

New products for machining technicians

NEW Inserts and holders for Mini 06 and 08



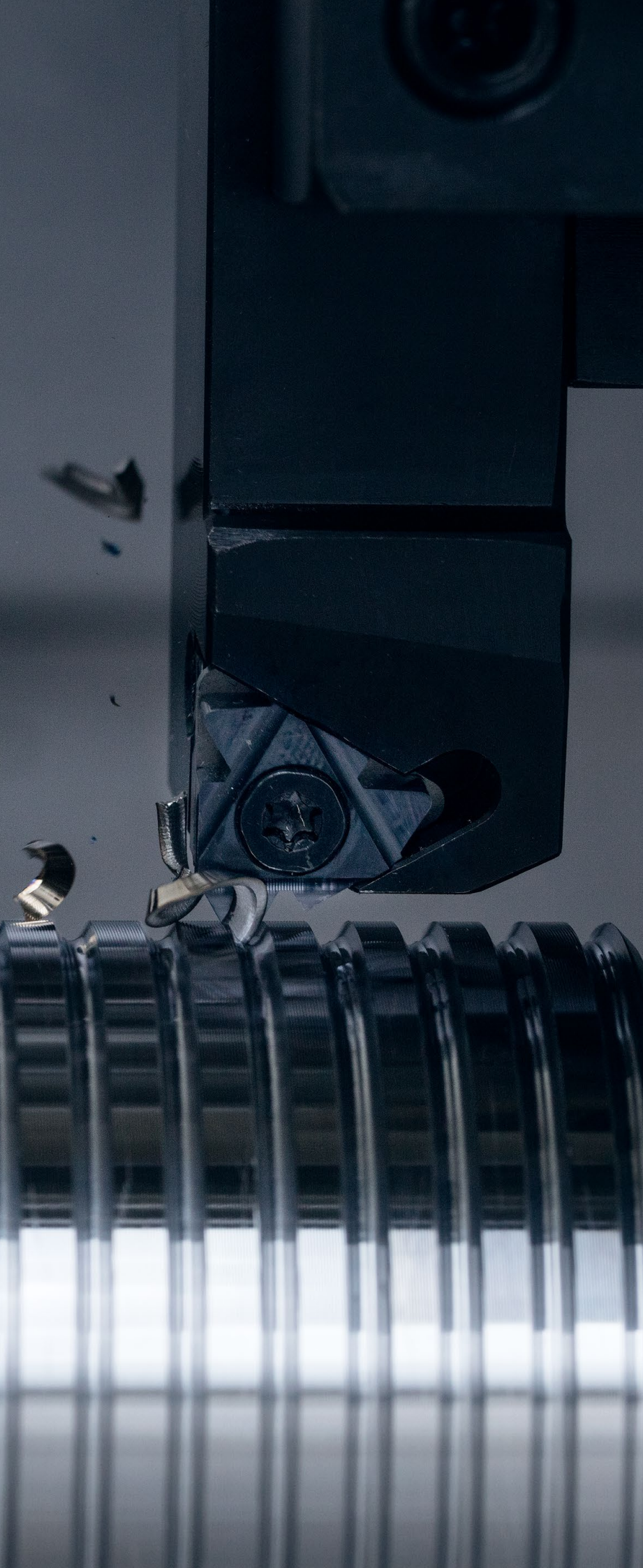
New grade CCN2520: Specialist for corrosion resistant and high-temperature-resistant material machining
Expansion of the existing CCN1525 variety

36-41

NEW Exchangeable head system



Use our standard thread turning inserts with the new exchangeable head system that you can find in Chapter 9 Turning Tools on pages 189-196.



Solid drilling and bore machining

- 1 HSS drilling
- 2 Solid carbide drilling
- 3 Indexable insert drilling
- 4 Reaming and Countersinking
- 5 Spindle Tooling

Threading

- 6 Taps and thread formers
- 7 Circular and Thread Milling
- 8 Thread turning

8

Turning

- 9 Turning Tools
- 10 Multifunctional Tools – EcoCut and FreeTurn
- 11 Grooving Tools
- 12 Miniature turning tools

Milling

- 13 HSS Milling Cutters
- 14 Solid Carbide milling cutters
- 15 Milling tools with indexable inserts

Catalogue –
Clamping technology

- 16 Adaptors and Accessories
- 17 Workpiece clamping

- 18 Material examples and article no. Index

Table of contents

Symbol explanation	3
Toolfinder	2+3
Product programme	4-41
Shims	42
Technical Information	
Pitch angle	43
Cutting Data	44+45
Thread turning methods	46
Troubleshooting	47
Designation Key	48
Grade description and profile explanation	49

WNT \ Performance

Premium quality tools for high performance.

The premium quality tools from the **WNT Performance** product line have been designed for specific applications and are distinguished by their outstanding performance. If you make high demands on the performance of your production and want to achieve the very best results, we recommend the Premium tools in this product line.

Toolfinder

TC threading system (external thread)

M	BSW
Full profile Partial profile	Full profile Partial profile

→ Chapter 11 – Grooving tools

TC threading system (internal thread)

M	BSW
Full profile Partial profile	Full profile Partial profile

→ Chapter 11 – Grooving tools

MiniCut

M	G	Tr
Full profile Partial profile	Partial profile	Partial profile

→ Chapter 12 – Miniature turning tools

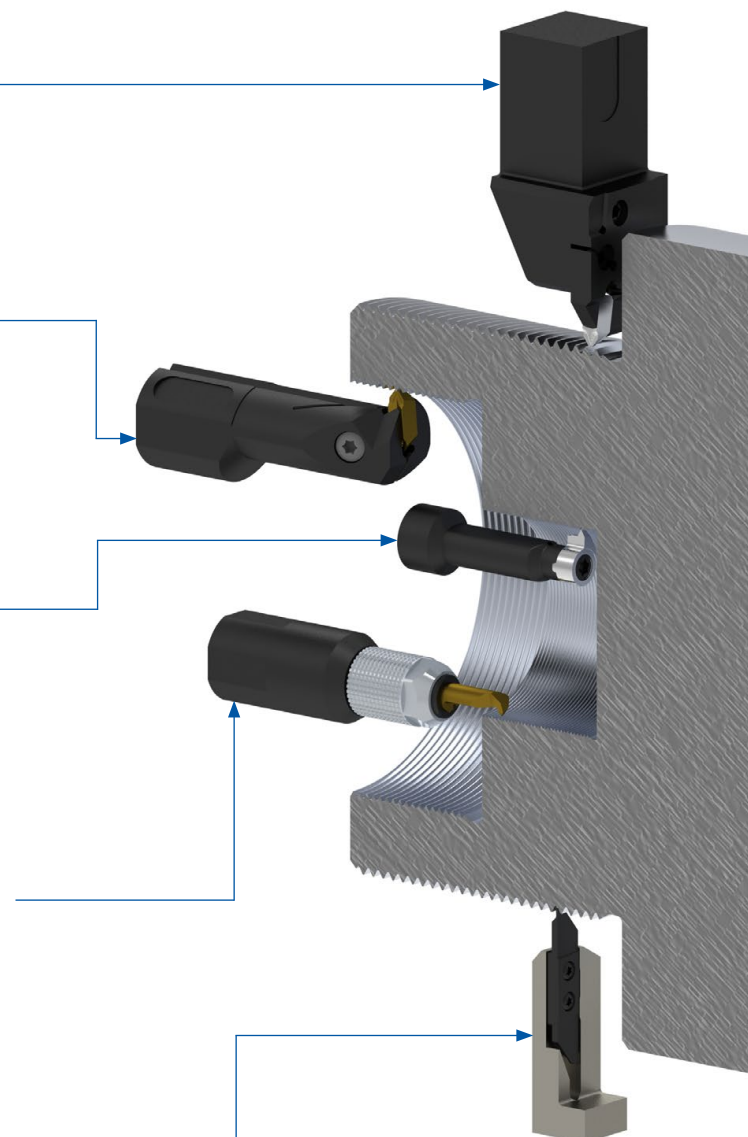
UltraMini

M	MF	G	Tr
Full profile Partial profile	Full profile Partial profile	Partial profile	Partial profile

→ Chapter 12 – Miniature turning tools

VertiClamp

→ Sliding head tooling catalogue



Symbol explanation

Flank angle



Flank angle 30° (Trapezoidal thread)



Flank angle 30° (Round thread)



Flank angle 55°



Flank angle 60°



Flank angle 80° (Conduit thread)

TP / TPI = Pitch

NT = Number of flutes

● = Main Application

○ = Extended application

Thread

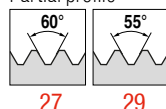
M	ISO metric coarse thread DIN 13	UNF	American unified thread (fine) BS 1580 (ASME B 1.1)
MF	ISO Metric fine thread DIN 13	UNEF	American unified thread (extra fine) BS 1580 (ASME B 1.1)
MJ	Metric thread for the aerospace industry DIN ISO 5855	NPT	American pipe thread ANSI/ASME B 1.20.3
BSW	British Whitworth thread BS 84	Tr	Trapezoidal thread DIN 103
UN	American unified thread BS 1580 (ASME B 1.1)	Rd	Round Thread DIN 405
UNC	American unified thread (coarse) BS 1580 (ASME B 1.1)	Pg	Conduit Threads DIN 40430

Standard external thread turning

Full profile

M	MJ	BSW	UN	UNC	UNF	UNEF	NPT	Tr	Rd	Pg
4+5	9	11+12	15+16	15+16	15+16	15+16	19	21	23	25

Partial profile



27

29

Multi-cutting edge



8

suitable holder



31+32

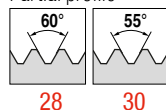


Standard internal thread turning

Full profile

M	MJ	BSW	UN	UNC	UNF	UNEF	NPT	Tr	Rd	Pg
6+7	10	13+14	17+18	17+18	17+18	17+18	20	22	24	26

Partial profile



28

30

suitable holder



33-35



Standard internal threading with our new exchangeable head system

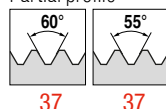
→ Chapter 9 – Turning Tools

Mini 06

Full profile

M	BSW
36	36

Partial profile



37

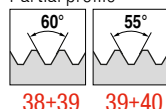
37

Mini 08

Full profile

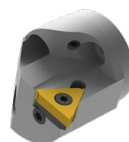
M
38

Partial profile



38+39

39+40



suitable holder



41

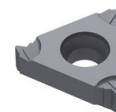
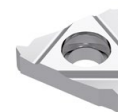
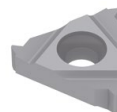
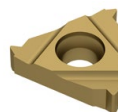
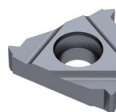
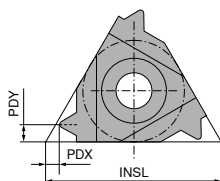


Information on the different thread profiles can be found on → Page 49.

Right hand external thread turning insert

▲ Full profile

▲ CCN7525 grade with sintered chip breaker for universal application



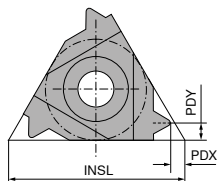
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					£ X3		£ X3		£ X3		£ Y1		£ X3	
11 ER 0,35	0.35	11	0.8	0.4	24.30	204					17.77	604		
11 ER 0,4	0.40	11	0.7	0.4	24.30	206					17.77	606		
11 ER 0,45	0.45	11	0.7	0.4	24.30	208					17.77	608		
11 ER 0,5	0.50	11	0.6	0.6	24.30	209					17.77	609		
11 ER 0,6	0.60	11	0.6	0.6	24.30	210					17.77	610		
11 ER 0,7	0.70	11	0.6	0.6	24.30	211					17.77	611		
11 ER 0,75	0.75	11	0.6	0.6	24.30	212					17.77	612		
11 ER 0,8	0.80	11	0.6	0.6	24.30	213					17.77	613		
11 ER 1,0	1.00	11	0.7	0.7	24.30	214					17.77	614		
11 ER 1,25	1.25	11	0.8	0.9	24.30	216					17.77	616		
11 ER 1,5	1.50	11	0.8	1.0	24.30	218					17.77	618		
11 ER 1,75	1.75	11	0.8	1.1	24.30	220					17.77	620		
16 ER 0,35	0.35	16	0.8	0.4	25.15	234			22.90	734	18.40	634		
16 ER 0,4	0.40	16	0.7	0.4	25.15	236			22.90	736	18.40	636		
16 ER 0,45	0.45	16	0.7	0.4	25.15	238					18.40	638		
16 ER 0,5	0.50	16	0.6	0.6	25.15	240	15.72	140	17.84	740	18.40	640	17.84	940
16 ER 0,7	0.70	16	0.6	0.6	25.15	241	17.40	141	18.42	741	18.40	641		
16 ER 0,75	0.75	16	0.6	0.6	25.15	242	16.34	142	17.84	742	18.40	642	17.84	942
16 ER 0,8	0.80	16	0.6	0.6	25.15	243	16.34	143	17.84	743	18.40	643	17.84	943
16 ER 1,0	1.00	16	0.7	0.7	25.15	244	15.26	144	17.40	744	17.90	644	17.40	944
16 ER 1,25	1.25	16	0.8	0.9	25.15	246	15.26	146	17.40	746	18.40	646	17.40	946
16 ER 1,5	1.50	16	0.8	1.0	25.15	248	15.26	148	17.40	748	17.90	648	17.40	948
16 ER 1,75	1.75	16	0.9	1.2	25.15	250	15.26	150	17.40	750	18.40	650		
16 ER 2,0	2.00	16	1.0	1.3	25.15	252	15.26	152	17.40	752	18.40	652	17.40	952
16 ER 2,5	2.50	16	1.1	1.5	25.15	254	15.26	154	17.40	754	18.40	654	17.40	954
16 ER 3,0	3.00	16	1.2	1.6	25.15	256	15.26	156	17.40	756	18.40	656	17.40	956
22 ER 3,5	3.50	22	1.6	2.3	34.73	270	23.81	170	26.20	770	30.23	670		
22 ER 4,0	4.00	22	1.6	2.3	34.73	272	24.84	172	27.63	772	30.23	672		
22 ER 4,5	4.50	22	1.7	2.4	34.73	274	26.80	174	29.18	774	30.23	674		
22 ER 5,0	5.00	22	1.7	2.5	34.73	276	26.80	176	29.18	776	30.23	676		
22 ER 5,5	5.50	22	1.7	2.6			26.80	178						
22 ER 5,5	5.50	22	1.9	2.7	34.73	278					30.23	678		
22 EN 5,5	5.50	22	2.3	11.0	34.73	282 ¹⁾					30.23	682 ¹⁾		
22 ER 6,0	6.00	22	1.9	2.7			26.80	180	29.18	780				
22 ER 6,0	6.00	22	2.0	2.9	34.73	280					30.23	680		
22 EN 6,0	6.00	22	2.6	11.0	34.73	284 ¹⁾					30.23	684 ¹⁾		
P					●		●		○				●	
M					●		○		●		○		●	
K					●		●		○		●		●	
N							●		○		●			
S					○				○		○		●	
H					○				○				○	
O							○							

1) Neutral version (N) – for right and left hand thread applications. Neutral toolholder marked (U) is required.

→ v_c Page 45

Left hand external thread turning insert

▲ Full profile

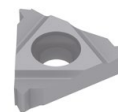
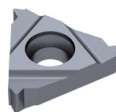


CCN20

CWN1525

HCN2525

CWK20



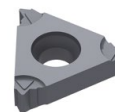
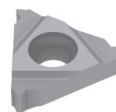
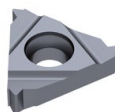
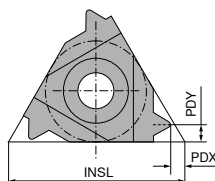
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					£		£		£		£	
					X3		X3		X3		Y1	
11 EL 0,35	0.35	11	0.8	0.4	24.30	204					17.77	604
11 EL 0,4	0.40	11	0.7	0.4	24.30	206					17.77	606
11 EL 0,45	0.45	11	0.7	0.4	24.30	208					17.77	608
11 EL 0,5	0.50	11	0.6	0.6	24.30	209					17.77	609
11 EL 0,6	0.60	11	0.6	0.6	24.30	210					17.77	610
11 EL 0,7	0.70	11	0.6	0.6	24.30	211					17.77	611
11 EL 0,75	0.75	11	0.6	0.6	24.30	212					17.77	612
11 EL 0,8	0.80	11	0.6	0.6	24.30	213					17.77	613
11 EL 1,0	1.00	11	0.7	0.7	24.30	214					17.77	614
11 EL 1,25	1.25	11	0.8	0.9	24.30	216					17.77	616
11 EL 1,5	1.50	11	0.8	1.0	24.30	218					17.77	618
11 EL 1,75	1.75	11	0.8	1.1	24.30	220					17.77	620
16 EL 0,35	0.35	16	0.8	0.4	25.15	234					18.40	634
16 EL 0,4	0.40	16	0.7	0.4	25.15	236					18.40	636
16 EL 0,45	0.45	16	0.7	0.4	25.15	238					18.40	638
16 EL 0,5	0.50	16	0.6	0.6	25.15	240					18.40	640
16 EL 0,7	0.70	16	0.6	0.6	25.15	241					18.40	641
16 EL 0,75	0.75	16	0.6	0.6	25.15	242					18.40	642
16 EL 0,8	0.80	16	0.6	0.6	25.15	243					18.40	643
16 EL 1,0	1.00	16	0.7	0.7	25.15	244	16.33	144	18.31	744	17.90	644
16 EL 1,25	1.25	16	0.8	0.9	25.15	246	17.37	146			18.40	646
16 EL 1,5	1.50	16	0.8	1.0	25.15	248	16.33	148	18.31	748	17.90	648
16 EL 1,75	1.75	16	0.9	1.2	25.15	250			21.37	750	18.40	650
16 EL 2,0	2.00	16	1.0	1.3	25.15	252	17.37	152			18.40	652
16 EL 2,5	2.50	16	1.1	1.5	25.15	254					18.40	654
16 EL 3,0	3.00	16	1.2	1.6	25.15	256	22.43	156			18.40	656
22 EL 3,5	3.50	22	1.6	2.3	34.73	270					30.23	670
22 EL 4,0	4.00	22	1.6	2.3	34.73	272					30.23	672
22 EL 4,5	4.50	22	1.7	2.4	34.73	274					30.23	674
22 EL 5,0	5.00	22	1.7	2.5	34.73	276					30.23	676
22 EL 5,5	5.50	22	1.9	2.7	34.73	278					30.23	678
22 EL 6,0	6.00	22	2.0	2.9	34.73	280					30.23	680
P					●		●		○			
M					●		○		●		○	
K					●		●		○		●	
N							●		○		●	
S					○				○		○	
H					○				○			
O							○					

