

Solid drilling and bore machining

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WNT \ Performance

Premium quality tools for high performance.

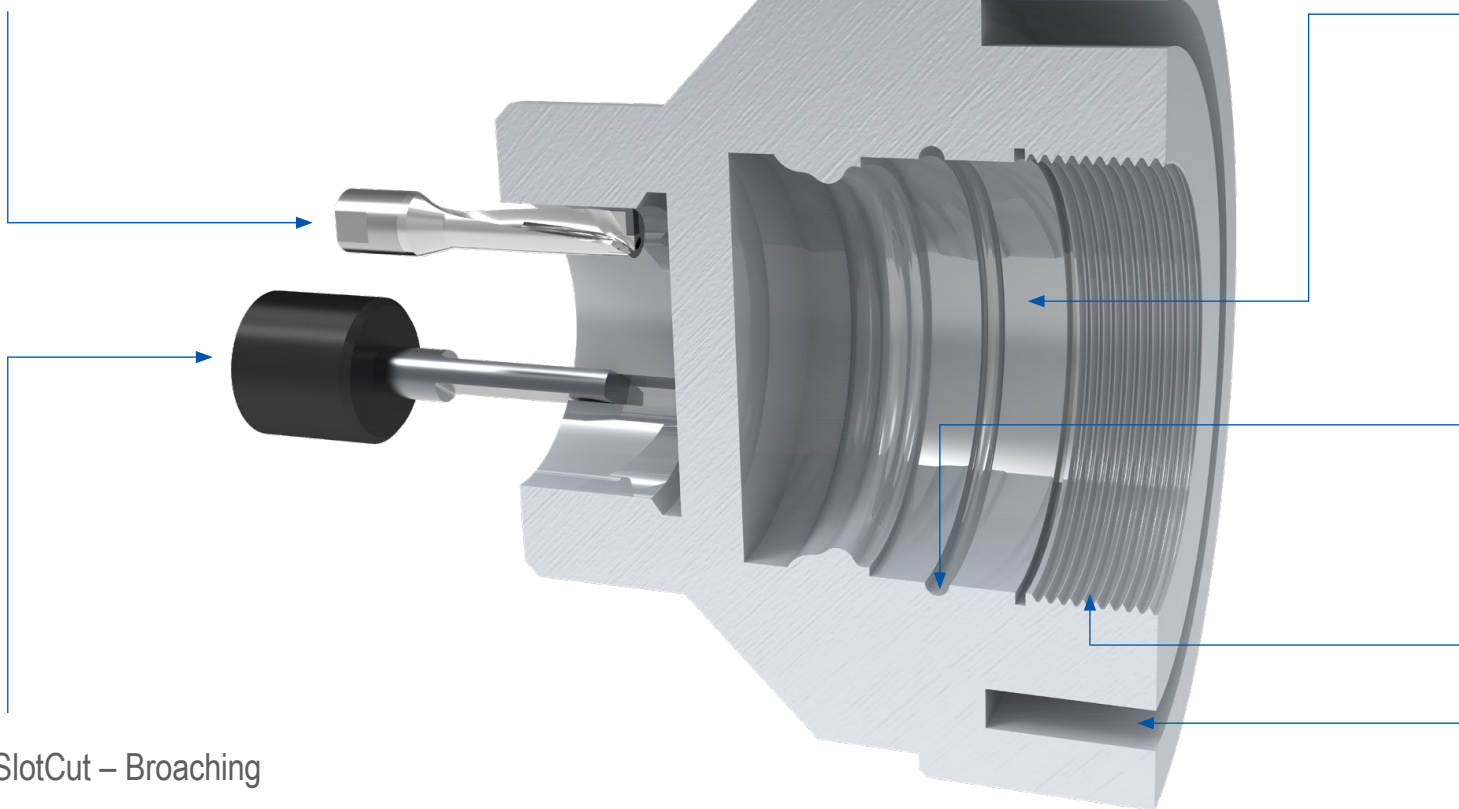
The premium quality tools from the **WNT Performance** product line have been designed for specific applications and are distinguished by their outstanding performance. If you make high demands on the performance of your production and want to achieve the very best results, we recommend the Premium tools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

Toolfinder

EcoCut Mini

From Ø 2 mm

Inserts and tool holders can be found in
→ Chapter 10 Multifunctional Tools – EcoCut and FreeTurn



SlotCut – Broaching

Inserts + Holder DIN138 54–57

Symbol explanation



Internal machining



Internal grooving



Internal thread turning



Axial machining

System overview

UltraMini



- ▲ from Ø 0.5 mm
- ▲ flexible system
- ▲ ground inserts
- ▲ high repeatability
- ▲ coolant supply to the cutting edge

MiniCut



- ▲ from Ø 7.8 mm
- ▲ stable three-rib interface
- ▲ easy handling
- ▲ coolant supply to the cutting edge
- ▲ precise cutting edge position

SlotCut

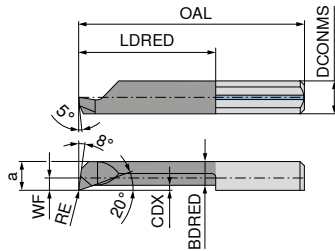
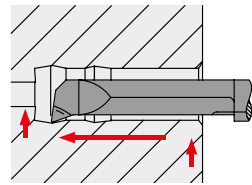
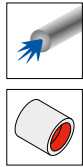


- ▲ broaching directly on the machine
- ▲ usable from Ø 6 mm
- ▲ low machine load
- ▲ variety of tolerance classes

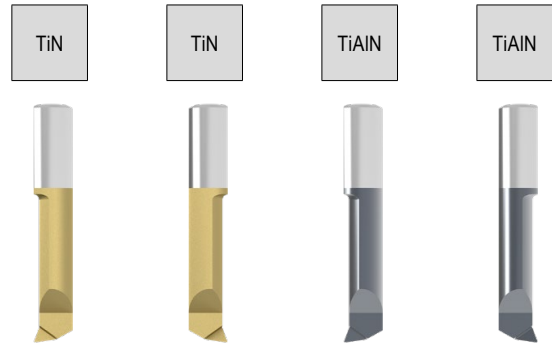
Hole diameter (mm)	UltraMini										MiniCut				
	≥ 0,5	≥ 2	≥ 2,4	≥ 2,8	≥ 3	≥ 4	≥ 5	≥ 6	≥ 8	≥ 16	≥ 8	≥ 9	≥ 11	≥ 14	≥ 16
Internal turning and profiling	6-9	6-9	6-9	6-9		6-9	6-9	6-9			35	35	35	35	35
Internal turning and profiling – hard turning		10		10		10	10	10			36		36	36	36
High-feed turning		11			11	11	11	11							
Internal turning				12		12	12				37	37	37	37	37
Back boring					13	13	13	13			38	38	38	38	
Turning and chamfering							14	14			38	38	38	38	
Pre-parting and chamfering						14	14	14			39	39	39	39	39
Internal Undercuts		18		18		18	18	18			42	42	42	42	42
Groove turning		15-17			15-17	15-17	15-17	15-17			40+41	40+41	40+41	40+41	40+41
Groove and profile turning						19	19	19			43	43	43	43	43
Internal thread turning			20-22			20-22	20-22	20-22			44-47	44-47	44-47	44-47	44-47
Axial grooving							23-28	23-28	23-28	23-28	48+49	48+49	48+49	48+49	48+49
suitable holder	31-34										50-53				
Sets	29+30														

UltraMini – Inserts for internal turning and profiling

▲ CDX = Maximum depth of cut when turning outwards



Illustrations show right-hand versions

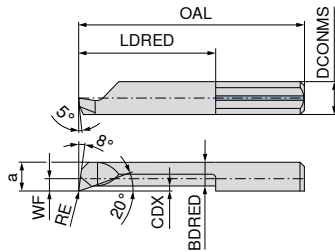
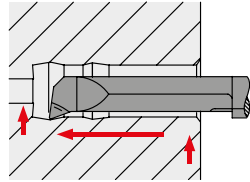


ISO designation	DCONMS _{h6} mm	WF mm	DMIN mm	a mm	OAL mm	LDRED mm	CDX mm	BDRED mm	RE mm	Left-hand		Right-hand		Left-hand		Right-hand	
										73 005 ...	73 004 ...	73 005 ...	73 004 ...	73 005 ...	73 004 ...		
										£ Y5	£ Y5	£ Y5	£ Y5	£ Y5	£ Y5	£ Y5	£ Y5
R/L 050.05-2	4		0.5	0.4	20	2	0.03	0.32	0.02	82.20	500	82.20	500				
R/L 050.06-2	4		0.6	0.5	20	2	0.05	0.40	0.04	82.20	510	82.20	510				
R/L 050.06-3	4		0.6	0.5	20	3	0.05	0.40	0.04	84.87	511	84.87	511				
R/L 050.08-4	4		0.8	0.7	20	4	0.05	0.60	0.04					82.73	812	82.73	812
R/L 050.1-8	4		1.0	0.9	22	8	0.10	0.75	0.05					81.94	813	81.94	813
R/L 050.15-5	4		1.5	1.3	19	5	0.10	1.15	0.05	78.40	515	78.40	515				
R/L 050.15-10	4		1.5	1.3	24	10	0.10	1.15	0.05	79.15	516	79.15	516				
R/L 050.15-12	4		1.5	1.3	26	12	0.10	1.15	0.05					81.94	818	81.94	818
R/L 050.2-5	4		2.0	1.7	19	5	0.10	1.50	0.05	66.63	520	61.13	520				
R/L 050.2-10	4		2.0	1.7	24	10	0.10	1.50	0.05	67.40	521	66.63	521				
R/L 050.2-15	4		2.0	1.7	29	15	0.10	1.50	0.05	72.36	522	66.07	522				
R/L 050.3-10	4	0.6	2.8	2.6	24	10	0.20	2.30	0.10	72.36	531	70.26	531				
R/L 050.3-16	4	0.6	2.8	2.6	30	16	0.20	2.30	0.10	79.36	530	77.08	530				
R/L 050.3-20	4	0.6	2.8	2.6	34	20	0.20	2.30	0.10	75.37	532	76.97	532				
R/L 050.35-10	4	1.1	3.5	3.1	24	10	0.25	2.80	0.10					64.80	835	64.80	835
R/L 050.35-16	4	1.1	3.5	3.1	30	16	0.25	2.80	0.10					68.30	836	68.30	836
R/L 050.35-20	4	1.1	3.5	3.1	34	20	0.25	2.80	0.10					82.08	837	82.08	837
R/L 050.35-24	4	1.1	3.5	3.1	38	24	0.25	2.80	0.10					89.92	838	89.92	838
R/L 050.4-10	4	1.5	4.0	3.5	24	10	0.30	3.00	0.10	72.73	541	69.28	541	66.45	841	66.45	841
R/L 050.4-16	4	1.5	4.0	3.5	30	16	0.30	3.00	0.10	72.73	540	69.28	540	70.26	840	70.26	840
R/L 050.4-20	4	1.5	4.0	3.5	34	20	0.30	3.00	0.10	74.30	542	73.84	542	78.59	842	78.59	842
R/L 050.4-24	4	1.5	4.0	3.5	38	24	0.30	3.00	0.10	89.22	545	86.55	545	89.22	845	89.22	845
R/L 050.4-28	4	1.5	4.0	3.5	42	28	0.30	3.00	0.10	99.30	546	94.80	546	99.30	846	99.30	846
R/L 050.5-10	5	1.9	5.0	4.4	25	10	0.50	3.80	0.15	71.90	551	65.55	551	62.26	851	62.26	851
R/L 050.5-15	5	1.9	5.0	4.4	30	15	0.50	3.80	0.15	73.00	552	69.83	552	66.45	852	66.45	852
R/L 050.5-20	5	1.9	5.0	4.4	35	20	0.50	3.80	0.15	73.57	550	71.70	550	76.50	850	76.50	850
R/L 050.5-25	5	1.9	5.0	4.4	40	25	0.50	3.80	0.15	84.74	553	80.98	553	86.55	853	86.55	853
R/L 050.5-30	5	1.9	5.0	4.4	45	30	0.50	3.80	0.15	91.32	554	89.04	554	97.59	854	97.59	854
R/L 050.5-35	5	1.9	5.0	4.4	50	35	0.50	3.80	0.15	108.20	556	103.35	556	108.20	856	108.20	856
R/L 050.5-40	5	1.9	5.0	4.4	55	40	0.50	3.80	0.15					117.61	857	117.61	857
R/L 050.6-15	6	2.3	6.0	5.3	30	15	0.50	4.50	0.15	74.78	561	68.54	561	66.45	861	66.45	861
R/L 050.6-22	6	2.3	6.0	5.3	37	22	0.50	4.50	0.15	76.68	560	74.63	560	76.50	860	76.50	860
R/L 050.6-25	6	2.3	6.0	5.3	40	25	0.50	4.50	0.15	86.78	562	79.36	562	86.55	862	86.55	862
R/L 050.6-30	6	2.3	6.0	5.3	45	30	0.50	4.50	0.15	92.68	563	90.18	563	97.59	863	97.59	863
R/L 050.6-35	6	2.3	6.0	5.3	50	35	0.50	4.50	0.15	108.20	564	103.35	564	108.20	864	108.20	864
R/L 050.6-42	6	2.3	6.0	5.3	57	42	0.50	4.50	0.15	120.94	565	117.53	565	120.94	865	120.94	865
R/L 050.7-20	7	2.8	6.8	6.3	35	20	0.60	5.50	0.15	78.40	572	76.15	572	75.42	872	75.42	872
R/L 050.7-25	7	2.8	6.8	6.3	40	25	0.60	5.50	0.15	98.13	573	94.15	573	87.53	873	87.53	873
R/L 050.7-30	7	2.8	6.8	6.3	45	30	0.60	5.50	0.15	97.78	574	95.47	574	97.19	874	97.19	874
R/L 050.7-35	7	2.8	7.0	6.3	50	35	0.60	5.50	0.15	110.08	575	110.08	575	110.08	875	110.08	875
R/L 050.7-40	7	2.8	7.0	6.3	55	40	0.60	5.50	0.15	122.62	576	122.62	576	122.62	876	122.62	876
R/L 050.7-45	7	2.8	7.0	6.3	60	45	0.60	5.50	0.15	127.56	577	127.56	577	127.56	877	127.56	877
R/L 050.7-50	7	2.8	7.0	6.3	65	50	0.60	5.50	0.15	139.88	578	139.88	578	139.88	878	139.88	878

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

UltraMini – Inserts for internal turning and profiling

▲ CDX = Maximum depth of cut when turning outwards



Left-hand

Right-hand

ISO designation	DCONMS _{h6} mm	WF mm	DMIN mm	a mm	OAL mm	LDRED mm	CDX mm	BDRED mm	RE mm
R/L 050.2-5	4		2.0	1.7	19	5	0.1	1.5	0.05
R/L 050.2-10	4		2.0	1.7	24	10	0.1	1.5	0.05
R/L 050.2-15	4		2.0	1.7	29	15	0.1	1.5	0.05
R/L 050.3-10	4	0.6	2.8	2.6	24	10	0.2	2.3	0.10
R/L 050.3-16	4	0.6	2.8	2.6	30	16	0.2	2.3	0.10
R/L 050.3-20	4	0.6	2.8	2.6	34	20	0.2	2.3	0.10
R/L 050.4-10	4	1.5	4.0	3.5	24	10	0.3	3.0	0.10
R/L 050.4-16	4	1.5	4.0	3.5	30	16	0.3	3.0	0.10
R/L 050.4-20	4	1.5	4.0	3.5	34	20	0.3	3.0	0.10
R/L 050.5-10	5	1.9	5.0	4.4	25	10	0.5	3.8	0.15
R/L 050.5-15	5	1.9	5.0	4.4	30	15	0.5	3.8	0.15
R/L 050.5-20	5	1.9	5.0	4.4	35	20	0.5	3.8	0.15
R/L 050.5-25	5	1.9	5.0	4.4	40	25	0.5	3.8	0.15
R 050.5-30	5	1.9	5.0	4.4	45	30	0.5	3.8	0.05
L 050.5-30	5	1.9	5.0	4.4	45	30	0.5	3.8	0.15
R/L 050.6-15	6	2.3	6.0	5.3	30	15	0.5	4.5	0.15
R/L 050.6-22	6	2.3	6.0	5.3	37	22	0.5	4.5	0.15
R/L 050.6-25	6	2.3	6.0	5.3	40	25	0.5	4.5	0.15
R/L 050.6-30	6	2.3	6.0	5.3	45	30	0.5	4.5	0.15
R/L 050.7-20	7	2.8	6.8	6.3	35	20	0.6	5.5	0.15
R/L 050.7-25	7	2.8	6.8	6.3	40	25	0.6	5.5	0.15
R/L 050.7-30	7	2.8	6.8	6.3	45	30	0.6	5.5	0.15

73 005 ...		73 004 ...	
£		£	
Y5		Y5	
53.27	020	53.27	020
55.83	021	55.83	021
59.61	022	59.61	022
56.40	031	56.40	031
65.00	030	65.00	030
66.61	032	66.61	032
56.56	041	56.56	041
58.67	040	58.67	040
62.26	042	61.48	042
56.98	051	56.98	051
59.97	052	59.97	052
62.08	050	62.08	050
71.90	053	71.90	053
		78.87	054
77.84	054		
61.48	061	61.48	061
62.57	060	62.57	060
74.30	062	74.30	062
80.12	063	78.96	063
66.07	072	66.07	072
75.42	073	75.42	073
88.07	074	80.98	074

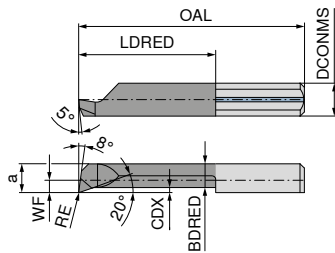
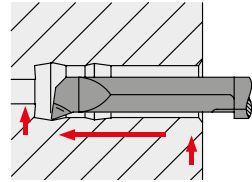
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→ v_c Page 59

UltraMini – Inserts for internal turning and profiling

▲ with corner radius ≤ 0.05 mm

▲ CDX = Maximum depth of cut when turning outwards



Illustrations show right-hand versions

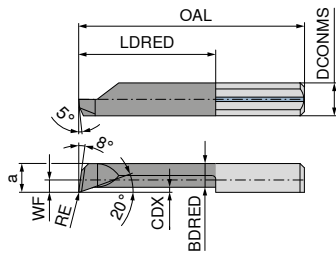
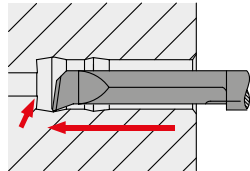


ISO designation	DCONMS _{h6} mm	WF mm	DMIN mm	a mm	OAL mm	LDRED mm	CDX mm	BDRED mm	RE mm	Left-hand		Right-hand		Left-hand		Right-hand		
										73 021 ...	73 020 ...	73 023 ...	73 022 ...					
										£	£	£	£	£	£	£	£	
R/L 053.3-10	4	0.6	2.8	2.6	24	10	0.2	2.3	0.03	Y5	71.76	310	71.76	310				
R/L 053.3-16	4	0.6	2.8	2.6	30	16	0.2	2.3	0.03		75.55	316	75.55	316				
R/L 053.3-20	4	0.6	2.8	2.6	34	20	0.2	2.3	0.03		87.90	320	87.90	320				
R/L 053.4-10	4	1.5	4.0	3.5	24	10	0.3	3.0	0.03		71.76	410	71.76	410				
R/L 053.4-16	4	1.5	4.0	3.5	30	16	0.3	3.0	0.03		75.55	416	75.55	416				
R/L 053.4-20	4	1.5	4.0	3.5	34	20	0.3	3.0	0.03		85.45	420	85.45	420				
R/L 053.4-24	4	1.5	4.0	3.5	38	24	0.3	3.0	0.03		94.55	424	94.55	424				
R/L 053.4-28	4	1.5	4.0	3.5	42	28	0.3	3.0	0.03		102.80	428	102.80	428				
R/L 055.2-10	4		2.0	1.7	24	10	0.1	1.5	0.05				72.46	210	72.46	210		
R/L 055.2-15	4		2.0	1.7	29	15	0.1	1.5	0.05				77.45	215	77.45	215		
R/L 055.2-5	4		2.0	1.7	19	5	0.1	1.5	0.05				71.76	205	71.76	205		
R/L 055.3-10	4	0.6	2.8	2.6	24	10	0.2	2.3	0.05				71.76	310	71.76	310		
R/L 055.3-16	4	0.6	2.8	2.6	30	16	0.2	2.3	0.05				75.55	316	75.55	316		
R/L 055.3-20	4	0.6	2.8	2.6	34	20	0.2	2.3	0.05				89.79	320	89.79	320		
R/L 055.4-10	4	1.5	4.0	3.5	24	10	0.3	3.0	0.05				71.76	410	71.76	410		
R/L 055.4-16	4	1.5	4.0	3.5	30	16	0.3	3.0	0.05				75.55	416	75.55	416		
R/L 055.4-20	4	1.5	4.0	3.5	34	20	0.3	3.0	0.05				85.45	420	85.45	420		
R/L 055.4-24	4	1.5	4.0	3.5	38	24	0.3	3.0	0.05				94.55	424	94.55	424		
R/L 055.4-28	4	1.5	4.0	3.5	42	28	0.3	3.0	0.05				102.80	428	102.80	428		
R/L 055.5-10	5	1.9	5.0	4.4	25	10	0.5	3.8	0.05				67.74	510	64.56	510		
R/L 055.5-15	5	1.9	5.0	4.4	30	15	0.5	3.8	0.05				71.76	515	71.76	515		
R/L 055.5-20	5	1.9	5.0	4.4	35	20	0.5	3.8	0.05				81.64	520	81.64	520		
R/L 055.5-25	5	1.9	5.0	4.4	40	25	0.5	3.8	0.05				90.31	525	90.31	525		
R/L 055.5-30	5	1.9	5.0	4.4	45	30	0.5	3.8	0.05				102.73	530	102.73	530		
R/L 055.5-35	5	1.9	5.0	4.4	50	35	0.5	3.8	0.05				113.51	535	113.51	535		
R/L 055.6-15	6	2.3	6.0	5.3	30	15	0.5	4.5	0.05				71.76	615	71.76	615		
R/L 055.6-22	6	2.3	6.0	5.3	37	22	0.5	4.5	0.05				79.90	622	79.90	622		
R/L 055.6-25	6	2.3	6.0	5.3	40	25	0.5	4.5	0.05				90.31	625	90.31	625		
R/L 055.6-30	6	2.3	6.0	5.3	45	30	0.5	4.5	0.05				102.73	630	102.73	630		
R/L 055.6-35	6	2.3	6.0	5.3	50	35	0.5	4.5	0.05				113.51	635	113.51	635		
R/L 055.6-42	6	2.3	6.0	5.3	57	42	0.5	4.5	0.05				123.84	642	123.84	642		
P											•	•	•	•				
M											•	•	•	•				
K											•	•	•	•				
N											•	•	•	•				
S											•	•	•	•				
H											•	•	•	•				
O											•	•	•	•				

