KENNAMETAL®

INNOVATIONS

metric

FALL 2025

TABLE OF CONTENTS

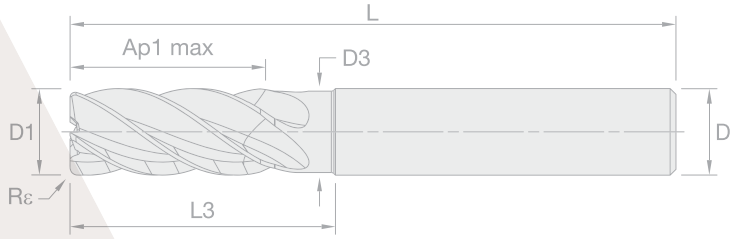
SOLID END MILLS.....3
HARVI™ II TE - High-Performance 5-Flute End Mills.....4
GOmill™ PRO - Versatile 4-Flute End Mills (Metric).....18

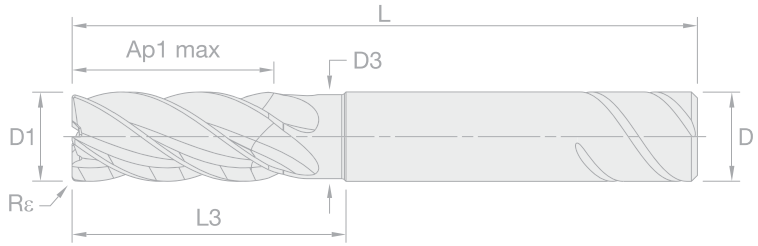
TURNING.....29
KCU25B - Universal Turning Grade with KENGold™.....31
Beyond Evolution™ - KCS10B Turning Grade.....86, 115
TopSwiss™ MBS - Precision Internal Turning.....119

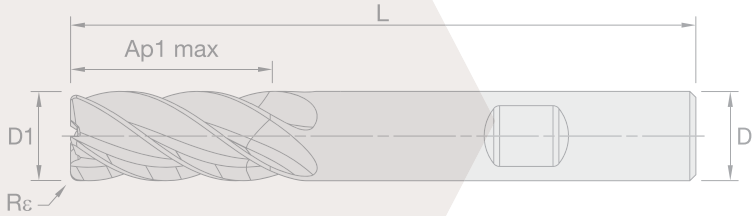
HOLEMAKING.....177
Drill Fix PRO™ - Indexable Drill.....179
KenDrill™ HPR - Solid Carbide Drill.....195

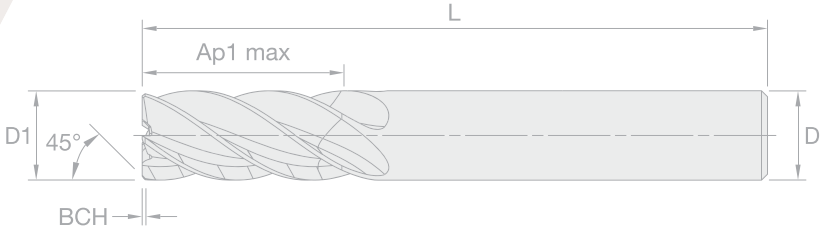
SYSTEMS.....201
BTKV30 - Taper Face Contact Tooling.....203

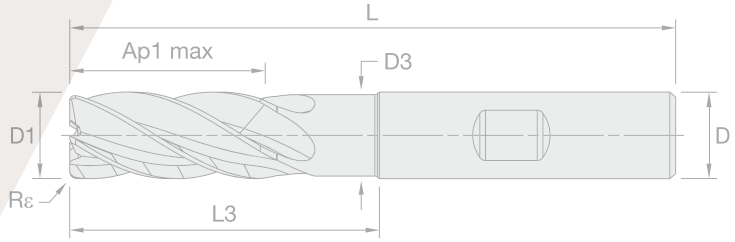
SOLID END MILLS











HARVI II TE

SOLID END MILLS

5-Flute End Mills with Extreme Application Range Achieve Ultimate Productivity and Tool Life

With the powerful combination of an extremely broad application range and ultimate productivity and tool life, HARVI II TE can make your general engineering, aerospace and defense and medical projects a cut above the rest. You can count on maximum machining flexibility across materials and efficiency in traditional and dynamic milling applications.

Applications

PRIMARY

- Side Milling/ Shoulder Milling
- Slotting Up to 1.5 – 2xD
- Helical Interpolation
- Ramping Up to 45 Degrees
- Trochoidal Milling

SECONDARY

- Plunging

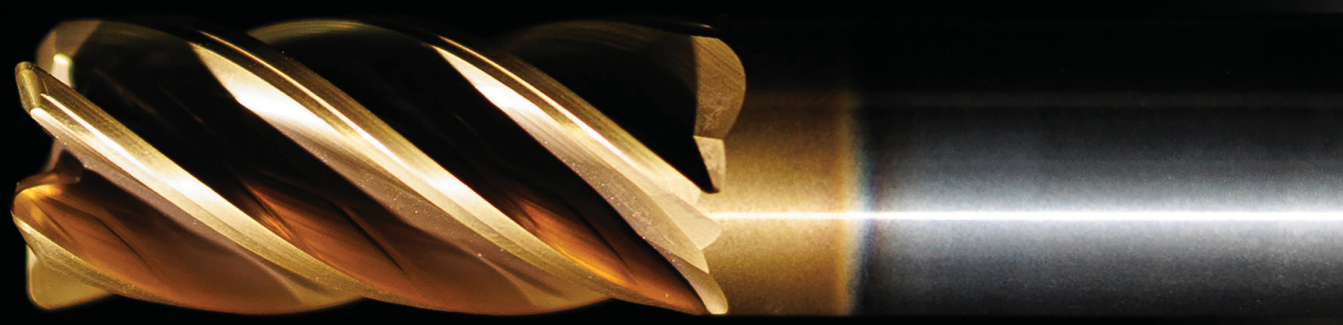
Materials

PRIMARY

- P Steels
- S High-Temp Alloys
- M Stainless Steels
- K Cast Iron

SECONDARY

- H Hardened Materials



KENNAMETAL

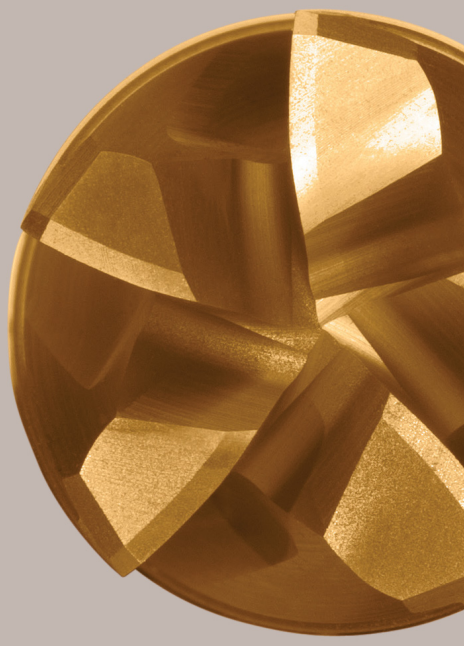
A Revolutionary 5-Flute End Mill Design for Ultimate Performance

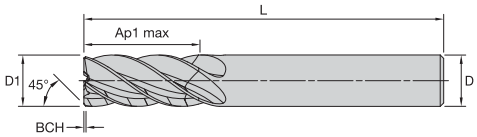
HARVI II TE solid end mills are the latest addition to Kennametal's HARVI family of high-performance versatile end mills and the only centerless 5-flute tool available for aggressive cutting parameters like ramping, plunging and deep slotting.

- Open 5-flute design combined with a stronger core for increased MRR, tool life and chip evacuation capabilities
- Novel centerless end face designed for aggressive ramping, plunging and deep slotting
- Chip gashes for better chip evacuation and improved tool cooling with increased coolant flow from the flute to cutting zone
- Proprietary W-flute shape for better chip evacuation and stronger core
- Eccentric relief increases the edge strength for longer tool life and wide material application range

Industries

- General Engineering
- Aerospace
- Medical
- Oil & Gas
- Wind & Solar
- Automotive





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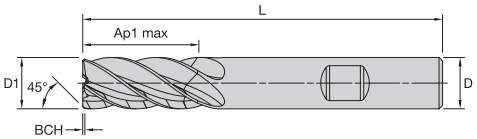
HARVI II TE

Chamfered • 5 Flutes • Plain Shank

KCPM15A

Order Number	Catalog Number	D1	D	AP1 Max	L	BCH	
7156120	H2TE5CH0400R011HAM	4.00	6.00	11.00	57.00	0.20	•
7156121	H2TE5CH0500R013HAM	5.00	6.00	13.00	57.00	0.20	•
7156122	H2TE5CH0600R016HAM	6.00	6.00	16.00	57.00	0.20	•
7157115	H2TE5CH0700R016HAM	7.00	8.00	16.00	63.00	0.20	•
7156125	H2TE5CH0800R019HAM	8.00	8.00	19.00	63.00	0.30	•
7157117	H2TE5CH0900R019HAM	9.00	10.00	19.00	72.00	0.30	•
7157118	H2TE5CH1000R022HAM	10.00	10.00	22.00	72.00	0.30	•
7156127	H2TE5CH1200R026HAM	12.00	12.00	26.00	83.00	0.40	•
7157120	H2TE5CH1600R032HAM	16.00	16.00	32.00	92.00	0.50	•
7157141	H2TE5CH1600L060HAM	16.00	16.00	60.00	125.00	0.50	•
7157142	H2TE5CH1800R032HAM	18.00	18.00	32.00	92.00	0.50	•
7157143	H2TE5CH2000R038HAM	20.00	20.00	38.00	104.00	0.50	•
7157144	H2TE5CH2000L060HAM	20.00	20.00	60.00	125.00	0.50	•
7157145	H2TE5CH2500R045HAM	25.00	25.00	45.00	121.00	0.50	•
7157146	H2TE5CH2500R075HAM	25.00	25.00	75.00	150.00	0.50	•



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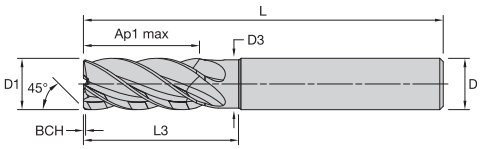
HARVI II TE

Chamfered • 5 Flutes • Weldon Shank

KCPM15A

Order Number	Catalog Number	D1	D	AP1 Max	L	BCH	
7156123	H2TE5CH0500R013HBM	5.00	6.00	13.00	57.00	0.20	•
7156124	H2TE5CH0600R016HBM	6.00	6.00	16.00	57.00	0.20	•
7157116	H2TE5CH0700R016HBM	7.00	8.00	16.00	63.00	0.20	•
7156126	H2TE5CH0800R019HBM	8.00	8.00	19.00	63.00	0.30	•
7157119	H2TE5CH1000R022HBM	10.00	10.00	22.00	72.00	0.30	•
7156128	H2TE5CH1200R026HBM	12.00	12.00	26.00	83.00	0.40	•
7157148	H2TE5CH1600R032HBM	16.00	16.00	32.00	92.00	0.50	•
7157149	H2TE5CH1600L060HBM	16.00	16.00	60.00	125.00	0.50	•
7157150	H2TE5CH1800R032HBM	18.00	18.00	32.00	92.00	0.50	•
7157151	H2TE5CH2000R038HBM	20.00	20.00	38.00	104.00	0.50	•
7157152	H2TE5CH2000L060HBM	20.00	20.00	60.00	125.00	0.50	•



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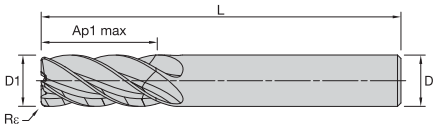
HARVI II TE

Chamfered • 5 Flutes • Necked • Plain Shank

KCPM15A

Order Number	Catalog Number	D1	D	D3	AP1 Max	L3	L	BCH	
7157191	H2TE5CH1000N022HAM	10.0	10.0	9.40	22.0	30.0	72.0	0.30	•
7156181	H2TE5CH1200N026HAM	12.0	12.0	11.28	26.0	36.0	83.0	0.40	•
7157192	H2TE5CH1600N032HAM	16.0	16.0	15.04	32.0	42.0	92.0	0.50	•
7157193	H2TE5CH2000N038HAM	20.0	20.0	18.80	38.0	52.0	104.0	0.50	•



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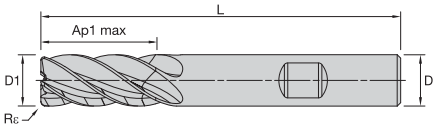
HARVI II TE

Radiused • 5 Flutes • Plain Shank

KCSM15A

Order Number	Catalog Number	D1	D	AP1 Max	L	Rε	
7156129	H2TE5RA0400R011HAR025M	4.00	6.00	11.00	57.00	0.25	•
7156130	H2TE5RA0500R013HAR025M	5.00	6.00	13.00	57.00	0.25	•
7156142	H2TE5RA0600R016HAR050M	6.00	6.00	16.00	57.00	0.50	•
7156168	H2TE5RA0600R016HAR100M	6.00	6.00	16.00	57.00	1.00	•
7156143	H2TE5RA0700R016HAR050M	7.00	8.00	16.00	63.00	0.50	•
7156144	H2TE5RA0800R019HAR050M	8.00	8.00	19.00	63.00	0.50	•
7157159	H2TE5RA0800R019HAR100M	8.00	8.00	19.00	63.00	1.00	•
7157154	H2TE5RA0900R019HAR050M	9.00	10.00	19.00	72.00	0.50	•
7156145	H2TE5RA1000R022HAR050M	10.00	10.00	22.00	72.00	0.50	•
7157160	H2TE5RA1000R022HAR100M	10.00	10.00	22.00	72.00	1.00	•
7156146	H2TE5RA1200R026HAR050M	12.00	12.00	26.00	83.00	0.50	•
7156169	H2TE5RA1200R026HAR100M	12.00	12.00	26.00	83.00	1.00	•
7157165	H2TE5RA1200R026HAR250M	12.00	12.00	26.00	83.00	2.50	•
7156147	H2TE5RA1600R032HAR050M	16.00	16.00	32.00	92.00	0.50	•
7156170	H2TE5RA1600R032HAR100M	16.00	16.00	32.00	92.00	1.00	•
7157166	H2TE5RA1600R032HAR250M	16.00	16.00	32.00	92.00	2.50	•
7156148	H2TE5RA1600L060HAR050M	16.00	16.00	60.00	125.00	0.50	•
7156171	H2TE5RA1600L060HAR100M	16.00	16.00	60.00	125.00	1.00	•
7157167	H2TE5RA1600L060HAR250M	16.00	16.00	60.00	125.00	2.50	•
7157161	H2TE5RA1800R032HAR100M	18.00	18.00	32.00	92.00	1.00	•
7156149	H2TE5RA2000R038HAR050M	20.00	20.00	38.00	104.00	0.50	•
7156172	H2TE5RA2000R038HAR100M	20.00	20.00	38.00	104.00	1.00	•
7157168	H2TE5RA2000R038HAR250M	20.00	20.00	38.00	104.00	2.50	•
7156173	H2TE5RA2000L060HAR100M	20.00	20.00	60.00	125.00	1.00	•
7156150	H2TE5RA2500R045HAR050M	25.00	25.00	45.00	121.00	0.50	•
7157172	H2TE5RA2500R075HAR400M	25.00	25.00	75.00	150.00	4.00	•



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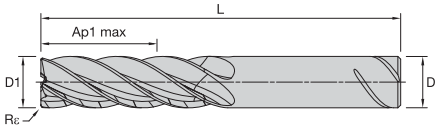
HARVI II TE

Radiused • 5 Flutes • Weldon Shank

KCSM15A

Order Number	Catalog Number	D1	D	AP1 Max	L	Rε	
7156141	H2TE5RA0500R013HBR025M	5.00	6.00	13.00	57.00	0.25	•
7156161	H2TE5RA0600R016HBR050M	6.00	6.00	16.00	57.00	0.50	•
7156162	H2TE5RA0800R019HBR050M	8.00	8.00	19.00	63.00	0.50	•
7156163	H2TE5RA1000R022HBR050M	10.00	10.00	22.00	72.00	0.50	•
7156164	H2TE5RA1200R026HBR050M	12.00	12.00	26.00	83.00	0.50	•
7157162	H2TE5RA1200R026HBR100M	12.00	12.00	26.00	83.00	1.00	•
7157169	H2TE5RA1200R026HBR250M	12.00	12.00	26.00	83.00	2.50	•
7156165	H2TE5RA1600R032HBR050M	16.00	16.00	32.00	92.00	0.50	•
7156174	H2TE5RA1600R032HBR100M	16.00	16.00	32.00	92.00	1.00	•
7157170	H2TE5RA1600R032HBR250M	16.00	16.00	32.00	92.00	2.50	•
7156166	H2TE5RA1600L060HBR050M	16.00	16.00	60.00	125.00	0.50	•
7156175	H2TE5RA1600L060HBR100M	16.00	16.00	60.00	125.00	1.00	•
7157155	H2TE5RA1800R032HBR050M	18.00	18.00	32.00	92.00	0.50	•
7156167	H2TE5RA2000R038HBR050M	20.00	20.00	38.00	104.00	0.50	•
7156176	H2TE5RA2000R038HBR100M	20.00	20.00	38.00	104.00	1.00	•
7157171	H2TE5RA2000R038HBR250M	20.00	20.00	38.00	104.00	2.50	•
7156177	H2TE5RA2000L060HBR100M	20.00	20.00	60.00	125.00	1.00	•
7157156	H2TE5RA2500R045HBR050M	25.00	25.00	45.00	121.00	0.50	•
7157173	H2TE5RA2500R075HBR400M	25.00	25.00	75.00	150.00	4.00	•



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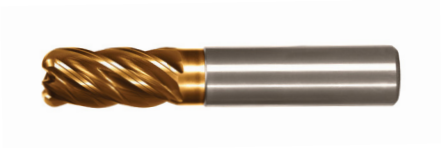
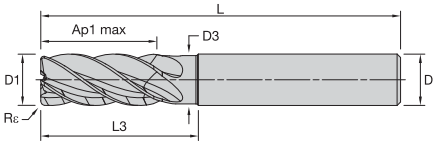
HARVI II TE

Radiused • 5 Flutes • SAFE-λOCK Shank™

KCSM15A

Order Number	Catalog Number	D1	D	AP1 Max	L	Rε	
7157163	H2TE5RA1600R032SLR100M	16.00	16.00	32.00	92.00	1.00	•
7157157	H2TE5RA2000R038SLR050M	20.00	20.00	38.00	104.00	0.50	•
7157164	H2TE5RA2000R038SLR100M	20.00	20.00	38.00	104.00	1.00	•
7157158	H2TE5RA2500R045SLR050M	25.00	25.00	45.00	121.00	0.50	•





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● Primary
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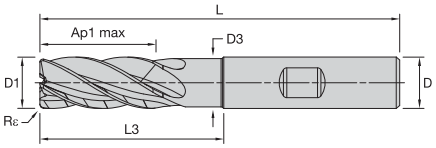
HARVI II TE

Radiused • 5 Flutes • Necked • Plain Shank

KCSM15A

Order Number	Catalog Number	D1	D	D3	AP1 Max	L3	L	Rε	
7156182	H2TE5RA0600N013HAR025M	6.00	6.00	5.64	13.00	19.00	57.00	0.25	•
7156186	H2TE5RA0600N013HAR050M	6.00	6.00	5.64	13.00	19.00	57.00	0.50	•
7156199	H2TE5RA0600N013HAR100M	6.00	6.00	5.64	13.00	19.00	57.00	1.00	•
7156183	H2TE5RA0800N019HAR025M	8.00	8.00	7.52	19.00	25.00	63.00	0.25	•
7156187	H2TE5RA0800N019HAR050M	8.00	8.00	7.52	19.00	25.00	63.00	0.50	•
7156200	H2TE5RA0800N019HAR100M	8.00	8.00	7.52	19.00	25.00	63.00	1.00	•
7157194	H2TE5RA1000N022HAR025M	10.00	10.00	9.40	22.00	30.00	72.00	0.25	•
7156188	H2TE5RA1000N022HAR050M	10.00	10.00	9.40	22.00	30.00	72.00	0.50	•
7156201	H2TE5RA1000N022HAR100M	10.00	10.00	9.40	22.00	30.00	72.00	1.00	•
7157209	H2TE5RA1000N022HAR150M	10.00	10.00	9.40	22.00	30.00	72.00	1.50	•
7156211	H2TE5RA1000N022HAR200M	10.00	10.00	9.40	22.00	30.00	72.00	2.00	•
7156216	H2TE5RA1000N022HAR250M	10.00	10.00	9.40	22.00	30.00	72.00	2.50	•
7156189	H2TE5RA1200N026HAR050M	12.00	12.00	11.28	26.00	36.00	83.00	0.50	•
7156202	H2TE5RA1200N026HAR100M	12.00	12.00	11.28	26.00	36.00	83.00	1.00	•
7156212	H2TE5RA1200N026HAR200M	12.00	12.00	11.28	26.00	36.00	83.00	2.00	•
7156217	H2TE5RA1200N026HAR250M	12.00	12.00	11.28	26.00	36.00	83.00	2.50	•
7156218	H2TE5RA1200N026HAR300M	12.00	12.00	11.28	26.00	36.00	83.00	3.00	•
7156190	H2TE5RA1400N026HAR050M	14.00	14.00	13.16	26.00	42.00	83.00	0.50	•
7157210	H2TE5RA1400N026HAR200M	14.00	14.00	13.16	26.00	42.00	83.00	2.00	•
7157219	H2TE5RA1400N026HAR300M	14.00	14.00	13.16	26.00	42.00	83.00	3.00	•
7156191	H2TE5RA1600N032HAR050M	16.00	16.00	15.04	32.00	42.00	92.00	0.50	•
7156203	H2TE5RA1600N032HAR100M	16.00	16.00	15.04	32.00	42.00	92.00	1.00	•
7156213	H2TE5RA1600N032HAR200M	16.00	16.00	15.04	32.00	42.00	92.00	2.00	•
7157214	H2TE5RA1600N032HAR250M	16.00	16.00	15.04	32.00	42.00	92.00	2.50	•
7156219	H2TE5RA1600N032HAR300M	16.00	16.00	15.04	32.00	42.00	92.00	3.00	•
7156192	H2TE5RA1600E032HAR050M	16.00	16.00	15.04	32.00	48.00	100.00	0.50	•
7156204	H2TE5RA1600E032HAR100M	16.00	16.00	15.04	32.00	48.00	100.00	1.00	•
7156214	H2TE5RA1600E032HAR200M	16.00	16.00	15.04	32.00	48.00	100.00	2.00	•
7157215	H2TE5RA1600E032HAR250M	16.00	16.00	15.04	32.00	48.00	100.00	2.50	•
7156220	H2TE5RA1600E032HAR300M	16.00	16.00	15.04	32.00	48.00	100.00	3.00	•
7156234	H2TE5RA1600E032HAR400M	16.00	16.00	15.04	32.00	48.00	100.00	4.00	•
7156237	H2TE5RA1600E032HAR600M	16.00	16.00	15.04	32.00	48.00	100.00	6.00	•
7156193	H2TE5RA2000N038HAR050M	20.00	20.00	18.80	38.00	52.00	104.00	0.50	•
7157201	H2TE5RA2000N038HAR100M	20.00	20.00	18.80	38.00	52.00	104.00	1.00	•
7157211	H2TE5RA2000N038HAR200M	20.00	20.00	18.80	38.00	52.00	104.00	2.00	•
7157220	H2TE5RA2000N038HAR300M	20.00	20.00	18.80	38.00	52.00	104.00	3.00	•
7156235	H2TE5RA2000N038HAR400M	20.00	20.00	18.80	38.00	52.00	104.00	4.00	•
7157195	H2TE5RA2000E038HAR050M	20.00	20.00	18.80	38.00	65.00	115.00	0.50	•
7157202	H2TE5RA2000E038HAR100M	20.00	20.00	18.80	38.00	65.00	115.00	1.00	•
7157212	H2TE5RA2000E038HAR200M	20.00	20.00	18.80	38.00	65.00	115.00	2.00	•
7157216	H2TE5RA2000E038HAR250M	20.00	20.00	18.80	38.00	65.00	115.00	2.50	•
7157221	H2TE5RA2000E038HAR300M	20.00	20.00	18.80	38.00	65.00	115.00	3.00	•
7156236	H2TE5RA2000E038HAR400M	20.00	20.00	18.80	38.00	65.00	115.00	4.00	•
7156205	H2TE5RA2500N045HAR100M	25.00	25.00	23.50	45.00	63.00	121.00	1.00	•
7157222	H2TE5RA2500N045HAR300M	25.00	25.00	23.50	45.00	63.00	121.00	3.00	•
7157227	H2TE5RA2500N045HAR400M	25.00	25.00	23.50	45.00	63.00	121.00	4.00	•
7157203	H2TE5RA2500E045HAR100M	25.00	25.00	23.50	45.00	75.00	135.00	1.00	•
7157224	H2TE5RA2500E045HAR300M	25.00	25.00	23.50	45.00	75.00	135.00	3.00	•



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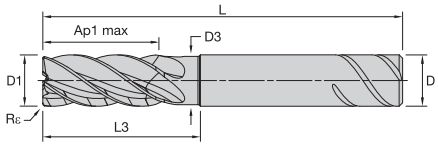
HARVI II TE

Radiused • 5 Flutes • Necked • Weldon Shank

Order Number	Catalog Number	D1	D	D3	AP1 Max	L3	L	Rε	KCSM15A
7156184	H2TE5RA0600N013HBR025M	6.00	6.00	5.64	13.00	19.00	57.00	0.25	•
7156206	H2TE5RA0600N013HBR100M	6.00	6.00	5.64	13.00	19.00	57.00	1.00	•
7156185	H2TE5RA0800N019HBR025M	8.00	8.00	7.52	19.00	25.00	63.00	0.25	•
7156207	H2TE5RA0800N019HBR100M	8.00	8.00	7.52	19.00	25.00	63.00	1.00	•
7157196	H2TE5RA1000N022HBR050M	10.00	10.00	9.40	22.00	30.00	72.00	0.50	•
7157217	H2TE5RA1000N022HBR250M	10.00	10.00	9.40	22.00	30.00	72.00	2.50	•
7156194	H2TE5RA1200N026HBR050M	12.00	12.00	11.28	26.00	36.00	83.00	0.50	•
7156231	H2TE5RA1200N026HBR300M	12.00	12.00	11.28	26.00	36.00	83.00	3.00	•
7156208	H2TE5RA1400N026HBR100M	14.00	14.00	13.16	26.00	42.00	83.00	1.00	•
7156195	H2TE5RA1600N032HBR050M	16.00	16.00	15.04	32.00	42.00	92.00	0.50	•
7156209	H2TE5RA1600N032HBR100M	16.00	16.00	15.04	32.00	42.00	92.00	1.00	•
7156232	H2TE5RA1600N032HBR300M	16.00	16.00	15.04	32.00	42.00	92.00	3.00	•
7156196	H2TE5RA1600E032HBR050M	16.00	16.00	15.04	32.00	48.00	100.00	0.50	•
7156210	H2TE5RA1600E032HBR100M	16.00	16.00	15.04	32.00	48.00	100.00	1.00	•
7156233	H2TE5RA1600E032HBR300M	16.00	16.00	15.04	32.00	48.00	100.00	3.00	•
7156197	H2TE5RA2000N038HBR050M	20.00	20.00	18.80	38.00	52.00	104.00	0.50	•
7156215	H2TE5RA2000N038HBR200M	20.00	20.00	18.80	38.00	52.00	104.00	2.00	•
7157225	H2TE5RA2000N038HBR300M	20.00	20.00	18.80	38.00	52.00	104.00	3.00	•
7156198	H2TE5RA2000E038HBR050M	20.00	20.00	18.80	38.00	65.00	115.00	0.50	•
7157204	H2TE5RA2000E038HBR100M	20.00	20.00	18.80	38.00	65.00	115.00	1.00	•
7157213	H2TE5RA2000E038HBR200M	20.00	20.00	18.80	38.00	65.00	115.00	2.00	•
7157218	H2TE5RA2000E038HBR250M	20.00	20.00	18.80	38.00	65.00	115.00	2.50	•
7157226	H2TE5RA2000E038HBR300M	20.00	20.00	18.80	38.00	65.00	115.00	3.00	•
7157228	H2TE5RA2000E038HBR400M	20.00	20.00	18.80	38.00	65.00	115.00	4.00	•
7157205	H2TE5RA2500N045HBR100M	25.00	25.00	23.50	45.00	63.00	121.00	1.00	•
7157206	H2TE5RA2500E045HBR100M	25.00	25.00	23.50	45.00	75.00	135.00	1.00	•