→ v_c Page 45

Right hand internal thread turning insert

▲ Full profile

▲ CCN7525 grade with sintered chip breaker for universal application



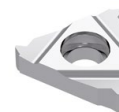
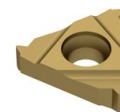
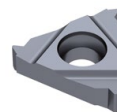
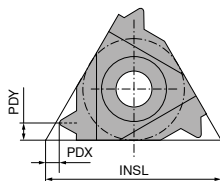
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					£ X3		£ X3		£ X3		£ Y1		£ X3	
11 IR 0,35	0.35	11	0.8	0.3	25.15	204					18.40	604		
11 IR 0,4	0.40	11	0.8	0.4	25.15	206					18.40	606		
11 IR 0,45	0.45	11	0.8	0.4	25.15	208					18.40	608		
11 IR 0,5	0.50	11	0.6	0.6	25.15	210					18.40	610		
11 IR 0,7	0.70	11	0.6	0.6	25.15	211					18.40	611		
11 IR 0,75	0.75	11	0.6	0.6	25.15	212					18.40	612	21.37	912
11 IR 0,8	0.80	11	0.6	0.6	25.15	213			26.10	713	18.40	613		
11 IR 1,0	1.00	11	0.6	0.6									17.40	914
11 IR 1,0	1.00	11	0.6	0.7	25.15	214	15.26	114	17.40	714	17.90	614		
11 IR 1,25	1.25	11	0.8	0.9	25.15	216					18.40	616		
11 IR 1,5	1.50	11	0.8	0.9									17.40	918
11 IR 1,5	1.50	11	0.8	1.0	25.15	218	15.26	118	17.40	718	17.90	618		
11 IR 1,75	1.75	11	0.9	1.1	25.15	220					18.40	620		
11 IR 2,0	2.00	11	0.8	0.9			15.26	122	17.40	722				
11 IR 2,0	2.00	11	0.9	1.1	25.15	222					18.40	622		
11 IR 2,5	2.50	11	0.8	1.2			17.37	124	18.87	724				
11 IR 2,5	2.50	11	0.9	1.1	25.15	224					18.40	624		
16 IR 0,35	0.35	16	0.8	0.4	25.15	234					18.40	634		
16 IR 0,4	0.40	16	0.7	0.4	25.15	236					18.40	636		
16 IR 0,45	0.45	16	0.7	0.4	25.15	238					18.40	638		
16 IR 0,5	0.50	16	0.6	0.6	25.15	240					18.40	640		
16 IR 0,7	0.70	16	0.6	0.6	25.15	241					18.40	641		
16 IR 0,75	0.75	16	0.6	0.6	25.15	242	19.16	142	21.37	742	18.40	642		
16 IR 0,8	0.80	16	0.6	0.6	25.15	243					18.40	643		
16 IR 1,0	1.00	16	0.6	0.7			15.26	144	17.40	744			17.40	944
16 IR 1,0	1.00	16	0.7	0.7	25.15	244					17.90	644		
16 IR 1,25	1.25	16	0.8	0.9	25.15	246			18.31	746	18.40	646	18.31	946
16 IR 1,5	1.50	16	0.8	1.0	25.15	248	15.26	148	17.40	748	17.90	648	17.40	948
16 IR 1,75	1.75	16	0.9	1.2	25.15	250			21.37	750	18.40	650		
16 IR 2,0	2.00	16	1.0	1.3	25.15	252	15.26	152	17.40	752	18.40	652	17.40	952
16 IR 2,5	2.50	16	1.1	1.5	25.15	254	15.26	154	17.40	754	18.40	654	17.40	954
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22 IR 4,5	4.50	22	1.6	2.4			26.80	174	29.18	774				
22 IR 4,5	4.50	22	1.7	2.4	34.73	274					30.23	674		
22 IR 5,0	5.00	22	1.6	2.3			26.80	176						
22 IR 5,0	5.00	22	1.7	2.5	34.73	276					30.23	676		
22 IR 5,5	5.50	22	1.6	2.3			30.22	178						
22 IR 5,5	5.50	22	1.9	2.7	34.73	278					30.23	678		
22 IN 5,5	5.50	22	2.3	11.0	34.73	282 ¹⁾					30.23	682 ¹⁾		
22 IR 6,0	6.00	22	1.6	2.4			26.80	180						
22 IR 6,0	6.00	22	2.0	2.9	34.73	280					30.23	680		
22 IN 6,0	6.00	22	2.6	11.0	34.73	284 ¹⁾					30.23	684 ¹⁾		
P					●		●		○				●	
M					●		○		●		○		●	
K					●		●		○		●		●	
N							●		○		●			
S					○				○		○		●	
H					○				○				○	
O								○						

1) Neutral version (N) – for right and left hand thread applications. Neutral toolholder marked (U) is required.

→ v_c Page 45

Left hand internal thread turning insert

▲ Full profile



Designation	TP mm	INSL mm	PDX mm	PDY mm	IL 71 226 ...		IL 71 226 ...		IL 71 226 ...	
					£ X3		£ X3		£ Y1	
11 IL 0,35	0.35	11	0.8	0.3	25.15	204			18.40	604
11 IL 0,4	0.40	11	0.8	0.4	25.15	206			18.40	606
11 IL 0,45	0.45	11	0.8	0.4	25.15	208			18.40	608
11 IL 0,5	0.50	11	0.6	0.6	25.15	210			18.40	610
11 IL 0,7	0.70	11	0.6	0.6	25.15	211			18.40	611
11 IL 0,75	0.75	11	0.6	0.6	25.15	212			18.40	612
11 IL 0,8	0.80	11	0.6	0.6	25.15	213			18.40	613
11 IL 1,0	1.00	11	0.6	0.7	25.15	214			17.90	614
11 IL 1,25	1.25	11	0.8	0.9	25.15	216			18.40	616
11 IL 1,5	1.50	11	0.8	1.0	25.15	218			17.90	618
11 IL 1,75	1.75	11	0.9	1.1	25.15	220			18.40	620
11 IL 2,0	2.00	11	0.9	1.1	25.15	222			18.40	622
11 IL 2,5	2.50	11	0.9	1.1	25.15	224			18.40	624
16 IL 0,35	0.35	16	0.8	0.4	25.15	234			18.40	634
16 IL 0,4	0.40	16	0.7	0.4	25.15	236			18.40	636
16 IL 0,45	0.45	16	0.7	0.4	25.15	238			18.40	638
16 IL 0,5	0.50	16	0.6	0.6	25.15	240			18.40	640
16 IL 0,7	0.70	16	0.6	0.6	25.15	241			18.40	641
16 IL 0,75	0.75	16	0.6	0.6	25.15	242			18.40	642
16 IL 0,8	0.80	16	0.6	0.6	25.15	243			18.40	643
16 IL 1,0	1.00	16	0.6	0.7			22.43	144		
16 IL 1,0	1.00	16	0.7	0.7	25.15	244			17.90	644
16 IL 1,25	1.25	16	0.8	0.9	25.15	246			18.40	646
16 IL 1,5	1.50	16	0.8	1.0	25.15	248	19.31	148	17.90	648
16 IL 1,75	1.75	16	0.9	1.2	25.15	250			18.40	650
16 IL 2,0	2.00	16	1.0	1.3	25.15	252	17.37	152	18.40	652
16 IL 2,5	2.50	16	1.1	1.5	25.15	254			18.40	654
16 IL 3,0	3.00	16	1.2	1.6	25.15	256			18.40	656
22 IL 3,5	3.50	22	1.6	2.3	34.73	270			30.23	670
22 IL 4,0	4.00	22	1.6	2.3	34.73	272			30.23	672
22 IL 4,5	4.50	22	1.7	2.4	34.73	274			30.23	674
22 IL 5,0	5.00	22	1.7	2.5	34.73	276			30.23	676
22 IL 5,5	5.50	22	1.9	2.7	34.73	278			30.23	678
22 IL 6,0	6.00	22	2.0	2.9	34.73	280			30.23	680
P					●		●			
M					●		○		○	
K					●		●		●	
N							●		●	
S					○				○	
H					○					
O									○	

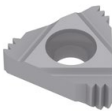
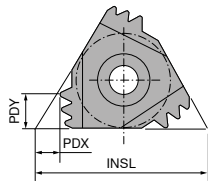
→ v_c Page 45

Right hand external thread turning insert

▲ Multi edge insert



HCN2525

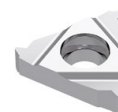
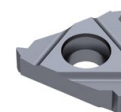
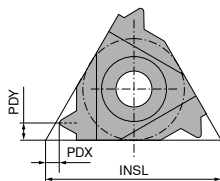


						ER	
						71 221 ...	
						£	
						X3	
Designation	TP mm	INSL mm	PDX mm	PDY mm	NT		
16 ER 1,0 3M	1.0	16	1.7	2.5	3	36.81	700
16 ER 1,5 2M	1.5	16	1.5	2.3	2	36.15	702
P							○
M							●
K							○
N							○
S							○
H							○
O							○

→ v_c Page 45

Right hand external thread turning insert

▲ Full profile

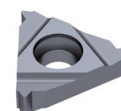
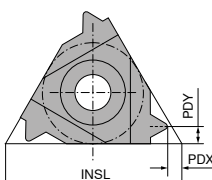


Designation	TP mm	INSL mm	PDX mm	PDY mm	ER 71 286 ...		ER 71 286 ...	
					£ X3		£ Y1	
11 ER 1,0	1.00	11	0.7	0.8	33.39	214	26.79	614
11 ER 1,25	1.25	11	0.8	0.9	33.39	216	26.79	616
11 ER 1,5	1.50	11	0.8	1.0	33.39	218	26.79	618
11 ER 2,0	2.00	11	0.9	1.0	33.39	222	26.79	622
16 ER 1,0	1.00	16	0.7	0.8	33.39	244	26.79	644
16 ER 1,25	1.25	16	0.8	0.9	33.39	246	26.79	646
16 ER 1,5	1.50	16	0.8	1.0	33.39	248	26.79	648
16 ER 2,0	2.00	16	1.0	1.3	33.39	252	26.79	652
P						●		
M						●		○
K						●		●
N								●
S						○		○
H						○		
O								

→ v_c Page 45

Left hand external thread turning insert

▲ Full profile

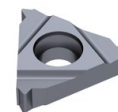
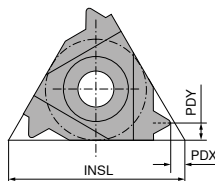


Designation	TP mm	INSL mm	PDX mm	PDY mm	EL 71 287 ...		EL 71 287 ...	
					£ X3		£ Y1	
11 EL 1,0	1.00	11	0.7	0.8	33.39	214	26.79	614
11 EL 1,25	1.25	11	0.8	0.9	33.39	216	26.79	616
11 EL 1,5	1.50	11	0.8	1.0	33.39	218	26.79	618
11 EL 2,0	2.00	11	0.9	1.0	33.39	222	26.79	622
16 EL 1,0	1.00	16	0.7	0.8	33.39	244	26.79	644
16 EL 1,25	1.25	16	0.8	0.9	33.39	246	26.79	646
16 EL 1,5	1.50	16	0.8	1.0	33.39	248	26.79	648
16 EL 2,0	2.00	16	1.0	1.3	33.39	252	26.79	652
P						●		
M						●		○
K						●		●
N								●
S						○		○
H						○		
O								

→ v_c Page 45

Right hand internal thread turning insert

▲ Full profile



Designation	TP mm	INSL mm	PDX mm	PDY mm
11 IR 1,0	1.00	11	0.7	0.8
11 IR 1,25	1.25	11	0.8	0.9
11 IR 1,5	1.50	11	0.8	1.0
11 IR 2,0	2.00	11	0.9	1.0
16 IR 1,0	1.00	16	0.7	0.8
16 IR 1,25	1.25	16	0.8	0.9
16 IR 1,5	1.50	16	0.8	1.0
16 IR 2,0	2.00	16	1.0	1.3

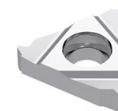
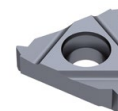
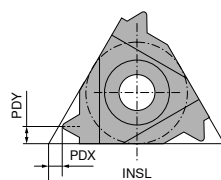
IR		IR	
71 284 ...		71 284 ...	
£		£	
X3		Y1	
33.39	214	26.79	614
33.39	216	26.79	616
33.39	218	26.79	618
33.39	222	26.79	622
33.39	244	26.79	644
33.39	246	26.79	646
33.39	248	26.79	648
33.39	252	26.79	652

P	●	
M	●	○
K	●	●
N		●
S	○	○
H	○	
O		

→ v_c Page 45

Left hand internal thread turning insert

▲ Full profile



Designation	TP mm	INSL mm	PDX mm	PDY mm
11 IL 1,0	1.00	11	0.7	0.8
11 IL 1,25	1.25	11	0.8	0.9
11 IL 1,5	1.50	11	0.8	1.0
11 IL 2,0	2.00	11	0.9	1.0
16 IL 1,0	1.00	16	0.7	0.8
16 IL 1,25	1.25	16	0.8	0.9
16 IL 1,5	1.50	16	0.8	1.0
16 IL 2,0	2.00	16	1.0	1.3

IL		IL	
71 285 ...		71 285 ...	
£		£	
X3		Y1	
33.39	214	26.79	614
33.39	216	26.79	616
33.39	218	26.79	618
33.39	222	26.79	622
33.39	244	26.79	644
33.39	246	26.79	646
33.39	248	26.79	648
33.39	252	26.79	652

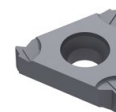
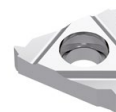
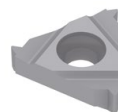
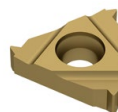
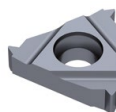
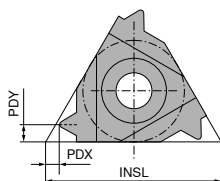
P	●	
M	●	○
K	●	●
N		●
S	○	○
H	○	
O		

→ v_c Page 45

Right hand external thread turning insert

▲ Full profile

▲ CCN7525 grade with sintered chip breaker for universal application



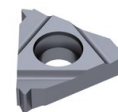
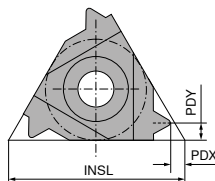
Designation	TPI 1/"	INSL mm	PDX mm	PDY mm	ER 71 228 ...		ER 71 228 ...		ER 71 228 ...		ER 71 228 ...		ER 71 228 ...	
					£		£		£		£		£	
					X3		X3		X3		Y1		X3	
11 ER 72	72.0	11	0.7	0.4	24.30	202					17.77	602		
11 ER 60	60.0	11	0.7	0.4	24.30	204					17.77	604		
11 ER 56	56.0	11	0.7	0.4	24.30	206					17.77	606		
11 ER 48	48.0	11	0.6	0.6	24.30	208					17.77	608		
11 ER 40	40.0	11	0.6	0.6	24.30	210					17.77	610		
11 ER 36	36.0	11	0.6	0.6	24.30	212					17.77	612		
11 ER 32	32.0	11	0.6	0.6	24.30	214					17.77	614		
11 ER 28	28.0	11	0.6	0.7	24.30	216					17.77	616		
11 ER 26	26.0	11	0.7	0.8	24.30	218					17.77	618		
11 ER 24	24.0	11	0.7	0.8	24.30	220					17.77	620		
11 ER 22	22.0	11	0.8	0.9	24.30	222					17.77	622		
11 ER 20	20.0	11	0.8	0.9	24.30	224					17.77	624		
11 ER 19	19.0	11	0.8	1.0	24.30	226					17.77	626		
11 ER 18	18.0	11	0.8	1.0	24.30	228					17.77	628		
11 ER 16	16.0	11	0.9	1.1	24.30	230					17.77	630		
11 ER 14	14.0	11	0.9	1.1	24.30	232					17.77	632		
16 ER 40	40.0	16	0.6	0.6	25.15	240					18.40	640		
16 ER 36	36.0	16	0.6	0.6	25.15	242					18.40	642		
16 ER 32	32.0	16	0.6	0.6	25.15	244					18.40	644		
16 ER 28	28.0	16	0.6	0.7	25.15	246	19.76	146	21.97	746	18.40	646		
16 ER 26	26.0	16	0.7	0.7					26.20	748				
16 ER 26	26.0	16	0.7	0.8	25.15	248					18.40	648		
16 ER 24	24.0	16	0.7	0.8	25.15	250					18.40	650		
16 ER 22	22.0	16	0.8	0.9	25.15	252					18.40	652		
16 ER 20	20.0	16	0.8	0.9	25.15	254			26.20	754	18.40	654		
16 ER 19	19.0	16	0.8	1.0	25.15	256	17.80	156	20.00	756	18.40	656	20.00	956
16 ER 18	18.0	16	0.8	1.0	25.15	258					18.40	658		
16 ER 16	16.0	16	0.9	1.1	25.15	260	21.70	160	23.94	760	18.40	660		
16 ER 14	14.0	16	1.0	1.2	25.15	262	17.80	162	20.00	762	18.40	662	20.00	962
16 ER 12	12.0	16	1.1	1.4	25.15	264	21.70	164	23.94	764	18.40	664		
16 ER 11	11.0	16	1.1	1.5	25.15	266	17.80	166	20.00	766	18.40	666	20.00	966
16 ER 10	10.0	16	1.1	1.5	25.15	268					18.40	668		
16 ER 9	9.0	16	1.2	1.7	25.15	270					18.40	670		
16 ER 8	8.0	16	1.2	1.5	25.15	272					18.40	672		
22 ER 7	7.0	22	1.6	2.3	34.73	280					30.23	680		
22 ER 6	6.0	22	1.6	2.3	34.73	282					30.23	682		
22 ER 5	5.0	22	1.7	2.4	34.73	284					30.23	684		
22 EN 4,5	4.5	22	2.3	11.0	34.73	290 ¹⁾					30.23	690 ¹⁾		
22 EN 4	4.0	22	1.8	11.0	34.73	292 ¹⁾					30.23	692 ¹⁾		
P					●		●		○				●	
M					●		○		●		○		●	
K					●		●		○		●		●	
N							●		○		●			
S					○				○		○		●	
H					○				○				○	
O							○							

1) Neutral version (N) – for right and left hand thread applications. Neutral toolholder marked (U) is required.