UltraMini – Inserts for internal turning and profiling

▲ with chip former

▲ CDX = Maximum depth of cut when turning outwards



Illustrations show right-hand versions



Left-hand

Right-hand

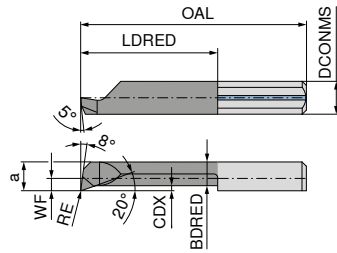
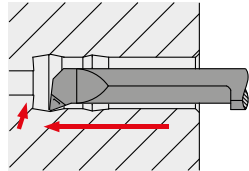
ISO designation	DCONMS ₁₆ mm	WF mm	DMIN mm	a mm	OAL mm	LDRED mm	CDX mm	BDRED mm	RE mm	73 017 ...		73 016 ...	
										£		£	
R/L 050.4-10C	4	1.5	4	3.5	24	10	0.3	3.0	0.2	66.45	410	66.45	410
R/L 050.4-16C	4	1.5	4	3.5	30	16	0.3	3.0	0.2	70.26	416	70.26	416
R/L 050.4-20C	4	1.5	4	3.5	34	20	0.3	3.0	0.2	78.59	420	78.59	420
R/L 050.4-24C	4	1.5	4	3.5	38	24	0.3	3.0	0.2	89.22	424	89.22	424
R/L 050.4-28C	4	1.5	4	3.5	42	28	0.3	3.0	0.2	99.30	428	99.30	428
R/L 050.5-10C	5	1.9	5	4.4	25	10	0.5	3.8	0.2	62.26	510	62.26	510
R/L 050.5-15C	5	1.9	5	4.4	30	15	0.5	3.8	0.2	66.45	515	66.45	515
R/L 050.5-20C	5	1.9	5	4.4	35	20	0.5	3.8	0.2	76.50	520	76.50	520
R/L 050.5-25C	5	1.9	5	4.4	40	25	0.5	3.8	0.2	86.55	525	86.55	525
R/L 050.5-30C	5	1.9	5	4.4	45	30	0.5	3.8	0.2	97.59	530	97.59	530
R/L 050.5-35C	5	1.9	5	4.4	50	35	0.5	3.8	0.2	108.20	535	108.20	535
R/L 050.6-15C	6	2.3	6	5.3	30	15	0.5	4.5	0.2	66.45	615	66.45	615
R/L 050.6-22C	6	2.3	6	5.3	37	22	0.5	4.5	0.2	76.50	622	76.50	622
R/L 050.6-25C	6	2.3	6	5.3	40	25	0.5	4.5	0.2	86.55	625	86.55	625
R/L 050.6-30C	6	2.3	6	5.3	45	30	0.5	4.5	0.2	97.59	630	97.59	630
R/L 050.6-35C	6	2.3	6	5.3	50	35	0.5	4.5	0.2	108.20	635	108.20	635
R/L 050.6-42C	6	2.3	6	5.3	57	42	0.5	4.5	0.2	120.94	642	120.94	642
R/L 050.7-20C	7	2.8	7	6.3	35	20	0.6	5.5	0.2	75.42	720	75.42	720
R/L 050.7-25C	7	2.8	7	6.3	40	25	0.6	5.5	0.2	87.53	725	87.53	725
R/L 050.7-30C	7	2.8	7	6.3	45	30	0.6	5.5	0.2	97.19	730	97.19	730
R/L 050.7-35C	7	2.8	7	6.3	50	35	0.6	5.5	0.2	110.08	735	110.08	735
R/L 050.7-40C	7	2.8	7	6.3	55	40	0.6	5.5	0.2	122.62	740	122.62	740
R/L 050.7-45C	7	2.8	7	6.3	60	45	0.6	5.5	0.2	127.56	745	127.56	745
R/L 050.7-50C	7	2.8	7	6.3	65	50	0.6	5.5	0.2	139.88	750	139.88	750
P											●		●
M											●		●
K											●		●
N											●		●
S											●		●
H											●		●
O											●		●

→ v_c Page 59

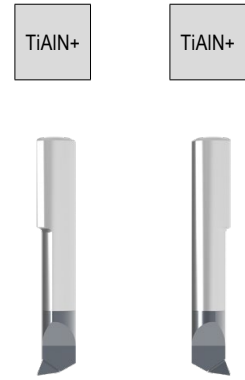
UltraMini – Inserts for internal turning and profiling – hard turning

▲ 46 to 65 HRC

▲ CDX = Maximum depth of cut when turning outwards



Illustrations show right-hand versions



Left-hand Right-hand

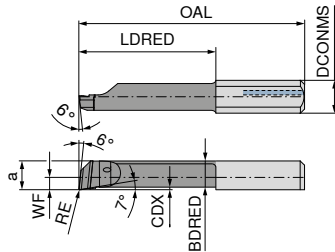
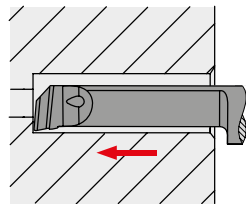
ISO designation	DCONMS _{h6} mm	WF mm	DMIN mm	a mm	OAL mm	LDRED mm	CDX mm	BDRED mm	RE mm	73 025 ...		73 024 ...	
										£ Y5		£ Y5	
R/L 050.2-5	4		2.0	1.7	19	5	0.1	1.5	0.05	98.87	920	98.87	920
R/L 050.2-10	4		2.0	1.7	24	10	0.1	1.5	0.05	100.69	921	100.69	921
R/L 050.2-15	4		2.0	1.7	29	15	0.1	1.5	0.05	104.48	922	104.48	922
R/L 050.3-10	4	0.6	2.8	2.6	24	10	0.2	2.3	0.10	98.53	931	98.53	931
R/L 050.3-16	4	0.6	2.8	2.6	30	16	0.2	2.3	0.10	102.69	930	102.69	930
R/L 050.3-20	4	0.6	2.8	2.6	34	20	0.2	2.3	0.10	117.51	932	117.51	932
R/L 050.4-10	4	1.5	4.0	3.5	24	10	0.3	3.0	0.10	98.53	941	98.53	941
R/L 050.4-16	4	1.5	4.0	3.5	30	16	0.3	3.0	0.10	102.69	940	102.69	940
R/L 050.4-20	4	1.5	4.0	3.5	34	20	0.3	3.0	0.10	113.05	942	113.05	942
R/L 050.4-24	4	1.5	4.0	3.5	38	24	0.3	3.0	0.10	122.96	945	122.96	945
R/L 050.4-28	4	1.5	4.0	3.5	42	28	0.3	3.0	0.10	133.47	946	133.47	946
R/L 050.5-10	5	1.9	5.0	4.4	25	10	0.5	3.8	0.15	95.57	951	95.57	951
R/L 050.5-15	5	1.9	5.0	4.4	30	15	0.5	3.8	0.15	100.02	952	100.02	952
R/L 050.5-20	5	1.9	5.0	4.4	35	20	0.5	3.8	0.15	110.75	950	110.75	950
R/L 050.5-25	5	1.9	5.0	4.4	40	25	0.5	3.8	0.15	121.62	953	121.62	953
R/L 050.5-30	5	1.9	5.0	4.4	45	30	0.5	3.8	0.15	133.32	954	133.32	954
R/L 050.5-35	5	1.9	5.0	4.4	50	35	0.5	3.8	0.15	144.54	956	144.54	956
R/L 050.6-15	6	2.3	6.0	5.3	30	15	0.5	4.5	0.15	101.50	961	101.50	961
R/L 050.6-22	6	2.3	6.0	5.3	37	22	0.5	4.5	0.15	112.21	960	112.21	960
R/L 050.6-25	6	2.3	6.0	5.3	40	25	0.5	4.5	0.15	123.09	962	123.09	962
R/L 050.6-30	6	2.3	6.0	5.3	45	30	0.5	4.5	0.15	134.80	963	134.80	963
R/L 050.6-35	6	2.3	6.0	5.3	50	35	0.5	4.5	0.15	146.34	964	146.34	964
R/L 050.6-42	6	2.3	6.0	5.3	57	42	0.5	4.5	0.15	159.36	965	159.36	965
R/L 050.7-20	7	2.8	6.8	6.3	35	20	0.6	5.5	0.15	113.40	972	113.40	972
R/L 050.7-25	7	2.8	6.8	6.3	40	25	0.6	5.5	0.15	124.91	973	124.91	973
R/L 050.7-30	7	2.8	6.8	6.3	45	30	0.6	5.5	0.15	137.13	974	137.13	974
R/L 050.7-35	7	2.8	6.8	6.3	50	35	0.6	5.5	0.15	148.66	975	148.66	975
R/L 050.7-40	7	2.8	6.8	6.3	55	40	0.6	5.5	0.15	162.32	976	162.32	976
R/L 050.7-45	7	2.8	6.8	6.3	60	45	0.6	5.5	0.15	170.07	977	170.07	977
R/L 050.7-50	7	2.8	6.8	6.3	65	50	0.6	5.5	0.15	180.80	978	180.80	978
P											○		○
M											○		○
K											○		○
N											○		○
S											○		○
H											●		●
O											○		○

→ v_c Page 59

Machining with cooling is recommended.

UltraMini – Inserts for internal turning

- ▲ with chip former
- ▲ High-feed internal turning
- ▲ CDX = Maximum depth of cut when turning outwards



Illustrations show right-hand versions



Left-hand Right-hand

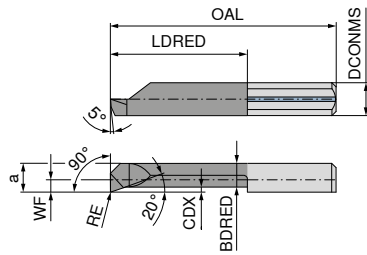
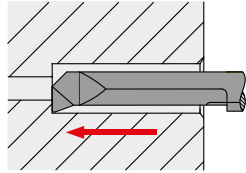
ISO designation	DCONMS ₁₆ mm	WF mm	DMIN mm	a mm	OAL mm	LDRED mm	CDX mm	BDRED mm	RE mm	73 001 ...		73 000 ...	
										£		£	
R/L X050.1-5	4		1.0	0.90	20	5	0.03	0.85	0.05	59.48	121	59.48	121
R/L X050.15-7	4		1.5	1.35	22	7	0.05	1.25	0.10	67.99	233	67.99	233
R/L X050.2-5	4		2.0	1.80	19	5	0.10	1.60	0.15	51.73	245	51.73	245
R/L X050.2-10	4		2.0	1.80	24	10	0.10	1.60	0.05	53.08	215	53.08	215
R/L X050.2-10	4		2.0	1.80	24	10	0.10	1.60	0.15	53.08	241	53.08	241
R/L X050.3-10	4	0.7	3.0	2.70	24	10	0.15	2.55	0.05	51.58	341	51.58	341
R/L X050.3-10	4	0.7	3.0	2.70	24	10	0.15	2.55	0.20	51.58	347	51.58	347
R/L X050.3-16	4	0.7	3.0	2.70	30	16	0.15	2.55	0.05	54.41	371	54.41	371
R/L X050.3-16	4	0.7	3.0	2.70	30	16	0.15	2.55	0.10	54.41	373	54.41	373
R/L X050.3-16	4	0.7	3.0	2.70	30	16	0.15	2.55	0.20	54.41	377	54.41	377
R/L X050.4-10	4	1.6	4.0	3.60	24	10	0.20	3.20	0.10	51.58	403	51.58	403
R/L X050.4-10	4	1.6	4.0	3.60	24	10	0.20	3.20	0.20	51.58	407	51.58	407
R/L X050.4-16	4	1.6	4.0	3.60	30	16	0.20	3.20	0.05	54.41	431	54.41	431
R/L X050.4-16	4	1.6	4.0	3.60	30	16	0.20	3.20	0.10	54.41	433	54.41	433
R/L X050.4-16	4	1.6	4.0	3.60	30	16	0.20	3.20	0.20	54.41	437	54.41	437
R/L X050.4-24	4	1.6	4.0	3.60	38	24	0.20	3.20	0.10	69.18	463	69.18	463
R/L X050.4-24	4	1.6	4.0	3.60	38	24	0.20	3.20	0.20	69.18	467	69.18	467
R/L X050.5-15	5	2.1	5.0	4.60	30	15	0.30	4.05	0.05	51.58	511	51.58	511
R/L X050.5-15	5	2.1	5.0	4.60	30	15	0.30	4.05	0.10	51.58	513	51.58	513
R/L X050.5-15	5	2.1	5.0	4.60	30	15	0.30	4.05	0.20	51.58	517	51.58	517
R/L X050.5-25	5	2.1	5.0	4.60	40	25	0.30	4.05	0.10	67.23	543	67.23	543
R/L X050.5-25	5	2.1	5.0	4.60	40	25	0.30	4.05	0.20	67.23	547	67.23	547
R/L X050.5-30	5	2.1	5.0	4.60	45	30	0.30	4.05	0.10	76.03	553	76.03	553
R/L X050.5-30	5	2.1	5.0	4.60	45	30	0.30	4.05	0.20	76.03	557	76.03	557
R/L X050.6-15	6	2.5	6.0	5.50	30	15	0.40	4.90	0.05	51.58	611	51.58	611
R/L X050.6-15	6	2.5	6.0	5.50	30	15	0.40	4.90	0.10	51.58	613	51.58	613
R/L X050.6-15	6	2.5	6.0	5.50	30	15	0.40	4.90	0.20	51.58	617	51.58	617
R/L X050.6-22	6	2.5	6.0	5.50	37	22	0.40	4.90	0.20	59.34	637	59.34	637
R/L X050.6-30	6	2.5	6.0	5.50	45	30	0.40	4.90	0.20	76.03	657	76.03	657
R/L X050.6-35	6	2.5	6.0	5.50	50	35	0.40	4.90	0.20	84.07	667	84.07	667
R/L X050.6-50	6	2.5	6.0	5.50	65	50	0.40	4.90	0.20	104.67	697	104.67	697
R/L X050.7-25	7	3.0	7.0	6.50	40	25	0.50	5.90	0.20	68.27	747	68.27	747
R/L X050.7-30	7	3.0	7.0	6.50	45	30	0.50	5.90	0.20	76.93	757	76.93	757

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

→ v_c Page 60+61

UltraMini – Inserts for internal turning

▲ CDX = Maximum depth of cut when turning outwards



Illustrations show right-hand versions



Left-hand

Right-hand

ISO designation	DCONMS _{h6} mm	WF mm	DMIN mm	a mm	OAL mm	LDRED mm	CDX mm	BDRED mm	RE mm
R/L 090.3-10	4	0.6	2.8	2.6	24	10	0.2	2.3	0.2
R/L 090.3-16	4	0.6	2.8	2.6	30	16	0.2	2.3	0.2
R/L 090.4-10	4	1.5	4.0	3.5	24	10	0.3	3.0	0.2
R/L 090.4-16	4	1.5	4.0	3.5	30	16	0.3	3.0	0.2
R/L 090.5-10	5	1.9	5.0	4.4	25	10	0.5	3.8	0.2
R/L 090.5-15	5	1.9	5.0	4.4	30	15	0.5	3.8	0.2
R/L 090.5-20	5	1.9	5.0	4.4	35	20	0.5	3.8	0.2

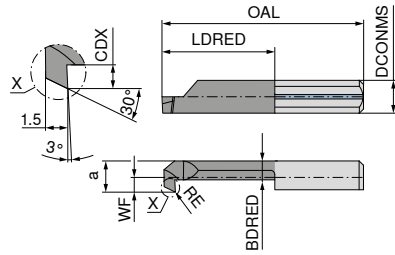
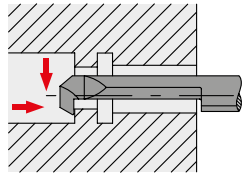
73 015 ...		73 014 ...	
£		£	
Y5		Y5	
66.45	541	66.45	541
70.43	542	70.43	542
66.45	545	66.45	545
70.43	546	70.43	546
66.45	550	66.45	550
70.43	551	70.43	551
76.50	552	76.50	552

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

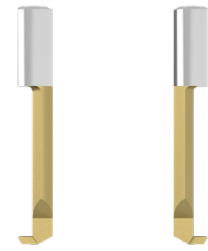
→ v_c Page 59

UltraMini – Inserts for back boring

▲ CDX = Maximum depth of cut when turning outwards



Illustrations show right-hand versions



Left-hand

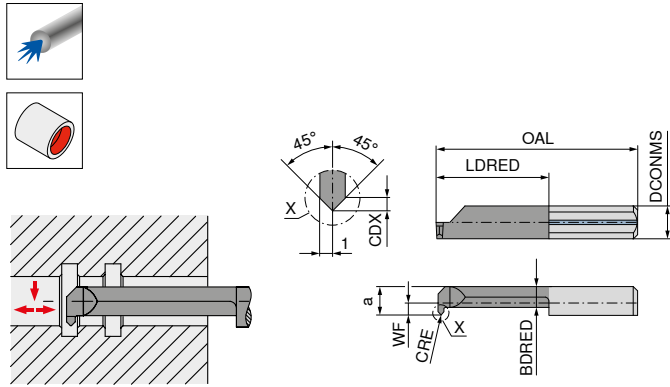
Right-hand

ISO designation	DCONMS ^{h6} mm	WF mm	DMIN mm	a mm	OAL mm	LDRED mm	CDX mm	BDRD mm	RE mm	73 013 ...		73 012 ...	
										£ Y5	542	£ Y5	542
R/L 080.0003-15	4	0.6	3	2.6	29	15	0.5	2.0	0.10	81.23	542	81.23	542
R/L 080.0003-20	4	0.6	3	2.6	34	20	0.5	2.0	0.10	96.83	544	96.83	544
R/L 080.0004-15	4	1.5	4	3.5	29	15	0.8	2.4	0.15	81.23	546	81.23	546
R/L 080.0004-25	4	1.5	4	3.5	39	25	0.8	2.4	0.15	91.07	548	91.07	548
R/L 080.0005-20	5	1.9	5	4.4	35	20	1.0	3.3	0.20	83.00	554	83.00	554
R/L 080.0005-30	5	1.9	5	4.4	45	30	1.0	3.3	0.20	86.22	558	86.22	558
R/L 080.0006-20	6	2.3	6	5.3	35	20	1.8	3.4	0.20	86.55	564	86.55	564
R/L 080.0006-30	6	2.3	6	5.3	45	30	1.8	3.4	0.20	103.63	568	103.63	568
R/L 080.0007-20	7	2.7	7	6.3	35	20	2.5	3.8	0.20	86.55	574	86.55	574
R/L 080.0007-30	7	2.7	7	6.3	45	30	2.5	3.8	0.20	103.63	578	103.63	578
P											●		●
M											●		●
K											●		●
N											●		●
S											○		○
H											○		○
O											●		●

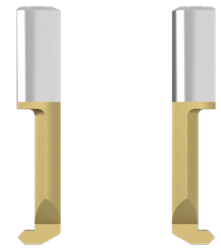
→ V_c Page 59

UltraMini – Inserts for internal turning and chamfering

▲ CDX = Maximum depth of cut when turning outwards



Illustrations show right-hand versions



Left-hand Right-hand

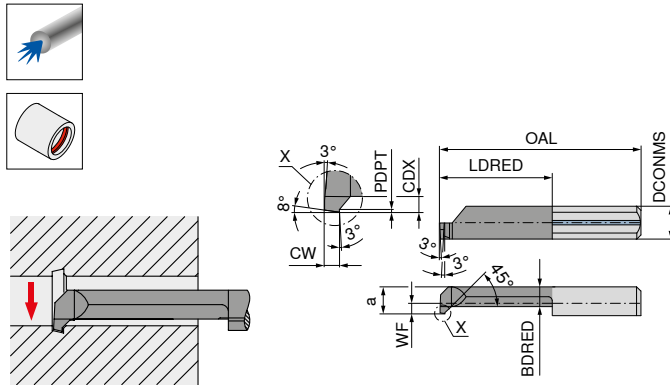
ISO designation	DCONMS _{h6} mm	WF mm	DMIN mm	a mm	OAL mm	LDRED mm	CDX mm	BDRED mm	CRE mm
R/L 060.5-15	5	1.9	5.0	4.4	30	15	0.7	3.3	0.2
R/L 060.5-20	5	1.9	5.0	4.4	35	20	0.7	3.3	0.2
R/L 060.7-20	7	2.7	6.8	6.3	35	20	0.7	3.8	0.2

73 007 ...		73 006 ...	
£		£	
Y5		Y5	
67.40	551	62.63	551
70.01	550	69.71	550
78.59	570	72.73	570

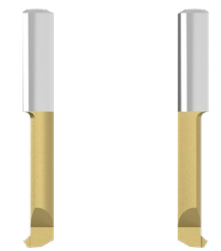
P	●	●
M	●	●
K	●	●
N	●	●
S	○	○
H	○	○
O	●	●