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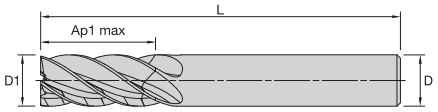
HARVI II TE

Radiused • 5 Flutes • Necked • SAFE-LOCK Shank

KCSM15A

Order Number	Catalog Number	D1	D	D3	AP1 Max	L3	L	Rε	
7157197	H2TE5RA1200N026SLR050M	12.00	12.00	11.28	26.00	36.00	83.00	0.50	•
7157198	H2TE5RA1600N032SLR050M	16.00	16.00	15.04	32.00	42.00	92.00	0.50	•
7157207	H2TE5RA1600E032SLR100M	16.00	16.00	15.04	32.00	48.00	100.00	1.00	•
7157199	H2TE5RA2000N038SLR050M	20.00	20.00	18.80	38.00	52.00	104.00	0.50	•
7157200	H2TE5RA2000E038SLR050M	20.00	20.00	18.80	38.00	65.00	115.00	0.50	•
7157208	H2TE5RA2500N045SLR100M	25.00	25.00	23.50	45.00	63.00	121.00	1.00	•



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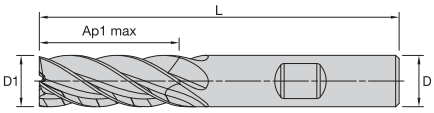
HARVI II TE

Square End • 5 Flutes • Plain Shank

KCPM15A

Order Number	Catalog Number	D1	D	AP1 Max	L	
7156097	H2TE5SE0400R011HAM	4.00	6.00	11.00	57.00	•
7156098	H2TE5SE0500R013HAM	5.00	6.00	13.00	57.00	•
7156099	H2TE5SE0600R016HAM	6.00	6.00	16.00	57.00	•
7156100	H2TE5SE0700R016HAM	7.00	8.00	16.00	63.00	•
7156111	H2TE5SE0800R019HAM	8.00	8.00	19.00	63.00	•
7156930	H2TE5SE0900R019HAM	9.00	10.00	19.00	72.00	•
7156112	H2TE5SE1000R022HAM	10.00	10.00	22.00	72.00	•
7156113	H2TE5SE1200R026HAM	12.00	12.00	26.00	83.00	•
7156114	H2TE5SE1600R032HAM	16.00	16.00	32.00	92.00	•
7156115	H2TE5SE1600L060HAM	16.00	16.00	60.00	125.00	•
7157111	H2TE5SE1800R032HAM	18.00	18.00	32.00	92.00	•
7156117	H2TE5SE2000R038HAM	20.00	20.00	38.00	104.00	•
7156118	H2TE5SE2000L060HAM	20.00	20.00	60.00	125.00	•
7157112	H2TE5SE2500R045HAM	25.00	25.00	45.00	121.00	•



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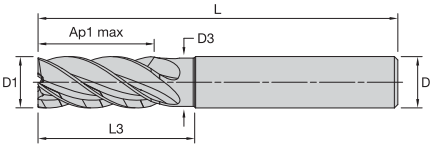
HARVI II TE

Square End • 5 Flutes • Weldon Shank

Order Number	Catalog Number	D1	D	AP1 Max	L	KCPM15A
7156119	H2TE5SE1600L060HBM	16.00	16.00	60.00	125.00	•
7157113	H2TE5SE2000R038HBM	20.00	20.00	38.00	104.00	•
7157114	H2TE5SE2000L060HBM	20.00	20.00	60.00	125.00	•



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HARVI II TE

Square End • 5 Flutes • Necked • Plain Shank

Order Number	Catalog Number	D1	D	D3	AP1 Max	L3	L	KCPM15A
7156180	H2TE5SE0600N013HAM	6.00	6.00	5.64	13.00	19.00	57.00	•
7156178	H2TE5SE0800N019HAM	8.00	8.00	7.52	19.00	25.00	63.00	•
7156179	H2TE5SE1000N022HAM	10.00	10.00	9.40	22.00	30.00	72.00	•
7157174	H2TE5SE1200N026HAM	12.00	12.00	11.28	26.00	36.00	83.00	•
7157175	H2TE5SE1400N026HAM	14.00	14.00	13.16	26.00	42.00	83.00	•
7157176	H2TE5SE1600E032HAM	16.00	16.00	15.04	32.00	48.00	100.00	•
7157177	H2TE5SE2000N038HAM	20.00	20.00	18.80	38.00	52.00	104.00	•
7157178	H2TE5SE2000E038HAM	20.00	20.00	18.80	38.00	65.00	115.00	•
7157179	H2TE5SE2500N045HAM	25.00	25.00	23.50	45.00	63.00	121.00	•
7157180	H2TE5SE2500E045HAM	25.00	25.00	23.50	45.00	75.00	135.00	•

HARVI II TE APPLICATION DATA

Material Group		Side Milling		Slotting	KCPM15A - KCSM15A Cutting Speed Vc m/min			Recommended Feed per Tooth (Fz=mm/th) is for Side Milling. For Slotting Reduce Fz by 20%												
								D1 - Diameter												
		Ap	Ae	Ap	Min	Max	mm	4.0	5.0	6.0	7.0	8.0	9.0	10.0	12.0	14.0	16.0	18.0	20.0	25.0
P	P0	1.5xD	0.5XD	1.25xD	150	200	Fz	0.031	0.040	0.048	0.057	0.066	0.073	0.079	0.091	0.102	0.111	0.119	0.125	0.136
	P1	1.5xD	0.5XD	1.25xD	150	200	Fz	0.031	0.040	0.048	0.057	0.066	0.073	0.079	0.091	0.102	0.111	0.119	0.125	0.136
	P2	1.5xD	0.5XD	1.25xD	140	190	Fz	0.031	0.040	0.048	0.057	0.066	0.073	0.079	0.091	0.102	0.111	0.119	0.125	0.136
	P3	1.5xD	0.5XD	1.25xD	120	160	Fz	0.026	0.033	0.040	0.047	0.055	0.061	0.067	0.077	0.087	0.096	0.104	0.111	0.125
	P4	1.5xD	0.5XD	1.25xD	90	150	Fz	0.024	0.030	0.036	0.043	0.049	0.054	0.059	0.069	0.077	0.084	0.091	0.097	0.107
	P5	1.5xD	0.5XD	1.25xD	60	100	Fz	0.021	0.027	0.032	0.038	0.044	0.049	0.053	0.062	0.070	0.077	0.083	0.089	0.100
	P6	1.5xD	0.5XD	1.25xD	50	75	Fz	0.018	0.022	0.027	0.032	0.037	0.041	0.044	0.051	0.057	0.063	0.067	0.071	0.078
M	M1	1.5xD	0.5XD	1.25xD	90	115	Fz	0.026	0.033	0.040	0.047	0.055	0.061	0.067	0.077	0.087	0.096	0.104	0.111	0.125
	M2	1.5xD	0.5XD	1.25xD	60	80	Fz	0.021	0.027	0.032	0.038	0.044	0.049	0.053	0.062	0.070	0.077	0.083	0.089	0.100
	M3	1.5xD	0.5XD	1.0xD	60	70	Fz	0.018	0.022	0.027	0.032	0.037	0.041	0.044	0.051	0.057	0.063	0.067	0.071	0.078
K	K1	1.5xD	0.5XD	1.0xD	120	150	Fz	0.031	0.040	0.048	0.057	0.066	0.073	0.079	0.091	0.102	0.111	0.119	0.125	0.136
	K2	1.5xD	0.5XD	1.0xD	110	140	Fz	0.026	0.033	0.040	0.047	0.055	0.061	0.067	0.077	0.087	0.096	0.104	0.111	0.125
	K3	1.5xD	0.5XD	1.0xD	110	130	Fz	0.021	0.027	0.032	0.038	0.044	0.049	0.053	0.062	0.070	0.077	0.083	0.089	0.100
S	S1	1.5xD	0.3XD	0.75xD	50	90	Fz	0.026	0.033	0.040	0.047	0.055	0.061	0.067	0.077	0.087	0.096	0.104	0.111	0.125
	S2	1.5xD	0.3XD	0.75xD	25	50	Fz	0.014	0.018	0.021	0.025	0.029	0.032	0.035	0.041	0.046	0.051	0.055	0.059	0.067
	S3	1.5xD	0.5XD	0.75xD	25	40	Fz	0.014	0.018	0.021	0.025	0.029	0.032	0.035	0.041	0.046	0.051	0.055	0.059	0.067
	S4	1.5xD	0.5XD	1.25xD	50	60	Fz	0.017	0.023	0.028	0.034	0.040	0.045	0.049	0.057	0.064	0.071	0.076	0.082	0.092
H	H1	1.5xD	0.5XD	1.0xD	80	140	Fz	0.024	0.030	0.036	0.043	0.049	0.054	0.059	0.069	0.077	0.084	0.091	0.097	0.107
	H2	1.5xD	0.2XD	1.0xD	70	120	Fz	0.018	0.022	0.027	0.032	0.037	0.041	0.044	0.051	0.057	0.063	0.067	0.071	0.078

NOTE:
Those guidelines may require variations to achive optimum results.
Lower value of cuting speed is used for high stock removal applications or for higher hardness (machinability) within group.
Higher value of cuting speed is used for finishing applications or for lower hardness (machinability) within group.
Above parameters are based on ideal conditions.
For smaller taper machining centers, please adjust parameters accordiongly on diameters greater than 12mm.
For tools with reach >4.5xD, reduce fz by 30% and use lowe range of cutting speed as starting condition.
Higher slotting DOC possible with proper pull-out protection, tool holder, machine setup & coolant flow.

HARVI II TE APPLICATION DATA - Adjustment Factor Table

Adjustment Factor Table for Feed and Speed Calculation.

	Ae/D	2%	4%	5%	8%	10%	12%	20%	30%	40%	50%	100%
Speed Factor	Kv	2.1 - 3.6	1.6 - 3	1.6 - 2.5	1.6	1.4	1.38	1.3	1.2	1.1	1	1
Feed Factor	KFz	3.58	2.56	2.3	1.84	1.67	1.54	1.25	1.09	1.02	1	0.9
phi [°]		16.26	23.07	25.84	32.86	36.87	40.54	53.13	66.42	78.46	90.00	180.00

NOTE:
These calculations are for roughing / semi-finishing cuts when used with the recommeded base fz.
For light finishing cuts requiring improved surface quality it is recommended to reduce the base fz approximately 50% and then apply these factors.
For an Ae/D ratio of 5% or less there is range given for speed factor Kv, which alows the user to either be more conservative at the lower value or more aggressive with the higher value.
This can also be considered based on machinability of the material, from difficukt to free cutting.

To calculate application specific cutting data, please use above Kv coefficient for adaptation of cutting speed and KFz for feed respectively.

Vc new=Vc*Kv
Fz new=Fz*KFz

Calculation Example:

Aplication:	D1=	12.0 mm
	Material Group	P5
	Ae=	20% of D
Cutting data recommendation:	Vc=	80 m/min
	Fz=	0.062 mm/th
Adjustment coefficient:	Kv=	1.30
	KFz=	1.25

Final cutting data recommendation:

Vc new=	80 *	1.30 =	104 m/min
Fz new=	0.062 *	1.25 =	0.0775 mm/th

HARVI II TE APPLICATION DATA

Material Group		Helical Interpolation / Ramping 0° - 15°	KCPM15A - KCSM15A Cutting Speed Vc m/min		Min - Max Diameter for Helical Interpolation	Recommended feed per tooth (fz = mm/z) for Helical Interpolation and Ramping - Zef=2 D1 - Diameter												
						4,6-7,6	5,8-9,5	6,9-11,4	8,1-13,3	9,2-15,2	10,4-17,1	11,5-19,0	13,8-22,8	16,1-26,6	18,4-30,4	20,7-34,2	23,0-38,0	28,8-47,5
		Max Depth	Min	Max	mm	4.0	5.0	6.0	7.0	8.0	9.0	10.0	12.0	14.0	16.0	18.0	20.0	25.0
P	P0	1,25 x D1	150	200	Fz	0.031	0.040	0.048	0.057	0.066	0.073	0.079	0.091	0.102	0.111	0.119	0.125	0.136
	P1	1,25 x D1	150	200	Fz	0.031	0.040	0.048	0.057	0.066	0.073	0.079	0.091	0.102	0.111	0.119	0.125	0.136
	P2	1,25 x D1	140	190	Fz	0.031	0.040	0.048	0.057	0.066	0.073	0.079	0.091	0.102	0.111	0.119	0.125	0.136
	P3	1,25 x D1	120	160	Fz	0.026	0.033	0.040	0.047	0.055	0.061	0.067	0.077	0.087	0.096	0.104	0.111	0.125
	P4	1,25 x D1	90	150	Fz	0.024	0.030	0.036	0.043	0.049	0.054	0.059	0.069	0.077	0.084	0.091	0.097	0.107
	P5	1,25 x D1	60	100	Fz	0.021	0.027	0.032	0.038	0.044	0.049	0.053	0.062	0.070	0.077	0.083	0.089	0.100
	P6	1,25 x D1	50	75	Fz	0.018	0.022	0.027	0.032	0.037	0.041	0.044	0.051	0.057	0.063	0.067	0.071	0.078
M	M1	1,25 x D1	90	115	Fz	0.026	0.033	0.040	0.047	0.055	0.061	0.067	0.077	0.087	0.096	0.104	0.111	0.125
	M2	1,25 x D1	60	80	Fz	0.021	0.027	0.032	0.038	0.044	0.049	0.053	0.062	0.070	0.077	0.083	0.089	0.100
	M3	1,0 x D1	60	70	Fz	0.018	0.022	0.027	0.032	0.037	0.041	0.044	0.051	0.057	0.063	0.067	0.071	0.078
K	K1	1,0 x D1	120	150	Fz	0.031	0.040	0.048	0.057	0.066	0.073	0.079	0.091	0.102	0.111	0.119	0.125	0.136
	K2	1,0 x D1	110	140	Fz	0.026	0.033	0.040	0.047	0.055	0.061	0.067	0.077	0.087	0.096	0.104	0.111	0.125
	K3	1,0 x D1	110	130	Fz	0.021	0.027	0.032	0.038	0.044	0.049	0.053	0.062	0.070	0.077	0.083	0.089	0.100
S	S1	0,75 x D1	50	90	Fz	0.026	0.033	0.040	0.047	0.055	0.061	0.067	0.077	0.087	0.096	0.104	0.111	0.125
	S2	0,75 x D1	25	50	Fz	0.014	0.018	0.021	0.025	0.029	0.032	0.035	0.041	0.046	0.051	0.055	0.059	0.067
	S3	0,5 x D1	25	40	Fz	0.014	0.018	0.021	0.025	0.029	0.032	0.035	0.041	0.046	0.051	0.055	0.059	0.067
	S4	1,25 x D1	50	60	Fz	0.017	0.023	0.028	0.034	0.040	0.045	0.049	0.057	0.064	0.071	0.076	0.082	0.092
H	H1	1,0 x D1	80	140	Fz	0.024	0.030	0.036	0.043	0.049	0.054	0.059	0.069	0.077	0.084	0.091	0.097	0.107
	H2	1,0 x D1	70	120	Fz	0.018	0.022	0.027	0.032	0.037	0.041	0.044	0.051	0.057	0.063	0.067	0.071	0.078

HARVI II TE APPLICATION DATA

Material Group		Helical Interpolation / Ramping 15° - 30°	KCPM15A - KCSM15A Cutting Speed Vc m/min		Min - Max Diameter for Helical Interpolation	Recommended feed per tooth (fz = mm/z) for Helical Interpolation and Ramping - Zef=2 D1 - Diameter												
						4,6-7,6	5,8-9,5	6,9-11,4	8,1-13,3	9,2-15,2	10,4-17,1	11,5-19,0	13,8-22,8	16,1-26,6	18,4-30,4	20,7-34,2	23,0-38,0	28,8-47,5
		Max Depth	Min	Max	mm	4.0	5.0	6.0	7.0	8.0	9.0	10.0	12.0	14.0	16.0	18.0	20.0	25.0
P	P0	1,25 x D1	150	200	Fz	0.023	0.030	0.036	0.043	0.050	0.055	0.059	0.068	0.076	0.083	0.089	0.094	0.102
	P1	1,25 x D1	150	200	Fz	0.023	0.030	0.036	0.043	0.050	0.055	0.059	0.068	0.076	0.083	0.089	0.094	0.102
	P2	1,25 x D1	140	190	Fz	0.023	0.030	0.036	0.043	0.050	0.055	0.059	0.068	0.076	0.083	0.089	0.094	0.102
	P3	1,25 x D1	120	160	Fz	0.019	0.025	0.030	0.036	0.041	0.046	0.050	0.058	0.065	0.072	0.078	0.083	0.094
	P4	1,25 x D1	90	150	Fz	0.018	0.022	0.027	0.032	0.037	0.041	0.045	0.051	0.058	0.063	0.068	0.073	0.080
	P5	1,25 x D1	60	100	Fz	0.016	0.020	0.024	0.029	0.033	0.037	0.040	0.046	0.052	0.058	0.062	0.067	0.075
	P6	1,25 x D1	50	75	Fz	0.013	0.017	0.020	0.024	0.028	0.031	0.033	0.038	0.043	0.047	0.050	0.053	0.059
K	K1	1,0 x D1	120	150	Fz	0.023	0.030	0.036	0.043	0.050	0.055	0.059	0.068	0.076	0.083	0.089	0.094	0.102
	K2	1,0 x D1	110	140	Fz	0.019	0.025	0.030	0.036	0.041	0.046	0.050	0.058	0.065	0.072	0.078	0.083	0.094
	K3	1,0 x D1	110	130	Fz	0.016	0.020	0.024	0.029	0.033	0.037	0.040	0.046	0.052	0.058	0.062	0.067	0.075
S	S1	0,75 x D1	50	90	Fz	0.019	0.025	0.030	0.036	0.041	0.046	0.050	0.058	0.065	0.072	0.078	0.083	0.094
	S2	0,75 x D1	25	50	Fz	0.010	0.013	0.016	0.019	0.022	0.024	0.026	0.031	0.035	0.038	0.042	0.045	0.051
	S3	0,5 x D1	25	40	Fz	0.010	0.013	0.016	0.019	0.022	0.024	0.026	0.031	0.035	0.038	0.042	0.045	0.051
	S4	1,25 x D1	50	60	Fz	0.013	0.017	0.021	0.026	0.030	0.034	0.037	0.043	0.048	0.053	0.057	0.061	0.069
H	H1	1,0 x D1	80	140	Fz	0.018	0.022	0.027	0.032	0.037	0.041	0.045	0.051	0.058	0.063	0.068	0.073	0.080
	H2	1,0 x D1	70	120	Fz	0.013	0.017	0.020	0.024	0.028	0.031	0.033	0.038	0.043	0.047	0.050	0.053	0.059

HARVI II TE APPLICATION DATA

Material Group		Helical Interpolation / Ramping 15° - 30°	KCPM15A - KCSM15A Cutting Speed Vc m/min		Min - Max Diameter for Helical Interpolation	Recommended feed per tooth (fz = mm/z) for Helical Interpolation and Ramping - Zef=2 D1 - Diameter												
						4,6-7,6	5,8-9,5	6,9-11,4	8,1-13,3	9,2-15,2	10,4-17,1	11,5-19,0	13,8-22,8	16,1-26,6	18,4-30,4	20,7-34,2	23,0-38,0	28,8-47,5
		Max Depth	Min	Max	mm	4.0	5.0	6.0	7.0	8.0	9.0	10.0	12.0	14.0	16.0	18.0	20.0	25.0
P	P0	1,25 x D1	150	200	Fz	0.023	0.030	0.036	0.043	0.050	0.055	0.059	0.068	0.076	0.083	0.089	0.094	0.102
	P1	1,25 x D1	150	200	Fz	0.023	0.030	0.036	0.043	0.050	0.055	0.059	0.068	0.076	0.083	0.089	0.094	0.102
	P2	1,25 x D1	140	190	Fz	0.023	0.030	0.036	0.043	0.050	0.055	0.059	0.068	0.076	0.083	0.089	0.094	0.102
	P3	1,25 x D1	120	160	Fz	0.019	0.025	0.030	0.036	0.041	0.046	0.050	0.058	0.065	0.072	0.078	0.083	0.094
	P4	1,25 x D1	90	150	Fz	0.018	0.022	0.027	0.032	0.037	0.041	0.045	0.051	0.058	0.063	0.068	0.073	0.080
	P5	1,25 x D1	60	100	Fz	0.016	0.020	0.024	0.029	0.033	0.037	0.040	0.046	0.052	0.058	0.062	0.067	0.075
	P6	1,25 x D1	50	75	Fz	0.013	0.017	0.020	0.024	0.028	0.031	0.033	0.038	0.043	0.047	0.050	0.053	0.059
K	K1	1,0 x D1	120	150	Fz	0.023	0.030	0.036	0.043	0.050	0.055	0.059	0.068	0.076	0.083	0.089	0.094	0.102
	K2	1,0 x D1	110	140	Fz	0.019	0.025	0.030	0.036	0.041	0.046	0.050	0.058	0.065	0.072	0.078	0.083	0.094
	K3	1,0 x D1	110	130	Fz	0.016	0.020	0.024	0.029	0.033	0.037	0.040	0.046	0.052	0.058	0.062	0.067	0.075
S	S1	0,75 x D1	50	90	Fz	0.019	0.025	0.030	0.036	0.041	0.046	0.050	0.058	0.065	0.072	0.078	0.083	0.094
	S2	0,75 x D1	25	50	Fz	0.010	0.013	0.016	0.019	0.022	0.024	0.026	0.031	0.035	0.038	0.042	0.045	0.051
	S3	0,5 x D1	25	40	Fz	0.010	0.013	0.016	0.019	0.022	0.024	0.026	0.031	0.035	0.038	0.042	0.045	0.051
	S4	1,25 x D1	50	60	Fz	0.013	0.017	0.021	0.026	0.030	0.034	0.037	0.043	0.048	0.053	0.057	0.061	0.069
H	H1	1,0 x D1	80	140	Fz	0.018	0.022	0.027	0.032	0.037	0.041	0.045	0.051	0.058	0.063	0.068	0.073	0.080
	H2	1,0 x D1	70	120	Fz	0.013	0.017	0.020	0.024	0.028	0.031	0.033	0.038	0.043	0.047	0.050	0.053	0.059

HARVI II TE APPLICATION DATA

Material Group		Helical Interpolation / Ramping 30° - 45°	KCPM15A - KCSM15A Cutting Speed Vc m/min		Min - Max Diameter for Helical Interpolation	Recommended feed per tooth (fz = mm/z) for Helical Interpolation and Ramping - Zef=2 D1 - Diameter												
						4,6-7,6	5,8-9,5	6,9-11,4	8,1-13,3	9,2-15,2	10,4-17,1	11,5-19,0	13,8-22,8	16,1-26,6	18,4-30,4	20,7-34,2	23,0-38,0	28,8-47,5
		Max Depth	Min	Max	mm	4.0	5.0	6.0	7.0	8.0	9.0	10.0	12.0	14.0	16.0	18.0	20.0	25.0
P	P0	1,25 x D1	150	200	Fz	0.019	0.024	0.029	0.034	0.040	0.044	0.048	0.055	0.061	0.067	0.071	0.075	0.082
	P1	1,25 x D1	150	200	Fz	0.019	0.024	0.029	0.034	0.040	0.044	0.048	0.055	0.061	0.067	0.071	0.075	0.082
	P2	1,25 x D1	140	190	Fz	0.019	0.024	0.029	0.034	0.040	0.044	0.048	0.055	0.061	0.067	0.071	0.075	0.082
	P3	1,25 x D1	120	160	Fz	0.015	0.020	0.024	0.028	0.033	0.037	0.040	0.046	0.052	0.058	0.062	0.067	0.075
	P4	1,25 x D1	90	150	Fz	0.014	0.018	0.022	0.026	0.030	0.033	0.036	0.041	0.046	0.051	0.055	0.058	0.064
	P5	1,25 x D1	60	100	Fz	0.013	0.016	0.019	0.023	0.026	0.029	0.032	0.037	0.042	0.046	0.050	0.053	0.060
	P6	1,25 x D1	50	75	Fz	0.011	0.013	0.016	0.019	0.022	0.024	0.027	0.031	0.034	0.038	0.040	0.043	0.047
K	K1	1,0 x D1	120	150	Fz	0.019	0.024	0.029	0.034	0.040	0.044	0.048	0.055	0.061	0.067	0.071	0.075	0.082
	K2	1,0 x D1	110	140	Fz	0.015	0.020	0.024	0.028	0.033	0.037	0.040	0.046	0.052	0.058	0.062	0.067	0.075
	K3	1,0 x D1	110	130	Fz	0.013	0.016	0.019	0.023	0.026	0.029	0.032	0.037	0.042	0.046	0.050	0.053	0.060
S	S1	0,75 x D1	50	90	Fz	0.015	0.020	0.024	0.028	0.033	0.037	0.040	0.046	0.052	0.058	0.062	0.067	0.075
	S2	0,75 x D1	25	50	Fz	0.008	0.011	0.013	0.015	0.017	0.019	0.021	0.025	0.028	0.031	0.033	0.036	0.040
	S3	0,5 x D1	25	40	Fz	0.008	0.011	0.013	0.015	0.017	0.019	0.021	0.025	0.028	0.031	0.033	0.036	0.040
	S4	1,25 x D1	50	60	Fz	0.010	0.014	0.017	0.021	0.024	0.027	0.029	0.034	0.038	0.042	0.046	0.049	0.055
H	H1	1,0 x D1	80	140	Fz	0.014	0.018	0.022	0.026	0.030	0.033	0.036	0.041	0.046	0.051	0.055	0.058	0.064
	H2	1,0 x D1	70	120	Fz	0.011	0.013	0.016	0.019	0.022	0.024	0.027	0.031	0.034	0.038	0.040	0.043	0.047

HARVI II TE

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TAKE YOUR
MANUFACTURING TO
THE **NEXT LEVEL**

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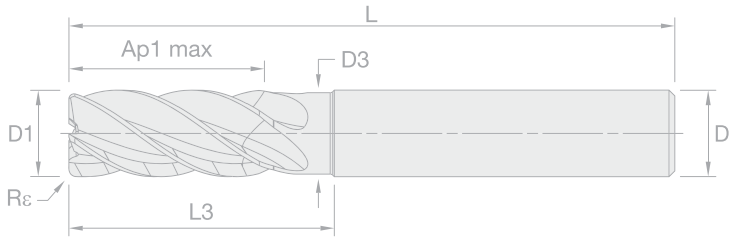
KENNAMETAL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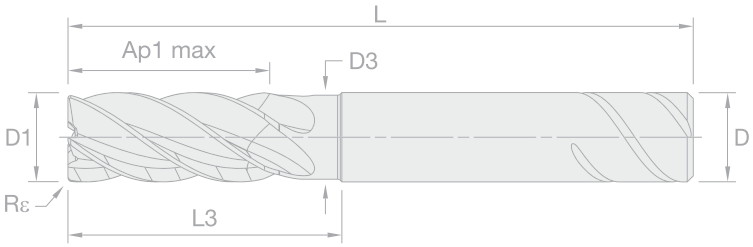
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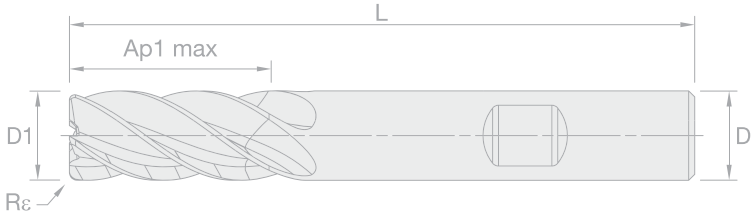
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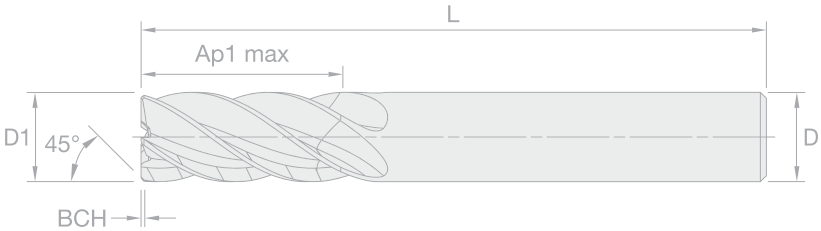
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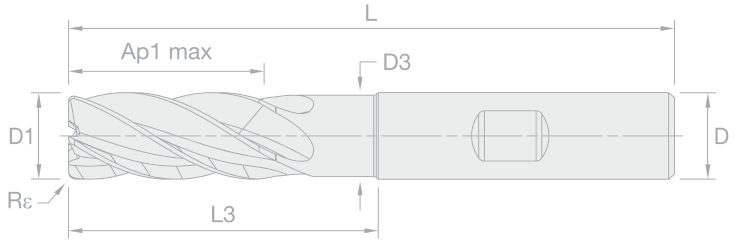
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GOmill™ PRO

SOLID CARBIDE END MILLS

Ideal for shops working in the general engineering, transportation, energy and medical industries, GOmill PRO serves as a do-it-all end mill where price, performance and versatility meet for next level operations.