→ v_c Page 45

Left hand external thread turning insert

▲ Full profile



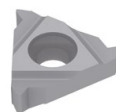
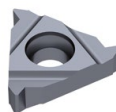
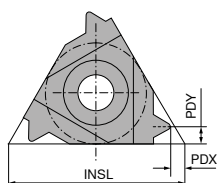
Designation	TPI 1/"	INSL mm	PDX mm	PDY mm	EL 71 229 ...		EL 71 229 ...	
					£ X3		£ Y1	
11 EL 72	72	11	0.7	0.4	24.30	202	17.77	602
11 EL 60	60	11	0.7	0.4	24.30	204	17.77	604
11 EL 56	56	11	0.7	0.4	24.30	206	17.77	606
11 EL 48	48	11	0.6	0.6	24.30	208	17.77	608
11 EL 40	40	11	0.6	0.6	24.30	210	17.77	610
11 EL 36	36	11	0.6	0.6	24.30	212	17.77	612
11 EL 32	32	11	0.6	0.6	24.30	214	17.77	614
11 EL 28	28	11	0.6	0.7	24.30	216	17.77	616
11 EL 26	26	11	0.7	0.8	24.30	218	17.77	618
11 EL 24	24	11	0.7	0.8	24.30	220	17.77	620
11 EL 22	22	11	0.8	0.9	24.30	222	17.77	622
11 EL 20	20	11	0.8	0.9	24.30	224	17.77	624
11 EL 19	19	11	0.8	1.0	24.30	226	17.77	626
11 EL 18	18	11	0.8	1.0	24.30	228	17.77	628
11 EL 16	16	11	0.9	1.1	24.30	230	17.77	630
11 EL 14	14	11	0.9	1.1	24.30	232	17.77	632
16 EL 40	40	16	0.6	0.6	25.15	240	18.40	640
16 EL 36	36	16	0.6	0.6	25.15	242	18.40	642
16 EL 32	32	16	0.6	0.6	25.15	244	18.40	644
16 EL 28	28	16	0.6	0.7	25.15	246	18.40	646
16 EL 26	26	16	0.7	0.8	25.15	248	18.40	648
16 EL 24	24	16	0.7	0.8	25.15	250	18.40	650
16 EL 22	22	16	0.8	0.9	25.15	252	18.40	652
16 EL 20	20	16	0.8	0.9	25.15	254	18.40	654
16 EL 19	19	16	0.8	1.0	25.15	256	18.40	656
16 EL 18	18	16	0.8	1.0	25.15	258	18.40	658
16 EL 16	16	16	0.9	1.1	25.15	260	18.40	660
16 EL 14	14	16	1.0	1.2	25.15	262	18.40	662
16 EL 12	12	16	1.1	1.4	25.15	264	18.40	664
16 EL 11	11	16	1.1	1.5	25.15	266	18.40	666
16 EL 10	10	16	1.1	1.5	25.15	268	18.40	668
16 EL 9	9	16	1.2	1.7	25.15	270	18.40	670
16 EL 8	8	16	1.2	1.5	25.15	272	18.40	672
22 EL 7	7	22	1.6	2.3	37.63	280	30.23	680
22 EL 6	6	22	1.6	2.3	37.63	282	30.23	682
22 EL 5	5	22	1.7	2.4	32.18	284	30.23	684
P						●		
M						●		○
K						●		●
N								●
S						○		○
H						○		
O								

→ v_c Page 45

Right hand internal thread turning insert

▲ Full profile

▲ CCN7525 grade with sintered chip breaker for universal application

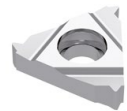
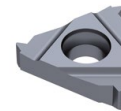
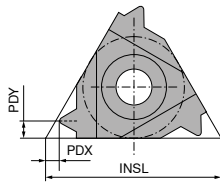


Designation	TPI 1/"	INSL mm	PDX mm	PDY mm	IR		IR		IR		IR		IR	
					71 230 ...		71 230 ...		71 230 ...		71 230 ...		71 230 ...	
					£ X3		£ X3		£ X3		£ Y1		£ X3	
11 IR 48	48	11	0.6	0.6	25.15	206					18.40	606		
11 IR 40	40	11	0.6	0.6	25.15	208					18.40	608		
11 IR 36	36	11	0.6	0.6	25.15	210					18.40	610		
11 IR 32	32	11	0.6	0.6	25.15	212					18.40	612		
11 IR 28	28	11	0.6	0.7	25.15	214					18.40	614		
11 IR 26	26	11	0.7	0.8	25.15	216					18.40	616		
11 IR 24	24	11	0.7	0.8	25.15	218					18.40	618		
11 IR 22	22	11	0.8	0.9	25.15	220					18.40	620		
11 IR 20	20	11	0.8	0.9	25.15	222					18.40	622		
11 IR 19	19	11	0.8	0.9									20.91	924
11 IR 19	19	11	0.8	1.0	25.15	224	18.69	124	20.91	724	18.40	624		
11 IR 18	18	11	0.8	1.0	25.15	226					18.40	626		
11 IR 16	16	11	0.9	1.1	25.15	228					18.40	628		
11 IR 14	14	11	0.8	0.9									20.91	930
11 IR 14	14	11	0.9	1.1	25.15	230	18.69	130	20.91	730	18.40	630		
16 IR 40	40	16	0.6	0.6	25.15	240					18.40	640		
16 IR 36	36	16	0.6	0.6	25.15	242					18.40	642		
16 IR 32	32	16	0.6	0.6	25.15	244					18.40	644		
16 IR 28	28	16	0.6	0.7	25.15	246					18.40	646		
16 IR 26	26	16	0.7	0.8	25.15	248					18.40	648		
16 IR 24	24	16	0.7	0.8	25.15	250					18.40	650		
16 IR 22	22	16	0.8	0.9	25.15	252					18.40	652		
16 IR 20	20	16	0.8	0.9	25.15	254					18.40	654		
16 IR 19	19	16	0.8	1.0	25.15	256					18.40	656		
16 IR 18	18	16	0.8	1.0	25.15	258					18.40	658		
16 IR 16	16	16	0.9	1.1	25.15	260			26.20	760	18.40	660		
16 IR 14	14	16	1.0	1.2	25.15	262	17.80	162	20.00	762	18.40	662	20.00	962
16 IR 12	12	16	1.1	1.4	25.15	264					18.40	664		
16 IR 11	11	16	1.1	1.5	25.15	266	17.80	166	20.00	766	18.40	666	20.00	966
16 IR 10	10	16	1.1	1.5	25.15	268					18.40	668		
16 IR 9	9	16	1.2	1.7	25.15	270					18.40	670		
16 IR 8	8	16	1.2	1.5	25.15	272					18.40	672		
22 IR 7	7	22	1.6	2.3	34.73	280					30.23	680		
22 IR 6	6	22	1.6	2.3	34.73	282					30.23	682		
22 IR 5	5	22	1.7	2.4	34.73	284					30.23	684		
P					●		●		○				●	
M					●		○		●		○		●	
K					●		●		○		●		●	
N									○		●			
S					○				○		○		●	
H					○				○				○	
O									○					

→ v_c Page 45

Left hand internal thread turning insert

▲ Full profile



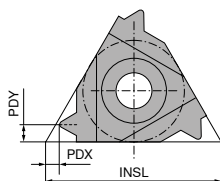
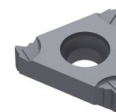
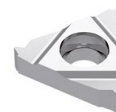
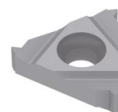
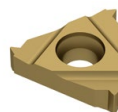
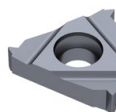
Designation	TPI 1/"	INSL mm	PDX mm	PDY mm	IL 71 231 ...		IL 71 231 ...	
					£ X3		£ Y1	
11 IL 48	48	11	0.6	0.6	25.15	206	18.40	606
11 IL 40	40	11	0.6	0.6	25.15	208	18.40	608
11 IL 36	36	11	0.6	0.6	25.15	210	18.40	610
11 IL 32	32	11	0.6	0.6	25.15	212	18.40	612
11 IL 28	28	11	0.6	0.7	25.15	214	18.40	614
11 IL 26	26	11	0.7	0.8	25.15	216	18.40	616
11 IL 24	24	11	0.7	0.8	25.15	218	18.40	618
11 IL 22	22	11	0.8	0.9	25.15	220	18.40	620
11 IL 20	20	11	0.8	0.9	25.15	222	18.40	622
11 IL 19	19	11	0.8	1.0	25.15	224	18.40	624
11 IL 18	18	11	0.8	1.0	25.15	226	18.40	626
11 IL 16	16	11	0.9	1.1	25.15	228	18.40	628
11 IL 14	14	11	0.9	1.1	25.15	230	18.40	630
16 IL 40	40	16	0.6	0.6	25.15	240	18.40	640
16 IL 36	36	16	0.6	0.6	25.15	242	18.40	642
16 IL 32	32	16	0.6	0.6	25.15	244	18.40	644
16 IL 28	28	16	0.6	0.7	25.15	246	18.40	646
16 IL 26	26	16	0.7	0.8	25.15	248	18.40	648
16 IL 24	24	16	0.7	0.8	25.15	250	18.40	650
16 IL 22	22	16	0.8	0.9	25.15	252	18.40	652
16 IL 20	20	16	0.8	0.9	25.15	254	18.40	654
16 IL 19	19	16	0.8	1.0	25.15	256	18.40	656
16 IL 18	18	16	0.8	1.0	25.15	258	18.40	658
16 IL 16	16	16	0.9	1.1	25.15	260	18.40	660
16 IL 14	14	16	1.0	1.2	25.15	262	18.40	662
16 IL 12	12	16	1.1	1.4	25.15	264	18.40	664
16 IL 11	11	16	1.1	1.5	25.15	266	18.40	666
16 IL 10	10	16	1.1	1.5	25.15	268	18.40	668
16 IL 9	9	16	1.2	1.7	25.15	270	18.40	670
16 IL 8	8	16	1.2	1.5	25.15	272	18.40	672
22 IL 7	7	22	1.6	2.3	34.73	280	30.23	680
22 IL 6	6	22	1.6	2.3	34.73	282	30.23	682
22 IL 5	5	22	1.7	2.4	34.73	284	30.23	684
P						●		
M						●		○
K						●		●
N								●
S						○		○
H						○		
O								

→ v_c Page 45

Right hand external thread turning insert

▲ Full profile

▲ CCN7525 grade with sintered chip breaker for universal application



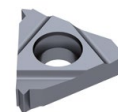
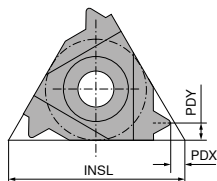
Designation	TPI 1/"	INSL mm	PDX mm	PDY mm	ER 71 264 ...		ER 71 264 ...		ER 71 264 ...		ER 71 264 ...		ER 71 264 ...	
					£		£		£		£		£	
					X3		X3		X3		Y1		X3	
11 ER 72	72.0	11	0.8	0.4	24.30	202					17.77	602		
11 ER 64	64.0	11	0.8	0.4	24.30	204					17.77	604		
11 ER 56	56.0	11	0.7	0.4	24.30	206					17.77	606		
11 ER 48	48.0	11	0.6	0.6	24.30	208					17.77	608		
11 ER 44	44.0	11	0.6	0.6	24.30	210					17.77	610		
11 ER 40	40.0	11	0.6	0.6	24.30	212					17.77	612		
11 ER 36	36.0	11	0.6	0.6	24.30	214					17.77	614		
11 ER 32	32.0	11	0.6	0.6	24.30	216					17.77	616		
11 ER 28	28.0	11	0.6	0.7	24.30	218					17.77	618		
11 ER 27	27.0	11	0.7	0.8	24.30	220					17.77	620		
11 ER 24	24.0	11	0.7	0.8	24.30	222					17.77	622		
11 ER 20	20.0	11	0.8	0.9	24.30	224					17.77	624		
11 ER 18	18.0	11	0.8	1.0	24.30	226					17.77	626		
11 ER 16	16.0	11	0.9	1.1	24.30	228					17.77	628		
11 ER 14	14.0	11	0.9	1.1	24.30	230					17.77	630		
16 ER 72	72.0	16	0.8	0.4	25.15	232					18.40	632		
16 ER 64	64.0	16	0.8	0.4	25.15	234					18.40	634		
16 ER 56	56.0	16	0.7	0.4	25.15	236					18.40	636		
16 ER 48	48.0	16	0.6	0.6	25.15	238					18.40	638		
16 ER 44	44.0	16	0.6	0.6	25.15	240					18.40	640		
16 ER 40	40.0	16	0.6	0.6	25.15	242					18.40	642		
16 ER 36	36.0	16	0.6	0.6	25.15	244					18.40	644		
16 ER 32	32.0	16	0.6	0.6	25.15	246			25.63	746	18.40	646		
16 ER 28	28.0	16	0.6	0.7	25.15	248			23.94	748	18.40	648		
16 ER 27	27.0	16	0.7	0.8	25.15	250					18.40	650		
16 ER 24	24.0	16	0.7	0.8	25.15	252	19.76	152	21.97	752	18.40	652		
16 ER 20	20.0	16	0.8	0.9	25.15	254	18.69	154	20.91	754	18.40	654	20.91	954
16 ER 18	18.0	16	0.8	1.0	25.15	256	19.76	156	21.97	756	18.40	656		
16 ER 16	16.0	16	0.9	1.1	25.15	258	18.69	158	20.91	758	18.40	658	20.91	958
16 ER 14	14.0	16	1.0	1.2	25.15	260	19.76	160	21.97	760	18.40	660		
16 ER 13	13.0	16	1.0	1.3	25.15	262					18.40	662		
16 ER 12	12.0	16	1.1	1.4	25.15	264	19.76	164	21.97	764	18.40	664		
16 ER 11,5	11.5	16	1.1	1.5	25.15	266					18.40	666		
16 ER 11	11.0	16	1.1	1.5	25.15	268	24.39	168			18.40	668		
16 ER 10	10.0	16	1.1	1.5	25.15	270					18.40	670		
16 ER 9	9.0	16	1.2	1.7	25.15	272					18.40	672		
16 ER 8	8.0	16	1.1	1.1									26.20	974
16 ER 8	8.0	16	1.1	1.5			24.39	174						
16 ER 8	8.0	16	1.2	1.6	25.15	274					18.40	674		
22 ER 7	7.0	22	1.6	2.3	34.73	276					30.23	676		
22 ER 6	6.0	22	1.6	2.3	34.73	278					30.23	678		
22 ER 5	5.0	22	1.7	2.5	34.73	280					30.23	680		
22 EN 4,5	4.5	22	2.0	11.0	34.73	282 ¹⁾					30.23	682 ¹⁾		
22 EN 4	4.0	22	2.0	11.0	34.73	284 ¹⁾					30.23	684 ¹⁾		
P					●		●		○				●	
M					●		○		●		○		●	
K					●		●		○		●		●	
N							●		○		●			
S					○				○		○		●	
H					○				○				○	
O									○					

1) Neutral version (N) – for right and left hand thread applications. Neutral toolholder marked (U) is required.

→ v_c Page 45

Left hand external thread turning insert

▲ Full profile

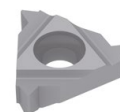
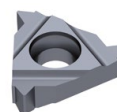
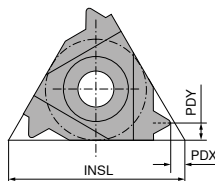


Designation	TPI 1/"	INSL mm	PDX mm	PDY mm	EL 71 266 ...		EL 71 266 ...	
					£ X3		£ Y1	
11 EL 72	72.0	11	0.8	0.4	24.30	202	17.77	602
11 EL 64	64.0	11	0.8	0.4	24.30	204	17.77	604
11 EL 56	56.0	11	0.7	0.4	24.30	206	17.77	606
11 EL 48	48.0	11	0.6	0.6	24.30	208	17.77	608
11 EL 44	44.0	11	0.6	0.6	24.30	210	17.77	610
11 EL 40	40.0	11	0.6	0.6	24.30	212	17.77	612
11 EL 36	36.0	11	0.6	0.6	24.30	214	17.77	614
11 EL 32	32.0	11	0.6	0.6	24.30	216	17.77	616
11 EL 28	28.0	11	0.6	0.7	24.30	218	17.77	618
11 EL 27	27.0	11	0.7	0.8	24.30	220	17.77	620
11 EL 24	24.0	11	0.7	0.8	24.30	222	17.77	622
11 EL 20	20.0	11	0.8	0.9	24.30	224	17.77	624
11 EL 18	18.0	11	0.8	1.0	24.30	226	17.77	626
11 EL 16	16.0	11	0.9	1.1	24.30	228	17.77	628
11 EL 14	14.0	11	0.9	1.1	24.30	230	17.77	630
16 EL 72	72.0	16	0.8	0.4	25.15	232	18.40	632
16 EL 64	64.0	16	0.8	0.4	25.15	234	18.40	634
16 EL 56	56.0	16	0.7	0.4	25.15	236	18.40	636
16 EL 48	48.0	16	0.6	0.6	25.15	238	18.40	638
16 EL 44	44.0	16	0.6	0.6	25.15	240	18.40	640
16 EL 40	40.0	16	0.6	0.6	25.15	242	18.40	642
16 EL 36	36.0	16	0.6	0.6	25.15	244	18.40	644
16 EL 32	32.0	16	0.6	0.6	25.15	246	18.40	646
16 EL 28	28.0	16	0.6	0.7	25.15	248	18.40	648
16 EL 27	27.0	16	0.7	0.8	25.15	250	18.40	650
16 EL 24	24.0	16	0.7	0.8	25.15	252	18.40	652
16 EL 20	20.0	16	0.8	0.9	25.15	254	18.40	654
16 EL 18	18.0	16	0.8	1.0	25.15	256	18.40	656
16 EL 16	16.0	16	0.9	1.1	25.15	258	18.40	658
16 EL 14	14.0	16	1.0	1.2	25.15	260	18.40	660
16 EL 13	13.0	16	1.0	1.3	25.15	262	18.40	662
16 EL 12	12.0	16	1.1	1.4	25.15	264	18.40	664
16 EL 11,5	11.5	16	1.1	1.5	25.15	266	18.40	666
16 EL 11	11.0	16	1.1	1.5	25.15	268	18.40	668
16 EL 10	10.0	16	1.1	1.5	25.15	270	18.40	670
16 EL 9	9.0	16	1.2	1.7	25.15	272	18.40	672
16 EL 8	8.0	16	1.2	1.6	25.15	274	18.40	674
22 EL 7	7.0	22	1.6	2.3	34.73	276	30.23	676
22 EL 6	6.0	22	1.6	2.3	34.73	278	30.23	678
22 EL 5	5.0	22	1.7	2.5	34.73	280	30.23	680
P						●		
M						●		○
K						●		●
N								●
S						○		○
H						○		
O								