→ v_c Page 59

UltraMini – Inserts for internal chamfering for subsequent parting off



Illustrations show right-hand versions



Left-hand Right-hand

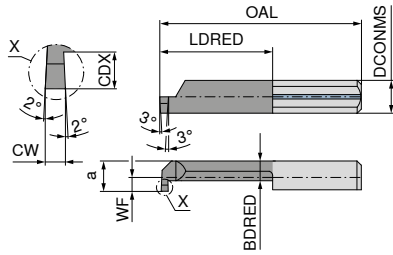
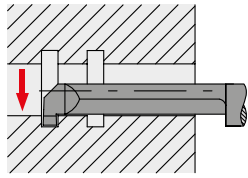
ISO designation	DCONMS _{h6} mm	WF mm	DMIN mm	a mm	OAL mm	LDRED mm	CDX mm	BDRED mm	CW mm	PDPT mm
R/L 070.4-10	4	1.5	4	3.5	25	10	0.8	2.4	1	0.2
R/L 070.4-16	4	1.5	4	3.5	30	16	0.8	2.4	1	0.2
R/L 070.5-15	5	1.9	5	4.4	30	15	1.0	3.3	1	0.2
R/L 070.5-20	5	1.9	5	4.4	35	20	1.0	3.3	1	0.2
R/L 070.5-30	5	1.9	5	4.4	45	30	1.0	3.3	1	0.2
R/L 070.6-30	6	2.3	6	5.3	45	30	1.0	4.2	1	0.2
R/L 070.6-42	6	2.3	6	5.3	57	42	1.0	4.2	1	0.2

73 009 ...		73 008 ...	
£		£	
Y5		Y5	
69.77	410	69.77	410
71.85	416	71.85	416
68.91	551	68.91	551
72.73	550	72.73	550
97.13	530	97.13	530
97.13	630	97.13	630
113.62	642	113.62	642

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

→ v_c Page 59

UltraMini – Inserts for Internal Grooving



Illustrations show right-hand versions

TiAlN

TiAlN



Left-hand

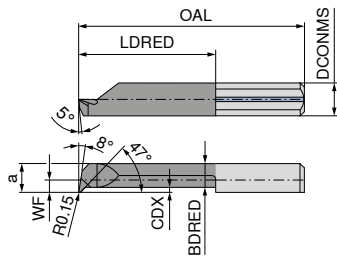
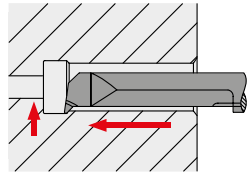
Right-hand

ISO designation	DCONMS _{h6} mm	WF mm	DMIN mm	a mm	OAL mm	LDRED mm	CDX mm	BDFRED mm	CW mm	73 003 ...		73 002 ...	
										£ Y5	820	£ Y5	820
R/L 002.0050-5	4		2	1.8	19	5	0.4	1.2	0.5	79.36	820	79.36	820
R/L 002.0050-10	4		2	1.8	24	10	0.4	1.2	0.5	79.90	821	79.90	821
R/L 002.0050-15	4		2	1.8	29	15	0.4	1.2	0.5	87.90	822	87.90	822
R/L 003.0070-5	4	0.7	3	2.7	19	5	0.6	1.9	0.7	73.57	830	73.57	830
R/L 003.0070-10	4	0.7	3	2.7	24	10	0.6	1.9	0.7	84.87	831	84.87	831
R/L 003.0070-16	4	0.7	3	2.7	30	16	0.6	1.9	0.7	94.55	832	94.55	832
P											●		●
M											●		●
K											●		●
N											●		●
S											●		●
H											●		●
O											●		●

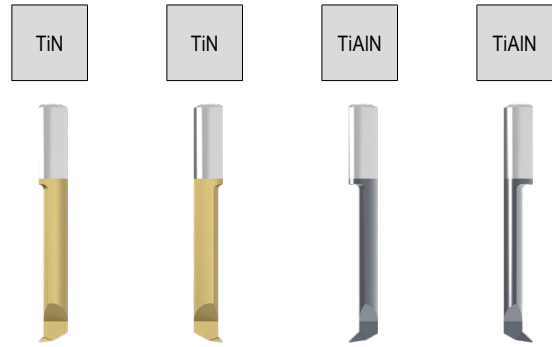
→ v_c Page 59

UltraMini – Inserts for internal undercuts

▲ CDX = Maximum depth of cut when turning outwards



Illustrations show right-hand versions

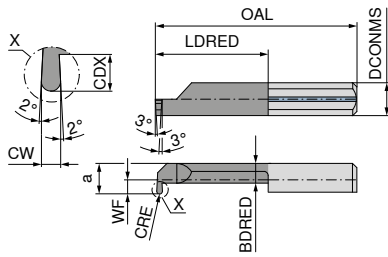
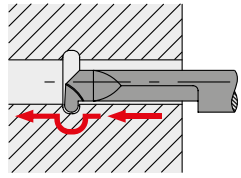
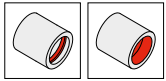


ISO designation	DCONMS ₁₆ mm	WF mm	DMIN mm	a mm	OAL mm	LDRED mm	CDX mm	BDRED mm	Left-hand		Right-hand		Left-hand		Right-hand	
									£	...	£	...	£	...	£	...
R/L 047.2-10	4		2.0	1.7	24	10	0.4	1.2	£	...	£	...	£	...	£	...
R/L 047.3-15	4	0.6	2.8	2.6	29	15	0.6	1.9	Y5		Y5		74.71	221	74.71	221
R/L 047.4-10	4	1.5	4.0	3.5	24	10	0.6	2.8					77.77	231	77.77	231
R/L 047.T4-20	4	1.5	4.0	3.5	34	20	0.6	2.8					71.22	241	71.22	241
R/L 047.4-20	4	1.5	4.0	3.5	34	20	0.3	3.0	80.31	542	79.17	542	83.53	242	83.53	242
R/L 047.5-15	5	1.9	5.0	4.4	30	15	0.8	3.5					80.15	251	80.15	251
R/L 047.T5-25	5	1.9	5.0	4.4	40	25	0.8	3.5					84.79	252	84.79	252
R/L 047.5-25	5	1.9	5.0	4.4	40	25	0.5	3.8	79.90	552	79.90	552				
R/L 047.T6-22	6	2.3	6.0	5.3	37	22	1.8	3.4					82.08	262	82.08	262
R/L 047.T6-30	6	2.3	6.0	5.3	45	30	1.8	3.4					109.28	263	86.74	263
R/L 047.6-30	6	2.3	6.0	5.3	45	30	0.5	4.5	81.76	562	83.00	562				
P									●		●		●		●	
M									●		●		●		●	
K									●		●		●		●	
N									●		●		●		●	
S									○		○		●		●	
H									○		○		●		●	
O									●		●		●		●	

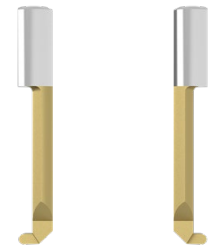
→ v_c Page 59

UltraMini – Inserts for internal grooving and turning

▲ CDX = Maximum depth of cut when turning outwards



Illustrations show right-hand versions



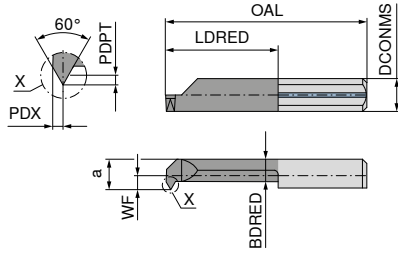
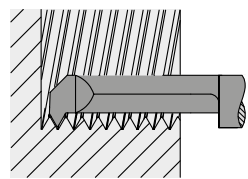
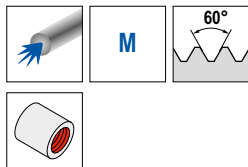
Left-hand

Right-hand

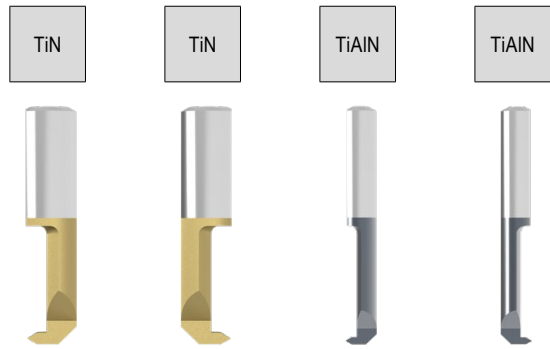
ISO designation	DCONMS _{HS} mm	WF mm	DMIN mm	a mm	OAL mm	LDRED mm	CDX mm	BDRD mm	CW mm	CRE mm	73 019 ...		73 018 ...	
											£ Y5	564	£ Y5	564
R/L 006-0.75-25	6	2.3	6.0	5.3	40	25	1.8	3.4	1.5	0.75	84.29	564	84.29	564
R/L 004-0.50-16	4	1.5	4.0	3.5	30	16	0.8	2.4	1.0	0.50	78.00	541	74.63	541
R/L 005-0.50-20	5	1.9	5.0	4.4	35	20	1.0	3.3	1.0	0.50	82.40	552	82.40	552
R/L 005-0.75-20	5	1.9	5.0	4.4	35	20	1.0	3.3	1.5	0.75	82.40	554	82.40	554
R/L 005-1.00-20	5	1.9	5.0	4.4	35	20	1.0	3.3	2.0	1.00	82.40	556	82.40	556
R/L 006-0.50-25	6	2.3	6.0	5.3	40	25	1.8	3.4	1.0	0.50	84.29	562	84.29	562
R/L 006-1.00-25	6	2.3	6.0	5.3	40	25	1.8	3.4	2.0	1.00	84.29	566	83.00	566
R/L 007-0.50-30	7	2.7	6.8	6.3	45	30	2.5	3.8	1.0	0.50	86.94	572	82.88	572
R/L 007-0.75-30	7	2.7	6.8	6.3	45	30	2.5	3.8	1.5	0.75	86.94	574	86.94	574
R/L 007-1.00-30	7	2.7	6.8	6.3	45	30	2.5	3.8	2.0	1.00	86.94	576	86.94	576
P												●		●
M												●		●
K												●		●
N												●		●
S												○		○
H												○		○
O												●		●

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UltraMini – Inserts for internal threading (Partial profile)



Illustrations show right-hand versions



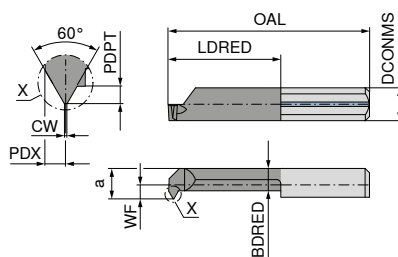
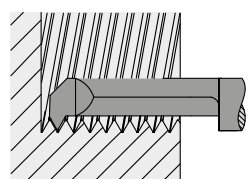
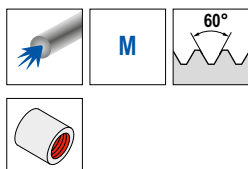
ISO designation	DCONMS	TP	WF	DMIN	a	OAL	LDRED	BDRED	PDPT	PDX
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
R/L 003.0105-8	4	0,5 - 0,7	0.30	2.4	2.3	22	8	1.8	0.27	0.33
R/L 004.0408-15	4	0,8 - 1,0	1.75	4.0	3.5	30	15	2.4	0.43	0.45
R/L 005.0510-20	5	1,0 - 1,25	1.90	4.8	4.4	35	20	3.3	0.55	0.55
R/L 005.0510-15	5	1,0 - 1,25	1.90	4.8	4.4	30	15	3.3	0.55	0.55
R/L 006.0612-22	6	1,25 - 1,5	2.30	6.0	5.3	37	22	3.4	0.68	0.65
R/L 006.0612-15	6	1,25 - 1,5	2.30	6.0	5.3	30	15	3.4	0.68	0.65
R/L 006.0815-15	6	1,5 - 1,75	2.30	6.0	5.3	30	15	3.4	0.81	0.75
R/L 006.0815-22	6	1,5 - 1,75	2.30	6.0	5.3	37	22	3.4	0.81	0.75
R/L 007.0815-15	7	1,5 - 1,75	2.70	7.0	6.3	30	15	3.8	0.81	0.75

Left-hand		Right-hand		Left-hand		Right-hand	
73 101 ...		73 100 ...		73 101 ...		73 100 ...	
£		£		£		£	
Y5		Y5		Y5		Y5	
				75.51	551	75.51	551
				78.73	552	78.73	552
	72.80	544	72.52	544			
	71.81	545	69.60	545			
	73.78	546	71.99	546			
	70.39	547	69.60	547			
	71.81	549	70.51	549			
	73.78	548	71.99	548			
	71.37	550	71.99	550			

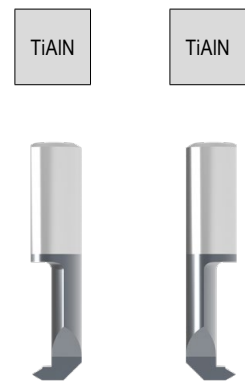
P	•	•	•	•
M	•	•	•	•
K	•	•	•	•
N	•	•	•	•
S	○	○	•	•
H	○	○	•	•
O	•	•	•	•

→ v_c Page 59

UltraMini – Inserts for Internal thread turning (Full profile)



Illustrations show right-hand versions



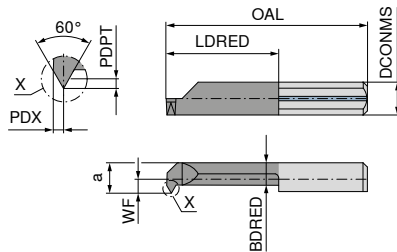
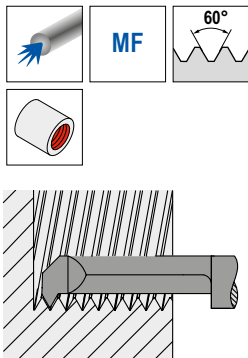
ISO designation	DCONMS	TP	WF	DMIN	a	OAL	LDRED	BDRED	PDPT	PDX	CW
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
R/L 105.0408-15	5	0.80	1.9	4.8	4.4	30	15	3.3	0.43	0.50	0.10
R/L 105.510-15	5	1.00	1.9	4.8	4.4	30	15	3.3	0.54	0.55	0.12
R/L 106.612-15	6	1.25	2.3	6.0	5.3	30	15	3.4	0.67	0.65	0.15
R/L 106.815-15	6	1.50	2.3	6.0	5.3	30	15	3.4	0.81	0.75	0.18
R/L 106.815-15	7	1.50	2.7	7.0	6.3	30	15	3.8	0.81	0.75	0.18

Left-hand		Right-hand		
73 209 ...		73 208 ...		
£		£		
Y5		Y5		
	81.61	799	81.61	799
	75.42	800	75.42	800
	75.42	802	75.42	802
	75.42	804	75.42	804
	75.42	806	75.42	806

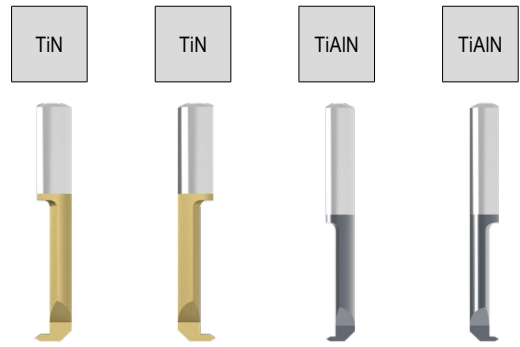
P	•	•	•	•
M	•	•	•	•
K	•	•	•	•
N	•	•	•	•
S	•	•	•	•
H	•	•	•	•
O	•	•	•	•

→ v_c Page 59

UltraMini – Inserts for internal thread turning (Partial profile)



Illustrations show right-hand versions



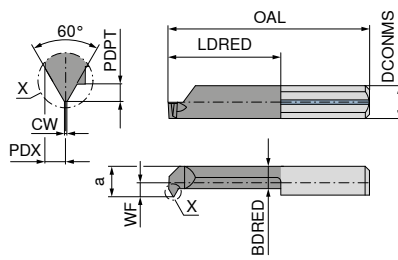
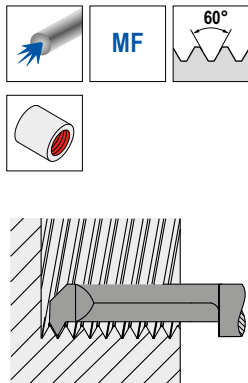
ISO designation	DCONMS mm	TP mm	WF mm	DMIN mm	a mm	OAL mm	LDRED mm	BDRED mm	PDPT mm	PDX mm
R/L 004.0205-15	4	0,5 - 0,75	1.5	4.0	3.5	30	15	2.4	0.27	0.35
R/L 004.0105-10	4	0,5 - 0,75	1.0	3.2	3.0	24	10	2.3	0.27	0.44
R/L 005.0205-15	5	0,5 - 0,75	1.9	5.0	4.4	35	15	3.3	0.27	0.35
R/L 005.0205-20	5	0,5 - 0,75	1.9	5.0	4.4	35	20	3.3	0.27	0.35
L 005.0407-15	5	0,75 - 1,0	1.9	5.0	4.4	30	15	3.3	0.40	0.45
R 005.0407-15	5	0,75 - 1,0	1.9	5.0	4.4	30	15	3.3	0.40	0.45
R/L 005.0407-20	5	0,75 - 1,0	1.9	5.0	4.4	35	20	3.3	0.40	0.45
R/L 006.0510-22	6	1,0 - 1,25	2.3	6.0	5.3	37	22	3.4	0.55	0.55
R/L 006.0510-15	6	1,0 - 1,25	2.3	6.0	5.3	30	15	3.4	0.55	0.55

Left-hand		Right-hand		Left-hand		Right-hand	
73 103 ...		73 102 ...		73 103 ...		73 102 ...	
£	Y5	£	Y5	£	Y5	£	Y5
74.37	510	74.37	510	74.41	509	74.41	509
71.81	539	71.81	539				
72.80	540	72.80	540				
71.81	541	71.81	541				
72.80	542	72.80	542				
73.78	544	73.78	544				
71.81	543	71.81	543				

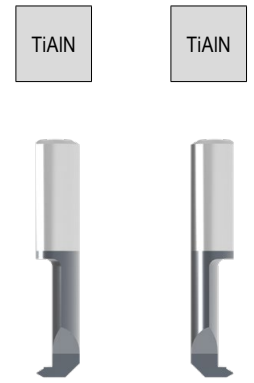
P	●	●	●	●
M	●	●	●	●
K	●	●	●	●
N	●	●	●	●
S	○	○	●	●
H	○	○	●	●
O	●	●	●	●

→ v_c Page 59

UltraMini – Inserts for Internal thread turning (Full profile)



Illustrations show right-hand versions



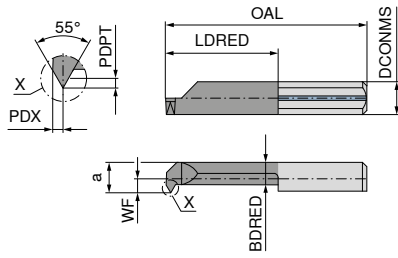
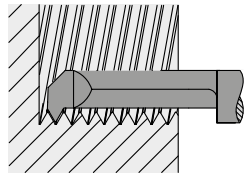
ISO designation	DCONMS _{hg} mm	TP mm	WF mm	DMIN mm	a mm	OAL mm	LDRED mm	BDRED mm	PDPT mm	PDX mm	CW mm
R/L 104.0205-15	5	0.50	1.5	4	3.5	30	15	2.4	0.27	0.35	0.06
R/L 105.0205-15	5	0.50	1.9	5	4.4	30	15	3.3	0.27	0.35	0.06
R/L 105.0407-15	5	0.75	1.9	5	4.4	30	15	3.3	0.40	0.45	0.09
R/L 106.0510-15	6	1.00	2.3	6	5.3	30	15	3.4	0.54	0.55	0.12

Left-hand		Right-hand	
73 207 ...		73 206 ...	
£	Y5	£	Y5
79.48	800	79.48	800
75.42	802	75.42	802
75.42	804	75.42	804
75.42	806	75.42	806

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

→ v_c Page 59

UltraMini – Inserts for internal thread turning (Partial profile)



Illustrations show right-hand versions

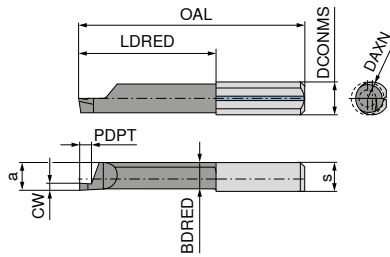
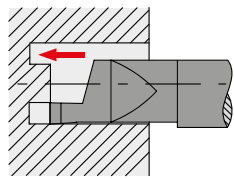


Left-hand

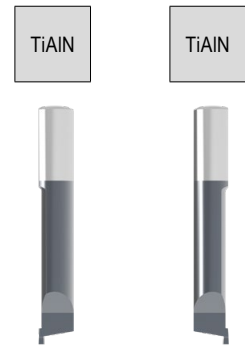
Right-hand

ISO designation	DCONMS _{ns} mm	TPI 1/"	WF mm	DMIN mm	a mm	OAL mm	LDRED mm	BDRED mm	PDPT mm	PDX mm	73 105 ...		73 104 ...	
											£ Y5	552	£ Y5	552
R/L 005.5548-15	5	48 - 24	1.9	4.8	4.4	30	15	3.3	0.40	0.45	76.72	552	76.72	552
R/L 006.5548-15	6	48 - 24	2.3	6.0	5.3	30	15	3.4	0.40	0.45	76.72	562	76.72	562
R/L 006.5524-15	6	24 - 16	2.3	6.0	5.3	30	15	3.4	0.81	0.75	76.72	563	76.72	563
R/L 007.5524-15	7	24 - 16	2.7	7.0	6.3	30	15	3.8	0.81	0.75	76.72	572	76.72	572
P												●		●
M												●		●
K												●		●
N												●		●
S												○		○
H												○		○
O												●		●

