6,65**	6,62	6,70	6,188	6,424
M 8 x 0,75	**7,65**	7,62	7,70	7,188	7,424
M 8 x 1,00	**7,55**	7,52	7,62	6,917	7,217
M 9 x 0,75	**8,65**	8,62	8,70	8,188	8,424
M 9 x 1,00	**8,55**	8,52	8,62	7,917	8,217
M 10 x 0,75	**9,65**	9,62	9,70	9,188	9,424
M 10 x 1,00	**9,55**	9,52	9,62	8,917	9,217
M 10 x 1,25	**9,40**	9,36	9,47	8,647	8,982
M 11 x 0,75	**10,65**	10,62	10,70	10,188	10,424
M 11 x 1,00	**10,55**	10,52	10,62	9,917	10,217
M 12 x 1,00	**11,55**	11,52	11,62	10,917	11,217
M 12 x 1,25	**11,40**	11,36	11,47	10,647	10,982
M 12 x 1,50	**11,30**	11,26	11,38	10,376	10,751
M 14 x 1,00	**13,55**	13,52	13,62	12,917	13,217
M 14 x 1,25	**13,40**	13,36	13,47	12,647	12,982
M 14 x 1,50	**13,30**	13,26	13,38	12,376	12,751
M 15 x 1,00	**14,55**	14,52	14,62	13,917	14,217
M 15 x 1,50	**14,30**	14,26	14,38	13,376	13,751
M 16 x 1,00	**15,55**	15,52	15,62	14,917	15,217
M 16 x 1,50	**15,30**	15,26	15,38	14,376	14,751
M 17 x 1,00	**16,55**	16,52	16,62	15,917	16,217

* M 2,5 x 0,35 saakka M 4 x 0,35 sydän halk. sisäkierteen 6H

nim. x nousu Ø	alkureiän Ø	alkureiän-Ø		sydän Ø sisäkierteen 7H*	
mm	mm	min. mm	max. mm	min. mm	max. mm
M 17 x 1,50	**16,30**	16,26	16,38	15,376	15,751
M 18 x 1,00	**17,55**	17,52	17,62	16,917	17,217
M 18 x 1,50	**17,30**	17,26	17,38	16,376	16,751
M 18 x 2,00	**17,10**	17,05	17,20	15,835	16,310
M 20 x 1,00	**19,55**	19,52	19,62	18,917	19,217
M 20 x 1,50	**19,30**	19,26	19,38	18,376	19,751
M 24 x 1,00	**23,55**	23,52	23,62	22,917	23,217
M 24 x 1,50	**23,30**	23,26	23,38	22,376	22,751
M 24 x 2,00	**23,10**	23,05	23,20	21,835	22,310
M 27 x 1,50	**26,30**	26,26	26,38	25,376	25,751
M 30 x 1,50	**29,30**	29,26	29,38	28,376	28,751
M 33 x 1,50	**32,30**	32,26	32,38	31,376	31,751
M 36 x 1,50	**35,30**	35,26	35,38	34,376	34,751
M 39 x 1,50	**38,30**	38,26	38,38	37,376	37,751
M 42 x 1,50	**41,30**	41,26	41,38	42,376	42,751

Kierteenalkureikien toleranssialue manglatuille kierteille(~ DIN 13, osa 50)
Suuresta vetolujuudesta johtuen kierteen alkureikätoleranssia 6H ei tarvitse noudattaa orjallisesti. Toleranssi 7H riittää kattamaan vaatimus, että sisäisen ja ulkoisen kierteen harjakorkeus ei laske alle 0,32 x P. Lisäksi manglatuilla kierteillä on yleensä leikattuihin kierteisiin verrattuna korkeampi vetomurtolujuus johtuen rakeiden katkeamattomuudesta ja työstökarkeamisesta.

UNC kierteet ASME B1.1

nim. Ø	kiert. per tuuma	alkureiän Ø	alkureiän-Ø		sydän Ø sisäkierteen 2B	
		mm	min. mm	max. mm	min. mm	max. mm
Nr. 1	- 64	**1,68**	1,67	1,70	1,425	1,580
Nr. 2	- 56	**1,98**	1,97	2,01	1,694	1,872
Nr. 3	- 48	**2,28**	2,27	2,32	1,941	2,146
Nr. 4	- 40	**2,55**	2,54	2,59	2,157	2,385
Nr. 5	- 40	**2,90**	2,89	2,94	2,487	2,698
Nr. 6	- 32	**3,15**	3,14	3,19	2,642	2,896
Nr. 8	- 32	**3,80**	3,78	3,82	3,302	3,531
Nr. 10	- 24	**4,35**	4,33	4,39	3,683	3,937
Nr. 12	- 24	**5,00**	4,97	5,03	4,343	4,597
1/4	- 20	**5,75**	5,72	5,80	4,978	5,258
5/16	- 18	**7,30**	7,26	7,37	6,401	6,731
3/8	- 16	**8,80**	8,77	8,88	7,798	8,153
7/16	- 14	**10,30**	10,27	10,37	9,144	9,550
1/2	- 13	**11,80**	11,77	11,88	10,592	11,024
9/16	- 12	**13,30**	13,28	13,39	11,989	12,446
5/8	- 11	**14,80**	14,78	14,90	13,386	13,868
3/4	- 10	**17,90**	17,85	17,97	16,307	16,840
7/8	- 9	**21,00**	20,95	21,10	19,177	19,761
1	- 8	**24,00**	23,95	24,12	21,971	22,606

UNF kierteet ASME B1.1

nim. Ø	kiert. per tuuma	alkureiän Ø	alkureiän-Ø		sydän Ø sisäkierteen 2B	
		mm	min. mm	max. mm	min. mm	max. mm
Nr. 1	- 72	**1,70**	1,69	1,72	1,473	1,610
Nr. 2	- 64	**2,00**	1,99	2,03	1,755	1,910
Nr. 3	- 56	**2,30**	2,29	2,34	2,024	2,197
Nr. 4	- 48	**2,60**	2,59	2,63	2,271	2,459
Nr. 5	- 44	**2,90**	2,89	2,93	2,550	2,741
Nr. 6	- 40	**3,20**	3,19	3,24	2,819	3,023
Nr. 8	- 36	**3,85**	3,83	3,88	3,404	3,607
Nr. 10	- 32	**4,45**	3,43	4,49	3,962	4,166
Nr. 12	- 28	**5,10**	5,07	5,13	4,496	4,724
1/4	- 28	**5,95**	5,92	5,99	5,359	5,588
5/16	- 24	**7,45**	7,42	7,50	6,782	7,036
3/8	- 24	**9,05**	9,02	9,10	8,838	8,636
7/16	- 20	**10,55**	10,48	10,58	9,728	10,033
1/2	- 20	**12,10**	12,08	12,18	11,328	11,608
9/16	- 18	**13,65**	13,61	13,72	12,751	13,081
5/8	- 18	**15,25**	15,21	15,32	14,351	14,681
3/4	- 16	**18,35**	15,30	18,41	17,323	17,678
7/8	- 14	**21,40**	21,35	21,49	20,269	20,650
1	- 12	**24,45**	24,40	24,54	23,114	23,571

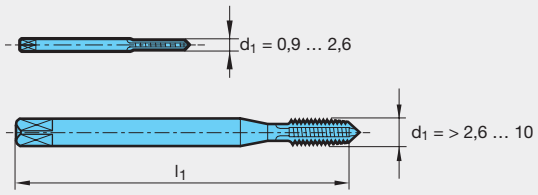
(Whitworth) kierteet DIN EN ISO 228-1

nim. Ø	kiert. per tuuma	alkureiän Ø	alkureiän-Ø		sydän Ø sisäkierteen	
tuuma		mm	min. mm	max. mm	min. mm	max. mm
G 1/16	28	**7,30**	7,28	7,35	6,561	6,843
G 1/8	28	**9,30**	9,28	9,35	8,566	8,848
G 1/4	19	**12,50**	12,48	12,55	11,445	11,890
G 3/8	19	**16,00**	15,98	16,05	14,950	15,395
G 1/2	14	**20,00**	19,98	20,12	18,631	19,172
G 5/8	14	**22,00**	21,98	22,12	20,587	21,128
G 3/4	14	**25,50**	25,48	25,62	24,117	24,658
G 7/8	14	**29,25**	29,23	29,37	27,877	28,418
G 1	11	**32,00**	31,98	32,15	30,291	30,931
G 1 1/4	11	**40,75**	40,70	40,85	38,952	39,592

Yksittäisten standardien ominaispiirteitä

DIN 371

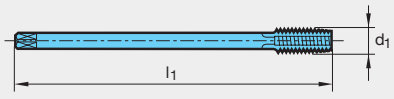
päästandardissa DIN 2184-**1**



Standardi ISO metristen, ja ISO metristen hienokierteiden kierretapeille vahvistetulla varrella. Pitkä muoto.
Halkaisija-alueittaiset (mm) varren muotoilut ohessa.

DIN 376

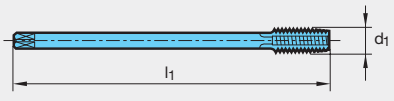
päästandardissa DIN 2184-**1**



Standardi ISO metristen kierteiden kierretapeille kevennetyllä varrella. Pitkä muoto.
Halkaisija-alue d_1 = 1,6 … 68 mm
(≤ Ø M3, varsi ilman vääntiötä)

DIN 374

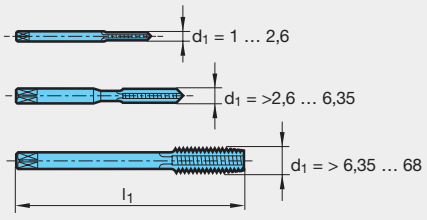
päästandardissa DIN 2184-**1**



Standardi ISO metristen kierteiden kierretapeille kevennetyllä varrella. Pitkä muoto.
Halkaisija-alue d_1 = 3 … 52 mm

DIN 352

päästandardissan DIN 2184-**2**

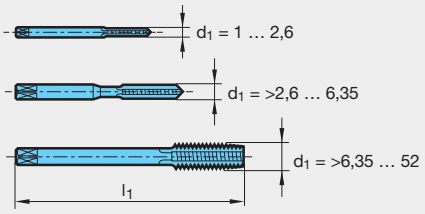


Standardi ISO metristen kierteiden käsi- ja konekierretapeille. Lyhyt muoto.
Halkaisija-alueittaiset (mm) varren muotoilut ohessa.

Yksittäisten standardien ominaispiirteitä

DIN 2181

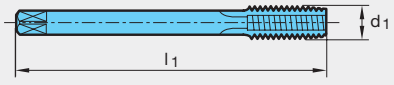
päästandardissa DIN 2184-**2**



Standardi ISO metristen kierteiden käsi- ja konekierretapeille. Lyhyt muoto. Halkaisija-alueittaiset (mm) varren muotoilut ohessa

DIN 5156

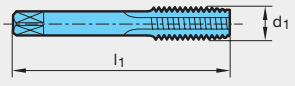
päästandardissa DIN 2184-**1**



Standardi BSP-kierteiden kierretapeille ~ DIN ISO 228 ja BSW-kierteille ~ DIN 2999. Pitkä muoto.
Halkaisija-alueet:
BSP kierteet G 1/16“ ... G 4“
BSW kierteet W 1/16“... W 4“

DIN 5157

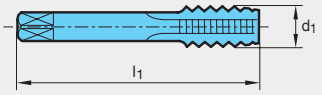
päästandardissa DIN 2184-**2**



Standardi BSP-kierteiden kierretapeille ~ DIN ISO 228 ja BSW-kierre tapeille ~ DIN EN 10 226-1. Lyhyt muoto.
Halkaisija-alueet:
BSP kierteet G 1/16“ ... G 4“
BSW kierteet W 1/16“...W 4“

DIN 40 432

päästandardissa DIN 2184-**2**

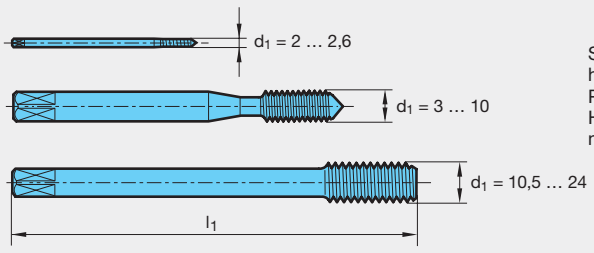


Standardi panssariputkikierteiden kierretapeille ~ DIN 40 430. Lyhyt muoto.
Halkaisija-alue
Pg 7 (12,5 mm) ... Pg 48 (59,3 mm)
korvataan DIN 374 ISO 3 6G :lla.

Yksittäisten standardien ominaispiirteitä

DIN 2174

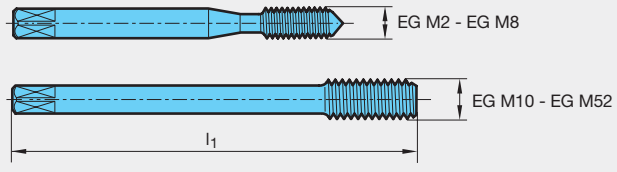
päästandardissa DIN 2184-**1**



Standardi ISO metristen, ja ISO metristen hienokierteiden kierretapeille.
Pitkä muoto.
Halkaisija-alueittaiset (mm) varren muotoilut ohessa.

DIN 40 435

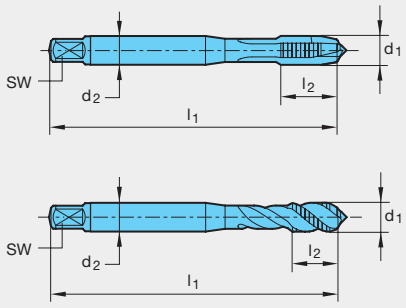
päästandardissa DIN 2184-**1**



Standardi kierre-elementtitapeille (EG) DIN 8140 mukaan metrisille ISO kierteille.
Standardi EG M2 - EG M52 ja EG M8x1 - EG M48x3 kierrereillle

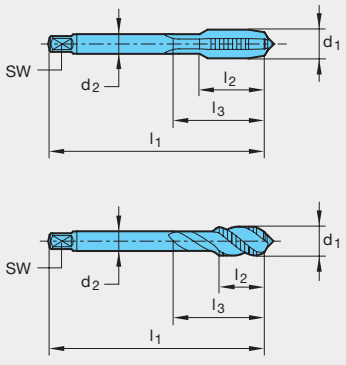
DIN - kansainvälinen standartointi

DIN 2184-1
DIN 2184-2

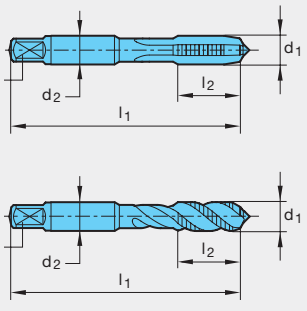


JIS B 4430

Japanin teollisuus standardi

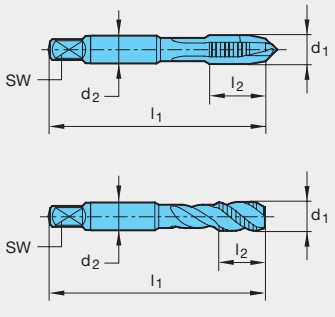


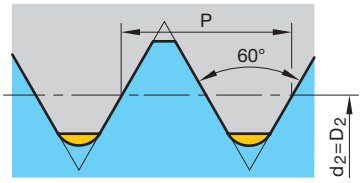
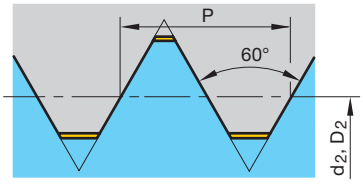
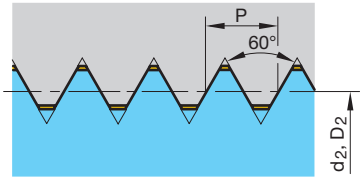
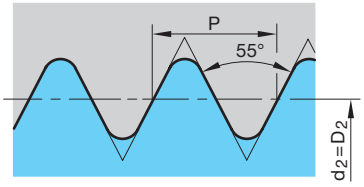
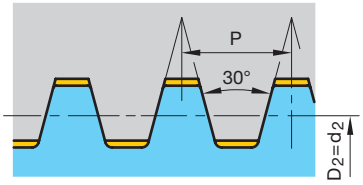
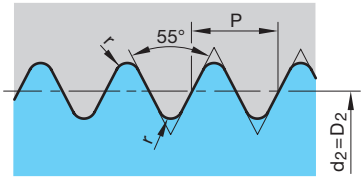
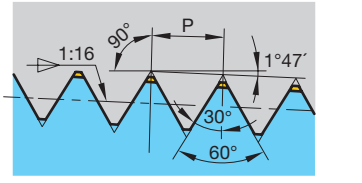
ISO 529

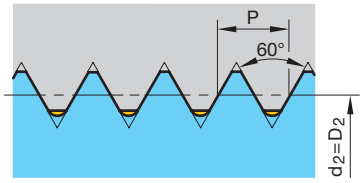
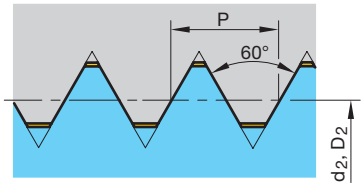
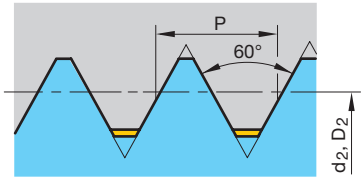
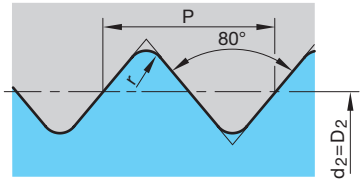
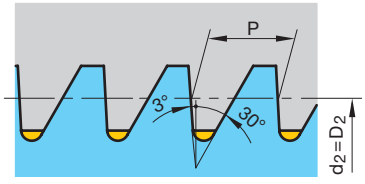
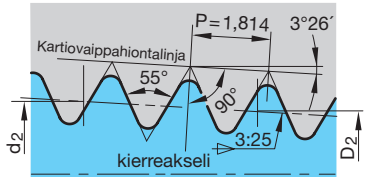
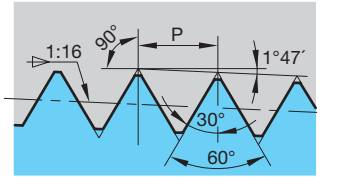


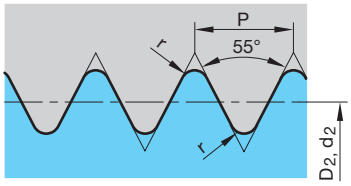
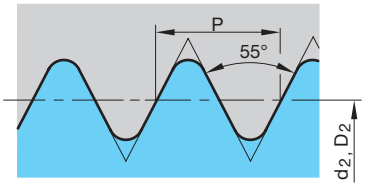
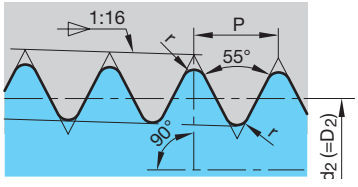
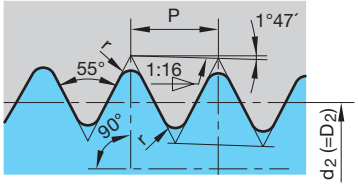
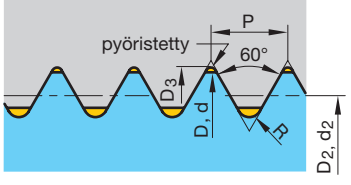
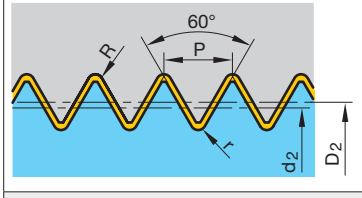
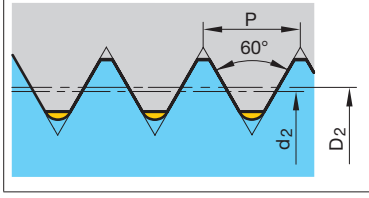
ASME B94.9

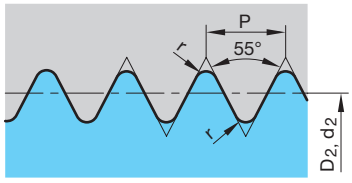
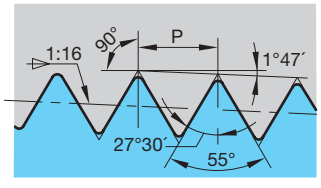
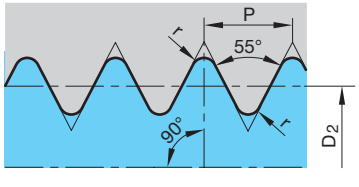
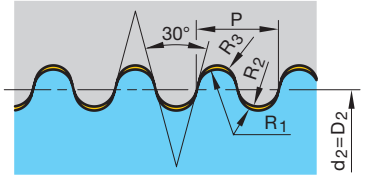
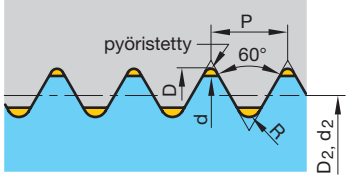
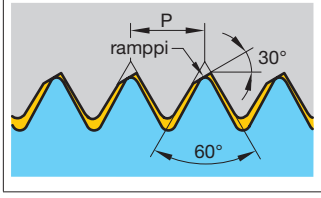
Amerikkalainen teollisuus standardi



mittapiirustus	Normi	käyttö
M ISO-metrinen kierre		
	DIN 13-1	Yleiset vakio kierteet
UNC Unified National Coarse kierre		
	ASME B1.1	Yleinen UN vakiokierre
UNEF Unified National Extra hienokierre		
	ASME B1.1	Yleinen UN Extra Hienokierre
G lieriöputkierre ilman tiivistystä liittymät		
	DIN EN ISO 228-1	Kierteet putkille, putkilittymille ja sovituksille
TR ISO-metrinen trapetsikierre		
	DIN 103	Yleistä, vetoholkit muuttuva varasto
W lieriö Whitworth-kierre		
	DIN 477	Sivutuotteet ja lisäosat kaasu-pulloventtiileille
NPT amerikkalainen putkikerre kartiokierre tiivistetyksi		
	ANSI/ ASME B1.20.1	putkikierteet ja sovitukset

mittapiirustus	Normi	käyttö
MF ISO-metriset hienokierteet		
	DIN 13-2 to DIN 13-11	Yleinen hien-okierre
UNF Unified National hienikierre		
	ASME B1.1 ISO-metrinen trapetsi-kierre	Yleinen UN hienikierre
UNS Unified Special kierre		
	ASME B1.1	Yleinen UN erikoiskierre
PG panssariputkikierrekierre		
	DIN 40430 lieriömäinen pyörökierre	sähköteollisuus
S-metrinen sahakierre		
	DIN 513	kun vältetään yhdensuuntaisia voimia
W Whitworth kartiokierre		
	DIN 477	Kierteytykset lieriömäisten kaasupullojen venttiileihin
NPTF amerikkalainen vakio putkierre kartiomainen, kuiva tiivistys		
	ANSI B1.20.3	putkikierteet ja sovitukset

mittapiirustus	Normi	käyttö
BSW lieriö Withworth-kierre		
	B.S. 84 Brittiläinen norni	Putkikierteet putkijatkeet ja sovituksille
BSP lieriö putkikierre (samanlainen kuin G)		
	B.S. 93 Brittiläinen norni	Putkikierteet putkijatkeet ja sovituksille
R Withworth kartioputkikirre		
	DIN EN 10226-1 (perustuu ISO 7-1 korvattur DIN 2999-1	Ulkokierteet putkikierteet ja sovitukset (kierteen sinetöinti liitoksissa)
Rc Whitworth kartiomainen sisäputkikierre		
	DIN ISO 10226-2 (harvoin käytetty Euroopaassa, korvattu putkikierteellä) ISO 7-1) asti	Sisäkierre putkikierteet ja sovitukset (kierteen sinetöinti liitoksissa)
MJ-kierre metrinen		
	DIN ISO 5855-1	Lentokoneteolli-suuteen
Vg venttiilikierre		
	DIN 7756	Auton renkaiden venttiilit suljettu
MFS		
	DIN 8141	Kohdepiste Alumiini, -valuseokset

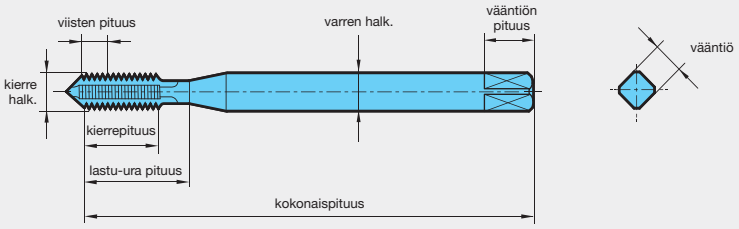
mittapiirustus	Normi	käyttö
BSF Whithworth lieriöhienokierre		
	B.S. 84 Brittiläinen hieno normi	Kierteet putkille, putklittymille ja sovituksille
BSPT kartioputkikierre (samanlainen kuin Rc)		
	B.S. 93 Brittiläinen norni	Sisäkierre putkikierteille ja sovitteille
Rp Whitworth putkikierre, lieriö sisäkierre		
	DIN EN 10226-1 (perustuu ISO 7-1 korvattur DIN 2999-1	Sisäkierre putkikierteille ja sovitteille (kierteen sinetöinti liitoksissa)
RD lieriö pyörökierre		
	DIN 405	Yleinen, vetokoukku, kaivos-, elintarviketeol-lisuus
UNJ tuumakierre		
	ISO 3161	Lentokoneteolli-suuteen
MSG lukkomutterikierre		
	Tehdasstdr.	Itselukittuva kierre vaihteistokotelot jne.

ulkokierre

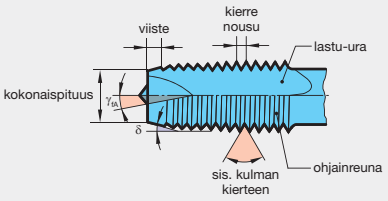
sisäkierre

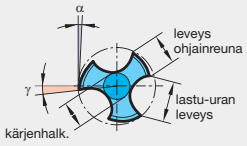
välys

Kulmien, keskiöiden ja lastu-urien muotojen määritelmät



δ = viistekulma
γ_{fA} = etuleikkuukulma
α = päästökulma
γ = rintakulma





Lastu-uran muodot

suora lastu-ura, muoto C
ilman etuleikkuuta

suora lastu-ura, muoto B
ja vuolevalla etuleikkuulla

nousukulma
15°

nousukulma
40°

Keskiömuodot (normi, DIN 2197/DIN 2175)

Kierrehalk. alue mm	Leikkuualueen keskus		Varren keskus
	viiste muodoilla A, C, D, E	viiste muodoilla B	
≤ 4,2	①	①	④⑤⑥
> 4,2 … 5,6	①②	①	④⑤⑥
> 5,6 … 10,0	①②③	①②③	④⑤⑥
> 10,0	③	③	⑥

Jäähd.kanava geometriat

aksiaalinen jäähdytys
reiän ulostulo
työkalun kärjestä

säteittäinen jäähdytys
reiän säteittäinen ulostulo
lastu-urasta

Viistemuodot, valinta ja käyttö

Kun tehdään sisäkierrettä, niin leikkaaminen tapahtuu viisteen hampailla. Tästä syystä kannattaa huolellisesti harkita viisteen muotoa, koska se vaikuttaa huomattavasti sekä työkalun kestoikään että kierteen laatuun

Yleisesti puhuen, viisteen muoto ja pituus riippuvat kierteytettävästä reiästä. Läpireikien koneistuksessa ei yleensä ilmene ongelmia kun taas lastunpoisto pohjarei'issä voi olla joskus ongelmallista ja myös takaisinkierron aikana leikatut lastut voivat aiheuttaa ongelmia.

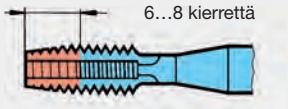
Viisteen pituuden määrityksessä on huomioitava useita eri muuttujia. Ylikuormitus, tylsyminen, ylisuuret kierteet, näihin kaikkiin sillä on merkitystä, leikkuiden lukumäärä ei saa olla liian pieni. Kuitenkin liian pitkä viiste lisää momentin tarvetta ja saattaa näin aiheuttaa rikon. Vuoleva etuleikkuu muodolla B varmistaa aina lastujen kulkeutumisen syötön suuntaa.

läpireikä

pohjareikä

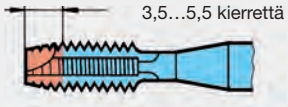
Viistemuodot DIN 2197 mukaan

Muoto A



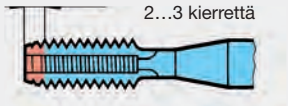
pitkä, 6 - 8 kierrettä
lyhyille
läpirei'ille

Muoto B



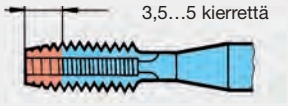
normaali, 3,5 - 5,5 kierrettä
vuolevalla etuleikkuulla
kaikille läpirei'ille
syville rei'ille normaali-
ja pitkälastuisille materiaaleille

Muoto C



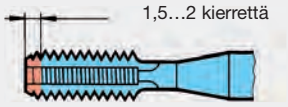
lyhyt, 2 - 3 kierrettä
pohjarei'ille
ja yleisesti
alimiinille, harmaalle
valuraudalle ja messingille

Muoto D



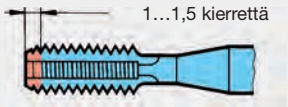
normaali, 3,5 - 5 kierrettä
lyhyille
läpirei'ille

Muoto E



erittäin lyhyt, 1,5 - 2 kierrettä,
pohjarei'ille
pienellä syvyyspoik.

Muoto F

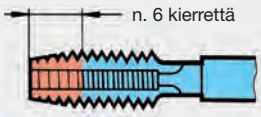


erittäin lyhyt, 1 - 1,5 kierrettä
pohjarei'ille
pienellä syvyyspoik.
Vältä käyttöä jos mahd.

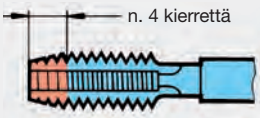
Viistemuodot, valinta ja käyttö

Viisteen pituus
3:n tapin sarja

Muoto A
aloitus tappi



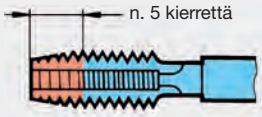
Muoto D
kakkostappi



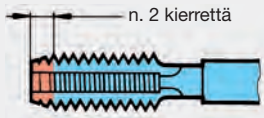
Muoto C
viimeistely tappi

Viisteen pituus
2:n tapin sarja

Muoto D
aloitus tappi



Muoto C
viimeistely tappi



Käyttösuosituksia

Kierteytettävä reikä määrää pääsääntoisesti viisteen ja yleisesti kierretapin geometrian l. muoto, lastu-urien muoto ja lukumäärä, leikkuukulma jne. riippuen työstettävästä materiaalista ja sovellutuksesta. Tavallisesti normaalissa koneenrakennuksessa kierretapit kokoon M16 saakka ovat kolmeleikkuisia ja siitä ylöspäin vähintään nelileikkuisia.

Vasenkätisellä nousulla ja vuolevalla etuleikkuulla olevat tapit työntävät lastut eteenpäin ja ovat täten erittäin sopivia läpireikien kierteytykseen. Suorauraiset ja pitkällä viisteellä (muoto D) olevat tapit antavat myös hyvän tuloksen.

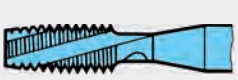
Pohjarei'ille suosittelemme oikeakätisiä nousullisilla lastu-urilla, tai suorauraisia, lyhyellä viisteellä olevia kierretappeja. Oikeakätisillä nousullisilla kierretapeilla lastuvirta menee taaksepäin ts. ylös uraa pitki. Etuviisteen pituus on suunniteltu siten etteivät lastu jumitu takaisnkierron aikana ja että ne ovat hyvin irtileikkautuneet.

Kierteyttettässä alumiinia, harmaavalurautaa ja messinkiä tapin viisteen täytyy olla lyhyt, ei väliä onko kyseessä läpi- vai pohjareikä. Näissä materiaaleissa pitkä etuviiste toimisi kuin väljennyspora lastunmurtajaurilla, se vain leikkaisi kierrereiän tekemättä siihen kuitenkaan kierrettä.

Suoraleikkuiset tapit ilman vuolevaa etuleikkuuta ovat ns. yleistyökaluja jotka eivät sovellu kaikille materiaaleille. Kannattaa nähdä hieman vaivaa oikean työkalun löytämiseksi oikealle materiaalille.

läpireikä

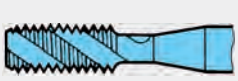
Tappi suorilla lastu-urilla ja vuolevalla etuleikkuulla



Vasenkätinen nousu-urallinen tappi

Tappi suorilla lastu-urilla pitkällä viisteellä

pohjareikä

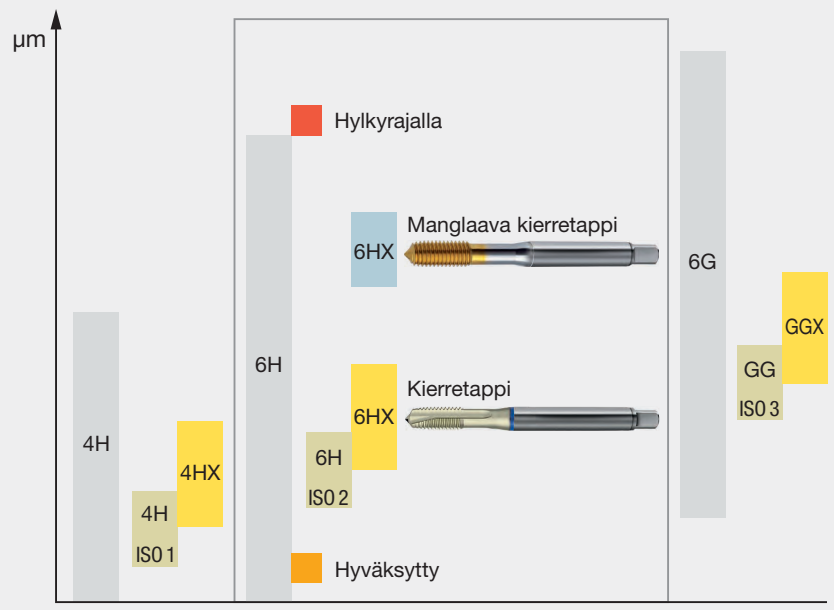


Oikeakätinen nousullinen tappi

Tappi suorilla lastu-urilla ja lyhyellä viisteellä

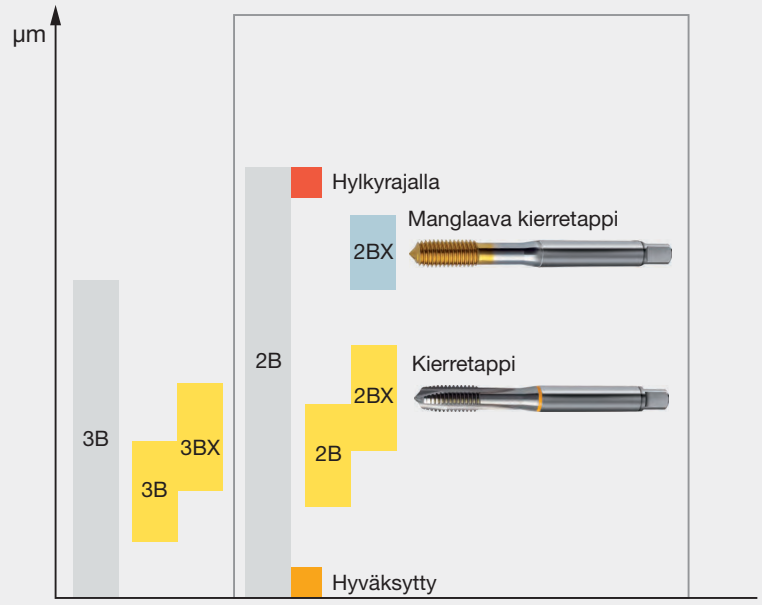
Toleranssialue DIN EN 22857 mukaan

Metrinen kierre



- Toleranssialue sisäkierteelle DIN ISO 965-1 mukaan
- Toleranssiluokka kierretapille DIN EN 22857 mukaan
- Toleranssiluokka kierretapille Gühring standardin mukaan
- Tolranssiluokka manglaavalle tapille Gühring standardin mukaan
- Toleranssiluokka hylkyrajalle DIN ISO 1502 mukaan
- Toleranssiluokka hyväksytty DIN ISO 1502 mukaan

UN-kierteet



- Toleranssialue sisäkierteelle ASME B1.1 mukaan
- Toleranssiluokka kierretapille Gühring standardin mukaan
- Toleranssiluokka manglaavalle tapille Gühring standardin mukaan
- Toleranssiluokka hylkyrajalle ANSI/ASME B1.2 mukaan
- Toleranssiluokka hyväksytty ANSI/ASME B1.2 mukaan

Tapit metriselle ISO - kierteelle, DIN EN 22857 (ote)

Kierteen päästö ja tol.
Kierretoleranssit sisä- ja ulkokierteille on eritelty kirjainkoolla, esim. 6H / 6g (sisä-/ulkokierre). Valitun toleranssin on sovittava kyseiselle kierrealueelle.
Toleranssiluokkien, hieno-, normaali- ja harva-alueet vastaavat ruuvipituuksia lyhyt (S), normaali (N) ja pitkä (L). Yleisesti ottaen nämä määräävät käytetyn toleransiaalueen:

Hienotoleranssialue (S):
Tarkoille kierteille, kun vain pieni poikkeana on sallittu toleranssista.