Applications

- Side Milling/ Shoulder Milling
- Helical Milling
- Pocketing
- Slotting
- Ramping
- Dynamic Milling

Materials

PRIMARY

- **P** Steels
- **K** Cast Iron
- **M** Stainless Steels

SECONDARY

- **S** High-Temp Alloys

KENNAMETAL

Your Go-To End Mill for Price, Performance & Versatility

Kennametal's 4-flute GOmill PRO Solid Carbide End Mills are suited to become a go-to solution for small and medium sized shops. Designed for side and shoulder milling, helical milling, pocketing, slotting and shallow ramping, GOmill PRO delivers affordability, versatility and high performance for next level machining. Designed for cutting steels, stainless steels and cast iron, the new solid carbide end mills feature:

- An asymmetric divided flute for better vibration control and tool life and smoother cutting
- A variable helix angle for better vibration control and tool life
- A tapered core for better chip evacuation and tool strength
- Multilayer TiN/TiALN coating for high performance at medium-high cutting on steels, stainless steels and cast iron
- Special relief design for higher edge strength, better vibration control and workpiece material flexibility

Industries

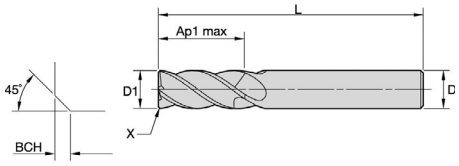
General Engineering

Automotive

Wind & Solar

Oil & Gas

Medical



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GOmill PRO

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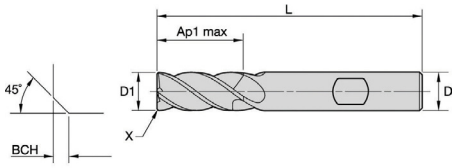
KCU20

Order Number	Catalog Number	D1	D	AP1 Max	L	BCH	
7231597	GOPR4CH0300R008HAM	3.00	6.00	8.00	57.00	0.15	•
7231599	GOPR4CH0400R011HAM	4.00	6.00	11.00	57.00	0.15	•
7231601	GOPR4CH0500R013HAM	5.00	6.00	13.00	57.00	0.15	•
7231603	GOPR4CH0600R013HAM	6.00	6.00	13.00	57.00	0.15	•
7231605	GOPR4CH0600X032HAM	6.00	6.00	32.00	76.00	0.15	•
7231606	GOPR4CH0700R019HAM	7.00	8.00	19.00	63.00	0.15	•
7231676	GOPR4CH0800R019HAM	8.00	8.00	19.00	63.00	0.20	•
7231678	GOPR4CH0800L032HAM	8.00	8.00	32.00	87.00	0.20	•
7231679	GOPR4CH0900R022HAM	9.00	10.00	22.00	72.00	0.20	•
7231680	GOPR4CH1000R022HAM	10.00	10.00	22.00	72.00	0.20	•
7231712	GOPR4CH1000L038HAM	10.00	10.00	38.00	89.00	0.20	•
7231713	GOPR4CH1200R026HAM	12.00	12.00	26.00	83.00	0.20	•
7231715	GOPR4CH1200L051HAM	12.00	12.00	51.00	100.00	0.20	•
7231716	GOPR4CH1400S026HAM	14.00	14.00	26.00	83.00	0.35	•
7231718	GOPR4CH1600R032HAM	16.00	16.00	32.00	92.00	0.35	•
7231721	GOPR4CH1600L057HAM	16.00	16.00	57.00	125.00	0.35	•
7231722	GOPR4CH2000S038HAM	20.00	20.00	38.00	104.00	0.35	•
7231724	GOPR4CH2000R057HAM	20.00	20.00	57.00	125.00	0.35	•
7231726	GOPR4CH2500S045HAM	25.00	25.00	45.00	121.00	0.35	•



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GOmill PRO

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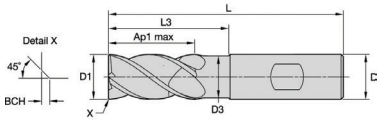
KCU20

Order Number	Catalog Number	D1	D	AP1 Max	L	BCH	
7231598	GOPR4CH0300R008HBM	3.00	6.00	8.00	57.00	0.15	•
7231600	GOPR4CH0400R011HBM	4.00	6.00	11.00	57.00	0.15	•
7231602	GOPR4CH0500R013HBM	5.00	6.00	13.00	57.00	0.15	•
7231604	GOPR4CH0600R013HBM	6.00	6.00	13.00	57.00	0.15	•
7231677	GOPR4CH0800R019HBM	8.00	8.00	19.00	63.00	0.20	•
7231711	GOPR4CH1000R022HBM	10.00	10.00	22.00	72.00	0.20	•
7231714	GOPR4CH1200R026HBM	12.00	12.00	26.00	83.00	0.20	•
7231717	GOPR4CH1400S026HBM	14.00	14.00	26.00	83.00	0.35	•
7231719	GOPR4CH1600R032HBM	16.00	16.00	32.00	92.00	0.35	•
7231723	GOPR4CH2000S038HBM	20.00	20.00	38.00	104.00	0.35	•



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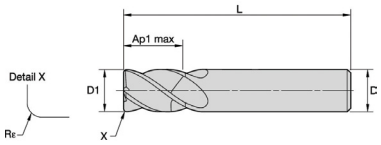
KCU20

Order Number	Catalog Number	D1	D	D3	AP1 Max	L	L3	BCH	
7230995	GOPR4CH0200N006HBM	2.00	6.00	1.88	4.00	57.00	8.00	0.15	•
7231184	GOPR4CH0300N008HBM	3.00	6.00	2.82	8.00	57.00	15.00	0.15	•
7231185	GOPR4CH0400N011HBM	4.00	6.00	3.76	11.00	57.00	16.00	0.15	•
7231186	GOPR4CH0500N013HBM	5.00	6.00	4.70	13.00	57.00	18.00	0.15	•
7231187	GOPR4CH0600N013HBM	6.00	6.00	5.64	13.00	57.00	21.00	0.15	•
7231188	GOPR4CH0800N019HBM	8.00	8.00	7.52	19.00	63.00	27.00	0.20	•
7231189	GOPR4CH1000N022HBM	10.00	10.00	9.40	22.00	72.00	32.00	0.20	•
7231190	GOPR4CH1200N026HBM	12.00	12.00	11.28	26.00	83.00	38.00	0.20	•
7231191	GOPR4CH1600N032HBM	16.00	16.00	15.04	32.00	92.00	44.00	0.35	•
7231192	GOPR4CH2000N038HBM	20.00	20.00	18.80	38.00	104.00	53.00	0.35	•
7231725	GOPR4CH2500N045HBM	25.00	25.00	23.50	45.00	121.00	65.00	0.35	•



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● Primary
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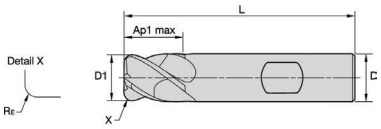
GOmill PRO

Radiused • 4 Flutes • Plain Shank

KCU20

Order Number	Catalog Number	D1	D	AP1 Max	L	Rε	
7231579	GOPR4RA0600S007HAR040M	6.00	6.00	7.00	50.00	0.40	•
7231641	GOPR4RA0800S010HAR040M	8.00	8.00	10.00	50.00	0.40	•
7231643	GOPR4RA1000S012HAR040M	10.00	10.00	12.00	66.00	0.40	•
7231646	GOPR4RA1200S015HAR050M	12.00	12.00	15.00	73.00	0.50	•
7231664	GOPR4RA1600S020HAR050M	16.00	16.00	20.00	82.00	0.50	•
7231662	GOPR4RA1600R035HAR050M	16.00	16.00	35.00	92.00	0.50	•
7231670	GOPR4RA2000S025HAR050M	20.00	20.00	25.00	92.00	0.50	•
7231668	GOPR4RA2000R042HAR050M	20.00	20.00	42.00	104.00	0.50	•
7231674	GOPR4RA2500R052HAR050M	25.00	25.00	52.00	121.00	0.50	•



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● Primary
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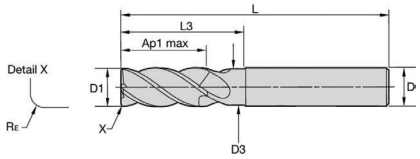
GOmill PRO

Radiused • 4 Flutes • Weldon Shank

KCU20

Order Number	Catalog Number	D1	D	AP1 Max	L	Rε	
7231580	GOPR4RA0600S007HBR040M	6.00	6.00	7.00	50.00	0.40	•
7231642	GOPR4RA0800S010HBR040M	8.00	8.00	10.00	50.00	0.40	•
7231644	GOPR4RA1000S012HBR040M	10.00	10.00	12.00	66.00	0.40	•
7231647	GOPR4RA1200S015HBR050M	12.00	12.00	15.00	73.00	0.50	•
7231665	GOPR4RA1600S020HBR050M	16.00	16.00	20.00	82.00	0.50	•
7231663	GOPR4RA1600R035HBR050M	16.00	16.00	35.00	92.00	0.50	•
7231671	GOPR4RA2000S025HBR050M	20.00	20.00	25.00	92.00	0.50	•
7231669	GOPR4RA2000R042HBR050M	20.00	20.00	42.00	104.00	0.50	•
7231675	GOPR4RA2500R052HBR050M	25.00	25.00	52.00	121.00	0.50	•



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● Primary
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GOmill PRO

Radiused • 4 Flutes • Necked • Plain Shank

KCU20

Order Number	Catalog Number	D1	D	D3	AP1 Max	L	L3	Rε	
7231153	GOPR4RA0300N008HAR020M	3.00	6.00	2.82	8.00	57.00	15.00	0.20	•
7231154	GOPR4RA0400N011HAR020M	4.00	6.00	3.76	11.00	57.00	16.00	0.20	•
7231155	GOPR4RA0400N011HAR050M	4.00	6.00	3.76	11.00	57.00	16.00	0.50	•
7231156	GOPR4RA0500N013HAR020M	5.00	6.00	4.70	13.00	57.00	18.00	0.20	•
7231157	GOPR4RA0500N013HAR050M	5.00	6.00	4.70	13.00	57.00	18.00	0.50	•
7231158	GOPR4RA0500N013HAR100M	5.00	6.00	4.70	13.00	57.00	18.00	1.00	•
7231159	GOPR4RA0600N013HAR050M	6.00	6.00	5.64	13.00	57.00	21.00	0.50	•
7231160	GOPR4RA0600N013HAR100M	6.00	6.00	5.64	13.00	57.00	21.00	1.00	•
7231161	GOPR4RA0600N013HAR150M	6.00	6.00	5.64	13.00	57.00	21.00	1.50	•
7231163	GOPR4RA0800N019HAR050M	8.00	8.00	7.52	19.00	63.00	27.00	0.50	•
7231164	GOPR4RA0800N019HAR100M	8.00	8.00	7.52	19.00	63.00	27.00	1.00	•
7231165	GOPR4RA0800N019HAR150M	8.00	8.00	7.52	19.00	63.00	27.00	1.50	•
7231166	GOPR4RA0800N019HAR200M	8.00	8.00	7.52	19.00	63.00	27.00	2.00	•
7231167	GOPR4RA1000N022HAR050M	10.00	10.00	9.40	22.00	72.00	32.00	0.50	•
7231168	GOPR4RA1000N022HAR100M	10.00	10.00	9.40	22.00	72.00	32.00	1.00	•
7231169	GOPR4RA1000N022HAR150M	10.00	10.00	9.40	22.00	72.00	32.00	1.50	•
7231170	GOPR4RA1000N022HAR200M	10.00	10.00	9.40	22.00	72.00	32.00	2.00	•
7231645	GOPR4RA1000N022HAR250M	10.00	10.00	9.40	22.00	72.00	32.00	2.50	•
7231171	GOPR4RA1200N026HAR050M	12.00	12.00	11.28	26.00	83.00	38.00	0.50	•
7231172	GOPR4RA1200N026HAR100M	12.00	12.00	11.28	26.00	83.00	38.00	1.00	•
7231173	GOPR4RA1200N026HAR150M	12.00	12.00	11.28	26.00	83.00	38.00	1.50	•
7231174	GOPR4RA1200N026HAR200M	12.00	12.00	11.28	26.00	83.00	38.00	2.00	•
7231648	GOPR4RA1200N026HAR250M	12.00	12.00	11.28	26.00	83.00	38.00	2.50	•
7231649	GOPR4RA1200N026HAR300M	12.00	12.00	11.28	26.00	83.00	38.00	3.00	•
7231175	GOPR4RA1200N026HAR400M	12.00	12.00	11.28	26.00	83.00	38.00	4.00	•

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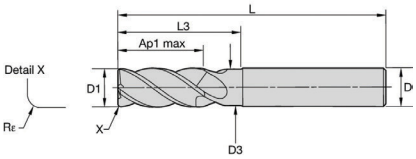

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● Primary
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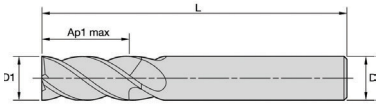
GOmill PRO Continued

Radiused • 4 Flutes • Necked • Plain Shank

Order Number	Catalog Number	D1	D	D3	AP1 Max	L	L3	Rε	KCU20
7231650	GOPR4RA1400N026HAR050M	14.00	14.00	13.16	26.00	89.00	40.00	0.50	•
7231661	GOPR4RA1400N026HAR100M	14.00	14.00	13.16	26.00	89.00	40.00	1.00	•
7231666	GOPR4RA1600N032HAR050M	16.00	16.00	15.04	32.00	92.00	44.00	0.50	•
7231176	GOPR4RA1600N032HAR100M	16.00	16.00	15.04	32.00	92.00	44.00	1.00	•
7231177	GOPR4RA1600N032HAR200M	16.00	16.00	15.04	32.00	92.00	44.00	2.00	•
7231667	GOPR4RA1600N032HAR250M	16.00	16.00	15.04	32.00	92.00	44.00	2.50	•
7231178	GOPR4RA1600N032HAR300M	16.00	16.00	15.04	32.00	92.00	44.00	3.00	•
7231179	GOPR4RA1600N032HAR400M	16.00	16.00	15.04	32.00	92.00	44.00	4.00	•
7231672	GOPR4RA2000N038HAR050M	20.00	20.00	18.80	38.00	104.00	53.00	0.50	•
7231180	GOPR4RA2000N038HAR100M	20.00	20.00	18.80	38.00	104.00	53.00	1.00	•
7231181	GOPR4RA2000N038HAR200M	20.00	20.00	18.80	38.00	104.00	53.00	2.00	•
7231673	GOPR4RA2000N038HAR250M	20.00	20.00	18.8	38.00	104.00	53.00	2.50	•
7231182	GOPR4RA2000N038HAR300M	20.00	20.00	18.80	38.00	104.00	53.00	3.00	•
7231183	GOPR4RA2000N038HAR400M	20.00	20.00	18.80	38.00	104.00	53.00	4.00	•



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● Primary
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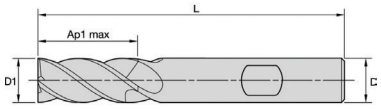
GOmill PRO

Square End • 4 Flutes • Plain Shank

Order Number	Catalog Number	D1	D	AP1 Max	L	KCU20
7230994	GOPR4SE0200R006HAM	2.00	6.00	6.00	57.00	•
7231062	GOPR4SE0300R008HAM	3.00	6.00	8.00	57.00	•
7231064	GOPR4SE0400R011HAM	4.00	6.00	11.00	57.00	•
7231066	GOPR4SE0500R013HAM	5.00	6.00	13.00	57.00	•
7231068	GOPR4SE0600R013HAM	6.00	6.00	13.00	57.00	•
7231070	GOPR4SE0800R019HAM	8.00	8.00	19.00	63.00	•
7231132	GOPR4SE1000R022HAM	10.00	10.00	22.00	72.00	•
7231133	GOPR4SE1000R025HAM	10.00	10.00	25.00	72.00	•
7231135	GOPR4SE1200R026HAM	12.00	12.00	26.00	83.00	•
7231137	GOPR4SE1200R030HAM	12.00	12.00	30.00	83.00	•
7231578	GOPR4SE1400S026HAM	14.00	14.00	26.00	83.00	•
7231139	GOPR4SE1600R032HAM	16.00	16.00	32.00	92.00	•
7231151	GOPR4SE2000S038HAM	20.00	20.00	38.00	104.00	•



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● Primary
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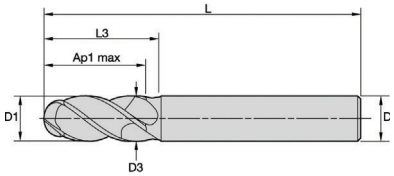
GOmill PRO

Square End • 4 Flutes • Weldon Shank

KCU20

Order Number	Catalog Number	D1	D	AP1 Max	L	
7231063	GOPR4SE0300R008HBM	3.00	6.00	8.00	57.00	•
7231065	GOPR4SE0400R011HBM	4.00	6.00	11.00	57.00	•
7231067	GOPR4SE0500R013HBM	5.00	6.00	13.00	57.00	•
7231069	GOPR4SE0600R013HBM	6.00	6.00	13.00	57.00	•
7231131	GOPR4SE0800R019HBM	8.00	8.00	19.00	63.00	•
7231134	GOPR4SE1000R022HBM	10.00	10.00	22.00	72.00	•
7231136	GOPR4SE1200R026HBM	12.00	12.00	26.00	83.00	•
7231140	GOPR4SE1600R032HBM	16.00	16.00	32.00	92.00	•
7231152	GOPR4SE2000S038HBM	20.00	20.00	38.00	104.00	•



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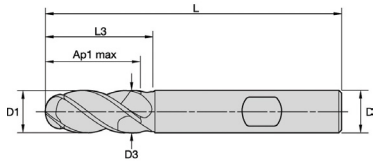
GOmill PRO

Ball Nose • 4 Flutes • Necked • Plain Shank

KCU20

Order Number	Catalog Number	D1	D	D3	AP1 Max	L	L3	
7231264	GOPR4BN0500R013HAM	5.00	6.00	4.70	13.00	57.00	18.00	•
7231266	GOPR4BN0600R013HAM	6.00	6.00	5.64	13.00	57.00	21.00	•
7231268	GOPR4BN0800R019HAM	8.00	8.00	7.52	19.00	63.00	27.00	•
7231270	GOPR4BN1000R022HAM	10.00	10.00	9.40	22.00	72.00	32.00	•
7231272	GOPR4BN1200R026HAM	12.00	12.00	11.28	26.00	83.00	30.00	•
7231274	GOPR4BN1600R032HAM	16.00	16.00	15.04	32.00	92.00	38.00	•
7231276	GOPR4BN2000S038HAM	20.00	20.00	18.80	38.00	104.00	50.00	•



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GOmill PRO

Ball Nose • 4 Flutes • Necked • Weldon Shank

KCU20

Order Number	Catalog Number	D1	D	D3	AP1 Max	L	L3	
7231265	GOPR4BN0500R013HBM	5.00	6.00	4.70	13.00	57.00	18.00	•
7231267	GOPR4BN0600R013HBM	6.00	6.00	5.64	13.00	57.00	21.00	•
7231269	GOPR4BN0800R019HBM	8.00	8.00	7.52	19.00	63.00	27.00	•
7231271	GOPR4BN1000R022HBM	10.00	10.00	9.40	22.00	72.00	32.00	•
7231273	GOPR4BN1200R026HBM	12.00	12.00	11.28	26.00	83.00	30.00	•
7231275	GOPR4BN1600R032HBM	16.00	16.00	15.04	32.00	92.00	38.00	•
7231277	GOPR4BN2000S038HBM	20.00	20.00	18.80	38.00	104.00	50.00	•

GOmill PRO APPLICATION DATA

GOmill PRO - Ball Nose

GOmill PRO - Square End

Material Group		Side Milling		Slotting	KCU20 Cutting Speed Vc m/min			Recommended Feed per Tooth (Fz=mm/th) is for Side Milling (A). For Slotting (B) Reduce Fz by 20%												
								D1 - Diameter												
		ap	ae	ap	Min	Max	mm	2.0	3.0	4.0	5.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0	25.0
P	P0	Ap1Max	0.4xD	1xD	150	200	Fz	0.014	0.021	0.028	0.036	0.044	0.060	0.072	0.083	0.092	0.101	0.108	0.114	0.124
	P1	Ap1Max	0.4xD	1xD	150	200	Fz	0.014	0.021	0.028	0.036	0.044	0.060	0.072	0.083	0.092	0.101	0.108	0.114	0.124
	P2	Ap1Max	0.4xD	1xD	140	190	Fz	0.014	0.021	0.028	0.036	0.044	0.060	0.072	0.083	0.092	0.101	0.108	0.114	0.124
	P3	Ap1Max	0.4xD	1xD	120	160	Fz	0.011	0.017	0.023	0.030	0.036	0.050	0.061	0.070	0.079	0.087	0.095	0.101	0.114
	P4	Ap1Max	0.4xD	0.75xD	90	150	Fz	0.010	0.016	0.021	0.027	0.033	0.045	0.054	0.062	0.070	0.077	0.083	0.088	0.098
	P5	Ap1Max	0.4xD	1xD	60	100	Fz	0.009	0.014	0.019	0.024	0.029	0.040	0.048	0.056	0.063	0.070	0.076	0.081	0.091
	P6	Ap1Max	0.4xD	0.75xD	50	75	Fz	0.008	0.012	0.016	0.020	0.025	0.034	0.040	0.047	0.052	0.057	0.061	0.065	0.071
M	M1	Ap1Max	0.4xD	1xD	90	115	Fz	0.011	0.017	0.023	0.030	0.036	0.050	0.061	0.070	0.079	0.087	0.095	0.101	0.114
	M2	Ap1Max	0.4xD	1xD	60	80	Fz	0.009	0.014	0.019	0.024	0.029	0.040	0.048	0.056	0.063	0.070	0.076	0.081	0.091
	M3	Ap1Max	0.4xD	1xD	60	70	Fz	0.008	0.012	0.016	0.020	0.025	0.034	0.040	0.047	0.052	0.057	0.061	0.065	0.071
K	K1	Ap1Max	0.4xD	1xD	120	150	Fz	0.014	0.021	0.028	0.036	0.044	0.060	0.072	0.083	0.092	0.101	0.108	0.114	0.124
	K2	Ap1Max	0.4xD	1xD	110	140	Fz	0.011	0.017	0.023	0.030	0.036	0.050	0.061	0.070	0.079	0.087	0.095	0.101	0.114
	K3	Ap1Max	0.4xD	1xD	110	130	Fz	0.009	0.014	0.019	0.024	0.029	0.040	0.048	0.056	0.063	0.070	0.076	0.081	0.091
S	S1	Ap1Max	0.4xD	0.3XD	50	90	Fz	0.011	0.017	0.023	0.030	0.036	0.050	0.061	0.070	0.079	0.087	0.095	0.101	0.114
	S2	Ap1Max	0.4xD	0.3XD	25	50	Fz	0.006	0.009	0.013	0.016	0.019	0.026	0.032	0.037	0.042	0.046	0.050	0.054	0.061
	S3	Ap1Max	0.4xD	1xD	25	40	Fz	0.006	0.009	0.013	0.016	0.019	0.026	0.032	0.037	0.042	0.046	0.050	0.054	0.061
	S4	Ap1Max	0.4xD	1xD	50	60	Fz	0.007	0.011	0.016	0.021	0.026	0.037	0.045	0.052	0.058	0.064	0.069	0.074	0.084
H	H1	Ap1Max	0.4xD	0.75xD	80	140	Fz	0.010	0.016	0.021	0.027	0.033	0.045	0.054	0.062	0.070	0.077	0.083	0.088	0.098
	H2	Ap1Max	0.4xD	0.5xD	70	120	Fz	0.008	0.012	0.016	0.020	0.025	0.034	0.040	0.047	0.052	0.057	0.061	0.065	0.071

NOTE:
Those guidelines may require variations to achive optimum results.
Lower value of cuting speed is used for high stock removal applications or for higher hardness (machinability) within group.
Higher value of cuting speed is used for finishing applications or for lower hardness (machinability) within group.
Above parameters are based on ideal conditions. For smaller taper machining centers, please adjust parameters accordiongly on diameters greater than 12mm.
For better surface finish reduce feed per tooth.
Side milling aplications - for longest reach (L3) tools, reduce Ae by 30%.
Slot milling aplications - for longest reach (L3) tools, reduce Ae by 30%.
Sharp corner tools do not recommended for sloting aplication.

GOmill PRO APPLICATION DATA - Adjustment Factor Table

Adjustment Factor Table for Feed and Speed Calculation.

	Ae/D	2%	4%	5%	8%	10%	12%	20%	30%	40%	50%	100%
Speed Factor	Kv	2.1 - 3.6	1.6 - 3	1.6 - 2.5	1.6	1.4	1.38	1.3	1.2	1.1	1	1
Feed Factor	KFz	3.58	2.56	2.3	1.84	1.67	1.54	1.25	1.09	1.02	1	0.9
phi [°]		16.26	23.07	25.84	32.86	36.87	40.54	53.13	66.42	78.46	90.00	180.00

NOTE:
These calculations are for roughing / semi-finishing cuts when used with the recommeded base fz.
For light finishing cuts requiring improved surface quality it is recommended to reduce the base fz approximately 50% and then apply these factors.
For an Ae/D ration of 5% or less there is range given for speed factor Kv, which alows the user to either be more conservative at the lower value or more aggressive with the higher value.
This can also be considered based on machinability of the material, from difficukt to free cutting.