UltraMini – Inserts for axial grooving



Illustrations show right-hand versions



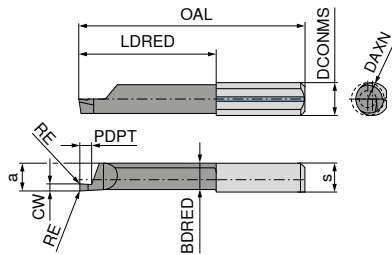
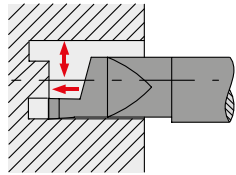
ISO designation	DCONMS _{h6}	a	DAXN	s	OAL	LDRED	PDPT	BDRED	CW
	mm	mm	mm	mm	mm	mm	mm	mm	mm
R/L 010.1006-10	6	5.2	6	5.3	26	11	1.5	4.9	1.0
R/L 010.1506-10	6	5.2	6	5.3	26	11	2.0	4.9	1.5
R/L 010.1008-10	7	5.9	8	6.3	26	11	1.5	5.6	1.0
R/L 010.1008-30	7	5.9	8	6.3	35	20	1.5	5.6	1.0
R/L 010.1008-30	7	5.9	8	6.3	45	30	1.5	5.6	1.0
R/L 010.1508-10	7	5.9	8	6.3	26	11	2.5	5.6	1.5
R/L 010.1508-20	7	5.9	8	6.3	35	20	2.5	5.6	1.5
R/L 010.1508-30	7	5.9	8	6.3	45	30	2.5	5.6	1.5
R/L 010.2008-10	7	5.9	8	6.3	26	11	3.0	5.6	2.0
R/L 010.2008-20	7	5.9	8	6.3	35	20	3.0	5.6	2.0
R/L 010.2008-30	7	5.9	8	6.3	45	30	3.0	5.6	2.0
R/L 010.2508-10	7	5.9	8	6.3	26	11	3.5	5.6	2.5
R/L 010.2508-20	7	5.9	8	6.3	35	20	3.5	5.6	2.5
R/L 010.2508-30	7	5.9	8	6.3	45	30	3.5	5.6	2.5
R/L 010.3008-10	7	5.9	8	6.3	26	11	3.5	5.6	3.0
R/L 010.3008-20	7	5.9	8	6.3	35	20	3.5	5.6	3.0
R/L 010.3008-30	7	5.9	8	6.3	45	30	3.5	5.6	3.0

	Left-hand 73 053 ...		Right-hand 73 052 ...	
	£		£	
	Y5		Y5	
P		●		●
M		●		●
K		●		●
N		●		●
S		●		●
H		●		●
O		●		●

→ v_c Page 59

UltraMini – Inserts for axial grooving

▲ with corner radius



Illustrations show right-hand versions



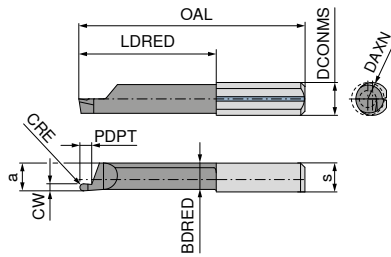
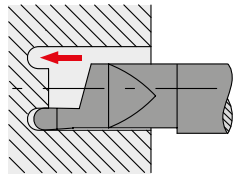
Left-hand

Right-hand

ISO designation	DCONMS _{HS} mm	a mm	DAXN mm	s mm	OAL mm	LDRED mm	PDPT mm	BDRED mm	CW mm	RE mm	73 253 ...		73 252 ...	
											£ Y5		£ Y5	
R/L 510M1008-10	5	4.3	5	6.3	26	11	2	4.0	1.0	0.05	96.82	510	96.82	510
R/L 510M1008-20	5	4.3	5	6.3	35	20	2	4.0	1.0	0.05	102.25	610	102.25	610
R/L 510M1508-10	5	4.3	5	6.3	26	11	3	4.0	1.5	0.05	96.82	515	96.82	515
R/L 510M1508-20	5	4.3	5	6.3	35	20	3	4.0	1.5	0.05	102.25	615	102.25	615
R/L 510M2008-10	5	4.3	5	6.3	26	11	4	4.0	2.0	0.05	96.82	520	96.82	520
R/L 510M2008-20	5	4.3	5	6.3	35	20	4	4.0	2.0	0.05	102.25	620	102.25	620
R/L 010M1008-10	7	5.9	8	6.3	26	11	2	5.6	1.0	0.10	89.58	800	89.58	800
R/L 010M1008-20	7	5.9	8	6.3	35	20	2	5.6	1.0	0.10	94.64	810	94.64	810
R/L 010M1008-30	7	5.9	8	6.3	45	30	2	5.6	1.0	0.10	98.95	820	98.95	820
R/L 010M1508-10	7	5.9	8	6.3	26	11	3	5.6	1.5	0.10	89.58	802	89.58	802
R/L 010M1508-20	7	5.9	8	6.3	35	20	3	5.6	1.5	0.10	94.64	812	94.64	812
R/L 010M1508-30	7	5.9	8	6.3	45	30	3	5.6	1.5	0.10	98.95	822	98.95	822
R/L 010M2008-10	7	5.9	8	6.3	26	11	4	5.6	2.0	0.10	89.58	804	89.58	804
R/L 010M2008-20	7	5.9	8	6.3	35	20	4	5.6	2.0	0.10	94.64	814	94.64	814
R/L 010M2008-30	7	5.9	8	6.3	45	30	4	5.6	2.0	0.10	98.95	824	98.95	824
R/L 010M2508-10	7	5.9	8	6.3	26	11	5	5.6	2.5	0.10	89.58	806	89.58	806
R/L 010M2508-20	7	5.9	8	6.3	35	20	5	5.6	2.5	0.10	94.64	816	94.64	816
R/L 010M2508-30	7	5.9	8	6.3	45	30	5	5.6	2.5	0.10	98.95	826	98.95	826
R/L 010M3008-10	7	5.9	8	6.3	26	11	6	5.6	3.0	0.10	89.58	808	89.58	808
R/L 010M3008-20	7	5.9	8	6.3	35	20	6	5.6	3.0	0.10	94.64	818	94.64	818
R/L 010M3008-30	7	5.9	8	6.3	45	30	6	5.6	3.0	0.10	98.95	828	98.95	828
P												●		●
M												●		●
K												●		●
N												●		●
S												●		●
H												●		●
O												●		●

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UltraMini – Inserts for axial grooving (Full radius)



Illustrations show right-hand versions

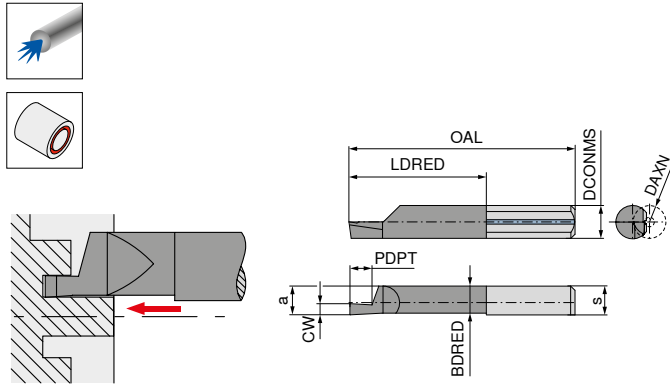


Left-hand

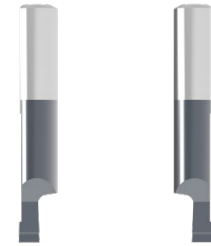
Right-hand

ISO designation	DCONMS _{ns} mm	a mm	DAXN mm	s mm	OAL mm	LDRED mm	PDPT mm	BDFRED mm	CW mm	CRE mm	73 059 ...		73 058 ...	
											£ Y5	071	£ Y5	071
R/L 610.1005-10	6	5.2	6	5.3	26	11	2	4.9	1.0	0.50	98.54	071	98.54	071
R/L 610.1005-20	6	5.2	6	5.3	35	20	2	4.9	1.0	0.50	104.33	171	104.33	171
R/L 610.1608-10	6	5.2	6	5.3	26	11	3	4.9	1.6	0.80	98.54	073	98.54	073
R/L 610.1608-20	6	5.2	6	5.3	35	20	3	4.9	1.6	0.80	104.33	173	104.33	173
R/L 610.2010-10	6	5.2	6	5.3	26	11	4	4.9	2.0	1.00	98.54	075	98.54	075
R/L 610.2010-20	6	5.2	6	5.3	35	20	4	4.9	2.0	1.00	104.33	175	104.33	175
R/L 610.2512-10	6	5.2	6	5.3	26	11	5	4.9	2.5	1.25	98.54	077	98.54	077
R/L 610.2512-20	6	5.2	6	5.3	35	20	5	4.9	2.5	1.25	104.33	177	104.33	177
R/L 610.3015-10	6	5.2	6	5.3	26	11	6	4.9	3.0	1.50	98.54	079	98.54	079
R/L 610.3015-20	6	5.2	6	5.3	35	20	6	4.9	3.0	1.50	104.33	179	104.33	179
R/L 010.1005-10	7	5.9	8	6.3	26	11	2	5.6	1.0	0.50	94.55	571	94.55	571
R/L 010.1005-20	7	5.9	8	6.3	35	20	2	5.6	1.0	0.50	100.05	671	100.05	671
R/L 010.1608-10	7	5.9	8	6.3	26	11	3	5.6	1.6	0.80	94.55	573	94.55	573
R/L 010.1608-20	7	5.9	8	6.3	35	20	3	5.6	1.6	0.80	100.05	673	100.05	673
R/L 010.2010-10	7	5.9	8	6.3	26	11	4	5.6	2.0	1.00	94.55	575	94.55	575
R/L 010.2010-20	7	5.9	8	6.3	35	20	4	5.6	2.0	1.00	100.05	675	100.05	675
R/L 010.2512-10	7	5.9	8	6.3	26	11	5	5.6	2.5	1.25	94.55	577	94.55	577
R/L 010.2512-20	7	5.9	8	6.3	35	20	5	5.6	2.5	1.25	100.05	677	100.05	677
R/L 010.3015-10	7	5.9	8	6.3	26	11	6	5.6	3.0	1.50	94.55	579	94.55	579
R/L 010.3015-20	7	5.9	8	6.3	35	20	6	5.6	3.0	1.50	100.05	679	100.05	679
P											•	•		
M											•	•		
K											•	•		
N											•	•		
S											•	•		
H											•	•		
O											•	•		

UltraMini – Inserts for axial grooving over a spigot



Illustrations show right-hand versions



Left-hand Right-hand

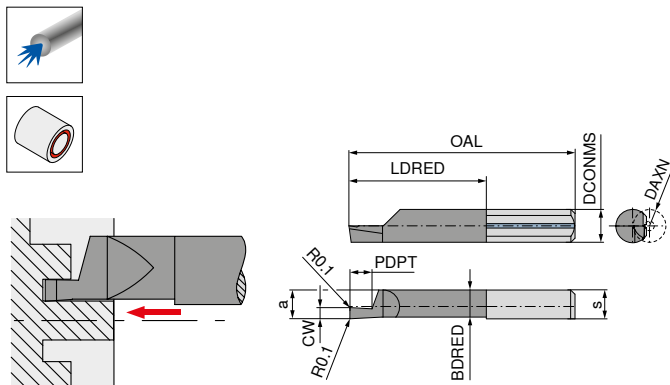
ISO designation	DCONMS _{HS} mm	a mm	DAXN mm	s mm	OAL mm	LDRED mm	PDPT mm	BDRED mm	CW mm	73 061 ...		73 060 ...	
										£	Y5	£	Y5
R/L 620.1006-20	6	5.2	6	5.3	35	20	2	4.9	1.0	100.05	561	100.05	561
R/L 620.1506-20	6	5.2	6	5.3	35	20	3	4.9	1.5	100.05	563	100.05	563
R/L 620.2006-20	6	5.2	6	5.3	35	20	4	4.9	2.0	100.05	565	100.05	565
R/L 620.2506-20	6	5.2	6	5.3	35	20	5	4.9	2.5	100.05	567	100.05	567
R/L 620.3006-20	6	5.2	6	5.3	35	20	6	4.9	3.0	100.05	569	100.05	569

P	•	•
M	•	•
K	•	•
N	•	•
S	•	•
H	•	•
O	•	•

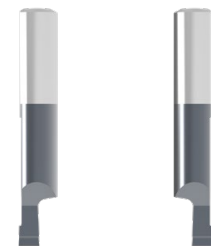
→ v. Page 59

UltraMini – Inserts for axial grooving over a spigot

▲ with corner radius



Illustrations show right-hand versions



Left-hand Right-hand

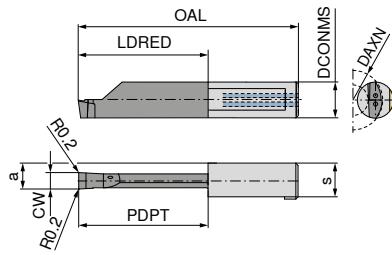
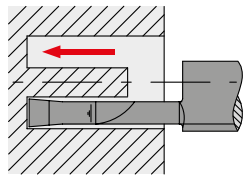
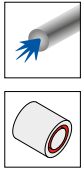
ISO designation	DCONMS _{HS} mm	a mm	DAXN mm	s mm	OAL mm	LDRED mm	PDPT mm	BDRED mm	CW mm	73 261 ...		73 260 ...	
										£	Y5	£	Y5
R/L 620M1006-20	6	5.2	6	5.3	35	20	2	4.9	1.0	95.68	800	95.68	800
R/L 620M1506-20	6	5.2	6	5.3	35	20	3	4.9	1.5	95.68	802	95.68	802
R/L 620M2006-20	6	5.2	6	5.3	35	20	4	4.9	2.0	95.68	804	95.68	804
R/L 620M2506-20	6	5.2	6	5.3	35	20	5	4.9	2.5	95.68	806	95.68	806
R/L 620M3006-20	6	5.2	6	5.3	35	20	6	4.9	3.0	95.68	808	95.68	808

P	•	•
M	•	•
K	•	•
N	•	•
S	•	•
H	•	•
O	•	•

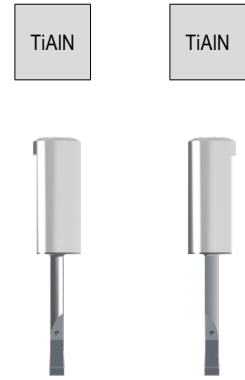
→ v. Page 59

UltraMini – Inserts for axial grooving

- ▲ up to 70 bar
- ▲ dual cooling channel



Illustrations show right-hand versions

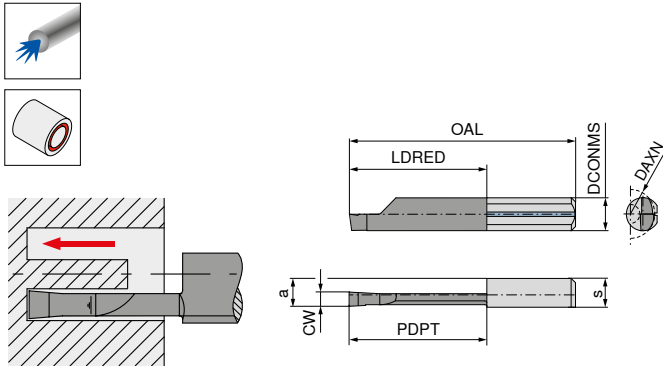


Left-hand Right-hand

ISO designation	DCONMS _{hg} mm	a mm	DAXN mm	s mm	OAL mm	LDRED mm	PDPT mm	CW mm	73 263 ...		73 262 ...	
									£	700	£	700
R/L 012.0200-10	8	5.00	12	7.3	30	10	10	2.0	88.53	700	88.53	700
R/L 012.0200-15	8	5.00	12	7.3	35	15	15	2.0	90.26	702	90.26	702
R/L 012.0250-10	8	5.25	12	7.3	30	10	10	2.5	88.53	704	88.53	704
R/L 012.0250-20	8	5.25	12	7.3	40	20	20	2.5	91.87	706	91.87	706
R/L 016.0300-10	8	5.50	16	7.3	30	10	10	3.0	125.52	800	125.52	800
R/L 016.0300-20	8	5.50	16	7.3	40	20	20	3.0	128.86	802	128.86	802
R/L 020.0300-25	8	5.50	20	7.3	45	25	25	3.0	130.61	804	130.61	804
R/L 020.0300-30	8	5.50	20	7.3	50	30	30	3.0	130.61	806	130.61	806
R/L 020.0300-35	8	5.50	20	7.3	55	35	35	3.0	133.64	808	133.64	808
R/L 020.0300-40	8	5.50	20	7.3	60	40	40	3.0	133.64	810	133.64	810
R/L 016.0400-10	8	6.00	16	7.3	30	10	10	4.0	125.52	812	125.52	812
R/L 016.0400-20	8	6.00	16	7.3	40	20	20	4.0	128.86	814	128.86	814
R/L 020.0400-25	8	6.00	20	7.3	45	25	25	4.0	130.61	816	130.61	816
R/L 020.0400-30	8	6.00	20	7.3	50	30	30	4.0	130.61	818	130.61	818
R/L 020.0400-35	8	6.00	20	7.3	55	35	35	4.0	133.64	820	133.64	820
R/L 020.0400-40	8	6.00	20	7.3	60	40	40	4.0	133.64	822	133.64	822
R/L 020.0500-20	8	6.50	20	7.3	40	20	20	5.0	125.52	824	125.52	824
R/L 020.0500.25	8	6.50	20	7.3	45	25	25	5.0	127.05	826	127.05	826
R/L 020.0500.30	8	6.50	20	7.3	50	30	30	5.0	127.05	828	127.05	828
R/L 020.0500.35	8	6.50	20	7.3	55	35	35	5.0	130.61	830	130.61	830
R/L 020.0500.40	8	6.50	20	7.3	60	40	40	5.0	127.01	832	127.01	832
P										•		•
M										•		•
K										•		•
N										•		•
S										•		•
H										•		•
O										•		•

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UltraMini – Inserts for axial grooving



Illustrations show right-hand versions

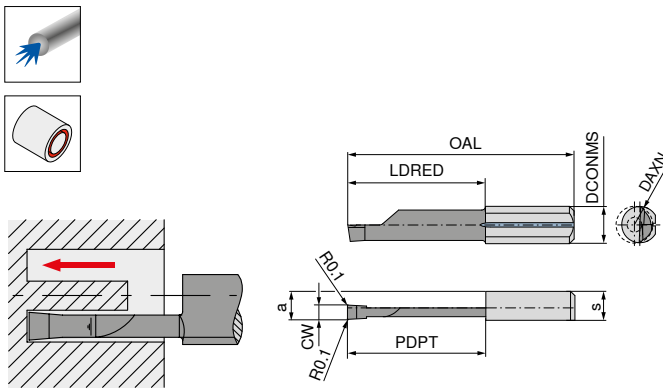
ISO designation	DCONMS _{ns} mm	a mm	DAXN mm	s mm	OAL mm	LDRED mm	PDPT mm	CW mm
R/L 015.2515-20	7	5.9	15	6.3	35	20	20	2.5
R/L 015.3015-20	7	5.9	15	6.3	35	20	20	3.0
R/L 015.3015-30	7	5.9	15	6.3	45	30	30	3.0

	Left-hand 73 057 ...		Right-hand 73 056 ...	
	£		£	
	Y5		Y5	
P	108.96	572	108.96	572
M	108.96	574	108.96	574
K	120.15	674	120.15	674
N				
S				
H				
O				

→ v_c Page 59

UltraMini – Inserts for axial grooving

▲ with corner radius



Illustrations show right-hand versions

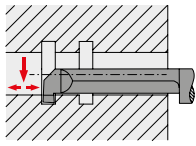
ISO designation	DCONMS _{ns} mm	a mm	DAXN mm	s mm	OAL mm	LDRED mm	PDPT mm	CW mm
R/L 015M2515-20	7	5.9	8	6.3	35	20	20	2.5
R/L 015M3015-20	7	5.9	8	6.3	35	20	20	3.0
R/L 015M3015-30	7	5.9	8	6.3	45	30	30	3.0

	Left-hand 73 257 ...		Right-hand 73 256 ...	
	£		£	
	Y5		Y5	
P	104.80	800	104.80	800
M	104.80	802	104.80	802
K	114.65	804	114.65	804
N				
S				
H				
O				

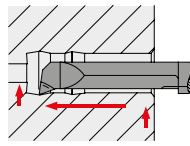
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UltraMini – Set: Internal turning, grooving and chamfering, right hand

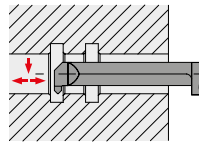
- ▲ extensive assortment of right-hand tools
- ▲ K10F – TiN



Grooving (E)



Profile turn (A)



Chamfers (F)



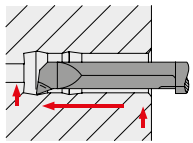
73 085 ...

Tool	Designation	Article no.	Bore Ø mm	Boring depth mm	Grooving depth mm	Groove width mm	Piece	fig.	£ Y5
Inserts	R 004.0100-16	73 002 541	4	16	0,8	1,0	1	E	
Inserts	R 005.0150-20	73 002 552	5	20	1,0	1,5	1	E	
Inserts	R 005.0200-20	73 002 553	5	20	1,0	2,0	1	E	
Inserts	R 006.0150-22	73 002 562	6	22	1,8	1,5	1	E	
Inserts	R 006.0200-22	73 002 563	6	22	1,8	2,0	1	E	
Inserts	R 050.3-16	73 004 530	3	16			1	A	1,269.71
Inserts	R 050.4-16	73 004 540	4	16			1	A	
Inserts	R 050.5-20	73 004 550	5	20			1	A	
Inserts	R 050.6-22	73 004 560	6	22			1	A	
Inserts	R 060.5-20	73 006 550	5	20			1	F	
Tool holder	645.0016-D	73 080 164					1		
Tool holder	676.0016-D	73 080 166					1		
Tightening Key	110.645	70 950 175					1		

999

UltraMini – Set: Internal Turning

- ▲ extensive assortment of right-hand tools
- ▲ K10F – TiN



73 085 ...