Normaalitoleranssialue (N):
Yleisiä sovellutuksia

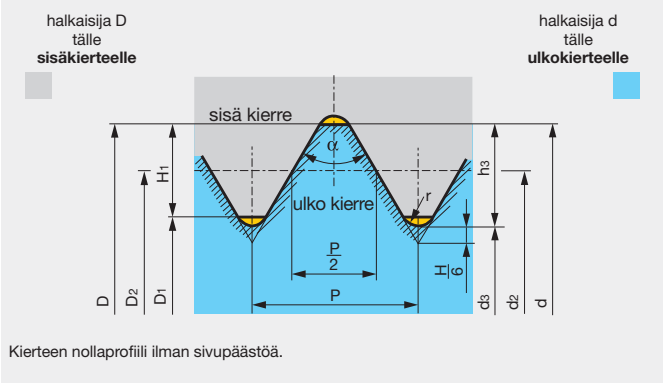
Laaja toleranssialue (L):
Ei ole olemassa erityisiä tarkkuusvaatimuksia ja tapauksissa joissa on tuotantovaikeuksia, esim. kierteyttäminen kuumavallassattuihin tankoihin, syvät pohjareiät tai muoviset komponentit.

Ruuvipituus
Ruuvin tarvitsema kierrepituus. ISO toleranssijärjestelmä on jaettu koleen rymään, erityisesti nousun halkaisijan suhteen, ne ovat:

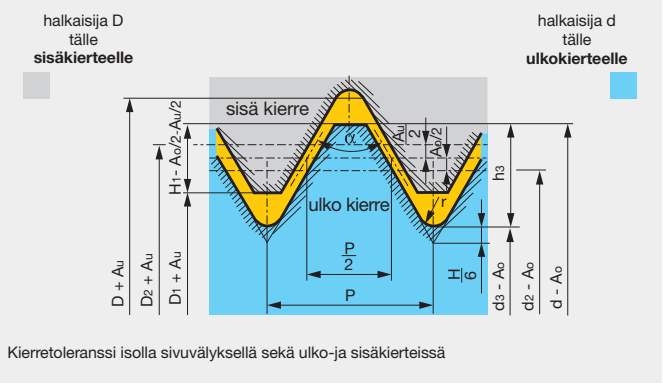
S (Lyhyt) = pituudeltaan lyhytruuvi
N (Normaali) = pituudeltaan normaaliruuvi
L (Pitkä) = pituudeltaan pitkäruuvi

Seuraava asetus pitäisi valita pituudesta N:
Paremman kierresovituksen saamiseksi suosittelemme lyhytruuvi-mallia. Jos pitkäruuvi-pituudet ovat kyseessä, tarvitaan suurempia toleransseja kompensoimaan nousuerot.

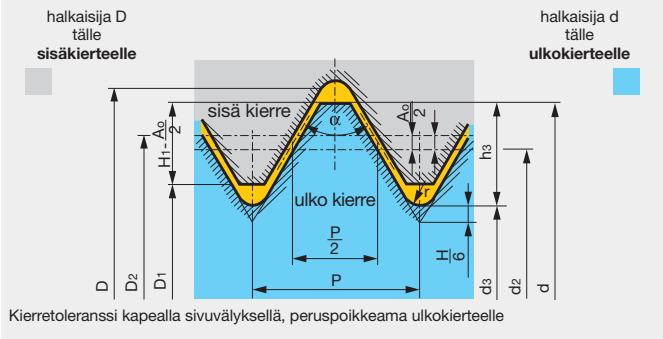
Kierretoleranssit eri sivupäästöjen kanssa



Kierteen nollaprofiili ilman sivupäästöä.



Kierretoleranssi isolla sivuvälyksellä sekä ulko-ja sisäkierteissä



Kierretoleranssi kapealla sivuvälyksellä, peruspoikkeama ulkokierteelle

Merkintöjen selitys

D	=	sisäkierteen nim. Ø
D_1	=	Kierteen alkureiän Ø
D_2	=	sisäkierteen nousu Ø
d	=	ulkokierteen nom. Ø
d_2	=	ulkokierteen nousun Ø
d_3	=	ulkokierteen Ø kierrereiälle
P	=	Nousu
α	=	sisältää kierteen kulman
H	=	Kierreprofiilin huipusta huippuun muoto
A_o	=	Toleranssin yläraja
A_u	=	Toleranssin alaraja

Kierretapit karkaistulle teräkselle (45 - 55 HRC)

Kierteytykseen materiaaleille joiden vetomurtolujuus on yli 1200 N/mm² olemme kehittäneet HSS-E-PM kierretapin TiCN-pinnoituksella.

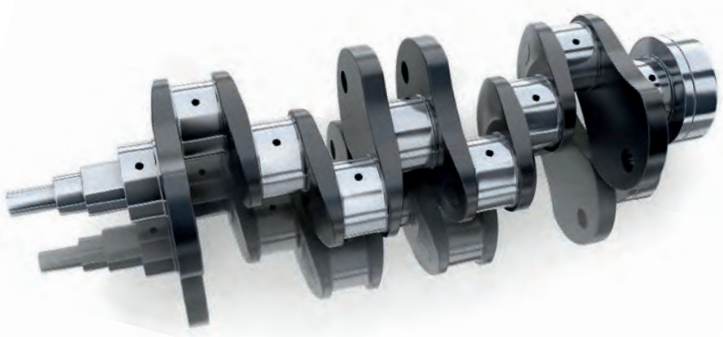
Erikoismuotoilu mahdollistaa luotettavan työstövarmuuden ja pitkän työkalun kestoiän kovissa materiaaleissa.

Sopii sovelletuksiin muottien valmistukseen ja monien autoteollisuuden osien työstämiseen lämpökäsittelyjen jälkeen.

Suositeltu leikkunopeus vc = 2-8 m/min riippuen kappaleen lujuudesta.

Luotettava kierteenvalmistus lyhyillä lastuilla

Täysin luotettavan prosessivarmuuden ja pitkän työkalun kestoiän saavuttamiseksi sarjatuotannossa lujille teräksille (850-1250 N/mm2), esim. kampiakseleille, lyhyet lastut ovat välttämättömyys. Tämä on mahdollista vain kirkkaiden lastu-urien/korjauksen kautta. Tähän Gühring tarjoaa ideaalisen ratkaisun artikkelinumeroilla 1188, 1194 ja 1200.



Yleis-tapit jäähdytyskanavilla lyhytlastuisille aineille (GG, Al, teräs)

Normaalisti lastut poistuvat pohjareiästä nousullisia lastu-uria pitkin. Valurautu, AlSi-seokset, messinki ja kupari ovat lyhytlastuisia materiaaleja. Jäähdytyskanavallisilla tapeilla jäähdytysneste poistaa lastut pohjareiästä.

Suorauraiset JK M-tapit (Art.no. 302, 297, 1091, 4165) ja MF-tapit (Art.no. 1007, 1090) ovat erityisen sopivia lyhytlastuisille materiaaleille.

Pitkien lastujen poisto teräksistä nousullisilla lastu-urilla on kasvava ongelma. Tarkoitus on tuottaa lyhyitä lastuja ja poistaa ne pohjareiästä jäähdytysnesteen avulla.

JK-kierretapit lisäävät työkalun kestoikää ja parantavat kierteen laatua.

Tyypilliset kohteet ovat vaihdelaatikot, sylinterilohkot ja -kannet, kampiakseli, pumppukotelot, hydraulikomponentit jne.

Kirkas pinta

Pikateräs- ja omasta kovametallituotannosta valmistetut työkalut tarjoavat hyvän perusteen monien aineiden työstämiseen

Höyrykäsittely

Höyrykäsittelyllä teräksen pinnassa tapahtuu µm-alueella kemiallinen muutos, synnyttäen kirkkaan rautaoksidikerroksen (3-5 µm).
Tämä pinta parantaa työkalun hankauskulumista. Tämän muutoksen ansiosta voiteluaine/jäähdytysneste vaikuttaa paremmin työkaluun.
Tämä tapahtuu normaalisti hiiliteräksissä alhaisilla leikkunopeuksilla jolloin on pyrkimus irtosärmän muodostuksee ja kylmähitsaukseen. Kirkkaan työkalun nitraaminen lisää pintakovuutta mikä mahdollistaa kuluttaviempien sovellutusten käytön.

TiN - pinnoite

Max.käyttölämpötila: < 600° C
Väri: kullankeltainen
Kovuus: 2300 $HV_{0,05}$

Gühring esitteli TiN-pinnoitteen 1980 luvun alussa.
Erityisesti kierteytyksessä on saatu hyviä käyttökokemuksia.
Tällä alueella se on osittautunut hyväksi yleispinnoitteeksi.

TiCN-pinnoite

Max. käyttölämpötila: < 400° C
Väri: harmaavioletti
Kovuus: 3000 $HV_{0,05}$

Hiilimäärän lisäys TiCn-pinnoitteessa parantaa sitkeyttä ja kovuuta.
Tästä johtuen se on erittäin sopiva kuluttaviin kohteisiin.

TiAlN-pinnoite

Max. käyttölämpötila: < 800° C
Väri: violetti
Kovuus: 3300 $HV_{0,05}$

Perinteinen TiAlN-pinnoite on kovempi ja lämmönkestävämpi kuin TiN- ja TiCN-pinnoitteet. Se sopii hyvin valuraudalle ja useimpien terästen työstöön.

SIRIUS-pinnoite

Max. käyttölämpötila: < 900° C
Väri: metallin kultainen
Kovuus: 3400 $HV_{0,05}$

Sirius on monekerrospinnoite. TiAlN komponenteista johtuen se on erittäin kulutukestävä eikä muodosta irtosärmää. Soveltuu erittäin hyvin läpireille ruostumattomalle teräkselle.

Carbo-pinnoite

Max. käyttölämpötila: < 500° C
Väri: harmaan musta
Kovuus: 5000 $HV_{0,05}$

Hiilihiukkas (CARBO) pinnoite (lyh. C) on sopiva ei-rautametalleille. Carbo sopii leikkaaviin ja manglaaviin tappeihin alumiinille (<12%Si) ja alumiinitakeille, kuparille, messingille ja pronssille.

AlCrN-pinnoite

Max. käyttölämpötila: < 1100° C
Väri: harmaan sininen
Kovuus: 3200 $HV_{0,05}$

AlCrN-pinnoite voi olla vaihtoehto TiN-/TiCN pinnoitteille. Ti vapaa pinnoite antaa hyvän kulumiskestävyyden ja vahvan hapettumiskovuussuojan.

	Kierretappi			Kierrejyrsin		Manglaava tappi		
	Kovametalli		HSS	Kovametalli		Kovametalli		HSS
	perinteinen	MQL		perinteinen	MQL	perinteinen	MQL	
C-teräs,	-	-	TiCN	TiCN	TiCN	TiCN	TiCN	TiCN
automaattiteräs,	-	-	TiAlN	-	-	TiN	TiN	TiN
Mn-teräs	-	-	TiN	-	-	-	-	-
	-	-	TiCN	TiCN	TiCN	TiCN	TiCN	TiCN
teräs, vähän seostettu	-	-	TiAlN	-	-	TiN	TiN	TiN
	-	-	TiN	-	-	-	-	AlCrN
	-	-	TiCN	TiCN	TiCN	TiCN	TiCN	TiCN
teräs, seostettu	-	-	TiAlN	-	-	TiN	TiN	TiN
	-	-	TiN	-	-	-	-	AlCrN
	-	-	TiCN	TiAlN	TiAlN	-	-	-
teräs, karkaistu <55 HRC	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	TiCN	-	-	TiAlN	TiAlN	-	-	-
teräs, karkaistu 55-65 HRC	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	Sirius[1]/TiAlN[2]	TiCN	TiCN	TiCN	TiCN	TiCN
ruostumaton- ja haponkestävä teräs	-	-	TiN	-	-	TiN	-	TiN
	-	-	-	-	-	-	-	-
	TiAlN	TiAlN	TiAlN	TiCN	TiCN	TiCN	TiCN	TiCN
valurauta	TiCN	-	TiCN	-	-	TiN	TiN	TiN
	-	-	TiN	-	-	-	-	-
	kirkas	kirkas	kirkas	kirkas	kirkas	Carbo	Carbo	Carbo
alumiinitakeet	Carbo	Carbo	Carbo	-	-	-	-	-
	-	-	-	-	-	-	-	-
	TiCN	TiCN	TiCN	TiCN	TiCN	TiCN	TiCN	TiCN
alumiiniseokset (< 12% Si)	-	-	-	kirkas	kirkas	Carbo	Carbo	Carbo
	-	-	-	-	-	-	-	-
	TiCN	TiCN	TiCN	TiCN	TiCN	-	-	-
alumiiniseokset (≥ 12% Si)	Cristall	-	-	Cristall	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	TiCN	TiCN	TiCN	TiCN	TiCN	TiCN
Ni-pohjaiset seokset (esim. Inconel)	-	-	TiAlN	-	-	-	-	-
	-	-	-	-	-	-	-	-
	-	-	TiCN	TiCN	TiCN	TiCN	TiCN	TiCN
Titaani / -seokset	-	-	TiAlN	-	-	-	-	-
	kirkas	kirkas	kirkas	kirkas	-	Carbo	Carbo	Carbo
kupari, pronssi, messinki	Carbo	Carbo	Carbo	-	-	-	-	-
	kirkas	-	kirkas	TiCN	TiCN	-	-	-
kobollt-kromi seokset	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
arvometallit	-	-	-	-	-	-	-	-
keraaminen	-	-	-	-	-	-	-	-
muovi, vahvistamaton	kirkas	-	kirkas	kirkas	kirkas	-	-	-
muovi, vahvistettu	TiCN	TiCN	-	TiCN	TiCN	-	-	-
	-	-	-	-	-	-	-	-

[1]... läpireiälle [2]... pohjareiälle

Opastus:

Katsaus näyttää yleiset sovellus esimerkit Gühring pinnoiteille. Prioriteetti ylhäältä alas.

Ongelmat uusien kierretappien käyttöönotossa

Ongelma	Mahdolliset syyt	Ratkaisu
1. Kierteen pinnanlaatu ei vastaa vaatimuksia	leikkuusärmägeometria ei sovellu kyseiseen työstökohteeseen	käytä „oikeaa“ kierretappia kyseiselle materiaalille
	liian suuri leikkuunopeus	alenna leikkuunopeutta paranna voitelua
	riittämätön jäähdytyskapasiteetti (konsentraatio ja riittävyys)	varmista jäähdytysnesteen soveltuvuus ja riittävä määrä
	lastutukos	käytä oikeaa kierretappia
	kierteen alkureikä liian pieni	huomioi kierteen alkureikien halkaisijavaatimusstandardi DIN 336 tai vastaava. Huomaa taulukko manglaaville kierretapeille
	työkalun liian suuri kuormitus työstettävän materiaalin kovuudesta tai liian suuresta noususta johtuen	käytä käsikierretappisarjaa
	irtosärmänmuodostus	käytä pinnoitettua kierretappia
	irtosärmänmuodostus	lisää jäähdytystä
2. Työkalun kestoikä riittämätön	alkureiän pinnan kovettuminen	tarkista poran leikkuusärmän kuluminen lämpö- tai pintakäsittely kierteytyksen jälkeen
	Katso: „kierteen pinnanlaatu ei vastaa vaatimuksia“	Katso: „kierteen pinnanlaatu ei vastaa vaatimuksia
	lastutukos	käytä oikeaa kierretappia
3. Työkalun rikkoutuminen etenemisen tai poiston aikana	kierteen alkureikä liian pieni	huomioi alkureiän halkaisija ~ DIN 336 tai vastaavan standardin mukaan
	viisteen leikkuut ylikuormittuneet	pidempi viiste (pohja tai - läpireikä) lisää viisteen leikkuiden lukumäärää lisäämällä lastu-urien määrää käytä kierretappisarjoja
	kierretappi osuu alkureiän pohjaan	tarkista reiän syvyys käytä kuristus kierteytysistukkaa
	alkureiän viisteytys suoritettu puutteellisesti kierteenalkureiän asemointi- tai kulmavirhe	korjaa alkureiän viisteen kulmaa varmista oikea työkalun kiinnitys käytä uivaa tapin pidintä tarkista alkureikäpora
	työkalun kovuusaste ei sovellu työstökohteeseen leikkuusärmägeometria ei sovellu työstökohteeseen	käytä työstökohteeseen paremmin sopivaa kierretappia

Virheitä ja vaikeuksia teroitettujen kierretappien kanssa

Ongelma	Mahdolliset syyt	Ratkaisu
1. Tehty kierre on liian suuri	jäyste	poista jäysteet
	leikkuusärmän geometria (viiste-, rinta- tai kärkikulma) ei säily	huomioi tekniset vaatimukset uudelleenhionnan yhteydessä seuraa uudelleenhiontaohjeistusta
2. Tehty kierre on liian pieni	kulunut pinta ei ole uudelleenhioutunut oikein	suorita uusi uud.hionta tai vaihda työkalua huomioi suurin sallittu uud.hiontojen määrä
	Kierretappi liian pieni johtuen liian monesta uudelleenhionnasta	max. uudelleenhiontojen määrä suoritettu ota uusi kierretappi käyttöön
3. Tehty kierre vastaa laatuvaatimuksia	jäyste	poista jäysteet
	leikkuusärmän geometria (viiste-, rinta- tai kärkikulma) ei säily	huomioi tekniset vaatimukset uudelleenhionnan yhteydessä seuraa uudelleenhiontaohjeistusta
	huippu-notko -korkeus uud.-hiotussa kierretapissa liian suuri	suorita uusi uud.hionta tai vaihda työkalua uomioi suurin sallittu uud.hiontojen määrä
	harjoissa irtosärmänmuodostusta	poista irtosärmänmuodostuksen jäljet
4. Työkalun kestoikä riittämätön	leikkuusärmän geometria (viiste-, rinta- tai kärkikulma) ei säily	suorita uusi uud.hionta tai vaihda työkalua huomioi suurin sallittu uud.hiontojen määrä
	kovuuden aleneminen kierretapissa uudelleenhionnan yhteydessä muodostuneesta lämmöstä johtuen	tarkista hiomalaikan kunto tarkista jäähdytyskapasiteetti
	pinnoitevauriot	uudelleenpinnoitus tarkista työstettävän materiaalin pinnoite

Kierteytys paine-muovautumisen avulla

Manglaavia kierretappeja käytetään sisäisten kierteiden muokkaukseen ilman lastunpoistoa. Perinteiseen leikkaavaan kierteytykseen verrattuna, jossa työkappaleesta irtoaa materiaalia, kierteen muokkauksessa pintapaine muokkaa kierteen irroittamatta materiaalia työkappaleesta. Prosessissa materiaali kylmämuokkautuu ilman raerajojen rikkoutumista.

DIN 8583 standardin mukaan kierteenmuokkaus kuvataan „kierteen painamisena työkappaleeseen työkalulla jossa on kierteellinen työstöosa“. Kierteytetty, monikulmainen osa manglaavasta kierretapista „kierretään“ esiporattuun työkappaleeseen tarkoituksenmukaisella, tasaisella kierteen nousuun sovitetulla syöttönopeudella. Näinollen kierreprofiili niin sanotusti painetaan asteittain ohjausviistealueen avulla työkappaleeseen. Tämä johtaa muokkausalueella paineen nousuun yli puristusrajan, työkappaleen plastiseen muotoutumiseen sekä valmiin kierteen muotoutumiseen. Materiaali antaa asteittain periksi, ns. „virtaa“ työkalun kierteen tyvessä olevaan tyhjään tilaan ja muodostaa mutterikierteen sisähalkaisijan. Virtausprosessi muodostaa prosessille ominaiset muototaskut (kynnet).

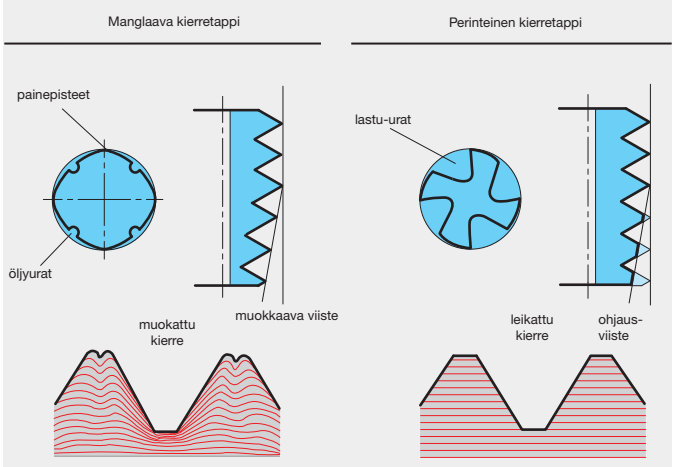
Kierteen alkureiän halkaisija riippuu hyvin paljon työstettävän materiaalin muokkautuvuudesta, työkappaleen geo-metriasta ja kierteen vaaditusta toimintasyvyydestä. Pe-rinteiseen kierteytykseen verrattuna alkureiän halkaisijan tulisi olla suurempi. Kun alkureikä on suurempi, työkaluun kohdistuvat voimat ovat pienempiä ja näin ollen työkalun kestoikä pidempi. Kun kierremateriaalin raerakennetta ei katkaista, kierteen kuormituskapasiteetti on riittävä jo 50%:n tehollisessa kierresyvyydessä.

Osittaisesti muodostuneet kierteen harjat pienentyvällä tehollisella kierteensyvyydellä ovat on tyypillinen muokatun kierteen ominaisuus. Kun harjat ovat täysin muokkautuneet, niillä ei ole minkäänlaista vaikutusta kierteen vetolujuuteen. Tarvittaessa vaadittu muokkausaste tulisi selvittää ensin koestamalla. Voitelulla on suuri merkitys. Voitelu estää irtosärmän muodostuksen kierteen harjalla ja varmistaa että kiertetytykseen vaadittu vääntömomentti ei nouse liian korkeaksi. Näin ollen, voitelun täytyy olla jatkuvaa! Tulisi preferoida voiteluaineita jotka sisältävät grafiittia, kuten esim. valssauksessa käytettävät. Seuraa aina ohjetta: „Mitä parempi voitelu, sitä helpompi kierteytysprosessi!“

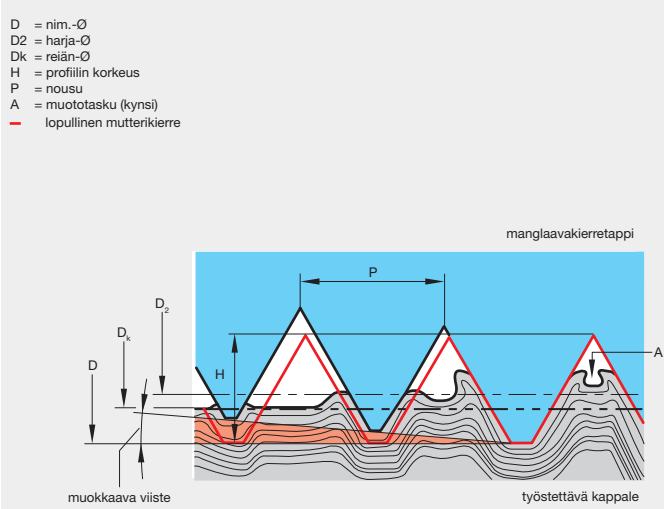
Manglaus tarjoaa seuraavat edut:

- ei lastunmuodostusta.
- yksi ja sama työkalu läpi- sekä pohjareikien työstöön.
- soveltuu monen eri materiaalin työstöön.
- ei kierteytysvirheitä.
- leikkuukierteytyksessä mahdolliset nousukulmavirheet eliminoituvat.
- manglaaalla tuotetut sisäiset kierteet omaavat suuremman vetolujuuden erityisesti harjan kohdalla kylmämuokkauksesta sekä „katkeamattomasta raerakenteesta“ johtuen.
- parantunut kierteen pinnanlaatu.
- manglaavia kierretappeja voidaan käyttää suuremmilla nopeuksilla sillä monella materiaalilla muokkautuvuus paranee nopeuden kasvaessa. Tällä ei ole työkalun kestoikään lyhentävää vaikutusta.
- jäykkä muotoilu pienentää murtumisvaurion riskiä

Prosessi
Sisäisen kierteen teko ilman lastunpoistoa
(kierteen muokkaus) verrattuna perinteiseen kierteytykseen



Materiaalin muokkautumisominaisuudet kierteytyksen ja kierteen muodostumisen yhteydessä



„Profile“ - Gühringin uusi manglaavien kierretappien sukupolvi Ominaisuudet ja hyödyt

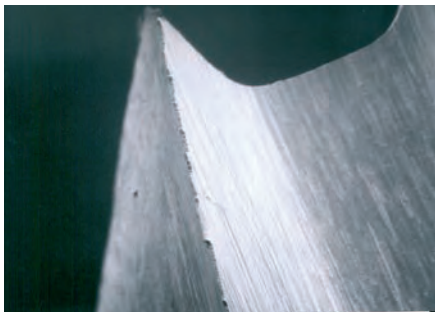
Perinteisillä manglaavilla kierretapeilla, joita valmistetaan vain hiomalla, näkyy merkkejä mikroskooppisista, erittäin hienoista hiontajäljistä työkalun pinnalla. Tämä pätee myös työkalun kierreosaan jolla kierteenmuokkaus suoritetaan.

Näillä pintamuodostumilla on negatiivinen vaikutus työkalun ja muokattavan materiaalin kitkaan, lämmön muodostumiseen, vaadittavaan vääntömomenttiin ja myös eikä vähiten manglaavankierretapin painepisteiden kulumiseen. Lisäksi hiontajäljet lisäävät irtosärmän muodostusta kierretapin päästöpinnalle. Tätä kutsutaan myös kylmähitsautumiseksi.

Gühring on kehittänyt kierretapin pintamuodon parantamiseksi menetelmän, jota sovellettaessa hiontajälkiä ei synny. Tämä on voitu varmentaa tutkimalla työkalujen kestoikää tuotanto-olosuhteissa ja erilaisia materiaaleja työstettäessä. Käyttäjälle lopputulos näkyy suurempana leikkuunopeutena sekä pidempänä työkalun kestoikänä. Työstettävästä materiaalista ja työstöolosuhteista riippuen kestoikää voidaan kasvattaa huomattavasti. 100% pidempi kestoikä ei ole mitenkään tavaton.

Parantunut pintamuoto ei ole ainoastaan kirkaaksi viimeisteltyjen työkalujen etu. Erityisesti pinnoitetut työkalut hyötyvät samasta prosessista. Ulkomitat ja muotoviiste mitä suurimmassa määrin vaikuttavat manglaavan kierretapin tehokkuuteen. Useat testit ovat osoittaneet että manglaavat kierretapit parhaalla painepistemuotoilulla ja paineensovituksella kestävät pitempään ja tekevät tarkempaa jälkeä.

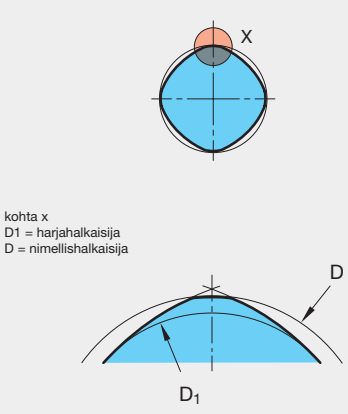
Laatu paranee entisestään kun kierretappi valmistetaan alusta loppuun yhdessä työvaiheessa, ja yhdellä hiomalaikalla - asetus erikoisrullalla. Nousuvirheet kierteen harjojen ja viiste-alueen välillä eivät ole yhtä yleisiä kuin perinteisissä valmistusmenetelmissä.



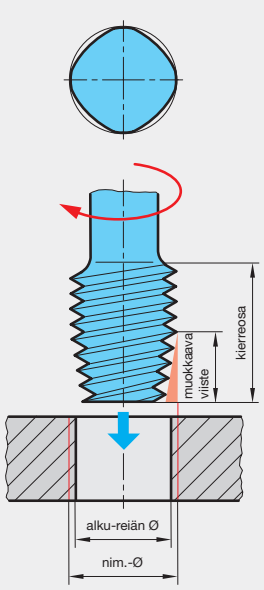
Perinteinen muoto manglaavakierretappi

Gühring ”Profile”-tapin optimoitu muoto

Manglaavan kierretapin poikkileikkaus



Toimintaperiaate



Alkureikätyypit

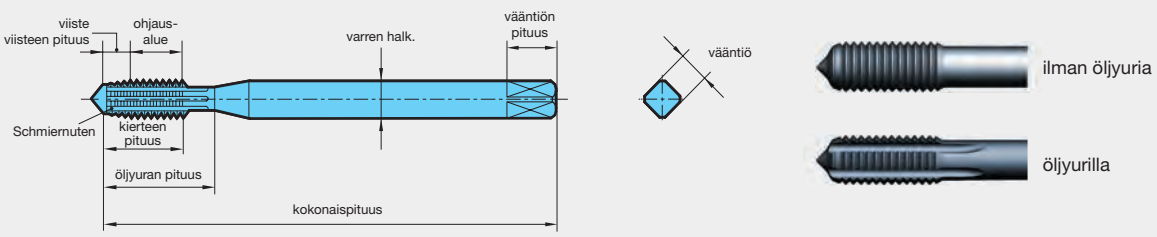
manglaavilla kierretapeilla ilman öljyuria
kierteytyssyvyys ≤ 1 x D

kierteytyssyvyys ≥ 1 x D

öljyurallisilla manglaavilla kierretapeilla kaikkiin kierteytyssyvyyksiin

Määritelmät, kulmat, keskiöt, kierretoleranssit sekä sovitukset

Kierre



Keskiötyypit (standardi ~ DIN 2197/DIN 2175)

Kierteen halk.-alue mm	Keskiö leikkuupäässä		Keskiö varressa
	viistemuodoilla A, C, D, E	viistemuodoilla B	
≤ 5,6	①	①	④⑤⑥
> 5,6 … 12,8	①②③	①②③	④⑤⑥
> 12,8	③	③	⑥

Kierretoleranssit ja sovitukset

Sovitusmerkinnäissä sisäinen ja ulkoinen kierre erotetaan kauttaviivalla(/), esim. 6H/6g(sisäinen/ulkoinen). Sovitus tulee valita kierreyhdistelmän mukaisesti.
Tolreanssialueet hieno-, keskisuuri- ja suuri toleranssi ovat eritelty kolmella kierteytyssyvyydellä: lyhyt - S, normaali - N ja pitkä - L. Seuraavat yleissäännöt pätevät toleranssia valittaessa:

Hieno toleranssialue (S):
Hienoille kierteille kun ainoastaan pieni liikkumavara sallitaan kierresovituksessa.

Kierteytyssyvyys
Kierresovituksen laatuun vaikuttaa myös kierteytyssyvyys. ISO-toleranssijärjestelmä oli, erityisesti mitä tulee nousuhalkaisijaan, jaettu kolmeen ryhmään, eli

S (lyhyt) = lyhytkierteytyssyvyys
N (normaali) = vakio kierteytyssyvyys
L (pitkä) = pitkä kierteytyssyvyys

Keskisuuri toleranssialue (N)
Yleiset käyttökohteet

Karkea toleranssialue (L):
Ei ole olemassa erityisiä tarkkuusvaatimuksia ja tapauksissa joissa on tuotantovaikeuksia, esim. kierteyttäminen kuumavallassattuihin tankoihin, syvät pohjareiät tai muoviset komponentit.

Seuraava sovitus tulisi valita kierteytyssyvyydelle N:
Jos halutaan varmistaa kierresovituksen pitävyys, suosittelemme tiukkaa sovitusta lyhyellä kierteytyssyvyydellä.

Alkureiän halkaisija

Manglaavassa kierteytyksessä alkureiän halkaisija vaikuttaa kierteen muotoon. Liian pieni alkureikä johtaa kierteen ylimuokkautumiseen, ja sitä tulee ehdottomasti välttää sillä muuten tuloksena voi olla työkalun rikkoutuminen. Liian suuri alkureikä voidaan tietyillä toleransseilla hyväksyä, sillä kierteillä on riittävä kuormituskapasiteetti 50%:n kierresyvyydessä.

Kierteen M18x1,5 esimerkki näyttää selvästi alkureiän vaikutuksen kierteeseen:

M 18 x 1,00	**17,55**	**17,52**	**17,62**	**16,917**	**17,217**
M 18 x 1,50	**17,30**	**17,26**	**17,38**	**16,376**	**16,751**
M 18 x 2,00	**17,10**	**17,05**	**17,20**	**15,835**	**16,310**

alkureikä-Ø 17,1 mm

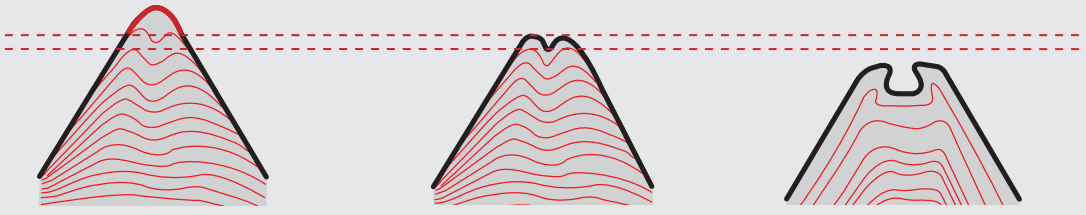
alkureikä-Ø 17,3 mm

alkureikä-Ø 17,4 mm

Liian pieni alkureiän halkaisija:
- liian suuri kierre
- ei muototaskua
- profiili liian korkea

Oikea alkureiän halkaisija:
- kierre täysin muotoutunut
- pieni muototasku
- oikea profiilikorkeus

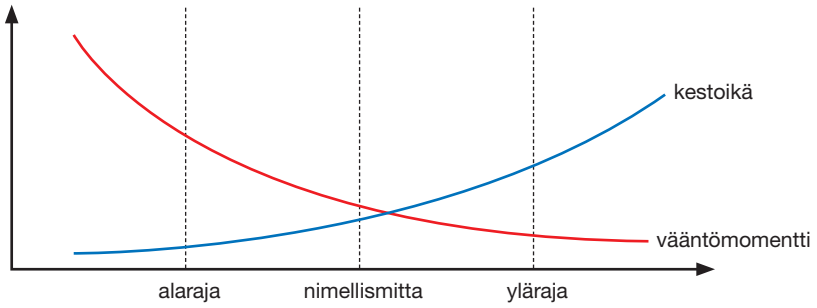
Liian suuri alkureiän halkaisija:
- kierre ei ole muotoutunut
- suuri muototasku
- profiilin korkeus liian matala



Alkureiän halkaisija toleranssialue DIN 13, osa 50 mukaan

Alkureiän vaikutus työkalun kestoikään, vääntömomenttiin ja toimintavarmuuteen

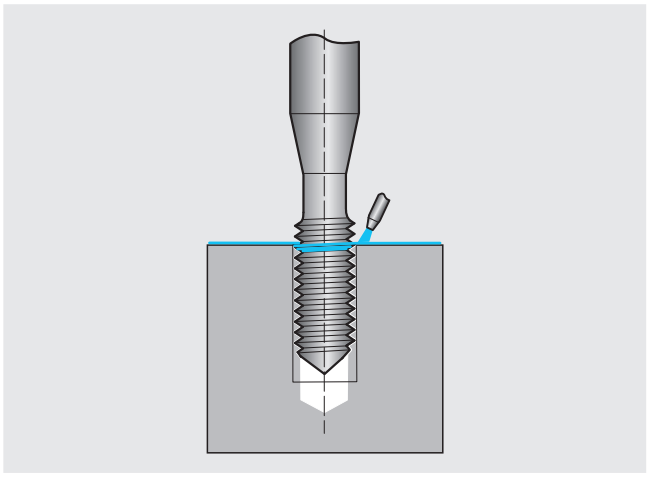
Kierteen alkureiän optimointi on erityisen hyödyllistä massatuotannossa. Mitä isompi se on sitä parempi kestoikä ja pienempi vääntömomentin tarve. Piirros esittää selvästi riippuvuuden.