To calculate application specific cutting data, please use above Kv coefficient for adaptation of cutting speed and KFz for feed respectively.

Vc new=Vc*Kv
Fz new=Fz*KFz

Calculation Example:

Aplication:	D1=	14.0mm
	Material Group	P5
	Ae=	20% of D
Cutting data recommendation:	Vc=	80 m/min
	Fz=	0.063 mm/th
Adjustment coefficient:	Kv=	1.30
	KFz=	1.25

Final cutting data recommendation:

Vc new=	80 *	1.30 =	104
Fz new=	0.06328 *	1.25 =	0.0791

GOmill PRO APPLICATION DATA - Long

GOmill PRO - Ball Nose

GOmill PRO - Square End

Material Group		Side Milling		KCU20 Cutting Speed Vc m/min			Recommended Feed per Tooth (Fz=mm/th) is for Side Milling (A). No Slotting operations recommended. D1 - Diameter											
		ap	ae	Min	Max	mm	2.0	3.0	4.0	5.0	6.0	8.0	10.0	12.0	14.0	18.0	20.0	25.0
P	P0	Ap1Max	0.2xD	150	200	Fz	0.014	0.021	0.028	0.036	0.044	0.060	0.072	0.083	0.092	0.108	0.114	0.124
	P1	Ap1Max	0.2xD	150	200	Fz	0.014	0.021	0.028	0.036	0.044	0.060	0.072	0.083	0.092	0.108	0.114	0.124
	P2	Ap1Max	0.2xD	140	190	Fz	0.014	0.021	0.028	0.036	0.044	0.060	0.072	0.083	0.092	0.108	0.114	0.124
	P3	Ap1Max	0.2xD	120	160	Fz	0.011	0.017	0.023	0.030	0.036	0.050	0.061	0.070	0.079	0.095	0.101	0.114
	P4	Ap1Max	0.2xD	90	150	Fz	0.010	0.016	0.021	0.027	0.033	0.045	0.054	0.062	0.070	0.083	0.088	0.098
	P5	Ap1Max	0.2xD	60	100	Fz	0.009	0.014	0.019	0.024	0.029	0.040	0.048	0.056	0.063	0.076	0.081	0.091
	P6	Ap1Max	0.15xD	50	75	Fz	0.008	0.012	0.016	0.020	0.025	0.034	0.040	0.047	0.052	0.061	0.065	0.071
M	M1	Ap1Max	0.2xD	90	115	Fz	0.011	0.017	0.023	0.030	0.036	0.050	0.061	0.070	0.079	0.095	0.101	0.114
	M2	Ap1Max	0.2xD	60	80	Fz	0.009	0.014	0.019	0.024	0.029	0.040	0.048	0.056	0.063	0.076	0.081	0.091
	M3	Ap1Max	0.2xD	60	70	Fz	0.008	0.012	0.016	0.020	0.025	0.034	0.040	0.047	0.052	0.061	0.065	0.071
K	K1	Ap1Max	0.2xD	120	150	Fz	0.014	0.021	0.028	0.036	0.044	0.060	0.072	0.083	0.092	0.108	0.114	0.124
	K2	Ap1Max	0.2xD	110	140	Fz	0.011	0.017	0.023	0.030	0.036	0.050	0.061	0.070	0.079	0.095	0.101	0.114
	K3	Ap1Max	0.2xD	110	130	Fz	0.009	0.014	0.019	0.024	0.029	0.040	0.048	0.056	0.063	0.076	0.081	0.091
S	S1	Ap1Max	0.1xD	50	90	Fz	0.011	0.017	0.023	0.030	0.036	0.050	0.061	0.070	0.079	0.095	0.101	0.114
	S2	Ap1Max	0.1xD	25	50	Fz	0.006	0.009	0.013	0.016	0.019	0.026	0.032	0.037	0.042	0.050	0.054	0.061
	S3	Ap1Max	0.1xD	25	40	Fz	0.006	0.009	0.013	0.016	0.019	0.026	0.032	0.037	0.042	0.050	0.054	0.061
	S4	Ap1Max	0.15xD	50	60	Fz	0.007	0.011	0.016	0.021	0.026	0.037	0.045	0.052	0.058	0.069	0.074	0.084
H	H1	Ap1Max	0.15xD	80	140	Fz	0.010	0.016	0.021	0.027	0.033	0.045	0.054	0.062	0.070	0.083	0.088	0.098
	H2	Ap1Max	0.15xD	70	120	Fz	0.008	0.012	0.016	0.020	0.025	0.034	0.040	0.047	0.052	0.061	0.065	0.071

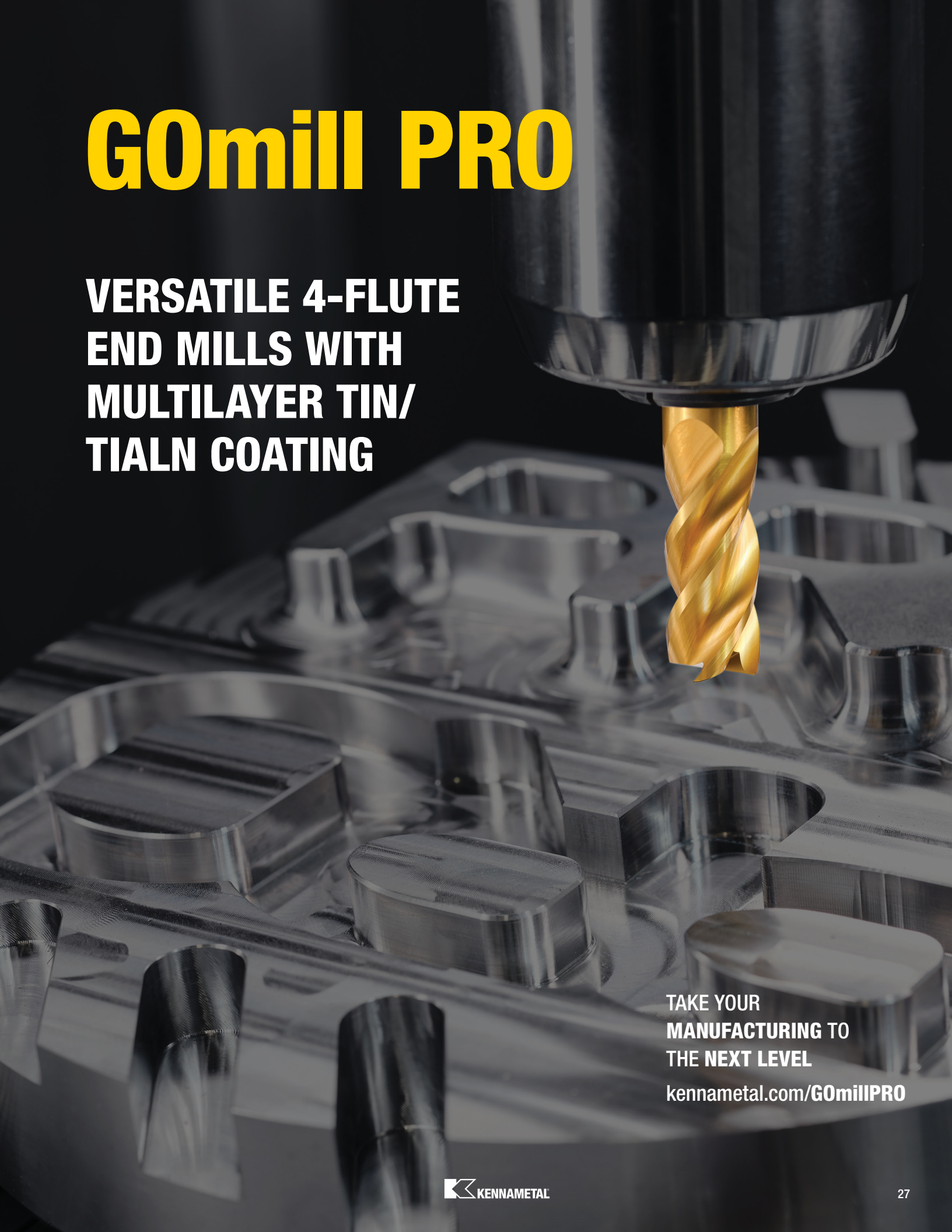
NOTE:

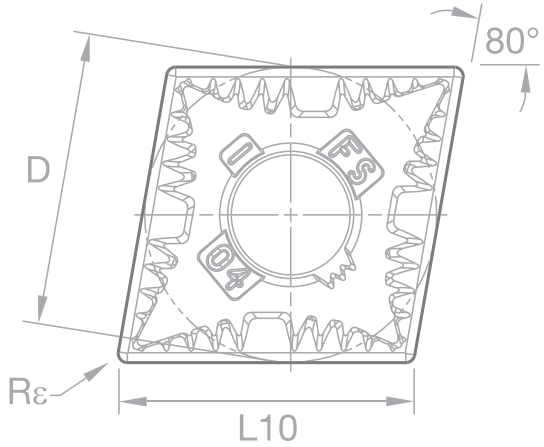
Those guidelines may require variations to achive optimum results.

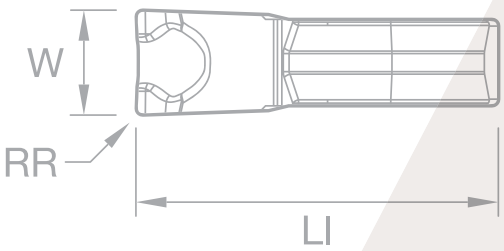
Lower value of cuting speed is used for high stock removal applications or for higher hardness (machinability) within group.

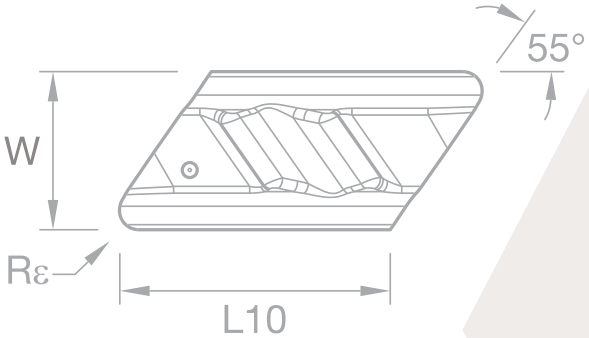
Higher value of cuting speed is used for finishing applications or for lower hardness (machinability) within group.

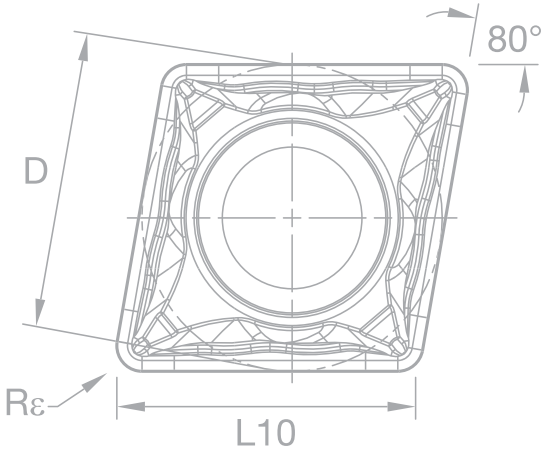
For better surface finish reduce feed per tooth.

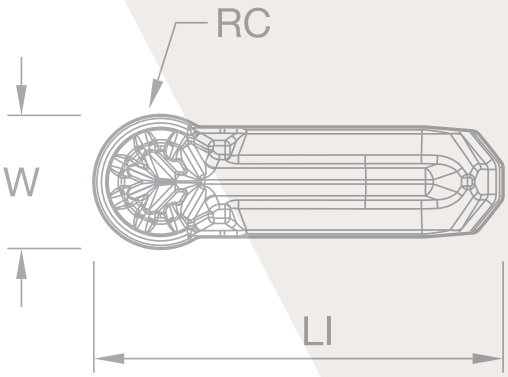

GOmill PRO
VERSATILE 4-FLUTE END MILLS WITH MULTILAYER TIN/ TIALN COATING
TAKE YOUR MANUFACTURING TO THE NEXT LEVEL
kennametal.com/GOmillPRO
KENNAMETAL


80°
D
Rε
L10


W
RR
LI


55°
W
Rε
L10


80°
D
Rε
L10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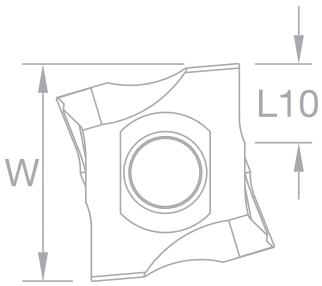
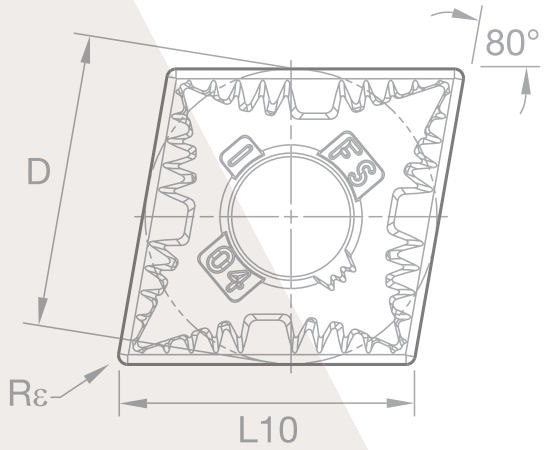
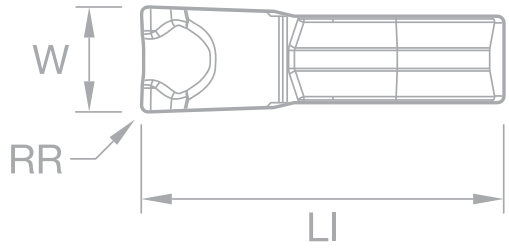
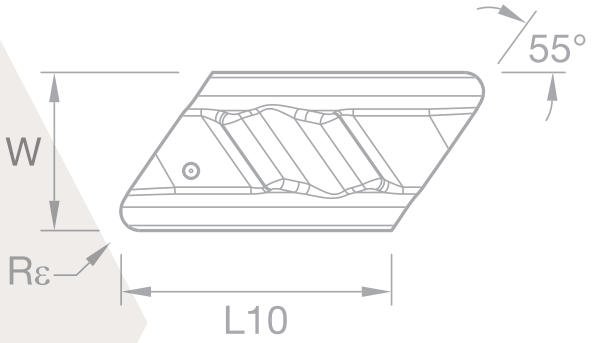
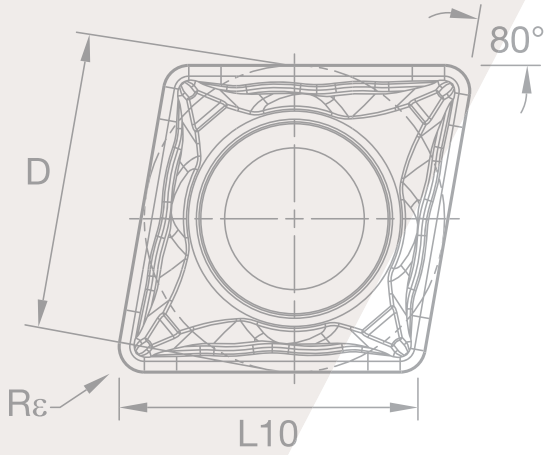
W
LI

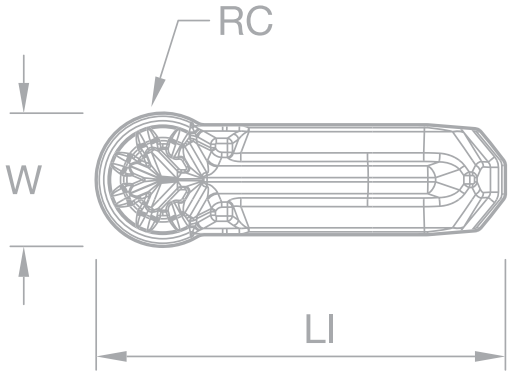

L10
W

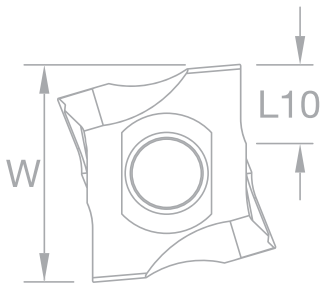

80°
D
Rε
L10


W
RR
LI


55°
W
Rε
L10


80°
D
Rε
L10


RC
W
LI


L10
W

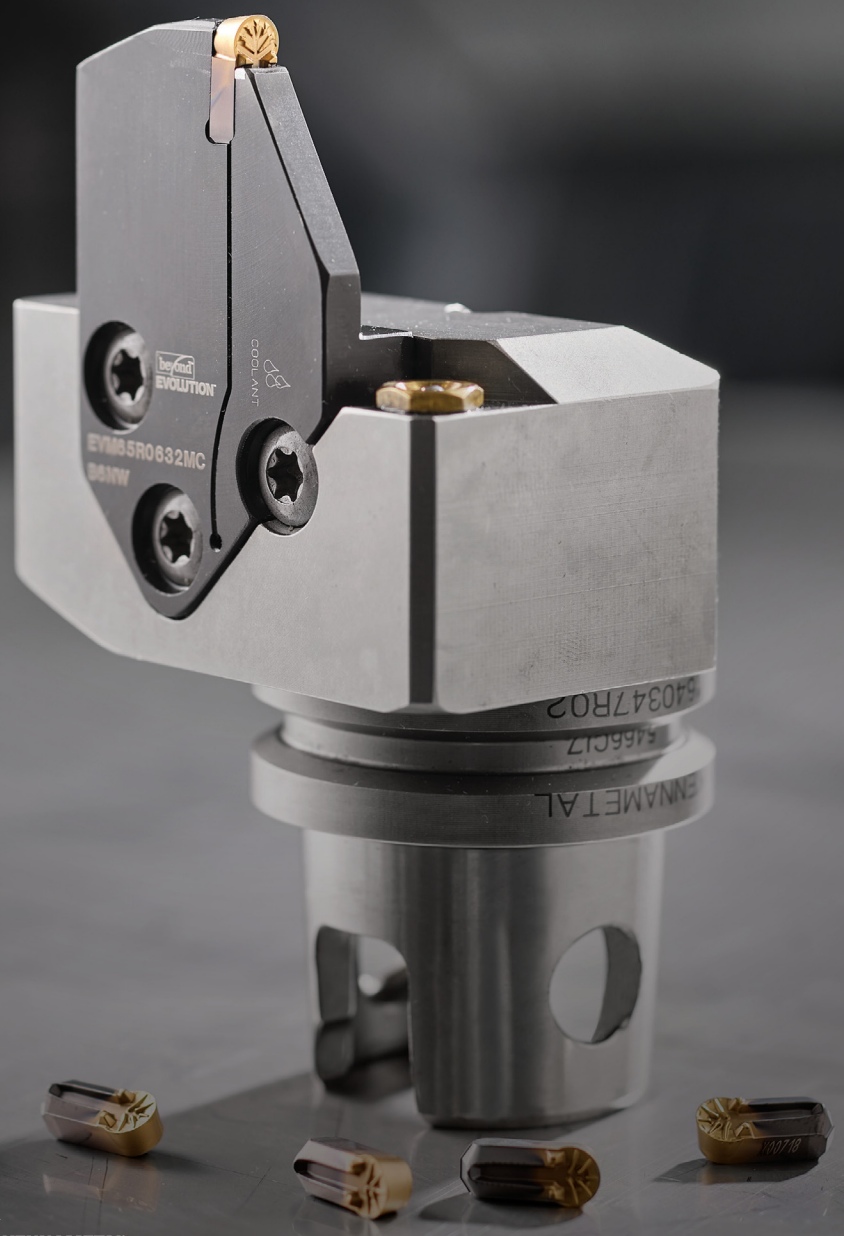
KCU25B

UNIVERSAL TURNING GRADE WITH KENGold PVD COATING TECHNOLOGY

Consistency in multi-material cutting
Improved wear resistance
Enhanced process security

Applications (Roughing & Medium Machining)

- Turning
- Profiling
- Facing
- Grooving
- Cut-Off
- I.D. Turning
- I.D. Grooving
- I.D. Face Grooving
- Face Grooving
- Chamfering
- I.D. Chamfering & Profiling
- I.D. Facing
- O.D. Deep Grooving



Materials

PRIMARY

- P Steels
- M Stainless Steels
- S High-Temp Alloys
- K Cast Iron

SECONDARY

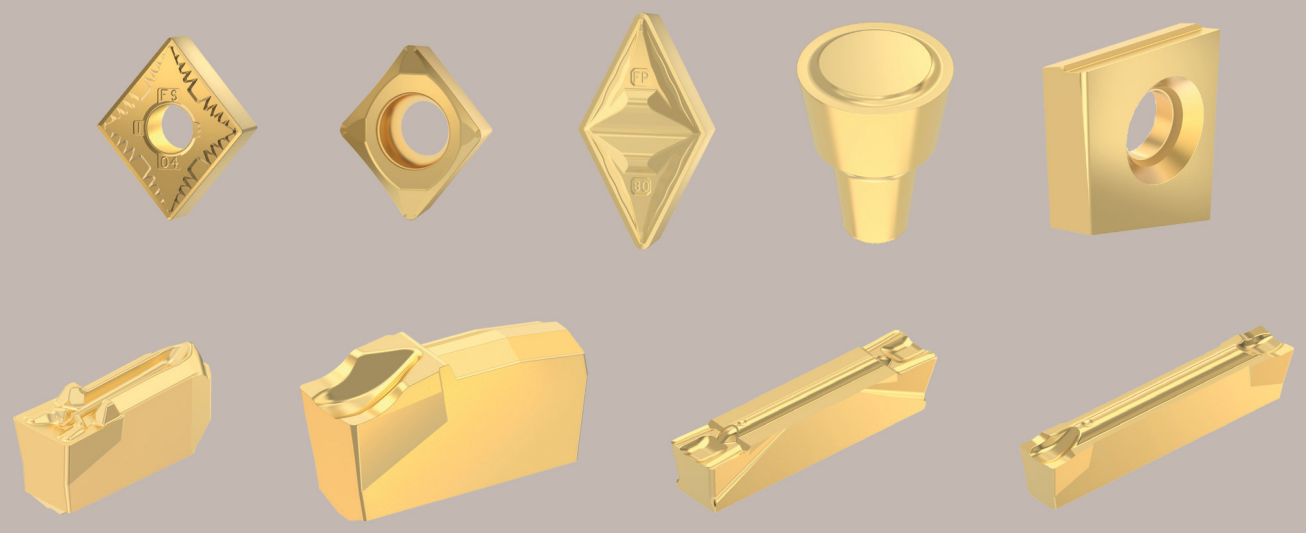
- N Non-Ferrous

KENNAMETAL

A Closer Look at KENGold PVD Coating Technology

This multilayer coating is comprised of three layers, each with unique protection properties:

- The TiSiN top layer is gold for easy wear identification
- The AlTiSiN second layer is a super-hard nanostructured interlayer for superior wear resistance
- The AlTiN third layer is a low-stress base layer for excellent flaking resistance
- Multilayer coating applied to cemented carbide delivering greater thermal deformation resistance and exceptional edge wear resistance

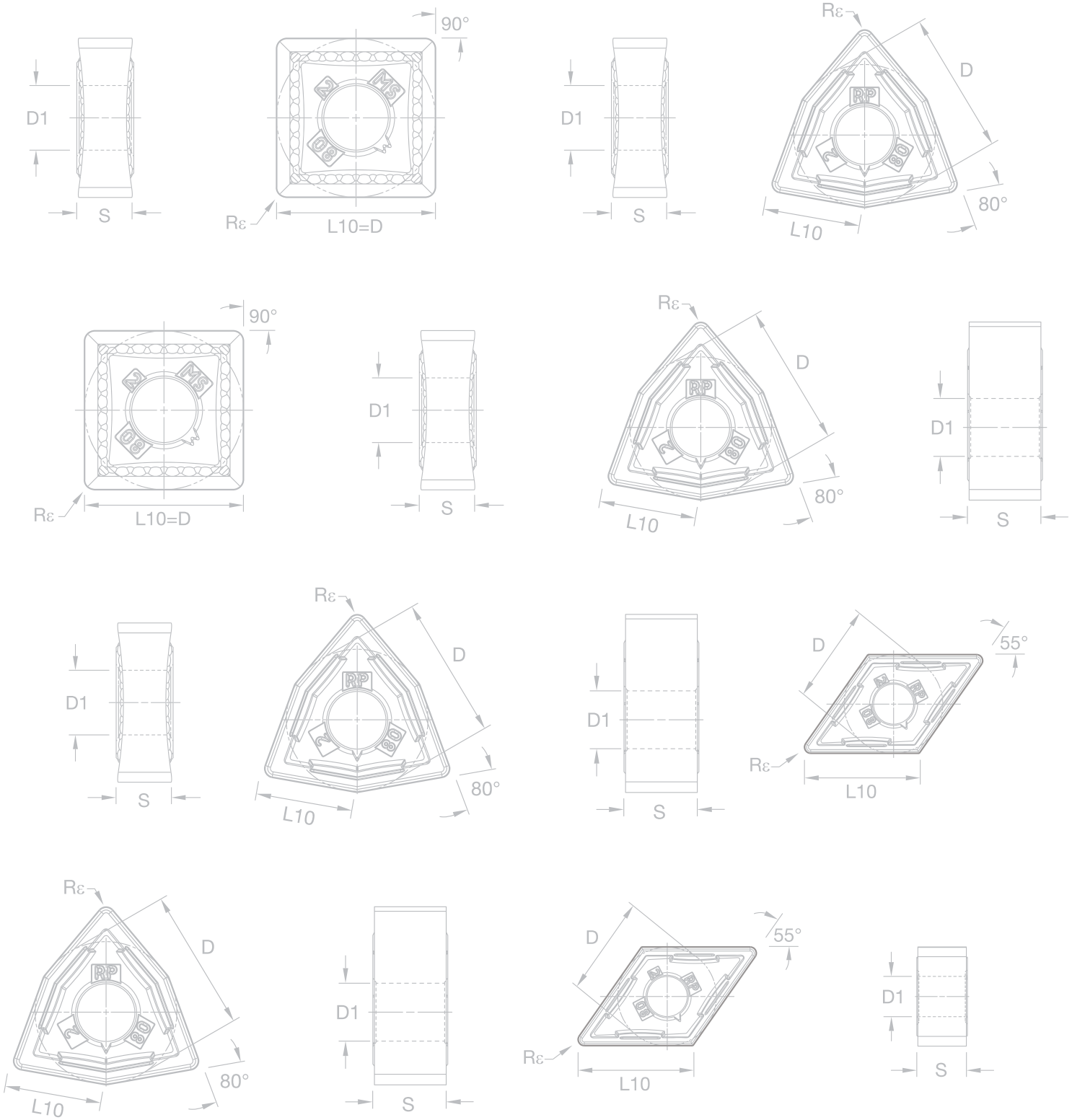


Industries

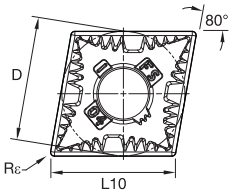
- General Engineering
- Aerospace
- Automotive
- Oil & Gas
- Wind & Solar
- Medical

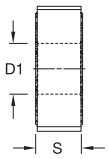
KENLOC™

NEGATIVE INSERTS



KENNAMETAL





● Primary
○ Secondary

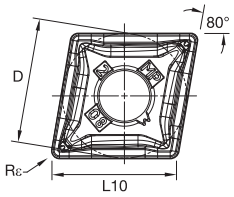
P	●
M	●
K	●
N	○
S	●
H	

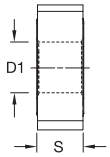
KCU25B

Kenloc

Negative Inserts • CNGG-FS

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
CNGG120404FS	CNGG431FS	12.70	0.500	12.90	0.508	0.4	0.016	•