→ v_c Page 45

Right hand internal thread turning insert

▲ Full profile



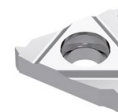
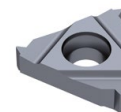
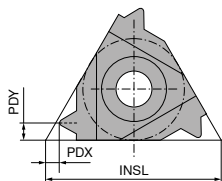
Designation	TPI 1/"	INSL mm	PDX mm	PDY mm	IR 71 268 ...		IR 71 268 ...		IR 71 268 ...	
					£ X3		£ X3		£ Y1	
11 IR 72	72.0	11	0.8	0.3	25.15	202			18.40	602
11 IR 64	64.0	11	0.8	0.4	25.15	204			18.40	604
11 IR 56	56.0	11	0.7	0.4	25.15	206			18.40	606
11 IR 48	48.0	11	0.6	0.6	25.15	208			18.40	608
11 IR 44	44.0	11	0.6	0.6	25.15	210			18.40	610
11 IR 40	40.0	11	0.6	0.6	25.15	212			18.40	612
11 IR 36	36.0	11	0.6	0.6	25.15	214			18.40	614
11 IR 32	32.0	11	0.6	0.6	25.15	216			18.40	616
11 IR 28	28.0	11	0.6	0.7	25.15	218			18.40	618
11 IR 27	27.0	11	0.7	0.8	25.15	220			18.40	620
11 IR 24	24.0	11	0.7	0.8	25.15	222			18.40	622
11 IR 20	20.0	11	0.8	0.9	25.15	224			18.40	624
11 IR 18	18.0	11	0.8	1.0	25.15	226			18.40	626
11 IR 16	16.0	11	0.9	1.1	25.15	228			18.40	628
11 IR 14	14.0	11	1.0	1.1	25.15	230			18.40	630
16 IR 72	72.0	16	0.8	0.3	25.15	232			18.40	632
16 IR 64	64.0	16	0.8	0.4	25.15	234			18.40	634
16 IR 56	56.0	16	0.7	0.4	25.15	236			18.40	636
16 IR 48	48.0	16	0.6	0.6	25.15	238			18.40	638
16 IR 44	44.0	16	0.6	0.6	25.15	240			18.40	640
16 IR 40	40.0	16	0.6	0.6	25.15	242			18.40	642
16 IR 36	36.0	16	0.6	0.6	25.15	244			18.40	644
16 IR 32	32.0	16	0.6	0.6	25.15	246			18.40	646
16 IR 28	28.0	16	0.6	0.7	25.15	248			18.40	648
16 IR 27	27.0	16	0.7	0.8	25.15	250			18.40	650
16 IR 24	24.0	16	0.7	0.8	25.15	252			18.40	652
16 IR 20	20.0	16	0.8	0.9	25.15	254			18.40	654
16 IR 18	18.0	16	0.8	1.0	25.15	256			18.40	656
16 IR 16	16.0	16	0.9	1.1	25.15	258			18.40	658
16 IR 14	14.0	16	1.0	1.2	25.15	260	26.20	760	18.40	660
16 IR 13	13.0	16	1.0	1.3	25.15	262			18.40	662
16 IR 12	12.0	16	1.1	1.4	25.15	264	21.97	764	18.40	664
16 IR 11,5	11.5	16	1.1	1.5	25.15	266			18.40	666
16 IR 11	11.0	16	1.1	1.5	25.15	268			18.40	668
16 IR 10	10.0	16	1.1	1.5	25.15	270			18.40	670
16 IR 9	9.0	16	1.2	1.7	25.15	272			18.40	672
16 IR 8	8.0	16	1.2	1.6	25.15	274			18.40	674
16 IR 8	8.0	16	1.1	1.5			26.20	774		
22 IR 7	7.0	22	1.6	2.3	34.73	276	34.29	776	30.23	676
22 IR 6	6.0	22	1.6	2.3	34.73	278			30.23	678
22 IR 5	5.0	22	1.7	2.5	34.73	280			30.23	680
22 IN 4,5	4.5	22	2.0	11.0	34.73	282 ¹⁾			30.23	682 ¹⁾
22 IN 4	4.0	22	2.0	11.0	34.73	284 ¹⁾			30.23	684 ¹⁾
P					●		○			
M					●		●		○	
K					●		○		●	
N							○		●	
S					○		○		○	
H					○		○			
O										

1) Neutral version (N) – for right and left hand thread applications. Neutral toolholder marked (U) is required.

→ v_c Page 45

Left hand internal thread turning insert

▲ Full profile

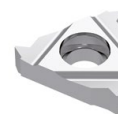
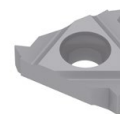
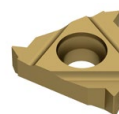
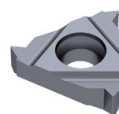
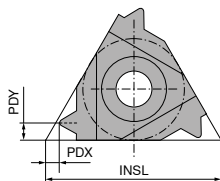


Designation	TPI 1/"	INSL mm	PDX mm	PDY mm	IL 71 270 ...		IL 71 270 ...	
					£ X3		£ Y1	
11 IL 72	72.0	11	0.8	0.3	25.15	202	18.40	602
11 IL 64	64.0	11	0.8	0.4	25.15	204	18.40	604
11 IL 56	56.0	11	0.7	0.4	25.15	206	18.40	606
11 IL 48	48.0	11	0.6	0.6	25.15	208	18.40	608
11 IL 44	44.0	11	0.6	0.6	25.15	210	18.40	610
11 IL 40	40.0	11	0.6	0.6	25.15	212	18.40	612
11 IL 36	36.0	11	0.6	0.6	25.15	214	18.40	614
11 IL 32	32.0	11	0.6	0.6	25.15	216	18.40	616
11 IL 28	28.0	11	0.6	0.7	25.15	218	18.40	618
11 IL 27	27.0	11	0.7	0.8	25.15	220	18.40	620
11 IL 24	24.0	11	0.7	0.8	25.15	222	18.40	622
11 IL 20	20.0	11	0.8	0.9	25.15	224	18.40	624
11 IL 18	18.0	11	0.8	1.0	25.15	226	18.40	626
11 IL 16	16.0	11	0.9	1.1	25.15	228	18.40	628
11 IL 14	14.0	11	0.9	1.1	25.15	230	18.40	630
16 IL 72	72.0	16	0.8	0.3	34.88	232	18.40	632
16 IL 64	64.0	16	0.8	0.4	25.15	234	18.40	634
16 IL 56	56.0	16	0.7	0.4	25.15	236	18.40	636
16 IL 48	48.0	16	0.6	0.6	25.15	238	18.40	638
16 IL 44	44.0	16	0.6	0.6	25.15	240	18.40	640
16 IL 40	40.0	16	0.6	0.6	25.15	242	18.40	642
16 IL 36	36.0	16	0.6	0.6	25.15	244	18.40	644
16 IL 32	32.0	16	0.6	0.6	25.15	246	18.40	646
16 IL 28	28.0	16	0.6	0.7	25.15	248	18.40	648
16 IL 27	27.0	16	0.7	0.8	25.15	250	18.40	650
16 IL 24	24.0	16	0.7	0.8	25.15	252	18.40	652
16 IL 20	20.0	16	0.8	0.9	25.15	254	18.40	654
16 IL 18	18.0	16	0.8	1.0	25.15	256	18.40	656
16 IL 16	16.0	16	0.9	1.1	25.15	258	18.40	658
16 IL 14	14.0	16	1.0	1.2	25.15	260	18.40	660
16 IL 13	13.0	16	1.0	1.3	25.15	262	18.40	662
16 IL 12	12.0	16	1.1	1.4	25.15	264	18.40	664
16 IL 11,5	11.5	16	1.1	1.5	25.15	266	18.40	666
16 IL 11	11.0	16	1.1	1.5	25.15	268	18.40	668
16 IL 10	10.0	16	1.1	1.5	25.15	270	18.40	670
16 IL 9	9.0	16	1.2	1.7	25.15	272	18.40	672
16 IL 8	8.0	16	1.2	1.6	25.15	274	18.40	674
22 IL 7	7.0	22	1.6	2.3	34.73	276	30.23	676
22 IL 6	6.0	22	1.6	2.3	34.73	278	30.23	678
22 IL 5	5.0	22	1.7	2.5	34.73	280	30.23	680
P						●		
M						●		○
K						●		●
N								●
S						○		○
H						○		
O								

→ v_c Page 45

Right hand external thread turning insert

▲ Full profile



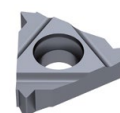
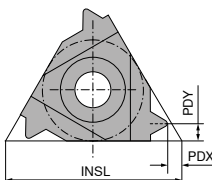
Designation	TPI 1/"	INSL mm	PDX mm	PDY mm	ER		ER		ER		ER	
					71 256 ...		71 256 ...		71 256 ...		71 256 ...	
					£ X3		£ X3		£ X3		£ Y1	
16 ER 27	27.0	16	0.7	0.8	27.75	240					22.23	640
16 ER 18	18.0	16	0.8	1.0	27.75	242			25.89	742	22.23	642
16 ER 14	14.0	16	0.9	1.2	27.75	244	21.70	144	23.81	744	22.23	644
16 ER 11,5	11.5	16	1.1	1.5	27.75	246	23.64	146	25.89	746	22.23	646
16 ER 8	8.0	16	1.3	1.8	27.75	248					22.23	648
P					●		●		○			
M					●		○		●		○	
K					●		●		○		●	
N							●		○		●	
S					○				○		○	
H					○				○			
O							○					

→ v_c Page 45

8

Left hand external thread turning insert

▲ Full profile



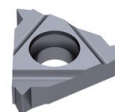
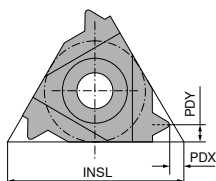
Designation	TPI 1/"	INSL mm	PDX mm	PDY mm	EL		EL	
					71 258 ...		71 258 ...	
					£ X3		£ Y1	
16 EL 27	27.0	16	0.7	0.8	27.75	240	22.23	640
16 EL 18	18.0	16	0.8	1.0	27.75	242	22.23	642
16 EL 14	14.0	16	0.9	1.2	27.75	244	22.23	644
16 EL 11,5	11.5	16	1.1	1.5	27.75	246	22.23	646
16 EL 8	8.0	16	1.3	1.8	27.75	248	22.23	648
P						●		
M						●		○
K						●		●
N								●
S						○		○
H						○		
O								

→ v_c Page 45

Right hand internal thread turning insert

▲ Full profile

▲ CCN7525 grade with sintered chip breaker for universal application

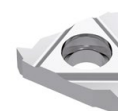
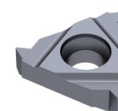
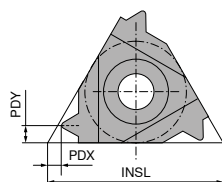


Designation	TPI 1/"	INSL mm	PDX mm	PDY mm	IR 71 260 ...		IR 71 260 ...		IR 71 260 ...	
					£ X3		£ Y1		£ X3	
11 IR 27	27.0	11	0.7	0.8	27.75	210	22.23	610		
11 IR 18	18.0	11	0.8	1.0	27.75	212	22.23	612		
11 IR 14	14.0	11	0.9	1.1	27.75	214	22.23	614		
16 IR 27	27.0	16	0.7	0.8	27.75	240	22.23	640		
16 IR 18	18.0	16	0.8	1.0	27.75	242	22.23	642		
16 IR 14	14.0	16	0.9	1.2	27.75	244	22.23	644	27.38	944
16 IR 11,5	11.5	16	1.1	1.5	27.75	246	22.23	646	30.68	946
16 IR 8	8.0	16	1.3	1.8	27.75	248	22.23	648		
P						●				●
M						●		○		●
K						●		●		●
N								●		
S						○		○		●
H						○				○
O										

→ v_c Page 45

Left hand internal thread turning insert

▲ Full profile



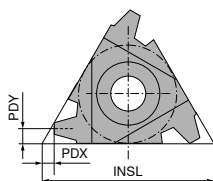
Designation	TPI 1/"	INSL mm	PDX mm	PDY mm	IL 71 262 ...		IL 71 262 ...	
					£ X3		£ Y1	
11 IL 27	27.0	11	0.7	0.8	27.75	210	22.23	610
11 IL 18	18.0	11	0.8	1.0	27.75	212	22.23	612
11 IL 14	14.0	11	0.9	1.1	27.75	214	22.23	614
16 IL 27	27.0	16	0.7	0.8	27.75	240	22.23	640
16 IL 18	18.0	16	0.8	1.0	27.75	242	22.23	642
16 IL 14	14.0	16	0.9	1.2	27.75	244	22.23	644
16 IL 11,5	11.5	16	1.1	1.5	27.75	246	22.23	646
16 IL 8	8.0	16	1.3	1.8	27.75	248	22.23	648
P						●		
M						●		○
K						●		●
N								●
S						○		○
H						○		
O								

→ v_c Page 45

Right hand external thread turning insert

▲ Full profile

▲ Trapezoidal thread DIN 103

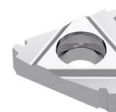
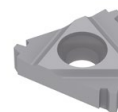
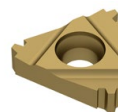
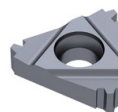


CCN20

CWN1525

HCN2525

CWK20



Designation	TP mm	INSL mm	PDX mm	PDY mm	ER 71 232 ...		ER 71 232 ...		ER 71 232 ...		ER 71 232 ...	
					£ X3		£ X3		£ X3		£ Y1	
16 ER 1,5	1.5	16	1.0	1.1	27.75	240					22.23	640
16 ER 2,0	2.0	16	1.1	1.3	27.75	242					22.23	642
16 ER 2,0	2.0	16	1.0	1.3			23.36	142	26.20	742	22.23	644
16 ER 3,0	3.0	16	1.3	1.5	27.75	244	22.87	144			22.23	644
22 ER 4,0	4.0	22	1.7	1.9	39.67	270					34.93	670
22 ER 4,0	4.0	22	1.8	1.9			32.04	170	36.31	770		
22 ER 5,0	5.0	22	2.0	2.4			35.55	172				
22 ER 5,0	5.0	22	2.1	2.5	39.67	272					34.93	672
22 ER 6,0	6.0	22	2.3	2.7	39.67	274					34.93	674
22 EN 6,0	6.0	22	2.0	11.0	39.67	276 ¹⁾					34.93	676 ¹⁾
22 EN 7,0	7.0	22	2.3	11.0	39.67	278 ¹⁾					34.93	678 ¹⁾
P						●		●		○		
M						●		○		●		○
K						●		○		○		●
N							●			○		●
S						○				○		○
H						○				○		
O								○				

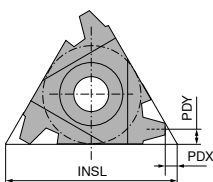
1) Neutral version (N) – for right and left hand thread applications. Neutral toolholder marked (U) is required.

→ v_c Page 45

Left hand external thread turning insert

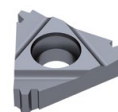
▲ Full profile

▲ Trapezoidal thread DIN 103



CCN20

CWK20



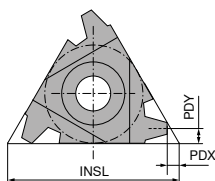
Designation	TP mm	INSL mm	PDX mm	PDY mm	EL 71 234 ...		EL 71 234 ...	
					£ X3		£ Y1	
16 EL 1,5	1.5	16	1.0	1.1	27.75	240	22.23	640
16 EL 2,0	2.0	16	1.1	1.3	27.75	242	22.23	642
16 EL 3,0	3.0	16	1.3	1.5	27.75	244	22.23	644
22 EL 4,0	4.0	22	1.7	1.9	39.67	270	34.93	670
22 EL 5,0	5.0	22	2.1	2.5	39.67	272	34.93	672
22 EL 6,0	6.0	22	2.3	2.7	39.67	274	34.93	674
P						●		
M						●		○
K						●		●
N								●
S						○		○
H						○		
O								

→ v_c Page 45

Right hand internal thread turning insert

▲ Full profile

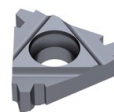
▲ Trapezoidal thread DIN 103



CCN20

CWN1525

CWK20



Designation	TP mm	INSL mm	PDX mm	PDY mm	IR 71 236 ...		IR 71 236 ...		IR 71 236 ...	
					£ X3		£ X3		£ Y1	
11 IR 1,5	1.5	11	0.815	0.9	27.75	210			22.23	610
16 IR 1,5	1.5	16	1.000	1.1	27.75	240			22.23	640
16 IR 2,0	2.0	16	1.100	1.3	27.75	242			22.23	642
16 IR 3,0	3.0	16	1.300	1.5	27.75	244	25.94	144	22.23	644
22 IR 4,0	4.0	22	1.800	1.9			36.24	170		
22 IR 4,0	4.0	22	1.700	1.9	39.67	270			34.93	670
22 IR 5,0	5.0	22	2.000	2.4			38.28	172		
22 IR 5,0	5.0	22	2.100	2.5	39.67	272			34.93	672
22 IR 6,0	6.0	22	2.300	2.7	39.67	274			34.93	674
22 IN 6,0	6.0	22	2.000	11.0	39.67	276 ¹⁾			34.93	676 ¹⁾
22 IN 7,0	7.0	22	2.300	11.0	39.67	278 ¹⁾			34.93	678 ¹⁾
P					●		●			
M					●		○		○	
K					●		●		●	
N							●		●	
S					○				○	
H					○					
O							○			

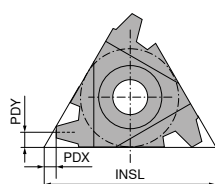
1) Neutral version (N) – for right and left hand thread applications. Neutral toolholder marked (U) is required.