Tool	Designation	Article no.	Bore Ø mm	Boring depth mm	Piece	£ Y5
Inserts	R 050.3-16	73 004 530	3	16	1	
Inserts	R 050.4-16	73 004 540	4	16	1	
Inserts	R 050.5-20	73 004 550	5	20	1	798.01
Inserts	R 050.6-22	73 004 560	6	22	1	
Tool holder	645.0016-D	73 080 164			1	
Tool holder	676.0016-D	73 080 166			1	
Tightening Key	110.645	70 950 175			1	

994

12

UltraMini – Set: Holder



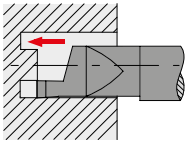
73 085 ...

Tool	Designation	Article no.	for cutting insert Ø mm	Piece	£ Y5
Tool holder	645.0016-D	73 080 164	3 / 4 / 5	1	
Tool holder	676.0016-D	73 080 166	6 / 7	1	497.54
Tightening Key	110.645	70 950 175		1	

990

UltraMini – Set: Axial Grooving

- ▲ extensive assortment of right-hand tools
- ▲ K10F – TiN



73 085 ...

Tool	Designation	Article no.	Bore Ø mm	Boring depth mm	Grooving depth mm	Groove width mm	Piece	£ Y5
Inserts	R 010.1008-10	73 050 571	8	10	1,5	1,0	1	
Inserts	R 010.1508-10	73 050 573	8	10	2,5	1,5	1	
Inserts	R 010.2008-10	73 050 575	8	10	3,0	2,0	1	644.25
Inserts	R 010.2508-20	73 050 677	8	20	3,5	2,5	1	
Inserts	R 010.3008-20	73 050 679	8	20	3,5	3,0	1	
Tool holder	676.0016-D	73 080 166					1	
Tightening Key	110.645	70 950 175					1	

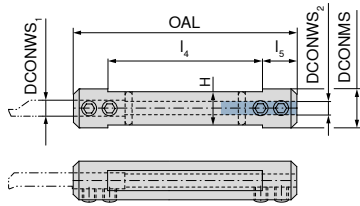
996

UltraMini – Standard tool holder for cutting inserts

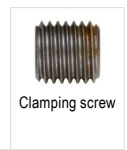
- ▲ double ended
- ▲ Machining diameter from Ø 0.5 mm

Scope of supply:

Tool holder with allen key



Designation	DCONWS ₁ mm	DCONWS ₂ mm	DCONMS mm	OAL mm	l ₄ mm	l ₅ mm	H mm	73 080 ...	
								£	
645.0012-D	4	5	12.00	75	55	10	10.3	Y5	230.44 163
645.0016-D	4	5	16.00	75	55	10	14.0	242.05	164
645.001905-D	4	5	19.05	90	70	10	17.2	201.66	170
645.0020-D	4	5	20.00	90	70	10	18.0	260.65	165
645.0022-D	4	5	22.00	90	70	10	20.0	210.29	171
645.00254-D	4	5	25.40	95	75	10	23.4	223.26	172
676.0016-D	6	7	16.00	75	55	10	14.0	242.05	166
676.001905-D	6	7	19.05	90	70	10	17.2	201.66	173
676.0020-D	6	7	20.00	90	70	10	18.0	260.65	167
676.0022-D	6	7	22.00	90	70	10	20.0	210.29	174
676.00254-D	6	7	25.40	95	75	10	23.4	223.26	175
687.0016-D	7	8	16.00	75	55	10	14.0	280.69	168
687.0020-D	7	8	20.00	90	70	10	18.0	300.42	169



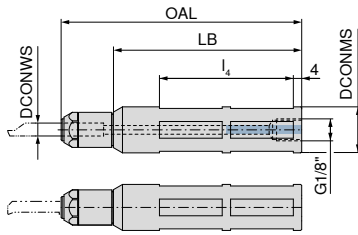
Spare parts for Article no.

Article no.	Screw	70 950 ...		73 082 ...	
		£		£	
73 080 163	SW2,5	2.97	175	M5x4	9.32 013
73 080 164	SW2,5	2.97	175	M5x6	7.65 001
73 080 170	SW2,5	2.97	175	M5x6	7.65 001
73 080 165	SW2,5	2.97	175	M5x8	9.28 008
73 080 171	SW2,5	2.97	175	M5x8	9.28 008
73 080 172	SW2,5	2.97	175	M5x8	9.28 008
73 080 166	SW2,5	2.97	175	M5x6	7.65 001
73 080 173	SW2,5	2.97	175	M5x6	7.65 001
73 080 167	SW2,5	2.97	175	M5x8	9.28 008
73 080 174	SW2,5	2.97	175	M5x8	9.28 008
73 080 175	SW2,5	2.97	175	M5x8	9.28 008
73 080 168	SW2,5	2.97	175	M6x6	10.89 014
73 080 169	SW2,5	2.97	175	M6x6	10.89 014

UltraMini – Quick change tool holder for cutting inserts

Scope of supply:

Tool holder, lock nut and clamping wedge

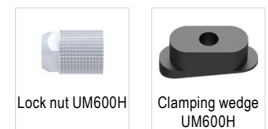


Designation	DCONWS mm	DCONMS mm	OAL mm	LB mm	l _i mm	73 089 ...	
						£ Y5	
UM600H.0012.4	4	12.00	115	90	64	434.99	124
UM600H.0016.4	4	16.00	115	90	64	394.64	164
UM600H.001905.4	4	19.05	115	90	64	423.47	194
UM600H.0020.4	4	20.00	115	90	64	417.71	204
UM600H.0022.4	4	22.00	115	90	64	424.91	224
UM600H.0025.4	4	25.00	115	90	64	433.55	254
UM600H.00254.4	4	25.40	115	90	64	442.20	264
UM600H.0028.4	4	28.00	115	90	64	442.20	284
UM600H.0012.5	5	12.00	115	90	64	434.99	125
UM600H.0016.5	5	16.00	115	90	64	394.64	165
UM600H.001905.5	5	19.05	115	90	64	423.47	195
UM600H.0020.5	5	20.00	115	90	64	417.71	205
UM600H.0022.5	5	22.00	115	90	64	424.91	225
UM600H.0025.5	5	25.00	115	90	64	433.55	255
UM600H.00254.5	5	25.40	115	90	64	442.20	265
UM600H.0028.5	5	28.00	115	90	64	442.20	285
UM600H.0012.6	6	12.00	115	90	64	434.99	126
UM600H.0016.6	6	16.00	115	90	64	394.64	166
UM600H.001905.6	6	19.05	115	90	64	423.47	196
UM600H.0020.6	6	20.00	115	90	64	417.71	206
UM600H.0022.6	6	22.00	115	90	64	424.91	226
UM600H.0025.6	6	25.00	115	90	64	433.55	256
UM600H.00254.6	6	25.40	115	90	64	442.20	266
UM600H.0028.6	6	28.00	115	90	64	442.20	286
UM600H.0012.7	7	12.00	115	90	64	434.99	127
UM600H.0016.7	7	16.00	115	90	64	394.64	167
UM600H.001905.7	7	19.05	115	90	64	423.47	197
UM600H.0020.7	7	20.00	115	90	64	417.71	207
UM600H.0022.7	7	22.00	115	90	64	424.91	227
UM600H.0025.7	7	25.00	115	90	64	433.55	257
UM600H.00254.7	7	25.40	115	90	64	442.20	267
UM600H.0028.7	7	28.00	115	90	64	442.20	287

Avoid pulling cuts. Ensure a suitable clamping force is used when using thro' coolant supply. Can be tightened using a key.

Spare parts

DCONWS	73 950 ...		73 950 ...	
	£ Y5		£ Y5	
4	97.95	104	63.38	111
5	97.95	105	63.38	111
6	97.95	106	63.38	111
7	97.95	107	63.38	111

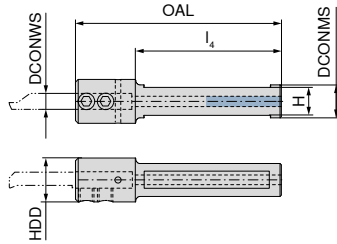


UltraMini – Toolholder for inserts

▲ single ended

Scope of supply:

Tool holder with allen key



Designation	DCONWS mm	HDD mm	DCONMS mm	OAL mm	l ₄ mm	H mm
640.0012-D	4	16	12	75	53	10.2
650.0012-D	5	16	12	75	53	10.2
660.0012-D	6	16	12	75	53	10.2
670.0012-D	7	16	12	75	53	10.2
680.0012-D	8	16	12	75	53	10.2

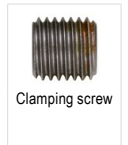
73 081 ...

£	
Y5	
237.66	264
237.66	265
339.83	266
339.83	267
339.83	268



70 950 ...

£
2A/28



73 082 ...

£
Y5

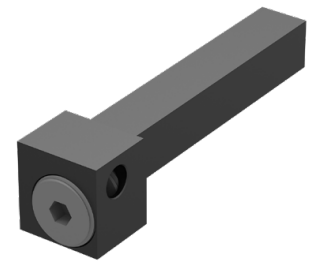
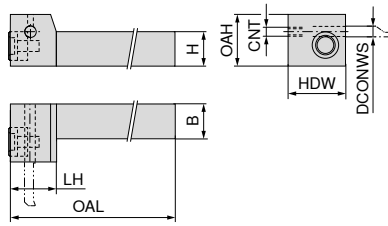
Spare parts

DCONWS		£		£	
4	SW2,5	2.97	175	M5x0,5x6	6.13 010
5	SW2,5	2.97	175	M5x0,5x6	6.13 010
6	SW2,5	2.97	175	M5x0,5x6	6.13 010
7	SW2,5	2.97	175	M5x0,5x6	6.13 010
8	SW2,5	2.97	175	M5x0,5x6	6.13 010

UltraMini – Toolholder for inserts

Scope of supply:

Tool holder with allen key



ISO designation	DCONWS mm	OAL mm	LH mm	B mm	HDW mm	H mm	OAH mm	CNT	Left-hand 73 083 ...		Right-hand 73 084 ...	
									£		£	
R/L .IK.UHCM.1212.4	4	90	17	12	20	12	18	M5	Y5	124	Y5	124
R/L .IK.UHCM.1212.5	5	90	17	12	20	12	18	M5	432.01	125	432.01	125
R/L .IK.UHCM.1212.6	6	90	17	12	20	12	21	M5	432.01	126	432.01	126
R/L .IK.UHCM.1212.7	7	90	17	12	20	12	21	M5	432.01	127	432.01	127

Suitable coolant connections can be found in our sliding head tooling catalogue.

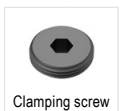
Spare parts

DCONWS

DCONWS		£			£	
4	SW5	8.11	050	UM 12	51.26	011
5	SW5	8.11	050	UM 12	51.26	011
6	SW5	8.11	050	UM 16	51.26	012
7	SW5	8.11	050	UM 16	51.26	012



Clamping key – T



Clamping screw

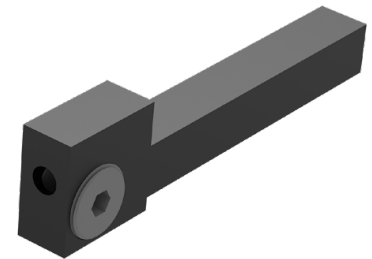
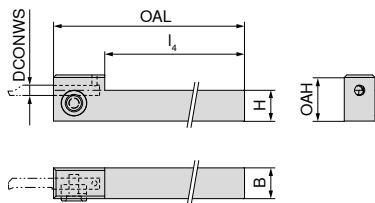
80 397 ...

73 082 ...

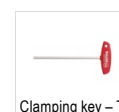
UltraMini – Toolholder for inserts

Scope of supply:

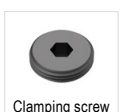
Tool holder with allen key



Designation	DCONWS mm	OAL mm	l ₄ mm	B mm	H mm	OAH mm	73 086 ...	
							£	
UM.1010.4	4	100	75	10	10	20	Y5	104
UM.1010.5	5	100	75	10	10	20	432.01	105
UM.1212.4	4	100	75	12	12	22	432.01	124
UM.1212.5	5	100	75	12	12	22	432.01	125
UM.1212.6	6	100	75	12	12	22	432.01	126



Clamping key – T



Clamping screw

80 397 ...

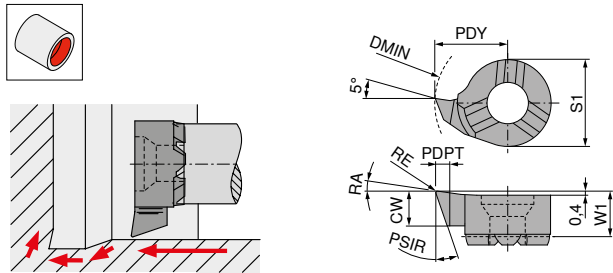
73 082 ...

Spare parts

DCONWS

DCONWS		£			£	
4	SW5	8.11	050	UM 12	51.26	011
5	SW5	8.11	050	UM 12	51.26	011
6	SW5	8.11	050	UM 16	51.26	012

MiniCut – Insert for turning and profiling



Illustrations show right-hand versions

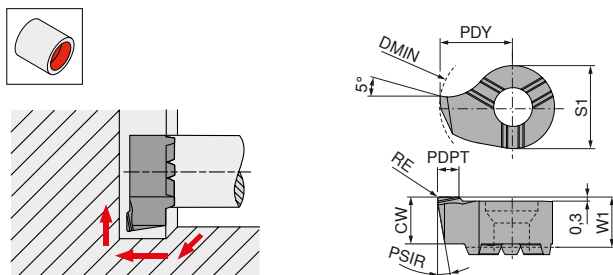
Size	ISO designation	DMIN mm	CW mm	W1 mm	PDY mm	S1 mm	RE mm	PDPT mm	PSIR °	RA °
08	8,00. R/L .3,30.18°	7.8	3.3	3.5	4.65	6.0	0.20	0.6	18	8
	8,00. R/L .3,50.18°	7.8	3.5	3.5	4.65	6.0	0.05	0.6	18	8
	8,00. R/L .3,50.20°	7.8	3.5	3.5	4.65	6.0	0.20	0.6	20	20
09	9,00. R/L .3,60.18°	9.0	3.6	3.6	5.50	6.2	0.20	0.8	18	8
	9,00. R/L .3,60.20°	9.0	3.6	3.6	5.50	6.2	0.20	0.8	20	20
11	9,80. R/L .3,90.18°	9.8	3.9	4.2	5.50	8.0	0.20	1.0	18	8
	11,00. R/L .3,90.18°	11.0	3.9	4.2	6.70	8.0	0.20	1.0	18	8
	11,00. R/L .4,20.20°	11.0	4.2	4.2	6.70	8.0	0.20	1.0	20	20
14	14,00. R/L .5,00.18°	13.8	5.0	5.1	8.70	9.0	0.20	1.5	18	8
	14,00. R/L .5,30.20°	14.0	5.3	5.3	8.70	9.0	0.20	1.5	20	20
16	15,50. R/L .5,00.18°	15.5	5.0	5.4	9.70	11.0	0.20	1.5	18	8

	Left-hand 73 324 ...	Right-hand 73 322 ...
	£ Y5	£ Y5
	49.37 033	49.37 033
	53.60 035	53.60 035
	51.84 135	51.84 135
	46.70 136	46.70 136
	52.80 236	52.80 236
	49.37 139	49.37 139
	48.81 339	48.81 339
	52.80 342	52.80 342
	48.81 550	48.81 550
	52.80 553	52.80 553
	53.34 750	53.34 750
P	•	•
M	•	•
K	•	•
N	•	•
S	•	•
H	•	•
O	•	•

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MiniCut – Insert for copy turning

▲ with chip breaker



Illustrations show right-hand versions

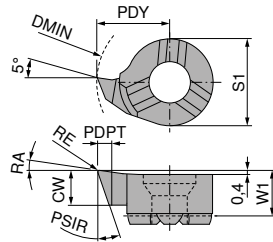
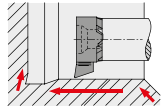
Size	ISO designation	DMIN mm	CW mm	W1 mm	PDY mm	S1 mm	RE mm	PDPT mm	PSIR °
08	8,00. R/L .3,40.10°	8	3.4	3.5	4.65	6.0	0.2	0.5	10
09	9,00. R/L .3,50.10°	9	3.5	3.6	5.50	6.2	0.2	0.5	10
11	11,00. R .4,10.10°	11	4.1	4.2	6.70	8.0	0.2	0.5	10

	Left-hand 73 388 ...	Right-hand 73 386 ...
	£ Y5	£ Y5
	41.26 13400	41.26 13400
	42.98 136	42.98 136
	41.26 14100	41.26 14100
P	•	•
M	•	•
K	•	•
N	•	•
S	•	•
H	•	•
O	•	•

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MiniCut – CBN insert for profiling – hard turning

▲ 56 to 65 HRC



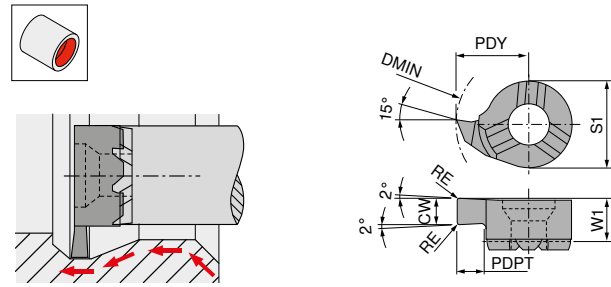
Illustrations show right-hand versions

Size	ISO designation	DMIN mm	CW mm	W1 mm	PDY mm	S1 mm	RE mm	PDPT mm	PSIR °	RA °	Left-hand CBN		Right-hand CBN	
											73 368 ...	033	73 366 ...	033
08	8,00. R/L .3,30.18°	7.8	3.3	3.5	4.65	6	0.2	0.39	18	8	£ Y5 223.21	033	£ Y5 223.21	033
11	11,00. R/L .3,90.18°	11.0	3.9	4.2	6.70	8	0.2	0.55	18	8	233.61	139	233.61	139
14	14,00. R/L .5,00.18°	13.8	5.0	5.3	8.70	9	0.2	0.69	18	8	247.52	550	247.52	550
16	16,00. R/L .5,00.18°	15.5	5.0	5.4	9.70	11	0.2	0.77	18	8	258.10	750	258.10	750
P														
M														
K														
N														
S												○	○	
H												●	●	
O														

→ v_c Page 59

MiniCut – Internal turning insert

▲ CDX = a_{pmax}



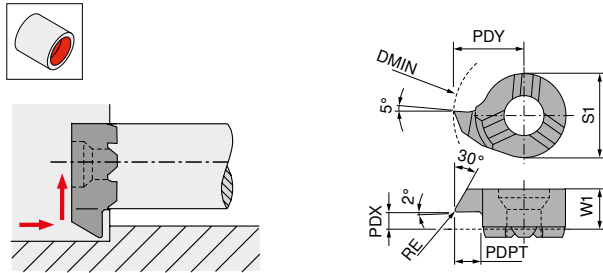
Illustrations show right-hand versions

Size	ISO designation	DMIN mm	CW mm	PDPT mm	W1 mm	PDY mm	S1 mm	RE mm	CDX mm	Left-hand		Right-hand	
										73 316 ...	73 314 ...	73 316 ...	73 314 ...
										£	£	£	£
08	8,00. R/L .1,50,1,0	8	1,5	1,0	3,3	4,8	6,0	0,2	0,2	49.94	015	49.94	015
	8,00. R/L .2,00,1,0	8	2,0	1,0	3,3	4,8	6,0	0,2	0,2	47.67	020	47.67	020
09	9,00. R/L .1,50,2,0	9	1,5	2,0	3,6	5,5	6,2	0,2	0,2	51.04	115	51.04	115
	9,00. R/L .1,50,3,0	10	1,5	3,0	3,6	6,5	6,2	0,2	0,2	51.04	121	51.04	121
	9,00. R/L .2,00,2,0	9	2,0	2,0	3,6	5,5	6,2	0,2	0,2	45.26	120	45.26	120
	9,00. R/L .2,00,3,0	10	2,0	3,0	3,6	6,5	6,2	0,2	0,2	45.26	122	45.26	122
11	11,00. R/L .1,50,2,3	11	1,5	2,3	4,2	6,7	8,0	0,2	0,2	52.58	315	52.58	315
	11,00. R/L .2,00,2,3	11	2,0	2,3	4,2	6,7	8,0	0,2	0,2	49.37	320	49.37	320
14	14,00. R/L .1,50,4,0	14	1,5	4,0	5,3	9,0	9,0	0,2	0,2	48.21	515	48.21	515
	14,00. R/L .1,50,5,5	16	1,5	5,5	5,2	10,5	9,0	0,2	0,2	61.35	516	61.35	516
	14,00. R/L .1,50,6,5	17	1,5	6,5	5,2	11,5	9,0	0,2	0,2	61.35	517	61.35	517
	14,00. R/L .2,00,4,0	14	2,0	4,0	5,3	9,0	9,0	0,2	0,2	49.37	520	49.37	520
	14,00. R/L .2,00,5,5	16	2,0	5,5	5,2	10,5	9,0	0,2	0,2	61.35	521	61.35	521
	14,00. R/L .2,00,6,5	17	2,0	6,5	5,2	11,5	9,0	0,2	0,2	61.35	522	61.35	522
	14,00. R/L .2,50,5,5	16	2,5	5,5	5,2	10,5	9,0	0,2	0,2	61.35	525	61.35	525
	14,00. R/L .2,50,6,5	17	2,5	6,5	5,2	11,5	9,0	0,2	0,2	61.35	526	61.35	526
	14,00. R/L .3,00,5,5	16	3,0	5,5	5,2	10,5	9,0	0,2	0,2	61.35	530	61.35	530
	14,00. R/L .3,00,6,5	17	3,0	6,5	5,2	11,5	9,0	0,2	0,2	61.35	531	61.35	531
16	16,00. R/L .2,00,4,3	16	2,0	4,3	5,4	10,2	11,0	0,2	0,2	53.82	720	53.82	720
P											●		●
M											●		●
K											●		●
N											●		●
S											●		●
H											●		●
O											●		●

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MiniCut – Back boring insert