● Primary
○ Secondary

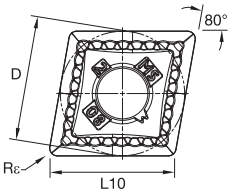
P	●
M	●
K	●
N	○
S	●
H	

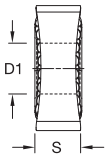
KCU25B

Kenloc

Negative Inserts • CNMG-MP

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
CNMG120408MP	CNMG432MP	12.70	0.500	12.90	0.508	0.8	0.031	•
CNMG120412MP	CNMG433MP	12.70	0.500	12.90	0.508	1.2	0.047	•
CNMG160612MP	CNMG543MP	15.88	0.625	16.12	0.635	1.2	0.047	•
CNMG190612MP	CNMG643MP	19.05	0.750	19.34	0.762	1.2	0.047	•





● Primary
○ Secondary

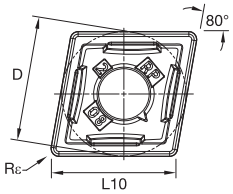
P	●
M	●
K	●
N	○
S	●
H	

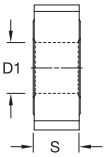
KCU25B

Kenloc

Negative Inserts • CNMG-MS

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
CNMG120401MS	CNMG4302MS	12.70	0.500	12.90	0.508	0.1	0.004	•
CNMG120402MS	CNMG4305MS	12.70	0.500	12.90	0.508	0.2	0.008	•
CNMG120404MS	CNMG431MS	12.70	0.500	12.90	0.508	0.4	0.016	•
CNMG120408MS	CNMG432MS	12.70	0.500	12.90	0.508	0.8	0.031	•
CNMG120412MS	CNMG433MS	12.70	0.500	12.90	0.508	1.2	0.047	•
CNMG120416MS	CNMG434MS	12.70	0.500	12.90	0.508	1.6	0.063	•
CNMG160608MS	CNMG542MS	15.88	0.625	16.12	0.635	0.8	0.031	•
CNMG160612MS	CNMG543MS	15.88	0.625	16.12	0.635	1.2	0.047	•
CNMG190608MS	CNMG642MS	19.05	0.750	19.34	0.762	0.8	0.031	•
CNMG190612MS	CNMG643MS	19.05	0.750	19.34	0.762	1.2	0.047	•
CNMG190616MS	CNMG644MS	19.05	0.750	19.34	0.762	1.6	0.063	•





● Primary
○ Secondary

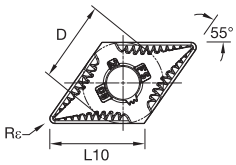
P	●
M	●
K	●
N	○
S	●
H	

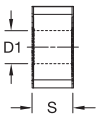
Kenloc

Negative Inserts • CNMG-RP

KCU25B

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
CNMG120404RP	CNMG431RP	12.70	0.500	12.90	0.508	0.4	0.016	•
CNMG120408RP	CNMG432RP	12.70	0.500	12.90	0.508	0.8	0.031	•
CNMG120412RP	CNMG433RP	12.70	0.500	12.90	0.508	1.2	0.047	•
CNMG120416RP	CNMG434RP	12.70	0.500	12.90	0.508	1.6	0.063	•
CNMG160608RP	CNMG542RP	15.88	0.625	16.12	0.635	0.8	0.031	•
CNMG160612RP	CNMG543RP	15.88	0.625	16.12	0.635	1.2	0.047	•
CNMG160616RP	CNMG544RP	15.88	0.625	16.12	0.635	1.6	0.063	•
CNMG190612RP	CNMG643RP	19.05	0.750	19.34	0.762	1.2	0.047	•
CNMG190616RP	CNMG644RP	19.05	0.750	19.34	0.762	1.6	0.063	•





● Primary
○ Secondary

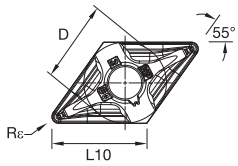
P	●
M	●
K	●
N	○
S	●
H	

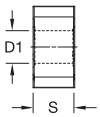
Kenloc

Negative Inserts • DNGG-FS

KCU25B

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
DNGG150408FS	DNGG432FS	12.70	0.500	15.50	0.610	0.8	0.031	•





● Primary
○ Secondary

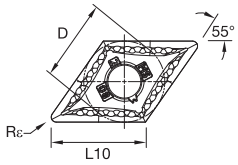
P	●
M	●
K	●
N	○
S	●
H	

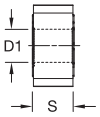
Kenloc

Negative Inserts • DNMG-MP

KCU25B

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
DNMG150608MP	DNMG442MP	12.70	0.500	15.50	0.610	0.8	0.031	•
DNMG150612MP	DNMG443MP	12.70	0.500	15.50	0.610	1.2	0.047	•





● Primary
○ Secondary

P	●
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N	○
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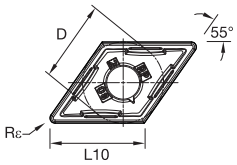
H	

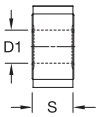
Kenloc

Negative Inserts • DNMG-MS

KCU25B

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
DNMG110404MS	DNMG331MS	9.53	0.375	11.63	0.458	0.4	0.016	•
DNMG110408MS	DNMG332MS	9.53	0.375	11.63	0.458	0.8	0.031	•
DNMG150402MS	DNMG4305MS	12.70	0.500	15.50	0.610	0.2	0.008	•
DNMG150404MS	DNMG431MS	12.70	0.500	15.50	0.610	0.4	0.016	•
DNMG150408MS	DNMG432MS	12.70	0.500	15.50	0.610	0.8	0.031	•
DNMG150412MS	DNMG433MS	12.70	0.500	15.50	0.610	1.2	0.047	•
DNMG150604MS	DNMG441MS	12.70	0.500	15.50	0.610	0.4	0.016	•
DNMG150608MS	DNMG442MS	12.70	0.500	15.50	0.610	0.8	0.031	•
DNMG150612MS	DNMG443MS	12.70	0.500	15.50	0.610	1.2	0.047	•





P	●
M	●
K	●
N	○
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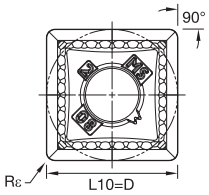
● Primary
○ Secondary

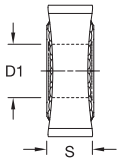
KCU25B

Kenloc

Negative Inserts • DNMG-RP

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
DNMG110408RP	DNMG332RP	9.53	0.375	11.63	0.458	0.8	0.031	•
DNMG150408RP	DNMG432RP	12.70	0.500	15.50	0.610	0.8	0.031	•
DNMG150608RP	DNMG442RP	12.70	0.500	15.50	0.610	0.8	0.031	•
DNMG150612RP	DNMG443RP	12.70	0.500	15.50	0.610	1.2	0.047	•
DNMG150616RP	DNMG444RP	12.70	0.500	15.50	0.610	1.6	0.063	•





P	●
M	●
K	●
N	○
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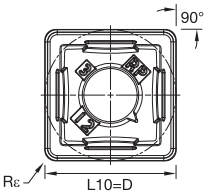
● Primary
○ Secondary

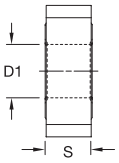
KCU25B

Kenloc

Negative Inserts • SNMG-MS

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
SNMG120408MS	SNMG432MS	12.70	0.500	12.70	0.500	0.8	0.031	•
SNMG120412MS	SNMG433MS	12.70	0.500	12.70	0.500	1.2	0.047	•
SNMG190612MS	SNMG643MS	19.05	0.750	19.05	0.750	1.2	0.047	•





P	●
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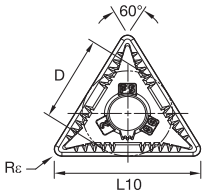
● Primary
○ Secondary

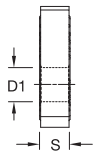
KCU25B

Kenloc

Negative Inserts • SNMG-RP

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
SNMG120408RP	SNMG432RP	12.70	0.500	12.70	0.500	0.8	0.031	•
SNMG120412RP	SNMG433RP	12.70	0.500	12.70	0.500	1.2	0.047	•
SNMG120416RP	SNMG434RP	12.70	0.500	12.70	0.500	1.6	0.063	•
SNMG150612RP	SNMG543RP	15.88	0.625	15.88	0.625	1.2	0.047	•
SNMG150616RP	SNMG544RP	15.88	0.625	15.88	0.625	1.6	0.063	•
SNMG190612RP	SNMG643RP	19.05	0.750	19.05	0.750	1.2	0.047	•
SNMG190616RP	SNMG644RP	19.05	0.750	19.05	0.750	1.6	0.063	•





P	●
M	●
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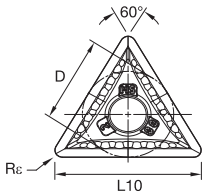
● Primary
○ Secondary

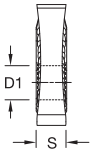
KCU25B

Kenloc

Negative Inserts • TNGG-FS

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
TNGG160402FS	TNGG3305FS	9.53	0.375	16.50	0.650	0.2	0.008	•
TNGG160404FS	TNGG331FS	9.53	0.375	16.50	0.620	0.4	0.016	•





● Primary
○ Secondary

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N	○
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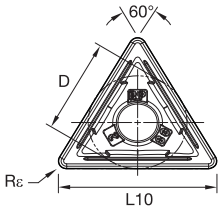
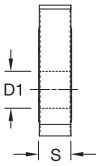
Kenloc

Negative Inserts • TNMG-MS

KCU25B

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
TNMG160402MS	TNMG3305MS	9.53	0.375	16.50	0.650	0.2	0.008	•
TNMG160404MS	TNMG331MS	9.53	0.375	16.50	0.650	0.4	0.016	•
TNMG160408MS	TNMG332MS	9.53	0.375	16.50	0.650	0.8	0.031	•
TNMG220404MS	TNMG431MS	12.70	0.500	22.00	0.866	0.4	0.016	•
TNMG220408MS	TNMG432MS	12.70	0.500	22.00	0.867	0.8	0.031	•
TNMG220412MS	TNMG433MS	12.70	0.500	22.00	0.866	1.2	0.047	•
TNMG270608MS	TNMG542MS	15.88	0.625	27.50	1.083	0.8	0.031	•





● Primary
○ Secondary

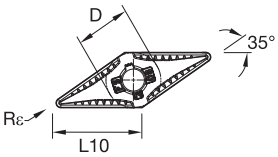
P	●
M	●
K	●
N	○
S	●
H	

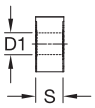
Kenloc

Negative Inserts • TNMG-RP

KCU25B

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
TNMG160408RP	TNMG332RP	9.53	0.375	16.50	0.650	0.8	0.031	•
TNMG160412RP	TNMG333RP	9.53	0.375	16.50	0.650	1.2	0.047	•
TNMG220408RP	TNMG432RP	12.70	0.500	22.00	0.866	0.8	0.031	•
TNMG220412RP	TNMG433RP	12.70	0.500	22.00	0.866	1.2	0.047	•
TNMG220416RP	TNMG434RP	12.70	0.500	22.00	0.866	1.6	0.063	•
TNMG270612RP	TNMG543RP	15.88	0.625	27.50	1.083	1.2	0.047	•





● Primary
○ Secondary

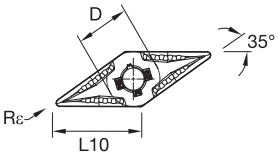
P	●
M	●
K	●
N	○
S	●
H	

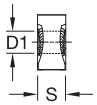
Kenloc

Negative Inserts • VNGG-FS

KCU25B

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
VNGG160402FS	VNGG3305FS	9.53	0.375	16.61	0.654	0.2	0.008	•
VNGG160404FS	VNGG331FS	9.53	0.375	16.61	0.654	0.4	0.016	•
VNGG160408FS	VNGG332FS	9.53	0.375	16.61	0.654	0.8	0.031	•





● Primary
○ Secondary

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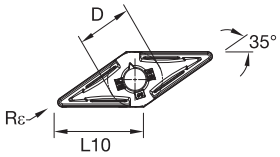
K	●
N	○
S	●
H	

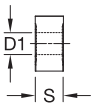
Kenloc

Negative Inserts • VNMG-MS

KCU25B

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
VNMG160401MS	VNMG3302MS	9.53	0.375	16.61	0.654	0.1	0.004	•
VNMG160402MS	VNMG3305MS	9.53	0.375	16.61	0.654	0.2	0.008	•
VNMG160404MS	VNMG331MS	9.53	0.375	16.61	0.654	0.4	0.016	•
VNMG160408MS	VNMG332MS	9.53	0.375	16.61	0.654	0.8	0.031	•
VNMG220404MS	VNMG431MS	12.70	0.500	22.14	0.872	0.4	0.016	•
VNMG220408MS	VNMG432MS	12.70	0.500	22.14	0.872	0.8	0.031	•





P		●
M		●
K		●
N		○
S		●
H		

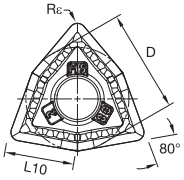
● Primary
○ Secondary

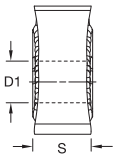
KCU25B

Kenloc

Negative Inserts • VNMG-RP

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
VNMG160408RP	VNMG332RP	9.53	0.375	16.61	0.654	0.8	0.031	•
VNMG160412RP	VNMG333RP	9.53	0.375	16.61	0.654	1.2	0.047	•





P		●
M		●
K		●
N		○
S		●
H		

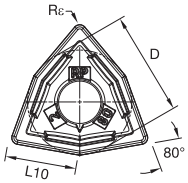
● Primary
○ Secondary

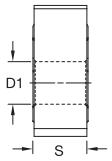
KCU25B

Kenloc

Negative Inserts • WNMG-MS

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
WNMG060408MS	WNMG332MS	9.53	0.375	6.52	0.257	0.8	0.031	•
WNMG080402MS	WNMG4305MS	12.70	0.500	8.69	0.342	0.2	0.008	•
WNMG080404MS	WNMG431MS	12.70	0.500	8.69	0.342	0.4	0.016	•
WNMG080408MS	WNMG432MS	12.70	0.500	8.69	0.342	0.8	0.031	•





P		●
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S		●
H		

● Primary
○ Secondary

KCU25B

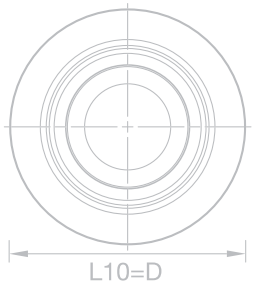
Kenloc

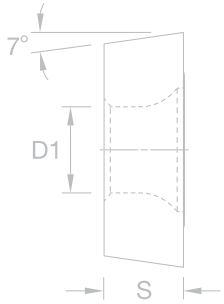
Negative Inserts • WNMG-RP

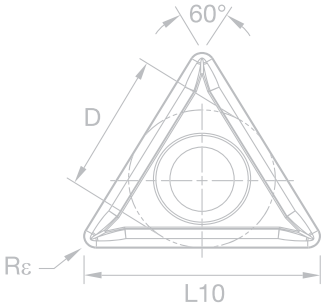
ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
WNMG060408RP	WNMG332RP	9.53	0.375	6.52	0.257	0.8	0.031	•
WNMG080408RP	WNMG432RP	12.70	0.500	8.69	0.342	0.8	0.031	•
WNMG080412RP	WNMG433RP	12.70	0.500	8.69	0.342	1.2	0.047	•
WNMG080416RP	WNMG434RP	12.70	0.500	8.69	0.342	1.6	0.063	•

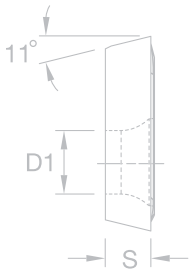
SCREW-ON

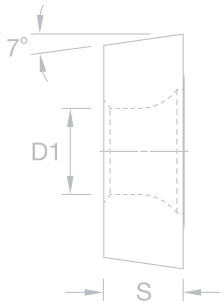
POSITIVE INSERTS

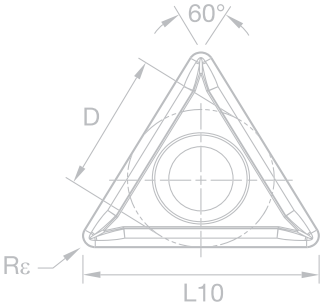


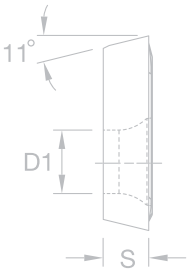


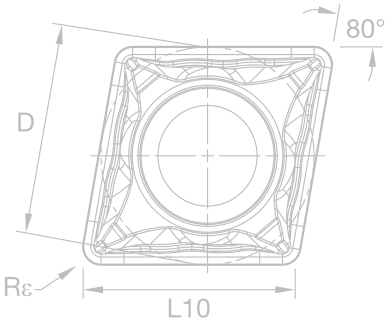


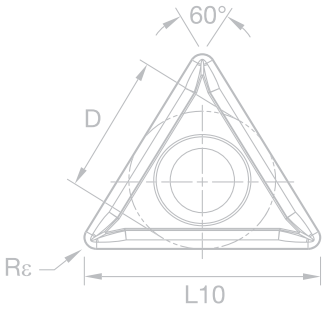


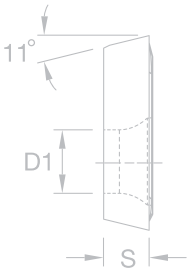


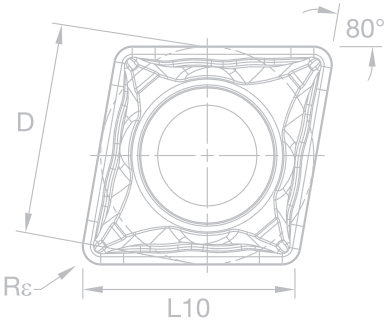


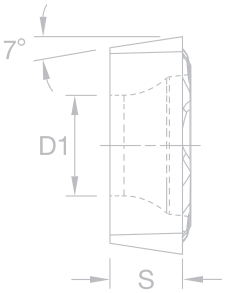


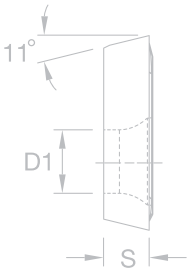


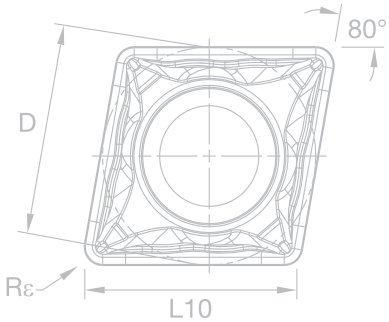


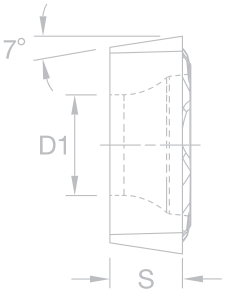


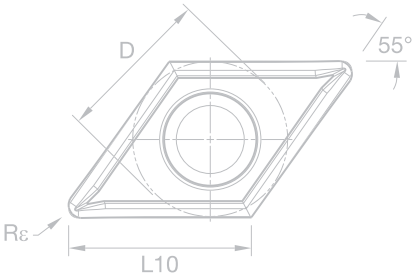


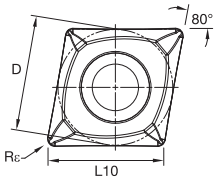


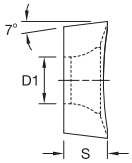












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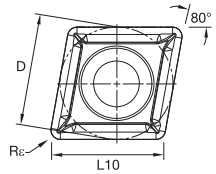
● Primary
○ Secondary

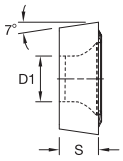
KCU25B

Screw-On

Positive Inserts • CCGT-HP

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
CCGT060202HP	CCGT21505HP	6.35	0.250	6.46	0.254	0.2	0.008	•
CCGT060204HP	CCGT2151HP	6.35	0.250	6.46	0.254	0.4	0.016	•
CCGT060208HP	CCGT2152HP	6.35	0.250	6.45	0.254	0.8	0.031	•
CCGT09T302HP	CCGT32505HP	9.53	0.375	9.67	0.381	0.2	0.008	•
CCGT09T304HP	CCGT3251HP	9.53	0.375	9.67	0.381	0.4	0.016	•
CCGT09T308HP	CCGT3252HP	9.53	0.375	9.67	0.381	0.8	0.031	•
CCGT120402HP	CCGT4305HP	12.70	0.500	12.90	0.508	0.2	0.008	•
CCGT120404HP	CCGT431HP	12.70	0.500	12.90	0.508	0.4	0.016	•
CCGT120408HP	CCGT432HP	12.70	0.500	12.90	0.508	0.8	0.031	•





P		●
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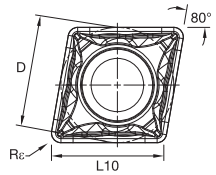
● Primary
○ Secondary

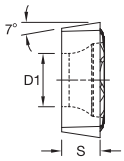
KCU25B

Screw-On

Positive Inserts • CCGT-LF

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
CCGT0602X0LF	CCGT215X0LF	6.35	0.250	6.45	0.254	0.0	0.002	•
CCGT060201LF	CCGT21502LF	6.35	0.250	6.45	0.254	0.1	0.004	•
CCGT060202LF	CCGT21505LF	6.35	0.250	6.45	0.254	0.2	0.008	•
CCGT060204LF	CCGT2151LF	6.35	0.250	6.45	0.254	0.4	0.016	•
CCGT09T3X0LF	CCGT325X0LF	9.53	0.375	9.67	0.381	0.0	0.002	•
CCGT09T301LF	CCGT32502LF	9.53	0.375	9.67	0.381	0.1	0.004	•
CCGT09T302LF	CCGT32505LF	9.53	0.375	9.67	0.381	0.2	0.008	•
CCGT09T304LF	CCGT3251LF	9.53	0.375	9.67	0.381	0.4	0.016	•
CCGT09T308LF	CCGT3252LF	9.53	0.375	9.67	0.381	0.8	0.031	•





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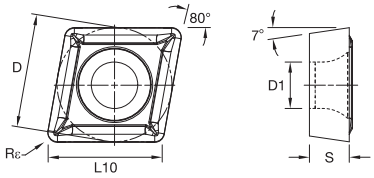
● Primary
○ Secondary

KCU25B

Screw-On

Positive Inserts • CCMT-FP

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
CCMT060202FP	CCMT21505FP	6.35	0.250	6.45	0.254	0.2	0.008	•
CCMT060204FP	CCMT2151FP	6.35	0.250	6.45	0.254	0.4	0.016	•
CCMT060208FP	CCMT2152FP	6.35	0.250	6.45	0.254	0.8	0.031	•
CCMT09T302FP	CCMT32505FP	9.53	0.375	9.67	0.381	0.2	0.008	•
CCMT09T304FP	CCMT3251FP	9.53	0.375	9.67	0.381	0.4	0.016	•
CCMT09T308FP	CCMT3252FP	9.53	0.375	9.67	0.381	0.8	0.031	•
CCMT120404FP	CCMT431FP	12.70	0.500	12.90	0.508	0.4	0.016	•
CCMT120408FP	CCMT432FP	12.70	0.500	12.90	0.508	0.8	0.031	•



● Primary
○ Secondary

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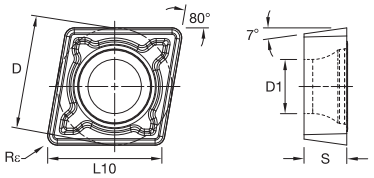
Screw-On

Positive Inserts • CCMT-LF

KCU25B

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
CCMT060202LF	CCMT21505LF	6.35	0.250	6.45	0.254	0.2	0.008	•
CCMT060204LF	CCMT2151LF	6.35	0.250	6.45	0.254	0.4	0.016	•
CCMT060208LF	CCMT2152LF	6.35	0.250	6.45	0.254	0.8	0.031	•
CCMT09T302LF	CCMT32505LF	9.53	0.375	9.67	0.381	0.2	0.008	•
CCMT09T304LF	CCMT3251LF	9.53	0.375	9.67	0.381	0.4	0.016	•
CCMT09T308LF	CCMT3252LF	9.53	0.375	9.67	0.381	0.8	0.031	•
CCMT120404LF	CCMT431LF	12.70	0.500	12.90	0.508	0.4	0.016	•
CCMT120408LF	CCMT432LF	12.70	0.500	12.90	0.508	0.8	0.031	•



● Primary
○ Secondary

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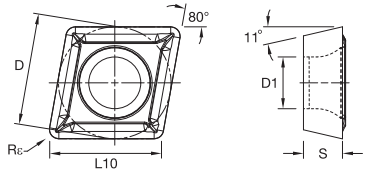
Screw-On

Positive Inserts • CCMT-MF

KCU25B

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
CCMT09T308MF	CCMT3252MF	9.53	0.375	9.67	0.381	0.8	0.031	•
CCMT120412MF	CCMT433MF	12.70	0.500	12.90	0.508	1.2	0.047	•



● Primary
○ Secondary

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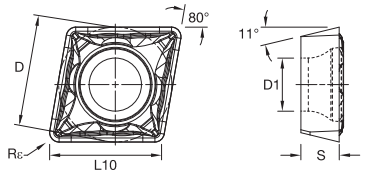
Screw-On

Positive Inserts • CPGT-LF

KCU25B

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
CPGT060201LF	CPGT21502LF	6.35	0.250	6.45	0.254	0.1	0.004	•
CPGT060202LF	CPGT21505LF	6.35	0.250	6.45	0.254	0.2	0.008	•
CPGT060204LF	CPGT2151LF	6.35	0.250	6.45	0.254	0.4	0.016	•
CPGT060208LF	CPGT2152LF	6.35	0.250	6.45	0.254	0.8	0.031	•
CPGT09T304LF	CPGT3251LF	9.53	0.375	9.67	0.381	0.4	0.016	•
CPGT09T308LF	CPGT3252LF	9.53	0.375	9.67	0.381	0.8	0.031	•



● Primary
○ Secondary

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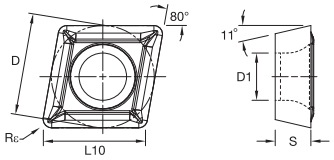
Screw-On

Positive Inserts • CPMT-FP

KCU25B

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
CPMT050204FP	CPMT18151FP	5.56	0.219	5.56	0.219	0.4	0.016	•
CPMT060202FP	CPMT21505FP	6.35	0.250	6.45	0.254	0.2	0.008	•
CPMT060204FP	CPMT2151FP	6.35	0.250	6.45	0.254	0.4	0.016	•
CPMT060208FP	CPMT2152FP	6.35	0.250	6.45	0.254	0.8	0.032	•
CPMT09T304FP	CPMT3251FP	9.53	0.375	9.67	0.381	0.4	0.016	•
CPMT09T308FP	CPMT3252FP	9.53	0.375	9.67	0.381	0.8	0.031	•



● Primary
○ Secondary

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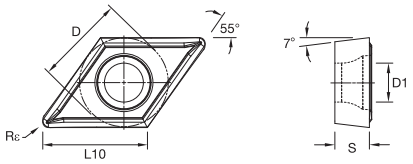
KCU25B