Manglaavan tapin voitelu

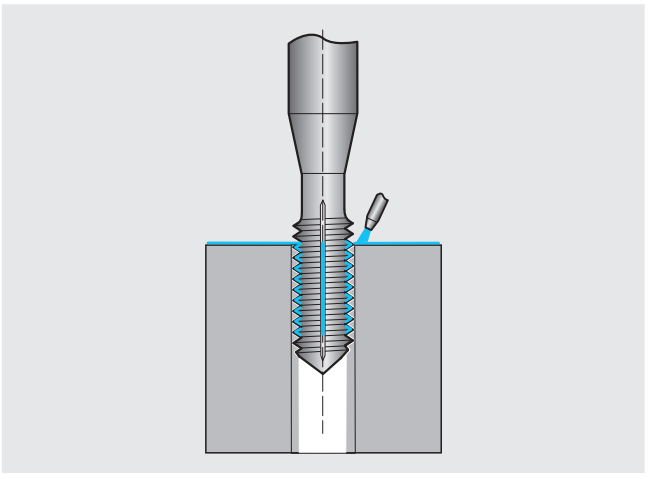
Työkalun valinta neljässä eri tapauksessa.

Pystykarainen pohjareikä



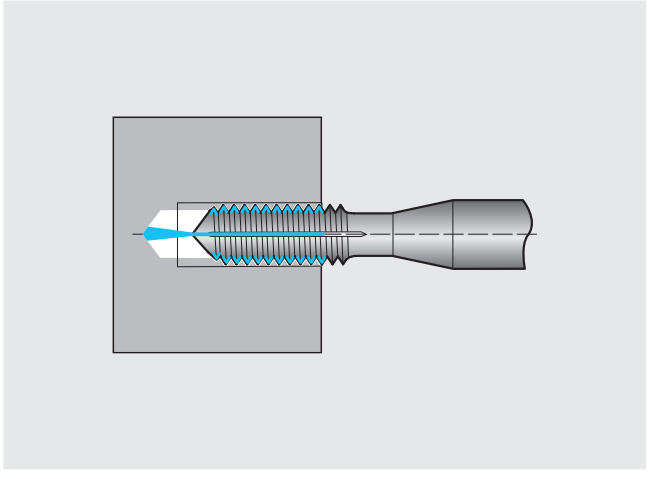
Öljyurat tai jäähdytyskanavat eivät ole välttämättömiä; ulkoinen voitelu on riittävä
(suositellaa aksiaalista voitelua erittäin syvissä rei'issä).

Pystykarainen läpireikä (> 1,5xD_N)



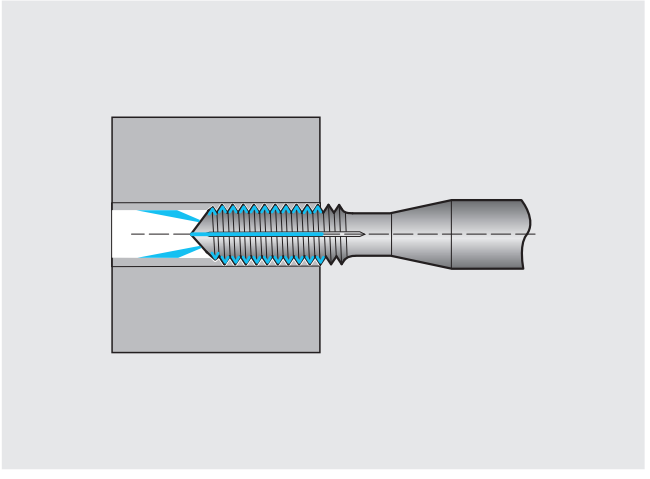
Öljyurat tarvitaan; jäädytyskanavat eivät ole välttämättömiä.
Öljyurat parantavat kierteen muovautumista.
(säteittäistä voitelua suositellaan erittäin syvissä rei'issä).

Vaakakarainen pohjakierre



Tarvitaan öljyurat ja jäähdytyskanavat.
Nesteen aksiaalinen poistuma oltava riittävä.

Vaakakarainen läpireikä



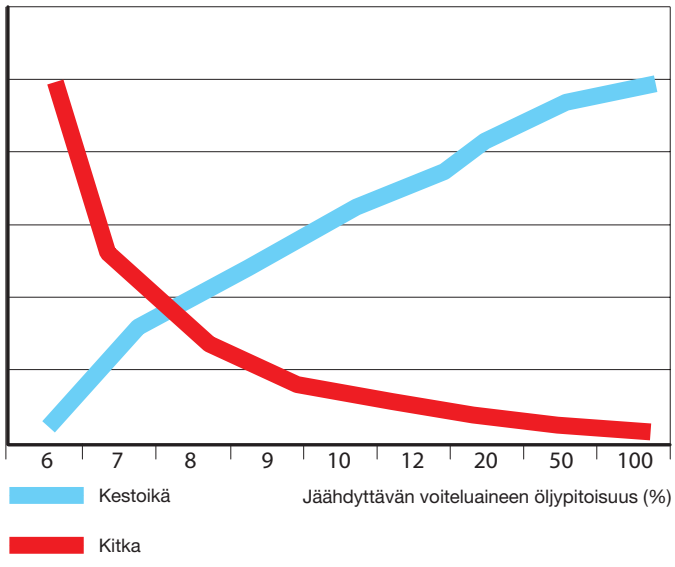
Tarvitaan öljyurat. Voiteluaineen radiaalinen syöttö suositeltava.

Jäähdyttävät voiteluaineet manglaaville kierretapeille

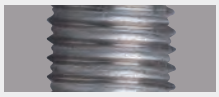
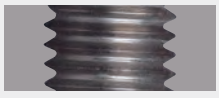
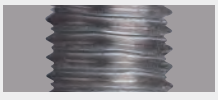
Mannglaavilla kierretapeilla jäähdytysnesteen päätehtävä on voitelu. Mitä suurempi öljypotoisuus, sitä parempi voitelu ja sitä pidempi työkalun kestoikä.
On kahden tyyppisiä voiteluaineita:

Öljypohjaiset voiteluaineet
Mineraaliöljyillä on parhaat voiteluominaisuudet. Ne vähentävät kitkaa ja parantavat kestoikää.

Emulsiot
Emulsiot ovat vedellä ohennettua öljyä. Öljypitoisuus ei saa olla alle 6 %:n. Yli 12 % pitoisuus antaa parhaimman voitelutehon ja sen kautta pisimmän kestoiän.



Ongelmia uusien manglaavien kierretappien kanssa

Ongelma	Mahdolliset aiheuttajat	Ratkaisu
1. Työstetty kierre on liian pieni 	Kierteen alkureiän halkaisija on liian suuri	Valitse taulukosta oikea halkaisija alkureiälle
2. Kierre on ylimuokkautunut 	Alkreiän halkaisija liian pieni	Valitse taulukosta oikea halkaisija alkureiälle
3. Kierteen pinnanlaatu ei ole vaatimiusten mukainen 	Irtosärmänmuodostus Voitelun liian alhainen öljypitoisuus	Nosta öljypitoisuutta tai käytä leikkuuöljyä Nosta öljypitoisuutta tai käytä leikkuuöljyä
4. Työkalun liian lyhyt kestoikä	Voitelun liian alhainen öljypitoisuus Alkreiän halkaisija liian pieni Liian suuri leikkuunopeus Leikkuuöljy likaantunut	Nosta öljypitoisuutta tai käytä leikkuuöljyä Valitse taulukosta oikea halkaisija alkureiälle Säädä leikkuunopeutta Tarkista suodatus
5. Työkalun rikkoutuminen	Voitelun liian alhainen öljypitoisuus Alkureiän halkaisija liian pieni Virheellinen työkalun kiinnitys	Nosta öljypitoisuutta tai käytä leikkuuöljyä Valitse taulukosta oikea halkaisija alkureiälle Tarkista työkalun kiinnitys

Mitä etuja on kierteen jyrsinnällä verrattuna leikkaaviin tai muovaaviin kierretappeihin ?

- useat materiaalit voidaan työstää yhdellä työkalulla (alumiini,teräs, valurauta, RST, titaani, Inconel, maks. kovuus HRC 65 jne.)
- eri halkaisijat ja toleranssit mahdollisia yhdellä työkalulla (esim. 6h+0,1, 7G EG jne.)
- yksi työkalu läpi- ja pohjareille kuten myös oikea- ja vasenkätisille kierteille
- kierteen syvyys pohjaan saakka mahdollista (0,5xP)
- ei aksiaalista poikkileikkausta
- työkalupaikkojen säästö (malli TMC, malli DTMC)
- ei lastuongelmia lyhyen lastun muodostuksen ansiosta
- kustannussäästö saman nousun ja suuremman koon yhteydessä (malli TMU))
- lyhyt työstöaika johtuen suuresta leikkuunopeudesta ja syöttöarvosta
- hyvä käyttöluotettavuus jopa työkalun rikkoutuessa,koska kierrejyrsin voidaan poistaa kokonaisuudessaan työkappaleesta ja koneesta
- hyvä taloudellisuus johtuen Gühring'in teroitus- ja pinnoituspalveluista

Gühring kierrejyrsimet

TM SP - kierrejyrsin ilman viistettä

- yksinkertainen ja edullinen työkalu sisäkierteille
- 2-3 kierrettä voidaan tehdä smalla nousulla nimelliskierteen lisäksi
- soveltuu aineille ≤ 1000 N/mm²
- joko jäähdytyskanavalla tai ilman

Kierteet: M, MF, UNC, UNF, G, NPT, NPTF

TMC SP - kierrejyrsin 45° viisteellä

- viisteytys ja kierrejyrsintä samalla työkalulla
- pehmeä käynti ja pienet sivuttaisvoimat
- suunniteltu vaikeasti työstettäville aineille, saatavana myös ilman viistettä
- 2-3 kierrettä voidaan tehdä smalla nousulla nimelliskierteen lisäksi
- vain jäähdytyskanavalla

Kierteet: M, MF,UNC, UNF,G, NPT, NPTF

TMU SP - yleiskierrejyrsin kaulan kevennyksellä

- yleiskäyttöön
- useammalle kierrekoolle joilla sama nousu l. M30x1,5; M12x1,5; M16x1,5 tai M20x1,5
- vain jäähdytyskanavalla

Kierteet: M, MF, G, UN, NPT, NPTF
ja ulkokierre M, MF, G

DTMC SP - poraava kierrejyrsin 2-leik. 45° viiste

- poraus, viisteytys ja kierre yhdellä työkalulla
- siitä johtuen lyhyempi työstöaika, pienempi kustannus ja työkalupaikkojen tarve
- soveltuu vain alumiinille, valuraudalle, messingille ja muoville
- joko jäähdytyskanavalla tai ilman

Kierteet: M, MF, UNC, UNF

MTM 3 SP - mikro-kierrejyrsin (3-hampainen malli)

- Kierrekoko ja nousu määrätty
- sopii erinomaisesti suurlujuuksisille aineille kuten titaani, RST jne.
- sopii karkaistulle teräkselle 45HRC - 65HRC
- kierre ylös 3xD
- joko jäähdytyskanavalla tai ilman

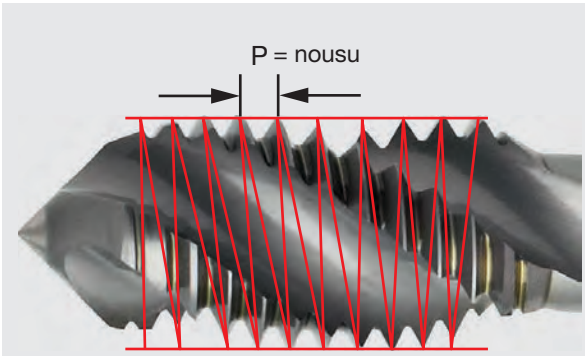
Kierteet: M, MF, G, UNC, UNF, MJ, UNJC, UNJF

MTM 1 SP mikro-kierrejyrsin (1-hampainen malli)

- yleiskäyttöön nimelliskierteiden tekemiseen täydellä nousulla
- ilman jäähdytyskanavaa

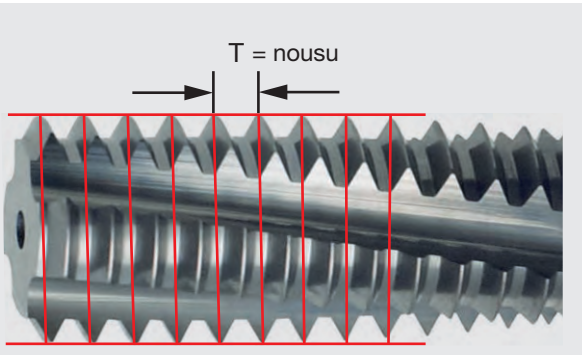
Kierteet: M, MF

Leikkaava-/manglaava tappi



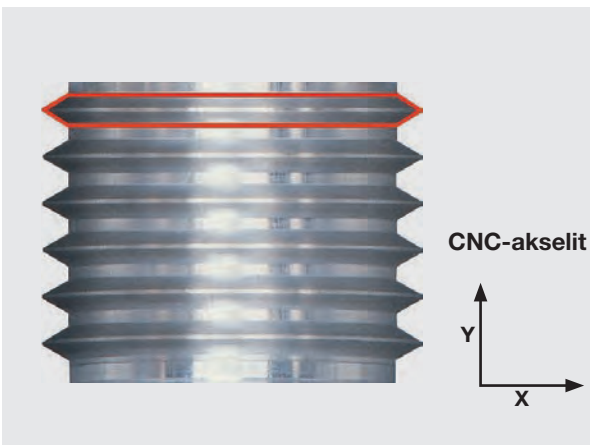
Punainen linja näyttää kierteen nosukulman mikä on hiottu työkaluun. Tämä merkitsee sitä, että työkalu leikkaa nousun työkappaleesee.

Kierrejyrsin

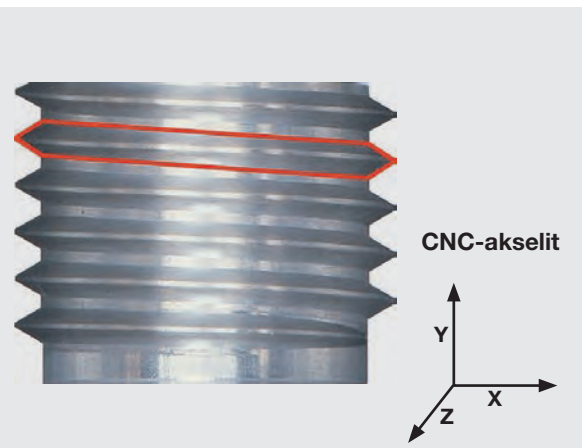


Punainen linja näyttää ettei työkalussa ole nousukulmaa. Nousu syntyy CNC-koneen Z-akselin avulla.

Kierteen muodostuminen jyrsimällä



Kierreprofiili ilman Z-akselia. Uramuoto syntyy ilman nousua. Toimivaa kierrettä ei synny.

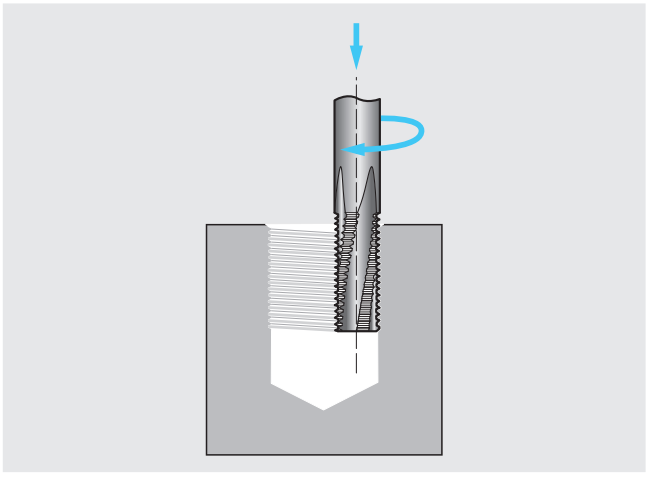


Lisäämällä ohjelmaan Z-akselin saadaan tarvittava kierre tehtyä.

Huom:
Johtuen nousukulman (**Z-akseli**) vinosta jyrsinnästä työkalun kierreprofiili siirtyy komponenttiin vääristyneenä. Mitä lähemmäksi jyrsimen halkaisija (80% nimellishalkaisijasta) tulee nimellistä kierteen halkaisijaa ja mitä suurempi kierteen nousu on sitä suurempi on profiilin vääristymä.

Vastenjyrsintä

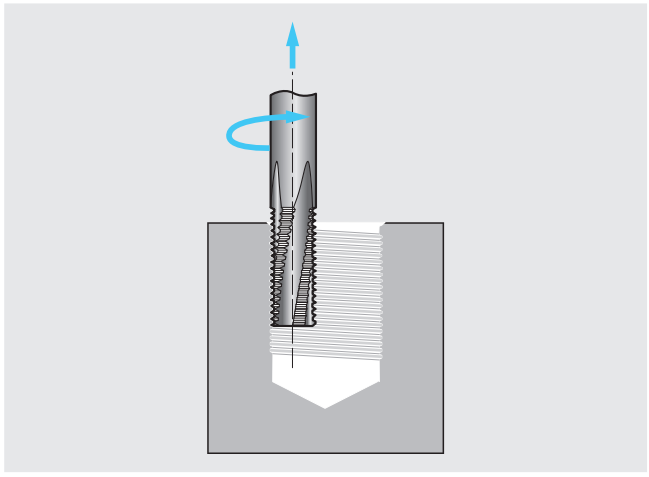
myötäpäivään G02



Vastajyrsintää suositellaan kovien aineiden työstöön tai kartio kierteiden korjaamiseen.

Myötäjyrsintä

vastapäivään G03

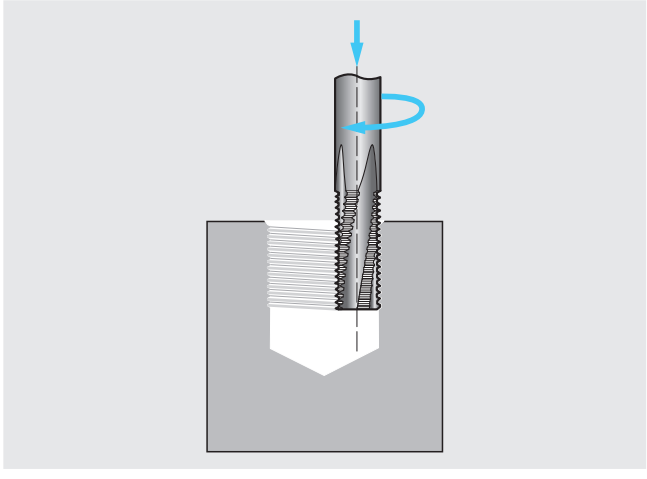


Myötäjyrsintä soveltuu alle 1,5xD kierteiden jyrsintään.
Etu: saavutetaan parempi pinnanlaatu.

Kierteen valmistus yhdellä työkalulla

Oikeakätinen kierre

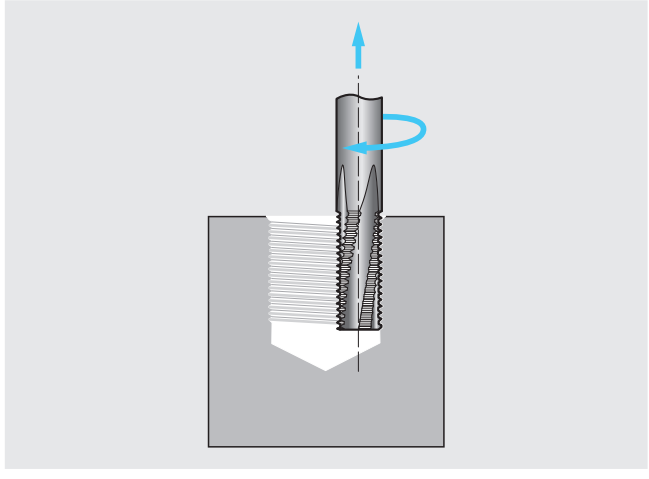
Vastenjyrsintä



Työkalu pyörii myötäpäivään ylhäältä alas

Vasenkätinen kierre

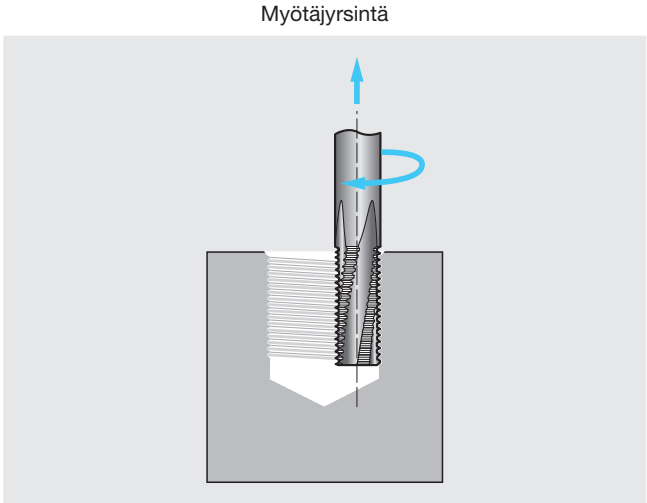
Vastenjyrsintä



Työkalu pyörii myötäpäivään alhaalta ylös

Oikeakätinen kierre

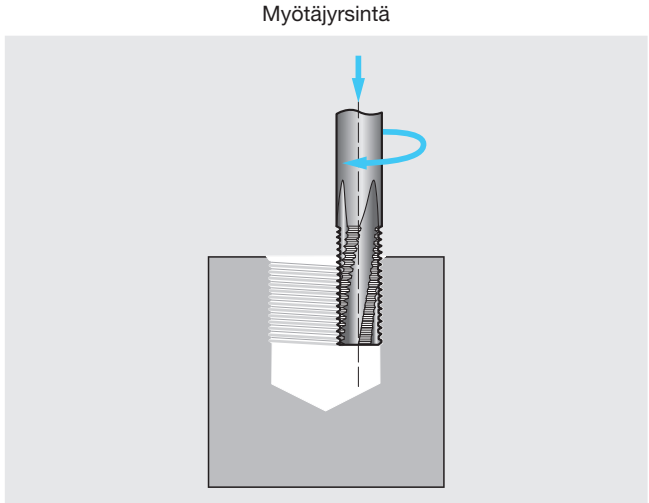
Myötäjyrsintä



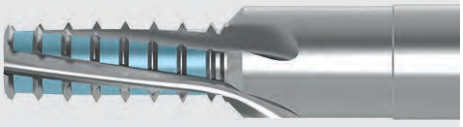
Työkalu pyörii myötäpäivään alhaalta ylös

Vasenkätinen kierre

Myötäjyrsintä



Työkalu pyörii myötäpäivään ylhäältä alas

Kuvaus	Muunnos	Vaikutus
	Jäähdytysurat varressa	Ohjattu jäähdytys ilman että työkalun poikkileikkaus kohta heikkenee
	Säteittäinen nesteen syöttö	Ohjattu jäähdytys läpirei'ille
	Harvennetut kierteet	Pienemmät leikkuuvoimat, mutta pidempi työstöaika koska tarvitaan kaksi työkierta
	Jäysteenpoistosärmä	Poistaa sisäänmennessään ei-kokonaisen kierteen ilman ylimääräistä työkiertoa
	Ensimmäinen kierreprofiili pidennetty otsapinnalla	Viisteen muodostaminen
	Hiottu kaulankevennys	Mahdollistaa aksiaalisen syvennyksen -käyttökelpoinen syville kierteille

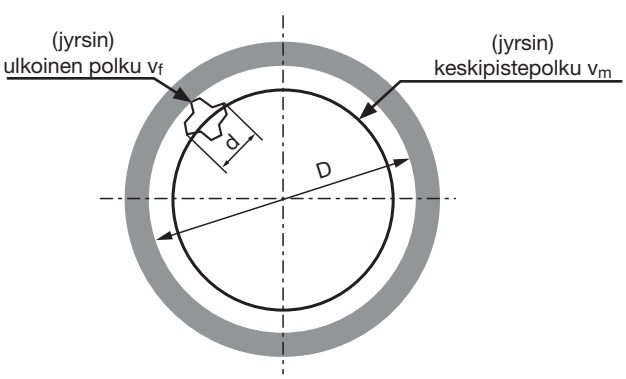
Ohjelman yksityiskohtia

Kierrejyrsinnän toiminnot

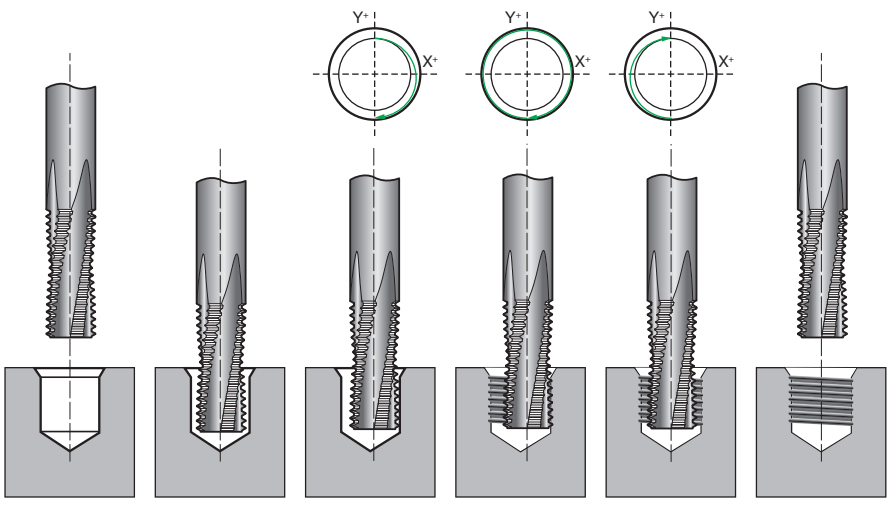
G00	Pikaliike	**G90**	Tarkka mittapiste
G01	Syöttö	**G91**	Askelmittapiste
G02	Ympyräinterpolaatio (myötäpäivään)	**M03**	Kara käyntiin (myötäpäivään)
G03	Ympyräinterpolaatio (vastapäivään)	**M05**	Kara seis
G17	Työstötason valinta x-y akselilla	**M08**	Jäähdytys päälle
G18	Työstötason valinta z-x akselilla	**X**	Akseli
G19	Työstötason valinta y-z akselilla	**Y**	Akseli
G40	Peru työkalukorjaus	**Z**	Akseli
G41	Työkalupolun korjaus (vasemmalle menosuuntaan)	**I**	Kierteen nousu X-akselin suuntaisesti
G42	Työkalupolun korjaus (oikealle menosuuntaan)	**J**	Kierteen nousu Y-akselin suuntaisesti
G43	Työkalun pituuskompensointi (kutsu)	**S**	Karanopeus
G49	Työkalun pituuskompensointi (pois)	**F**	Syöttö
G54	Nollapiste		

CNC sisäkierteen jyrsintä

1. Siirtyminen alkuasentoon
2. Kierresyvyyteen siirtyminen
3. 180^0 sisäänmenojakso
4. 360^0 kierteen jyrsintä
5. 180^0 poistumisjakso
6. Pikaliike alkuasentoon



sisäänmeno 180^0
(aina puolella syöttöarvosta)



Laskentakaava

$$v_c = \frac{d \cdot \pi \cdot n}{1000}$$

$$n = \frac{v_c \cdot 1000}{d \cdot \pi}$$

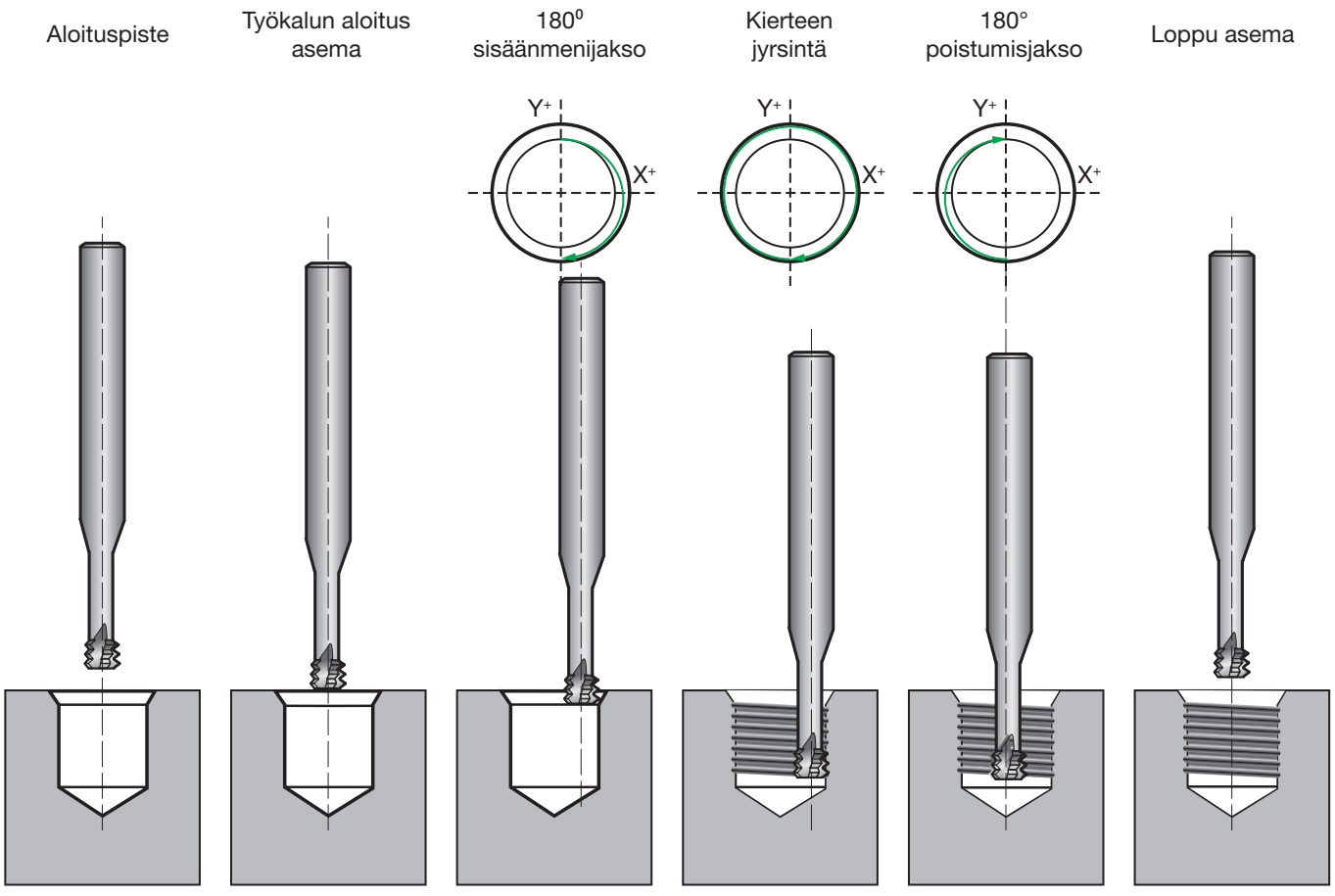
$$v_f = n \cdot z \cdot f_z$$

$$v_m = \frac{v_f \cdot (D - d)}{D}$$

$$v_b = n \cdot f_b$$

v_c = leikkuunopeus
v_f = pöytäsyöttö
v_m = keskipistepolun syöttö
n = kierrokset
z = leikkuiden lkm.
f_z = syöttö per hammas
f_b = poran syöttö per kierros*
v_b = poran syöttöarvo*
D = Kierteen nimellishalk. (mm)
d = Jyrsimen ulkohalkaisija (mm)
* poraavalle kierrejyrsimelle

Mikro-kierrejyrsimen ohjelmointi (oikeakätinen kierre vastapäivään)



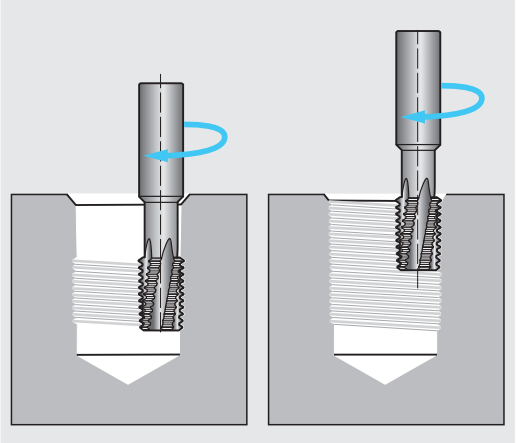
Mahdollisuudet vähentää säteittäisiä voimia

Säteittäisiä voimia voidaan pienentää suorittamalla jyrsintä useammassa osassa.

EDUT:
- suuremmat kierresyvyydet
- korvaa kartiokierteet
- soveltuu epävakaisiin olosuhteisiin

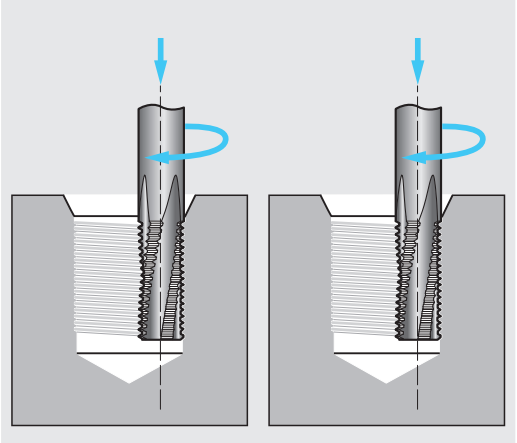
HAITAT:
- nopeampi työkalun kuluminen
- pidempi valmistusaika

Aksiaalinen työstö



1. leikkaus | 2. leikkaus

Säteittäinen työstö



1. leikkaus | 2. leikkaus

Oikean kiinnitysistukan valinta

Oikea työkalun kiinnitys on välttämätöntä myös kierrejyrsinnässä. Kierrejyrsimet pitäisi kiinnittää niin lyhyesti kuin mahdollista. Suositellaan puristus ja mekaanista kiinnitysvoimaa.

Voimaistukka

max. sallittu heitto: 0,003 mm

Voimaistukka on oiva valinta sen tarkan samankeskeisyyden vuoksi. Suuret kiinnitysvoimat ja tasainen käynti ovat täydellinen asetelma kierteiden valmistukseen kaikissa materiaaleissa myös suurilla nousuilla.

Weldon-/Whistle-Notch istukat

max. sallittu heitto: 0,02 mm

Nämä HB- ja HE varsille tarkoitetut istukat ovat vankkoja ja edullisia, myös maksimaalinen kiinitysvoima. Kiinnitystaso estää työkalua taipumasta tai tulemasta ulos työstön aikana. Siksi nämä istukat soveltuvat kaikkien materiaalien työstöön, myös suurille nousuille.

Kuristeistukka

max. sallittu heitto: 0,005 mm

Kuristusistukka muodostaa joustamattoman kiinnityksen työkalun ja istukan välille. Väärä kuristesovite tai kulunut kuristusistukka voi aihettaa työkalun ulos vetämisen, mikä johtaa työkalun rikkoon ja mahdollisesti työkappaleen pilalle menoo. Täten kuristeistukat sopivat kierteille joiden nousu P <=1,5mm.

Hydrauli-istukka

max. sallittu heitto: 0,005 mm

Hydrauli-istukalla, samoin kuin kuristeistukalla, on vain rajallinen soveltuvuus kierteen jyrsintään.
Erityisesti suuret sivuttaivoimat asettavat sille rajoituksia.
Täten hydrauli-istukkaa suositellaan pehmeille materiaaleille kuten alumiini ja kierteen nousulle P<=1,5mm.

Holkki-istukka

max. sallittu heitto: 0,01 mm

Holkki-istukat sopivat hyvin mikro.kierrejyrsimille, koska niihin tulee vain aksiaalinen kuormitus. Heikko kiinnitysvoima sallii vain pehmeiden materiaalien työstön. Tästä johtuen holkki-istukat eivät sovellu perinteiseen kierteen jyrsintään.