▲ CDX = a_{pmax}



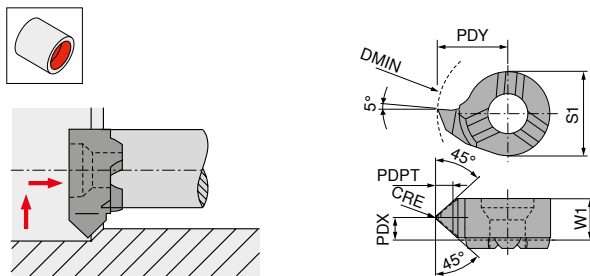
Illustrations show right-hand versions

Size	ISO designation	DMIN mm	PDPT mm	W1 mm	PDX mm	PDY mm	S1 mm	RE mm	CDX mm	Left-hand		Right-hand	
										73 332 ...	73 330 ...		
08	8,00. R/L .30°.1,3	7.8	1.3	3.50	1.0	4.65	6.0	0.2	0.6	£ Y5 56.79	013	£ Y5 56.79	013
09	9,00. R/L .30°.1,7	9.0	1.7	3.55	1.2	5.50	6.2	0.2	0.8	51.84	117	51.84	117
	9,00. R/L .30°.2,3	10.0	2.3	3.55	1.2	6.50	6.2	0.2	0.8	51.84	123	51.84	123
11	11,00. R/L .30°.2,3	11.0	2.3	4.30	1.6	6.70	8.0	0.2	1.0	55.62	323	55.62	323
14	14,00. R/L .30°.3,5	13.8	3.5	5.40	2.4	8.70	9.0	0.2	1.5	56.79	535	56.79	535
P											●		●
M											●		●
K											●		●
N											●		●
S											●		●
H											●		●
O											●		●

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MiniCut – Internal turning and chamfering insert

▲ CDX = a_{pmax}

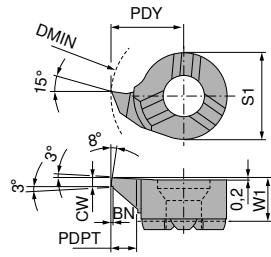
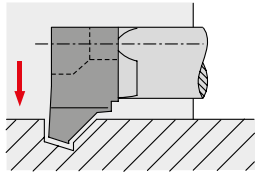


Illustrations show right-hand versions

Size	ISO designation	DMIN mm	PDPT mm	W1 mm	PDX mm	PDY mm	S1 mm	CRE mm	CDX mm	Left-hand		Right-hand	
										73 336 ...	73 334 ...		
08	8,00. R/L .45°.1,4	8	1.4	3.50	1.8	4.8	6.0	0.2	0.6	£ Y5 47.45	010	£ Y5 47.45	010
09	9,00. R/L .45°.1,3	9	1.3	3.55	1.8	5.5	6.2	0.2	0.8	44.46	110	44.46	110
11	11,00. R/L .45°.1,5	11	1.5	4.30	2.2	6.7	8.0	0.2	1.0	47.45	310	47.45	310
14	14,00. R/L .45°.1,5	14	1.5	5.40	2.8	9.0	9.0	0.2	1.2	51.25	510	51.25	510
P											●		●
M											●		●
K											●		●
N											●		●
S											●		●
H											●		●
O											●		●

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MiniCut – Insert for pregrooving and chamfering



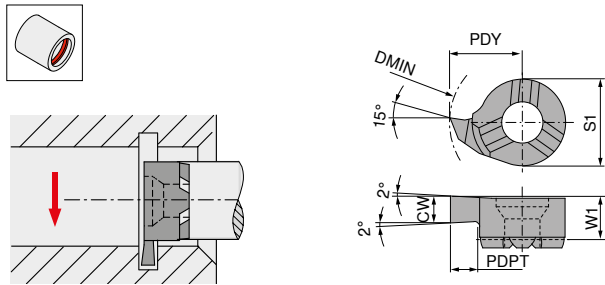
Illustrations show right-hand versions

Size	ISO designation	DMIN mm	CW mm	PDPT mm	W1 mm	PDY mm	S1 mm	BN mm	Left-hand		Right-hand	
									73 340 ...	73 338 ...	73 340 ...	73 338 ...
08	8,00. R/L .1,00.45°	8	1	1.0	3.3	4.8	6.0	0.2	£ Y5 48.22	100	£ Y5 48.22	100
09	9,00. R/L .1,00.45°	9	1	1.5	3.6	5.5	6.2	0.2	45.93	215	45.93	215
11	11,00. R/L .1,00.45°	11	1	1.5	4.2	6.7	8.0	0.2	48.22	315	48.22	315
14	14,00. R/L .1,00.45°	14	1	1.5	5.3	9.0	9.0	0.2	48.22	515	48.22	515
16	16,00. R/L .1,00.45°	16	1	1.5	5.4	10.2	11.0	0.2	48.22	715	48.22	715
P										●		●
M										●		●
K										●		●
N										●		●
S										●		●
H										●		●
O										●		●

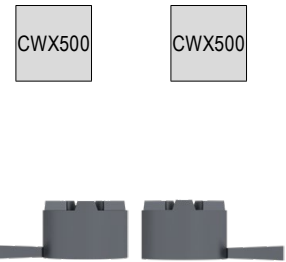
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MiniCut – Grooving insert

▲ large groove depth (T_{max} 5.5 mm)



Illustrations show right-hand versions

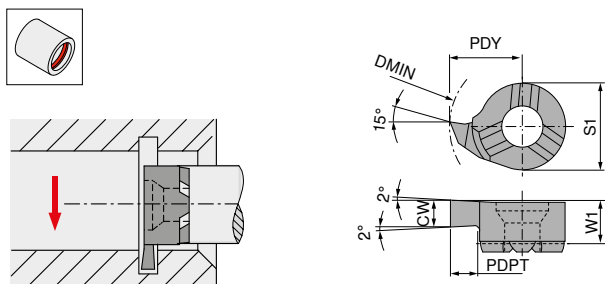


Size	ISO designation	DMIN mm	CW mm	PDPT mm	W1 mm	PDY mm	S1 mm	Left-hand		Right-hand	
								£		£	
14	14,00. R/L .1,50.5,5	16	1.5	5.5	5.2	10.5	9	73 372 ...		73 370 ...	
	14,00. R/L .2,00.5,5	16	2.0	5.5	5.2	10.5	9	£ Y5		£ Y5	
	14,00. R/L .2,50.5,5	16	2.5	5.5	5.2	10.5	9	49.52	715	49.52	715
	14,00. R/L .3,00.5,5	16	3.0	5.5	5.2	10.5	9	49.52	720	49.52	720
								49.52	725	49.52	725
								49.52	730	49.52	730
P									●		●
M									●		●
K									●		●
N									●		●
S									●		●
H									●		●
O									●		●

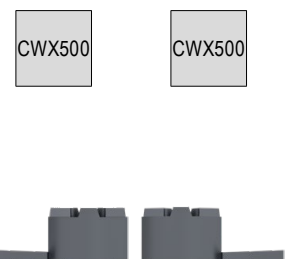
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MiniCut – Grooving insert

▲ large groove depth (T_{max} 6.5 mm)



Illustrations show right-hand versions



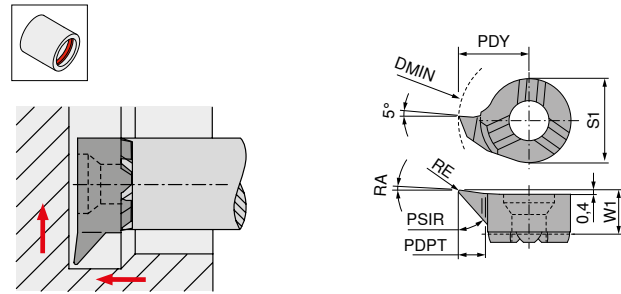
12

Size	ISO designation	DMIN mm	CW mm	PDPT mm	W1 mm	PDY mm	S1 mm	Left-hand		Right-hand	
								£		£	
14	14,00. R/L .1,50.6,5	17	1.5	6.5	5.2	11.5	9	73 384 ...		73 382 ...	
	14,00. R/L .2,00.6,5	17	2.0	6.5	5.2	11.5	9	£ Y5		£ Y5	
	14,00. R/L .2,50.6,5	17	2.5	6.5	5.2	11.5	9	49.52	515	49.52	515
	14,00. R/L .3,00.6,5	17	3.0	6.5	5.2	11.5	9	49.52	520	49.52	520
								49.52	525	49.52	525
								49.52	530	49.52	530
P									●		●
M									●		●
K									●		●
N									●		●
S									●		●
H									●		●
O									●		●

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MiniCut – Internal undercut insert

▲ CDX = ap_{max}



CWX500

CWX500

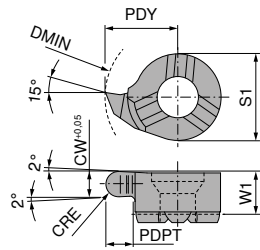
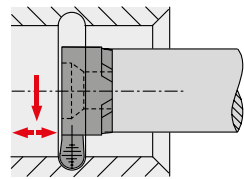
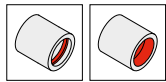


Illustrations show right-hand versions

Size	ISO designation	DMIN mm	PDPT mm	W1 mm	PDY mm	S1 mm	RE mm	CDX mm	PSIR °	RA °	Left-hand		Right-hand	
											73 328 ...	73 326 ...	73 328 ...	73 326 ...
											£ Y5		£ Y5	
08	8,00. R/L .30°1,0	7.8	1.0	3.5	4.65	6.0	0.2	0.4	30	3	57.01	010	57.01	010
	8,00. R/L .47°1,2	7.8	1.2	3.5	4.65	6.0	0.2	0.4	47	3	49.52	012	49.52	012
09	9,00. R/L .47°1,5	9.0	1.5	3.6	5.50	6.2	0.2	0.5	47	3	45.93	115	45.93	115
11	11,00. R/L .30°2,3	11.0	2.3	4.2	6.70	8.0	0.2	0.6	30	3	55.68	423	55.68	423
	11,00. R/L .47°2,3	11.0	2.3	4.2	6.70	8.0	0.2	0.6	47	3	48.22	323	48.22	323
14	13,70. R/L .47°3,0	13.7	3.0	5.3	8.70	9.0	0.2	0.8	47	3	49.52	530	49.52	530
	13,70. R/L .30°4,0	13.7	4.0	5.3	8.70	9.0	0.2	0.8	30	3	57.01	540	57.01	540
16	15,80. R/L .30°4,3	15.8	4.3	5.4	10.20	11.0	0.2	1.0	30	3	55.33	744	55.33	744
P											●		●	
M											●		●	
K											●		●	
N											●		●	
S											●		●	
H											●		●	
O											●		●	

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MiniCut – Full radius grooving and turning insert

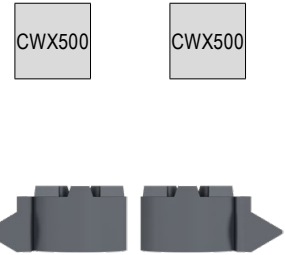
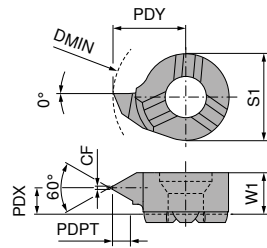
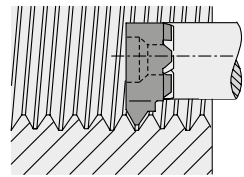
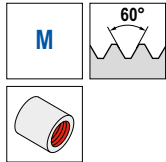


Illustrations show right-hand versions

Size	ISO designation	DMIN mm	CW mm	PDPT mm	W1 mm	PDY mm	S1 mm	CRE mm	Left-hand		Right-hand	
									73 320 ...	73 318 ...	£ Y5	£ Y5
08	8,00. R/L .0,80,1,0	8	0,8	1,0	3,3	4,8	6,0	0,4	53.17	008	53.17	008
	8,00. R/L .1,20,1,0	8	1,2	1,0	3,3	4,8	6,0	0,6	53.17	012	53.17	012
	8,00. R/L .1,80,1,0	8	1,8	1,0	3,3	4,8	6,0	0,9	53.17	018	53.17	018
	8,00. R/L .2,00,1,0	8	2,0	1,0	3,3	4,8	6,0	1,0	49.27	020	49.27	020
09	9,00. R/L .0,80,1,6	9	0,8	1,6	3,6	5,5	6,2	0,4	51.04	108	51.04	108
	9,00. R/L .1,20,1,6	9	1,2	1,6	3,6	5,5	6,2	0,6	51.04	112	51.04	112
	9,00. R/L .1,80,1,6	9	1,8	1,6	3,6	5,5	6,2	0,9	51.04	118	51.04	118
	9,00. R/L .2,00,1,6	9	2,0	1,6	3,6	5,5	6,2	1,0	51.04	120	51.04	120
11	11,00. R/L .0,80,2,3	11	0,8	2,3	4,2	6,7	8,0	0,4	53.82	308	53.82	308
	11,00. R/L .1,20,2,3	11	1,2	2,3	4,2	6,7	8,0	0,6	53.82	312	53.82	312
	11,00. R/L .1,60,2,3	11	1,6	2,3	4,2	6,7	8,0	0,8	51.04	316	51.04	316
	11,00. R/L .1,80,2,3	11	1,8	2,3	4,2	6,7	8,0	0,9	53.82	318	53.82	318
	11,00. R/L .2,00,2,3	11	2,0	2,3	4,2	6,7	8,0	1,0	53.82	320	53.82	320
	11,00. R/L .2,40,2,3	11	2,4	2,3	4,2	6,7	8,0	1,2	51.04	324	51.04	324
	11,00. R/L .3,00,2,3	11	3,0	2,3	4,2	6,7	8,0	1,5	53.82	330	53.82	330
14	14,00. R/L .0,80,4,0	14	0,8	4,0	5,3	9,0	9,0	0,4	53.12	508	53.12	508
	14,00. R/L .1,20,4,0	14	1,2	4,0	5,3	9,0	9,0	0,6	56.98	512	56.98	512
	14,00. R/L .1,80,4,0	14	1,8	4,0	5,3	9,0	9,0	0,9	56.98	518	56.98	518
	14,00. R/L .2,00,4,0	14	2,0	4,0	5,3	9,0	9,0	1,0	56.98	520	56.98	520
	14,00. R/L .2,20,4,0	14	2,2	4,0	5,3	9,0	9,0	1,1	56.98	522	56.98	522
	14,00. R/L .3,00,4,0	14	3,0	4,0	5,3	9,0	9,0	1,5	56.98	530	56.98	530
16	16,00. R/L .1,60,4,3	16	1,6	4,3	5,4	10,2	11,0	0,8	54.56	716	54.56	716
	16,00. R/L .1,80,4,3	16	1,8	4,3	5,4	10,2	11,0	0,9	57.56	718	57.56	718
	16,00. R/L .2,00,4,3	16	2,0	4,3	5,4	10,2	11,0	1,0	54.56	720	54.56	720
	16,00. R/L .2,20,4,3	16	2,2	4,3	5,4	10,2	11,0	1,1	57.56	722	57.56	722
	16,00. R/L .2,40,4,3	16	2,4	4,3	5,4	10,2	11,0	1,2	54.56	724	54.56	724
	16,00. R/L .3,00,4,3	16	3,0	4,3	5,4	10,2	11,0	1,5	57.56	730	57.56	730
	16,00. R/L .3,20,4,3	16	3,2	4,3	5,4	10,2	11,0	1,6	54.56	732	54.56	732
	16,00. R/L .4,00,4,3	16	4,0	4,3	5,4	10,2	11,0	2,0	57.56	740	57.56	740
P										●		●
M										●		●
K										●		●
N										●		●
S										●		●
H										●		●
O										●		●

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MiniCut – Threading insert (Partial profile)

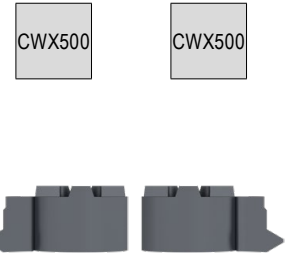
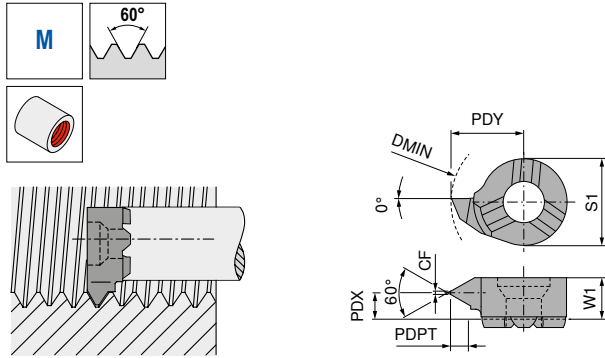


Illustrations show right-hand versions

Size	ISO designation	DMIN mm	TP mm	CF mm	PDPT mm	W1 mm	PDX mm	PDY mm	S1 mm	Left-hand		Right-hand	
										73 344 ...	73 342 ...	£ Y5	£ Y5
08	8,00. R/L .0,5/0,75.60°	8	0,5 - 0,75	0,06	0,43	3,50	2,7	4,8	6,0	57.56	012	57.56	012
	8,00. R/L .1,0/1,25.60°	8	1,0 - 1,25	0,12	0,70	3,50	2,7	4,8	6,0	57.56	014	57.56	014
	8,00. R/L .1,5/1,75.60°	8	1,5 - 1,75	0,18	0,95	3,50	2,5	4,8	6,0	57.56	010	57.56	010
09	9,00. R/L .0,5/0,75.60°	9	0,5 - 0,75	0,06	0,27	3,55	3,2	5,5	6,2	54.56	112	54.56	112
	9,00. R/L .1,0/1,25.60°	9	1,0 - 1,25	0,12	0,54	3,55	3,0	5,5	6,2	54.56	114	54.56	114
	9,00. R/L .1,5/1,75.60°	9	1,5 - 1,75	0,18	0,81	3,55	2,8	5,5	6,2	54.56	116	54.56	116
	9,00. R/L .1,75/2,0.60°	9	1,75 - 2,0	0,20	0,95	3,55	2,6	5,5	6,2	54.56	118	54.56	118
	9,00. R/L .2,0/2,5.60°	9	2,0 - 2,5	0,25	1,08	3,55	2,5	5,5	6,2	54.56	120	54.56	120
	9,00. R/L .2,5/3,0.60°	9	2,5 - 3,0	0,31	1,35	3,55	2,1	5,5	6,2	54.56	122	54.56	122
11	11,00. R/L .0,5/0,75.60°	11	0,5 - 0,75	0,06	0,75	4,30	3,5	6,7	8,0	57.56	312	57.56	312
	11,00. R/L .1,0/1,25.60°	11	1,0 - 1,25	0,12	0,55	4,30	3,5	6,7	8,0	57.56	314	57.56	314
	11,00. R/L .1,5/1,75.60°	11	1,5 - 1,75	0,18	0,81	4,30	3,5	6,7	8,0	57.56	316	57.56	316
	11,00. R/L .2,0/2,5.60°	11	2,0 - 2,5	0,25	1,08	4,30	3,0	6,7	8,0	57.56	310	57.56	310
	11,00. R/L .2,5/3,0.60°	11	2,5 - 3,0	0,31	1,35	4,30	3,0	6,7	8,0	57.56	320	57.56	320
14	14,00. R/L .1,0/1,25.60°	14	1,0 - 1,25	0,12	0,55	5,40	4,7	9,0	9,0	57.56	512	57.56	512
	14,00. R/L .1,5/1,75.60°	14	1,5 - 1,75	0,18	0,81	5,40	4,5	9,0	9,0	57.56	514	57.56	514
	14,00. R/L .2,0/2,5.60°	14	2,0 - 2,5	0,25	1,08	5,40	4,2	9,0	9,0	57.56	510	57.56	510
	14,00. R/L .2,5/3,0.60°	14	2,5 - 3,0	0,31	1,35	5,40	4,7	9,0	9,0	57.56	520	57.56	520
16	16,00. R/L .1,0/1,25.60°	16	1,0 - 1,25	0,12	0,55	5,50	4,7	10,2	11,0	57.56	712	57.56	712
	16,00. R/L .1,5/1,75.60°	16	1,5 - 1,75	0,18	0,81	5,50	4,5	10,2	11,0	57.56	714	57.56	714
	16,00. R/L .2,0/2,5.60°	16	2,0 - 2,5	0,25	1,08	5,50	4,2	10,2	11,0	57.56	716	57.56	716
	16,00. R/L .2,5/3,0.60°	16	2,5 - 3,0	0,31	1,35	5,50	4,2	10,2	11,0	57.56	710	57.56	710
P											●		●
M											●		●
K											●		●
N											●		●
S											●		●
H											●		●
O											●		●

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MiniCut – Threading insert (Full profile)

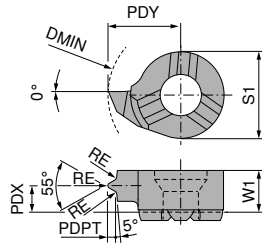
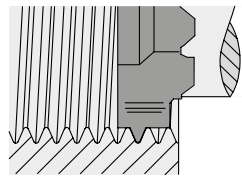
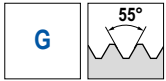