Screw-On

Positive Inserts • CPMT-LF

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
CPMT050204LF	CPMT18151LF	5.56	0.219	5.65	0.222	0.4	0.016	•
CPMT060202LF	CPMT21505LF	6.35	0.250	6.45	0.254	0.2	0.008	•
CPMT060204LF	CPMT2151LF	6.35	0.250	6.45	0.254	0.4	0.016	•
CPMT060208LF	CPMT2152LF	6.35	0.250	6.45	0.254	0.8	0.031	•
CPMT09T304LF	CPMT3251LF	9.53	0.375	9.67	0.381	0.4	0.016	•
CPMT09T308LF	CPMT3252LF	9.53	0.375	9.67	0.381	0.8	0.031	•



● Primary
○ Secondary

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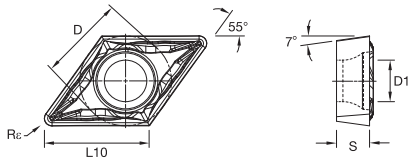
KCU25B

Screw-On

Positive Inserts • DCGT-LF

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
DCGT0702X0LF	DCGT215X0LF	6.35	0.250	7.75	0.305	0.0	0.002	•
DCGT070201LF	DCGT21502LF	6.35	0.250	7.75	0.305	0.1	0.004	•
DCGT11T3X0LF	DCGT325X0LF	9.53	0.375	11.63	0.458	0.0	0.002	•
DCGT11T301LF	DCGT32502LF	9.53	0.375	11.63	0.458	0.1	0.004	•



● Primary
○ Secondary

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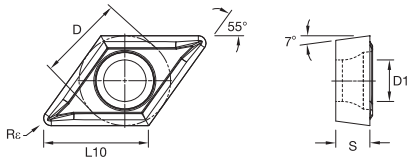
KCU25B

Screw-On

Positive Inserts • DCMT-FP

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
DCMT070204FP	DCMT2151FP	6.35	0.250	7.75	0.305	0.4	0.016	•
DCMT11T302FP	DCMT32505FP	9.53	0.375	11.63	0.458	0.2	0.008	•
DCMT11T304FP	DCMT3251FP	9.53	0.375	11.63	0.458	0.4	0.016	•
DCMT11T308FP	DCMT3252FP	9.53	0.375	11.63	0.458	0.8	0.031	•



● Primary
○ Secondary

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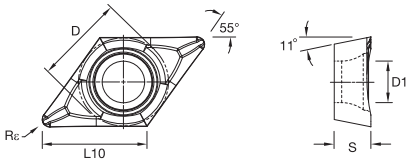
KCU25B

Screw-On

Positive Inserts • DCMT-LF

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
DCMT070202LF	DCMT21505LF	6.35	0.250	7.75	0.305	0.2	0.008	•
DCMT070204LF	DCMT2151LF	6.35	0.250	7.75	0.305	0.4	0.016	•
DCMT11T302LF	DCMT32505LF	9.53	0.375	11.63	0.458	0.2	0.008	•
DCMT11T304LF	DCMT3251LF	9.53	0.375	11.63	0.458	0.4	0.016	•



● Primary
○ Secondary

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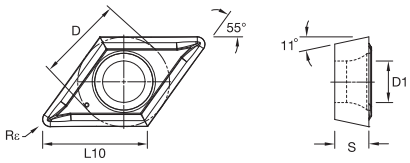
Screw-On

Positive Inserts • DPGT-HP

KCU25B

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
DPGT11T304HP	DPGT3251HP	9.53	0.375	11.63	0.458	0.4	0.016	•
DPGT11T308HP	DPGT3252HP	9.53	0.375	11.63	0.458	0.8	0.031	•



● Primary
○ Secondary

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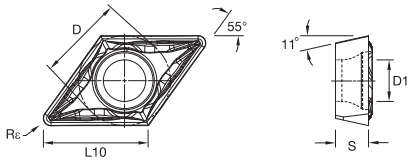
Screw-On

Positive Inserts • DPGT-LF

KCU25B

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
DPGT070204LF	DPGT2151LF	6.35	0.250	7.75	0.305	0.4	0.016	•
DPGT11T302LF	DPGT32505LF	9.53	0.375	11.63	0.458	0.2	0.008	•
DPGT11T304LF	DPGT3251LF	9.53	0.375	11.63	0.458	0.4	0.016	•



● Primary
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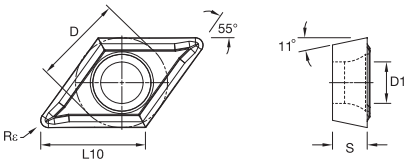
Screw-On

Positive Inserts • DPMT-FP

KCU25B

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
DPMT070204FP	DPMT2151FP	6.35	0.250	7.75	0.305	0.4	0.016	•
DPMT070208FP	DPMT2152FP	6.35	0.250	7.75	0.305	0.8	0.031	•
DPMT11T304FP	DPMT3251FP	9.53	0.375	11.63	0.458	0.4	0.016	•
DPMT11T308FP	DPMT3252FP	9.53	0.375	11.63	0.458	0.8	0.031	•



● Primary
○ Secondary

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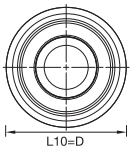
H	

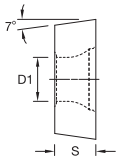
Screw-On

Positive Inserts • DPMT-LF

KCU25B

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
DPMT070202LF	DPMT21505LF	6.35	0.250	7.75	0.305	0.2	0.008	•
DPMT070204LF	DPMT2151LF	6.35	0.250	7.75	0.305	0.4	0.016	•
DPMT070208LF	DPMT2152LF	6.35	0.250	7.75	0.305	0.8	0.031	•
DPMT11T304LF	DPMT3251LF	9.53	0.375	11.63	0.458	0.4	0.016	•
DPMT11T308LF	DPMT3252LF	9.53	0.375	11.63	0.458	0.8	0.031	•





P		●
M		●
K		●
N		○
S		●
H		

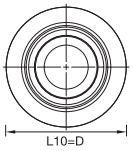
● Primary
○ Secondary

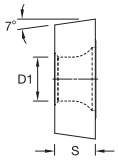
KCU25B

Screw-On

Positive Inserts • RCGT-HP

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
RCGT0803M0HP	RCGT0803M0HP	8.00	0.315	-	-	-	-	•
RCGT10T3M0HP	RCGT10T3M0HP	10.00	0.394	-	-	-	-	•
RCGT1204M0HP	RCGT1204M0HP	12.00	0.472	-	-	-	-	•





P		●
M		●
K		●
N		○
S		●
H		

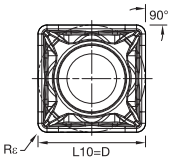
● Primary
○ Secondary

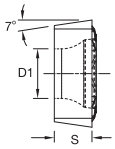
KCU25B

Screw-On

Positive Inserts • RCGT-MS

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
RCGT1204M0MS	RCGT1204M0MS	12.00	0.472	-	-	-	-	•





P		●
M		●
K		●
N		○
S		●
H		

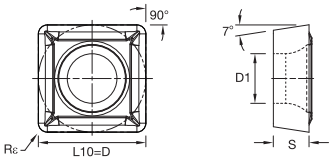
● Primary
○ Secondary

KCU25B

Screw-On

Positive Inserts • SCMT-FP

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
SCMT09T304FP	SCMT3251FP	9.53	0.375	9.53	0.375	0.4	0.016	•
SCMT09T308FP	SCMT3252FP	9.53	0.375	9.53	0.375	0.8	0.031	•
SCMT120408FP	SCMT432FP	12.70	0.500	12.70	0.500	0.8	0.031	•



● Primary
○ Secondary

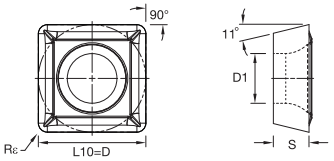
P	●
M	●
K	●
N	○
S	●
H	

Screw-On

Positive Inserts • SCMT-LF

KCU25B

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
SCMT09T304LF	SCMT3251LF	9.53	0.375	9.53	0.375	0.4	0.016	•
SCMT09T308LF	SCMT3252LF	9.53	0.375	9.53	0.375	0.8	0.031	•
SCMT120408LF	SCMT432LF	12.70	0.500	12.70	0.500	0.8	0.031	•



● Primary
○ Secondary

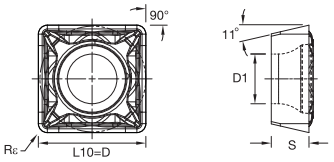
P	●
M	●
K	●
N	○
S	●
H	

Screw-On

Positive Inserts • SPGT-LF

KCU25B

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
SPGT09T304LF	SPGT3251LF	9.53	0.375	9.53	0.375	0.4	0.016	•
SPGT09T308LF	SPGT3252LF	9.53	0.375	9.53	0.375	0.8	0.031	•



● Primary
○ Secondary

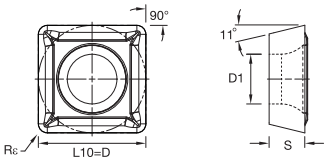
P	●
M	●
K	●
N	○
S	●
H	

Screw-On

Positive Inserts • SPMT-FP

KCU25B

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
SPMT09T304FP	SPMT3251FP	9.53	0.375	9.53	0.375	0.4	0.016	•
SPMT09T308FP	SPMT3252FP	9.53	0.375	9.53	0.375	0.8	0.031	•



● Primary
○ Secondary

P	●
M	●
K	●
N	○
S	●
H	

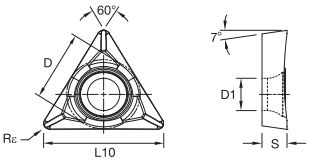
Screw-On

Positive Inserts • SPMT-LF

KCU25B

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
SPMT09T304LF	SPMT3251LF	9.53	0.375	9.53	0.375	0.4	0.016	•
SPMT09T308LF	SPMT3252LF	9.53	0.375	9.53	0.375	0.8	0.031	•

KENNAMETAL



P	●
M	●
K	●
N	○
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H	

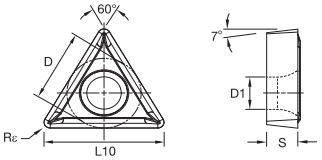
● Primary
○ Secondary

KCU25B

Screw-On

Positive Inserts • TCGT-HP

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
TCGT110202HP	TCGT21505HP	6.35	0.250	11.00	0.433	0.2	0.008	•
TCGT110204HP	TCGT2151HP	6.35	0.250	11.00	0.433	0.4	0.016	•
TCGT16T302HP	TCGT32505HP	9.53	0.375	16.50	0.650	0.2	0.008	•
TCGT16T304HP	TCGT3251HP	9.53	0.375	16.50	0.650	0.4	0.016	•
TCGT16T308HP	TCGT3252HP	9.53	0.375	16.50	0.650	0.8	0.031	•



P	●
M	●
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S	●
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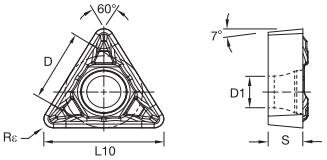
● Primary
○ Secondary

KCU25B

Screw-On

Positive Inserts • TCGT-LF

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
TCGT110201LF	TCGT21502LF	6.35	0.250	11.00	0.433	0.1	0.004	•
TCGT110204LF	TCGT2151LF	6.35	0.250	11.00	0.433	0.4	0.016	•



P	●
M	●
K	●
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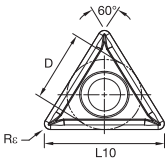
● Primary
○ Secondary

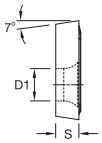
KCU25B

Screw-On

Positive Inserts • TCMT-FP

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
TCMT090204FP	TCMT18151FP	5.56	0.219	9.62	0.379	0.4	0.016	•
TCMT090208FP	TCMT18152FP	5.56	0.219	9.63	0.379	0.8	0.031	•
TCMT110202FP	TCMT21505FP	6.35	0.250	11.00	0.433	0.2	0.008	•
TCMT110204FP	TCMT2151FP	6.35	0.250	11.00	0.433	0.4	0.016	•
TCMT110208FP	TCMT2152FP	6.35	0.250	11.00	0.433	0.8	0.031	•
TCMT110304FP	TCMT221FP	6.35	0.250	11.00	0.433	0.4	0.016	•
TCMT110308FP	TCMT222FP	6.35	0.250	11.00	0.433	0.8	0.031	•
TCMT16T304FP	TCMT3251FP	9.53	0.375	16.50	0.650	0.4	0.016	•
TCMT16T308FP	TCMT3252FP	9.53	0.375	16.50	0.650	0.8	0.031	•
TCMT16T312FP	TCMT3253FP	9.53	0.375	16.50	0.650	1.2	0.047	•
TCMT220408FP	TCMT432FP	12.70	0.500	22.00	0.866	0.8	0.031	•





P		●
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N		○
S		●
H		

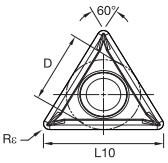
● Primary
○ Secondary

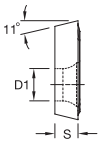
Screw-On

Positive Inserts • TCMT-LF

KCU25B

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
TCMT110202LF	TCMT21505LF	6.35	0.250	11.00	0.433	0.2	0.008	•
TCMT110204LF	TCMT2151LF	6.35	0.250	11.00	0.433	0.4	0.016	•
TCMT110208LF	TCMT2152LF	6.35	0.250	11.00	0.433	0.8	0.031	•
TCMT16T302LF	TCMT32505LF	9.53	0.375	16.50	0.650	0.2	0.008	•
TCMT16T304LF	TCMT3251LF	9.53	0.375	16.50	0.650	0.4	0.016	•
TCMT16T308LF	TCMT3252LF	9.53	0.375	16.50	0.650	0.8	0.031	•
TCMT220408LF	TCMT432LF	12.70	0.500	22.00	0.866	0.8	0.031	•





P		●
M		●
K		●
N		○
S		●
H		

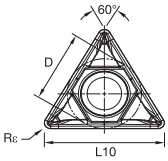
● Primary
○ Secondary

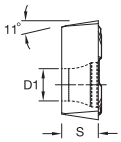
Screw-On

Positive Inserts • TPGT-LF

KCU25B

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
TPGT090204LF	TPGT18151LF	5.56	0.219	9.62	0.379	0.4	0.016	•
TPGT110202LF	TPGT21505LF	6.35	0.250	11.00	0.433	0.2	0.008	•
TPGT110204LF	TPGT2151LF	6.35	0.250	11.00	0.433	0.4	0.016	•
TPGT16T304LF	TPGT3251LF	9.53	0.375	16.50	0.650	0.4	0.016	•





P		●
M		●
K		●
N		○
S		●
H		

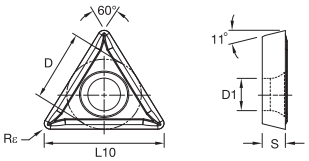
● Primary
○ Secondary

Screw-On

Positive Inserts • TPMT-FP

KCU25B

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
TPMT110204FP	TPMT2151FP	6.35	0.250	11.00	0.433	0.4	0.016	•
TPMT110208FP	TPMT2152FP	6.35	0.250	11.00	0.433	0.8	0.031	•
TPMT110304FP	TPMT221FP	6.35	0.250	11.00	0.433	0.4	0.016	•
TPMT16T304FP	TPMT3251FP	9.53	0.375	16.50	0.650	0.4	0.016	•
TPMT16T308FP	TPMT3252FP	9.53	0.375	16.50	0.650	0.8	0.031	•



P	●
M	●
K	●
N	○
S	●
H	

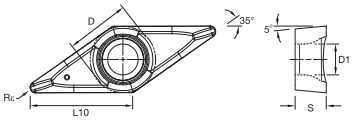
● Primary
○ Secondary

KCU25B

Screw-On

Positive Inserts • TPMT-LF

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
TPMT090204LF	TPMT18151LF	5.56	0.219	9.63	0.379	0.4	0.016	•
TPMT110204LF	TPMT2151LF	6.35	0.250	11.00	0.433	0.4	0.016	•
TPMT110208LF	TPMT2152LF	6.35	0.250	11.00	0.433	0.8	0.031	•
TPMT16T304LF	TPMT3251LF	9.53	0.375	16.50	0.650	0.4	0.016	•
TPMT16T308LF	TPMT3252LF	9.53	0.375	16.50	0.650	0.8	0.031	•
TPMT220408LF	TPMT432LF	12.70	0.500	22.00	0.866	0.8	0.031	•



P	●
M	●
K	●
N	○
S	●
H	

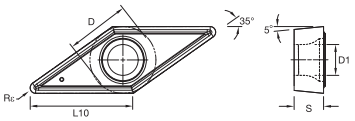
● Primary
○ Secondary

KCU25B

Screw-On

Positive Inserts • VBGT-HP

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
VBGT110302HP	VBGT2205HP	6.35	0.250	11.07	0.436	0.2	0.008	•
VBGT110304HP	VBGT221HP	6.35	0.250	10.95	0.431	0.4	0.016	•
VBGT160404HP	VBGT331HP	9.53	0.375	16.61	0.654	0.4	0.016	•
VBGT160408HP	VBGT332HP	9.53	0.375	16.61	0.654	0.8	0.031	•



P	●
M	●
K	●
N	○
S	●
H	

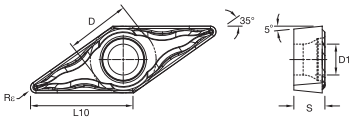
● Primary
○ Secondary

KCU25B

Screw-On

Positive Inserts • VBGT-LF

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
VBGT1103X0LF	VBGT22X0LF	6.35	0.250	11.07	0.436	0.0	0.002	•
VBGT110301LF	VBGT2202LF	6.35	0.250	11.07	0.436	0.1	0.004	•
VBGT110302LF	VBGT2205LF	6.35	0.250	11.07	0.436	0.2	0.008	•
VBGT110304LF	VBGT221LF	6.35	0.250	11.07	0.436	0.4	0.016	•
VBGT1604X0LF	VBGT33X0LF	9.53	0.375	16.61	0.654	0.0	0.002	•
VBGT160401LF	VBGT3302LF	9.53	0.375	16.61	0.654	0.1	0.004	•
VBGT160402LF	VBGT3305LF	9.53	0.375	16.61	0.654	0.2	0.008	•
VBGT160404LF	VBGT331LF	9.53	0.375	16.61	0.654	0.4	0.016	•



P	●
M	●
K	●
N	○
S	●
H	

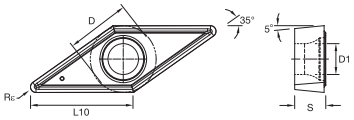
● Primary
○ Secondary

Screw-On

Positive Inserts • VBMT-FP

KCU25B

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
VBMT110304FP	VBMT221FP	6.35	0.250	11.07	0.436	0.4	0.016	•
VBMT110308FP	VBMT222FP	6.35	0.250	11.07	0.436	0.8	0.031	•
VBMT160402FP	VBMT3305FP	9.53	0.375	16.61	0.654	0.2	0.008	•
VBMT160404FP	VBMT331FP	9.53	0.375	16.61	0.654	0.4	0.016	•
VBMT160408FP	VBMT332FP	9.53	0.375	16.61	0.654	0.8	0.031	•



P	●
M	●
K	●
N	○
S	●
H	

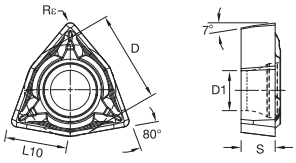
● Primary
○ Secondary

Screw-On

Positive Inserts • VBMT-LF

KCU25B

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
VBMT110304LF	VBMT221LF	6.35	0.250	11.07	0.436	0.4	0.016	•
VBMT110308LF	VBMT222LF	6.35	0.250	11.07	0.436	0.8	0.031	•
VBMT160402LF	VBMT3305LF	9.53	0.375	16.61	0.654	0.2	0.008	•
VBMT160404LF	VBMT331LF	9.53	0.375	16.61	0.654	0.4	0.016	•
VBMT160408LF	VBMT332LF	9.53	0.375	16.61	0.654	0.8	0.031	•



P	●
M	●
K	●
N	○
S	●
H	

● Primary
○ Secondary

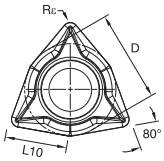
Screw-On

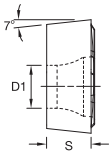
Positive Inserts • WCMT-FP

KCU25B

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
WCMT040204FP	WCMT2151FP	6.35	0.250	4.34	0.171	0.4	0.016	•

KENNAMETAL





● Primary
○ Secondary

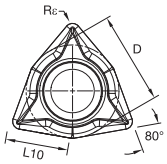
P	●
M	●
K	●
N	○
S	●
H	

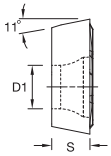
KCU25B

Screw-On

Positive Inserts • WCMT-LF

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
WCMT06T308LF	WCMT3252LF	9.53	0.375	6.52	0.257	0.8	0.031	•





● Primary
○ Secondary

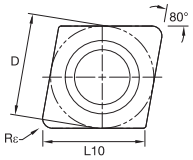
P	●
M	●
K	●
N	○
S	●
H	

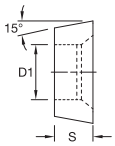
KCU25B

Screw-On

Positive Inserts • WPMT-LF

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
WPMTS3T104LF	WPMT15121LF	4.76	0.188	3.26	0.128	0.4	0.016	•
WPMT040204LF	WPMT2151LF	6.35	0.250	4.34	0.171	0.4	0.016	•





● Primary
○ Secondary

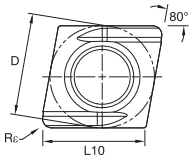
P	●
M	●
K	●
N	○
S	●
H	

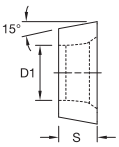
KCU25B

Screw-On

Positive Inserts • CDHB

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
CDHBS4T0S0	CDHB120601	3.97	0.156	4.03	0.159	0.1	0.002	•
CDHBS4T002	CDHB120605	3.97	0.156	4.03	0.159	0.2	0.007	•
CDHBS4T004	CDHB12061	3.97	0.156	4.03	0.159	0.4	0.015	•





● Primary
○ Secondary

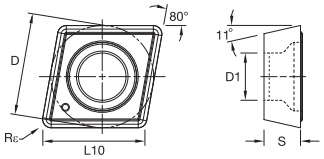
P	●
M	●
K	●
N	○
S	●
H	

KCU25B

Screw-On

Positive Inserts • CDHH

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
CDHHS4T002L	CDHH120605L	3.97	0.156	4.03	0.159	0.2	0.007	•
CDHHS4T002R	CDHH120605R	3.97	0.156	4.03	0.159	0.2	0.007	•
CDHHS4T004L	CDHH12061L	3.97	0.156	4.03	0.159	0.4	0.015	•



P		●
M		●
K		●
N		○
S		●
H		

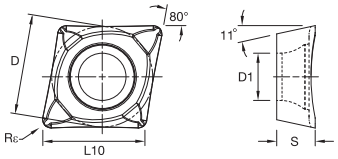
● Primary
○ Secondary

Screw-On

Positive Inserts • CPGM

KCU25B

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
CPGH09T301	CPGM32502	9.53	0.375	9.67	0.381	0.1	0.004	•
CPGH09T302	CPGM32505	9.53	0.375	9.67	0.381	0.2	0.008	•
CPGH09T304	CPGM3251	9.53	0.375	9.67	0.381	0.4	0.016	•
CPGH09T308	CPGM3252	9.53	0.375	9.67	0.381	0.8	0.031	•



P		●
M		●
K		●
N		○
S		●
H		

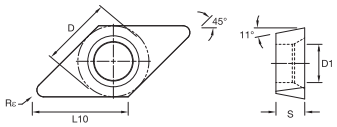
● Primary
○ Secondary

Screw-On

Positive Inserts • CPGT-HP

KCU25B

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
CPGT060202HP	CPGT21505HP	6.35	0.250	6.45	0.254	0.2	0.008	•
CPGT060204HP	CPGT2151HP	6.35	0.250	6.45	0.254	0.4	0.016	•
CPGT060208HP	CPGT2152HP	6.35	0.250	6.45	0.254	0.8	0.031	•
CPGT09T302HP	CPGT32505HP	9.53	0.375	9.67	0.381	0.2	0.008	•
CPGT09T304HP	CPGT3251HP	9.53	0.375	9.67	0.381	0.4	0.016	•
CPGT09T308HP	CPGT3252HP	9.53	0.375	9.67	0.381	0.8	0.031	•



P		●
M		●
K		●
N		○
S		●
H		

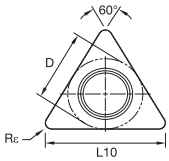
● Primary
○ Secondary

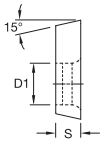
Screw-On

Positive Inserts • GPCD

KCU25B

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
GPHW050102	GPHW12105	3.97	0.156	5.61	0.221	0.2	0.007	•
GPHW050104	GPHW1211	3.97	0.156	5.61	0.221	0.4	0.015	•





P	●
M	●
K	●
N	○
S	●
H	

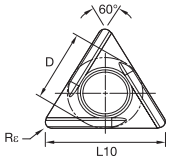
● Primary
○ Secondary

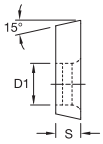
KCU25B

Screw-On

Positive Inserts • TDHB

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
TDHB07T12S0	TDHB12807501	4.06	0.158	7.04	0.277	0.1	0.002	•
TDHB07T1202	TDHB12807505	4.06	0.160	7.04	0.277	0.2	0.007	•
TDHB07T1204	TDHB1280751	4.06	0.160	7.04	0.277	0.4	0.015	•
TDHB07T1208	TDHB1280752	4.06	0.158	7.04	0.277	0.8	0.031	•





P	●
M	●
K	●
N	○
S	●
H	

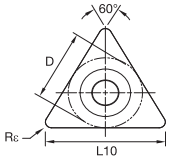
● Primary
○ Secondary

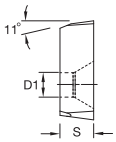
KCU25B

Screw-On

Positive Inserts • TDHH

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
TDHH07T1202L	TDHH12807505L	4.06	0.158	7.04	0.277	0.2	0.007	•
TDHH07T1204L	TDHH1280751L	4.06	0.160	7.04	0.277	0.4	0.015	•





P	●
M	●
K	●
N	○
S	●
H	

● Primary
○ Secondary

KCU25B

Screw-On

Positive Inserts • TPHB

ISO	ANSI	D		L10		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	
TPHB110204	TPHB2151	6.35	0.250	11.00	0.433	0.4	0.015	•

STEP 1 - SELECT INSERT GEOMETRY

Negative Inserts

1/2" IC CNMG120408

	min feed	min DOC	max feed	max DOC
-FF	0.1	0.1	0.3	2.7
-FV	0.1	0.4	0.3	3.0
-FN	0.1	0.3	0.3	2.5
-MV	0.2	0.5	0.5	4.5
-MN	0.2	0.5	0.5	5.1
-MR	0.2	1.0	0.5	5.7
-RN	0.3	1.1	0.6	5.7
-RP	0.2	1.1	0.6	6.4

Positive Insert Geometry

Size 3 CCMT09T308/CCGT09T308

	min feed	min DOC	max feed	max DOC
-11	0.1	0.2	0.3	1.3
-UF	0.1	1.1	0.3	1.3
-HP	0.2	0.6	0.4	2.3
-LF	0.2	0.8	0.4	2.3
-FP	0.1	0.2	0.3	1.2
-MP	0.1	0.8	0.4	1.7
-MF	0.2	1.1	0.4	1.7
-RP	0.2	1.1	0.6	6.4

STEP 2 - SELECT GRADE

Negative Insert Geometry									
Cutting Condition	-CT	-FF	-FV	-FN	-MV	-MN	-MR	-RP	-RN
heavily interrupted cut	-	**KCP10B**/ KCP10	KCP25C/ KCU25B	**KCP25C**/ KCU25B	KCP40B	**KCP30B**/ KCP40B	KCP30B	**KCP30B**/ KCP40B	**KCP30B**/ KCP40B
lightly interrupted cut	-	**KCP10B**/ KCP10	KCP10B	**KCP25C**/ KCU25B	**KCP25C**/ KCU25B	**KCP25C**/ KCU25B	**KCP25C**/ KCU25B	**KCP25C**/ KCU25B	**KCP25C**/ KCU25B
varying depth of cut, casting, or forging skin	KCP10B	**KCP05B**/ KCU10B/ KTP10/ KT315	KCP10B	KCP10B	KCP10B	KCP10B	**KCP10B**/ KCU10B	**KCP10B**/ KCU10B	**KCP10B**/ KCU10B
smooth cut, pre-turned surface	KCP05	KCP05B	KCP05B	**KCP05B**/ KCP05/ KCP10B	KCPK05	**KCP05B**/ KCP10B	**KCP10B**/ KCP10/ KCK15B	**KCP05B**/ KCPK05	KCP05B
smooth cut, high precision / tight tolerance	KCU10B	**KCU10B**/ KTP10/ KT315	**KTP10**/ KT315	**KCU10B**/ KTP10/ KT315	-	-	KCU10B	KCU10B	KCU10B

Positive insert Geometry						
Cutting Condition	-11	-UF	-LF	-FP	-MF	-MP
heavily interrupted cut	-	**KCP25C**/ KCU25B/ KCU10B	**KCP25C**/ KCU25B/ KCP30B/ KCP40B	**KCP25C**/ KCU25B	**KCP25C**/ KCU25B/ KCP30B	-
lightly interrupted cut	-	**KCP25C**/ KCU25B/ KCU10B	**KCP25C**/ KCU25B	**KCP25C**/ KCU25B	**KCP25C**/ KCU25B	**KCP25C**/ KCU25B
varying depth of cut, casting, or forging skin	**KTP10**/ KT315	KCP10B	KCU10B	**KCP10B**/ KCU10B	KCP10B	**KCU10B**/ KCP10
smooth cut, pre-turned surface	**KTP10**/ KT315	KCP05B	KCP05B	**KCP05B**/ KCP10B	KCP10B	-
smooth cut, high precision / tight tolerance	**KTP10**/ KT315	-	KCU10B	**KCU10B**/ KTP10/ KT315	-	KCU10B

NOTE: **Bold** is first choice when showing multiple grades.