Kierrejyrsimien käytännön sovellutuksia

1.) Työkalun kiinnitys:
tarkka kiinnitys on tärkeää, siksi kiinnitin niin lyhyt ja tukeva kuin mahdollista.
(katso kiinnitin suositukse)

2.) Työkalutietojen syöttö koneen muistiin
1.) Työkalun pituus edestä katsottuna, käytä poraavisssa kierrejyrsimissä (DTMC) kärjen alkua.
2.) Mittaa työkalun halkaisija esiaetuslaitteessa. Yleinen käytäntö: mitattu säde – 0,022 x nousu on koneelle annettava arvo.

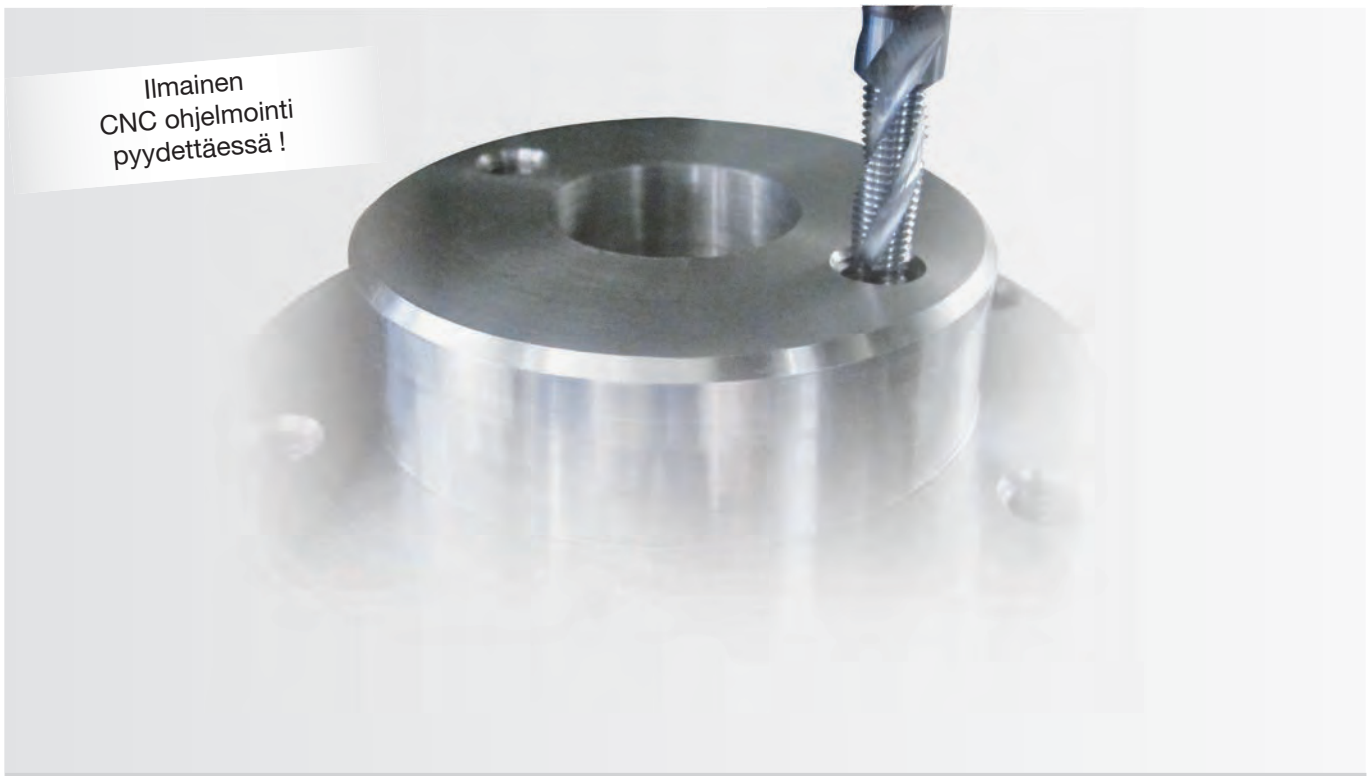
3.) CNC-ohjelman syöttö ohjaukseen
(suositeltavampaa integroitu aliohjelma kyseisiin asemiin)
a.) Itseohjaavan jakson kutsu (järjestys on tiedettävä)
b.) Data-tiedoston yhdistäminen meidän Gühring'n kierrejyrsin-ohjelmasta (DIN tai Heidenhain).

4.) Koeajoa työkappaleen päällä
a) Työkalun pituus muistissa pidennettynä arvio arvolla kontakti etäisyydestä (esim. 30mm) tai nollapisteen asennus
b) Ohjelman ajo osissa, liikeradan silmämääräinen huomiointi
c) Ohjelman ajo automaattisest.

Huom:
Niisä ohjauksissa missä ei ole täysin varmaa mikä jyrsintäpolku on täytyy selvittää onko syöttö asetettu ulkoiselle polulle v_f vai keskipistepolulle v_m.
Pääsääntöisesti käytämme jyrsinnän keskipistepolkua v_m.

5.) Käyttö työkappaleessa
Aseta takaisin työkalun pidennys tai nollapiste. Anna ohjelman edetä työkappaleessa, syötön ohjaus on oltava 100% valittuna. Mikäli kierre ei läpäise mittausta, työkalun sädettä on korjattava muistiin:
Esimerkki:
- kierre liian tiukka: sädekorjaus – arvo
- kierre liian iso: sädekorjaus + arvo

TM SP – Kierrejyrsimet ilman viistettä



Työesimerkki malli TM			
Artikkelinro.:	3737 TiCN	**Leikkuunopeus [v_c]:**	80 m/min
Kierrekoko:	M10x(1)	**Syöttö per hammas:**	0,05 mm
Kierteen syvyys:	20 mm / pohjareikä	**Työjärjestys:**	vastapäivään jyrsintä
Aines:	St- 37	**Työaika:**	6,9 sec.

CNC ohjelma	
N10 M6 T1	
N20 G90 G54 G00 X0 Y0	
N30 Z2 S3203 M3 M8	asemointi työkappaleen päälle
N40 Z-18.70	asemointi kierteen syvyydelle
N50 G91	absoluuttinen tieto
N60 G42 G01 X0 Y3.975 F50	säteen kompensointi
N70 G02 X0 Y-9.005 I0 J-4.503 Z-0.150	180^0 sisäänmenojakso
N80 G02 X0 Y0 I0 J5.030 Z-1.000 F101	360^0 kierteen nousu
N90 G02 X0 Y9.005 I0 J4.503 Z-0.150	180^0 poistumisjakso
N100 G40 G01 X0 Y-3.975	säteen kompensointi pois
N110 G90	absoluuttinen tieto pois
N120 G00 Z2 M9	pikaliike alkuasentoon
N130 M30	

TMC SP – Kierrejyrsimet 45^0 viisteellä

Työesimerkki malli TMC			
Artikkelinro.:	3528 TiCN	**Leikkuunopeus [v_c]:**	100 m/min
Kierrekoko:	M12x(1,5)	**Syöttö per hammas:**	0,075 mm
Kierteen syvyys:	18 mm / pohjareikä	**Työjärjestys:**	vastapäivään jyrsintä
Aines:	42CrMo4	**Työaika:**	4,15 sec.

CNC ohjelma	
N10 M6 T1	
N20 G90 G54 G00 X0 Y0	
N30 Z2 S1600 M3 M8	asemointi työkappaleen päälle
N40 Z-26.20	asemointi 45^0 viisteytykselle
N50 G01 Z-27.57 F85	viisteytys 45^0
N60 G00 Z-16.05 S3199	asemointi kierteen syvyydelle
N70 G91	askeltila
N80 G42 G01 X0 Y4.975 F85	säteen kompensointi
N90 G02 X0 Y-11.015 I0 J-5.508 Z-0.225	180^0 sisäänmenojakso
N100 G02 X0 Y0 I0 J6.040 Z-1.5 F169	360^0 kierteen nousu
N110 G02 X0 Y11.015 I0 J5.508 Z-0.225	180^0 poistumisjakso
N120 G40 G01 X0 Y-4.975	säteen kompensointi pois
N130 G90	lopetus
N140 G00 Z2 M9	pikaliike alkuasentoon
N150 M30	

TMU SP – Yleiskäyttöiset kierrejyrsimet

Työesimerkki malli TMU

Artikkelinro.:	3541 Ø 12xM1 TiCN	**Leikkuunopeus [v_c]:**	60 m/min
Kierrekoko:	M28x1	**Syöttö per hammas:**	0,05 mm
Kierteen syvyys:	12 mm / pohjareikä	**Työjärjestys:**	vastapäivään jyrsintä
Aines:	RST [1.4301]	**Työaika:**	28,96 s.

CNC ohjelma

N10 M6 T1	
N20 G90 G54 G00 X0 Y0	
N30 Z2 S1598 M3 M8	asemointi työkappaleen päälle
N40 Z-10.70	asemointi kierteen syvyydelle
N50 G91	askeltila
N60 G42 G01 X0 Y5.975 F92	säteen kompensointi
N70 G02 X0 Y-20.015 I0 J-10.008 Z-0.150	180^0 sisäänmenojakso
N80 G02 X0 Y0 I0 J14.040 Z-1.000 F184	360^0 kierteen nousu
N90 G02 X0 Y20.015 I0 J10.008 Z-0.150	180^0 poistumisjakso
N100 G40 G01 X0 Y-5.975	säteen kompensointi pois
N110 G90	lopetus
N120 G00 Z2 M9	pikaliike alkuasentoon
N130 M30	

DTMC SP – Poraavat kierrejyrsimet

Työesimerkki malli DTMC

Artikkelinro.:	3779 kirkas	**Leikkuunopeus [v_c]:**	230 m/min
Kierrekoko:	M8x(1,25)	**Poraus syöttö:**	0,1 mm / U
Kierteen syvyys:	15 mm / pohjareikä	**Syöttö per hammas:**	0,05 mm
Aines:	AlSi 10%	**Työjärjestys:**	vastapäivään jyrsintä
		Työaika:	3,44 s.

CNC ohjelma

N10 M6 T1	
N20 G90 G54 G00 X0 Y0	
N30 Z2 S11529 M3 M8	asemointi työkappaleen päälle
N40 G01 Z-1 F577	avarrus (parantaa keskiöintiä)
N50 G01 Z-19.86 F1153	poraus alkureiän syvyyteen 45^0 upotuksella
N60 G00 Z2 S11529	pikaliike pois reiästä lastujen poistamiseksi
N70 Z-13.38	asemointi kierteen syvyydelle
N80 G91	askeltila
N90 G42 G01 X0 Y3.175 F122	säteen kompensointi
N100 G02 X0 Y-7.205 I0 J-3.603 Z-0.188	180^0 sisäänmenojakso
N110 G02 X0 Y0 I0 J4.030 Z-1.250 F245	360^0 kierteen nousu
N120 G02 X0 Y7.205 I0 J3.603 Z-0.188	180^0 poistumisjakso
N130 G40 G01 X0 Y-3.175	säteen kompensointi pois
N140 G90	lopetus
N150 G00 Z2 M9	pikaliike alkuasentoon
N160 M30	

TMU SP – Uleiskäyttöiset kierrejyrsimet ulkokierteelle

Ilmainen
CNC ohjelmointi
pyydettäessä !

Ohjelmointi esimerkki M14x1,5 – 6g (ulkokierre)	
Työkalun malli:	TMU D12x20xM1,5-A TiCN Z=4 (työkalun-Ø 11,95 mm)
	(vaihtoehtoisesti TMU D16x25xM1.5 A TiCN Z=5 voidaan käyttää)
Aines:	38MnSiV5
Leikkuuarvot:	v_c = 130 m/min, f_z = 0,06 (vastapäivään jyrsintä) v_f = 831 mm/min, v_m = 1548 mm/min
N10 M6 T1	
N20 G90 G54 G00 X0 Y0	
N30 Z2 S3463 M3 M8	liike keskeisesti pultin päälle
N40 G91	askeltila
N50 X7.033 Y11.99	aloitus asema säteittäisesti pulttiin
N60 G01 Z-14.5	liike aloitussyvyyteen
N70 G42 G01 X0 Y-5.975	säteen kompensointi
N80 G01 X-7.033 Y0.000 F774	lineaarinen lähestymispolku
N90 G03 X0.000 Y0.000 Z1.5 I0 J-6.015 F1548	360^0 kierteen nousu
N100 G01 X-7.033 Y0.000	lineaarinen poistumispolku
N110 G40 G01 X0.000 Y5.975	säteen kompensointi pois
N120 G90	lopetus
N130 G80 G00 Z2 M9	lopetus asema pultin päällä
N140 M30	

TYP TM SP – NPT kierteelle (kartiomainen kartio 1:16)

Ohjelmointi esimerkki NPT ¼-18: (kartiomainen, kartio 1:16)	
Työkalun malli:	TM D 9,95x19,05xNPT18 JK (4-leikkeinen)
Työkalun Ø:	d1 = 9,95 mm (mitattu ensimmäisestä hampaasta)
Työkalun pituus:	mitattu etupinnalla
Kierteytyskoko Ø:	Ø 11,10 mm lieriömäinen (suositellumpi kartiomainen D1=11,36mm / d1= 11,10mm)
Materiaali:	16 Mn Cr 5
Leikkuuarvot:	v_c = 70 m/min, f_z = 0,05 (vastapäivään jyrsintä) v_f = 447 mm/min, v_m = 102 mm/min
N10 M6 T1	
N20 G90 G54 G00 X0.000 Y0.000	
N30 Z2.000 S2239 M3 D1	asemointi työkappaleen päälle
N40 G00 Z-10.016	työkalu poraukseen
N50 G91	askeltila
N60 G42 G01 X0.000 Y4.975 F1000	säteen kompensointi
N70 G02 X0.000 Y-11.432 I0.000 J-5.716 Z-0.212 F51	180^0 sisäänmenojakso
N80 G02 X-6.457 Y6.457 I0.000 J6.457 Z-0.353 F102	¼ kierre ilman korjausta
N90 G02 X6.445 Y6.445 I6.445 J0.000 Z-0.353	¼ kierre korjauksella
N100 G02 X6.434 Y-6.434 I0.000 J-6.434 Z-0.353	¼ kierre korjauksella
N110 G02 X-6.423 Y-6.423 I-6.423 J0.000 Z-0.353	¼ kierre korjauksella
N120 G02 X0.000 Y11.387 I0.000 J5.694 Z-0.212	180^0 poistumisjakso
N130 G40 G01 X0.000 Y-4.975 F1000	säteen kompensointi pois
N140 G90	lopetus
N150 G53 G00 Z2.000	pikaliike alkuasentoon
N160 M30	

MTM – Mikro-kierrejyrsimet

Ilmainen
CNC ohjelmointi
pyydettäessä !

Mikro-kierrejyrsimet

Kovametalliset mikro-kierrejyrsimet on suunniteltu erikoisesti kierteiden tekoon pienissä rei'issä:

- erinomaiset ominaisuudet lujissa materiaaleissa (esim. titaaniseokset, ruostumattomat teräkset, …)
- pohja- ja läpireiät 3xD asti
- vähäinen leikkuuvoima
- erittäin hyvä kierteen laatu
- lyhyet työstöajat
- sopii myös pehmeille materiaaleille (esim. alumiini tai muovit)

Ohjelmointi esimerkki: M3x(0,5) MTM 3 SP	
Aines:	TiAl6V4
Kierre:	M3, syvyys 7,0 mm / pohjareikä
Työkalu:	MTM 3 SP M3x(0,5) työkalun-Ø 2,4 mm Z=3
Leikkuuarvot:	v_c = 40 m/min, f_z = 0,025 (vastapäivään jyrsintä) v_f = 398 mm/min, v_m = 84 mm/min
N10 M6 T1	
N20 G90 G54 G00 X0 Y0	
N30 Z2 S5305 M3 M8	
N40 Z0.1	
N50 G91	
N60 G42 G01 X0 Y1.200 F42	
N70 G02 X0 Y-2.720 I0 J-1.360 Z-0.075	
N80 G02 X0 Y0 I0 J1.520 Z-0.500 F84	
Setin N80 toistojen määrä=15	
N90 G02 X0 Y2.720 I0 J1.360 Z-0.075	
N100 G40 G01 X0 Y-1.200	
N110 G90	
N120 G00 Z2 M9	
N130 M30	

Leikkuuarvot kierrejyrsimille

			Malli	TM	TMC	TMU

ISO	Materiaaliryhmä	Leikkuunopeus v_c (m/min)	Syöttö mm/hammas fz Ø:lle (**vastenjyrsintä**) Jyrsinosan halkaisija Ø2 mm	Ø3 mm	Ø4 mm	Ø5 mm	Ø6 mm	Ø7 mm	Ø8 mm	Ø9 mm	Ø10 mm	Ø12 mm	Ø14 mm	Ø16 mm	Ø18 mm	Ø20 mm			
P	Yleiset rakenneteräkset Automaattiteräkset Seostamattomat hiiliteräkset Seostamattomat nuorrutusteräkset	110	0,02	0,02	0,025	0,03	0,035	0,045	0,05	0,055	0,06	0,06	0,065	0,065	0,07	0,08	++	++	++
	Seostetut hiiliteräkset Seostetut nuorrutusteräkset Seostetut työkaluteräkset	90	0,015	0,015	0,02	0,025	0,03	0,035	0,04	0,045	0,05	0,05	0,05	0,055	0,06	0,07	+	++	++
M	RST ja haponkestävät teräkset rikitetty austeniittinen martensiittinen	60	0,01	0,01	0,015	0,02	0,025	0,03	0,03	0,035	0,04	0,045	0,05	0,05	0,055	0,06	+	++	++
K	Harmaa valu, valurauta Pallografiitti- ja adusoitu valurauta	120	0,02	0,02	0,025	0,03	0,035	0,045	0,05	0,055	0,06	0,06	0,065	0,07	0,08	0,1	++	++	++
N	Ei-rautametallit: Alumiini ja muut ei-rautametalli, kupariseokset	250	0,03	0,035	0,04	0,045	0,05	0,055	0,06	0,065	0,07	0,08	0,085	0,09	0,1	0,12	++	++	++
	Muovit	350	0,03	0,04	0,045	0,05	0,055	0,055	0,06	0,07	0,075	0,085	0,09	0,1	0,12	0,15	++	++	++
S	Erikoisseokset ja titaani	35	0,01	0,01	0,015	0,02	0,025	0,03	0,03	0,035	0,04	0,045	0,05	0,05	0,055	0,06	+	++	++
H	Karkaistut teräkset (max. 55 HRC)	25	-	0,005	0,005	0,01	0,012	0,014	0,018	0,02	0,02	0,022	0,025	0,03	0,035	0,04	+	++	+

Huom: Karkaistuissa teräksissä max. 55 HRC halkaisija on ohjelmoita kolmessa vaiheessa !

Leikkuuarvot poraaville kierrejyrsimille 2xD, 2,5xD

			Malli	DTMC

ISO	Materiaaliryhmä	Schnittgeschw. v_c (m/min)	Syöttö mm/hammas fz Ø:lle (**vastenjyrsintä**) Jyrsinosan halkaisija M3 fb mm/U	M3 fz mm	M4 fb mm/U	M4 fz mm	M5 fb mm/U	M5 fz mm	M6 fb mm/U	M6 fz mm	M8 fb mm/U	M8 fz mm	M10 fb mm/U	M10 fz mm	M12 fb mm/U	M12 fz mm	
K	Harmaa valu, valurauta Pallografiitti- ja adusoitu valurauta	100	0,05	0,01	0,06	0,02	0,07	0,025	0,08	0,035	0,1	0,04	0,12	0,055	0,14	0,065	+
N	Ei-rautametallit: Alumiini ja muut ei-rautametalli, kupariseokset	230	0,06	0,015	0,07	0,025	0,08	0,03	0,1	0,04	0,12	0,05	0,15	0,07	0,18	0,08	++
	Muovi	300	0,07	0,02	0,08	0,03	0,09	0,04	0,12	0,05	0,13	0,06	0,18	0,09	0,2	0,12	++

Leikkuuarvot mikro-kierrejyrsimille

			Malli	MTM 3	MTM 1	MTMH 3

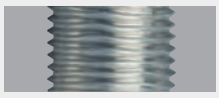
ISO	Materiaaliryhmä	Schnittgeschw. v_c (m/min)	Syöttö mm/hammas fz Ø:lle (**vastenjyrsintä**) Jyrsinosan halkaisija Ø1 mm	Ø1.5 mm	Ø2 mm	Ø3 mm	Ø4 mm	Ø5 mm	Ø6 mm	Ø7 mm	Ø8 mm	Ø9 mm	Ø10 mm	Ø12 mm	Ø14 mm			
P	Yleiset rakenneteräkset Automaattiteräkset Seostamattomat hiiliteräkset Seostamattomat nuorrutusteräkset	70 - 120	0,04	0,04	0,05	0,05	0,06	0,06	0,07	0,07	0,08	0,09	0,09	0,1	0,12	++	++	–
	Seostetut hiiliteräkset Seostetut nuorrutusteräkset Seostetut työkaluteräkset	60-90	0,03	0,03	0,04	0,04	0,05	0,05	0,06	0,06	0,07	0,07	0,08	0,09	0,1	++	++	–
M	RST ja haponkestävät teräkset rikitetty austeniittinen	40-80	0,02	0,02	0,02	0,03	0,03	0,04	0,05	0,05	0,05	0,06	0,06	0,06	0,07	++	++	–
	martensiittinen	40-80	0,02	0,03	0,03	0,04	0,04	0,05	0,05	0,05	0,06	0,07	0,07	0,08	0,09	++	++	–
K	Harmaa valu, valurauta Pallografiitti- ja adusoitu valurauta	60-80	0,04	0,04	0,05	0,05	0,06	0,06	0,07	0,07	0,08	0,09	0,09	0,1	0,12	++	++	–
N	Ei-rautametallit: Alumiini ja muut ei-rautametalli, kupariseokset	80 - 150	0,04	0,05	0,05	0,06	0,06	0,07	0,07	0,08	0,09	0,1	0,11	0,12	0,14	++	++	–
	Muovit	60 - 200	0,05	0,05	0,06	0,07	0,07	0,08	0,09	0,09	0,1	0,11	0,12	0,13	0,15	++	++	–
S	Erikoisseokset ja titaani	20-40	0,02	0,02	0,02	0,03	0,03	0,04	0,05	0,05	0,05	0,06	0,06	0,06	0,07	++	++	+
H	Karkaistut teräkset (max. 65 HRC)	40-50	0,01	0,02	0,02	0,03	0,03	0,035	0,035	0,04	0,045	0,045	0,05	0,055	0,06	–	–	++

Huomio:
Oheisissa taulukoissa annetut arvot ovat ohjearvoja, niitä on muutettava käyttöolosuhteiden mukaan (materiaali, voitelu, työkalun kiinnitys, työstökone jne.).
Riippuen työstötavasta optimaaliset arvot voivat vaihdella + - 30% taulukoiden arvoista!

Gühro Kierrejyrsin
(CNC-ohjelmointi tehty helpoksi) Gühring'n Threadmill ohjelma yksinkertaistaa huomattavasti CNC-ohjelmointia. Käyttäjä syöttää ohjelmalle kaikki oleelliset tiedot kuten kierrejyrsimen mallin, kierteen mallin, leikkuuarvot jne. Näistä muodostuu välittömästi CNC-ohjelma.
Ohjelma on saatavissa maksuttomana, käy DIN ja Heidenhain ohjauksiin.

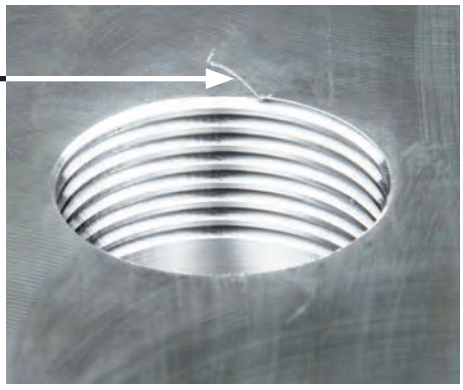
++ ihanteellisesti + soveltuu hyvin

Ongelmia uusien kierre-jyrsinten käytössä

Ongelma	Mahdolliset syyt	Ratkaisu
1. Tehty kierre on liian suuri tai liian pieni	CNC-ohjelmassa on määritelty säde väärin johtaen vääränkokoisen ympyrän jyrsintään	Korjataan jyrsintähalkaisijaa kunnes kierre on suuruudeltaan oikein
2. Kierre ei pyöreä	Syöttönopeus liian suuri Synkronoitu jyrsintä pitkille kierteille	Alenna syöttönopeutta Vaihda jyrsinnän suunta vastakkaiseksi
3. Kierteen pinnanlaatu ei vastaa vaatimuksia, raapimisjälkiä 	Liian suuri leikkuunopeus Riittämätön työkalun tai työkappaleen kiinnitys	Säädettävä leikkuunopeutta Tarkistettava kiinnitykset
4. Työkalurikko	Virhe CNC ohjelmassa Liian suuret leikkuunopeudet	Tarkistettava CNC-ohjelma Säädettävä leikkuunopeutta
5. Työkalun kestoikä riittämätön	Liian suuret leikkuunopeudet Pinnoittamaton työkalu Riittämätön voitelu ja lastunpoisto	Säädettävä leikkuunopeutta Käytetään pinnoitettua työkalua Parannetaan voitelua, nesteen syöttöä karan läpi
6. Työkalurikko porassa tai jyrsimessä	Lastu-ongelmia porattaessa Syöttönopeudet porattaessa liian korkeita	Käytetään jk-työkalua Yhdistetyt katkokierrot

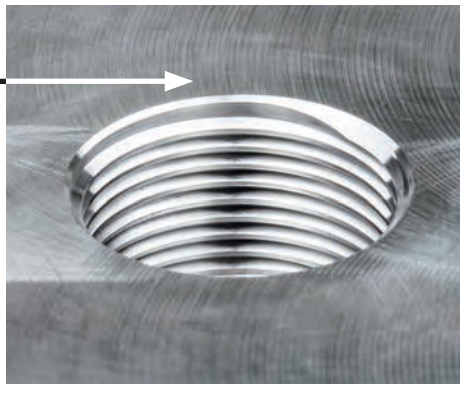
Jäysteetön kierteentyöstö kierteen alussa – ei ongelma Gühring'n kierrejyrsimille

Ongelma:
Jäysteen muodostus kierteen suulle



Ratkaisu:
Erikoistyökalu
päästöhiottu jäysteenpoistotaso

Tulos:
Kun kierre on jyrsitty sopivaan syvyyteen saavutetaan jäysteestä vapaa kierteensuu



Gühring'n tekninen know-how on saatavillasi aina ratkaistaessa erikoistapauksia.

Erikoiskierrejyrsimet

Etkö löydä sopivaa työkalua laajasta kierrejyrsin valikoimastamme?
Olemme enemmän kuin iloisia voidessamme tarjota erikoisratkaisun juuri sinun tarpeisiisi
Ole hyvä ja ota yhtettä!

Teroitus ja uudelleen pinnoitus

Gühring tarjoaa kierrejyrsimille työkalun kestoikäisen teroitus ja uudelleen pinnoitus-palvelun. Alkuperäisen geometrian ja pinnoitteen avulla Gühring pystyy takaamaan 100% tehokkuuden huolletulle työkalulle.

Teroituspalvelu

Huoltokeskuksissamme työkalut hiotaan etu-rintapinnasta kulumisen mukaisesti.Kulumismerkkien leveyden mukaan teroitus on mahdollista tehdä kaksi tai kolme kertaa (alkaen jyrsimen halkaisijasta d1 > 5,0mm).

Jotta jyrsinosan halkaisija voidaan uudelleen määrittää niin varren päähän tehdään lovi jokaisella teroituskerralla

Uudelleen pinnoitus

Jos kierrejyrsin on alun perin pinnoitettu niin se toimitetaan uudelleen pinnoitettuna myös teroituksen jälkeen.
Tämä pidentää työkalun kestoikää sekä antaa myös suojan korroosiota ja kulumista vastaan.

SISÄLLYS LUETTELO

Sisällysluettelo
Artikkelinro. Luettelo

Konekierretapit, metrinen ISO-kierre

P	M	K	N	S	H	Työkalun kuvaus	Standardi	Malli	Muoto	Ø-Tole-ranssi	Materiaali	Pinta	d1/mm	Artikke-linro.	Leikku-uarvosivu	Sivu
≤ 800							WN	N	D	ISO2/6H	HSS-E	○	M3 - M12	1839	18	87
≤ 800							WN	N	B	ISO2/6H	HSS-E	○	M3 - M20	998	19	86
≤ 800							WN	N R40	C	ISO2/6H	HSS-E	○	M3 - M20	888	23	88
≤ 1000	○	○					WN	N R40	C	6HX	HSS-E	S	M3 - M20	4153	25	67
≤ 800							DIN 352	N	C	ISO2/6H	HSS-E	○	M2,2 - M16	995	22	53
≤ 800							DIN 352	N	B	ISO2/6H	HSS-E	○	M2 - M24	991	19	35
≤ 800							DIN 352	N R15	C	ISO2/6H	HSS-E	○	M3 - M20	992	22	58
≤ 800							DIN 352	N R40	C	ISO2/6H	HSS-E	○	M2 - M22	993	23	65
≤ 800							DIN 357	N		ISO2/6H	HSS-E	○	M3 - M30	851	18	85
		•					DIN 371	GGT	C	ISO2/6H	HSS-E	S	M3 - M10	1875	349	357
≤ 800							DIN 371	N	C	ISO2/6H	HSS-E	○	M1 - M10	806	18	50
≤ 800							DIN 371	N	C	ISO3/6G	HSS-E	○	M2 - M10	795	22	52
≤ 800							DIN 371	N	D	ISO2/6H	HSS-E	○	M2 - M10	801	18	49
≤ 800							DIN 371	N	B	ISO1/4H	HSS-E	○	M2 - M10	794	18	36
≤ 1000	○						DIN 371	N	B	ISO2/6H	HSS-E	S	M2 - M10	313	20	33
≤ 800							DIN 371	N	B	ISO2/6H	HSS-E	○	M2 - M10	802	19	55
≤ 800							DIN 371	N	B	ISO2/6H	HSS-E	○	M1 - M10	803	19	30
≤ 800							DIN 371	N	B	ISO2/6H	HSS-E	○	M1,2 - M10	838	19	54
≤ 800							DIN 371	N	B	ISO2/6H	HSS-E	○	M1,2 - M10	839	19	54
≤ 800							DIN 371	N	B	ISO2/6H	HSS-E	S	M1 - M10	912	19	30
≤ 800							DIN 371	N	B	ISO2/6H	HSS-E	●	M1 - M10	945	19	30
≤ 800							DIN 371	N	B	ISO2/6H	HSS-E	C	M1 - M10	1246	19	30
≤ 1000	•		•				DIN 371	N	B	ISO2/6H	HSS-E	○	M2 - M10	1870	229	236
≤ 1000	•						DIN 371	N	B	ISO2/6H	HSS-E	S	M2 - M10	2086	229	236

Konekierretapit, metrinen ISO-kierre

P	M	K	N	S	H	Työkalun kuvaus	Standardi	Malli	Muoto	Ø-Tole-ranssi	Materiaali	Pinta	d1/mm	Artikke-linro.	Leikku-uarvosivu	Sivu
≤ 1000	○						DIN 371	N	B	ISO2/6H	HSS-E	A	M2 - M10	2427	20	33
≤ 1000	○						DIN 371	N	B	ISO2/6H	HSS-E	A	M5 - M10	2517	20	34
≤ 1000	○						DIN 371	N	B	ISO2/6H	HSS-E		M2 - M10	2876	20	33
≤ 1000	●		○				DIN 371	N	B	ISO2/6H	HSS-E-PM		M2 - M10	877	229	237
≤ 1000	○						DIN 371	N	B	ISO2/6H	HSS-E-PM	S	M2 - M10	1285	20	39
≤ 1000	○						DIN 371	N	B	ISO2/6H	HSS-E-PM	C	M3 - M20	1287	20	40
≤ 800							DIN 371	N	B	ISO3/6G	HSS-E		M2 - M10	796	19	56
≤ 800							DIN 371	N	B	ISO3/6G	HSS-E		M2 - M10	797	19	56
≤ 800							DIN 371	N	B	ISO3/6G	HSS-E		M1,4 - M10	837	19	37
≤ 800							DIN 371	N	B	ISO3/6G	HSS-E		M2 - M10	869	19	56
≤ 1000	○						DIN 371	N	B	ISO3/6G	HSS-E		M2 - M10	2990	20	41
≤ 1000	○						DIN 371	N	B	ISO3/6G	HSS-E	S	M2 - M10	2991	20	41
≤ 800							DIN 371	N-LH	B	ISO2/6H	HSS-E		M3 - M10	789	19	32
≤ 800							DIN 371	N R15	C	ISO2/6H	HSS-E		M2 - M10	809	22	57
≤ 800							DIN 371	N R15	C	ISO2/6H	HSS-E	S	M2 - M10	913	22	57
≤ 800							DIN 371	N R15	C	ISO2/6H	HSS-E		M2 - M10	946	22	57
≤ 800							DIN 371	N R15	C	ISO2/6H	HSS-E		M5 - M10	1891	22	59
≤ 800							DIN 371	N R15	C	ISO2/6H	HSS-E	S	M5 - M10	2436	23	59
		○	≥ 7				DIN 371	N R15	C	6HX	VHM		M3 - M10	971	465	478
		●					DIN 371	N R15	C	6HX	VHM	A	M3 - M10	2510	-	364
≤ 800							DIN 371	N R15	C	ISO3/6G	HSS-E		M2 - M10	799	22	52
≤ 800							DIN 371	N L15	D	ISO2/6H	HSS-E		M3 - M10	808	19	89
≤ 1000	○	○	○				DIN 371	N R40	E	ISO2/6H	HSS-E		M3 - M10	2790	24	69
≤ 1000	○	○					DIN 371	N R40	C	ISO2/6H	HSS-E	S	M5 - M10	174	25	70

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P	M	K	N	S	H	Työkalun kuvaus	Standardi	Malli	Muoto	Ø-Tole-ranssi	Materiaali	Pinta	d1/mm	Artikke-linro.	Leikku-uarvosivu	Sivu
≤ 800							DIN 371	N R40	C	ISO2/6H	HSS-E	●	M2 - M10	783	23	60
≤ 800							DIN 371	N R40	C	ISO2/6H	HSS-E	○	M2 - M10	810	23	60
≤ 1000	○	○					DIN 371	N R40	C	ISO2/6H	HSS-E	●	M2 - M10	836	24	66
≤ 1000	○	○	○				DIN 371	N R40	C	ISO2/6H	HSS-E	○	M2 - M10	889	24	66
≤ 800							DIN 371	N R40	C	ISO2/6H	HSS-E	S	M2 - M10	914	23	60
≤ 800							DIN 371	N R40	C	ISO2/6H	HSS-E	C	M2 - M10	1252	24	60
≤ 800							DIN 371	N R40	C	ISO2/6H	HSS-E	○	M5 - M10	1893	24	63
≤ 1000	○	○					DIN 371	○ N R40	C	ISO2/6H	HSS-E	A	M2 - M10	2425	-	66
≤ 800							DIN 371	N R40	C	ISO2/6H	HSS-E	S	M5 - M10	2438	24	64
≤ 1000	○	○					DIN 371	N R40	C	ISO2/6H	HSS-E	S	M2 - M10	2440	24	66
≤ 1000	○	○					DIN 371	N R40	C	ISO2/6H	HSS-E	A	M5 - M10	2514	-	68
≤ 1000	○	○					DIN 371	N R40	C	ISO2/6H	HSS-E-PM	S	M2 - M10	1288	25	72
≤ 1000	○	○					DIN 371	N R40	C	ISO2/6H	HSS-E-PM	C	M2 - M20	1290	25	73
≤ 800							DIN 371	N R40	C	ISO3/6G	HSS-E	○	M3 - M10	844	23	61
≤ 1000	○	○					DIN 371	N R40	C	ISO3/6G	HSS-E	●	M2 - M20	2994	24	73
≤ 1000	○	○					DIN 371	N R40	C	ISO3/6G	HSS-E	S	M2 - M20	2995	24	73
≤ 800							DIN 371	N L40 LH	C	ISO2/6H	HSS-E	○	M3 - M10	786	24	62
●	●	○	●	○			DIN 371	N R50	C	ISO2/6H	HSS-E-PM	S	M3 - M10	767	25	74
●	●	○	●	○			DIN 371	N R50	C	ISO2/6H	HSS-E-PM	C	M3 - M10	1152	25	74
≤ 1200		●	≥ 7				DIN 371	H	E	6HX	HSS-E-PM	C	M5 - M10	1091	23	78
		●	≥ 7				DIN 371	H	E	6HX	VHM	○	M3 - M10	1008	351	364
≤ 1200		●	≥ 7				DIN 371	H	C	6HX	HSS-E-PM	C	M5 - M10	302	23	78
		●	≥ 7				DIN 371	H	C	6HX	VHM	○	M3 - M10	969	351	362
		●	≥ 7				DIN 371	H	C	6HX	VHM	○	M3 - M10	1858	349	362