→ v_c Page 45

Left hand internal thread turning insert

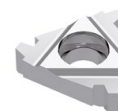
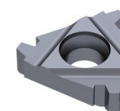
▲ Full profile

▲ Trapezoidal thread DIN 103



CCN20

CWK20



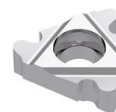
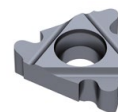
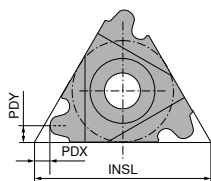
Designation	TP mm	INSL mm	PDX mm	PDY mm	IL 71 238 ...		IL 71 238 ...	
					£ X3		£ Y1	
11 IL 1,5	1.5	11	0.8	0.9	27.75	210	22.23	610
16 IL 1,5	1.5	16	1.0	1.1	27.75	240	22.23	640
16 IL 2,0	2.0	16	1.1	1.3	27.75	242	22.23	642
16 IL 3,0	3.0	16	1.3	1.5	27.75	244	22.23	644
22 IL 4,0	4.0	22	1.7	1.9	39.67	270	34.93	670
22 IL 5,0	5.0	22	2.1	2.5	39.67	272	34.93	672
22 IL 6,0	6.0	22	2.3	2.7	39.67	274	34.93	674
P					●			
M					●		○	
K					●		●	
N							●	
S					○		○	
H					○			
O								

→ v_c Page 45

Right hand external thread turning insert

▲ Full profile

▲ Round thread DIN 405



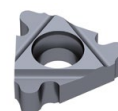
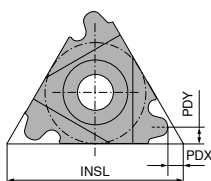
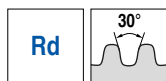
Designation	TPI 1/"	INSL mm	PDX mm	PDY mm	ER 71 248 ...		ER 71 248 ...	
					£ X3		£ Y1	
16 ER 10	10	16	1.1	1.2	27.75	240	22.23	640
16 ER 8	8	16	1.4	1.3	27.75	242	22.23	642
16 ER 6	6	16	1.5	1.7	27.75	246	22.23	646
22 ER 6	6	22	1.5	1.7	39.67	270	36.07	670
22 ER 4	4	22	2.2	2.3	39.67	272	36.07	672
P						●		
M						●		○
K						●		●
N								●
S						○		○
H						○		
O								

→ v_c Page 45

Left hand external thread turning insert

▲ Full profile

▲ Round thread DIN 405



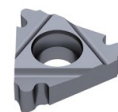
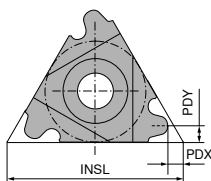
Designation	TPI 1/"	INSL mm	PDX mm	PDY mm	EL 71 250 ...		EL 71 250 ...	
					£ X3		£ Y1	
16 EL 10	10	16	1.1	1.2	27.75	240	22.23	640
16 EL 8	8	16	1.4	1.3	27.75	242	22.23	642
16 EL 6	6	16	1.5	1.7	27.75	246	22.23	646
22 EL 6	6	22	1.5	1.7	39.67	270	36.07	670
22 EL 4	4	22	2.2	2.3	39.67	272	36.07	672
P						●		
M						●		○
K						●		●
N								●
S						○		○
H						○		
O								

→ v_c Page 45

Right hand internal thread turning insert

▲ Full profile

▲ Round thread DIN 405



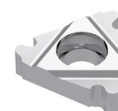
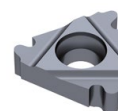
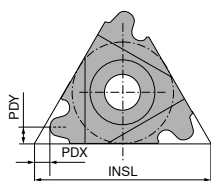
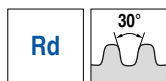
Designation	TPI 1/"	INS mm	PDX mm	PDY mm	IR 71 252 ...		IR 71 252 ...	
					£ X3		£ Y1	
16 IR 10	10	16	1.1	1.2	27.75	240	22.23	640
16 IR 8	8	16	1.4	1.4	27.75	242	22.23	642
16 IR 6	6	16	1.4	1.5	27.75	246	22.23	646
22 IR 6	6	22	1.5	1.7	39.67	270	36.07	670
22 IR 4	4	22	2.2	2.3	39.67	272	36.07	672
P						●		
M						●		○
K						●		●
N								●
S						○		○
H						○		
O								

→ v_c Page 45

Left hand internal thread turning insert

▲ Full profile

▲ Round thread DIN 405

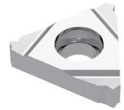
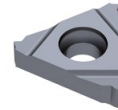
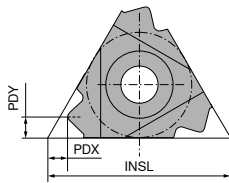
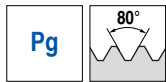


Designation	TPI 1/"	INS mm	PDX mm	PDY mm	IL 71 254 ...		IL 71 254 ...	
					£ X3		£ Y1	
16 IL 10	10	16	1.1	1.2	27.75	240	22.23	640
16 IL 8	8	16	1.4	1.4	27.75	242	22.23	642
16 IL 6	6	16	1.4	1.5	27.75	246	22.23	646
22 IL 6	6	22	1.5	1.7	39.67	270	36.07	670
22 IL 4	4	22	2.2	2.3	39.67	272	36.07	672
P						●		
M						●		○
K						●		●
N								●
S						○		○
H						○		
O								

→ v_c Page 45

Right hand external thread turning insert

- ▲ Full profile
- ▲ Conduit thread DIN 40430



Designation	TPI 1/"	INSL mm	PDX mm	PDY mm
16 ER 20	20	16	0.8	0.8
16 ER 18	18	16	0.8	0.9
16 ER 16	16	16	0.8	1.0

ER		ER	
71 240 ...		71 240 ...	
£		£	
X3		Y1	
27.75	240	22.23	640
27.75	242	22.23	642
27.75	244	22.23	644

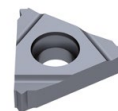
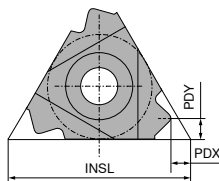
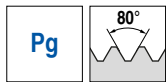
P	●	
M	●	○
K	●	●
N		●
S	○	○
H	○	
O		

→ v_c Page 45

8

Left hand external thread turning insert

- ▲ Full profile
- ▲ Conduit thread DIN 40430



Designation	TPI 1/"	INSL mm	PDX mm	PDY mm
16 EL 20	20	16	0.8	0.8
16 EL 18	18	16	0.8	0.9
16 EL 16	16	16	0.8	1.0

EL		EL	
71 242 ...		71 242 ...	
£		£	
X3		Y1	
27.75	240	22.23	640
27.75	242	22.23	642
27.75	244	22.23	644

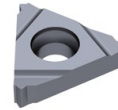
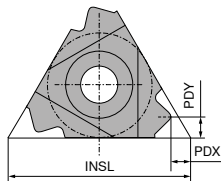
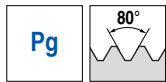
P	●	
M	●	○
K	●	●
N		●
S	○	○
H	○	
O		

→ v_c Page 45

Right hand internal thread turning insert

▲ Full profile

▲ Conduit thread DIN 40430



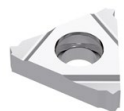
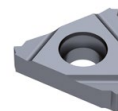
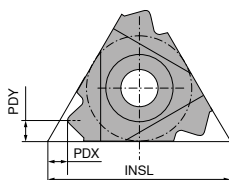
Designation	TPI 1/"	INSL mm	PDX mm	PDY mm	IR 71 244 ...		IR 71 244 ...	
					£ X3		£ Y1	
11 IR 18	18	11	0.8	0.9	27.75	238	22.23	638
16 IR 18	18	16	0.8	0.9	27.75	242	22.23	642
16 IR 16	16	16	0.8	1.0	27.75	244	22.23	644
P						●		
M						●		○
K						●		●
N								●
S						○		○
H						○		
O								

→ v_c Page 45

Left hand internal thread turning insert

▲ Full profile

▲ Conduit thread DIN 40430



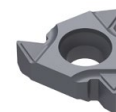
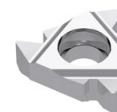
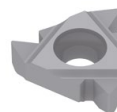
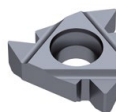
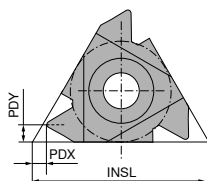
Designation	TPI 1/"	INSL mm	PDX mm	PDY mm	IL 71 246 ...		IL 71 246 ...	
					£ X3		£ Y1	
11 IL 18	18	11	0.8	0.9	27.75	238	22.23	638
16 IL 18	18	16	0.8	0.9	27.75	242	22.23	642
16 IL 16	16	16	0.8	1.0	27.75	244	22.23	644
P						●		
M						●		○
K						●		●
N								●
S						○		○
H						○		
O								

→ v_c Page 45

Right hand external thread turning insert

▲ Partial profile

▲ CCN7525 grade with sintered chip breaker for universal application



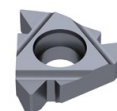
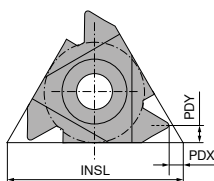
Designation	TP mm	INSL mm	PDX mm	PDY mm	ER 71 206 ...		ER 71 206 ...		ER 71 206 ...		ER 71 206 ...		ER 71 206 ...	
					£		£		£		£		£	
					X3		X3		X3		Y1		X3	
16 ER A60	0,5 - 1,5	16	0.8	0.9	25.15	240	17.21	140	18.69	740	18.40	640	18.69	940
16 ER G60	1,75 - 3	16	1.2	1.7	25.15	242	18.42	142	20.44	742	18.40	642	20.44	942
16 ER AG60	0,5 - 3	16	1.2	1.7	25.15	244	16.79	144	18.11	744	18.40	644	18.11	944
22 ER N60	3,5 - 5	22	1.7	2.5	34.73	270	31.27	170			30.23	670		
22 EN U60	5,5 - 8	22	0.9	11.0	34.73	272 ¹⁾					30.23	672 ¹⁾		
P					●		●		○				●	
M					●		○		●		○		●	
K					●		○		●		○		●	
N					○		●		○		●		○	
S					○		○		○		○		○	
H					○		○		○		○		○	
O							○						○	

1) Neutral version (N) – for right and left hand thread applications. Neutral toolholder marked (U) is required.

→ v_c Page 45

Left hand external thread turning insert

▲ Partial profile



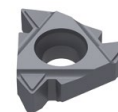
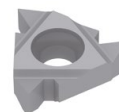
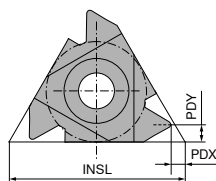
Designation	TP mm	INSL mm	PDX mm	PDY mm	EL 71 208 ...		EL 71 208 ...	
					£		£	
					X3		Y1	
16 EL A60	0,5 - 1,5	16	0.8	0.9	25.15	240	18.40	640
16 EL G60	1,75 - 3	16	1.2	1.7	25.15	242	18.40	642
16 EL AG60	0,5 - 3	16	1.2	1.7	25.15	244	18.40	644
22 EL N60	3,5 - 5	22	1.7	2.5	34.73	270	30.23	670
P						●		○
M						●		○
K						●		○
N						○		○
S						○		○
H						○		○
O								

→ v_c Page 45

Right hand internal thread turning insert

▲ Partial profile

▲ CCN7525 grade with sintered chip breaker for universal application



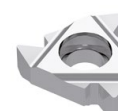
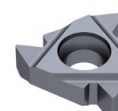
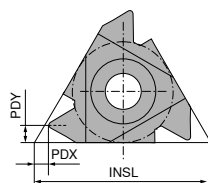
Designation	TP mm	INSL mm	PDX mm	PDY mm	IR 71 210 ...		IR 71 210 ...		IR 71 210 ...		IR 71 210 ...		IR 71 210 ...	
					£ X3		£ X3		£ X3		£ Y1		£ X3	
11 IR A60	0,5 - 1,5	11	0.8	0.9	25.15	210	17.37	110			18.40	610		
16 IR A60	0,5 - 1,5	16	0.8	0.9	25.15	240	22.75	140			18.40	640		
16 IR G60	1,75 - 3	16	1.2	1.7	25.15	242	18.42	142			18.40	642		
16 IR AG60	0,5 - 3	16	1.2	1.7	25.15	244	17.84	144	19.16	744	18.40	644	19.16	944
22 IR N60	3,5 - 5	22	1.7	2.5	34.73	270	30.04	170			30.23	670		
22 IN U60	5,5 - 8	22	0.9	11.0	34.73	272 ¹⁾					30.23	672 ¹⁾		
P					●		●		○				●	
M					●		○		●		○		●	
K					●		●		○		●		●	
N							●		○		●			
S					○				○		○		●	
H					○				○				○	
O							○						○	

1) Neutral version (N) – for right and left hand thread applications. Neutral toolholder marked (U) is required.

→ v_c Page 45

Left hand internal thread turning insert

▲ Partial profile



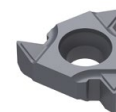
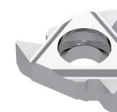
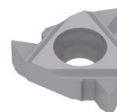
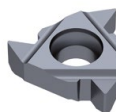
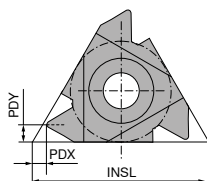
Designation	TP mm	INSL mm	PDX mm	PDY mm	IL 71 212 ...		IL 71 212 ...	
					£ X3		£ Y1	
11 IL A60	0,5 - 1,5	11	0.8	0.9	25.15	210	18.40	610
16 IL A60	0,5 - 1,5	16	0.8	0.9	25.15	240	18.40	640
16 IL G60	1,75 - 3	16	1.2	1.7	25.15	242	18.40	642
16 IL AG60	0,5 - 3	16	1.2	1.7	25.15	244	18.40	644
22 IL N60	3,5 - 5	22	1.7	2.5	34.73	270	28.92	670
P							●	
M							●	○
K							●	●
N								●
S							○	○
H							○	
O								

→ v_c Page 45

Right hand external thread turning insert

▲ Partial profile

▲ CCN7525 grade with sintered chip breaker for universal application



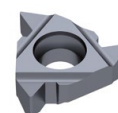
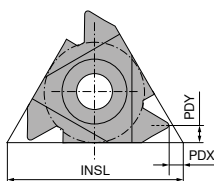
Designation	TPI 1/"	INSL mm	PDX mm	PDY mm	ER 71 200 ...		ER 71 200 ...		ER 71 200 ...		ER 71 200 ...		ER 71 200 ...	
					£ X3		£ X3		£ X3		£ Y1		£ X3	
16 ER A55	48 - 16	16	0.8	0.9	25.15	240	20.36	140	21.70	740	18.40	640	21.70	940
16 ER AG55	48 - 8	16	1.2	1.7	25.15	244	18.42	144	20.44	744	18.40	644	20.44	944
16 ER G55	14 - 8	16	1.2	1.7	25.15	242	20.36	142	22.43	742	18.40	642	22.43	942
22 ER N55	7 - 5	22	1.7	2.5	34.73	270	36.24	170	39.23	770	30.23	670		
22 EN U55	4,5 - 3,25	22	0.9	11.0	34.73	272 ¹⁾					30.23	672 ¹⁾		
P					●		●		○				●	
M					●		○		●		○		●	
K					●		○		○		●		●	
N							●		○		●			
S					○				○		○		○	
H					○				○				○	
O							○							

1) Neutral version (N) – for right and left hand thread applications. Neutral toolholder marked (U) is required.

→ v_c Page 45

Left hand external thread turning insert

▲ Partial profile



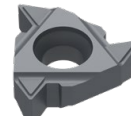
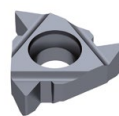
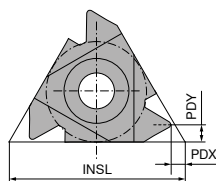
Designation	TPI 1/"	INSL mm	PDX mm	PDY mm	EL 71 202 ...		EL 71 202 ...	
					£ X3		£ Y1	
16 EL A55	48 - 16	16	0.8	0.9	25.15	240	18.40	640
16 EL AG55	48 - 8	16	1.2	1.7	25.15	244	18.40	644
16 EL G55	14 - 8	16	1.2	1.7	25.15	242	18.40	642
22 EL N55	7 - 5	22	1.7	2.5	34.73	270	30.23	670
P						●		
M						●		○
K						●		●
N								●
S						○		○
H						○		
O								

→ v_c Page 45

Right hand internal thread turning insert

▲ Partial profile

▲ CCN7525 grade with sintered chip breaker for universal application



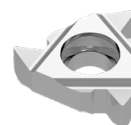
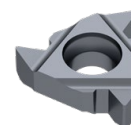
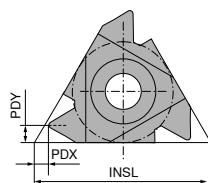
Designation	TPI 1/"	INSL mm	PDX mm	PDY mm	IR 71 204 ...		IR 71 204 ...		IR 71 204 ...		IR 71 204 ...	
					£ X3		£ X3		£ Y1		£ X3	
11 IR A55	48 - 16	11	0.8	0.9	25.15	210			18.40	610		
16 IR A55	48 - 16	16	0.8	0.9	25.15	240			18.40	640		
16 IR AG55	48 - 8	16	1.2	1.7	25.15	244			18.40	644		
16 IR G55	14 - 8	16	1.2	1.7	25.15	242	20.36	142	18.40	642	22.43	942
22 IR N55	7 - 5	22	1.7	2.5	34.73	270			30.23	670		
22 IN U55	4,5 - 3,25	22	0.9	11.0	34.73	272 ¹⁾			30.23	672 ¹⁾		
P						●		●				●
M						●		○		○		●
K						●		●		●		●
N								●		●		
S						○				○		●
H						○						○
O								○				

1) Neutral version (N) – for right and left hand thread applications. Neutral toolholder marked (U) is required.