STEP 3 - SELECT CUTTING SPEED

Low-Carbon (<0,3% C) and Free-Machining Steel		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
P0/P1	KTP10/KT315	180	475	590	1560
	KCU10B	165	395	540	1300
	KCU25B	135	360	443	1181
	KCP05B/KCP05/KCPK05	180	500	590	1640
	KCP10B/KCP10	180	440	590	1440
	KCP25C	150	430	490	1410
	KCP30B/KCP30/KCP40/KCP40B	115	235	380	770

Medium- and High-Carbon Steels (>0,3% C)		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
P2	KTP10/KT315	190	395	620	1300
	KCU10B	155	250	510	820
	KCU25B	125	220	410	722
	KCP05B/KCP05/KCPK05	180	400	590	1310
	KCP10B/KCP10	180	350	590	1150
	KCP25C	150	385	490	1260
	KCP30B/KCP30/KCP40/KCP40B	115	240	380	790

Alloy Steels and Tool Steels; <330 HB; <35 HRC		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
P3	KTP10/KT315	180	275	590	900
	KCU10B	150	250	490	820
	KCU25B	120	220	394	722
	KCP05B/KCP05/KCPK05	180	275	590	900
	KCP10B/KCP10	160	245	520	800
	KCP25C	150	275	490	900
	KCP30B/KCP30/KCP40/KCP40B	115	160	380	520

Alloy Steels and Tool Steels; 350–450 HB; 35–48 HRC		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
P4	KTP10/KT315	90	215	300	710
	KCU10B	85	195	280	640
	KCU25B	35	95	115	312
	KCP05B/KCP05/KCPK05	90	215	300	710
	KCP10B/KCP10	90	195	300	640
	KCP25C	75	215	250	710
	KCP30B/KCP30/KCP40/KCP40B	50	135	160	440

Ferritic, Martensitic, and PH Stainless Steels; <330 HB; <35 HRC		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
P5	KTP10/KT315	150	310	490	1020
	KCU10B	130	290	430	950
	KCU25B	60	145	197	476
	KCP05B/KCP05/KCPK05	150	270	490	890
	KCP10B/KCP10	150	300	490	980
	KCP25C	130	325	430	1070
	KCP30B/KCP30/KCP40/KCP40B	110	150	360	490

Ferritic, Martensitic, and PH Stainless Steels; 350–450 HB; 35–48 HRC		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
P6	KTP10/KT315	140	295	460	970
	KCU10B	115	250	380	820
	KCU25B	50	120	164	394
	KCP05B/KCP05/KCPK05	140	300	460	980
	KCP10B/KCP10	120	270	390	890
	KCP25C	115	265	380	870
	KCP30B/KCP30/KCP40/KCP40B	90	140	300	460

STEP 1 - SELECT INSERT GEOMETRY

Negative Inserts

1/2" IC CNMG120408

	min feed	min DOC	max feed	max DOC
-FF	0.1	0.1	0.3	2.7
-FP	0.1	0.3	0.3	2.5
-MP/-UP	0.2	0.8	0.6	6.4
-RP	0.2	1.1	0.6	6.4
-MR	0.2	1.0	0.5	5.7
-FS	0.1	0.2	0.3	2.0

Positive Insert Geometry

CCMT09T308/CCGT09T308

	min feed	min DOC	max feed	max DOC
-11	0.1	0.2	0.3	1.3
-UF	0.1	1.1	0.3	1.3
..GT-LF	0.2	0.8	0.4	2.3
-LF	0.2	0.8	0.4	1.7
-FP	0.1	0.2	0.3	1.2
-MP/-MF	0.1	0.8	0.4	1.7
R.GT-MS	0.1	0.8	0.4	3.2

STEP 2 - SELECT GRADE

Negative Insert Geometry						
Cutting Condition	-FF	-FP	-MP/-UP	-RP	-MR	-FS/MS
heavily interrupted cut	KCU10B	**KCM15B**/ KCM15	**KCM35B**/ KCM35	**KCM35B**/ KCM35	**KCM35B**/ KCM35	-
lightly interrupted cut	KCU10B	**KCM15B**/ KCM15/ KCS10B/ KCU10B	**KCM25B**/ KCM25/ KCS10B	**KCM25B**/ KCM25/ KCU25B	**KCM25B**/ KCM25	**KCS10B**/ KCU25B
varying depth of cut, casting, or forging skin	**KTP10**/ KT315	**KCM15B**/ KCM15/ KCS10B/ KCU10B	**KCM15B**/ KCM15/ KCS10B/ KCU10B	**KCM15B**/ KCM15/ KCM25B/ KCM25/ KCU25B	**KCM15B**/ KCM15/ KCU10B	**KCS10B**/ KCU25B
smooth cut, pre-turned surface	**KCU10B**/ KTP10/ KT315	**KCM15B**/ KCM15	**KCM15B**/ KCM15	**KCU10B**/ KCU25B	**KCM15B**/ KCM15	**KCS10B**/ KCU25B
smooth cut, high precision / tight tolerance	**KCU10B**/ KTP10/ KT315	**KCU10B**/ KCS10B/ KTP10/ KT315	**KCS10B**/ KCU10B	**KCU10B**/ KCU25B	KCU10B	**KCS10B**/ KCU25B

Positive Insert Geometry							
Cutting Condition	-11	-UF	..GT-LF	-LF	-FP	-MP/-MF	R.GT-MS
heavily interrupted cut	-	-	KCU25B	**KCM35B**/ KCM35	**KCM25B**/ KCU25B/ KCM25	**KCM25B**/ KCM25/ KCU25B	KCU25B
lightly interrupted cut	-	KCU10B	KCU25B	**KCM25B**/ KCM25/ KCS10B	**KCM15B**/ KCM15/ KCU10B	**KCM25B**/ KCM25/ KCU25B	KCU25B
varying depth of cut, casting, or forging skin	**KTP10**/ KT315	-	**KCU10B**/ KCU25B	**KCM15B**/ KCU10B/ KCS10B	KCU10B	**KCM15B**/ KCM15/ KCU10B	KCS10B
smooth cut, pre-turned surface	**KTP10**/ KT315	KCU10B	KCU10B	**KCM15B**/ KCM15	**KCU10B**/ KT315/ KTP10	**KCM15B**/ KCM15	KCS10B
smooth cut, high precision / tight tolerance	**KTP10**/ KT315	KCU10B	KCU10B	**KCU10B**/ KCS10B/ KTP10/ KT315	**KCU10B**/ KT315/ KTP10	KCU10B	KCS10B

NOTE: **Bold** is first choice when showing multiple grades.

STEP 3 - SELECT CUTTING SPEED

Austenitic Stainless Steel		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
M1	KTP10/KT315	145	300	480	980
	KCU10B	150	275	490	900
	KCU25B	100	265	328	869
	KCS10B	135	250	440	820
	KCM15B/KCM15	100	240	330	790
	KCM25B/KCM25	90	180	300	590
	KCM35B/KCM35	80	135	260	440

High Strength Austenitic Stainless and Cast Stainless Steels		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
M2	KTP10/KT315	140	290	460	950
	KCU10B	125	275	410	900
	KCU25B	90	250	295	820
	KCS10B	115	250	380	820
	KCM15B/KCM15	110	250	360	820
	KCM25B/KCM25	90	225	300	740
	KCM35B/KCM35	80	130	260	430

Duplex Stainless Steel (Ferritic and Austenitic Mixture)		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
M3	KTP10/KT315	140	290	460	950
	KCU10B	140	250	460	820
	KCU25B	90	220	295	722
	KCS10B	125	225	410	740
	KCM15B/KCM15	110	250	360	820
	KCM25B/KCM25	90	180	300	590
	KCM35B/KCM35	80	135	260	440

STEP 1 - SELECT INSERT GEOMETRY

Negative Inserts

1/2" IC CNMG120408

	min feed	min DOC	max feed	max DOC
-FN	0.1	0.3	0.3	2.5
-MR	0.2	1.0	0.5	5.7
-UN/-RP	0.2	0.8	0.6	6.4
..MA	0.1	0.1	0.3	2.5

Positive Insert Geometry

CCMT09T308/CCGT09T308

	min feed	min DOC	max feed	max DOC
-11/-UF	0.1	0.2	0.3	1.3
-LF	0.2	0.8	0.4	1.7
-FP	0.1	0.2	0.3	1.2
-MF	0.2	1.1	0.4	1.7
-MP	0.1	0.8	0.4	1.7

STEP 2 - SELECT GRADE

Negative Insert Geometry				
Cutting Condition	**-FN**	**-MR**	**-UN/-RP**	**..MA**
heavily interrupted cut	**KCK15B**/ KCK15	**KCP10B**/ KCP10/ KCP25C/	**KCK20B**/ KCK20/ KCPK05/ KCU25B	**KCK20B**/ KCK20/ KYK25/ KY3500/ KBK45/ KB1340
lightly interrupted cut	**KCK15B**/ KCK15	**KCP10B**/ KCP10/ KCP25C/ KCU25B	**KCK20B**/ KCK20/ KCPK05/ KCU25B	**KCK20B**/ KCK20/ KYK25/ KY3500/ KBK45/ KB1340
varying depth of cut, casting, or forging skin	**KCK05B**/ KCK05/ KTP10/ KT315	**KCK15B**/ KCK15	**KCK15B**/ KCK15	**KCK15B**/ KCK15/ KYK25/ KY3500/ KB5630/ KB1345
smooth cut, pre-turned surface	**KCK05B**/ KCK05	**KCK15B**/ KCK15	**KCK05B**/ KCK05	**KCK05B**/ KCK05/ KYK25/ KY3500/ KYHK15B/ KB5630/ KB1345
smooth cut, high precision / tight tolerance	**KTP10**/ KT315	KCU10B		**KYHK15B**/ KB5630/ KB1345

Positive Insert Geometry						
Cutting Condition	**-11**	**-LF**	**-FP**	**-MP**	**-MF**	**..GN & ..GW**
heavily interrupted cut	-	**KCK20B**/ KCK20/ KCU25B	**KCK20B**/ KCK20/ KCU25B	**KCK20B**/ KCK20	**KCK20B**/ KCK20	**KY3500**/ KB5630/ KB1345
lightly interrupted cut	KCU10B	**KCK20B**/ KCK20/ KCU25B	**KCK20B**/ KCK20/ KCU25B	**KCK20B**/ KCK20	**KCK20B**/ KCK20	**KY3500**/ KB5630/ KB1345
varying depth of cut, casting, or forging skin	KCU10B	**KCK15B**/ KCK15/ KCU25B	**KCK20B**/ KCK20/ KCU25B	**KCK20B**/ KCK20	**KCK15B**/ KCK15	**KY3500**/ KB5630/ KB1345
smooth cut, pre-turned surface	**KCU10B**/ KTP10/ KT315	KCU10B	**KCK20B**/ KCK20/	**KCK20B**/ KCK20	**KCK15B**/ KCK15	**KY3500**/ KYHK15B/ KB5630/ KB1345
smooth cut, high precision / tight tolerance	**KCU10B**/ KTP10/ KT315	KCU10B	-	KCU10B	-	**KYHK15B**/ KB5630/ KB1345

NOTE: **Bold** is first choice when showing multiple grades.
NOTE: Machining Ductile Iron requires a sharper edge / chip breaker ("-MR", "-11")

STEP 3 - SELECT CUTTING SPEED

Gray Cast Iron		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
K1	KTP10/KT315	150	440	490	1440
	KCU10B	150	440	490	1440
	KCU25B	135	400	443	1312
	KCK05B/KCK05	240	615	790	2020
	KCK15B/KCK15	200	550	660	1800
	KCK20B/KCK20	200	550	660	1800
	KYHK15B	450	950	1480	3120
	KY3500/KYK25/KYK10	350	1040	1150	3410
	KBK45/ KB1340	600	1200	1970	3940
	KB5630/KB1345	550	1200	1800	3940

High-Strength Ductile and Austempered Ductile Iron (ADI) Malleable Cast Irons; >600 MPa Tensile Strength		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
K3	KTP10/KT315	150	440	490	1440
	KCU10B	110	375	360	1230
	KCU25B	115	375	377	1230
	KCK05B/KCK05	155	445	510	1460
	KCK15B/KCK15	140	380	460	1250
	KCK20B/KCK20/KCPK05	140	350	460	1150

STEP 1 - SELECT INSERT GEOMETRY

Negative Inserts

1/2" IC CNMG120408

	min feed	min DOC	max feed	max DOC
...GP	0.1	0.2	0.3	1.6
-P	0.2	0.8	0.5	5.0
-K	0.1	0.2	0.4	2.5
..MS	0.1	0.2	0.3	2.5
..MG	0.1	0.2	0.3	2.5
-FST	0.1	0.1	0.3	2.0
-E	0.1	0.1	0.3	0.4

Positive Insert Geometry

CCMT09T308/CCGT09T308

	min feed	min DOC	max feed	max DOC
-LF	0.2	0.8	0.4	2.3
-HP	0.2	0.6	0.4	2.3
..MT	0.1	0.8	0.4	1.7
-FST	0.1	0.1	0.3	2.0
-ST	0.1	0.1	0.3	2.0

STEP 2 - SELECT GRADE

Negative Insert Geometry							
Cutting Condition	..GP	-P	-K	..MS	MG	-FST	-E
heavily interrupted cut	**KC5410**/ KCU10B/ K313	K313	K313	**KC5410**/ KCU10B/ K313	K68	-	-
lightly interrupted cut	**KC5410**/ KCU10B/ K313	K313	K313	**KC5410**/ KCU10B/ K313	K68	**KD1400**/ KD1425	KD1405
varying depth of cut, casting, or forging skin	**KC5410**/ KCU10B/ K313	K313	K313	**KC5410**/ KCU10B/ K313	K68	**KD1400**/ KD1425	KD1405
smooth cut, pre-turned surface	**KC5410**/ KCU10B/ K313	K313	K313	**KC5410**/ KCU10B/ K313	K68	**KD1400**/ KD1425	KD1405

Positive Insert Geometry					
Cutting Condition	-LF	-HP	..MT	-FST	-ST
heavily interrupted cut	**KCU10B**/ KCU25B/ K313	**KC5410**/ KCU10B/ K313	**KCU10B**/ K313	**KD1400**/ KD1425	**KD1400**/ KD1425
lightly interrupted cut	**KC5410**/ KCU10B/ KCU25B/ K313	**KC5410**/ KCU10B/ K313	**KC5410**/ KCU10B/ K313	**KD1400**/ KD1425	**KD1400**/ KD1425
varying depth of cut, casting, or forging skin	**KC5410**/ KCU10B/ KCU25B/ K313	**KC5410**/ KCU10B/ K313	**KC5410**/ KCU10B/ K313	**KD1425**/ KD1400	**KD1425**/ KD1400
smooth cut, pre-turned surface	**KC5410**/ KCU10B/ K313	**KC5410**/ KCU10B/ K313	**KC5410**/ KCU10B/ K313	**KD1425**/ KD1400	**KD1425**/ KD1400

NOTE: **Bold** is first choice when showing multiple grades.

STEP 3 - SELECT CUTTING SPEED

Wrought Aluminum Alloys		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
N1	KC5410	200	1200	660	3940
	K313	198	617	650	2020
	KCU10B	200	900	660	2950
	KCU25B	200	900	660	2950

Low-Silicon Aluminum Alloys and Magnesium Alloys; Si12.2%		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
N2	KC5410	125	1000	410	3280
	K313	100	600	330	1970
	KCU10B	125	900	410	2950
	KCU25B	125	900	410	2950
	KD1400	250	2625	820	8610

High-Silicone Aluminum and Magnesium Alloys; Si>12.2%		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
N3	KD1405	250	1125	820	3690
	KD1425	250	1000	820	3280

Copper, Brass, Zinc-Based on a Machinability Index Range of 70-100		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
N4	KC5410	125	750	410	2460
	K68	125	360	410	1180
	K313	107	366	350	1200
	KCU10B	125	700	410	2300
	KD1400/KD1405	250	1000	820	3280
	KD1425	125	750	410	2460

Nylon, Plastics, Rubbers, Phenolics, Resins, Fiberglass		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
N5	KC5410	125	400	410	1310
	KCU10B	100	350	330	1150
	KD1400/KD1405	125	750	410	2460
	KD1425	125	500	410	1640

STEP 1 - SELECT INSERT GEOMETRY

Negative Inserts

1/2" IC CNMG120408

	min feed	min DOC	max feed	max DOC
-FS	0.1	0.2	0.3	2.0
-FP	0.1	0.3	0.3	2.5
-P	0.2	0.8	0.5	5.0
-MS	0.1	0.8	0.4	5.0
-UP	0.2	1.0	0.6	6.4
-MP	0.2	0.8	0.5	5.1
-RP	0.2	1.1	0.6	6.4
CNGA	0.1	0.2	0.3	2.5

Positive Insert Geometry

CCMT09T308/CCGT09T308

	min feed	min DOC	max feed	max DOC
-FS	0.1	0.2	0.3	2.0
-HP	0.2	0.6	0.4	2.3
-LF	0.2	0.8	0.4	2.3
-FP	0.1	0.2	0.3	1.6
-MS	0.1	0.8	0.4	5.0
-MP	0.2	0.8	0.5	5.1

STEP 2 - SELECT GRADE

Negative Insert Geometry							
Cutting Condition	**-FS**	**-FP**	**-MS**	**-UP**	**-MP**	**-RP**	**CNGA**
heavily interrupted cut	KCU25B	-	KCU25B	KCM35B	KCU25B	**KCM35B**/ KCM25	-
lightly interrupted cut	KCU10B	KCU10B	KCU25B	KCM25B	KCU25B	**KCM15B**/ KCU25B	KYS30
varying depth of cut, casting, or forging skin	KCU10B	**KCS10B**/ KCU10B	**KCS10B**/ KCU10B	KCM15B	KCS10B	**KCS10B**/ KCU10B/ KCU25B	**KYS30**/ KYS25/ KY4300/ KB1630
smooth cut, pre-turned surface	**KCU10B**/ K313	**KCS10B**/ KCU10B	**KCS10B**/ KCU10B	KCU10B	**KCS10B**/ KCU10B	**KCS10B**/ KCU10B	**KYS25**/ KY4300/ KB1630
smooth cut, high precision / tight tolerance	**KCU10B**/ K313	**KCS10B**/ KCU10B	**KCS10B**/ KCU10B	KCU10B	**KCS10B**/ KCU10B	**KCS10B**/ KCU10B	-

Positive Insert Geometry						
Cutting Condition	**-FS**	**-HP**	**-LF**	**-FP**	**-MS**	**-MP**
heavily interrupted cut	-	-	-	KCU25B	-	-
lightly interrupted cut	KCU10B	KCU25B	KCU25B	**KCU25B**/ KCU10B	KCU25B	-
varying depth of cut, casting, or forging skin	KCU10B	**KCS10B**/ KCU10B	**KCS10B**/ KCU10B	**KCS10B**/ KCU10B	**KCS10B**/ KCU10B	KCS10B
smooth cut, pre-turned surface	**KCU10B**/ K313	**KCS10B**/ KCU10B	**KCS10B**/ KCU10B	**KCS10B**/ KCU10B	**KCS10B**/ KCU10B	KCS10B
smooth cut, high precision / tight tolerance	KCU10B	**KCS10B**/ KCU10B	**KCS10B**/ KCU10B	**KCS10B**/ KCU10B	KCS10B	KCS10B

NOTE: **Bold** is first choice when showing multiple grades.

STEP 3 - SELECT CUTTING SPEED

Iron-Based, Heat-Resistant Alloys; 160-260 HB; 25-48 HRC; 500-1200 Mpa Tensile Strength		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
S1	K313	10	75	30	250
	KCU10B	15	155	50	510
	KCS10B	15	140	50	460
	KCU25B	10	65	33	213
	KCM15B/KCM15	30	120	100	390
	KCM25B/KCM25/KCM35B/KCM35	10	60	30	200
	KYS25/KY4300	80	195	260	640
	KYS30	80	195	260	640
	KB1630	80	210	260	690

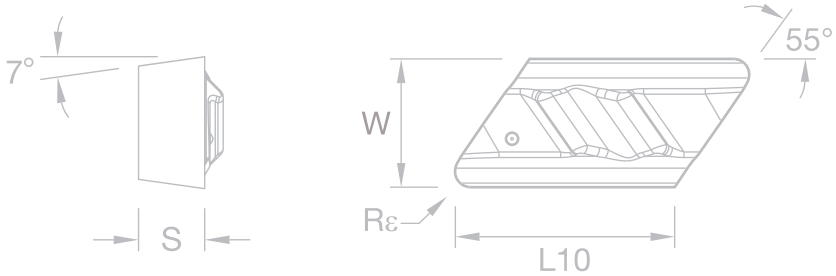
Cobalt-Based, Heat-Resistant Alloys; 250-450 HB; 25-48 HRC; 1000-1450 Tensile Strength		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
S2	K313	10	75	30	250
	KCU10B	15	155	50	510
	KCS10B	15	140	50	460
	KCU25B	10	85	33	279
	KCM15B/KCM15	30	120	100	390
	KCM25B/KCM25/KCM35B/KCM35	10	60	30	200
	KYHK15B	70	120	230	390
	KYS25/KY4300	85	215	280	710
	KYS30	85	215	280	710
	KB1630	85	225	280	740

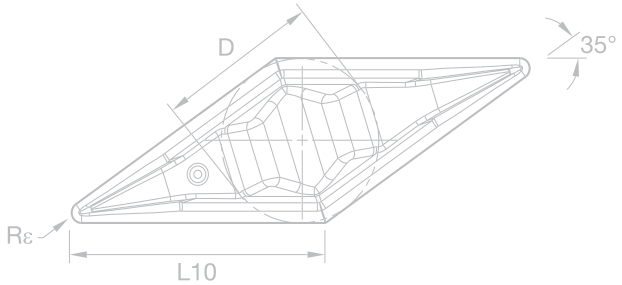
Nickel-Based, Heat-Resistant Alloys 160-450HB; <48 HRC; 600-1700 Tensile Strength		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
S3	K313	10	75	30	250
	KCU10B	15	155	50	510
	KCS10B	15	140	50	460
	KCU25B	15	85	49	279
	KCM15B/KCM15	30	120	100	390
	KCM25B/KCM25/KCM35B/KCM35	10	60	30	200
	KYS25/KY4300	100	250	330	820
	KYS30	100	250	330	820
	KB1630	100	270	330	890

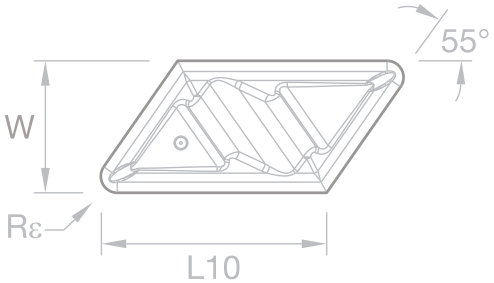
Titanium and Titanium Alloys 300-400 HB; 33-48 HRC; 900-1600 Tensile Strength		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
S4	K313	10	75	30	250
	KCU10B	15	185	50	610
	KCS10B	15	170	50	560
	KCU25B	10	115	33	377
	KD1405	150	350	490	1150

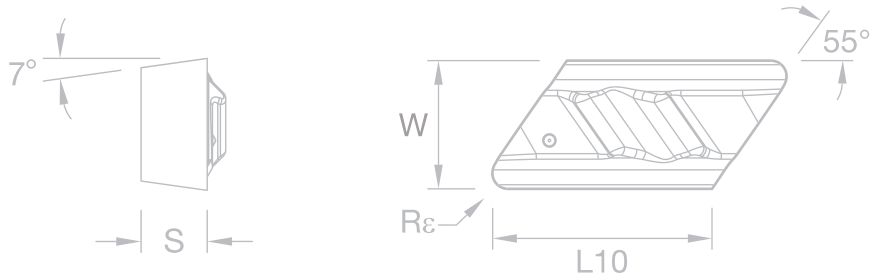
TOP NOTCH™

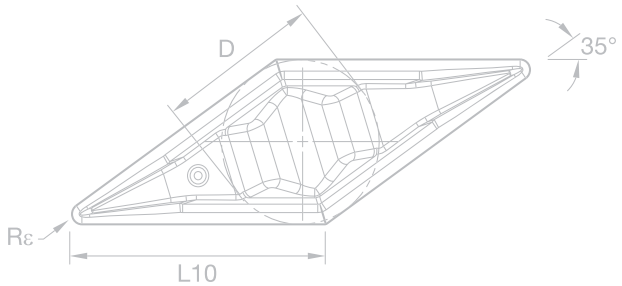
PROFILING INSERTS

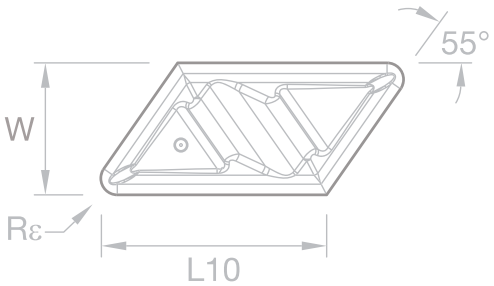


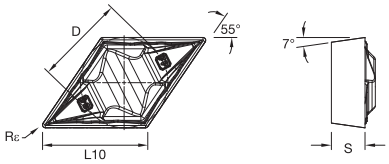












● Primary
○ Secondary

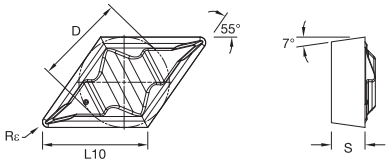
P	●
M	●
K	●
N	○
S	●
H	

Top Notch

Profiling Inserts • DCGR-FP

KCU25B

ISO	ANSI	D		L10		S		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	mm	in	
DCGR150404FP	DPGR431FP	12.70	0.500	15.50	0.610	4.76	0.188	0.4	0.016	•
DCGR150408FP	DPGR432FP	12.70	0.500	15.50	0.610	4.76	0.188	0.8	0.031	•