Illustrations show right-hand versions

Size	ISO designation	DMIN mm	TP mm	CF mm	PDPT mm	W1 mm	PDX mm	PDY mm	S1 mm	Left-hand		Right-hand	
										73 348 ...		73 346 ...	
										£		£	
09	9,00. R/L .0,5.60°	9	0.50	0.06	0.27	3.55	3.25	5.5	6.2	60.81	405	60.81	405
	9,00. R/L .1,0.60°	9	1.00	0.12	0.54	3.55	3.00	5.5	6.2	60.81	410	60.81	410
	9,00. R/L .1,5.60°	9	1.50	0.18	0.81	3.55	2.80	5.5	6.2	60.81	415	60.81	415
	9,00. R/L .1,75.60°	9	1.75	0.20	0.95	3.55	2.70	5.5	6.2	60.81	418	60.81	418
	9,00. R/L .2,0.60°	9	2.00	0.25	1.08	3.55	2.60	5.5	6.2	60.81	420	60.81	420
	9,00. R/L .2,5.60°	9	2.50	0.31	1.35	3.55	2.50	5.5	6.2	60.81	425	60.81	425
	9,00. R/L .3,0.60°	9	3.00	0.37	1.62	3.55	2.20	5.5	6.2	60.81	430	60.81	430
11	11,00. R/L .1,0.60°	11	1.00	0.12	0.54	4.30	3.50	6.7	8.0	65.30	314	65.30	314
	11,00. R/L .1,5.60°	11	1.50	0.18	0.81	4.30	3.50	6.7	8.0	64.26	316	65.30	316
	11,00. R/L .2,0.60°	11	2.00	0.25	1.08	4.30	3.20	6.7	8.0	65.30	310	65.30	310
	11,00. R/L .2,5.60°	11	2.50	0.31	1.35	4.30	3.00	6.7	8.0	65.30	320	65.30	320
	11,00. R/L .3,0.60°	11	3.00	0.37	1.62	4.30	2.90	6.7	8.0	65.30	330	65.30	330
14	14,00. R/L .0,5.60°	14	0.50	0.06	0.27	5.40	3.50	9.0	9.0	66.12	510	66.12	510
	14,00. R/L .1,0.60°	14	1.00	0.12	0.54	5.40	3.50	9.0	9.0	60.18	512	60.18	512
	14,00. R/L .1,5.60°	14	1.50	0.18	0.81	5.40	3.30	9.0	9.0	60.18	514	60.18	514
	14,00. R/L .2,0.60°	14	2.00	0.25	1.08	5.40	4.20	9.0	9.0	60.18	610	60.18	610
	14,00. R/L .2,5.60°	14	2.50	0.31	1.35	5.40	4.70	9.0	9.0	60.18	520	60.18	520
16	16,00. R/L .1,0.60°	16	1.00	0.12	0.54	5.50	4.70	10.2	11.0	72.73	712	72.73	712
	16,00. R/L .1,5.60°	16	1.50	0.18	0.81	5.50	4.50	10.2	11.0	72.73	714	72.73	714
	16,00. R/L .2,0.60°	16	2.00	0.25	1.08	5.50	4.20	10.2	11.0	72.73	716	72.73	716
	16,00. R/L .2,5.60°	16	2.50	0.31	1.35	5.50	4.20	10.2	11.0	72.73	710	72.73	710
	16,00. R/L .3,0.60°	16	3.00	0.37	1.62	5.50	4.00	10.2	11.0	72.73	720	72.73	720
	16,00. R/L .3,5.60°	16	3.50	0.43	1.89	5.50	3.80	10.2	11.0	72.73	730	72.73	730
	16,00. R/L .4,0.60°	16	4.00	0.50	2.16	5.50	3.60	10.2	11.0	72.73	740	72.73	740
P											•		•
M											•		•
K											•		•
N											•		•
S											•		•
H											•		•
O											•		•

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MiniCut – Threading insert (Full profile)



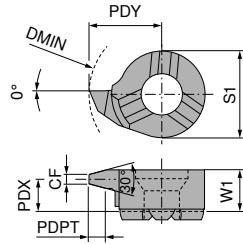
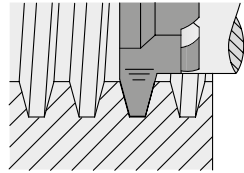
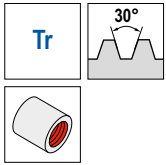
Illustrations show right-hand versions

Size	ISO designation	DMIN mm	TP mm	TPI 1/"	PDPT mm	W1 mm	PDX mm	PDY mm	S1 mm	RE mm	Left-hand		Right-hand	
											73 352 ...	73 350 ...		
											£	£		
											Y5	Y5		
11	11,00. R/L .1,814.55°	11	1.814	14	1.16	4.30	3.0	6.7	8	0.24	84.74	306	84.74	306
	11,00. R/L .1,337.55°	11	1.337	19	0.85	4.30	2.7	6.7	8	0.18	84.74	304	84.74	304
14	14,00. R/L .1,814.55°	14	1.814	14	1.16	5.35	3.6	9.0	9	0.24	83.62	506	83.62	506
	14,00. R/L .1,337.55°	14	1.337	19	0.85	5.35	3.8	9.0	9	0.18	83.62	504	83.62	504
16	16,00. R/L .2,309.55°	16	2.309	11	1.48	5.50	3.5	10.2	11	0.31	92.26	708	92.26	708
	16,00. R/L .1,814.55°	16	1.814	14	1.16	5.50	3.9	10.2	11	0.24	92.26	706	92.26	706
P											●	●		
M											●	●		
K											●	●		
N											●	●		
S											●	●		
H											●	●		
O											●	●		

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MiniCut – Threading insert (Partial profile)

▲ Trapezoidal thread DIN 103



CWX500

CWX500

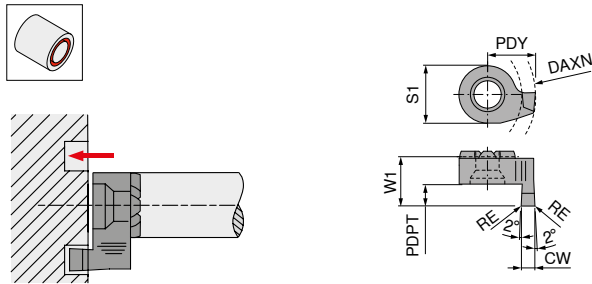


Illustrations show right-hand versions

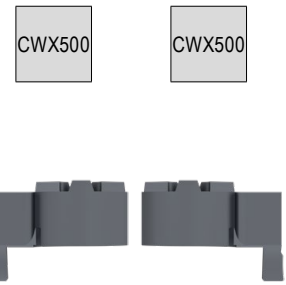
Size	ISO designation	DMIN mm	TP mm	CF mm	PDPT mm	W1 mm	PDX mm	PDY mm	S1 mm	Left-hand		Right-hand	
										73 356 ...		73 354 ...	
										£ Y5		£ Y5	
09	9,00. R/L .1,5.30°	9	1.5	0.47	0.90	3.55	3.00	5.5	6.2	56.16	415	56.16	415
	9,00. R/L .2,0.30°	9	2.0	0.60	1.25	3.55	2.85	5.5	6.2	56.16	420	56.16	420
	9,00. R/L .3,0.30°	9	3.0	0.96	1.75	3.55	2.25	5.5	6.2	56.16	430	56.16	430
	9,00. R/L .4,0.30°	10	4.0	1.33	2.25	3.55	2.25	5.5	6.2	56.16	440	56.16	440
11	11,00. R/L .1,5.30°	11	1.5	0.47	0.90	4.30	3.70	6.7	8.0	59.44	315	59.44	315
	11,00. R/L .2,0.30°	11	2.0	0.60	1.25	4.30	3.50	6.7	8.0	59.44	320	59.44	320
	11,00. R/L .3,0.30°	11	3.0	0.96	1.75	4.30	3.20	6.7	8.0	59.44	330	59.44	330
	11,00. R/L .4,0.30°	11	4.0	1.33	2.25	3.95	2.60	6.7	8.0	56.79	340	56.79	340
14	14,00. R/L .2,0.30°	14	2.0	0.60	1.25	5.30	4.30	9.0	9.0	59.61	520	59.61	520
	14,00. R/L .3,0.30°	14	3.0	0.96	1.75	5.30	4.00	9.0	9.0	59.61	530	59.61	530
	14,00. R/L .4,0.30°	14	4.0	1.33	2.25	5.30	3.60	9.0	9.0	59.61	540	59.61	540
	14,00. R/L .5,0.30°	14	5.0	1.69	2.75	5.30	3.30	9.0	9.0	59.61	550	59.61	550
16	16,00. R/L .2,0.30°	16	2.0	0.60	1.25	5.50	4.50	9.7	11.0	68.91	720	68.91	720
	16,00. R/L .3,0.30°	16	3.0	0.96	1.75	5.50	4.30	9.7	11.0	68.91	730	68.91	730
	16,00. R/L .4,0.30°	16	4.0	1.33	2.25	5.50	4.00	9.7	11.0	68.91	740	68.91	740
	16,00. R/L .5,0.30°	16	5.0	1.69	2.75	5.50	3.55	9.7	11.0	64.42	750	64.42	750
	16,00. R/L .6,0.30°	16	6.0	1.92	3.50	5.50	3.30	10.2	11.0	60.24	760	60.24	760
P										●		●	
M										●		●	
K										●		●	
N										●		●	
S										●		●	
H										●		●	
O										●		●	

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MiniCut – Axial grooving insert



Illustrations show right-hand versions



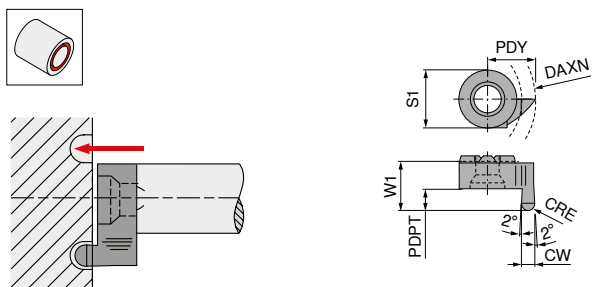
Size	ISO designation	DAXN mm	CW mm	PDPT mm	W1 mm	PDY mm	RE mm	S1 mm
14	14,00. R/L .1,0,1,5	14	1.0	1.5	8.3	9		9
	14,00. R/L .1,5,2,5	14	1.5	2.5	8.3	9	0.2	9
	14,00. R/L .2,0,3,0	14	2.0	3.0	8.3	9	0.2	9
	14,00. R/L .2,0,5,0	14	2.0	5.0	10.3	9	0.2	9
	14,00. R/L .2,5,3,0	14	2.5	3.0	8.3	9	0.2	9
	14,00. R/L .2,5,5,0	14	2.5	5.0	10.3	9	0.2	9
	14,00. R/L .3,0,3,0	14	3.0	3.0	8.3	9	0.2	9
	14,00. R/L .3,0,5,0	14	3.0	5.0	10.3	9	0.2	9

Left-hand		Right-hand	
73 364 ...		73 362 ...	
£		£	
Y5		Y5	
46.38	510	46.38	510
46.38	515	46.38	515
46.38	520	46.38	520
53.82	620	53.82	620
46.38	525	46.38	525
53.82	625	53.82	625
46.38	530	46.38	530
53.82	630	53.82	630

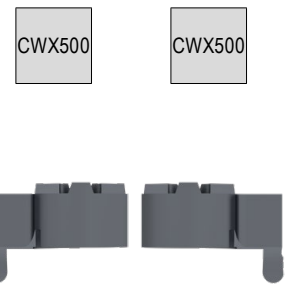
P	•	•
M	•	•
K	•	•
N	•	•
S	•	•
H	•	•
O	•	•

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MiniCut – Full radius axial grooving insert



Illustrations show right-hand versions



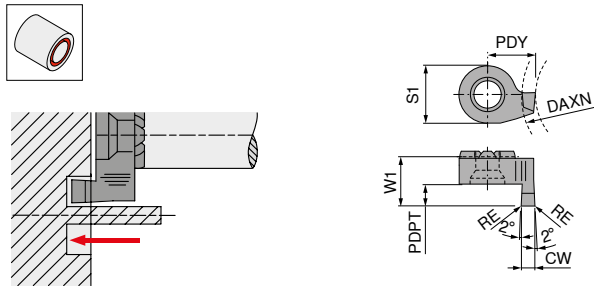
Size	ISO designation	DAXN mm	CW mm	PDPT mm	W1 mm	PDY mm	CRE mm	S1 mm
14	14,00. R/L . 1,0,1,5	14	1.0	1.5	8.3	9	0.5	9
	14,00. R/L . 1,6,2,5	14	1.6	2.5	8.3	9	0.8	9
	14,00. R/L . 2,0,3,0	14	2.0	3.0	8.3	9	1.0	9
	14,00. R/L . 2,5,3,0	14	2.5	3.0	8.3	9	1.2	9
	14,00. R/L . 3,0,3,0	14	3.0	3.0	8.3	9	1.5	9

Left-hand		Right-hand	
73 376 ...		73 374 ...	
£		£	
Y5		Y5	
53.60	510	53.60	510
53.60	516	53.60	516
53.60	520	53.60	520
53.60	525	53.60	525
53.60	530	53.60	530

P	•	•
M	•	•
K	•	•
N	•	•
S	•	•
H	•	•
O	•	•

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MiniCut – Axial grooving insert over a spigot



CWX500 CWX500



Illustrations show right-hand versions

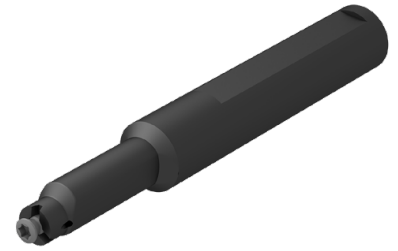
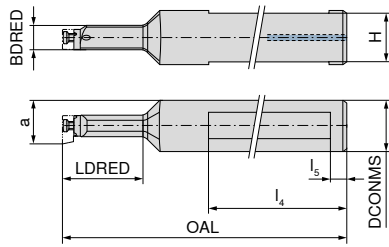
Size	ISO designation	DAXN mm	CW mm	PDPT mm	W1 mm	PDY mm	RE mm	S1 mm	Left-hand		Right-hand	
									73 360 ...	73 358 ...	73 360 ...	73 358 ...
									£		£	
									Y5		Y5	
14	14/12. R/L .1,0,1,5	12	1.0	1.5	8.3	7.0		9	48.22	310	48.22	310
	14/12. R/L .1,5,2,5	12	1.5	2.5	8.3	7.5	0.2	9	49.37	315	49.37	315
	14/12. R/L .2,0,3,0	12	2.0	3.0	8.3	8.0	0.2	9	49.37	320	49.37	320
	14/12. R/L .2,0,5,0	12	2.0	5.0	10.3	8.0	0.2	9	57.55	420	57.55	420
	14/12. R/L .2,5,3,0	12	2.5	3.0	8.3	8.5	0.2	9	49.37	325	49.37	325
	14/12. R/L .2,5,5,0	12	2.5	5.0	10.3	8.5	0.2	9	57.55	425	57.55	425
	14/12. R/L .3,0,3,0	12	3.0	3.0	8.3	9.0	0.2	9	49.37	330	49.37	330
	14/12. R/L .3,0,5,0	12	3.0	5.0	10.3	9.0	0.2	9	57.55	430	57.55	430
P									●		●	
M									●		●	
K									●		●	
N									●		●	
S									●		●	
H									●		●	
O									●		●	

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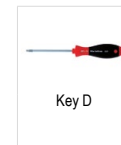
MiniCut – Steel Tool holder

Scope of supply:

Holder with clamping screw



Size	Designation	a mm	DCONMS mm	OAL mm	l ₄ mm	LDRED mm	BDRED mm	H mm	l ₅ mm	73 522 ...	
										£	
08	8,00/16.N.12.1,0	7.8	16	80	60	12		15.0	5	255.11	012
	8,00/16.N.22.1,0	7.8	16	90	60	22	7.0	15.0	5	292.72	122
09	9,00/16.N.14.1,8	8.6	16	95	60	14	7.4	15.0	5	231.37	014
	9,00/16.N.25.1,8	8.6	16	105	60	25	7.4	15.0	5	265.29	125
11	11,00/16.N.16.2,3	10.7	16	97	60	16		14.5	5	255.11	016
	11,00/16.N.29.2,3	10.7	16	110	60	29	9.5	14.5	5	292.72	129
14	14,00/16.N.18.4,0	13.8	16	100	60	18	11.0	14.5	5	292.72	018
	14,00/16.N.38.4,0	13.8	16	120	60	38	11.0	14.5	5	292.72	138
16	16,00/16.N.22.4,3	15.7	16	100	60	22		14.5	5	255.11	022
	16,00/16.N.42.4,3	15.7	16	120	60	42	13.5	14.5	5	292.72	142



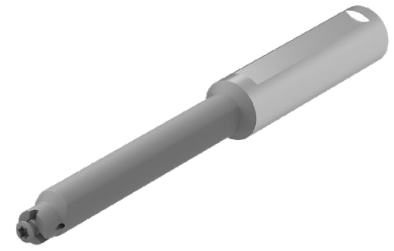
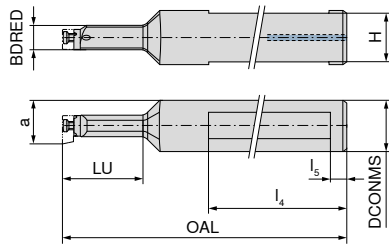
Spare parts

Size	Key D	Clamping screw	80 950 ...		73 082 ...	
			£		£	
08	T08	M2,6	13.73	110	9.52	002
09	T08	M2,6	13.73	110	9.52	002
11	T10	M3,5	16.05	112	9.52	003
14	T15	M4	16.32	113	9.52	004
16	T20	M5	17.48	114	9.52	005

MiniCut – Solid Carbide Tool holder – vibration damped

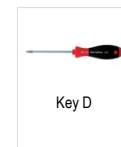
Scope of supply:

Holder with clamping screw



Size	Designation	a mm	DCONMS mm	OAL mm	l ₄ mm	LU mm	BDRED mm	H mm	l ₅ mm	83 520 ...	
										£	Y5
08	8,00/12.N.21.1,0 HM	7.8	12	80	50	22.60		11.0	5	412.70	021
	8,00/12.N.30.1,0 HM	7.8	12	90	54	30.80		11.0	5	446.29	030
	8,00/12.N.42.1,0 HM	7.8	12	100	54	42.80		11.0	5	525.05	042
	8,00/12.N.50.1,0 HM	7.8	12	115	48	51.60	7.2	11.0	5	599.83	050
09	9,00/12.N.22.1,0 HM	8.6	12	90	60	23.60	7.4	11.0	5	414.74	222
	9,00/12.N.30.2,0 HM	8.6	12	98	60	30.54	7.4	11.0	5	483.84	230
	9,00/12.N.42.3,0 HM	8.6	12	110	60	43.60	7.4	11.0	5	544.32	242
	9,00/12.N.56.4,0 HM	8.6	12	122	56	57.60	7.4	11.0	5	616.32	256
11	11,00/12.N.29.2,3 HM	10.7	12	95	60	26.40		10.5	5	412.70	129
	11,00/12.N.42.2,3 HM	10.7	12	110	56	42.50		10.5	5	446.29	142
	11,00/12.N.56.2,3 HM	10.7	12	120	56	57.60		10.5	5	525.05	156
	11,00/12.N.64.2,3 HM	10.7	12	130	56	65.60	9.5	10.5	5	599.83	164
14	14,00/12.N.34.4,0 HM	13.8	12	100	59	35.00	11.0	10.5	5	502.26	234
	14,00/12.N.45.4,0 HM	13.8	12	110	59	46.25	11.0	10.5	5	566.04	245
	14,00/12.N.64.4,0 HM	13.8	12	130	60	65.25	11.0	10.5	5	667.41	264
	14,00/16.N.34.4,0 HM	13.8	16	100	59	35.60	11.0	14.5	5	588.65	334
	14,00/16.N.45.4,0 HM	13.8	16	110	56	46.60	11.0	14.5	5	671.03	345
	14,00/16.N.64.4,0 HM	13.8	16	130	59	65.40	11.0	14.5	5	771.82	364
16	14,00/16.N.75.4,0 HM	13.8	16	145	56	81.60	11.0	14.5	5	824.56	375
	16,00/12.N.40.4,3 HM	15.7	12	130	60	41.25		10.5	5	532.45	440
	16,00/12.N.56.4,3 HM	15.7	12	130	60	57.25		10.5	5	566.04	456
	16,00/12.N.80.4,3 HM	15.7	12	150	60	81.06		10.5	5	667.41	480
	16,00/16.N.56.4,3 HM	15.7	16	130	60	57.60		14.5	5	671.03	556
	16,00/16.N.40.4,3 HM	15.7	16	130	60	41.60		14.5	5	648.64	540
16,00/16.N.80.4,3 HM	15.7	16	150	60	81.60		14.5	5	771.82	580	

12



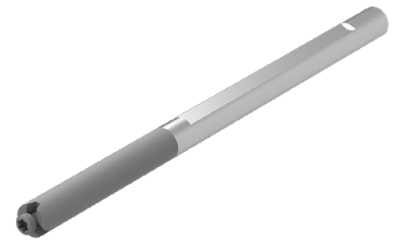
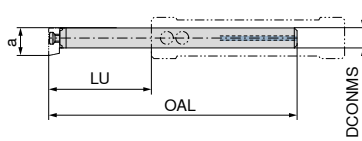
Spare parts

Size	Designation	80 950 ...		73 082 ...	
		£	Y7	£	Y5
08	T08	13.73	110	M2,6	9.52 002
09	T08	13.73	110	M2,6	9.52 002
11	T10	16.05	112	M3,5	9.52 003
14	T15	16.32	113	M4	9.52 004
16	T20	17.48	114	M5	9.52 005

MiniCut – HM – Flexholder

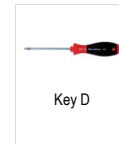
Scope of supply:

Holder with clamping screw



Size	Designation	DCONMS mm	OAL mm	LU mm	a mm	73 525 ...	
						£	
08	8,0/6.N16/2	6	65	18	8	584.65	818
	8,0/6.N40/4	6	103	40	8	665.28	840
11	11,0/8.N20/2	8	79	20	11	740.17	120 ¹⁾
	11,0/8.N50/4	8	129	50	11	840.97	150 ¹⁾

1) with thro' coolant



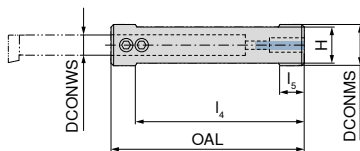
Spare parts
Size

Size	Part	£	Quantity	Part	£	Quantity
08	T08	13.73	110	M2,6	9.52	002
11	T10	16.05	112	M3,5	9.52	003

MiniCut – Base holder for solid carbide Flexholder

Scope of supply:

Holder with clamping screw



Size	Designation	DCONWS mm	DCONMS mm	H mm	OAL mm	l ₄ mm	l ₅ mm	73 526 ...	
								£	
08	8/16.75	6	16	14	75	55	10	351.37	816
	8/20.75	6	20	18	75	70	10	351.37	820
11	11/16.75	8	16	14	75	55	10	351.37	116
	11/20.75	8	20	18	75	70	10	351.37	120



Spare parts
for Article no.