→ v_c Page 45

Left hand internal thread turning insert

▲ Partial profile

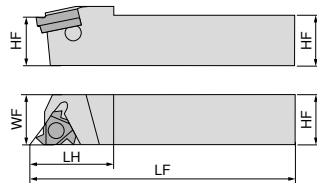


Designation	TPI 1/"	INSL mm	PDX mm	PDY mm	IL 71 203 ...		IL 71 203 ...	
					£ X3		£ Y1	
11 IL A55	48 - 16	11	0.8	0.9	23.25	210	18.40	610
16 IL A55	48 - 16	16	0.8	0.9	23.25	240	18.40	640
16 IL AG55	48 - 8	16	1.2	1.7	23.25	244	18.40	644
16 IL G55	14 - 8	16	1.2	1.7	23.25	242	18.40	642
22 IL N55	7 - 5	22	1.7	2.5	32.70	270	30.23	670
P						●		
M						●		○
K						●		●
N								●
S						○		○
H						○		
O								

→ v_c Page 45

Standard External Thread Turning Holder

▲ Tool Holder with Approach Angle $\beta = 1,5^\circ$



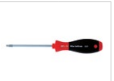
Illustrations show right-hand versions



Designation	HF mm	WF mm	LF mm	LH mm	Insert	torque moment Nm	Left-hand		Right-hand	
							71 281 ...		71 280 ...	
							£ Y2		£ Y2	
SE R/L 08 08 H11	8	11	100	16	11 ..	1,3	112.08	908 ²⁾	112.08	908 ²⁾
SE R/L 10 10 H11	10	12	100	18	11 ..	1,3	112.08	910 ²⁾	112.08	910 ²⁾
SE R/L 12 12 K11	12	12	125	20	11 ..	1,3	112.08	912 ²⁾	112.08	912 ²⁾
SE R/L 12 12 F16	12	16	80	22	16 ..	3,5	112.08	012	112.08	012
SE R/L 16 16 H16	16	16	100	25	16 ..	3,5	137.96	016	137.96	016
SE R/L 20 20 K16	20	20	125	30	16 ..	3,5	137.96	020	137.96	020
SE R/L 25 25 M16	25	25	150	30	16 ..	3,5	157.45	025	157.45	025
SE R/L 32 32 P16	32	32	170	30	16 ..	3,5	173.04	032	173.04	032
SE R/L 25 25 M22	25	25	150	32	22 ..	10	173.04	125	173.04	125
SE R 32 32 P22	32	32	170	34	22 ..	10			180.83	132
SE R 32 32 P22U	32	21	170	32	22 ..N	10			180.83	232 ¹⁾

1) Neutral insert indicated by marking (N)

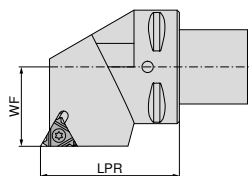
2) without shim

																					
71 950 ...				71 950 ...				71 950 ...				80 950 ...				71 950 ...					
Spare parts for Article no.		£ Y2				£ Y2				£ Y2				£ Y7				£ Y2			
71 280 908 / 71 281 908												T08				10.82	110	2.13	230		
71 280 910 / 71 281 910												T08				10.82	110	2.13	230		
71 280 912 / 71 281 912												T08				10.82	110	2.13	230		
71 280 012	ER 16 / IL 16	18.03	101	ER 16 / IL 16	14.66	121	2.07	234	T10	12.65	112	1.52	231								
71 281 012	EL 16 / IR 16	18.03	108	EL 16 / IR 16	14.66	129	2.07	234	T10	12.65	112	1.52	231								
71 280 016	ER 16 / IL 16	18.03	101	ER 16 / IL 16	14.66	121	2.07	234	T10	12.65	112	1.52	231								
71 281 016	EL 16 / IR 16	18.03	108	EL 16 / IR 16	14.66	129	2.07	234	T10	12.65	112	1.52	231								
71 280 020	ER 16 / IL 16	18.03	101	ER 16 / IL 16	14.66	121	2.07	234	T10	12.65	112	1.52	231								
71 281 020	EL 16 / IR 16	18.03	108	EL 16 / IR 16	14.66	129	2.07	234	T10	12.65	112	1.52	231								
71 280 025	ER 16 / IL 16	18.03	101	ER 16 / IL 16	14.66	121	2.07	234	T10	12.65	112	1.52	231								
71 281 025	EL 16 / IR 16	18.03	108	EL 16 / IR 16	14.66	129	2.07	234	T10	12.65	112	1.52	231								
71 280 032	ER 16 / IL 16	18.03	101	ER 16 / IL 16	14.66	121	2.07	234	T10	12.65	112	1.52	231								
71 281 032	EL 16 / IR 16	18.03	108	EL 16 / IR 16	14.66	129	2.07	234	T10	12.65	112	1.52	231								
71 280 125	ER 22 / IL 22	24.84	110	ER 22 / IL 22	23.36	137	2.56	235	T20	13.77	114	2.56	232								
71 281 125	EL 22 / IR 22	24.84	115	EL 22 / IR 22	23.36	145	2.56	235	T20	13.77	114	2.56	232								
71 280 132				ER 22 / IL 22	23.36	137	2.56	235	T20	13.77	114	2.56	232								
71 280 232				ER 22U / IL 22U	23.36	153	2.56	235	T20	13.77	114	2.56	232								



Shims for correction of helix angle see page → Page 42.

External threading holder



Illustrations show right-hand versions

ISO designation	Adapter	LPR mm	WF mm	Insert	torque moment Nm	Left-hand 84 191 ...		Right-hand 84 190 ...	
						£ Y8		£ Y8	
PSC40 SE R/L 27050-16.IK	PSC 40	50	27	16 ..	3,5	383.49	412	383.49	412
PSC40 SE R/L 27050-22.IK	PSC 40	50	27	22 ..	10	383.49	422	383.49	422
PSC50 SE R/L 35060-16.IK	PSC 50	60	35	16 ..	3,5	423.17	512	423.17	512
PSC50 SE R/L 35060-22.IK	PSC 50	60	35	22 ..	10	423.17	522	423.17	522
PSC63 SE R/L 45065-16.IK	PSC 63	65	45	16 ..	3,5	485.73	612	485.73	612
PSC63 SE R/L 45065-22.IK	PSC 63	65	45	22 ..	10	485.73	622	485.73	622
PSC80 SE R/L 55080-22.IK	PSC 80	80	55	22 ..	10	512.80	822	512.80	822

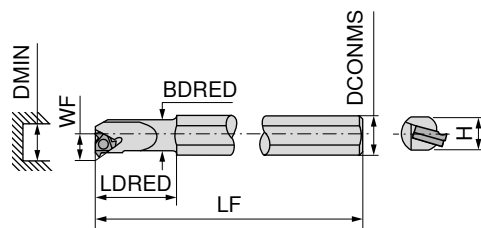
Spare parts for Article no.	Multi tooth shim		Shim		Screw-U		Key D		Clamping screw	
	£ Y2		£ Y2		£ Y2		£ Y7		£ Y2	
84 190 412	18.03	101	14.66	121	2.07	234	12.65	112	1.52	231
84 191 412	18.03	108	14.66	129	2.07	234	12.65	112	1.52	231
84 190 422	24.84	110	23.36	137	2.56	235	13.77	114	2.56	232
84 191 422	24.84	115	23.36	145	2.56	235	13.77	114	2.56	232
84 190 512	18.03	101	14.66	121	2.07	234	12.65	112	1.52	231
84 191 512	18.03	108	14.66	129	2.07	234	12.65	112	1.52	231
84 190 522	24.84	110	23.36	137	2.56	235	13.77	114	2.56	232
84 191 522	24.84	115	23.36	145	2.56	235	13.77	114	2.56	232
84 190 612	18.03	101	14.66	121	2.07	234	12.65	112	1.52	231
84 191 612	18.03	108	14.66	129	2.07	234	12.65	112	1.52	231
84 190 622	24.84	110	23.36	137	2.56	235	13.77	114	2.56	232
84 191 622	24.84	115	23.36	145	2.56	235	13.77	114	2.56	232
84 190 822	24.84	110	23.36	137	2.56	235	13.77	114	2.56	232
84 191 822	24.84	115	23.36	145	2.56	235	13.77	114	2.56	232



Shims for correction of helix angle see page → Page 42.

Standard Internal Thread Turning Holder

▲ Tool Holder with Approach Angle $\beta = 1,5^\circ$



Illustrations show right-hand versions



Designation	H mm	LF mm	LDRED mm	DCONMS mm	BDRED mm	WF mm	DMIN mm	Insert	torque moment Nm	Left-hand		Right-hand	
										71 283 ...		71 282 ...	
SI R 0010 H11	9.0	100	25	10	9.5	7.4	12	11 ..	1,3	£ Y2		£ Y2	
SI R/L 0010 K11	14.0	125	25	16	10.0	7.4	12	11 ..	1,3	120.80	010 ¹⁾	120.80	010 ¹⁾
SI R 0013 L11	14.0	140	32	16	12.0	8.9	15	11 ..	1,3			129.39	013 ¹⁾
SI R/L 0013 M16	14.0	150	32	16	13.0	10.2	16	16 ..	3,5	131.57	015 ¹⁾	131.57	015 ¹⁾
SI R/L 0016 P16	18.0	170	40	20	15.0	11.7	19	16 ..	3,5	131.57	016 ¹⁾	131.57	016 ¹⁾
SI R/L 0020 P16	18.0	170	40	20	19.5	13.7	24	16 ..	3,5	155.11	020	155.11	020
SI R 0025 R16	22.6	200	40	25	24.5	16.2	29	16 ..	3,5			188.62	026
SI R/L 0032 S16	28.8	250	50	32	31.5	19.7	36	16 ..	3,5	202.65	032	202.65	032
SI R 0040 T16	36.0	300	50	40	39.5	23.7	44	16 ..	3,5			300.86	040
SI R 0020 P22	18.0	170	40	20	19.5	15.6	24	22 ..	10			146.70	120 ¹⁾
SI R/L 0025 R22	22.6	200	40	25	24.5	18.1	29	22 ..	10	188.62	126	188.62	126
SI R 0032 S22	28.8	250	50	32	31.5	21.6	38	22 ..	10			208.88	132
SI R 0040 T22	36.0	300	60	40	39.5	25.6	46	22 ..	10			308.65	140
SI R 0032 S22U	28.8	250	60	32	31.5	24.4	38	22 .N	10			184.58	133 ²⁾

1) without shim

2) Neutral insert indicated by marking (N)



Multi tooth shim



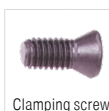
Shim



Screw-U



Key D

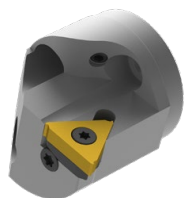


Clamping screw

	71 950 ...			71 950 ...			71 950 ...			80 950 ...			71 950 ...	
Spare parts for Article no.	£ Y2			£ Y2			£ Y2			£ Y7			£ Y2	
71 282 011										T08	10.82	110	2.13	230
71 282 010 / 71 283 010										T08	10.82	110	2.13	230
71 282 013										T08	10.82	110	2.13	230
71 282 015 / 71 283 015										T10	12.65	112	2.35	236
71 282 016 / 71 283 016										T10	12.65	112	2.35	236
71 282 020	EL 16 / IR 16	18.03	108	EL 16 / IR 16	14.66	129	2.07	234	T10	12.65	112	1.52	231	231
71 283 020	ER 16 / IL 16	18.03	101	ER 16 / IL 16	14.66	121	2.07	234	T10	12.65	112	1.52	231	231
71 282 026	EL 16 / IR 16	18.03	108	EL 16 / IR 16	14.66	129	2.07	234	T10	12.65	112	1.52	231	231
71 282 032	EL 16 / IR 16	18.03	108	EL 16 / IR 16	14.66	129	2.07	234	T10	12.65	112	1.52	231	231
71 283 032	ER 16 / IL 16	18.03	101	ER 16 / IL 16	14.66	121	2.07	234	T10	12.65	112	1.52	231	231
71 282 040	EL 16 / IR 16	18.03	108	EL 16 / IR 16	14.66	129	2.07	234	T10	12.65	112	1.52	231	231
71 282 120							2.07	234	T20	13.77	114	2.52	237	237
71 282 126	EL 22 / IR 22	24.84	115	EL 22 / IR 22	23.36	145	2.56	235	T20	13.77	114	2.56	232	232
71 283 126	ER 22 / IL 22	24.84	110	ER 22 / IL 22	23.36	137	2.56	235	T20	13.77	114	2.56	232	232
71 282 132	EL 22 / IR 22	24.84	115	EL 22 / IR 22	23.36	145	2.56	235	T20	13.77	114	2.56	232	232
71 282 140	EL 22 / IR 22	24.84	115	EL 22 / IR 22	23.36	145	2.56	235	T20	13.77	114	2.56	232	232
71 282 133				AL 22U / IR 22U	23.36	161	2.56	235				2.56	232	232



Shims for correction of helix angle see page → Page 42.



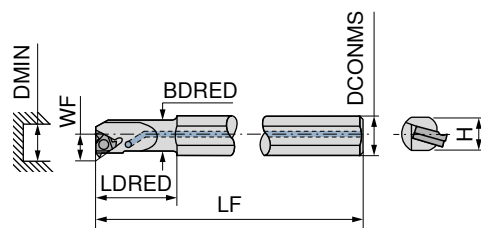
Have you seen our new exchangeable head system?

Use our standard thread turning inserts with the new exchangeable head system.

Further information and products can be found in the → Chapter 9 – Turning Tools

Standard Internal Thread Turning Holder with thro' coolant

▲ Tool Holder with Approach Angle $\beta = 1,5^\circ$



Illustrations show right-hand versions



Designation	H mm	LF mm	LDRED mm	DCONMS mm	BDRED mm	WF mm	DMIN mm	Insert	torque moment Nm	Left-hand 71 283 ...		Right-hand 71 282 ...	
										£ Y2		£ Y2	
SI R 0010 M11CB	9.0	150	25	10	9.5	7.4	12	11 ..	1,3			494.14	510 ²⁾
SI R 0012 P11CB	11.0	170	30	12	11.5	8.4	15	11 ..	1,3			525.33	512 ²⁾
SI R/L 0010 K11B	14.0	125	25	16	10.0	7.4	12	11 ..	1,3	144.66	310	144.66	310
SI R/L 0013 M16B	14.0	150	32	16	13.0	10.2	16	16 ..	3,5	157.45	315	157.45	315
SI R 0016 P16B	18.0	170	40	20	16.0	11.7	19	16 ..	3,5			157.45	316
SI R 0020 P16B	18.0	170	40	20	19.5	13.7	24	16 ..	3,5			185.48	320 ¹⁾
SI R/L 0032 S16B	28.8	250	50	32	31.5	19.7	36	16 ..	3,5	229.14	332 ¹⁾	229.14	332 ¹⁾

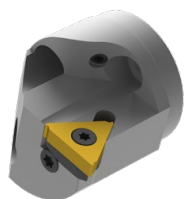
1) with shim seat

2) Carbide version

 Multi tooth shim				 Shim				 Screw-U				 Key D				 Clamping screw							
71 950 ...				71 950 ...				71 950 ...				80 950 ...				71 950 ...							
Spare parts for Article no.				£ Y2				£ Y2				£ Y2				£ Y7				£ Y2			
71 282 510												T08				10.82 110 2.13 230							
71 282 512												T08				10.82 110 2.13 230							
71 282 310 / 71 283 310												T08				10.82 110 2.13 230							
71 282 315 / 71 283 315												T10				12.65 112 2.35 236							
71 282 316												T10				12.65 112 2.35 236							
71 282 320				EL 16 / IR 16 18.03 108				EL 16 / IR 16 14.66 129				2.07 234				T10 12.65 112 1.52 231							
71 282 332				EL 16 / IR 16 18.03 108				EL 16 / IR 16 14.66 129				2.07 234				T10 12.65 112 1.52 231							
71 283 332				ER 16 / IL 16 18.03 101				ER 16 / IL 16 14.66 121				2.07 234				T10 12.65 112 1.52 231							



Shims for correction of helix angle see page → **Page 42.**

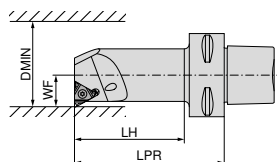


Have you seen our new exchangeable head system?

Use our standard thread turning inserts with the new exchangeable head system.

Further information and products can be found in the → **Chapter 9 – Turning Tools**

Internal threading holder



Illustrations show right-hand versions

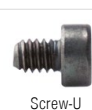
ISO designation	Adapter	WF mm	LPR mm	LH mm	DMIN mm	Insert	torque moment Nm	Left-hand 84 197 ...		Right-hand 84 196 ...	
								£ Y8		£ Y8	
PSC40 SI R/L 12060-16.IK	PSC 40	12	60	37	20	16 ..	3,5	535.71	410	535.71	410
PSC40 SI R/L 14060-16.IK	PSC 40	14	60	38	25	16 ..	3,5	535.71	412	535.71	412
PSC40 SI R/L 17070-16.IK	PSC 40	17	70	48	32	16 ..	3,5	535.71	414	535.71	414
PSC40 SI R/L 22090-16.IK	PSC 40	22	90	69	40	16 ..	3,5	535.71	416	535.71	416
PSC40 SI R/L 27080-16.IK	PSC 40	27	80	60	50	16 ..	3,5	535.71	418	535.71	418
PSC40 SI R/L 15065-22.IK	PSC 40	15	65	42	25	22 ..	10	535.71	420	535.71	420
PSC40 SI R/L 19070-22.IK	PSC 40	19	70	48	32	22 ..	10	535.71	422	535.71	422
PSC40 SI R/L 22090-22.IK	PSC 40	22	90	69	40	22 ..	10	535.71	424	535.71	424
PSC40 SI R/L 27080-22.IK	PSC 40	27	80	60	50	22 ..	10	535.71	426	535.71	426
PSC50 SI R/L 12060-16.IK	PSC 50	12	60	35	20	16 ..	3,5	596.18	510	596.18	510
PSC50 SI R/L 14060-16.IK	PSC 50	14	60	36	25	16 ..	3,5	596.18	512	596.18	512
PSC50 SI R/L 17070-16.IK	PSC 50	17	70	47	32	16 ..	3,5	596.18	514	596.18	514
PSC50 SI R/L 22090-16.IK	PSC 50	22	90	68	40	16 ..	3,5	596.18	516	596.18	516
PSC50 SI R/L 27105-16.IK	PSC 50	27	105	84	50	16 ..	3,5	596.18	518	596.18	518
PSC50 SI R/L 15065-22.IK	PSC 50	15	65	41	25	22 ..	10	596.18	520	596.18	520
PSC50 SI R/L 19070-22.IK	PSC 50	19	70	47	32	22 ..	10	596.18	522	596.18	522
PSC50 SI R/L 22090-22.IK	PSC 50	22	90	68	40	22 ..	10	596.18	524	596.18	524
PSC50 SI R/L 27105-22.IK	PSC 50	27	105	84	50	22 ..	10	596.18	526	596.18	526
PSC63 SI R/L 14070-16.IK	PSC 63	14	70	42	25	16 ..	3,5	685.81	610	685.81	610
PSC63 SI R/L 17075-16.IK	PSC 63	17	75	48	32	16 ..	3,5	685.81	612	685.81	612
PSC63 SI R/L 22090-16.IK	PSC 63	22	90	64	40	16 ..	3,5	685.81	614	685.81	614
PSC63 SI R/L 27105-16.IK	PSC 63	27	105	80	50	16 ..	3,5	685.81	616	685.81	616
PSC63 SI R/L 19075-22.IK	PSC 63	19	75	48	32	22 ..	10	685.81	620	685.81	620
PSC63 SI R/L 22090-22.IK	PSC 63	22	90	64	40	22 ..	10	685.81	622	685.81	622
PSC63 SI R/L 27105-22.IK	PSC 63	27	105	80	50	22 ..	10	685.81	624	685.81	624



Multi tooth shim



Shim



Screw-U



Key D

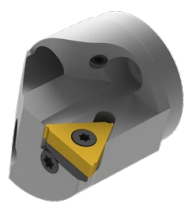


Clamping screw

		71 950 ...			71 950 ...			71 950 ...		80 950 ...			71 950 ...		
Spare parts			£			£				£			£		
Insert	R/L/N		Y2			Y2				Y7			Y2		
16 ..	Right-hand	EL 16 / IR 16	18.03	108	EL 16 / IR 16	14.66	129		2.07	234	T10	12.65	112	1.52	231
16 ..	Left-hand	ER 16 / IL 16	18.03	101	ER 16 / IL 16	14.66	121		2.07	234	T10	12.65	112	1.52	231
22 ..	Left-hand	ER 22 / IL 22	24.84	110	ER 22 / IL 22	23.36	137		2.56	235	T20	13.77	114	2.56	232
22 ..	Right-hand	EL 22 / IR 22	24.84	115	EL 22 / IR 22	23.36	145		2.56	235	T20	13.77	114	2.56	232



Shims for correction of helix angle see page → Page 42.