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P	M	K	N	S	H	Työkalun kuvaus	Standardi	Malli	Muoto	Ø-Tole-ranssi	Materiaali	Pinta	d1/mm	Artikke-linro.	Leikku-uarvosivu	Sivu
		•			45/55		DIN 371	H	C	6HX	VHM	A	M3 - M10	2311	349	364
		•					DIN 371	H	C	6HX	VHM	A	M5 - M10	2506	351	363
							DIN 371	H	D	6HX	HSS-E-PM	C	M3 - M16	1201	676	680
≤ 1200							DIN 371	H	B	ISO2/6H	HSS-E		M2 - M10	733	21	43
≤ 1200							DIN 371	H	B	ISO2/6H	HSS-E		M2 - M10	804	21	43
≤ 1200							DIN 371	H	B	ISO2/6H	HSS-E	C	M2 - M10	1914	21	43
≤ 1200							DIN 371	H	B	ISO2/6H	HSS-E		M2 - M10	2941	21	43
≤ 1200							DIN 371	H	B	ISO2/6H	HSS-E-PM	S	M3 - M10	57	21	47
≤ 1200							DIN 371	H	B	ISO2/6H	HSS-E-PM		M3 - M10	875	21	46
≤ 1200							DIN 371	H	B	ISO2/6H	HSS-E-PM	A	M3 - M10	1575	21	47
≤ 1200							DIN 371	H	B	ISO3/6G	HSS-E		M2 - M10	2465	21	45
≤ 1200							DIN 371	H	B	ISO3/6G	HSS-E	S	M2 - M10	2710	21	45
≤ 1200							DIN 371	H R15	C	ISO2/6H	HSS-E-PM		M3 - M10	872	23	76
≤ 1200							DIN 371	H R15	C	ISO2/6H	HSS-E-PM	A	M3 - M10	1577	23	76
≤ 1200							DIN 371	H R15	C	6HX	HSS-E-PM	C	M6 - M10	1188	23	77
≤ 1200							DIN 371	H R40	C	ISO2/6H	HSS-E	S	M2 - M10	361	25	82
≤ 1200							DIN 371	H R40	C	ISO2/6H	HSS-E		M2 - M10	811	25	81
≤ 1200							DIN 371	H R40	C	ISO2/6H	HSS-E		M2 - M10	947	25	81
≤ 1200							DIN 371	H R40	C	ISO2/6H	HSS-E		M5 - M10	1894	25	83
≤ 1200							DIN 371	H R40	C	ISO2/6H	HSS-E	C	M2 - M10	1916	25	82
≤ 1200							DIN 371	H R40	C	ISO2/6H	HSS-E		M2 - M10	2850	25	81
≤ 1200							DIN 371	H R40	C	ISO3/6G	HSS-E		M2 - M10	2985	25	84
≤ 1200							DIN 371	H R40	C	ISO3/6G	HSS-E	S	M2 - M10	2986	25	84
			○				DIN 371	H AZ	C	ISO2/6H	HSS-E		M2 - M10	788	-	483

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P	M	K	N	S	H	Työkalun kuvaus	Standardi	Malli	Muoto	Ø-Tole-ranssi	Materiaali	Pinta	d1/mm	Artikke-linro.	Leikku-uarvosivu	Sivu
≤ 1200							DIN 371	H AZ	B	ISO2/6H	HSS-E	○	M2 - M10	791	21	44
≤ 1000	•						DIN 371	VA	B	ISO2/6H	HSS-E	●	M2 - M10	2869	229	236
	•						DIN 371	VA R15	C	ISO2/6H	HSS-E	●	M2 - M10	843	230	241
	•						DIN 371	VA R15	C	ISO2/6H	HSS-E	S	M2 - M10	2896	230	241
	•		•				DIN 371	VA R40	C	ISO2/6H	HSS-E	○	M3 - M10	814	231	243
	•		•				DIN 371	VA R40	C	ISO2/6H	HSS-E	○	M3 - M10	1892	231	243
	•						DIN 371	VA R40	C	ISO2/6H	HSS-E	●	M3 - M10	2862	231	243
	•						DIN 371	VA R40	C	ISO2/6H	HSS-E-PM	S	M3 - M10	59	231	246
	•		○				DIN 371	VA R40	C	ISO2/6H	HSS-E-PM	○	M3 - M10	909	231	246
•	•	○	•	○			DIN 371	VA R50	C	6HX	HSS-E-PM	S	M3 - M10	761	25	75
•	•	○	•	○			DIN 371	VA R50	C	6HX	HSS-E-PM	C	M3 - M10	1139	25	75
≤ 1000	•		○				DIN 371	VA AZ	B	ISO2/6H	HSS-E	○	M3 - M10	1871	229	240
			•				DIN 371	AI	B	ISO2/6H	HSS-E	○	M2 - M10	805	463	472
			•				DIN 371	AI R45	C	ISO2/6H	HSS-E	○	M1,6 - M10	812	464	474
		•					DIN 371	GG	C	6HX	HSS-E	A	M5 - M10	318	350	358
		•					DIN 371	GG	C	6HX	HSS-E	●	M3 - M10	807	349	356
		•					DIN 371	GG	C	6HX	HSS-E	S	M3 - M10	930	349	356
		•					DIN 371	GG	C	6HX	HSS-E	●	M5 - M10	1890	350	358
		•					DIN 371	GG	C	6HX	HSS-E	A	M3 - M10	1918	349	356
		○	≥ 7				DIN 371	Ms	E	ISO2/6H	HSS-E	○	M3 - M10	800	463	482
		○	≥ 7				DIN 371	Ms	E	ISO3/6G	HSS-E	○	M3 - M10	1084	463	482
≤ 1000							~DIN 371	N	B	6HX	VHM	C	M5 - M12	942	21	42
					≤ 62		~DIN 371	H	D	ISO2/6H	VHM	C	M3 - M16	2944	676	681
		•					DIN 376	GGT	C	ISO2/6H	HSS-E	S	M3 - M16	1876	349	357

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P	M	K	N	S	H	Työkalun kuvaus	Standardi	Malli	Muoto	Ø-Tole-ranssi	Materiaali	Pinta	d1/mm	Artikke-linro.	Leikku-uarvosivu	Sivu
≤ 800							DIN 376	N	C	ISO2/6H	HSS-E	○	M1,6 - M48	818	22	51
≤ 800							DIN 376	N	D	ISO2/6H	HSS-E	○	M2 - M30	813	18	49
≤ 1000	○						DIN 376	N	B	ISO2/6H	HSS-E	S	M3 - M36	315	20	33
≤ 800							DIN 376	N	B	ISO2/6H	HSS-E	○	M1,6 - M52	815	19	31
≤ 800							DIN 376	N	B	ISO2/6H	HSS-E	○	M3 - M16	846	19	54
≤ 800							DIN 376	N	B	ISO2/6H	HSS-E	○	M3 - M16	847	19	54
≤ 800							DIN 376	N	B	ISO2/6H	HSS-E	S	M1,6 - M52	915	19	31
≤ 800							DIN 376	N	B	ISO2/6H	HSS-E	●	M1,6 - M52	948	19	31
≤ 800							DIN 376	N	B	ISO2/6H	HSS-E	C	M1,6 - M52	1249	19	31
≤ 1000	●		●				DIN 376	N	B	ISO2/6H	HSS-E	○	M3 - M30	1872	229	236
≤ 1000	○						DIN 376	N	B	ISO2/6H	HSS-E	A	M3 - M36	2428	20	33
≤ 1000	○						DIN 376	N	B	ISO2/6H	HSS-E	●	M3 - M36	2877	20	33
≤ 1000	●		○				DIN 376	N	B	ISO2/6H	HSS-E-PM	○	M12 - M20	879	229	237
≤ 1000	○						DIN 376	N	B	ISO2/6H	HSS-E-PM	S	M12 - M20	1286	20	39
≤ 1000	●						DIN 376	N	B	6HX	HSS-E	S	M3 - M30	2087	229	236
≤ 800							DIN 376	N	B	ISO3/6G	HSS-E	○	M2 - M20	845	19	37
≤ 800							DIN 376	N-LH	B	ISO2/6H	HSS-E	○	M12 - M20	790	19	32
≤ 800							DIN 376	N R15	C	ISO2/6H	HSS-E	○	M3 - M30	821	22	57
≤ 800							DIN 376	N R15	C	ISO2/6H	HSS-E	S	M3 - M30	916	22	57
≤ 800							DIN 376	N R15	C	ISO2/6H	HSS-E	●	M3 - M30	949	22	57
≤ 800							DIN 376	N R15	C	ISO2/6H	HSS-E	○	M12 - M20	1898	22	59
≤ 800							DIN 376	N R15	C	ISO2/6H	HSS-E	S	M12 - M20	2437	23	59
≤ 800							DIN 376	N L15	D	ISO2/6H	HSS-E	○	M3 - M16	820	19	89
≤ 1000	○	○	○				DIN 376	N R40	E	ISO2/6H	HSS-E	○	M4 - M16	2791	24	69

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P	M	K	N	S	H	Työkalun kuvaus	Standardi	Malli	Muoto	Ø-Tole-ranssi	Materiaali	Pinta	d1/mm	Artikke-linro.	Leikku-uarvosivu	Sivu
≤ 1000	○	○					DIN 376	N R40	C	ISO2/6H	HSS-E	S	M5 - M30	196	25	70
≤ 800							DIN 376	N R40	C	ISO2/6H	HSS-E	●	M3 - M30	784	23	60
≤ 800							DIN 376	N R40	C	ISO2/6H	HSS-E	○	M3 - M30	822	23	60
≤ 1000	○	○					DIN 376	N R40	C	ISO2/6H	HSS-E	●	M3 - M36	826	24	66
≤ 1000	○	○	○				DIN 376	N R40	C	ISO2/6H	HSS-E	○	M3 - M36	890	24	66
≤ 800							DIN 376	N R40	C	ISO2/6H	HSS-E	S	M3 - M30	917	23	60
≤ 800							DIN 376	N R40	C	ISO2/6H	HSS-E	C	M3 - M30	1254	24	60
≤ 1000	○	○					DIN 376	N R40	C	ISO2/6H	HSS-E	A	M3 - M36	2426	-	66
≤ 800							DIN 376	N R40	C	ISO2/6H	HSS-E	S	M12 - M20	2439	24	64
≤ 1000	○	○					DIN 376	N R40	C	ISO2/6H	HSS-E-PM	S	M12 - M20	1289	25	72
≤ 1000	○	○					DIN 376	N R40	C	6HX	HSS-E	S	M3 - M36	2441	24	66
≤ 800							DIN 376	N R40	C	ISO3/6G	HSS-E	○	M3 - M24	848	23	61
≤ 800							DIN 376	N L40 LH	C	ISO2/6H	HSS-E	○	M12 - M20	787	24	62
●	●	○	○	○			DIN 376	N R50	C	ISO2/6H	HSS-E-PM	S	M12 - M20	1098	25	74
●	●	○	●	○			DIN 376	N R50	C	ISO2/6H	HSS-E-PM	C	M12 - M20	1293	25	74
			○				DIN 376	N AZ	E	ISO2/6H	HSS-E	A	M5 - M12	2899	464	484
≤ 1200		●	≥ 7				DIN 376	H	E	6HX	HSS-E-PM	C	M10 - M20	4165	351	359
≤ 1200		●	≥ 7				DIN 376	H	C	6HX	HSS-E	C	M16 - M39	778	23	79
≤ 1200		●	≥ 7				DIN 376	H	C	6HX	HSS-E-PM	C	M10 - M20	297	23	78
		●	≥ 7				DIN 376	H	C	6HX	VHM	○	M12 - M20	1859	349	362
		●	≥ 7				DIN 376	H	C	6HX	VHM	○	M12 - M20	1883	351	362
≤ 1200							DIN 376	H	B	ISO2/6H	HSS-E	●	M3 - M24	734	21	43
≤ 1200							DIN 376	H	B	ISO2/6H	HSS-E	○	M3 - M24	816	21	43
≤ 1200							DIN 376	H	B	ISO2/6H	HSS-E	C	M3 - M24	1915	21	43

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P	M	K	N	S	H	Työkalun kuvaus	Standardi	Malli	Muoto	Ø-Tole-ranssi	Materiaali	Pinta	d1/mm	Artikke-linro.	Leikku-uarvosivu	Sivu
≤ 1200							DIN 376	H	B	ISO2/6H	HSS-E	●	M3 - M24	2942	21	43
≤ 1200							DIN 376	H	B	ISO2/6H	HSS-E-PM	S	M12 - M30	58	21	47
≤ 1200							DIN 376	H	B	ISO2/6H	HSS-E-PM	A	M12 - M30	1576	21	47
≤ 1200							DIN 376	H R15	C	ISO2/6H	HSS-E-PM	○	M12 - M20	935	23	76
≤ 1200							DIN 376	H R15	C	ISO2/6H	HSS-E-PM	A	M12 - M20	1578	23	76
≤ 1200							DIN 376	H R15	C	6HX	HSS-E-PM	C	M12 - M24	1194	23	77
≤ 1200							DIN 376	H R40	C	ISO2/6H	HSS-E	S	M3 - M30	362	25	82
≤ 1200							DIN 376	H R40	C	ISO2/6H	HSS-E	○	M3 - M30	823	25	81
≤ 1200							DIN 376	H R40	C	ISO2/6H	HSS-E	●	M3 - M30	950	25	81
≤ 1200							DIN 376	H R40	C	ISO2/6H	HSS-E	○	M12 - M20	1901	25	83
≤ 1200							DIN 376	H R40	C	ISO2/6H	HSS-E	C	M3 - M30	1917	25	82
≤ 1200							DIN 376	H R40	C	ISO2/6H	HSS-E	◐	M3 - M30	2851	25	81
≤ 1200							DIN 376	H AZ	B	ISO2/6H	HSS-E	○	M12 - M16	849	21	44
≤ 1000	●						DIN 376	VA	B	ISO2/6H	HSS-E	◐	M3 - M30	2870	229	236
	●						DIN 376	VA R15	C	ISO2/6H	HSS-E	◐	M12 - M24	785	230	241
	●						DIN 376	VA R15	C	ISO2/6H	HSS-E	S	M12 - M24	2895	230	241
	●		●				DIN 376	VA R40	C	ISO2/6H	HSS-E	○	M12 - M30	825	231	243
	●		●				DIN 376	VA R40	C	ISO2/6H	HSS-E	○	M12 - M30	1899	231	243
	●						DIN 376	VA R40	C	ISO2/6H	HSS-E	◐	M12 - M30	2863	231	243
	●						DIN 376	VA R40	C	ISO2/6H	HSS-E-PM	S	M12 - M24	60	231	246
	●		●				DIN 376	VA R40	C	ISO2/6H	HSS-E-PM	○	M12 - M24	910	231	246
●	●	○	●	○			DIN 376	VA R50	C	6HX	HSS-E-PM	S	M12 - M20	763	25	75
●	●	○	●	○			DIN 376	VA R50	C	6HX	HSS-E-PM	C	M12 - M20	1142	25	75
≤ 1000	●		○				DIN 376	VA AZ	B	ISO2/6H	HSS-E	○	M12 - M16	792	229	240

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P	M	K	N	S	H	Työkalun kuvaus	Standardi	Malli	Muoto	Ø-Tole-ranssi	Materiaali	Pinta	d1/mm	Artikke-linro.	Leikku-uarvosivu	Sivu
			•				DIN 376	AI	B	ISO2/6H	HSS-E	○	M12 - M24	817	463	472
			•				DIN 376	AI R45	C	ISO2/6H	HSS-E	○	M3 - M24	824	464	474
		•					DIN 376	GG	C	6HX	HSS-E	A	M12 - M20	319	350	358
		•					DIN 376	GG	C	6HX	HSS-E	●	M3 - M30	819	349	356
		•					DIN 376	GG	C	6HX	HSS-E	S	M3 - M30	931	349	356
		•					DIN 376	GG	C	6HX	HSS-E	●	M12 - M20	1897	350	358
		•					DIN 376	GG	C	6HX	HSS-E	A	M3 - M30	1919	349	356
≤ 1200		•	≥ 7				~DIN 376	H	C	6HX	HSS-E	C	M16 - M39	779	23	80
≤ 1000	•						DIN 371/376	N	B	ISO2/6H	HSS-E-PM	S	M2 - M12	1002	229	238
•	•	○	○	○			DIN 371/376	N	B	6HX	HSS-E	S	M2 - M30	4218	21	38
≤ 1000	○	○					DIN 371/376	N R15	E	ISO2/6H	HSS-E	C	M3 - M20	4155	23	48
≤ 1000	○	○					DIN 371/376	N R15	C	ISO2/6H	HSS-E	C	M3 - M20	4154	23	48
•	•	○	○	○			DIN 371/376	VA R45	C	6HX	HSS-E	A	M2 - M30	393	25	71
				•			DIN 371/376	Ti R15	C	4HX	HSS-E-PM	C	MJ3 x 0,5 - M16	1061	597	605
				•			DIN 371/376	Ti R15	C	6HX	HSS-E-PM	C	M3 - M16	2909	597	604
				•			DIN 371/376	Ni R10	C	4HX	HSS-E-PM	A	MJ3 x 0,5 - M16	1065	597	605
				•			DIN 371/376	Ni R10	C	6HX	HSS-E-PM	A	M3 - M16	2920	597	604
				•			DIN 371/376	Ti Ni	B	4HX	HSS-E-PM	C	MJ3 x 0,5 - M16	1057	596	603
				•			DIN 371/376	Ti Ni	B	6HX	HSS-E-PM	C	M3 - M16	2901	596	602
				•			DIN 371/376	Ti Ni	B	6HX	HSS-E-PM	A	M3 - M16	2916	596	602

Konekierretapit, metrinen ISO-hienokierre

≤ 800							DIN 2180	N R40	C	ISO2/6H	HSS-E	○	M 6 X0,75 - M12 X1,5	1970	23	106
≤ 800							DIN 374	N	C	ISO2/6H	HSS-E	○	M 3 X0,35 - M63 X1,5	830	18	100
≤ 800							DIN 374	N	C	ISO3/6G	HSS-E	○	M 3 X0,35 - M63 X1,5	829	18	100

Konekierretapit, metrinen ISO-hienokierre

P	M	K	N	S	H	Työkalun kuvaus	Standardi	Malli	Muoto	Ø-Tole-ranssi	Materiaali	Pinta	d1/mm	Artikke-linro.	Leikku-uarvosivu	Sivu
≤ 800							DIN 374	N	B	ISO2/6H	HSS-E	○	M 3 X0,35 - M40 X1,5	827	19	91
≤ 800							DIN 374	N	B	ISO2/6H	HSS-E	S	M 3 X0,35 - M40 X1,5	832	19	91
≤ 1000	○						DIN 374	N	B	ISO2/6H	HSS-E	A + M	M 5 X0,5 - M50 X1,5	2878	20	94
≤ 1000	○						DIN 374	N	B	ISO2/6H	HSS-E	●	M 5 X0,5 - M50 X1,5	2879	20	94
≤ 800							DIN 374	N	B	ISO2/6H	HSS-E	●	M 3 X0,35 - M40 X1,5	2888	19	91
≤ 1000	●						DIN 374	N	B	ISO2/6H	HSS-E-PM	S	M 6 X0,75 - M24 X2	1291	20	98
●	●	○	○	○			DIN 374	N	B	6HX	HSS-E	S	M 6 X0,75 - M24 X1,5	4219	21	90
≤ 1000							DIN 374	N	B	6HX	VHM	C	M14 X1,25 - M16 X1,5	944	21	96
≤ 800							DIN 374	N	B	ISO3/6G	HSS-E	○	M 6 X0,75 - M20 X1,5	316	19	93
≤ 1000	○						DIN 374	N	B	ISO3/6G	HSS-E	S	M 6 X0,75 - M20 X1,5	2993	20	93
≤ 1000	○	○					DIN 374	N R15	E	ISO2/6H	HSS-E	C	M 8 X1 - M16 X1,5	4157	23	103
≤ 800							DIN 374	N R15	C	ISO2/6H	HSS-E	○	M 4 X0,5 - M30 X2	833	22	102
≤ 800							DIN 374	N R15	C	ISO2/6H	HSS-E	○	M 5 X0,5 - M20 X1,5	1905	22	104
≤ 800							DIN 374	N R15	C	ISO2/6H	HSS-E	S	M 4 X0,5 - M30 X2	1971	22	102
≤ 800							DIN 374	N R15	C	ISO2/6H	HSS-E	●	M 4 X0,5 - M30 X2	2838	22	102
≤ 1000	○	○					DIN 374	N R15	C	ISO2/6H	HSS-E	C	M 8 X1 - M16 X1,5	4156	23	103
		○	≥ 7				DIN 374	N R15	C	6HX	VHM	○	M12 X1,5 - M20 X1,5	978	465	493
			≥ 7				DIN 374	N L15	D	6HX	VHM	○	M12 X1,5 - M18 X1,5	976	463	495
≤ 1000	○	○	○				DIN 374	N R40	E	ISO2/6H	HSS-E	○	M 5 X0,5 - M30 X2	2792	24	107
≤ 800							DIN 374	N R40	C	ISO2/6H	HSS-E	○	M 3 X0,35 - M30 X2	834	23	105
≤ 800							DIN 374	N R40	C	ISO2/6H	HSS-E	S	M 3 X0,35 - M30 X2	852	23	105
≤ 1000	○	○	○				DIN 374	N R40	C	ISO2/6H	HSS-E	○	M 5 X0,5 - M30 X2	2424	24	107
≤ 800							DIN 374	N R40	C	ISO2/6H	HSS-E	●	M 3 X0,35 - M30 X2	2843	23	105
≤ 1000	○	○					DIN 374	N R40	C	ISO2/6H	HSS-E	●	M 5 X0,5 - M30 X2	2853	24	107

Konekierretapit, metrinen ISO-hienokierre

P	M	K	N	S	H	Työkalun kuvaus	Standardi	Malli	Muoto	Ø-Tole-ranssi	Materiaali	Pinta	d1/mm	Artikke-linro.	Leikku-uarvosivu	Sivu
≤ 1000	○	○					DIN 374	N R40	C	ISO2/6H	HSS-E-PM	S	M 6 X0,75 - M24 X2	1292	25	109
≤ 1000	○	○					DIN 374	N R40	C	ISO3/6G	HSS-E	S	M 8 X1 - M20 X1,5	1049	24	108
≤ 1000	○	○	○				DIN 374	N R40	C	ISO3/6G	HSS-E	○	M 8 X1 - M20 X1,5	2998	24	108
≤ 1000	○	○					DIN 374	N R40	C	ISO3/6G	HSS-E	●	M 8 X1 - M20 X1,5	2999	24	108
≤ 1000	○	○					DIN 374	N R40	C(K)	ISO2/6H	HSS-E	S	M 6 X0,75 - M24 X2	273	25	109
●	●	○	○	○			DIN 374	N R50	C	ISO2/6H	HSS-E-PM	S	M 8 X1 - M20 X1,5	1100	25	110
●	●	○	●	○			DIN 374	N R50	C	ISO2/6H	HSS-E-PM	C	M 8 X1 - M20 X1,5	1294	25	110
≤ 1200		●	≥ 7				DIN 374	H	E	6HX	HSS-E-PM	C	M 5 X0,5 - M16 X1,5	1007	23	113
		●	≥ 7				DIN 374	H	E	6HX	VHM	○	M10 X1 - M16 X1,5	1009	351	369
≤ 1200		●	≥ 7				DIN 374	H	C	6HX	HSS-E-PM	C	M 5 X0,5 - M16 X1,5	1090	23	113
		●	≥ 7				DIN 374	H	C	6HX	VHM	○	M12 X1,5 - M20 X1,5	974	351	368
		●	≥ 7				DIN 374	H	C	6HX	VHM	○	M12 X1,5 - M20 X1,5	1860	349	368
≤ 1200							DIN 374	H	B	ISO2/6H	HSS-E	○	M 3 X0,35 - M24 X1,5	828	21	97
≤ 1200							DIN 374	H	B	ISO2/6H	HSS-E	●	M 3 X0,35 - M24 X1,5	2943	21	97
≤ 1200							DIN 374	H	B	ISO3/6G	HSS-E	S	M 8 X1 - M20 X1,5	2983	21	99
≤ 1200							DIN 374	H R15	C	ISO2/6H	HSS-E-PM	○	M 6 X0,75 - M24 X1,5	874	23	112
≤ 1200							DIN 374	H R15	C	6HX	HSS-E-PM	C	M 6 X0,75 - M24 X1,5	1200	23	112
≤ 1200							DIN 374	H R40	C	ISO2/6H	HSS-E	○	M 6 X0,75 - M24 X1,5	835	25	114
≤ 1200							DIN 374	H R40	C	ISO2/6H	HSS-E	●	M 6 X0,75 - M24 X1,5	2852	25	114
≤ 1200							DIN 374	H R40	C	ISO2/6H	HSS-E	●	M 6 X0,75 - M24 X1,5	2940	25	114
≤ 1200							DIN 374	H R40	C	ISO3/6G	HSS-E	●	M 8 X1 - M20 X1,5	2988	25	116
≤ 1200							DIN 374	H R40	C	ISO3/6G	HSS-E	S	M 8 X1 - M20 X1,5	2989	25	116
≤ 1000	●						DIN 374	VA	B	ISO2/6H	HSS-E	S	M 3 X0,35 - M24 X1,5	1001	229	257
≤ 1000	●		●				DIN 374	VA	B	ISO2/6H	HSS-E	○	M 5 X0,5 - M24 X2	1873	229	256

Konekierretapit, metrinen ISO-hienokierre

P	M	K	N	S	H	Työkalun kuvaus	Standardi	Malli	Muoto	Ø-Tole-ranssi	Materiaali	Pinta	d1/mm	Artikke-linro.	Leikku-uarvosivu	Sivu
≤ 1000	•						DIN 374	VA	B	ISO2/6H	HSS-E	○	M 3 X0,35 - M24 X1,5	2871	229	257
≤ 1000	•						DIN 374	VA	B	ISO2/6H	HSS-E-PM	○	M 5 X0,5 - M24 X2	887	229	256
	•						DIN 374	VA R15	C	ISO2/6H	HSS-E	○	M 4 X0,5 - M24 X1,5	1874	230	249
	•						DIN 374	VA R15	C	ISO2/6H	HSS-E	S	M 4 X0,5 - M24 X1,5	2897	230	249
	•						DIN 374	VA R40	C	ISO2/6H	HSS-E	○	M 3 X0,35 - M24 X1,5	2864	231	251
	•		•				DIN 374	VA R40	C	ISO2/6H	HSS-E-PM	○	M 8 X1 - M20 X1,5	936	231	253
	•						DIN 374	VA R40	C	ISO2/6H	HSS-E-PM	S	M 8 X1 - M20 X1,5	1004	231	253
•	•	○	○	○			DIN 374	VA R45	C	6HX	HSS-E	A	M 6 X0,75 - M24 X1,5	394	25	115
•	•	○	•	○			DIN 374	VA R50	C	6HX	HSS-E-PM	S	M 8 X1 - M20 X1,5	764	25	111
•	•	○	•	○			DIN 374	VA R50	C	6HX	HSS-E-PM	C	M 8 X1 - M20 X1,5	1144	25	111
		•					DIN 374	GG	C	6HX	HSS-E	A	M 4 X0,5 - M30 X1,5	169	349	365
		•					DIN 374	GG	C	6HX	HSS-E	A	M 8 X1 - M24 X1,5	347	350	366
		•					DIN 374	GG	C	6HX	HSS-E	●	M 4 X0,5 - M30 X1,5	831	349	365
		•					DIN 374	GG	C	6HX	HSS-E	S	M 4 X0,5 - M30 X1,5	932	349	365
		•					DIN 374	GG	C	6HX	HSS-E	●	M 8 X1 - M24 X1,5	1904	350	366
		○	≥ 7				DIN 371	N R15	C	6HX	VHM	○	M 4 X0,5 - M10 X1	977	465	493
			≥ 7				DIN 371	N R15	C	6HX	VHM	M	M 5 - M10	2516	-	494
			≥ 7				DIN 371	N L15	D	6HX	VHM	○	M 4 X0,5 - M10 X1	975	463	495
		•	≥ 7				DIN 371	H	C	6HX	VHM	○	M 5 X0,5 - M10 X1	972	351	368
		•	≥ 7				DIN 371	H	C	6HX	VHM	○	M 5 X0,5 - M10 X1	1861	349	368
					45-55		DIN 371	H	D	6HX	HSS-E-PM	C	M 8 X1 - M12 X1,5	4161	676	682
				•			DIN 371	Ti R15	C	4HX	HSS-E-PM	C	MJ 6 X0,5 - MJ10 X1,25	1062	597	609
				•			DIN 371	Ti R15	C	6HX	HSS-E-PM	C	M 3 X0,35 - M10 X1,25	2910	597	608
				•			DIN 371	Ni R10	C(K)	4HX	HSS-E-PM	A	MJ 6 X0,5 - MJ10 X1,25	1066	597	609

Konekierretapit, metrinen ISO-hienokierre

P	M	K	N	S	H	Työkalun kuvaus	Standardi	Malli	Muoto	Ø-Tole-ranssi	Materiaali	Pinta	d1/mm	Artikke-linro.	Leikku-uarvosivu	Sivu
				•			DIN 371	Ni R10	C(K)	6HX	HSS-E-PM	A	M 3 X0,35 - M10 X1,25	2921	597	608
				•			DIN 371	Ti Ni	B	4HX	HSS-E-PM	C	MJ 6 X0,5 - MJ10 X1,25	1058	596	607
				•			DIN 371	Ti Ni	B	6HX	HSS-E-PM	C	M 3 X0,35 - M10 X1,25	2903	596	606
				•			DIN 371	Ti Ni	B	6HX	HSS-E-PM	A	M 3 X0,35 - M10 X1,25	2917	596	606
≤ 1000							~DIN 371	N	B	6HX	VHM	C	M 5 X0,5 - M12 X1,5	943	21	95
					≤ 62		~DIN 371	H	D	ISO2/6H	VHM	C	M 6 X0,5 - M12 X1,5	1161	676	683

Konekierretapit UNC-kierteille

P	M	K	N	S	H	Työkalun kuvaus	Standardi	Malli	Muoto	Ø-Tole-ranssi	Materiaali	Pinta	d1/mm	Artikke-linro.	Leikku-uarvosivu	Sivu
≤ 800							~DIN 371	N	C	2B	HSS-E	○	3 - 48 - 3/8 - 16	1977	18	121
≤ 800							~DIN 371	N	B	2B	HSS-E	○	1 - 64 - 3/8 - 16	873	19	117
≤ 1000	•		•				~DIN 371	N	B	2B	HSS-E	○	4 - 40 - 3/8 - 16	1980	229	258
≤ 1000	○						~DIN 371	N	B	2B	HSS-E	●	4 - 40 - 3/8 - 16	2881	20	118
≤ 800							~DIN 371	N	B	2B	HSS-E	●	1 - 64 - 3/8 - 16	2889	19	117
≤ 800							~DIN 371	N R15	C	2B	HSS-E	○	4 - 40 - 3/8 - 16	1978	22	119
≤ 800							~DIN 371	N R15	C	2B	HSS-E	●	4 - 40 - 10 - 24	2839	22	120
≤ 800							~DIN 371	N R40	C	2B	HSS-E	○	2 - 56 - 3/8 - 16	876	23	122
≤ 1000	○	○					~DIN 371	N R40	C	2B	HSS-E	S	10 - 24 - 3/8 - 16	1837	25	124
≤ 800							~DIN 371	N R40	C	2B	HSS-E	●	2 - 56 - 3/8 - 16	2844	23	122
≤ 1000	○	○	○				~DIN 371	N R40	C	2B	HSS-E	○	2 - 56 - 3/8 - 16	2854	24	123
≤ 1000	○	○					~DIN 371	N R40	C	2B	HSS-E	●	2 - 56 - 3/8 - 16	2855	24	123
≤ 1000	•						~DIN 371	VA	B	2B	HSS-E	●	4 - 40 - 3/8 - 16	2872	229	258
	•		•				~DIN 371	VA R40	C	2B	HSS-E	○	2 - 56 - 3/8 - 16	1981	231	259
	•						~DIN 371	VA R40	C	2B	HSS-E	●	2 - 56 - 3/8 - 16	2865	231	259
		•					~DIN 371	GG	C	2B	HSS-E	A	10 - 24 - 3/8 - 16	1085	350	371
		•					~DIN 371	GG	C	2B	HSS-E	●	2 - 56 - 3/8 - 16	1979	349	370

Konekierretapit UNC-kierteille

P	M	K	N	S	H	Työkalun kuvaus	Standardi	Malli	Muoto	Ø-Tole-ranssi	Materiaali	Pinta	d1/mm	Artikke-linro.	Leikku-uarvosivu	Sivu
				•			~DIN 371	Ti Ni	B	2BX	HSS-E-PM	C	6 - 32 - 3/8 - 16	2905	596	610
				•			~DIN 371	Ti Ni	B	2BX	HSS-E-PM	A	6 - 32 - 3/8 - 16	2918	596	610
≤ 800 N/mm²							~DIN 376	N	B	2B	HSS-E	○	7/16 - 14 - 1 1/2 - 6	878	19	117
≤ 1000 N/mm²	•		•				~DIN 376	N	B	2B	HSS-E	○	1/2 - 13 - 1 - 8	1985	229	258
≤ 1000 N/mm²	○						~DIN 376	N	B	2B	HSS-E	●	7/16 - 14 - 1 - 8	2883	20	118
≤ 800 N/mm²							~DIN 376	N	B	2B	HSS-E	●	7/16 - 14 - 1 1/2 - 6	2890	19	117
≤ 800 N/mm²							~DIN 376	N R15	C	2B	HSS-E	●	1/2 - 13 - 1 - 8	2840	22	120
≤ 800 N/mm²							~DIN 376	N R40	C	2B	HSS-E	○	7/16 - 14 - 1 - 8	881	23	122
≤ 800 N/mm²							~DIN 376	N R40	C	2B	HSS-E	●	7/16 - 14 - 1 - 8	2845	23	122
≤ 1000 N/mm²	○	○	○				~DIN 376	N R40	C	2B	HSS-E	○	7/16 - 14 - 1 - 8	2856	24	123
≤ 1000 N/mm²	○	○					~DIN 376	N R40	C	2B	HSS-E	●	7/16 - 14 - 1 - 8	2857	24	123
≤ 1000 N/mm²	•						~DIN 376	VA	B	2B	HSS-E	●	1/2 - 13 - 1 - 8	2873	229	258
	•		•				~DIN 376	VA R40	C	2B	HSS-E	○	7/16 - 14 - 7/8 - 9	1986	231	259
	•						~DIN 376	VA R40	C	2B	HSS-E	●	7/16 - 14 - 7/8 - 9	2866	231	259
		•					~DIN 376	GG	C	2B	HSS-E	A	7/16 - 14 - 7/8 - 9	1086	350	371
		•					~DIN 376	GG	C	2B	HSS-E	■	7/16 - 14 - 3/4 - 10	1984	349	370
				•			~DIN 371/376	Ti R15	C	2BX	HSS-E-PM	C	4 - 40 - 5/8 - 11	2912	597	612
				•			~DIN 371/376	Ti R15	C	3BX	HSS-E-PM	C	6 - 32 - 5/8 - 11	1063	597	613
				•			~DIN 371/376	Ni R10	C	2BX	HSS-E-PM	A	4 - 40 - 5/8 - 11	2922	597	612
				•			~DIN 371/376	Ni R10	C	3BX	HSS-E-PM	A	6 - 32 - 5/8 - 11	1067	597	613
				•			~DIN 371/376	Ti Ni	B	3BX	HSS-E-PM	C	6 - 32 - 5/8 - 11	1059	596	611