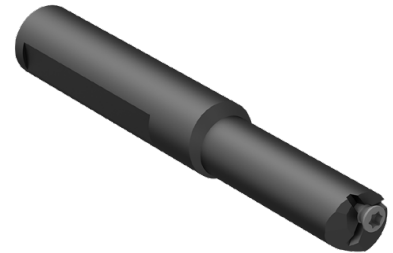
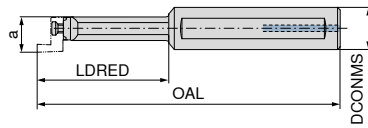
Article no.	Part	£	Quantity	Part	£	Quantity
73 526 816	SW2,5	2.97	175	M5x0,5x6	6.13	010
73 526 820	SW2,5	2.97	175	M5x0,5x6	6.13	010
73 526 116	SW2,5	2.97	175	M5x0,5x4	6.13	009
73 526 120	SW2,5	2.97	175	M5x0,5x6	6.13	010

MiniCut – Steel holder

▲ for axial machining

Scope of supply:

Holder with clamping screw



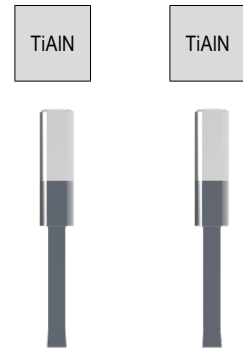
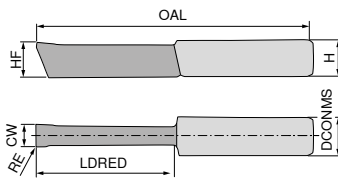
Size	Designation	a mm	DCONMS mm	OAL mm	LDRED mm	Left-hand		Right-hand	
						73 523 ...	73 524 ...	73 523 ...	73 524 ...
14	14,0/16. L .25.1,0	13.5	16	90	25	£ Y5 313.92	025	£ Y5 313.92	025
	14,0/16. R .25.1,0	13.5	16	90	25	£ Y5 313.92		£ Y5 313.92	
	14,0/16. L .45.1,0	13.5	16	110	45	£ Y5 334.08	145	£ Y5 334.08	145
	14,0/16. R .45.1,0	13.5	16	110	45	£ Y5 334.08		£ Y5 334.08	

Spare parts

Size	Key D	Clamping screw
14	80 950 ... £ Y7 16.32	73 082 ... £ Y5 9.52
	T15 113	M4 004

SlotCut – Inserts – DIN 138

▲ b₁ = Groove width



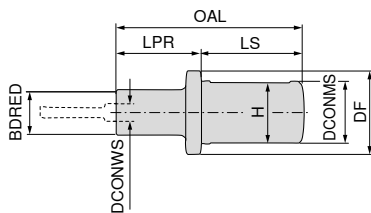
Designation	b ₁ P 9/US 9 mm	CW mm	HF mm	RE mm	OAL mm	LDRED mm	DMIN mm	DCONMS mm	H mm	73 601 ...		73 602 ...	
										£		£	
NPU.0198.01.1	2	1.98	5.5	0.1	38	12.5	6	7	6.3	Y5		Y5	
NPU.0200.01.1	2	2.01	5.5	0.1	38	12.5	6	7	6.3	108.20	099	108.20	099
NPU.0298.01.1	3	2.98	6.2	0.1	38	12.5	7	7	6.3	108.20	100	108.20	100
NPU.0300.01.1	3	3.01	6.2	0.1	38	12.5	7	7	6.3	108.20	100	108.20	100
NPU.0398.01.1	4	3.98	6.2	0.1	40	15.0	7	7	6.3			94.93	101
NPU.0398.02.2	4	3.98	6.2	0.2	50	25.0	7	7	6.3			124.56	102
NPU.0400.01.1	4	4.01	6.2	0.1	40	15.0	7	7	6.3	94.93	101		
NPU.0400.02.1	4	4.01	6.2	0.2	40	15.0	7	7	6.3	94.93	102		
NPU.0400.02.2	4	4.01	6.2	0.2	50	25.0	7	7	6.3	124.56	103		
NPU.0498.02.2	5	4.98	5.8	0.2	50	25.0	7	7	6.3			124.56	103
NPU.0500.02.2	5	5.01	5.8	0.2	50	25.0	8	7	6.3	124.56	104		

Tolerance JS 9 for 73 601, Tolerance P 9 for 73 602

SlotCut – Toolholder for broaching inserts

Scope of supply:

Tool holder with clamping screw, without insert

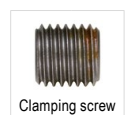


Designation	DCONWS mm	BDRED mm	DCONMS mm	DF mm	OAL mm	LS mm	LPR mm	H mm	73 610 ...	
									£	
NHU.25	7	18	25	33	73	40	33	23	Y5	025
NHU.32	7	20	32	40	73	40	33	30	518.63	032
									543.47	

Spare parts

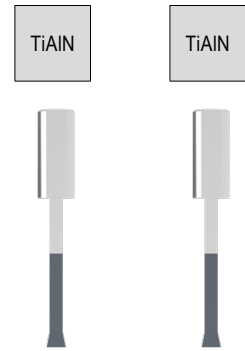
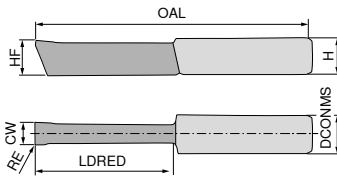
DCONMS

	70 950 ...		73 082 ...	
	£		£	
25	2.97	175	Y5	7.65
32	2.97	175	7.65	001



SlotCut – Inserts – DIN 138

▲ b₁ = Groove width



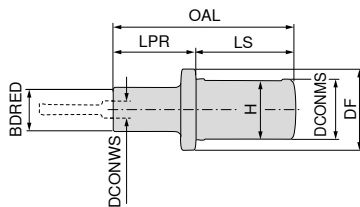
Designation	b ₁ JS 9/P 9 mm	CW mm	HF mm	RE mm	OAL mm	LDRED mm	DMIN mm	DCONMS mm	H mm	73 607 ...		73 608 ...	
										£		£	
NP10.398.02.2	4	3.98	9	0.2	50	25	10	10	9.2	151.87	101	Y5	
NP10.398.02.3	4	3.98	9	0.2	66	41	10	10	9.2	189.83	102		
NP10.400.02.2	4	4.01	9	0.2	50	25	10	10	9.2				151.87 101
NP10.400.02.3	4	4.01	9	0.2	66	41	10	10	9.2				189.83 102
NP10.498.02.2	5	4.98	9	0.2	50	25	10	10	9.2	151.87	103		
NP10.498.02.3	5	4.98	9	0.2	66	41	10	10	9.2	189.83	104		
NP10.500.02.2	5	5.01	9	0.2	50	25	10	10	9.2				151.87 103
NP10.500.02.3	5	5.01	9	0.2	66	41	10	10	9.2				189.83 104

Tolerance **P 9** for 73 607, Tolerance **JS 9** for 73 608

SlotCut – Toolholder for Cutting Inserts

Scope of supply:

Tool holder with clamping screw, without insert



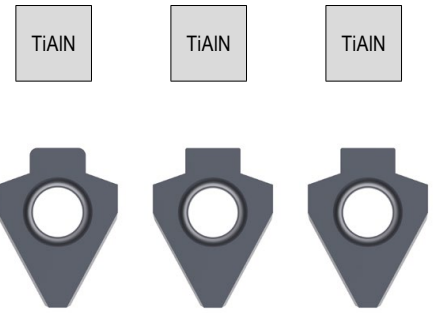
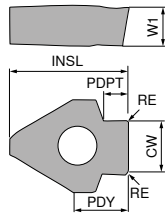
Designation	DCONWS mm	BDRED mm	DCONMS mm	DF mm	OAL mm	LS mm	LPR mm	H mm	73 612 ...	
									£	
NH10.0025.1	10	20	25	33	73	40	33	23	590.36	025
NH10.0032.1	10	20	32	40	73	40	33	30	590.36	032

12

Spare parts	DCONMS	Key I	70 950 ...		70 950 ...	
			£		£	
25	SW3		2A/28	176	M6x5,5	031
32	SW3			176	M6x5,5	031

SlotCut – Inserts – DIN 138

▲ b₁ = Groove width



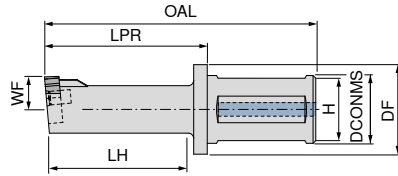
Designation	b ₁ P 9/JS 9/C 11 mm	CW mm	RE mm	PDY mm	INSL mm	PDPT mm	DMIN mm	W1 mm	clamping holder	73 603 ...		73 604 ...		73 605 ...	
										£ Y5		£ Y5		£ Y5	
NV15.0398.02	4	3.98	0.20	6.5	13.0	2.3	15	3.2	NHV 15						
NV15.0401.02	4	4.01	0.20	6.5	13.0	2.3	15	3.2	NHV 15			99.69	110		
NV15.0410.050	4	4.10	0.50	6.5	13.0	2.2	15	3.2	NHV 15	99.69	108			99.69	110
NV15.0498.02	5	4.98	0.20	6.5	13.0	2.8	15	3.2	NHV 15					99.69	111
NV15.0501.02	5	5.01	0.20	6.5	13.0	2.8	15	3.2	NHV 15			99.69	111		
NV15.0510.050	5	5.10	0.50	6.5	13.0	2.5	15	3.2	NHV 15	99.69	109				
NV15.0598.02	6	5.98	0.20	6.5	13.0	3.3	15	3.2	NHV 15					99.69	112
NV15.0601.02	6	6.01	0.20	6.5	13.0	3.3	15	3.2	NHV 15			99.69	112		
NV15.0612.085	6	6.12	0.85	6.5	13.0	2.6	15	3.2	NHV 15	99.69	110				
NPV.0498.02	5	4.98	0.20	8.0	17.3	2.7	22	5.3	NHV 22					96.83	100
NPV.0501.02	5	5.01	0.20	8.0	17.3	2.7	22	5.3	NHV 22			96.83	100		
NPV.0598.02	6	5.98	0.20	8.0	17.3	3.4	22	5.3	NHV 22					87.70	101
NPV.0601.02	6	6.01	0.20	8.0	17.3	3.4	22	5.3	NHV 22			87.70	101		
NPV.0612.085	6	6.12	0.85	8.0	17.3	2.6	22	5.3	NHV 22	87.70	101				
NPV.0713.085	7	7.13	0.85	8.0	17.3	3.3	22	5.3	NHV 22	87.70	102				
NPV.0798.02	8	7.98	0.20	8.0	17.3	4.1	22	5.3	NHV 22/30					87.70	102
NPV.0801.02	8	8.01	0.20	8.0	17.3	4.1	22	5.3	NHV 22/30			87.70	102		
NPV.0813.105	8	8.13	1.05	8.0	17.3	3.4	22	5.3	NHV 22/30	87.70	103				
NPV.0998.03	10	9.98	0.30	8.0	17.3	4.2	30	5.3	NHV 30					87.70	103
NPV.1001.03	10	10.01	0.30	8.0	17.3	4.2	30	5.3	NHV 30			87.70	103		
NPV.1013.105	10	10.13	1.05	10.9	20.2	4.2	40	5.3	NHV 38	87.70	104				
NPV.1197.03	12	11.97	0.30	10.9	20.2	5.7	40	5.3	NHV 38					96.83	104
NPV.1202.03	12	12.02	0.30	10.9	20.2	5.7	40	5.3	NHV 38			96.83	104		
NPV.1202.05	20	12.02	0.50	10.9	20.2	8.5	40	5.3	NHV 38			96.83	105		
NPV.1215.135	12	12.15	1.35	10.9	20.2	5.1	40	5.3	NHV 38	96.83	105				
NPV.1215.175	16	12.15	1.75	10.9	20.2	6.6	40	5.3	NHV 38	96.83	106				
NPV.1215.225	24	12.15	2.25	10.9	20.2	8.5	40	5.3	NHV 38	96.83	107				
NPV.1397.03	14	13.97	0.30	10.9	20.1	7.5	45	5.3	NHV 45					112.95	106
NPV.1402.03	14	14.02	0.30	10.9	20.1	7.5	45	5.3	NHV 45			112.95	106		
NPV.1597.03	16	15.97	0.30	10.9	20.1	7.5	45	5.3	NHV 45					112.95	107
NPV.1602.03	16	16.02	0.30	10.9	20.1	7.5	45	5.3	NHV 45			112.95	107		
NPV.1797.05	18	17.97	0.50	10.9	20.1	9.5	45	5.3	NHV 45					112.95	108
NPV.1802.05	18	18.02	0.50	10.9	20.1	9.5	45	5.3	NHV 45			112.95	108		
NPV.1997.05	20	19.97	0.50	10.9	20.1	10.0	45	5.3	NHV 45					112.95	109
NPV.2002.05	20	20.02	0.50	10.9	20.1	10.0	45	5.3	NHV 45			112.95	109		

1 Tolerance C 11 for 73 603, Tolerance JS 9 for 73 604, Tolerance P 9 for 73 605

SlotCut – Toolholder for inserts

Scope of supply:

Tool holder with clamping screw, without insert



Designation	DCONMS	DMIN	DF	OAL	LH	LPR	H	WF
	mm	mm	mm	mm	mm	mm	mm	mm
NHV.15.1	25	15	33	75	25	35	23	8.4
NHV.15.2	25	15	33	90	40	50	23	8.4
NHV.15.3	25	15	33	110	60	70	23	8.4

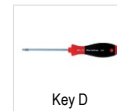
73 613 ...

£	
Y5	
506.89	025
555.83	125
633.61	225

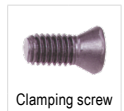
Spare parts

DCONMS

25



Key D



Clamping screw

80 950 ...

£	
Y7	
16.32	113

73 950 ...

£	
Y5	
12.97	029

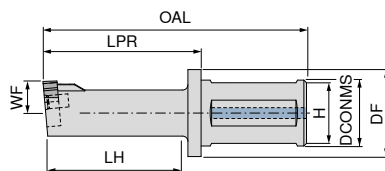
T15

M4x10

SlotCut – Toolholder for inserts

Scope of supply:

Tool holder with clamping screw, without insert



12

Designation	DCONMS	DMIN	DF	OAL	LH	LPR	H	WF
	mm	mm	mm	mm	mm	mm	mm	mm
NHV.22	25	22	33	100	50	60	23	12.0
NHV.30	32	30	45	100	50	60	30	16.5
NHV.30	32	30	45	125	75	85	30	16.5
NHV.38	32	38	45	100	50	60	30	22.0
NHV.38	32	38	45	125	75	85	30	22.0
NHV.45	40	45	55	175	105	115	38	24.0
NHV.45	40	45	55	120	50	60	38	24.0
NHV.45	40	45	55	225	155	165	38	24.0

73 611 ...

£	
Y5	
486.31	025
486.31	032
554.32	532
486.31	132
554.32	632
1,013.74	140
748.82	040
1,143.36	240

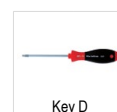
Spare parts

DCONMS

25

32

40



Key D



Clamping screw

80 950 ...

£	
Y7	
17.48	114
17.48	114
17.48	114

73 082 ...

£	
Y5	
10.00	007
10.00	007
10.00	007

T20

T20

T20

M5x13

M5x13

M5x13


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	< 0,45 % C 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	< 0,75 % C 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
S.1.2			Fe - basis 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			Ni or Co basis Age-hardened	1180 N/mm ² / 350 HB	2.4668	NiCr19Nb5Mo3 (Inconel 718)	2.4955	NiFe25Cr20NbTi
S.2.3			Ni or Co basis 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

	UltraMini K10F uncoated	UltraMini TiN	UltraMini TiAlN	UltraMini DPX 57S	UltraMini TiAlN+	MiniCut CWX500	MiniCut CBN		UltraMini	MiniCut
Index	v _c in m/min							f in mm/rev.		
	P.1.1		90	110	110	110	160		Internal turning and profiling	0,02–0,05
P.1.2		80	100	100	100	140		Internal turning and profiling – hard turning	0,02–0,06	0,03–0,10
P.1.3		60	80	80	80	140		Turning and profile turning – super alloys	0,02–0,08	
P.1.4		60	80	80	80	110		Internal turning	0,02–0,05	0,01–0,03
P.1.5		60	60	60	60	100		Back boring	0,02–0,04	0,03–0,10
P.2.1		60	80	80	80	110		Turning and chamfering	0,01–0,03	0,03–0,10
P.2.2		60	60	60	60	100		Pre-parting and chamfering	0,01–0,02	0,01–0,03
P.2.3		50	60	60	60	90		Groove turning	0,01–0,02	0,01–0,03
P.2.4		50	60	60	60	80		Internal Undercuts	0,01–0,03	0,03–0,08
P.3.1		50	60	60	60	80		Groove and profile turning	0,01–0,02	0,01–0,03
P.3.2		30	50	50	50	70		Axial grooving	0,02–0,05	0,02–0,05
P.3.3		30	30	30	30	50				
P.4.1		60	70	70	70	100				
P.4.2		50	60	60	60	90				
M.1.1		60	80	80	80	80				
M.2.1		50	60	60	60	70				
M.3.1		40	50	50	50	60				
K.1.1		80	100	100	100	90				
K.1.2		60	70	70	70	100				
K.2.1		60	60	60	60	80				
K.2.2		50	60	60	60	70				
K.3.1		80	100	100	100	120				
K.3.2		70	80	80	80	100				
N.1.1	100	200	230	230	230	290				
N.1.2	100	180	220	220	220	280				
N.2.1	90	160	190	190	190	240				
N.2.2	70	140	170	170	170	200				
N.2.3	50	80	100	100	100	120				
N.3.1	80	140	170	170	170	210				
N.3.2	70	120	140	140	140	180				
N.3.3	50	100	120	120	120	130				
N.4.1	50	100	120	120	120	100				
S.1.1		30	50	50	50	50				
S.1.2		30	30	30	30	30	30			
S.2.1		30	50	50	50	50	50			
S.2.2		30	30	30	30	40	30			
S.2.3			30	30	30	30	30			
S.3.1		30	50	50	50	50				
S.3.2		20	30	30	30	40				
S.3.3			20	20	20	30	20			
H.1.1		30	40	40	40	50	40			
H.1.2			30	30	30	40	30			
H.1.3				20	30		30			
H.1.4										
H.2.1										
H.3.1		20	30	30	30	40	30			
O.1.1	50	90	110	110	110	150				
O.1.2	50	100	120	120	120	150				
O.2.1		90	110	110	110	130				
O.2.2		60	80	80	80	100				
O.3.1	50	100	120	120	120	150				

 The cutting data is strongly influenced by external conditions, such as the stability of the tool and workpiece clamping, material and type of machine. The specified values represent guideline cutting data that can be adjusted by approx. ±20% according to the usage conditions.

Broaching – Recommendations for Correct Use

SlotCut

More and more often small and medium sized batch sizes are manufactured with precision grooves.

To directly machine such grooves in one set-up on one machine, it requires a special application of “Broaching” tools.

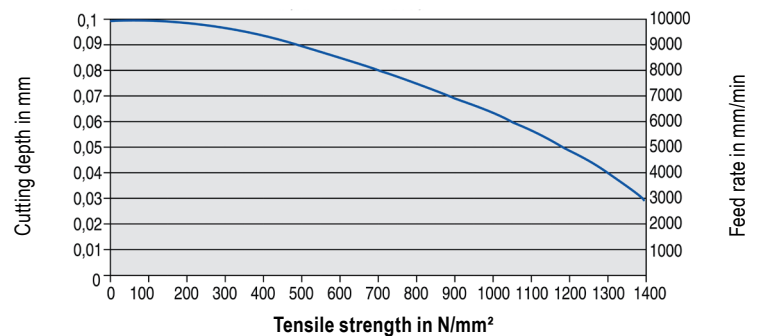
The SlotCut system can produce grooves with the most common groove tolerances.

To this end, there are four options. Two concepts are based on a solid carbide solution, which gives great success with small diameters.

For larger diameters, the concept with screw-on inserts is more suitable.

Broaching, on both lathes and machining centers is now economical, and provides highly accurate results in the shortest possible time.

Approximate values when broaching



The data depends strongly on the conditions and represent only an approximate value, factors such as machine stability, application and material may require adjustment of the data upward or downward.



Tips for the User

- ▲ Avoid interrupted cuts.
- ▲ Lift the tool out of the groove when retracting.
- ▲ Where possible, orientate the part so the groove is at the top, so the chips fall away!
- ▲ Use coolant
This will increase tool life and surface quality.
- ▲ Ensure there is a relief at the end of the groove.
- ▲ Adjustment of the tool is essential, therefore the tool diameter must be considered.



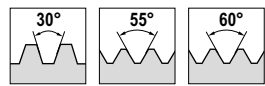
Coatings

<p>TiAlN+</p> <ul style="list-style-type: none"> ▲ TiAlN multilayer coating ▲ Maximum application temperature: 1000°C 	<p>CWX500</p> <ul style="list-style-type: none"> ▲ Carbide, TiAlN-coated ▲ The universal carbide grade for almost all materials
<p>TiN</p> <ul style="list-style-type: none"> ▲ TiN coating ▲ Maximum application temperature: 450°C 	<p>DPX77S</p> <ul style="list-style-type: none"> ▲ TiAlN+X-coating ▲ Maximum application temperature: 900°C
<p>TiAlN</p> <ul style="list-style-type: none"> ▲ TiAlN multilayer coating ▲ Maximum application temperature: 900°C 	<p>DPX57S</p> <ul style="list-style-type: none"> ▲ TiCrN coating ▲ Maximum application temperature: 900°C

Thread types

<p>M Metric ISO standard thread</p>	<p>MF Metric ISO fine thread</p>	<p>G Whitworth thread</p>
<p>Tr Metric ISO trapezoidal fine thread</p>		

Thread flank angle



Cooling