Have you seen our new exchangeable head system?

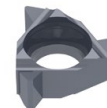
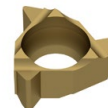
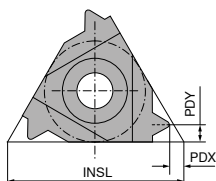
Use our standard thread turning inserts with the new exchangeable head system.

Further information and products can be found in the → Chapter 9 – Turning Tools

Right hand internal thread turning insert – Mini size 06

▲ Full profile

▲ Thread production from diameter 6 mm



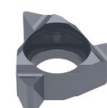
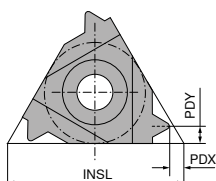
Designation	TP mm	PDX mm	PDY mm	INSL mm	IR 71 271 ...		IR 71 224 ...	
					£ X3		£ X3	
06 IR 0,5	0.50	0.9	0.5	6	23.94	110	27.90	35700
06 IR 0,75	0.75	0.8	0.5	6	23.94	112	27.90	36100
06 IR 1,0	1.00	0.7	0.6	6	23.94	114	26.26	36500
06 IR 1,25	1.25	0.6	0.6	6	23.94	116	27.90	36700
P						●		○
M						●		●
K						●		○
N						○		
S								●
H								○
O						○		

→ v_c Page 45

Right hand internal thread turning insert – Mini size 06

▲ Full profile

▲ Thread production from diameter 6 mm



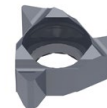
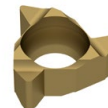
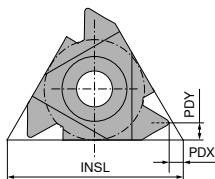
Designation	TPI 1/"	PDX mm	PDY mm	INSL mm	IR 71 230 ...		IR 71 230 ...	
					£ X3		£ X3	
06 IR 26	26	0.7	0.6	6	23.94	13500	27.90	33500
06 IR 22	22	0.6	0.6	6	23.94	13100	27.90	33100
06 IR 20	20	0.6	0.7	6	23.94	12900	27.90	32900
06 IR 18	18	0.6	0.7	6	23.94	12500	27.90	32500
P						●		○
M						●		●
K						●		○
N						○		
S								●
H								○
O						○		

→ v_c Page 45

Right hand internal thread turning insert – Mini size 06

▲ Partial profile

▲ Thread production from diameter 6 mm



Designation	TP mm	INSL mm	PDX mm	PDY mm	IR 71 274 ...		IR 71 272 ...	
					£ X3		£ X3	
06 IR A60	0,5 - 1,25	6	0.6	0.6	23.94	210	27.90	30000
P						●		○
M						●		●
K						●		○
N						○		
S								●
H								○
O						○		

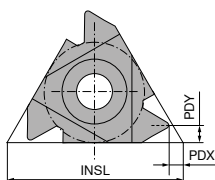
→ v_c Page 45

8

Right hand internal thread turning insert – Mini size 06

▲ Partial profile

▲ Thread production from diameter 6 mm



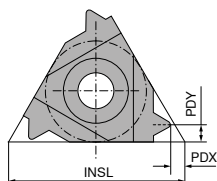
Designation	TPI 1/"	INSL mm	PDX mm	PDY mm	IR 71 272 ...		IR 71 272 ...	
					£ X3		£ X3	
06 IR A55	48 - 20	6	0.5	0.6	23.94	10100	27.90	30100
P						●		○
M						●		●
K						●		○
N						○		
S								●
H								○
O						○		

→ v_c Page 45

Right hand internal thread turning insert – Mini size 08

▲ Full profile

▲ Thread production from diameter 8 mm



Designation	TP mm	PDX mm	PDY mm	INSL mm
08 IR 0,5	0.50	0.6	0.5	8
08 IR 0,75	0.75	0.6	0.5	8
08 IR 1,0	1.00	0.6	0.6	8
08 IR 1,25	1.25	0.6	0.7	8
08 IR 1,5	1.50	0.6	0.7	8
08 IR 1,75	1.75	0.6	0.8	8
08 IN 2,0	2.00	0.9	4.0	8

IR	71 224 ...	IR	71 224 ...
£		£	
X3		X3	
27.90	14300	27.90	34300
27.90	13700	27.90	33700
27.90	13300	26.26	33300
27.90	13100	27.90	33100
27.90	12900	26.26	32900
27.90	12700	27.90	32700
27.90	12500 ¹⁾	33.39	32500 ¹⁾

P	●	○
M	●	●
K	●	○
N	○	
S		●
H		○
O	○	

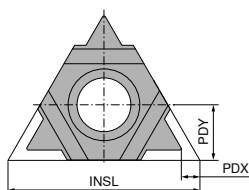
1) Neutral version (N)

→ v_c Page 45

Neutral internal thread turning insert – Mini size 08

▲ Partial profile

▲ Thread production from diameter 8 mm



Designation	TP mm	INSL mm	PDX mm	PDY mm
08 IN M60	1,75 - 2,0	8	0.8	4

IN	71 273 ...	IN	71 273 ...
£		£	
X3		X3	
27.90	10800	33.39	30800

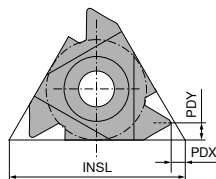
P	●	○
M	●	●
K	●	○
N	○	
S		●
H		○
O	○	

→ v_c Page 45

Right hand internal thread turning insert – Mini size 08

▲ Partial profile

▲ Thread production from diameter 8 mm



Designation	TP mm	PDX mm	PDY mm	INSL mm	IR 71 272 ...		IR 71 272 ...	
					£ X3		£ X3	
08 IR A60	0,5 - 1,25	0.6	0.6	8	27.90	10600	27.90	30600
08 IR A60	0,5 - 1,5	0.6	0.7	8				
P						●		○
M						●		●
K						●		○
N						○		○
S								●
H								○
O						○		

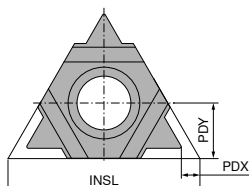
→ v_c Page 45

8

Neutral internal thread turning insert – Mini size 08

▲ Partial profile

▲ Thread production from diameter 8 mm

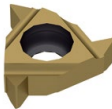
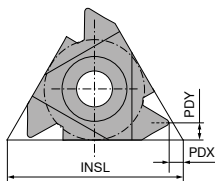


Designation	TPI 1/"	INSL mm	PDX mm	PDY mm	IN 71 273 ...		IN 71 273 ...	
					£ X3		£ X3	
08 IN M55	14 - 11	8	0.9	4	27.90	10900	33.39	30900
P						●		○
M						●		●
K						●		○
N						○		○
S								●
H								○
O						○		

→ v_c Page 45

Right hand internal thread turning insert – Mini size 08

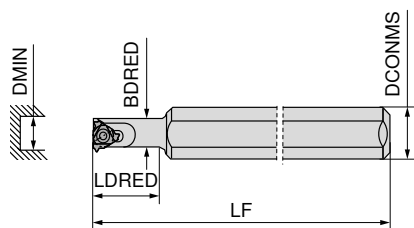
- ▲ Partial profile
- ▲ Thread production from diameter 8 mm



Designation	TPI 1/"	INSL mm	PDX mm	PDY mm	IR		IR	
					71 272 ...		71 272 ...	
08 IR A55	48 - 16	8	0.6	0.7	£ X3 27.90	10700	£ X3 27.90	30700
P					●		○	
M					●		●	
K					●		○	
N					○			
S							●	
H							○	
O					○			

→ v_c Page 45

Right Hand Internal Thread Holder – Mini size 06



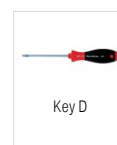
NEW
Right-hand

71 282 ...

Designation	LF mm	LDRED mm	DCONMS mm	BDRED mm	DMIN mm	Insert	torque moment Nm
SI R 0005 H06	100	12	12	5.1	6	06 ..	0,6
SI R 0005 H06 C	100	26	6	5.1	6	06 ..	0,6

£
Y2
200.21 00500
356.97 10500¹⁾

1) Solid Carbide Shank with Thro' Coolant



Key D



Clamping screw

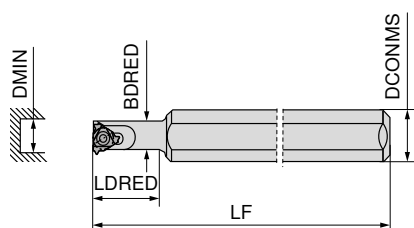
Spare parts
for Article no.

71 282 00500
71 282 10500

	80 950 ...	71 950 ...
	£ Y7	£ Y2
T06	11.71 108	1.95 23800
T06	11.71 108	1.95 23800

8

Right Hand Internal Thread Holder – Mini size 08



NEW
Right-hand

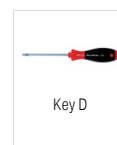
71 282 ...

Designation	LF mm	LDRED mm	DCONMS mm	BDRED mm	DMIN mm	Insert	torque moment Nm
SI R 0007 K08	125	18	16	6.6	7.8	08 ..	0,6
SI R 0007 K08C	125	30	8	6.6	7.8	08 ..	0,6
SI R 0007 K08U	125	31	16	7.3	9.0	08 .N	0,6

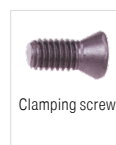
£
Y2
200.21 00700
405.12 10700²⁾
227.86 00800¹⁾

1) Neutral insert indicated by marking (N)

2) Solid Carbide Shank with Thro' Coolant



Key D



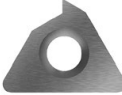
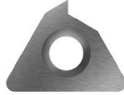
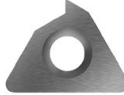
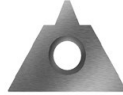
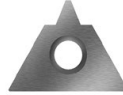
Clamping screw

Spare parts
for Article no.

71 282 00700
71 282 10700
71 282 00800

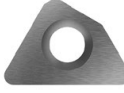
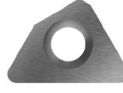
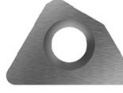
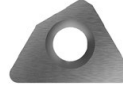
	80 950 ...	71 950 ...
	£ Y7	£ Y2
T06	11.71 108	2.06 23900
T06	11.71 108	2.06 23900
T06	11.71 108	2.06 23900

Shims for Standard Threading Inserts

												
	AE 16 ER 16 / IL 16		AI 16 EL 16 / IR 16		AE 22 ER 22 / IL 22		AI 22 EL 22 / IR 22		AE 22 U ER 22 / IL 22		AI 22 U EL 22 / IR 22	
Pitch-angle β	71 950 ...		71 950 ...		71 950 ...		71 950 ...		71 950 ...		71 950 ...	
	£		£		£		£		£		£	
	Y2		Y2		Y2		Y2		Y2		Y2	
+ 4,5°	14.23	118	14.23	126	22.67	134	22.67	142	23.36	150 ¹⁾	23.36	158 ¹⁾
+ 3,5°	14.23	119	14.23	127	22.67	135	22.67	143	23.36	151 ¹⁾	23.36	159 ¹⁾
+ 2,5°	14.23	120	14.23	128	22.67	136	22.67	144	23.36	152 ¹⁾	23.36	160 ¹⁾
+ 1,5°	14.66	121	14.66	129	23.36	137	23.36	145	23.36	153 ¹⁾	23.36	161 ¹⁾
+ 0,5°	14.23	122	14.23	130	22.67	138	22.67	146	23.36	154 ¹⁾	23.36	162 ¹⁾
0°	14.23	123	14.23	131	22.67	139	22.67	147				
- 0,5°	14.23	124	14.23	132	22.67	140	22.67	148	23.36	156 ¹⁾	23.36	164 ¹⁾
- 1,5°	14.23	125	14.23	133	22.67	141	22.67	149	23.36	157 ¹⁾	23.36	165 ¹⁾

1) Neutral version for tool holder identified by (U).

Shims for Multi-Tooth Threading Inserts

								
	AE 16 M ER 16 / IL 16		AI 16 M EL 16 / IR 16		AE 22 M ER 22 / IL 22		AI 22 M EL 22 / IR 22	
Pitch-angle β	71 950 ...		71 950 ...		71 950 ...		71 950 ...	
	£		£		£		£	
	Y2		Y2		Y2		Y2	
+ 1,5°	18.03	101	18.03	108	24.84	110	24.84	115

Pitch angle

Important Information about Standard Shims

- ▲ the pitch angle should be determined through calculation or by using the chart below.
- ▲ the standard threading holder is supplied with a 1.5° inclined insert seat and a shim without angular correction.
Hence the Tool holders are delivered with an angle of inclination β of 1.5°.

Without the appropriate correction of the helix angle, the following may occur

- ▲ the profile will be distorted.
- ▲ insufficient clearance angle.
- ▲ the tool life of the insert is greatly reduced.

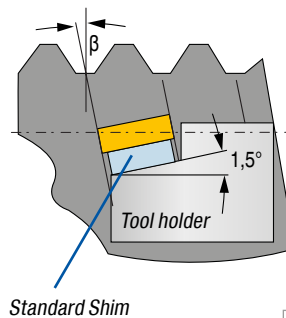


Method 1: Calculation

Calculating the helix angle β :

$$\beta = \frac{20 \times TP}{DMIN}$$

20 = constant
 β = Helix angle (°)
 TP = Pitch (mm)
 DMIN = Nominal diameter (mm)



Example calculation

External thread M24 x 1.5

Feed towards chuck

DMIN = Nominal Ø: M24 = 24 mm

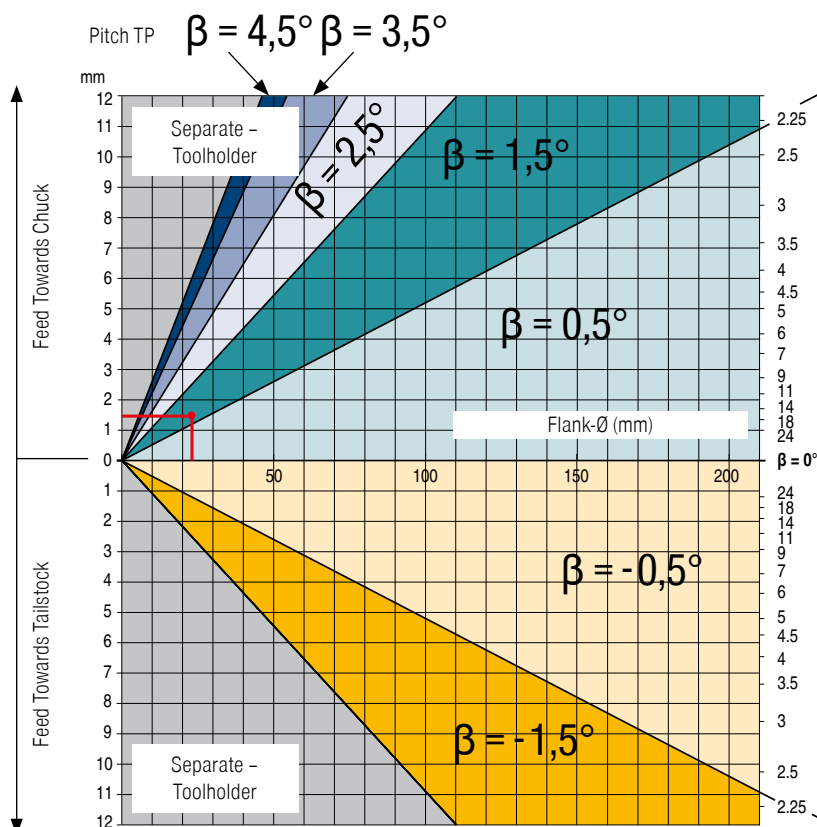
TP = Pitch: 1.5 mm

$$\beta = \frac{20 \times 1,5 \text{ mm}}{24 \text{ mm}}$$

$$\beta = 1,25^\circ$$

Method 2: Diagram

From the flank Ø in the diagram, a line is drawn vertically upwards until it intersects with the line of the pitch of the thread to be produced. In the color-coded region in which it is now, a horizontal line to the edge of the chart indicates the appropriate factor.



calculated pitch angle β value	Shim
0,0°–0,99°	0,5°
1,0°–1,99°	1,5°
2,0°–2,99°	2,5°
3,0°–3,99°	3,5°
4,0°–4,99°	4,5°
0,0°–(-0,99°)	-0,5°
-1,0°–(-1,99°)	-1,5°