Konekierretapit UNF-kierteille

≤ 800 N/mm²							~DIN 374	N	C	2B	HSS-E	○	3 - 56 - 1 - 12	1987	18	126
≤ 800 N/mm²							~DIN 374	N	B	2B	HSS-E	○	3 - 56 - 1 1/4 - 12	908	18	125

Konekierretapit UNF-kierteille

P	M	K	N	S	H	Työkalun kuvaus	Standardi	Malli	Muoto	Ø-Tole-ranssi	Materiaali	Pinta	d1/mm	Artikke-linro.	Leikku-uarvosivu	Sivu
vc 1000 vf	●		●				~DIN 374	N	B	2B	HSS-E	○	10 - 32 - 3/8 - 24	1990	229	260
vc 1000 vf	○						~DIN 374	N	B	2B	HSS-E	●	6 - 40 - 1 - 12	2885	20	130
vc 800 vf							~DIN 374	N	B	2B	HSS-E	●	3 - 56 - 1 1/4 - 12	2891	19	125
vc 800 vf							~DIN 374	N R15	C	2B	HSS-E	○	3 - 56 - 1 - 12	1988	22	127
vc 800 vf							~DIN 374	N R15	C	2B	HSS-E	●	3 - 56 - 1 - 12	2841	22	127
vc 800 vf							~DIN 374	N R40	C	2B	HSS-E	○	3 - 56 - 1 - 12	911	23	128
vc 1000 vf	○	○					~DIN 374	N R40	C	2B	HSS-E	S	10 - 32 - 1 - 12	1838	25	131
vc 800 vf							~DIN 374	N R40	C	2B	HSS-E	●	3 - 56 - 1 - 12	2846	23	128
vc 1000 vf	○	○					~DIN 374	N R40	C	2B	HSS-E	●	10 - 32 - 7/8 - 14	2859	24	129
vc 1000 vf	●						~DIN 374	VA	B	2B	HSS-E	●	4 - 48 - 1 - 12	2874	229	260
	●						~DIN 374	VA R15	C	2B	HSS-E	●	5 - 44 - 1 - 12	1991	230	261
	●						~DIN 374	VA R15	C	2B	HSS-E	S	5 - 44 - 1 - 12	2898	230	261
	●		●				~DIN 374	VA R40	C	2B	HSS-E	○	1/4 - 28 - 1 - 12	2867	231	262
	●						~DIN 374	VA R40	C	2B	HSS-E	●	10 - 32 - 1 - 12	2868	231	262
		●					~DIN 374	GG	C	2B	HSS-E	A	10 - 32 - 7/8 - 14	1082	350	373
		●					~DIN 374	GG	C	2B	HSS-E	●	4 - 48 - 1 - 12	1989	349	372
				●			~DIN 371	Ti Ni	B	2BX	HSS-E-PM	A	6 - 40 - 3/8 - 24	2919	596	614
				●			~DIN 371-374	Ti R15	C	2BX	HSS-E-PM	C	4 - 48 - 5/8 - 18	2914	597	617
				●			~DIN 371-374	Ti R15	C	3BX	HSS-E-PM	C	6 - 40 - 5/8 - 18	1064	597	618
				●			~DIN 371-374	Ni R10	C	2BX	HSS-E-PM	A	4 - 48 - 5/8 - 18	2923	597	616
				●			~DIN 371-374	Ni R10	C	3BX	HSS-E-PM	A	6 - 40 - 5/8 - 18	1068	597	618
				●			~DIN 371-374	Ti Ni	B	3BX	HSS-E-PM	C	6 - 40 - 5/8 - 18	1060	596	615
		●					DIN 5156	GG	C		HSS-E	●	G1/16 - G2	961	349	374

Konekierretapit BSP-kierteille

P	M	K	N	S	H	Työkalun kuvaus	Standardi	Malli	Muoto	Ø-Tole-ranssi	Materiaali	Pinta	d1/mm	Artikke-linro.	Leikku-uarvosivu	Sivu
≤ 800							DIN 5156	N	C		HSS-E	○	G 1/16 - G2	963	18	133
≤ 800							DIN 5156	N	B		HSS-E	○	G 1/16 - G2	962	19	132
≤ 1000	●		●				DIN 5156	N	B		HSS-E	○	G 1/16 - G1	967	229	263
≤ 1000	○						DIN 5156	N	B		HSS-E	A	G 1/8 - G2	2886	20	140
≤ 1000	○						DIN 5156	N	B		HSS-E	●	G 1/8 - G2	2887	20	140
≤ 800							DIN 5156	N	B		HSS-E	●	G 1/16 - G2	2894	19	132
●	●	○	○	○			DIN 5156	N	B		HSS-E	S	G 1/16 - G1	4220	21	134
≤ 1000	○	○					DIN 5156	N R15	E		HSS-E	C	G 1/16 - G1	4158	23	135
≤ 800							DIN 5156	N R15	C		HSS-E	○	G 1/16 - G1	964	22	135
≤ 800							DIN 5156	N R15	C		HSS-E	●	G 1/16 - G1	2842	22	135
≤ 1000	○	○					DIN 5156	N R40	C		HSS-E	S	G 1/8 - G1	937	25	141
≤ 800							DIN 5156	N R40	C		HSS-E	○	G 1/16 - G1 1/2	965	23	136
≤ 800							DIN 5156	N R40	C		HSS-E	●	G 1/16 - G1 1/2	2849	23	136
≤ 1000	○	○	○				DIN 5156	N R40	C		HSS-E	○	G 1/8 - G2	2860	24	137
≤ 1000	○	○					DIN 5156	N R40	C		HSS-E	●	G 1/8 - G2	2861	24	137
≤ 1000	●						DIN 5156	VA	B		HSS-E	●	G 1/16 - G1	2875	229	263
	●						DIN 5156	VA R40	C		HSS-E	●	G 1/16 - G1 1/2	968	231	265
	●		●				DIN 5156	VA R40	C		HSS-E-PM	○	G 1/16 - G1 1/2	939	231	265
●	●	○	○	○			DIN 5156	VA R45	C		HSS-E	A	G 1/16 - G1	395	25	139
●	●	○	●	○			DIN 5156	VA R50	C		HSS-E-PM	S	G 1/16 - G 1/2	4159	25	138

Konekierretapit BSW-kierteille

≤ 800							~DIN 371	N	B		HSS-E	●	W 1/8 - W 3/8	2892	19	142
≤ 800							~DIN 371	N R40	C		HSS-E	●	W 1/8 - W 3/8	2847	23	143
≤ 800							~DIN 376	N	B		HSS-E	●	W 7/16 - W1	2893	19	142

P	M	K	N	S	H	Työkalun kuvaus	Standardi	Malli	Muoto	Ø-Tole-ranssi	Materiaali	Pinta	d1/mm	Artikke-linro.	Leikku-uarvosivu	Sivu
Konekierretapit BSW-kierteille																
≤ 800							~DIN 376	N R40	C		HSS-E	○	W 3/8 - W1	2848	23	143
Konekierretapit EG-kierteille																
≤ 1000	○						DIN 40435	N	B		HSS-E	S	EG M 4 - EG M16	1010	20	144
≤ 1000	○	○					DIN 40435	N R40	C		HSS-E	S	EG M 4 - EG M16	1011	24	145
Konekierretapit NPT-kierteille																
≤ 800							WN	N	C		HSS-E	○	1/16 - 2	973	18	146
	●	○	○				WN	N	C		HSS-E	○	1/16 - 1	1087	230	268
	●	○	○				WN	N	C		HSS-E	S	1/16 - 1	1088	230	268
Konekierretapit NPTF-kierteille																
	●	○	○				WN	N	C		HSS-E	S	1/16 - 1	4127	230	269
Konekierretapit PG-kierteille																
≤ 800							DIN 40432	N	C		HSS-E	○	PG7 - PG29	979	18	147
≤ 800							DIN 40432	N	B		HSS-E	○	PG7 - PG29	980	19	147
Manglaavat kierretapit, metrinen ISO-kierre																
●	●		○	○			~DIN 371	N	C	6HX	HSS-E-PM	S	M 3 - M10	322	27	154
●	●		○	○			~DIN 371	N	C	6HX	HSS-E-PM	S	M 5 - M10	323	27	158
●	●		○	○			~DIN 376	N	C	6HX	HSS-E-PM	S	M12 - M16	339	27	154
●	●		○	○			~DIN 376	N	C	6HX	HSS-E-PM	S	M12 - M16	342	27	158
●	●		○	○			~DIN 371	N	C	6HX	HSS-E	S	M 3 - M10	919	26	152
●	●		○	○			~DIN 371	N	C	6HX	HSS-E-PM	S	M 3 - M10	1266	27	155
●	●		○	○			~DIN 371	N	C	6GX	HSS-E	S	M 3 - M10	918	26	153
●	●		○				~DIN 371	N	C	6HX	HSS-E-PM	S	M 1 - M10	1255	26	149
●	●		○				~DIN 371	N	C	6GX	HSS-E-PM	S	M 1 - M10	903	26	149
●	●		○				~DIN 371	N	C	6GX	HSS-E	S	M 2 - M10	920	26	150
●	●		○				~DIN 371	N	C	6HX	HSS-E	S	M 1 - M10	921	26	149

Manglaavat kierretapit, metrinen ISO-kierre

P	M	K	N	S	H	Työkalun kuvaus	Standardi	Malli	Muoto	Ø-Tole-ranssi	Materiaali	Pinta	d1/mm	Artikke-linro.	Leikku-uarvosivu	Sivu
●	●		○	○			~DIN 376	N	C	6HX	HSS-E	S	M 6 - M39	923	26	152
●	●		○	○			~DIN 376	N	C	6GX	HSS-E	S	M 6 - M39	922	26	153
●	●		○				~DIN 376	N	C	6HX	HSS-E	S	M12 - M20	925	26	149
●	●		○				~DIN 376	N	C	6HX	HSS-E-PM	S	M12 - M20	1256	26	149
●	●		○				~DIN 376	N	C	6GX	HSS-E-PM	S	M12 - M20	952	26	149
●	●		○	○			~DIN 376	N	C	6HX	HSS-E-PM	S	M12 - M20	1267	27	155
●	●		≥ 7	●			~DIN 371	N	C	6HX	HSS-E-PM	C	M 3 - M10	1270	27	159
●	●		≥ 7	●			~DIN 371	N	C	6GX	HSS-E-PM	C	M 5 - M10	1713	27	160
●	●		≥ 7	○			~DIN 376	N	C	6HX	HSS-E-PM	C	M12 - M20	1271	27	159
			●				~DIN 371	N	C	6HX	HSS-E-PM	Cb	M 1 - M10	1347	466	506
			●				~DIN 371	N	C	6GX	HSS-E-PM	Cb	M 2 - M10	1565	466	508
			●				~DIN 376	N	C	6HX	HSS-E-PM	Cb	M12 - M20	1566	466	506
			●				~DIN 376	N	C	6GX	HSS-E-PM	Cb	M12 - M20	1567	466	508
●	●		≥ 7	●			~DIN 376	N	C	6HX	VHM	C	M12 - M20	1931	27	163
●							~DIN 371	N	C	6HX	HSS-E	P	M 3 - M10	1587	26	152
●							~DIN 371	N	C	6HX	HSS-E-PM	P	M 3 - M10	1599	27	155
●							~DIN 371	N	C	6GX	HSS-E	P	M 3 - M10	1588	26	153
●							~DIN 371	N	C	6GX	HSS-E-PM	P	M 3 - M10	1705	27	153
●							~DIN 376	N	C	6HX	HSS-E	P	M 6 - M39	1589	26	152
●							~DIN 376	N	C	6HX	HSS-E-PM	P	M12 - M20	1707	27	155
●							~DIN 376	N	C	6GX	HSS-E	P	M 6 - M20	1590	26	153
●							~DIN 376	N	C	6GX	HSS-E-PM	P	M 6 - M20	1708	27	153
●	●			●			~DIN 371	N	C	6HX	HSS-E-PM	A	M 3 - M10	1717	27	159
●	●			●			~DIN 371	N	C	6GX	HSS-E-PM	A	M 3 - M10	1718	27	161

Manglaavat kierretapit, metrinen ISO-kierre

P	M	K	N	S	H	Työkalun kuvaus	Standardi	Malli	Muoto	Ø-Tole-ranssi	Materiaali	Pinta	d1/mm	Artikke-linro.	Leikku-uarvosivu	Sivu
•	•			•			~DIN 376	N	C	6HX	HSS-E-PM	A	M12 - M20	1719	27	159
•	•			•			~DIN 376	N	C	6GX	HSS-E-PM	A	M12 - M20	1720	27	161
•	•		○	○			~DIN 371	N	C	6HX	HSS-E	S	M 5 - M10	2442	27	156
•	•		○	○			~DIN 371	N	C	6GX	HSS-E	S	M 5 - M10	2443	27	156
•	•		○	○			~DIN 371	N	E	6HX	HSS-E-PM	S	M 3 - M10	1725	27	159
•	•		○	○			~DIN 371	N	E	6GX	HSS-E-PM	S	M 3 - M10	1726	27	161
•	•		○	○			~DIN 376	N	C	6HX	HSS-E	S	M12 - M16	2444	27	156
•	•		○	○			~DIN 376	N	C	6GX	HSS-E	S	M12 - M16	2445	27	156
•	•		○	○			~DIN 376	N	E	6HX	HSS-E-PM	S	M12 - M20	1727	27	159
•	•		○	○			~DIN 376	N	E	6GX	HSS-E-PM	S	M12 - M20	1728	27	161
•	•		≥ 7	•			~DIN 371	N	E	6HX	VHM	C	M 3 - M10	1927	27	164
•	•		≥ 7	•			~DIN 371	N	C	6HX	VHM	C	M 3 - M10	1972	27	163
•	•		≥ 7	○			~DIN 376	N	C	6HX	HSS-E	C	M 6 - M39	2013	26	152
•	•		≥ 7	○			~DIN 371	N	C	6HX	HSS-E	C	M 3 - M10	2012	26	152
•	•		≥ 7	○			~DIN 371	N	C	6HX	HSS-E	C	M 5 - M10	2446	27	156
•	•		≥ 7	○			~DIN 371	N	C	6GX	HSS-E	C	M 5 - M10	2447	27	157
•	•		≥ 7	○			~DIN 376	N	C	6HX	HSS-E	C	M12 - M16	2448	27	156
			•				~DIN 371/376	N	C	6HX	HSS-E	Cb	M 5 - M20	2515	467	517
•	•		≥ 7	○			~DIN 371/376	N	C	6HX	VHM	S	M 5 - M16	2518	26	151
•	•		○	○		≤M5		N	C	6HX	HSS-E-PM	S	M 3 - M20	4143	27	162
			•				~DIN 371/376	N	C	6GX	HSS-E	Cb	M 5 - M20	4146	467	520

Manglaavat kierretapit, metrinen ISO-hienokierre

•	•		○	○			~DIN 374	N	C	6HX	HSS-E-PM	S	M 8 X1 - M20 X1,5	333	27	173
•	•		○	○			~DIN 374	N	C	6HX	HSS-E-PM	S	M 8 X1 - M16 X1,5	338	27	177

Manglaavat kierretapit, metrinen ISO-hienokierre

P	M	K	N	S	H	Työkalun kuvaus	Standardi	Malli	Muoto	Ø-Tole-ranssi	Materiaali	Pinta	d1/mm	Artikke-linro.	Leikku-uarvosivu	Sivu
•	•		○	○			~DIN 371	N	C	6HX	HSS-E	S	M 6 X0,75 - M10 X1,25	1275	26	169
•	•		○	○			~DIN 371	N	C	6GX	HSS-E	S	M 8 X1 - M10 X1	1277	26	172
•	•		○				~DIN 371	N	C	6HX	HSS-E-PM	S	M 8 X1 - M10 X1	1257	26	166
•	•		○				~DIN 371	N	C	6GX	HSS-E-PM	S	M 8 X1 - M10 X1,25	1740	26	167
•	•		○	○			~DIN 374	N	C	6HX	HSS-E	S	M 6 X0,75 - M24 X1,5	927	26	169
•	•		○	○			~DIN 374	N	C	6GX	HSS-E	S	M 8 X1 - M20 X1,5	926	26	172
•	•		○				~DIN 374	N	C	6HX	HSS-E	S	M 8 X1 - M20 X1,5	929	26	165
•	•		○				~DIN 374	N	C	6HX	HSS-E-PM	S	M12 X1 - M24 X2	1258	26	166
•	•		○				~DIN 374	N	C	6GX	HSS-E	S	M 8 X1 - M18 X1,5	928	26	168
•	•		○	○			~DIN 374	N	C	6HX	HSS-E-PM	S	M12 X1,25 - M24 X2	1269	27	174
•	•		○	○			~DIN 371	N	C	6HX	HSS-E-PM	S	M 8 X1 - M10 X1	1268	27	174
•	•		≥ 7	•			~DIN 371	N	C	6HX	HSS-E-PM	C	M 8 X1 - M10 X1,25	1272	27	178
•	•		≥ 7	•			~DIN 371	N	C	6GX	HSS-E-PM	C	M 8 X1 - M10 X1,25	1715	27	179
•	•		≥ 7	•			~DIN 374	N	C	6HX	HSS-E-PM	C	M12 X1 - M24 X1,5	1273	27	178
			•				~DIN 371	N	C	6HX	HSS-E-PM	Cb	M 8 X1 - M10 X1	1568	466	526
			•				~DIN 371	N	C	6GX	HSS-E-PM	Cb	M 8 X1 - M10 X1	1569	466	529
			•				~DIN 374	N	C	6GX	HSS-E-PM	Cb	M12 X1 - M24 X1,5	1580	466	529
•	•		≥ 7	•			~DIN 371/376	N	C	6HX	VHM	C	M10 X1 - M24 X1,5	1581	27	181
•							~DIN 374	N	C	6HX	HSS-E	P	M 6 X0,75 - M24 X1,5	1593	26	169
•							~DIN 374	N	C	6HX	HSS-E-PM	P	M12 X1 - M24 X1,5	1711	27	175
•							~DIN 374	N	C	6GX	HSS-E-PM	P	M12 X1 - M24 X1,5	1712	27	176
•							~DIN 371	N	C	6HX	HSS-E	P	M 6 X0,75 - M10 X1,25	1591	26	169
•							~DIN 371	N	C	6GX	HSS-E	P	M 8 X1 - M10 X1	1592	26	171
•							~DIN 371	N	C	6GX	HSS-E-PM	P	M 8 X1 - M10 X1	1710	27	176

Manglaavat kierretapit, metrinen ISO-hienokierre

P	M	K	N	S	H	Työkalun kuvaus	Standardi	Malli	Muoto	Ø-Tole-ranssi	Materiaali	Pinta	d1/mm	Artikke-linro.	Leikku-uarvosivu	Sivu
•	•		≥ 7	•			~DIN 374	N	C	6GX	HSS-E-PM	C	M12 X1 - M24 X1,5	1716	27	179
•	•			•			~DIN 371	N	C	6HX	HSS-E-PM	A	M 8 X1 - M10 X1,25	1721	27	178
•	•			•			~DIN 374	N	C	6HX	HSS-E-PM	A	M12 X1 - M24 X1,5	1723	27	178
•	•		○	○			~DIN 371	N	E	6HX	HSS-E-PM	S	M 8 X1 - M10 X1,25	1729	27	178
•	•		○	○			~DIN 371	N	E	6GX	HSS-E-PM	S	M 8 X1 - M10 X1,25	1730	27	179
•	•		○	○			~DIN 374	N	E	6HX	HSS-E-PM	S	M12 X1 - M24 X1,5	1731	27	178
•	•		○	○			~DIN 374	N	E	6GX	HSS-E-PM	S	M12 X1 - M24 X1,5	1732	27	179
•	•		≥ 7	○			~DIN 374	N	C	6HX	HSS-E	C	M 6 X0,75 - M20 X1,5	2008	26	170
•	•		○	○				N	C	6HX	HSS-E-PM	S	M 8 X1 - M16 X1,5	4145	27	180
			•				~DIN 371-374	N	C	6HX	HSS-E	Cb	M 8 X1 - M16 X1,5	4147	467	537
			•				~DIN 371-374	N	C	6GX	HSS-E	Cb	M 8 X1 - M16 X1,5	4151	467	539

Manglaavat kierretapit UNC-kierteille

•	•		○	○			~DIN 371	N	C	2BX	HSS-E	S	4 - 40 - 3/8 - 16	1582	26	182
•	•		○				~DIN 371	N	C	2BX	HSS-E	S	4 - 40 - 3/8 - 16	2273	26	182
•	•		○	○			~DIN 376	N	C	2BX	HSS-E	S	7/16 - 14 - 7/8 - 9	1583	26	182
•	•		○				~DIN 376	N	C	2BX	HSS-E	S	7/16 - 14 - 7/8 - 9	2274	26	182

Manglaavat kierretapit UNF-kierteille

•	•		○	○			~DIN 374	N	C	2BX	HSS-E	S	10 - 32 - 1 - 12	1585	26	183
•	•		○				~DIN 374	N	C	2BX	HSS-E	S	10 - 32 - 1 - 12	2275	26	183
•	•		○				~DIN 371	N	C	2BX	HSS-E	S	4 - 48 - 3/8 - 24	1283	26	183
•	•		○	○			~DIN 371	N	C	2BX	HSS-E	S	4 - 48 - 3/8 - 24	1584	26	183

Manglaavat kierretapit BSP-kierteille

•	•		○				DIN 2189	N	C		HSS-E	S	G 1/16 - G1 1/4	966	26	184
•	•		○	○			DIN 2189	N	C		HSS-E	S	G 1/16 - G 3/4	1586	26	184
			•				DIN 2189	N	C		HSS-E	Cb	G 1/16 - G1	4152	467	546

Kierrejyrsimet ilman viistettä metrisille ISO-kierteille

P	M	K	N	S	H	Työkalun kuvaus	Standardi	Malli	Muoto	Ø-Tole-ranssi	Materiaali	Pinta	d1/mm	Artikke-linro.	Leikku-uarvosivu	Sivu
○	○	●	●				WN	TM SP			VHM	○	M 6 - M20 X1,5	3734	468	548
●	○	●	●	○	≤55		WN	TM SP			VHM	C	M 6 - M20	3735	28	187
●	○	●	●	○	≤55		WN	TM SP			VHM	C	M 6 - M20 X1,5	3737	28	186
●	○	●	●	○	≤55		WN	TM SP			VHM	C	M 6 - M20	3740	28	187
●	○	●	●	○	≤55		WN	TM SP			VHM	C	M 6 - M20 X1,5	3743	28	186
●	○	●	●	○	≤55		WN	TM SP			VHM	C	M 6 - M20	4132	28	186
●	○	●	●	○	≤55		WN	TM SP			VHM	C	M 6 - M20	4133	28	186
○	○	●	●	○			WN	TMC SP			VHM	○	M 3 - M20	3510	469	551
○	○	●	●	○			WN	TMC SP			VHM	○	M 3 - M20	3511	469	552
●	●	●	●	●	≤55		WN	TMC SP			VHM	C	M 3 - M20	3525	28	188
●	●	●	●	●	≤55		WN	TMC SP			VHM	C	M 3 - M20	3526	29	189
●	●	●	●	●	≤55		WN	TMC SP			VHM	C	M 3 - M20	3543	28	188
●	●	●	●	●	≤55		WN	TMC SP			VHM	C	M 3 - M20	3544	29	189
●	●	●	●	●	≤55		WN	TMC SP			VHM	C	M 3 - M20	3759	29	190
●	●	●	●	●	≤55		WN	TMC SP			VHM	C	M 3 - M20	3760	29	190

Viisteelliset kierrejyrsimet metrisille ISO-hienokierteille

○	○	●	●	○			WN	TMC SP			VHM	○	M 4 X0,5 - M16 X1,5	3512	469	554
○		●	●				WN	TMC SP			VHM	○	M 4 X0,5 - M16 X1,5	3513	469	555
●	●	●	●	●	≤55		WN	TMC SP			VHM	C	M 4 X0,5 - M16 X1,5	3527	28	191
●	●	●	●	●	≤55		WN	TMC SP			VHM	C	M 4 X0,5 - M16 X1,5	3528	29	192
●	●	●	●	●	≤55		WN	TMC SP			VHM	C	M 4 X0,5 - M16 X1,5	3545	28	191
●	●	●	●	●	≤55		WN	TMC SP			VHM	C	M 4 X0,5 - M16 X1,5	3546	29	192
●	●	●	●	●	≤55		WN	TMC SP			VHM	C	M 4 X0,5 - M16 X1,5	3762	29	193
●	●	●	●	●	≤55		WN	TMC SP			VHM	C	M 4 X0,5 - M16 X1,5	3763	29	193

P	M	K	N	S	H	Työkalun kuvaus	Standardi	Malli	Muoto	Ø-Tole-ranssi	Materiaali	Pinta	d1/mm	Artikke-linro.	Leikku-uarvosivu	Sivu
Kierrejyrsimet ilman viistettä UNC-kierteille																
●	○	●	●	○	≤55		WN	TM SP			VHM	C	10 - 24 - 5/8 - 11	4134	28	194
●	○	●	●	○	≤55		WN	TM SP			VHM	C	10 - 24 - 5/8 - 11	4135	28	194
●	●	●	●	●	≤55		WN	TMC SP			VHM	C	1/4 - 20 - 1/2 - 13	3516	28	195
●	●	●	●	●	≤55		WN	TMC SP			VHM	C	1/4 - 20 - 1/2 - 13	3517	29	196
●	●	●	●	●	≤55		WN	TMC SP			VHM	C	1/4 - 20 - 1/2 - 13	3534	28	195
●	●	●	●	●	≤55		WN	TMC SP			VHM	C	1/4 - 20 - 1/2 - 13	3535	29	196
Kierrejyrsimet ilman viistettä UNF-kierteille																
●	○	●	●	○	≤55		WN	TM SP			VHM	C	10 - 32 - 5/8 - 18	4136	28	197
●	○	●	●	○	≤55		WN	TM SP			VHM	C	10 - 32 - 5/8 - 18	4137	28	197
●	●	●	●	●	≤55		WN	TMC SP			VHM	C	1/4 - 28 - 1/2 - 20	3518	28	198
●	●	●	●	●	≤55		WN	TMC SP			VHM	C	1/4 - 28 - 1/2 - 20	3519	29	199
●	●	●	●	●	≤55		WN	TMC SP			VHM	C	1/4 - 28 - 1/2 - 20	3536	28	198
●	●	●	●	●	≤55		WN	TMC SP			VHM	C	1/4 - 28 - 1/2 - 20	3537	29	199
Kierrejyrsimet ilman viistettä BSP-kierteille																
●	○	●	●	○	≤55		WN	TM SP			VHM	C	G 1/8 - G 3/8	3745	28	200
●	○	●	●	○	≤55		WN	TM SP			VHM	C	G 1/8 - G 3/8	3746	28	201
●	○	●	●	○	≤55		WN	TM SP			VHM	C	G 1/8 - G 3/8	3748	28	200
●	○	●	●	○	≤55		WN	TM SP			VHM	C	G 1/8 - G 3/8	3750	28	201
●	●	●	●	●	≤55		WN	TMC SP			VHM	C	G 1/8 - G 3/8	3514	28	202
●	●	●	●	●	≤55		WN	TMC SP			VHM	C	G 1/8 - G 3/8	3515	29	203
●	●	●	●	●	≤55		WN	TMC SP			VHM	C	G 1/8 - G 3/8	3529	28	202
●	●	●	●	●	≤55		WN	TMC SP			VHM	C	G 1/8 - G 3/8	3533	29	203
●	●	●	●	●	≤55		WN	TMC SP			VHM	C	G 1/8 - G 3/8	3765	29	204
●	●	●	●	●	≤55		WN	TMC SP			VHM	C	G 1/8 - G 3/8	3766	29	204

P	M	K	N	S	H	Työkalun kuvaus	Standardi	Malli	Muoto	Ø-Tole-ranssi	Materiaali	Pinta	d1/mm	Artikke-linro.	Leikku-uarvosivu	Sivu
Kierrejyrsimet ilman viistettä NPT-kierteille																
•	•	•	•	•	≤55		WN	TM SP			VHM	C	1/16 - 3/8	3753	28	205
•	•	•	•	•	≤55		WN	TM SP			VHM	C	1/16 - 3/8	3754	28	205
•	•	•	•	•	≤55		WN	TMC SP			VHM	C	1/8 - 3/8	3520	28	206
•	•	•	•	•	≤55		WN	TMC SP			VHM	C	1/8 - 3/8	3538	28	206
Kierrejyrsimet ilman viistettä NPTF-kierteille																
•	•	•	•	•	≤55		WN	TM SP			VHM	C	1/16 - 3/8	3756	28	207
•	•	•	•	•	≤55		WN	TM SP			VHM	C	1/16 - 3/8	3757	28	207
•	•	•	•	•	≤55		WN	TMC SP			VHM	C	1/8 - 3/8	3521	28	208
•	•	•	•	•	≤55		WN	TMC SP			VHM	C	1/8 - 3/8	3539	28	208
Kierrejyrsimet BSP-kierteille																
○	○	•	•	○			WN	TM SP	BSP		VHM	○	≥ 1/4 - ≥ 1	3524	470	575
•	•	•	•	•	≤55		WN	TM SP	BSP		VHM	C	≥ 1/4 - ≥ 1	3542	29	212
•	•	•	•	•	≤55		WN	TM SP	BSP		VHM	C	≥ 1/4 - ≥ 1	3557	29	212
•	•	•	•	•	≤55		WN	TM SP	NPT		VHM	C	≥ 1/2 - ≥ 1	3768	69	213
•	•	•	•	•	≤55		WN	TM SP	NPT		VHM	C	≥ 1/2 - ≥ 1	3769	69	213
•	•	•	•	•	≤55		WN	TM SP	NPTF		VHM	C	≥ 1/2 - ≥ 1	3772	29	214
•	•	•	•	•	≤55		WN	TM SP	NPTF		VHM	C	≥ 1/2 - ≥ 1	3773	29	214
○	○	•	•	○			WN	TMU SP	M		VHM	○	≥ 10 - ≥ 30	3523	470	572
•	•	•	•	•	≤55		WN	TMU SP	M		VHM	C	≥ 10 - ≥ 30	3541	29	209
•	•	•	•	•	≤55		WN	TMU SP	M		VHM	C	≥ 10 - ≥ 30	3556	29	209
•	•	•	•	•	≤55		WN	TMU SP	M		VHM	C	≥ 3 - ≥ 24	4162	29	210
•	•	•	•	•	≤55		WN	TMU SP	M		VHM	C	≥ 3 - ≥ 24	4163	29	210
•	•	•	•	•	≤55		WN	TMU UN	UN		VHM	C	≥ 1/2 - ≥ 1	3595	29	211
•	•	•	•	•	≤55		WN	TMU UN	UN		VHM	C	≥ 1/2 - ≥ 1	3596	29	211

P	M	K	N	S	H	Työkalun kuvaus	Standardi	Malli	Muoto	Ø-Tole-ranssi	Materiaali	Pinta	d1/mm	Artikke-linro.	Leikku-uarvosivu	Sivu
Mikro-kierrejyrsimet																
●	●	●	●	●			WN	SP G	BSP		VHM	C	G 1/8 - G2	4228	29	216
●	●	●	●	●			WN	SP M	M		VHM	C	M 1,6 - M16	4226	29	215
				○	●		WN	SP M	M		VHM	A	M 2 - M12	4227	679	703
●	●	●	●	●			WN	SP M/MF	M		VHM	C	M1,4 - M1,8 - M8 - M10	4225	29	217
Poraavat kierrejyrsimet metrisille ISO-kierteille																
		○	●				WN	DTMC SP	M		VHM		M3 - M16	3774	471	581
		○	●				WN	DTMC SP	M		VHM		M3 - M16	3775	471	581
		●	●				WN	DTMC SP	M		VHM	C	M3 - M16	3776	471	581
		●	●				WN	DTMC SP	M		VHM	C	M3 - M16	3777	471	581
		○	●				WN	DTMC SP	M		VHM		M3 - M16	3778	471	582
		○	●				WN	DTMC SP	M		VHM		M3 - M16	3779	471	582
		●	●				WN	DTMC SP	M		VHM	C	M3 - M16	3780	471	582
		●	●				WN	DTMC SP	M		VHM	C	M3 - M16	3781	471	582
		○	●				WN	DTMC SP	M		VHM		M3 - M16	3782	471	583
		○	●				WN	DTMC SP	M		VHM		M3 - M16	3783	471	583
		●	●				WN	DTMC SP	M		VHM	C	M3 - M16	3784	471	583
		●	●				WN	DTMC SP	M		VHM	C	M3 - M16	3785	471	583
		○	●				WN	DTMC SP	MF		VHM		M4 x 0,5 - M16 x 1,5	3787	471	584
		●	●				WN	DTMC SP	MF		VHM	C	M4 x 0,5 - M16 x 1,5	3788	471	584
		●	●				WN	DTMC SP	MF		VHM	C	M4 x 0,5 - M16 x 1,5	3789	471	584
		○	●				WN	DTMC SP	MF		VHM		M4 x 0,5 - M16 x 1,5	3790	471	585
		○	●				WN	DTMC SP	MF		VHM		M4 x 0,5 - M16 x 1,5	3791	471	585
		●	●				WN	DTMC SP	MF		VHM	C	M4 x 0,5 - M16 x 1,5	3792	471	585
		●	●				WN	DTMC SP	MF		VHM	C	M4 x 0,5 - M16 x 1,5	3793	471	585

P	M	K	N	S	H	Työkalun kuvaus	Standardi	Malli	Muoto	Ø-Tole-ranssi	Materiaali	Pinta	d1/mm	Artikke-linro.	Leikku-uarvosivu	Sivu
Poraavat kierrejyrsimet metrisille ISO-kierteille																
		•	•				WN	DTMC SP	UNC		VHM	○	1/4 - 20 - 5/8 - 11	4138	471	586
		•	•				WN	DTMC SP	UNC		VHM	C	1/4 - 20 - 5/8 - 11	4139	471	586
		•	•				WN	DTMC SP	UNF		VHM	○	1/4 - 28 - 5/8 - 18	4140	471	587
		•	•				WN	DTMC SP	UNF		VHM	C	1/4 - 28 - 5/8 - 18	4141	471	587
Automaattikierreleuat, metrinen ISO-kierre																
≤ 1000		•	•				WN		B	6g	HSS	○	M 3 - M12	121	706	707
≤ 1000		•	•				WN		B	6g	HSS	○	M 2 - M10	125	706	708
Kierreleuat, metrinen ISO-kierre																
≤ 1000		•	•				DIN EN 22568		B	6g	HSS	○	M 1 - M30	151	706	710
≤ 1000		•	•				DIN EN 22568		B	6g	HSS	○	M 3 - M30	152	706	711
≤ 1000		•	•				DIN EN 22568		B	6g	HSS	○	M 1 - M30	153	706	710
≤ 1000		•	•				DIN EN 22568		B	6g	HSS	○	M 3 - M20	156	706	713
≤ 1000		•	•				DIN 382			6g	HSS	○	M 5 - M52	139	706	709
≤ 1200	•						DIN EN 22568		B	6g	HSS-E	●	M 2 - M20	130	706	712
Kierreleuat, metrinen ISO-hienokierre																
≤ 1000		•	•				DIN EN 22568		B	6g	HSS	○	M 3 X0,35 - M30 X2	161	706	714
≤ 1000		•	•				DIN EN 22568		B	6g	HSS	○	M 3 X0,35 - M30 X2	162	706	714
Kierreleuat UNC-kierteille																
≤ 1000		•	•				DIN EN 22568		B	2a	HSS	○	8 -32 - 3/4 -10	182	706	716
Kierreleuat UNF-kierteille																
≤ 1000		•	•				DIN EN 22568		B	2a	HSS	○	10 - 32 - 7/8 - 14	185	706	717
Kierreleuat BSP-kierteille																
≤ 1000		•	•				DIN EN 24231		B		HSS	○	G 1/8 - G1 1/2	175	706	718
≤ 1000		•	•				DIN EN 24231		B		HSS	○	G 1/8 - G1 1/2	176	706	718
Kierreleuat R-kierteille BSPT																
≤ 1000		•	•				DIN EN 24230		B		HSS	○	R 1/8 - R 1/2	198	706	719

P	M	K	N	S	H	Työkalun kuvaus	Standardi	Malli	Muoto	Ø-Tole-ranssi	Materiaali	Pinta	d1/mm	Artikke-linro.	Leikku-uarvosivu	Sivu
Kierreleuat NPT-kierteille																
▭1000		•	•				DIN EN 22568		B		HSS	○	1/8 - 3/4	191	706	720
Käsikierretapit, metrinen ISO-kierre																
≤ 800 ≤			○				DIN 352	N		ISO2/6H	HSS	○	M 1 - M68	861		721
≤ 800 ≤			○				DIN 352	N	A	ISO2/6H	HSS	○	M 1 - M68	862		721
≤ 800 ≤			○				DIN 352	N	D	ISO2/6H	HSS	○	M 1 - M68	863		721
≤ 800 ≤			○				DIN 352	N	C	ISO2/6H	HSS	○	M 1 - M45	864		721
≤ 800 ≤			○				DIN 352	N		ISO2/6H	HSS	○	M 1 - M45	882		723
≤ 800 ≤			○				DIN 352	N	D	ISO2/6H	HSS	○	M 1 - M45	883		723
≤ 800 ≤			○				DIN 352	N		ISO2/6H	HSS	○	M 2 - M18	904		724
≤ 800 ≤			○				DIN 352	N-LH	A	ISO2/6H	HSS	○	M 2 - M18	905		724
≤ 800 ≤			○				DIN 352	N-LH	D	ISO2/6H	HSS	○	M 2 - M18	906		724
≤ 800 ≤			○				DIN 352	N-LH	C	ISO2/6H	HSS	○	M 2 - M18	907		724
•	•	•	•				DIN 352	H		ISO2/6H	HSS-E	●	M 2 - M20	857		726
•	•	•	•				DIN 352	H	A	ISO2/6H	HSS-E	●	M 2 - M20	858		726
•	•	•	•				DIN 352	H	D	ISO2/6H	HSS-E	●	M 2 - M20	859		726
•	•	•	•				DIN 352	H	C	ISO2/6H	HSS-E	●	M 2 - M20	860		726
≤ 1000 ≤	•	•	•				DIN 352	VA		ISO2/6H	HSS-E	○	M 2 - M20	853		725
≤ 1000 ≤	•	•	•				DIN 352	VA	A	ISO2/6H	HSS-E	○	M 2 - M20	854		725
≤ 1000 ≤	•	•	•				DIN 352	VA	D	ISO2/6H	HSS-E	○	M 2 - M20	855		725
≤ 1000 ≤	•	•	•				DIN 352	VA	C	ISO2/6H	HSS-E	○	M 2 - M20	856		725
•	•	•	•				DIN 352	H		ISO2/6H	HSS-E-PM	●	M 3 - M12	1818		727
•	•	•	•				DIN 352	H	A	ISO2/6H	HSS-E-PM	●	M 3 - M12	1819		727
•	•	•	•				DIN 352	H	D	ISO2/6H	HSS-E-PM	●	M 3 - M12	1820		727
•	•	•	•				DIN 352	H	C	ISO2/6H	HSS-E-PM	●	M 3 - M12	1821		727

P	M	K	N	S	H	Työkalun kuvaus	Standardi	Malli	Muoto	Ø-Tole-ranssi	Materiaali	Pinta	d1/mm	Artikke-linro.	Leikku-uarvosivu	Sivu
Käsikierretapit, metrinen ISO-hienokierre																
≤ 800 N/mm²			○				DIN 2180	N		ISO2/6H	HSS	◯	M 2 X0,25 - M52 X1,5	884		728
≤ 800 N/mm²			○				DIN 2180	N	D	ISO2/6H	HSS	◯	M 2 X0,25 - M52 X1,5	885		728
≤ 800 N/mm²			○				DIN 2180	N	C	ISO2/6H	HSS	◯	M 2 X0,25 - M52 X1,5	886		728
Käsikierretapit UNC-kierteille																
≤ 800 N/mm²			○				~DIN 352	N		2B	HSS	◯	1 -64 - 2- 4 1/2	981		730
≤ 800 N/mm²			○				~DIN 352	N	A	2B	HSS	◯	1 -64 - 2- 4 1/2	982		730
≤ 800 N/mm²			○				~DIN 352	N	D	2B	HSS	◯	1 -64 - 2- 4 1/2	983		730
≤ 800 N/mm²			○				~DIN 352	N	C	2B	HSS	◯	1 -64 - 2- 4 1/2	984		730
Käsikierretapit UNF-kierteille																
≤ 800 N/mm²			○				~DIN 2181	N		2B	HSS	◯	1 -72 - 1 -12	985		731
≤ 800 N/mm²			○				~DIN 2181	N	D	2B	HSS	◯	1 -72 - 1 -12	986		731
≤ 800 N/mm²			○				~DIN 2181	N	C	2B	HSS	◯	1 -72 - 1 -12	987		731
Käsikierretapit BSW-kierteille																
≤ 800 N/mm²			○				~DIN 352	N			HSS	◯	W 3/32 - W2	954		732
≤ 800 N/mm²			○				~DIN 352	N	A		HSS	◯	W 3/32 - W2	955		732
≤ 800 N/mm²			○				~DIN 352	N	D		HSS	◯	W 3/32 - W2	956		732
≤ 800 N/mm²			○				~DIN 352	N	C		HSS	◯	W 3/32 - W2	957		732
Käsikierretapit BSP-kierteille																
≤ 800 N/mm²			○				DIN 5157	N			HSS	◯	G 1/8 - G2	958		733
≤ 800 N/mm²			○				DIN 5157	N	D		HSS	◯	G 1/8 - G2	959		733
≤ 800 N/mm²			○				DIN 5157	N	C		HSS	◯	G 1/8 - G2	960		733

Synkrokierteytysistukat

	Työkalun kuvaus	Varren muoto	Kiinnitettävä Ø-alue	Artikkelinro.	Sivu
	HSK-A hydraulinen synkrokierteytysistukka jäähdytyskanavalla	HSK-A	HSK-A 63 - HSK-A 100	**4601**	742
	ISO-kartio hydraulinen synkrokierteytysistukka jäähdytyskanavalla	SK	SK 30 - SK 40	**4576**	743
	MAS/BT hydraulinen synkrokierteytysistukka jäähdytyskanavalla	BT	BT 30 - BT 40	**4577**	744
	Lieriövartinen hydraulinen synkrokierteytysistukka jäähdytyskanavalla	lieriö	20,000 - 25,000	**4525**	745
	Tiivistetyt pienennysholkit hyraulisille synkroistukoille		12,000 / 20,000	**4605**	746
	GÜHROJET pienennysholkit hydraulisille synkrokierteytysistukoille		12,000 / 20,000	**4606**	748
	Säätöruuvit „ taso „ synkrokierteytysistukoille jäähdytyskanavalla		ER20 - ER32	**4364**	750
	Synkro kierteytysistukat lieriövarrella	lieriö	25,000	**4326**	751
	HSK-A synkrokierteytysistukat	HSK-A	HSK-A 63 - HSK-A 100	**4327**	751
	Kierreholkit		ER16 - ER40	**4308**	753
	HSK-A pidin kierteytysistukoille	HSK-A	HSK-A 50 - HSK-A 100	**4343**	754
	Pikavaihto-kierteytysistukka ilman JK		M3 - M20	**4340**	754
	Pikavaihto-kierteytysistukka JK:lla		M3 - M20	**4342**	755
	Pikavaihto-kierteytysistukat, HSK-A JK:lla	HSK-A	HSK-A 63	**4328**	755
	Pikavaihto kierteytysistukka		M3 - M20	**4206**	756

MQL kierteytysistukat

	Työkalun kuvaus	Varren muoto	Kiinnitettävä Ø-alue	Artikkelinro.	Sivu
	MQL HSK-A 1-kanavainen hydr. synkrokierteytysistukka (atom. työkalunvaihto)	HSK-A	HSK-A 63 - HSK-A 100	**4602**	760
	MQL HSK-A 2-kanavainen hydraulinen synkrokierteytysistukka (atom. työkalunvaihto)	HSK-A	HSK-A 63 - HSK-A 100	**4603**	761
	MQL HSK-A hydraulinen synkrokierteytysistukka (manuaalinen työkalunvaihto)	HSK-A	HSK-A 63 - HSK-A 100	**4604**	762
	MQL hydraulinen synkrokierteytysistukka jäähdytyskanavalla	lieriö	20,000	**4524**	763
	MQL synkrohydrauli-istukka HSK-A manuaaliselle työkalunvaihdolle	HSK-A	HSK-A 63	**4298**	764
	MQL 1-kanavainen synkroistukka HSK-A automaattiselle työkalunvaihdolle	HSK-A	HSK-A 63 - HSK-A 100	**4330**	764
	MQL 1-kanavainen synkroistukka HSK-A automaattiselle työkalunvaihdolle	HSK-A	HSK-A 63 - HSK-A 100	**4341**	765
	MQL säätöruuvit sisäkartiolla MQL synkrokiertetysistukalle		ER20 - ER32	**4305**	766
	MQL 1-kanavaisen nesteputkisarja HSK-A	HSK-A	HSK-A 32 - HSK-A 100	**4508**	767
	MQL 2-kanavaisen nesteputkisarja HSK-A	HSK-A	HSK-A 32 - HSK-A 100	**4511**	767
	MQL nesteputkisarja HSK-A (täyte)	HSK-A	HSK-A 32 - HSK-A 100	**4513**	768
	Kiinnitysmutterit, DIN ISO 15488		ER16 - ER40	**4306**	769
	Tiivistelevyt		ER16 - ER40	**4335**	770
	Vääntöavain		ER16 mini - ER40	**4913**	770

Artikkelinro.	Sivu	Poraussyvyys	Standardi	Kuvaus	Materiaali	Malli	Muoto
57	47		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E-PM	H	B
58	47		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E-PM	H	B
59	246		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E-PM	VA R40	C
60	246		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E-PM	VA R40	C
121	707			Automaattikierreleuat, metrinen ISO-kierre	HSS		B
125	708			Automaattikierreleuat, metrinen ISO-kierre	HSS		B
130	712			Kierreleuat, metrinen ISO-kierre	HSS-E		B
139	709			Kierreleuat, metrinen ISO-kierre	HSS		
151	710			Kierreleuat, metrinen ISO-kierre	HSS		B
152	711			Kierreleuat, metrinen ISO-kierre	HSS		B
153	710			Kierreleuat, metrinen ISO-kierre	HSS		B
156	713			Kierreleuat, metrinen ISO-kierre	HSS		B
161	714			Kierreleuat, metrinen ISO-hienokierre	HSS		B
162	714			Kierreleuat, metrinen ISO-hienokierre	HSS		B
169	365		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E	GG	C
174	70		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	N R40	C(K)
175	718			Kierreleuat BSP-kierteille	HSS		B
176	718			Kierreleuat BSP-kierteille	HSS		B
182	716			Kierreleuat UNC-kierteille	HSS		B
185	717			Kierreleuat UNF-kierteille	HSS		B
191	720			Kierreleuat NPT-kierteille	HSS		B
196	70		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	N R40	C(K)
198	719			Kierreleuat R-kierteille BSPT	HSS		B
273	109		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E	N R40	C(K)
297	78, 359, 479		DIN 376	Jäähdytyskanavatapit, metrinen ISO kierre	HSS-E-PM	H	C
302	78, 359, 479		DIN 371	Jäähdytyskanavatapit, metrinen ISO kierre	HSS-E-PM	H	C
313	33		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	N	B
315	33		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	N	B
316	93		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E	N	B
318	358		DIN 371	Jäähdytyskanavatapit, metrinen ISO kierre	HSS-E	GG	C
319	358		DIN 376	Jäähdytyskanavatapit, metrinen ISO kierre	HSS-E	GG	C
322	154, 275, 380, 511, 620		~DIN 371	Manglaavat kierretapit, metrinen ISO-kierre	HSS-E-PM	N	C
323	158, 279, 384, 515, 622		~DIN 371	Manglaavat kierretapit JK, metrinen ISO-kierre	HSS-E-PM	N	C
333	173, 294, 399, 533, 629		~DIN 374	Manglaavat kierretapit, metrinen ISO-hienokierre	HSS-E-PM	N	C
338	177, 295, 400, 535, 631		~DIN 374	Manglaavat kierretapit JK, metrinen ISO-hienokierre	HSS-E-PM	N	C
339	154, 275, 380, 511, 620		~DIN 376	Manglaavat kierretapit, metrinen ISO-kierre	HSS-E-PM	N	C
342	158, 279, 384, 515, 622		~DIN 376	Manglaavat kierretapit JK, metrinen ISO-kierre	HSS-E-PM	N	C
347	366		DIN 374	Jäähdytyskanavatapit, metrinen ISO hienokierre	HSS-E	GG	C
361	82		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	H R40	C
362	82		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	H R40	C
393	71, 244		DIN 371/DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	VA R45	C
394	115, 252		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E	VA R45	C
395	139, 267		DIN 5156	Konekierretapit BSP-kierteille	HSS-E	VA R45	C
733	43		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	H	B
734	43		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	H	B
761	75, 247, 486		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E-PM	VA R50	C
763	75, 247, 486		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E-PM	VA R50	C
764	111, 255, 490		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E-PM	VA R50	C
767	74, 245, 485		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E-PM	N R50	C
778	79, 360, 480		DIN 376	Jäähdytyskanavatapit, metrinen ISO kierre	HSS-E	H	C
779	80, 361, 481			Jäähdytyskanavatapit, metrinen ISO kierre	HSS-E	H	C
783	60		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	N R40	C
784	60		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	N R40	C
785	241		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	VA R15	C
786	62		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	N L40-LH	C
787	62		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	N L40-LH	C
788	483		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	H AZ	C
789	32		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	N-LH	B
790	32		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	N-LH	B
791	44		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	H AZ	B
792	240		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	VA AZ	B
794	36		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	N	B
795	52		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	N	C
796	56		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	N	B
797	56		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	N	B
799	52		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	N R15	C
800	482		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	Ms	E
801	49		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	N	D
802	55		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	N	B
803	30		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	N	B
804	43		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	H	B
805	472		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	Al	B

Artikkelinro.	Sivu	Poraussyvyys	Standardi	Kuvaus	Materiaali	Malli	Muoto
806	50		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	N	C
807	356		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	GG	C
808	89		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	N L15	D
809	57		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	N R15	C
810	60		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	N R40	C
811	81		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	H R40	C
812	474		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	Al R45	C
813	49		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	N	D
814	243, 475		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	VA R40	C
815	31		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	N	B
816	43		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	H	B
817	472		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	Al	B
818	51		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	N	C
819	356		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	GG	C
820	89		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	N L15	D
821	57		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	N R15	C
822	60		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	N R40	C
823	81		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	H R40	C
824	474		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	Al R45	C
825	243, 475		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	VA R40	C
826	66		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	N R40	C
827	91		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E	N	B
828	97		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E	H	B
829	100		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E	N	C
830	100		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E	N	C
831	365		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E	GG	C
832	91		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E	N	B
833	102		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E	N R15	C
834	105		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E	N R40	C
835	114		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E	H R40	C
836	66		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	N R40	C
837	37		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	N	B
838	54		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	N	B
839	54		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	N	B
843	241		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	VA R15	C
844	61		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	N R40	C
845	37		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	N	B
846	54		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	N	B
847	54		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	N	B
848	61		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	N R40	C
849	44		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	H AZ	B
851	85			Mutterikierretapit, metrinen ISO-kierre	HSS-E	N	
852	105		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E	N R40	C
853	725		DIN 352	Käsikierretapit, metrinen ISO-kierre	HSS-E	VA	
854	725		DIN 352	Käsikierretapit, metrinen ISO-kierre	HSS-E	VA	A
855	725		DIN 352	Käsikierretapit, metrinen ISO-kierre	HSS-E	VA	D
856	725		DIN 352	Käsikierretapit, metrinen ISO-kierre	HSS-E	VA	C
857	726		DIN 352	Käsikierretapit, metrinen ISO-kierre	HSS-E	H	
858	726		DIN 352	Käsikierretapit, metrinen ISO-kierre	HSS-E	H	A
859	726		DIN 352	Käsikierretapit, metrinen ISO-kierre	HSS-E	H	D
860	726		DIN 352	Käsikierretapit, metrinen ISO-kierre	HSS-E	H	C
861	721		DIN 352	Käsikierretapit, metrinen ISO-kierre	HSS	N	
862	721		DIN 352	Käsikierretapit, metrinen ISO-kierre	HSS	N	A
863	721		DIN 352	Käsikierretapit, metrinen ISO-kierre	HSS	N	D
864	721, 723		DIN 352	Käsikierretapit, metrinen ISO-kierre	HSS	N	C
869	56		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	N	B
872	76		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E-PM	H R15	C
873	117		~DIN 371	Konekierretapit UNC-kierteille	HSS-E	N	B
874	112		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E-PM	H R15	C
875	46		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E-PM	H	B
876	122		~DIN 371	Konekierretapit UNC-kierteille	HSS-E	N R40	C
877	237		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E-PM	VA	B
878	117		~DIN 376	Konekierretapit UNC-kierteille	HSS-E	N	B
879	237		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E-PM	VA	B
881	122		~DIN 376	Konekierretapit UNC-kierteille	HSS-E	N R40	C
882	723		DIN 352	Käsikierretapit, metrinen ISO-kierre	HSS	N	
883	723		DIN 352	Käsikierretapit, metrinen ISO-kierre	HSS	N	D
884	728		DIN 2181	Käsikierretapit, metrinen ISO-hienokierre	HSS	N	
885	728		DIN 2181	Käsikierretapit, metrinen ISO-hienokierre	HSS	N	D
886	728		DIN 2181	Käsikierretapit, metrinen ISO-hienokierre	HSS	N	C
887	256		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E-PM	VA	B
888	88			Konekierretapit, metrinen ISO-kierre	HSS-E	N R40	C

Artikkelinro.	Sivu	Poraussyvyys	Standardi	Kuvaus	Materiaali	Malli	Muoto
889	66		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	N R40	C
890	66		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	N R40	C
903	149, 271, 376, 508		~DIN 371	Manglaavat kierretapit, metrinen ISO-kierre	HSS-E-PM	N	C
904	724		DIN 352	Käsikierretapit, metrinen ISO-kierre	HSS	N-LH	
905	724		DIN 352	Käsikierretapit, metrinen ISO-kierre	HSS	N-LH	A
906	724		DIN 352	Käsikierretapit, metrinen ISO-kierre	HSS	N-LH	D
907	724		DIN 352	Käsikierretapit, metrinen ISO-kierre	HSS	N-LH	C
908	125		~DIN 374	Konekierretapit UNF-kierteille	HSS-E	N	B
909	246		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E-PM	VA R40	C
910	246		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E-PM	VA R40	C
911	128		~DIN 374	Konekierretapit UNF-kierteille	HSS-E	N R40	C
912	30		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	N	B
913	57		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	N R15	C
914	60		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	N R40	C
915	31		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	N	B
916	57		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	N R15	C
917	60		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	N R40	C
918	153, 274, 379, 510		~DIN 371	Manglaavat kierretapit, metrinen ISO-kierre	HSS-E	N	C
919	152, 274, 379, 510		~DIN 371	Manglaavat kierretapit, metrinen ISO-kierre	HSS-E	N	C
920	150, 272, 377, 507		~DIN 371	Manglaavat kierretapit, metrinen ISO-kierre	HSS-E	N	C
921	149, 271, 376, 506		~DIN 371	Manglaavat kierretapit, metrinen ISO-kierre	HSS-E	N	C
922	153, 274, 379, 510		~DIN 376	Manglaavat kierretapit, metrinen ISO-kierre	HSS-E	N	C
923	152, 274, 379, 510		~DIN 376	Manglaavat kierretapit JK, metrinen ISO-kierre	HSS-E	N	C
925	149, 271, 376, 506		~DIN 376	Manglaavat kierretapit, metrinen ISO-kierre	HSS-E	N	C
926	172, 292, 397, 532		~DIN 374	Manglaavat kierretapit, metrinen ISO-hienokierre	HSS-E	N	C
927	169, 288, 395, 530		~DIN 374	Manglaavat kierretapit, metrinen ISO-hienokierre	HSS-E	N	C
928	168, 290, 393, 528		~DIN 374	Manglaavat kierretapit, metrinen ISO-hienokierre	HSS-E	N	C
929	165, 286, 391, 524		~DIN 374	Manglaavat kierretapit, metrinen ISO-hienokierre	HSS-E	N	C
930	356		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	GG	C
931	356		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	GG	C
932	365		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E	GG	C
935	76		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E-PM	H R15	C
936	253, 488		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E-PM	VA R40	C
937	141		DIN 5156	Konekierretapit BSP-kierteille	HSS-E	N R40	C(K)
939	265, 503		DIN 5156	Konekierretapit BSP-kierteille	HSS-E-PM	VA R40	C
942	42		~DIN 371	Konekierretapit, metrinen ISO-kierre	TKM	N	B
943	95		~DIN 371	Konekierretapit, metrinen ISO-hienokierre	TKM	N	B
944	96		DIN 374	Konekierretapit, metrinen ISO-hienokierre	TKM	N	B
945	30		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	N	B
946	57		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	N R15	C
947	81		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	H R40	C
948	31		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	N	B
949	57		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	N R15	C
950	81		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	H R40	C
952	149, 271, 376, 508		~DIN 376	Manglaavat kierretapit, metrinen ISO-kierre	HSS-E-PM	N	C
954	732		~DIN 352	Käsikierretapit BSW-kierteille	HSS	N	
955	732		~DIN 352	Käsikierretapit BSW-kierteille	HSS	N	A
956	732		~DIN 352	Käsikierretapit BSW-kierteille	HSS	N	D
957	732		~DIN 352	Käsikierretapit BSW-kierteille	HSS	N	C
958	733		DIN 5157	Käsikierretapit BSP-kierteille	HSS	N	
959	733		DIN 5157	Käsikierretapit BSP-kierteille	HSS	N	D
960	733		DIN 5157	Käsikierretapit BSP-kierteille	HSS	N	C
961	374		DIN 5156	Konekierretapit BSP-kierteille	HSS-E	GG	C
962	132		DIN 5156	Konekierretapit BSP-kierteille	HSS-E	N	B
963	133		DIN 5156	Konekierretapit BSP-kierteille	HSS-E	N	C
964	135		DIN 5156	Konekierretapit BSP-kierteille	HSS-E	N R15	C
965	136		DIN 5156	Konekierretapit BSP-kierteille	HSS-E	N R40	C
966	184, 302, 407, 544		DIN 2189	Manglaavat kierretapit BSP-kierteille	HSS-E	N	C
967	263, 502		DIN 5156	Konekierretapit BSP-kierteille	HSS-E	VA	B
968	265		DIN 5156	Konekierretapit BSP-kierteille	HSS-E	VA R40	C
969	362, 476		DIN 371	Jäähdytyskanavatapit, metrinen ISO kierre	TKM	H	C
971	478		DIN 371	Jäähdytyskanavatapit, metrinen ISO kierre	TKM	N R15	C
972	368, 491		DIN 371	Jäähdytyskanavatapit, metrinen ISO hienokierre	TKM	H	C
973	146			Konekierretapit NPT-kierteille	HSS-E	N	C
974	368, 491		DIN 374	Jäähdytyskanavatapit, metrinen ISO hienokierre	TKM	H	C
975	495		DIN 371	Jäähdytyskanavatapit, metrinen ISO hienokierre	TKM	N L15	D
976	495		DIN 374	Jäähdytyskanavatapit, metrinen ISO hienokierre	TKM	N L15	D
977	493		DIN 371	Jäähdytyskanavatapit, metrinen ISO hienokierre	TKM	N R15	C
978	493		DIN 374	Jäähdytyskanavatapit, metrinen ISO hienokierre	TKM	N R15	C
979	147		DIN 40432	Konekierretapit PG-kierteille	HSS-E	N	C
980	147		DIN 40432	Konekierretapit PG-kierteille	HSS-E	N	B
981	730		~DIN 352	Käsikierretapit UNC-kierteille	HSS	N	

Artikkelinro.	Sivu	Poraussyvyys	Standardi	Kuvaus	Materiaali	Malli	Muoto
982	730		~DIN 352	Käsikierretapit UNC-kierteille	HSS	N	A
983	730		~DIN 352	Käsikierretapit UNC-kierteille	HSS	N	D
984	730		~DIN 352	Käsikierretapit UNC-kierteille	HSS	N	C
985	731		~DIN 2181	Käsikierretapit UNF-kierteille	HSS	N	
986	731		~DIN 2181	Käsikierretapit UNF-kierteille	HSS	N	D
987	731		~DIN 2181	Käsikierretapit UNF-kierteille	HSS	N	C
991	35		DIN 352	Konekierretapit, metrinen ISO-kierre	HSS-E	N	B
992	58		DIN 352	Konekierretapit, metrinen ISO-kierre	HSS-E	N R15	C
993	65		DIN 352	Konekierretapit, metrinen ISO-kierre	HSS-E	N R40	C
995	53		DIN 352	Konekierretapit, metrinen ISO-kierre	HSS-E	N	C
998	86			Konekierretapit, metrinen ISO-kierre	HSS-E	N	B
1001	257		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E	VA	B
1002	238		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E-PM	VA	B
1004	253		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E-PM	VA R40	C
1007	113, 367, 497		DIN 374	Jäähdytyskanavatapit, metrinen ISO hienokierre	HSS-E-PM	H	E
1008	364, 477		DIN 371	Jäähdytyskanavatapit, metrinen ISO kierre	TKM	H	E
1009	369, 492		DIN 374	Jäähdytyskanavatapit, metrinen ISO hienokierre	TKM	H	E
1010	144			Konekierretapit EG-kierteille	HSS-E	N	B
1011	145			Konekierretapit EG-kierteille	HSS-E	N R40	C
1049	108		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E	N R40	C
1057	603		DIN 371/DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E-PM	TiNi	B
1058	607		DIN 371	Konekierretapit, metrinen ISO-hienokierre	HSS-E-PM	TiNi	B
1059	611		~DIN 371/~DIN 376	Konekierretapit UNC-kierteille	HSS-E-PM	TiNi	B
1060	615		~DIN 371/~DIN 374	Konekierretapit UNF-kierteille	HSS-E-PM	TiNi	B
1061	605		DIN 371/DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E-PM	Ti R15	C
1062	609		DIN 371	Konekierretapit, metrinen ISO-hienokierre	HSS-E-PM	Ti R15	C
1063	613		~DIN 371/~DIN 376	Konekierretapit UNC-kierteille	HSS-E-PM	Ti R15	C
1064	618		~DIN 371/~DIN 374	Konekierretapit UNF-kierteille	HSS-E-PM	Ti R15	C
1065	605		DIN 371/DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E-PM	Ni R10	C(K)
1066	609		DIN 371	Konekierretapit, metrinen ISO-hienokierre	HSS-E-PM	Ni R10	C(K)
1067	613		~DIN 371/~DIN 376	Konekierretapit UNC-kierteille	HSS-E-PM	Ni R10	C(K)
1068	618		~DIN 371/~DIN 374	Konekierretapit UNF-kierteille	HSS-E-PM	Ni R10	C(K)
1082	373		~DIN 374	Jäähdytyskanavatapit UNF-kierteille	HSS-E	GG	C
1084	482		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	Ms	E
1085	371		~DIN 371	Jäähdytyskanavatapit UNC-kierteille	HSS-E	GG	C
1086	371		~DIN 376	Jäähdytyskanavatapit UNC-kierteille	HSS-E	GG	C
1087	268			Konekierretapit NPT-kierteille	HSS-E	VA R25	C
1088	268			Konekierretapit NPT-kierteille	HSS-E	VA R25	C
1090	113, 367, 496		DIN 374	Jäähdytyskanavatapit, metrinen ISO hienokierre	HSS-E-PM	H	C
1091	78, 359, 479		DIN 371	Jäähdytyskanavatapit, metrinen ISO kierre	HSS-E-PM	H	E
1098	74, 245, 485		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E-PM	N R50	C
1100	110, 254, 489		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E-PM	N R50	C
1139	75, 247, 486		DIN 371	Jäähdytyskanavatapit, metrinen ISO kierre	HSS-E-PM	VA R50	C
1142	75, 247, 486		DIN 376	Jäähdytyskanavatapit, metrinen ISO kierre	HSS-E-PM	VA R50	C
1144	111, 255, 490		DIN 374	Jäähdytyskanavatapit, metrinen ISO hienokierre	HSS-E-PM	VA R50	C
1152	74, 245, 485		DIN 371	Jäähdytyskanavatapit, metrinen ISO kierre	HSS-E-PM	N R50	C
1161	683		~DIN 371	Konekierretapit, metrinen ISO-hienokierre	TKM	H	D
1188	77		DIN 371	Jäähdytyskanavatapit, metrinen ISO kierre	HSS-E-PM	H R15	C
1194	77		DIN 376	Jäähdytyskanavatapit, metrinen ISO kierre	HSS-E-PM	H R15	C
1200	112		DIN 374	Jäähdytyskanavatapit, metrinen ISO hienokierre	HSS-E-PM	H R15	C
1201	680		DIN 371/DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E-PM	H	D
1246	30		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	N	B
1249	31		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	N	B
1252	60		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	N R40	C
1254	60		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	N R40	C
1255	149, 271, 376, 506		~DIN 371	Manglaavat kierretapit, metrinen ISO-kierre	HSS-E-PM	N	C
1256	149, 271, 376, 506		~DIN 376	Manglaavat kierretapit, metrinen ISO-kierre	HSS-E-PM	N	C
1257	166, 287, 394, 525		~DIN 371	Manglaavat kierretapit, metrinen ISO-hienokierre	HSS-E-PM	N	C
1258	166, 287, 394, 525		~DIN 374	Manglaavat kierretapit, metrinen ISO-hienokierre	HSS-E-PM	N	C
1266	155, 276, 381, 512, 621		~DIN 371	Manglaavat kierretapit, metrinen ISO-kierre	HSS-E-PM	N	C
1267	155, 276, 381, 512, 621		~DIN 376	Manglaavat kierretapit, metrinen ISO-kierre	HSS-E-PM	N	C
1268	174, 293, 398, 534, 630		~DIN 371	Manglaavat kierretapit, metrinen ISO-hienokierre	HSS-E-PM	N	C
1269	174, 293, 398, 534, 630		~DIN 374	Manglaavat kierretapit, metrinen ISO-hienokierre	HSS-E-PM	N	C
1270	159, 280, 385, 516, 623		~DIN 371	Manglaavat kierretapit JK, metrinen ISO-kierre	HSS-E-PM	N	C
1271	159, 280, 385, 516, 623		~DIN 376	Manglaavat kierretapit JK, metrinen ISO-kierre	HSS-E-PM	N	C
1272	178, 296, 401, 536, 632		~DIN 371	Manglaavat kierretapit JK, metrinen ISO-hienokierre	HSS-E-PM	N	C
1273	178, 296, 401, 536, 632		~DIN 374	Manglaavat kierretapit JK, metrinen ISO-hienokierre	HSS-E-PM	N	C
1275	169, 288, 395, 530		~DIN 371	Manglaavat kierretapit, metrinen ISO-hienokierre	HSS-E	N	C
1277	172, 292, 397, 532		~DIN 371	Manglaavat kierretapit, metrinen ISO-hienokierre	HSS-E	N	C
1283	183, 301, 406, 543		~DIN 371	Manglaavat kierretapit UNF-kierteille	HSS-E	N	C
1285	39		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E-PM	N	B
1286	39		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E-PM	N	B

Artikkelinro.	Sivu	Poraussyvyys	Standardi	Kuvaus	Materiaali	Malli	Muoto
1287	40		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E-PM	N	B
1288	72		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E-PM	N R40	C
1289	72		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E-PM	N R40	C
1290	73		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E-PM	N R40	C
1291	98, 248		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E-PM	N	B
1292	109		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E-PM	N R40	C
1293	74, 245, 485		DIN 376	Jäähdytyskanavatapit, metrinen ISO kierre	HSS-E-PM	N R50	C
1294	110, 254, 489		DIN 374	Jäähdytyskanavatapit, metrinen ISO hienokierre	HSS-E-PM	N R50	C
1347	506		~DIN 371	Manglaavat kierretapit, metrinen ISO-kierre	HSS-E-PM	N	C
1565	508		~DIN 371	Manglaavat kierretapit, metrinen ISO-kierre	HSS-E-PM	N	C
1566	506		~DIN 376	Manglaavat kierretapit, metrinen ISO-kierre	HSS-E-PM	N	C
1567	508		~DIN 376	Manglaavat kierretapit, metrinen ISO-kierre	HSS-E-PM	N	C
1568	526		~DIN 371	Manglaavat kierretapit, metrinen ISO-hienokierre	HSS-E-PM	N	C
1569	529		~DIN 371	Manglaavat kierretapit, metrinen ISO-hienokierre	HSS-E-PM	N	C
1575	47		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E-PM	H	B
1576	47		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E-PM	H	B
1577	76		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E-PM	H R15	C
1578	76		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E-PM	H R15	C
1580	529		~DIN 374	Manglaavat kierretapit, metrinen ISO-hienokierre	HSS-E-PM	N	C
1581	181, 299, 404, 541, 635		~DIN 371/~DIN 376	Manglaavat kierretapit JK, metrinen ISO-hienokierre	TKM	N	C
1582	182, 300, 405, 542		~DIN 371	Manglaavat kierretapit UNC-kierteille	HSS-E	N	C
1583	182, 300, 405, 542		~DIN 376	Manglaavat kierretapit UNC-kierteille	HSS-E	N	C
1584	183, 301, 406, 543		~DIN 371	Manglaavat kierretapit UNF-kierteille	HSS-E	N	C
1585	183, 301, 406, 543		~DIN 374	Manglaavat kierretapit UNF-kierteille	HSS-E	N	C
1586	184, 302, 408, 545		DIN 2189	Manglaavat kierretapit BSP-kierteille	HSS-E	N	C
1587	152		~DIN 371	Manglaavat kierretapit, metrinen ISO-kierre	HSS-E	N	C
1588	153		~DIN 371	Manglaavat kierretapit, metrinen ISO-kierre	HSS-E	N	C
1589	152		~DIN 376	Manglaavat kierretapit, metrinen ISO-kierre	HSS-E	N	C
1590	153		~DIN 376	Manglaavat kierretapit, metrinen ISO-kierre	HSS-E	N	C
1591	169		~DIN 371	Manglaavat kierretapit, metrinen ISO-hienokierre	HSS-E	N	C
1592	171		~DIN 371	Manglaavat kierretapit, metrinen ISO-hienokierre	HSS-E	N	C
1593	169		~DIN 374	Manglaavat kierretapit, metrinen ISO-hienokierre	HSS-E	N	C
1599	155		~DIN 371	Manglaavat kierretapit, metrinen ISO-kierre	HSS-E-PM	N	C
1705	153		~DIN 371	Manglaavat kierretapit, metrinen ISO-kierre	HSS-E-PM	N	C
1707	155		~DIN 376	Manglaavat kierretapit, metrinen ISO-kierre	HSS-E-PM	N	C
1708	153		~DIN 376	Manglaavat kierretapit, metrinen ISO-kierre	HSS-E-PM	N	C
1710	176		~DIN 371	Manglaavat kierretapit, metrinen ISO-hienokierre	HSS-E-PM	N	C
1711	175		~DIN 374	Manglaavat kierretapit, metrinen ISO-hienokierre	HSS-E-PM	N	C
1712	176		~DIN 374	Manglaavat kierretapit, metrinen ISO-hienokierre	HSS-E-PM	N	C
1713	160, 281, 386, 518, 624		~DIN 371	Manglaavat kierretapit JK, metrinen ISO-kierre	HSS-E-PM	N	C
1715	179, 297, 402, 538, 633		~DIN 371	Manglaavat kierretapit JK, metrinen ISO-hienokierre	HSS-E-PM	N	C
1716	179, 297, 402, 538, 633		~DIN 374	Manglaavat kierretapit JK, metrinen ISO-hienokierre	HSS-E-PM	N	C
1717	159, 280, 385, 623		~DIN 371	Manglaavat kierretapit JK, metrinen ISO-kierre	HSS-E-PM	N	C
1718	161, 282, 387, 625		~DIN 371	Manglaavat kierretapit JK, metrinen ISO-kierre	HSS-E-PM	N	C
1719	159, 280, 385, 623		~DIN 376	Manglaavat kierretapit JK, metrinen ISO-kierre	HSS-E-PM	N	C
1720	161, 282, 387, 625		~DIN 376	Manglaavat kierretapit JK, metrinen ISO-kierre	HSS-E-PM	N	C
1721	178, 296, 401, 632		~DIN 371	Manglaavat kierretapit JK, metrinen ISO-hienokierre	HSS-E-PM	N	C
1723	178, 296, 401, 632		~DIN 374	Manglaavat kierretapit JK, metrinen ISO-hienokierre	HSS-E-PM	N	C
1725	159, 280, 385, 516, 623		~DIN 371	Manglaavat kierretapit JK, metrinen ISO-kierre	HSS-E-PM	N	E
1726	161, 282, 387, 519, 625		~DIN 371	Manglaavat kierretapit JK, metrinen ISO-kierre	HSS-E-PM	N	E
1727	159, 280, 385, 516, 623		~DIN 376	Manglaavat kierretapit JK, metrinen ISO-kierre	HSS-E-PM	N	E
1728	161, 282, 387, 519, 625		~DIN 376	Manglaavat kierretapit JK, metrinen ISO-kierre	HSS-E-PM	N	E
1729	178, 296, 401, 536, 632		~DIN 371	Manglaavat kierretapit JK, metrinen ISO-hienokierre	HSS-E-PM	N	E
1730	179, 297, 402, 538, 633		~DIN 371	Manglaavat kierretapit JK, metrinen ISO-hienokierre	HSS-E-PM	N	E
1731	178, 296, 401, 536, 632		~DIN 374	Manglaavat kierretapit JK, metrinen ISO-hienokierre	HSS-E-PM	N	E
1732	179, 297, 402, 538, 633		~DIN 374	Manglaavat kierretapit JK, metrinen ISO-hienokierre	HSS-E-PM	N	E
1740	167, 289, 392, 527		~DIN 371	Manglaavat kierretapit, metrinen ISO-hienokierre	HSS-E-PM	N	C
1818	727		DIN 352	Käsikierretapit, metrinen ISO-kierre	HSS-E-PM	H	
1819	727		DIN 352	Käsikierretapit, metrinen ISO-kierre	HSS-E-PM	H	A
1820	727		DIN 352	Käsikierretapit, metrinen ISO-kierre	HSS-E-PM	H	D
1821	727		DIN 352	Käsikierretapit, metrinen ISO-kierre	HSS-E-PM	H	C
1837	124		~DIN 371	Konekierretapit UNC-kierteille	HSS-E	N R40	C(K)
1838	131		~DIN 374	Konekierretapit UNF-kierteille	HSS-E	N R40	C(K)
1839	87			Pora-kierretappiyhdistelmä	HSS-E	N	D
1858	362, 476		DIN 371	Jäähdytyskanavatapit, metrinen ISO kierre	TKM	H	C
1859	362, 476		DIN 376	Jäähdytyskanavatapit, metrinen ISO kierre	TKM	H	C
1860	368, 491		DIN 374	Jäähdytyskanavatapit, metrinen ISO hienokierre	TKM	H	C
1861	368, 491		DIN 371	Jäähdytyskanavatapit, metrinen ISO hienokierre	TKM	H	C
1870	236, 473		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	VA	B
1871	240		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	VA AZ	B
1872	236, 473		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	VA	B
1873	256, 487		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E	VA	B