Material examples for cutting data tables

	Material sub-group	Index	Composition / Structure / Heat treatment		Tensile strength N/mm ² / HB / HRC	Material number	Material designation	Material number	Material designation
P	Unalloyed steel	P.1.1	< 0,15 % C	Annealed	420 N/mm ² / 125 HB	1.0401	C15	1.1141	Ck15
		P.1.2	< 0,45 % C	Annealed	640 N/mm ² / 190 HB	1.1191	C45E	1.0718	9SMnPb28
		P.1.3		Tempered	840 N/mm ² / 250 HB	1.1191	C45E	1.0535	C55
		P.1.4	< 0,75 % C	Annealed	910 N/mm ² / 270 HB	1.1223	C60R	1.0535	C55
		P.1.5		Tempered	1010 N/mm ² / 300 HB	1.1223	C60R	1.0727	45S20
	Low-alloy steel	P.2.1		Annealed	610 N/mm ² / 180 HB	1.7131	16MnCr5	1.6587	17CrNiMo6
		P.2.2		Tempered	930 N/mm ² / 275 HB	1.7131	16MnCr5	1.6587	17CrNiMo6
		P.2.3		Tempered	1010 N/mm ² / 300 HB	1.7225	42CrMo4	1.3505	100Cr6
		P.2.4		Tempered	1200 N/mm ² / 375 HB	1.7225	42CrMo4	1.3505	100Cr6
	High-alloy steel and high-alloy tool steel	P.3.1		Annealed	680 N/mm ² / 200 HB	1.4021	X20Cr13	1.4034	X46Cr13
		P.3.2		Hardened and tempered	1100 N/mm ² / 300 HB	1.2343	X38CrMoV5-1	1.4034	X46Cr13
		P.3.3		Hardened and tempered	1300 N/mm ² / 400 HB	1.2343	X38CrMoV5-1	1.4034	X46Cr13
	Stainless steel	P.4.1	Ferritic / martensitic	Annealed	680 N/mm ² / 200 HB	1.4016	X6Cr17	1.2316	X36CrMo16
		P.4.2	Martensitic	Tempered	1010 N/mm ² / 300 HB	1.4112	X90CrMoV18	1.2316	X36CrMo16
M	Stainless steel	M.1.1	Austenitic / austenitic-ferritic	Quenched	610 N/mm ² / 180 HB	1.4301	X5CrNi18-10	1.4571	X6CrNiMoTi17-12-2
		M.2.1	Austenitic	Tempered	300 HB	1.4841	X15CrNiSi25-21	1.4539	X1NiCrMoCu25-20-5
		M.3.1	Austenitic / ferritic (Duplex)		780 N/mm ² / 230 HB	1.4462	X2CrNiMoN22-5-3	1.4501	X2CrNiMoCuWN25-7-4
K	Grey cast iron	K.1.1	Pearlitic / ferritic		350 N/mm ² / 180 HB	0.6010	GG-10	0.6025	GG-25
		K.1.2	Pearlitic (martensitic)		500 N/mm ² / 260 HB	0.6030	GG-30	0.6045	GG-45
	Spherulitic graphite cast iron	K.2.1	Ferritic		540 N/mm ² / 160 HB	0.7040	GGG-40	0.7060	GGG-60
		K.2.2	Pearlitic		845 N/mm ² / 250 HB	0.7070	GGG-70	0.7080	GGG-80
	Malleable iron	K.3.1	Ferritic		440 N/mm ² / 130 HB	0.8035	GTW-35-04	0.8045	GTW-45
		K.3.2	Pearlitic		780 N/mm ² / 230 HB	0.8165	GTS-65-02	0.8170	GTS-70-02
N	Aluminium wrought alloy	N.1.1	Non-hardenable		60 HB	3.0255	Al99,5	3.3315	AlMg1
		N.1.2	Hardenable	Age-hardened	340 N/mm ² / 100 HB	3.1355	AlCuMg2	3.2315	AlMgSi1
	Cast aluminium alloy	N.2.1	≤ 12 % Si, non-hardenable		250 N/mm ² / 75 HB	3.2581	G-AlSi12	3.2163	G-AlSi9Cu3
		N.2.2	≤ 12 % Si, hardenable	Age-hardened	300 N/mm ² / 90 HB	3.2134	G-AlSi5Cu1Mg	3.2373	G-AlSi9Mg
		N.2.3	> 12 % Si, non-hardenable		440 N/mm ² / 130 HB		G-AlSi17Cu4Mg		G-AlSi18CuNiMg
	Copper and copper alloys (bronze/brass)	N.3.1	Free-machining alloys, PB > 1 %		375 N/mm ² / 110 HB	2.0380	CuZn39Pb2 (Ms58)	2.0410	CuZn44Pb2
		N.3.2	CuZn, CuSnZn		300 N/mm ² / 90 HB	2.0331	CuZn15	2.4070	CuZn28Sn1As
		N.3.3	CuSn, lead-free copper and electrolytic copper		340 N/mm ² / 100 HB	2.0060	E-Cu57	2.0590	CuZn40Fe
	Magnesium alloys	N.4.1	Magnesium and magnesium alloys		70 HB	3.5612	MgAl6Zn	3.5312	MgAl3Zn
S	Heat-resistant alloys	S.1.1	Fe - basis	Annealed	680 N/mm ² / 200 HB	1.4864	X12NiCrSi 36-16	1.4865	G-X40NiCrSi38-18
		S.1.2		Age-hardened	950 N/mm ² / 280 HB	1.4980	X6NiCrTiMoVB25-15-2	1.4876	X10NiCrAlTi32-20
		S.2.1	Ni or Co basis	Annealed	840 N/mm ² / 250 HB	2.4631	NiCr20TiAl (Nimonic80A)	3.4856	NiCr22Mo9Nb
		S.2.2		Age-hardened	1180 N/mm ² / 350 HB	2.4668	NiCr19Nb5Mo3 (Inconel 718)	2.4955	NiFe25Cr20NbTi
		S.2.3		Cast	1080 N/mm ² / 320 HB	2.4765	CoCr20W15Ni	1.3401	G-X120Mn12
	Titanium alloys	S.3.1	Pure titanium		400 N/mm ²	3.7025	Ti99,8	3.7034	Ti99,7
		S.3.2	Alpha + beta alloys	Age-hardened	1050 N/mm ² / 320 HB	3.7165	TiAl6V4	Ti-6246	Ti-6Al-2Sn-4Zr-6Mo
		S.3.3	Beta alloys		1400 N/mm ² / 410 HB	Ti555.3	Ti-5Al-5V-5Mo-3Cr	R56410	Ti-10V-2Fe-3Al
H	Hardened steel	H.1.1		Hardened and tempered	46-55 HRC				
		H.1.2		Hardened and tempered	56-60 HRC				
		H.1.3		Hardened and tempered	61-65 HRC				
		H.1.4		Hardened and tempered	66-70 HRC				
	Chilled iron	H.2.1		Cast	400 HB				
	Hardened cast iron	H.3.1		Hardened and tempered	55 HRC				
O	Non-metal materials	O.1.1	Plastics, duroplastic		≤ 150 N/mm ²				
		O.1.2	Plastics, thermoplastic		≤ 100 N/mm ²				
		O.2.1	Aramid fibre-reinforced		≤ 1000 N/mm ²				
		O.2.2	Glass/carbon-fibre reinforced		≤ 1000 N/mm ²				
		O.3.1	Graphite						

* Tensile strength

Cutting data standard values

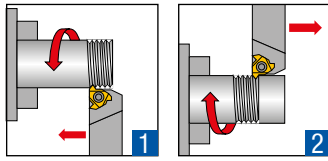
	Mini CCN1525	Mini CCN2520	CWN1525	HCN2525	CCN7525	CCN20	CWK20
Index	v _c in m/min						
P.1.1	80	120	120	120	120	120	
P.1.2	80	120	120	120	120	120	
P.1.3	80	120	120	120	120	120	
P.1.4	80	80	80	90	80	80	
P.1.5	70	80	80	90	80	80	
P.2.1	50	80	80	90	80	80	
P.2.2	50	80	80	90	80	80	
P.2.3	50	80	80	90	80	80	
P.2.4	50	80	80	90	80	80	
P.3.1	50	50	60	70	50	50	
P.3.2	50	50	60	70	50	50	
P.3.3	50	50	60	70	50	50	
P.4.1	50	50	60	70	50	50	
P.4.2	50	50	60	70	50	50	
M.1.1	40	90	60	110	90	60	40
M.2.1	40	90	60	110	90	60	40
M.3.1	40	90	60	110	90	60	40
K.1.1	60	120	90	140	120	120	80
K.1.2	60	120	90	140	120	120	80
K.2.1	60	100	80	120	100	100	70
K.2.2	60	100	80	120	100	100	70
K.3.1	50	100	80	110	100	100	70
K.3.2	50	100	80	110	100	100	70
N.1.1	500		600	700			150
N.1.2	300		600	700			150
N.2.1	120		250	280			120
N.2.2	120		250	280			120
N.2.3	120		250	280			120
N.3.1	110		150	190			100
N.3.2	150		150	190			100
N.3.3	150		150	190			100
N.4.1	300		300	220			150
S.1.1		25		20	25	20	20
S.1.2		25		20	25	20	20
S.2.1		25		20	25	20	20
S.2.2		25		20	25	20	20
S.2.3		25		20	25	20	20
S.3.1		35		30	35	30	30
S.3.2		35		30	35	30	30
S.3.3		35		30	35	30	30
H.1.1		35		30	35	30	
H.1.2		35		30	35	30	
H.1.3		35		30	35	30	
H.1.4		35		30	35	30	
H.2.1		25		20	25	20	
H.3.1		25		20	25	20	
O.1.1	150		200				
O.1.2	150		200				
O.2.1	150		200				
O.2.2	150		200				
O.3.1	150		200				



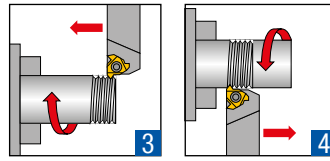
The cutting data depends extremely on the external conditions, the material and machine type. The indicated values are possible values which have to be increased or reduced according to the application conditions.

Thread turning methods

External right-hand thread

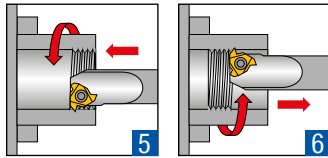


External left-hand thread

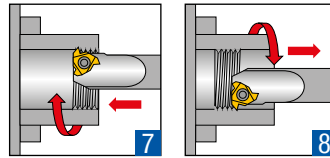


i The machining examples 2, 4, 6 and 8 require negative shims!
These shims can be found on → **Page 42.**

Internal right-hand thread

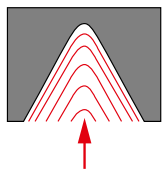


Internal left-hand thread



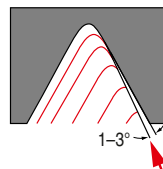
Thread infeed methods

Radial Infeed



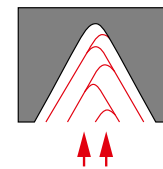
- ▲ for pitches less than 1.5mm
- ▲ for short chipping materials
- ▲ for machining hardened materials
- ▲ simple and quick method

Flank infeed



- ▲ for pitches larger than 1.5mm
- ▲ with radial penetration the effective cutting edge length is too large, which may lead to chattering
- ▲ with trapezoidal and ACME threads, chip flow on three sides can be problematic

Alternating infeed



- ▲ with large pitches
- ▲ for long chipping materials
- ▲ uniform wear of the cutting edges
- ▲ complicated programming process

Recommended number of cuts and cutting depths

Standard Threading Inserts

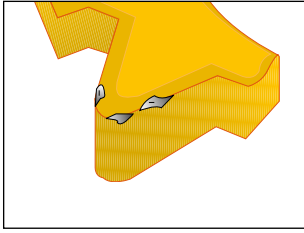
Pitch (TP/TPI)	mm	0,50	0,75	1,00	1,25	1,50	1,75	2,00	2,50	3,00	3,50	4,00	4,50	5,00	5,50	6,00	8,00
	TPI	48	32	24	20	16	14	12	10	8	7	6	5,5	5	4,5	4	3
Number of passes		4-6	4-7	4-8	5-9	6-10	7-12	7-12	8-14	9-16	10-18	11-18	11-19	12-20	12-20	12-20	15-24
Number of passes	(CCN7525)	3-4	3-4	3-5	4-6	5-6	6-8	6-8	8-10								
Number of passes	Mini Inserts	6-9	6-11	6-12	8-14	9-15	11-18	11-18									

Multi edge thread turning insert

Standard	Insert	Insert size		Pitch (TP)	Number of flutes (NT)	Designation	Passes	Cutting depth per pass		
		IC	L mm					1	2	3
ISO external	M	3/8"	16	1,0 mm	3	3 ER 1.0 ISO 3M	2	0,38	0,25	
ISO external	M	3/8"	16	1,5 mm	2	3 ER 1.5 ISO 2M	3	0,42	0,30	0,20

Troubleshooting

Edge chipping



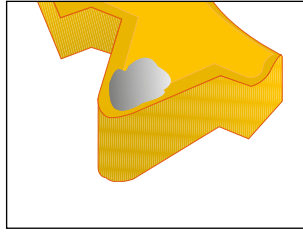
Cause

- ▲ Common in stainless materials
- ▲ Incorrect grade

Remedy

- ▲ Minimize tool overhang length
- ▲ Check that the insert is clamped
- ▲ Minimize vibration
- ▲ Use a tougher grade

Cratering



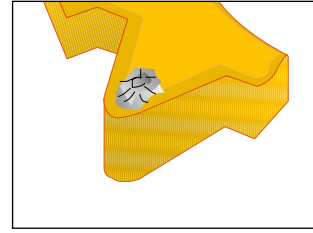
Cause

- ▲ Common in stainless materials
- ▲ Cutting speed too high
- ▲ Incorrect grade

Remedy

- ▲ Apply coolant
- ▲ Reduce depth of cut
- ▲ Use a harder grade

Built-up edge



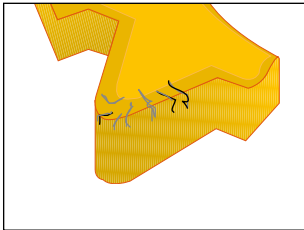
Cause

- ▲ Cutting speed too low
- ▲ Incorrect grade

Remedy

- ▲ Apply coolant
- ▲ Increase cutting speed
- ▲ Use a tougher grade

Thermal cracking



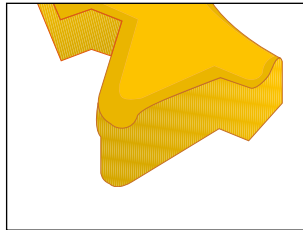
Cause

- ▲ Insufficient coolant
- ▲ Cutting speed too high
- ▲ Incorrect grade

Remedy

- ▲ Apply coolant
- ▲ Reduce cutting speed
- ▲ Use a tougher grade

Plastic deformation



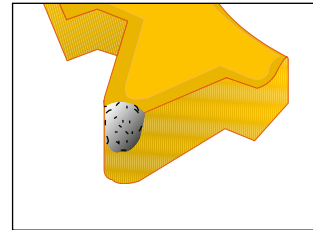
Cause

- ▲ Infeed too large
- ▲ Insufficient coolant
- ▲ Cutting speed too high
- ▲ Incorrect grade

Remedy

- ▲ Apply coolant
- ▲ Reduce depth of cut
- ▲ Reduce cutting speed
- ▲ Use a harder grade

Breakage



Cause

- ▲ Infeed too large
- ▲ Insufficient coolant
- ▲ Plastic deformation
- ▲ Instability
- ▲ Helix angle not appropriate
- ▲ Incorrect grade

Remedy

- ▲ Reduce depth of cut
- ▲ Check machine and tool stability
- ▲ Reduce cutting speed
- ▲ Check helix angle
- ▲ Use a tougher grade

Designation Key

Inserts

16		
L	06	I.C. 5/32"
	08	3/16"
	11	1/4"
	16	3/8"
	22	1/2"

Insert

E	External
I	Internal

E

Cutting design

R	Right-hand
L	Left-hand
N	neutral

R

AG 60

Pitch (TP/TPI)

Full profile	mm	G/Z
	0,35	72-4

Partial profile

mm	G/Z
A	0,5-1,5
AG	0,5-3,0
M	1,7-2,0
G	1,75-3,0
N	3,5-5,0
U	5,5-8,0

Flank angle

55°
60°

Number of flutes
(NT)

2M	Multi-tooth insert with 2 teeth
3M	Multi-tooth insert with 3 teeth

Example

16 ER AG 60

ER16 right hand - external insert with a pitch
of 0.5-3.0 mm

Tool holder

SE	
Tool holder	External
	Internal
SE	
SI	

Tool holder

SE	External
SI	Internal

Cutting design

R	Right-hand
L	Left-hand

R

1212

Shank cross-section

Example	1212 = 12 mm x 12 mm
External holder	
square shank	0020 = 20 mm
Internal boring bar	Diameter

F

Overall length

F	mm
H	80
K	100
L	125
M	140
P	150
R	170
S	200
T	250
	300

16

Insert size

L	I.C.
06	5/32"
08	3/16"
11	1/4"
16	3/8"
22	1/2"

Properties

B	with thro' coolant
C	with carbide shank
U	neutral holder

Example

SE R 1212 F 16

Right hand holder with 12 x 12 mm square shank,
overall length of 80 mm, only suitable for an ER16 threading insert

Grade description

Universal

CCN7525

- ▲ Carbide, TiAlN-coated
- ▲ ISO | **P25** | **M25** | **K25** | **S25** | H25
- ▲ The universal carbide grade with sintered chip breaker for medium to high cutting speeds

CCN2520

- ▲ Carbide, TiAlN-coated
- ▲ ISO | P25 | **M25** | K25 | **S25** | H25
- ▲ The coated carbide grade for the machining of stainless steels at medium to high cutting speeds

CCN1525

- ▲ Carbide, TiN-coated
- ▲ ISO | **P25** | **M25** | **K25** | N25 | O25
- ▲ The coated carbide grade for machining steels and stainless steels at low cutting speeds

Non ferrous metals

CWK20

- ▲ Carbide, uncoated
- ▲ ISO | M10 | **K10** | **N10** | S10
- ▲ The wear-resistant carbide grade for machining aluminium and other non-ferrous metals

Steel

CCN20

- ▲ Carbide, TiAlN-coated
- ▲ ISO | **P20** | **M20** | **K20** | S20 | H20
- ▲ The all-round carbide grade for machining steels at low cutting speeds

CWN1525

- ▲ Carbide, TiN-coated
- ▲ ISO | **P25** | M25 | **K25** | **N25** | O25
- ▲ The universal carbide grade for machining steels and non-ferrous metals at low cutting speeds

Stainless steel

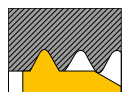
HCN2525

- ▲ Carbide, TiAlN-coated
- ▲ ISO | P25 | **M25** | K25 | N25 | S25 | H25
- ▲ The coated carbide grade for machining stainless steels at high cutting speeds
- ▲ Also suitable for exotic materials

8

Profile Type Description

Full profile



- ▲ Thread diameter must not be turned to final thread size
- ▲ a minimum infeed of 0.07 mm is necessary
- ▲ Insert can only be used only for a specific pitch

- Advantages:**
- ▲ High-quality thread
 - ▲ No burr formation
 - ▲ No rework
 - ▲ In part longer service life

Partial profile



- ▲ Core diameter must be premachined to the finished size
- ▲ A minimum infeed of 0.07 mm is required

- Advantages:**
- ▲ One threading insert can be used to machine several pitches
 - ▲ Threading insert can be used for any application
 - ▲ Reduced stock requirements

Multi-Tooth Thread Turning Insert



- ▲ Thread diameter must not be turned to final thread size
- ▲ a minimum infeed of 0.07 mm is necessary
- ▲ Insert can only be used only for a specific pitch

- Advantages:**
- ▲ Fewer passes required
 - ▲ Thread production in less time

Attention: ▲ Check there is sufficient thread run-out

Mini Thread Turning Insert



- ▲ From a min. core hole diameter of Ø 6 mm or Ø 8 mm

- Advantages:**
- ▲ Special cutting materials for low cutting speeds
 - ▲ 3 cutting edges for miniature applications