Artikkelinro.	Sivu	Poraussyvyys	Standardi	Kuvaus	Materiaali	Malli	Muoto
1874	249		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E	VA R15	C
1875	357		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	GGT	C
1876	357		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	GGT	C
1883	362, 476		DIN 376	Jäähdytyskanavatapit, metrinen ISO kierre	TKM	H	C
1890	358		DIN 371	Jäähdytyskanavatapit, metrinen ISO kierre	HSS-E	GG	C
1891	59		DIN 371	Jäähdytyskanavatapit, metrinen ISO kierre	HSS-E	N R15	C
1892	243		DIN 371	Jäähdytyskanavatapit, metrinen ISO kierre	HSS-E	VA R40	C
1893	63		DIN 371	Jäähdytyskanavatapit, metrinen ISO kierre	HSS-E	N R40	C
1894	83		DIN 371	Jäähdytyskanavatapit, metrinen ISO kierre	HSS-E	H R40	C
1897	358		DIN 376	Jäähdytyskanavatapit, metrinen ISO kierre	HSS-E	GG	C
1898	59		DIN 376	Jäähdytyskanavatapit, metrinen ISO kierre	HSS-E	N R15	C
1899	243		DIN 376	Jäähdytyskanavatapit, metrinen ISO kierre	HSS-E	VA R40	C
1901	83		DIN 376	Jäähdytyskanavatapit, metrinen ISO kierre	HSS-E	H R40	C
1904	366		DIN 374	Jäähdytyskanavatapit, metrinen ISO hienokierre	HSS-E	GG	C
1905	104		DIN 374	Jäähdytyskanavatapit, metrinen ISO hienokierre	HSS-E	N R15	C
1914	43		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	H	B
1915	43		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	H	B
1916	82		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	H R40	C
1917	82		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	H R40	C
1918	356		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	GG	C
1919	356		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	GG	C
1927	164, 285, 390, 523, 628		~DIN 371	Manglaavat kierretapit JK, metrinen ISO-kierre	TKM	N	E
1931	163, 284, 389, 522, 627		~DIN 376	Manglaavat kierretapit JK, metrinen ISO-kierre	TKM	N	C
1970	106		DIN 2181	Konekierretapit, metrinen ISO-hienokierre	HSS-E	N R40	C
1971	102		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E	N R15	C
1972	163, 284, 389, 522, 627		~DIN 371	Manglaavat kierretapit JK, metrinen ISO-kierre	TKM	N	C
1977	121		~DIN 371	Konekierretapit UNC-kierteille	HSS-E	N	C
1978	119		~DIN 371	Konekierretapit UNC-kierteille	HSS-E	N R15	C
1979	370		~DIN 371	Konekierretapit UNC-kierteille	HSS-E	GG	C
1980	258, 498		~DIN 371	Konekierretapit UNC-kierteille	HSS-E	VA	B
1981	259, 499		~DIN 371	Konekierretapit UNC-kierteille	HSS-E	VA R40	C
1984	370		~DIN 376	Konekierretapit UNC-kierteille	HSS-E	GG	C
1985	258, 498		~DIN 376	Konekierretapit UNC-kierteille	HSS-E	VA	B
1986	259, 499		~DIN 376	Konekierretapit UNC-kierteille	HSS-E	VA R40	C
1987	126		~DIN 374	Konekierretapit UNF-kierteille	HSS-E	N	C
1988	127		~DIN 374	Konekierretapit UNF-kierteille	HSS-E	N R15	C
1989	372		~DIN 374	Konekierretapit UNF-kierteille	HSS-E	GG	C
1990	260, 500		~DIN 374	Konekierretapit UNF-kierteille	HSS-E	VA	B
1991	261		~DIN 374	Konekierretapit UNF-kierteille	HSS-E	VA R15	C
2008	170, 291, 396, 531		~DIN 374	Manglaavat kierretapit, metrinen ISO-hienokierre	HSS-E	N	C
2012	152, 274, 379, 510		~DIN 371	Manglaavat kierretapit, metrinen ISO-kierre	HSS-E	N	C
2013	152, 274, 379, 510		~DIN 376	Manglaavat kierretapit, metrinen ISO-kierre	HSS-E	N	C
2086	236		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	VA	B
2087	236		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	VA	B
2273	182, 300, 405, 542		~DIN 371	Manglaavat kierretapit UNC-kierteille	HSS-E	N	C
2274	182, 300, 405, 542		~DIN 376	Manglaavat kierretapit UNC-kierteille	HSS-E	N	C
2275	183, 301, 406, 543		~DIN 374	Manglaavat kierretapit UNF-kierteille	HSS-E	N	C
2311	364		DIN 371	Jäähdytyskanavatapit, metrinen ISO kierre	TKM	H	C
2424	107		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E	N R40	C
2425	66		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	N R40	C
2426	66		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	N R40	C
2427	33		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	N	B
2428	33		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	N	B
2436	59		DIN 371	Jäähdytyskanavatapit, metrinen ISO kierre	HSS-E	N R15	C
2437	59		DIN 376	Jäähdytyskanavatapit, metrinen ISO kierre	HSS-E	N R15	C
2438	64		DIN 371	Jäähdytyskanavatapit, metrinen ISO kierre	HSS-E	N R40	C
2439	64		DIN 376	Jäähdytyskanavatapit, metrinen ISO kierre	HSS-E	N R40	C
2440	66		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	N R40	C
2441	66		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	N R40	C
2442	156, 277, 382, 513		~DIN 371	Manglaavat kierretapit JK, metrinen ISO-kierre	HSS-E	N	C
2443	156, 277, 382, 513		~DIN 371	Manglaavat kierretapit JK, metrinen ISO-kierre	HSS-E	N	C
2444	156, 277, 382, 513		~DIN 376	Manglaavat kierretapit JK, metrinen ISO-kierre	HSS-E	N	C
2445	156, 277, 382, 513		~DIN 376	Manglaavat kierretapit JK, metrinen ISO-kierre	HSS-E	N	C
2446	156, 277, 382, 513		~DIN 371	Manglaavat kierretapit JK, metrinen ISO-kierre	HSS-E	N	C
2447	157, 278, 383, 514		~DIN 371	Manglaavat kierretapit JK, metrinen ISO-kierre	HSS-E	N	C
2448	156, 277, 382, 513		~DIN 376	Manglaavat kierretapit JK, metrinen ISO-kierre	HSS-E	N	C
2465	45		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	H	B
2506	363		DIN 371	Jäähdytyskanavatapit, metrinen ISO kierre	TKM	H	C
2510	364		DIN 371	Jäähdytyskanavatapit, metrinen ISO kierre	TKM	N R15	C
2514	68		DIN 371	Jäähdytyskanavatapit, metrinen ISO kierre	HSS-E	N R40	C
2515	517		~DIN 371/~DIN 376	Manglaavat kierretapit JK, metrinen ISO-kierre	HSS-E	N	C
2516	494		DIN 371	Jäähdytyskanavatapit, metrinen ISO kierre	TKM	N R15	C

Artikkelinro.	Sivu	Poraussy-vyys	Standardi	Kuvaus	Materiaali	Malli	Muoto
2517	34		DIN 371	Jäähdytyskanavatapit, metrinen ISO kierre	HSS-E	N	B
2518	151, 273, 378, 509		~DIN 371/~DIN 376	Manglaavat kierretapit JK, metrinen ISO-kierre	TKM	N	C
2710	45		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	H	B
2790	69		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	N R40	E
2791	69		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	N R40	E
2792	107		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E	N R40	E
2838	102		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E	N R15	C
2839	120		~DIN 371	Konekierretapit UNC-kierteille	HSS-E	N R15	C
2840	120		~DIN 376	Konekierretapit UNC-kierteille	HSS-E	N R15	C
2841	127		~DIN 374	Konekierretapit UNF-kierteille	HSS-E	N R15	C
2842	135		DIN 5156	Konekierretapit BSP-kierteille	HSS-E	N R15	C
2843	105		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E	N R40	C
2844	122		~DIN 371	Konekierretapit UNC-kierteille	HSS-E	N R40	C
2845	122		~DIN 376	Konekierretapit UNC-kierteille	HSS-E	N R40	C
2846	128		~DIN 374	Konekierretapit UNF-kierteille	HSS-E	N R40	C
2847	143		~DIN 371	Konekierretapit BSW-kierteille	HSS-E	N R40	C
2848	143		~DIN 376	Konekierretapit BSW-kierteille	HSS-E	N R40	C
2849	136		DIN 5156	Konekierretapit BSP-kierteille	HSS-E	N R40	C
2850	81		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	H R40	C
2851	81		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	H R40	C
2852	114		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E	H R40	C
2853	107		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E	N R40	C
2854	123		~DIN 371	Konekierretapit UNC-kierteille	HSS-E	N R40	C
2855	123		~DIN 371	Konekierretapit UNC-kierteille	HSS-E	N R40	C
2856	123		~DIN 376	Konekierretapit UNC-kierteille	HSS-E	N R40	C
2857	123		~DIN 376	Konekierretapit UNC-kierteille	HSS-E	N R40	C
2859	129		~DIN 374	Konekierretapit UNF-kierteille	HSS-E	N R40	C
2860	137		DIN 5156	Konekierretapit BSP-kierteille	HSS-E	N R40	C
2861	137		DIN 5156	Konekierretapit BSP-kierteille	HSS-E	N R40	C
2862	243		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	VA R40	C
2863	243		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	VA R40	C
2864	251		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E	VA R40	C
2865	259		~DIN 371	Konekierretapit UNC-kierteille	HSS-E	VA R40	C
2866	259		~DIN 376	Konekierretapit UNC-kierteille	HSS-E	VA R40	C
2867	262, 501		~DIN 374	Konekierretapit UNF-kierteille	HSS-E	VA R40	C
2868	262		~DIN 374	Konekierretapit UNF-kierteille	HSS-E	VA R40	C
2869	236		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	VA	B
2870	236		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	VA	B
2871	257		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E	VA	B
2872	258		~DIN 371	Konekierretapit UNC-kierteille	HSS-E	VA	B
2873	258		~DIN 376	Konekierretapit UNC-kierteille	HSS-E	VA	B
2874	260		~DIN 374	Konekierretapit UNF-kierteille	HSS-E	VA	B
2875	263		DIN 5156	Konekierretapit BSP-kierteille	HSS-E	VA	B
2876	33		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	N	B
2877	33		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	N	B
2878	94		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E	N	B
2879	94		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E	N	B
2881	118		~DIN 371	Konekierretapit UNC-kierteille	HSS-E	N	B
2883	118		~DIN 376	Konekierretapit UNC-kierteille	HSS-E	N	B
2885	130		~DIN 374	Konekierretapit UNF-kierteille	HSS-E	N	B
2886	140		DIN 5156	Konekierretapit BSP-kierteille	HSS-E	N	B
2887	140		DIN 5156	Konekierretapit BSP-kierteille	HSS-E	N	B
2888	91		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E	N	B
2889	117		~DIN 371	Konekierretapit UNC-kierteille	HSS-E	N	B
2890	117		~DIN 376	Konekierretapit UNC-kierteille	HSS-E	N	B
2891	125		~DIN 374	Konekierretapit UNF-kierteille	HSS-E	N	B
2892	142		~DIN 371	Konekierretapit BSW-kierteille	HSS-E	N	B
2893	142		~DIN 376	Konekierretapit BSW-kierteille	HSS-E	N	B
2894	132		DIN 5156	Konekierretapit BSP-kierteille	HSS-E	N	B
2895	241		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	VA R15	C
2896	241		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	VA R15	C
2897	249		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E	VA R15	C
2898	261		~DIN 374	Konekierretapit UNF-kierteille	HSS-E	VA R15	C
2899	484		DIN 376	Jäähdytyskanavatapit, metrinen ISO kierre	HSS-E	N AZ	E
2901	602		DIN 371/DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E-PM	TiNi	B
2903	606		DIN 371	Konekierretapit, metrinen ISO-hienokierre	HSS-E-PM	TiNi	B
2905	610		~DIN 371	Konekierretapit UNC-kierteille	HSS-E-PM	TiNi	B
2909	604		DIN 371/DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E-PM	Ti R15	C
2910	608		DIN 371	Konekierretapit, metrinen ISO-hienokierre	HSS-E-PM	Ti R15	C
2912	612		~DIN 371/~DIN 376	Konekierretapit UNC-kierteille	HSS-E-PM	Ti R15	C
2914	617		~DIN 371/~DIN 374	Konekierretapit UNF-kierteille	HSS-E-PM	Ti R15	C
2916	602		DIN 371/DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E-PM	TiNi	B

Artikkelinro.	Sivu	Poraussyvyys	Standardi	Kuvaus	Materiaali	Malli	Muoto
2917	606		DIN 371	Konekierretapit, metrinen ISO-hienokierre	HSS-E-PM	TiNi	B
2918	610		~DIN 371	Konekierretapit UNC-kierteille	HSS-E-PM	TiNi	B
2919	614		~DIN 371	Konekierretapit UNF-kierteille	HSS-E-PM	TiNi	B
2920	604		DIN 371/DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E-PM	Ni R10	C(K)
2921	608		DIN 371	Konekierretapit, metrinen ISO-hienokierre	HSS-E-PM	Ni R10	C(K)
2922	612		~DIN 371/~DIN 376	Konekierretapit UNC-kierteille	HSS-E-PM	Ni R10	C(K)
2923	616		~DIN 371/~DIN 374	Konekierretapit UNF-kierteille	HSS-E-PM	Ni R10	C(K)
2940	114		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E	H R40	C
2941	43		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	H	B
2942	43		DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	H	B
2943	97		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E	H	B
2944	681		~DIN 371	Konekierretapit, metrinen ISO-kierre	TKM	H	D
2983	99		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E	H	B
2985	84		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	H R40	C
2986	84		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	H R40	C
2988	116		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E	H R40	C
2989	116		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E	H R40	C
2990	41		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	N	B
2991	41		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	N	B
2993	93		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E	N	B
2994	73		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	N R40	C
2995	73		DIN 371	Konekierretapit, metrinen ISO-kierre	HSS-E	N R40	C
2998	108		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E	N R40	C
2999	108		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E	N R40	C
3510	413, 551, 643	1,5xD		Viisteelliset kierrejyrsimet metrisille ISO-kierteille	TKM	TMC SP	
3511	414, 552, 644	2xD		Viisteelliset kierrejyrsimet metrisille ISO-kierteille	TKM	TMC SP	
3512	416, 554, 646	1,5xD		Viisteelliset kierrejyrsimet metrisille ISO-hienokierteille	TKM	TMC SP	
3513	417, 555, 647	2xD		Viisteelliset kierrejyrsimet metrisille ISO-hienokierteille	TKM	TMC SP	
3514	202, 320, 429, 565, 657, 693	1,5xD		Viisteelliset kierrejyrsimet BSP-kierteille	TKM	TMC SP	
3515	203, 321, 430, 566, 658, 694	2xD		Viisteelliset kierrejyrsimet BSP-kierteille	TKM	TMC SP	
3516	195, 313, 420, 558, 650, 689	1,5xD		Viisteelliset kierrejyrsimet UNC-kierteille	TKM	TMC SP	
3517	196, 314, 421, 559, 651, 690	2xD		Viisteelliset kierrejyrsimet UNC-kierteille	TKM	TMC SP	
3518	198, 316, 423, 561, 653, 691	1,5xD		Viisteelliset kierrejyrsimet UNF-kierteille	TKM	TMC SP	
3519	199, 317, 424, 562, 654, 692	2xD		Viisteelliset kierrejyrsimet UNF-kierteille	TKM	TMC SP	
3520	206, 324, 426, 569, 661, 695			Viisteelliset kierrejyrsimet NPT-kierteille	TKM	TMC SP	
3521	208, 326, 433, 571, 663, 696			Viisteelliset kierrejyrsimet NPTF-kierteille	TKM	TMC SP	
3523	434, 572, 664			Kierrejyrsimet metrisille ISO-kierteille	TKM	TMU SP	
3524	437, 575, 667			Kierrejyrsimet BSP-kierteille	TKM	TMU SP	
3525	188, 306, 413, 551, 643, 685	1,5xD		Viisteelliset kierrejyrsimet metrisille ISO-kierteille	TKM	TMC SP	
3526	189, 307, 414, 552, 644, 686	2xD		Viisteelliset kierrejyrsimet metrisille ISO-kierteille	TKM	TMC SP	
3527	191, 309, 416, 554, 646, 687	1,5xD		Viisteelliset kierrejyrsimet metrisille ISO-hienokierteille	TKM	TMC SP	
3528	192, 310, 417, 555, 647, 688	2xD		Viisteelliset kierrejyrsimet metrisille ISO-hienokierteille	TKM	TMC SP	
3529	202, 320, 429, 565, 657, 693	1,5xD		Viisteelliset kierrejyrsimet BSP-kierteille	TKM	TMC SP	
3533	203, 321, 430, 566, 658, 694	2xD		Viisteelliset kierrejyrsimet BSP-kierteille	TKM	TMC SP	
3534	195, 313, 420, 558, 650, 689	1,5xD		Viisteelliset kierrejyrsimet UNC-kierteille	TKM	TMC SP	
3535	196, 314, 421, 559, 651, 690	2xD		Viisteelliset kierrejyrsimet UNC-kierteille	TKM	TMC SP	
3536	198, 316, 423, 561, 653, 691	1,5xD		Viisteelliset kierrejyrsimet UNF-kierteille	TKM	TMC SP	
3537	199, 317, 424, 562, 654, 692	2xD		Viisteelliset kierrejyrsimet UNF-kierteille	TKM	TMC SP	
3538	206, 324, 426, 569, 661, 695			Viisteelliset kierrejyrsimet NPT-kierteille	TKM	TMC SP	
3539	208, 326, 433, 571, 663, 696			Viisteelliset kierrejyrsimet NPTF-kierteille	TKM	TMC SP	
3541	209, 327, 434, 572, 664, 697			Kierrejyrsimet metrisille ISO-kierteille	TKM	TMU SP	
3542	212, 330, 437, 575, 667, 700			Kierrejyrsimet BSP-kierteille	TKM	TMU SP	
3543	188, 306, 413, 551, 643, 685	1,5xD		Viisteelliset kierrejyrsimet metrisille ISO-kierteille	TKM	TMC SP	
3544	189, 307, 414, 552, 644, 686	2xD		Viisteelliset kierrejyrsimet metrisille ISO-kierteille	TKM	TMC SP	
3545	191, 309, 416, 554, 646, 687	1,5xD		Viisteelliset kierrejyrsimet metrisille ISO-hienokierteille	TKM	TMC SP	
3546	192, 310, 417, 555, 647, 688	2xD		Viisteelliset kierrejyrsimet metrisille ISO-hienokierteille	TKM	TMC SP	
3556	209, 327, 434, 572, 664, 697			Kierrejyrsimet metrisille ISO-kierteille	TKM	TMU SP	
3557	212, 330, 437, 575, 667, 700			Kierrejyrsimet BSP-kierteille	TKM	TMU SP	
3595	211, 329, 436, 574, 666, 699			Kierrejyrsimet UN-kierteille	TKM	TMU UN	
3596	211, 329, 436, 574, 666, 699			Kierrejyrsimet UN-kierteille	TKM	TMU UN	
3734	410, 548, 640	2xD		Kierrejyrsimet ilman viistettä metrisille ISO-kierteille	TKM	TM SP	
3735	187, 305, 412, 550, 642	2,5xD		Kierrejyrsimet ilman viistettä metrisille ISO-kierteille	TKM	TM SP	
3737	186, 304, 410, 548, 640	2xD		Kierrejyrsimet ilman viistettä metrisille ISO-kierteille	TKM	TM SP	
3740	187, 305, 412, 550, 642	2,5xD		Kierrejyrsimet ilman viistettä metrisille ISO-kierteille	TKM	TM SP	
3743	186, 304, 410, 548, 640	2xD		Kierrejyrsimet ilman viistettä metrisille ISO-kierteille	TKM	TM SP	
3745	200, 318, 427, 563, 655	2xD		Kierrejyrsimet ilman viistettä BSP-kierteille	TKM	TM SP	
3746	201, 319, 428, 564, 656	2,5xD		Kierrejyrsimet ilman viistettä BSP-kierteille	TKM	TM SP	
3748	200, 318, 427, 563, 655	2xD		Kierrejyrsimet ilman viistettä BSP-kierteille	TKM	TM SP	
3750	201, 319, 428, 564, 656	2,5xD		Kierrejyrsimet ilman viistettä BSP-kierteille	TKM	TM SP	
3753	205, 323, 425, 568, 660			Kierrejyrsimet ilman viistettä NPT-kierteille	TKM	TM SP	
3754	205, 323, 425, 568, 660			Kierrejyrsimet ilman viistettä NPT-kierteille	TKM	TM SP	
3756	207, 325, 432, 570, 662			Kierrejyrsimet ilman viistettä NPTF-kierteille	TKM	TM SP	

Artikkelinro.	Sivu	Poraussyvyys	Standardi	Kuvaus	Materiaali	Malli	Muoto
3757	207, 325, 432, 570, 662			Kierrejyrsimet ilman viistettä NPTF-kierteille	TKM	TM SP	
3759	190, 308, 415, 553, 645	2,5xD		Viisteelliset kierrejyrsimet metrisille ISO-kierteille	TKM	TMC SP	
3760	190, 308, 415, 553, 645	2,5xD		Viisteelliset kierrejyrsimet metrisille ISO-kierteille	TKM	TMC SP	
3762	193, 311, 418, 556, 648	2,5xD		Viisteelliset kierrejyrsimet metrisille ISO-hienokierteille	TKM	TMC SP	
3763	193, 311, 418, 556, 648	2,5xD		Viisteelliset kierrejyrsimet metrisille ISO-hienokierteille	TKM	TMC SP	
3765	204, 322, 431, 567, 659	2,5xD		Viisteelliset kierrejyrsimet BSP-kierteille	TKM	TMC SP	
3766	204, 322, 431, 567, 659	2,5xD	Tehdas stdr.	Viisteelliset kierrejyrsimet BSP-kierteille	TKM	TMC SP	
3768	213, 331, 438, 576, 668, 701			Kierrejyrsimet NPT-kierteille	TKM	TMU SP	
3769	213, 331, 438, 576, 668, 701			Kierrejyrsimet NPT-kierteille	TKM	TMU SP	
3772	214, 332, 439, 577, 669, 702			Kierrejyrsimet NPTF-kierteille	TKM	TMU SP	
3773	214, 332, 439, 577, 669, 702			Kierrejyrsimet NPTF-kierteille	TKM	TMU SP	
3774	443, 581	1,5xD		Poraavat kierrejyrsimet metrisille ISO-kierteille	TKM	DTMC SP	
3775	443, 581	1,5xD		Poraavat kierrejyrsimet metrisille ISO-kierteille	TKM	DTMC SP	
3776	443, 581	1,5xD		Poraavat kierrejyrsimet metrisille ISO-kierteille	TKM	DTMC SP	
3777	443, 581	1,5xD		Poraavat kierrejyrsimet metrisille ISO-kierteille	TKM	DTMC SP	
3778	444, 582	2xD		Poraavat kierrejyrsimet metrisille ISO-kierteille	TKM	DTMC SP	
3779	444, 582	2xD		Poraavat kierrejyrsimet metrisille ISO-kierteille	TKM	DTMC SP	
3780	444, 582	2xD		Poraavat kierrejyrsimet metrisille ISO-kierteille	TKM	DTMC SP	
3781	444, 582	2xD		Poraavat kierrejyrsimet metrisille ISO-kierteille	TKM	DTMC SP	
3782	445, 583	2,5xD		Poraavat kierrejyrsimet metrisille ISO-kierteille	TKM	DTMC SP	
3783	445, 583	2,5xD		Poraavat kierrejyrsimet metrisille ISO-kierteille	TKM	DTMC SP	
3784	445, 583	2,5xD		Poraavat kierrejyrsimet metrisille ISO-kierteille	TKM	DTMC SP	
3785	445, 583	2,5xD		Poraavat kierrejyrsimet metrisille ISO-kierteille	TKM	DTMC SP	
3787	446, 584	1,5xD		Poraavat kierrejyrsimet metrisille ISO-hienokierteille	TKM	DTMC SP	
3788	446, 584	1,5xD		Poraavat kierrejyrsimet metrisille ISO-hienokierteille	TKM	DTMC SP	
3789	446, 584	1,5xD		Poraavat kierrejyrsimet metrisille ISO-hienokierteille	TKM	DTMC SP	
3790	447, 585	2xD		Poraavat kierrejyrsimet metrisille ISO-hienokierteille	TKM	DTMC SP	
3791	447, 585	2xD		Poraavat kierrejyrsimet metrisille ISO-hienokierteille	TKM	DTMC SP	
3792	447, 585	2xD		Poraavat kierrejyrsimet metrisille ISO-hienokierteille	TKM	DTMC SP	
3793	447, 585	2xD		Poraavat kierrejyrsimet metrisille ISO-hienokierteille	TKM	DTMC SP	
4127	269			Konekierretapit NPTF-kierteille	HSS-E	VA R25	C
4132	186, 304, 411, 549, 641	2xD		Kierrejyrsimet ilman viistettä metrisille ISO-kierteille	TKM	TM SP	
4133	186, 304, 411, 549, 641	2xD		Kierrejyrsimet ilman viistettä metrisille ISO-kierteille	TKM	TM SP	
4134	194, 312, 419, 557, 649	2xD		Kierrejyrsimet ilman viistettä UNC-kierteille	TKM	TM SP	
4135	194, 312, 419, 557, 649	2xD		Kierrejyrsimet ilman viistettä UNC-kierteille	TKM	TM SP	
4136	197, 315, 422, 560, 652	2xD		Kierrejyrsimet ilman viistettä UNF-kierteille	TKM	TM SP	
4137	197, 315, 422, 560, 652	2xD		Kierrejyrsimet ilman viistettä UNF-kierteille	TKM	TM SP	
4138	448, 586	2xD		Poraavat kierrejyrsimet UNC-kierteille	TKM	DTMC SP	
4139	448, 586	2xD		Poraavat kierrejyrsimet UNC-kierteille	TKM	DTMC SP	
4140	449, 587	2xD		Poraavat kierrejyrsimet UNF-kierteille	TKM	DTMC SP	
4141	449, 587	2xD		Poraavat kierrejyrsimet UNF-kierteille	TKM	DTMC SP	
4143	162, 283, 388, 521, 626			Manglaavat kierretapit JK, metrinen ISO-kierre	HSS-E-PM	N	C
4145	180, 298, 403, 540, 634			Manglaavat kierretapit JK, metrinen ISO-hienokierre	HSS-E-PM	N	C
4146	520		~DIN 371/~DIN 376	Manglaavat kierretapit JK, metrinen ISO-kierre	HSS-E	N	C
4147	537		~DIN 371/~DIN 374	Manglaavat kierretapit JK, metrinen ISO-hienokierre	HSS-E	N	C
4151	539		~DIN 371/~DIN 374	Manglaavat kierretapit JK, metrinen ISO-hienokierre	HSS-E	N	C
4152	546			Manglaavat kierretapit BSP-kierteille	HSS-E	N	C
4153	67			Konekierretapit, metrinen ISO-kierre	HSS-E	N R40	C
4154	48, 242		DIN 371/DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	N R15	C
4155	48, 242		DIN 371/DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	N R15	E
4156	103, 250		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E	N R15	C
4157	103, 250		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E	N R15	E
4158	135		DIN 5156	Konekierretapit BSP-kierteille	HSS-E	N R15	E
4159	138, 266, 504		DIN 5156	Konekierretapit BSP-kierteille	HSS-E-PM	VA R40	C
4161	682		DIN 371	Konekierretapit, metrinen ISO-hienokierre	HSS-E-PM	H	D
4162	210, 328, 435, 573, 665, 698			Kierrejyrsimet ulkokierteelle	TKM	TMU SP	
4163	210, 328, 435, 573, 665, 698			Kierrejyrsimet ulkokierteelle	TKM	TMU SP	
4165	78, 359, 479		DIN 376	Jäähdytyskanavatapit, metrinen ISO kierre	HSS-E-PM	H	E
4218	38, 239		DIN 371/DIN 376	Konekierretapit, metrinen ISO-kierre	HSS-E	N	B
4219	90, 248		DIN 374	Konekierretapit, metrinen ISO-hienokierre	HSS-E	N	B
4220	134, 264		DIN 5156	Konekierretapit BSP-kierteille	HSS-E	N	B
4225	217, 335, 442, 580, 639	3xD		Mikro-kierrejyrsimet	TKM	SP M/MF	
4226	215, 333, 440, 578, 637	3xD		Mikro-kierrejyrsimet	TKM	SP M	
4227	703	3xD		Mikro-kierrejyrsimet	TKM	SP M	
4228	216, 334, 441, 579, 638	3xD		Mikro-kierrejyrsimet	TKM	SP G	

Artikkelinro.	Sivu	Poraussyvyys	Standardi	Kuvaus	Materiaali	Malli	Muoto
4206	756			Pikavaihto kierteytysistukka			
4298	764			MQL synkrohydrauli-istukka HSK-A manuaaliselle työkalunvaihdolle		HSK-A	
4305	766			MQL säätöruuvit sisäkartiolla MQL synkrokiertetysistukalle			
4306	769			Kiinnitysmutterit, DIN ISO 15488			
4308	753			Kierreholkit			
4326	751			Synkro kierteytysistukat lieriövarrella		lieriö	
4327	751			HSK-A synkrokierteytysistukat		HSK-A	
4328	755			Pikavaihto-kierteytysistukat, HSK-A JK:lla		HSK-A	
4330	764			MQL 1-kanavainen synkroistukka HSK-A automaattiselle työkalunvaihdolle		HSK-A	
4335	770			Tiivistelevyt			
4340	754			Pikavaihto-kierteytysistukka ilman JK			
4341	765			MQL 2-kanavainen synkroistukka HSK-A automaattiselle työkalunvaihdolle		HSK-A	
4342	755			Pikavaihto-kierteytysistukka JK:lla			
4343	754			HSK-A pidin kierteytysistukoille		HSK-A	
4364	750			Säätöruuvit " taso " synkrokierteytysistukoille jäähdytyskanavalla			
4508	767			MQL 1-kanavaisen nesteputkisarja HSK-A		HSK-A	
4511	767			MQL 2-kanavaisen nesteputkisarja HSK-A		HSK-A	
4513	768			MQL nesteputkisarja HSK-A (täyte)		HSK-A	
4524	763			MQL hydraulinen synkrokierteytysistukka jäähdytyskanavalla		lieriö	
4525	745			Lieriövartinen hydraulinen synkrokierteytysistukka jäähdytyskanavalla		lieriö	
4576	743			ISO-kartio hydraulinen synkrokierteytysistukka jäähdytyskanavalla		SK	
4577	744			MAS/BT hydraulinen synkrokierteytysistukka jäähdytyskanavalla		BT	
4601	742			HSK-A hydraulinen synkrokierteytysistukka jäähdytyskanavalla		HSK-A	
4602	760			MQL HSK-A 1-kanavainen hydr. synkrokierteytysistukka (atom. työkalunvaihto)		HSK-A	
4603	761			MQL HSK-A 2-kanavainen hydraulinen synkrokierteytysistukka (atom. työkalunvaihto)		HSK-A	
4604	762			MQL HSK-A hydraulinen synkrokierteytysistukka (manuaalinen työkalunvaihto)		HSK-A	
4605	746, 747			Tiivistetyt pienennysholkit hyraulisille synkroistukoille			
4606	748, 749			GÜHROJET pienennysholkit hydraulisille synkrokierteytysistukoille			
4913	770			Vääntöavain			

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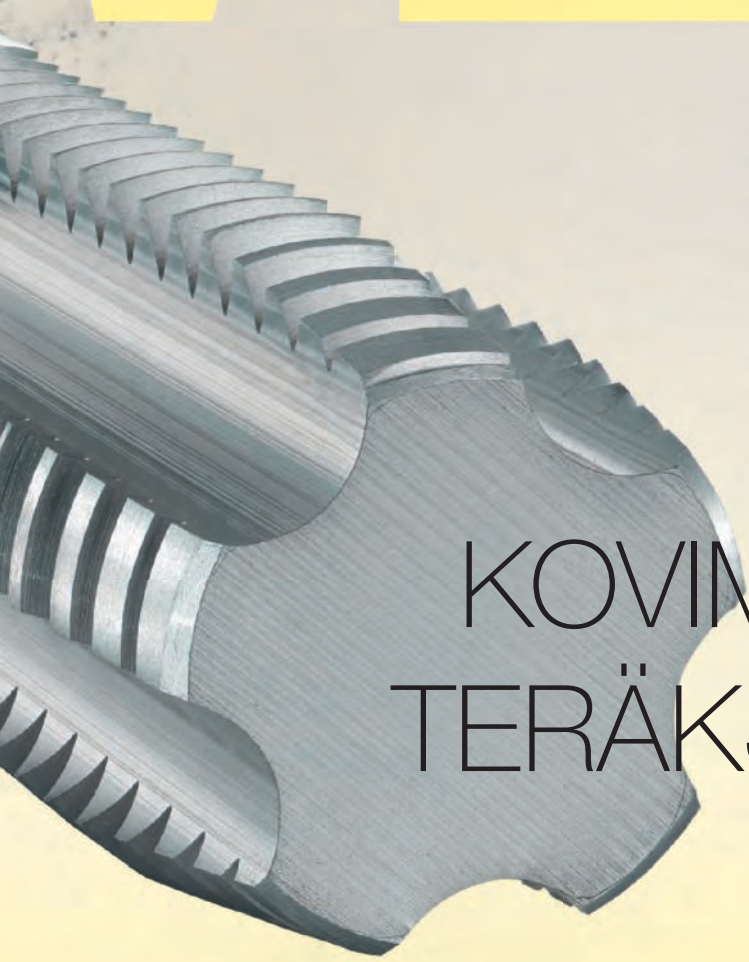

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