● Primary
○ Secondary

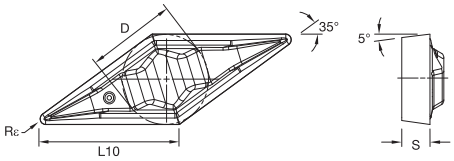
P	●
M	●
K	●
N	○
S	●
H	

Top Notch

Profiling Inserts • DCGR

KCU25B

ISO	ANSI	D		L10		S		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	mm	in	
DCGR150412	DPGR433	12.70	0.500	15.50	0.610	4.76	0.188	1.2	0.047	•



● Primary
○ Secondary

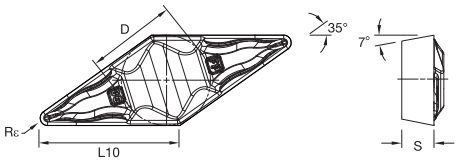
P	●
M	●
K	●
N	○
S	●
H	

Top Notch

Profiling Inserts • VBMR-FP

KCU25B

ISO	ANSI	D		L10		S		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	mm	in	
VBMR110304FP	VBMR221FP	6.35	0.250	11.07	0.436	3.18	0.125	0.4	0.016	•



● Primary
○ Secondary

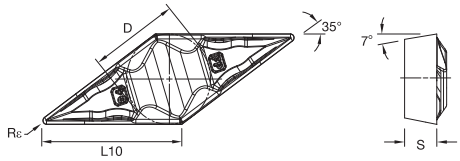
P	●
M	●
K	●
N	○
S	●
H	

Top Notch

Profiling Inserts • VCGR-FP

KCU25B

ISO	ANSI	D		L10		S		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	mm	in	
VCGR160402FP	VCGR3305FP	9.52	0.375	16.61	0.654	4.76	0.188	0.2	0.008	•
VCGR160404FP	VCGR331FP	9.52	0.375	16.61	0.654	4.76	0.188	0.4	0.016	•
VCGR160408FP	VCGR332FP	9.52	0.375	16.61	0.654	4.76	0.188	0.8	0.031	•
VCGR160412FP	VCGR333FP	9.52	0.375	16.61	0.654	4.76	0.188	1.2	0.047	•



P	●
M	●
K	●
N	○
S	●
H	

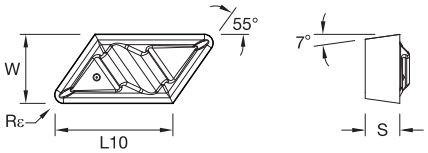
● Primary
○ Secondary

Top Notch

Profiling Inserts • VCMR-FP

KCU25B

ISO	ANSI	D		L10		S		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	mm	in	
VCMR160404FP	VCMR331FP	9.52	0.375	16.61	0.654	4.76	0.188	0.4	0.016	•
VCMR160408FP	VCMR332FP	9.52	0.375	16.61	0.654	4.76	0.188	0.8	0.031	•



P	●
M	●
K	●
N	○
S	●
H	

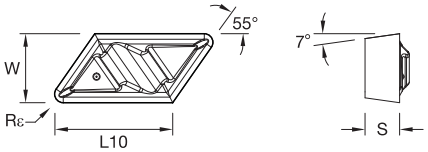
● Primary
○ Secondary

Top Notch

Profiling Inserts • KCGR • Right Hand

KCU25B

ISO	ANSI	L10		W		S		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	mm	in	
KCGR110304R08	NPGR51R	11.60	0.457	6.35	0.250	3.18	0.125	0.4	0.016	•
KCGR110308R08	NPGR52R	11.60	0.457	6.35	0.250	3.18	0.125	0.8	0.031	•



P	●
M	●
K	●
N	○
S	●
H	

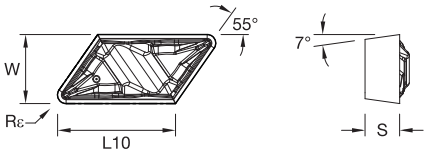
● Primary
○ Secondary

Top Notch

Profiling Inserts • KCGR • Left Hand

KCU25B

ISO	ANSI	L10		W		S		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	mm	in	
KCGR110308L08	NPGR52L	11.60	0.457	6.35	0.250	3.18	0.125	0.8	0.031	•



P	●
M	●
K	●
N	○
S	●
H	

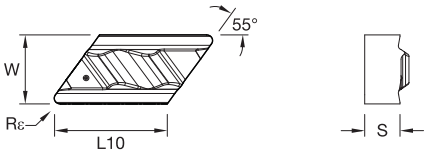
● Primary
○ Secondary

Top Notch

Profiling Inserts • KCGR-FP • Left Hand

KCU25B

ISO	ANSI	L10		W		S		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	mm	in	
KCGR110304L08FP	NPGR51LFP	11.60	0.457	6.33	0.249	3.18	0.125	0.4	0.016	•



P	●
M	●
K	●
N	○
S	●
H	

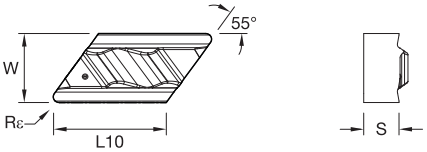
● Primary
○ Secondary

KCU25B

Top Notch

Profiling Inserts • KNGX • Right Hand

ISO	ANSI	L10		W		S		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	mm	in	
KNGX150404R20	NPR131F	15.44	0.608	9.47	0.373	4.76	0.188	0.4	0.016	•
KNGX150408R20	NPR132F	15.44	0.608	9.47	0.373	4.76	0.188	0.8	0.031	•
KNGX220404R25	NPR331N	22.73	0.895	9.53	0.375	4.76	0.188	0.4	0.016	•



P	●
M	●
K	●
N	○
S	●
H	

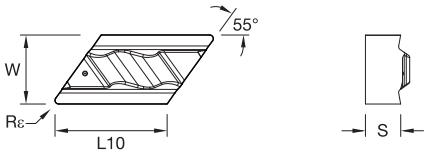
● Primary
○ Secondary

KCU25B

Top Notch

Profiling Inserts • KNGX • Left Hand

ISO	ANSI	L10		W		S		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	mm	in	
KNGX150404L20	NPL131F	15.44	0.608	9.47	0.373	4.76	0.188	0.4	0.016	•
KNGX150408L20	NPL132F	15.44	0.608	9.47	0.373	4.76	0.188	0.8	0.031	•



P	●
M	●
K	●
N	○
S	●
H	

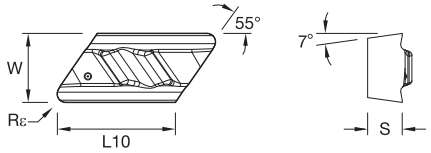
● Primary
○ Secondary

KCU25B

Top Notch

Profiling Inserts • KNUX • Right Hand

ISO	ANSI	L10		W		S		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	mm	in	
KNUX160405R1	KNUX160405R1	17.51	0.689	9.52	0.375	4.76	0.188	0.5	0.020	•



P	●
M	●
K	●
N	○
S	●
H	

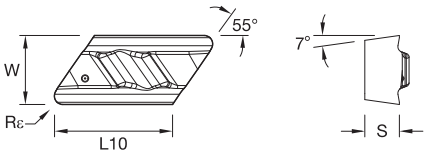
● Primary
○ Secondary

Top Notch

Profiling Inserts • KCGX • Right Hand

KCU25B

ISO	ANSI	L10		W		S		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	mm	in	
KCGX110301R15	NPR505	11.60	0.457	6.33	0.249	3.18	0.125	0.1	0.005	•
KCGX110302R15	NPR508	11.60	0.457	6.33	0.249	3.18	0.125	0.2	0.008	•
KCGX110304R15	NPR51	11.60	0.457	6.33	0.249	3.18	0.125	0.4	0.016	•
KCGX110308R15	NPR52	-	-	6.33	0.249	3.18	0.125	0.8	0.031	•



P	●
M	●
K	●
N	○
S	●
H	

● Primary
○ Secondary

Top Notch

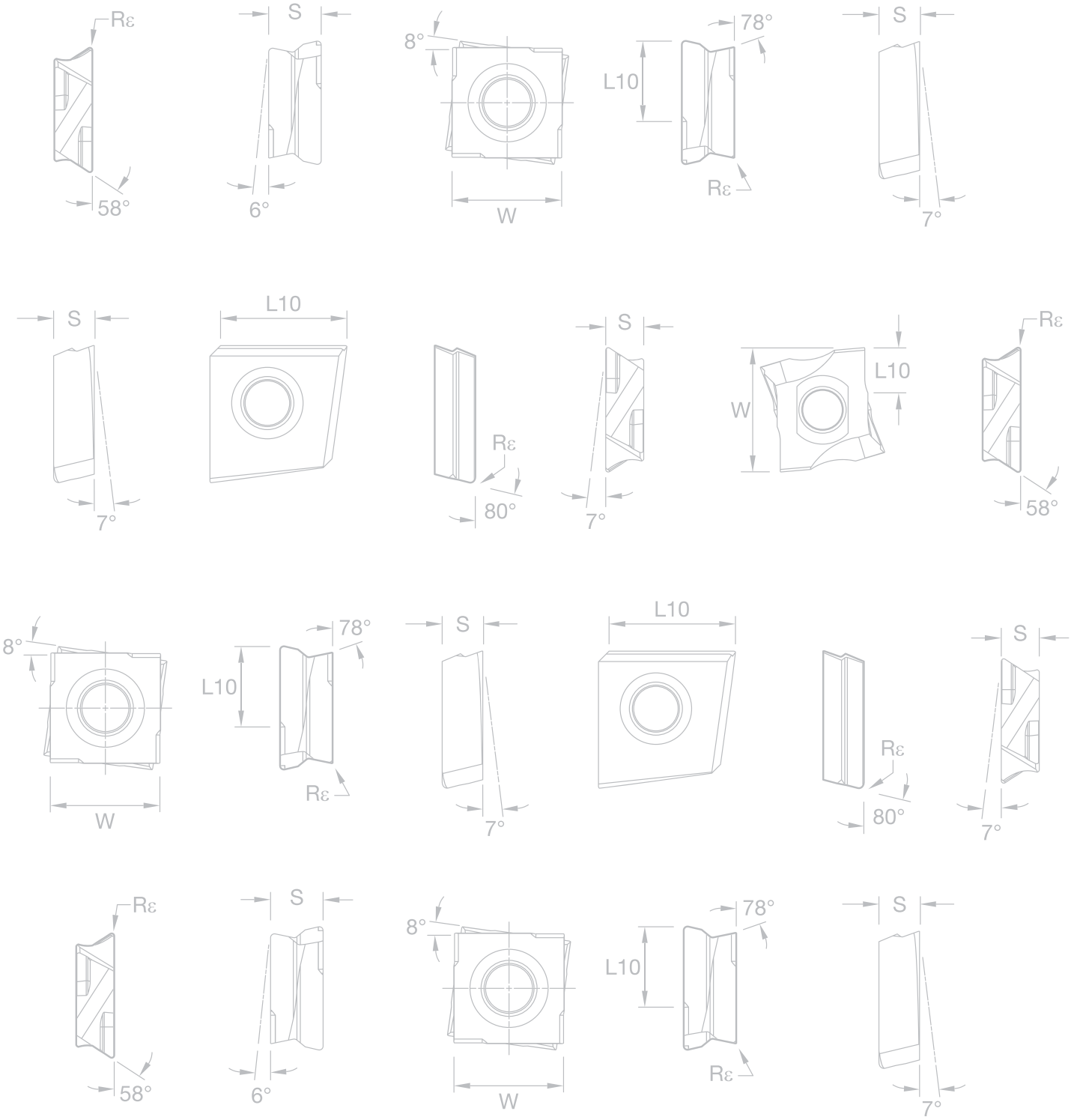
Profiling Inserts • KCGX • Left Hand

KCU25B

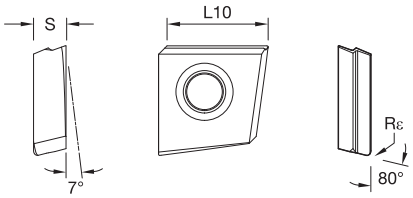
ISO	ANSI	L10		W		S		Rε		
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	mm	in	
KCGX110301L15	NPL505	11.60	0.457	6.35	0.250	3.18	0.125	0.1	0.005	•
KCGX110302L15	NPL508	11.60	0.457	6.35	0.250	3.18	0.125	0.2	0.008	•
KCGX110304L15	NPL51	11.60	0.457	6.35	0.250	3.18	0.125	0.4	0.016	•
KCGX110308L15	NPL52	-	-	6.33	0.249	3.18	0.125	0.8	0.031	•

FIX-PERFECT™

TANGENTIALLY MOUNTED INSERTS



KENNAMETAL



P	●
M	●
K	●
N	○
S	●
H	

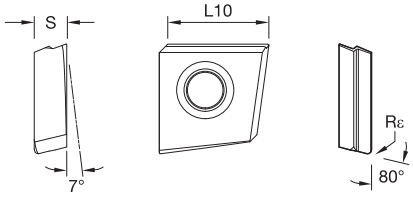
● Primary
○ Secondary

KCU25B

Fix-Perfect

Negative Inserts • C2FIX-MN • Right Hand

ISO	L10		S		Rε		
Catalog Number	mm	in	mm	in	mm	in	
C2FIX150512RMN	14.50	0.571	5.00	0.197	1.2	0.048	•



P	●
M	●
K	●
N	○
S	●
H	

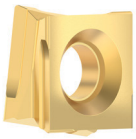
● Primary
○ Secondary

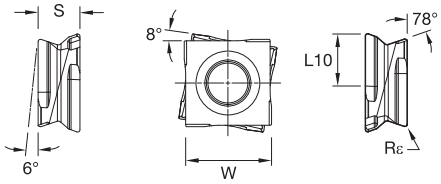
KCU25B

Fix-Perfect

Negative Inserts • C2FIX-MN • Left Hand

ISO	L10		S		Rε		
Catalog Number	mm	in	mm	in	mm	in	
C2FIX150504LMN	14.70	0.578	5.00	0.197	0.4	0.016	•
C2FIX150508LMN	14.60	0.574	5.00	0.197	0.8	0.032	•





P	●
M	●
K	●
N	○
S	●
H	

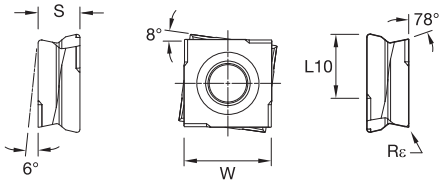
● Primary
○ Secondary

KCU25B

Fix-Perfect

Negative Inserts • C8FIX-MP • Right Hand

ISO	L10		S		Rε		
Catalog Number	mm	in	mm	in	mm	in	
C8FIX120503RMP	7.30	0.287	5.50	0.217	0.3	0.012	•
C8FIX150603RMP	9.30	0.366	6.60	0.260	0.3	0.012	•



P	●
M	●
K	●
N	○
S	●
H	

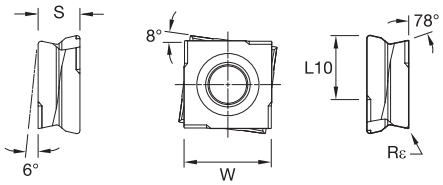
● Primary
○ Secondary

KCU25B

Fix-Perfect

Negative Inserts • C8FIX-RN • Right Hand

ISO	L10		S		Rε		
Catalog Number	mm	in	mm	in	mm	in	
C8FIX150605RRN	10.00	0.394	6.60	0.260	0.5	0.020	•
C8FIX150608RRN	8.90	0.350	6.60	0.260	0.8	0.031	•



●	Primary
○	Secondary

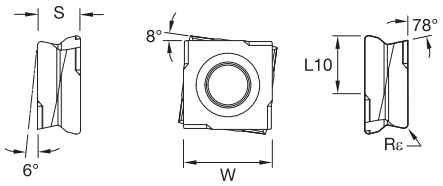
P		●
M		●
K		●
N		○
S		●
H		

KCU25B

Fix-Perfect

Negative Inserts • C8FIX-RN • Left Hand

ISO	L10		S		Rε		
Catalog Number	mm	in	mm	in	mm	in	
C8FIX150605LRN	10.00	0.394	6.60	0.260	0.5	0.020	•



●	Primary
○	Secondary

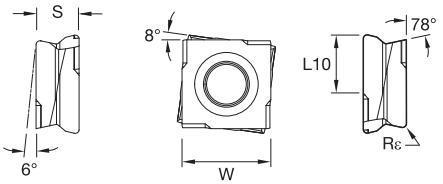
P		●
M		●
K		●
N		○
S		●
H		

KCU25B

Fix-Perfect

Negative Inserts • C8FIX-RP • Right Hand

ISO	L10		S		Rε		
Catalog Number	mm	in	mm	in	mm	in	
C8FIX120505RRP	7.10	0.280	5.50	0.217	0.5	0.020	•



●	Primary
○	Secondary

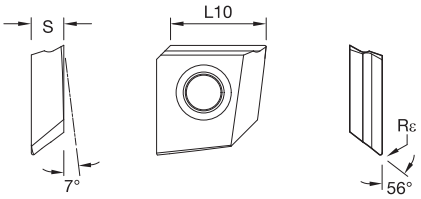
P		●
M		●
K		●
N		○
S		●
H		

KCU25B

Fix-Perfect

Negative Inserts • C8FIX-RP • Left Hand

ISO	L10		S		Rε		
Catalog Number	mm	in	mm	in	mm	in	
C8FIX150608LRP	8.80	0.345	6.60	0.260	0.8	0.031	•



P	●
M	●
K	●
N	○
S	●
H	

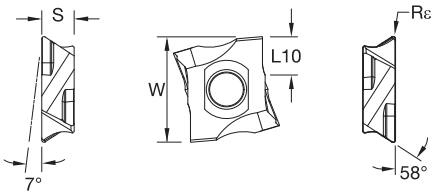
● Primary
○ Secondary

KCU25B

Fix-Perfect

Negative Inserts • D2FIX-HP • Right Hand

ISO	L10		S		Rε		
Catalog Number	mm	in	mm	in	mm	in	
D2FIX110404RHP	10.00	0.394	4.00	0.157	0.4	0.016	•



P	●
M	●
K	●
N	○
S	●
H	

● Primary
○ Secondary

KCU25B

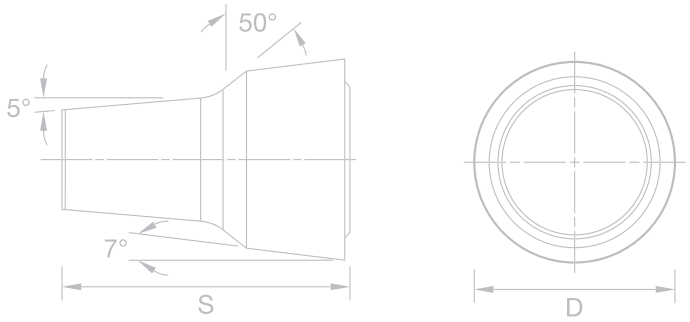
Fix-Perfect

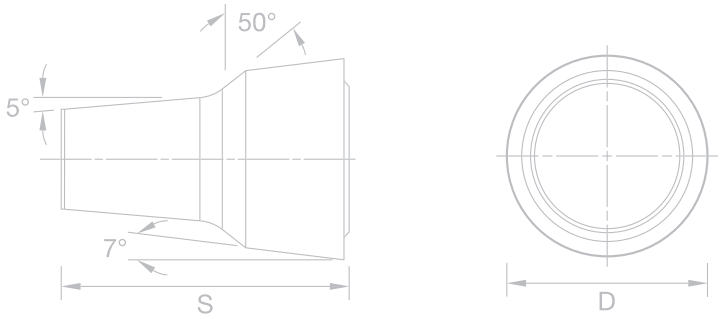
Negative Inserts • D4FIX-MN • Right Hand

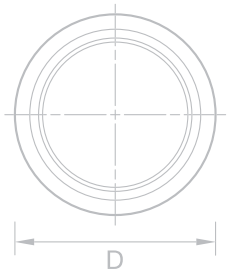
ISO	L10		S		Rε		
Catalog Number	mm	in	mm	in	mm	in	
D4FIX140604RMN	7.10	0.280	5.90	0.233	0.4	0.016	•
D4FIX140608RMN	6.70	0.264	5.90	0.233	0.8	0.031	•

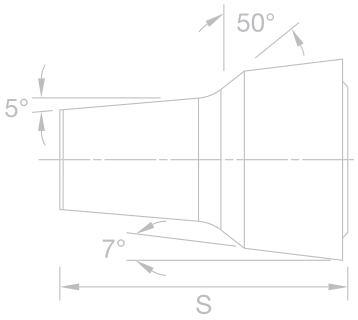
K-LOCK™

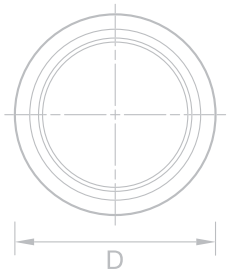
POSITIVE INSERTS

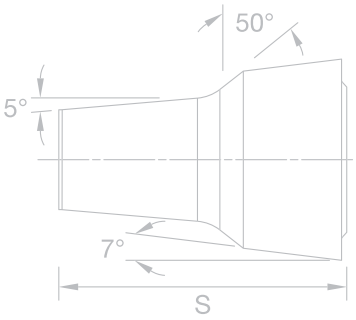


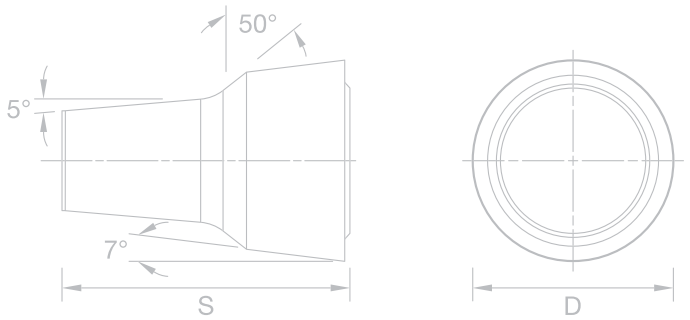


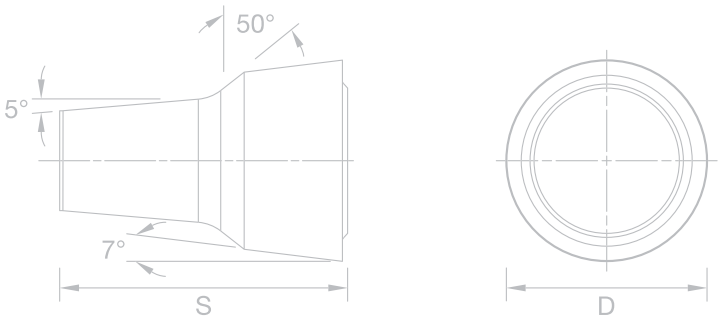


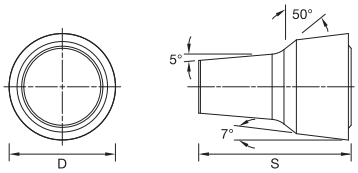












P	●
M	●
K	●
N	○
S	●
H	

● Primary
○ Secondary

K-Lock

Positive Inserts • RCGK-FS

KCU25B

ISO	D		S		
Catalog Number	mm	in	mm	in	
RCGK090700FS	9.53	0.375	13.23	0.521	•

STEP 1 - SELECT INSERT GEOMETRY

Top Notch Profiling

Size 15 DCGR150408FP

	min feed	min DOC	max feed	max DOC
- FP	0.063	0.1	0.25	1.2
- R/L 08	0.080	0.2	0.25	1.6
- R/L 15	0.140	0.8	0.40	2.8
- R/L 20	0.200	1.0	0.50	3.0
- R/L 25	0.300	1.1	0.60	3.6

Fix Perfect

Size 15 C8FIX15

	min feed	min DOC	max feed	max DOC
D2FIX - HP	0.160	0.515	0.70	5.15
D4FIX - MN	0.160	0.515	0.63	5.15
C2FIX - MN	0.160	0.515	0.63	5.15
C8FIX - MP	0.160	0.515	0.63	5.15
C8FIX - RN	0.280	1.150	0.85	10.0
C8FIX - RP	0.280	0.630	0.85	8.2

K-Lock

Size 09 RCGK09

	min feed	min DOC	max feed	max DOC
RCMK	0.10	0.40	0.80	3.81
RCGK - FS	0.07	0.50	0.30	3.81
RCGK - HP	0.20	0.60	0.60	3.45
RCMK - MP	0.10	0.40	0.80	3.81

STEP 2 - SELECT GRADE

Top Notch Profiling					
Cutting Condition	- FP	- R/L 08	- R/L 15	- R/L 20	- R/L 25
heavily interrupted cut	**KCU25B** KCU25 KCP25C KCP25 KCM25	**KCU25B** KCU25 KCP25C	**KCU25B** KCU25 KCP25C KCP25B	**KCU25B** KCU25 KCP25C KCP25B	**KCP25B** KCU25
lightly interrupted cut	**KCU25B** KCU25 KCP25C KCP25 KCM25	**KCU25B** KCU25 KCP25C	**KCU25B** KCU25 KCP25C KCP25B	**KCU25B** KCU25 KCP25C KCP25B	**KCP25B** KCU25 KCU10B KCU10
varying depth of cut, casting, or forging skin	**KCU10B** KCS10B KCU10 KCP10 KCK05	**KCU10B** KCU10 KCM15B KT315	**KCU10B** KCU10 KC5410 KT315	**KCU10B** KCU10 KCU25	**KCU10B** KCU10 KCU25
smooth cut, pre-turned surface	**KCU10B** KCS10B KCU10 KCP10 KCK05	**KCU10B** KCU10 KCM15B K68 KT315	**KCU10B** KCU10 KC5410 K68 K313 KT315	**KCU10B** KCU10 K68	**KCU10B** KCU10 K68
smooth cut, high precision / tight tolerance	**KCU10B** KCS10B KCU10 KCP10 KCK05	**KCU10B** KCU10 KCM15B K68 KT315	**KCU10B** KCU10 KC5410 K68 K313 KT315	**KCU10B** KCU10 K68	**KCU10B** KCU10 K68

Fix Perfect						
Cutting Condition	D2FIX - HP	D4FIX - MN	C2FIX - MN	C8FIX - MP	C8FIX - RN	C8FIX - RP
heavily interrupted cut	*	**KCP40** KCP25 KCU25B KCU25	**KCP40** KCP25 KCU25B KCU25	**KCP40** KCP25 KCU25B KCU25	**KCP40** KCP25 KCU25B KCU25	**KCP40** KCP25 KCU25B KCU25
lightly interrupted cut	**KCU25B** KCU25 KCP25	**KCU25B** KCU25 KCP25	**KCU25B** KCU25 KCP25	**KCU25B** KCU25 KCP25	**KCU25B** KCU25 KCP25	**KCU25B** KCU25 KCP25
varying depth of cut, casting, or forging skin	**KCU25B** KCU25 KCP25	**KCU25B** KCU25 KCP25	**KCU25B** KCU25 KCP25	**KCU25B** KCU25 KCP25	**KCU25B** KCU25 KCP25	**KCU25B** KCU25 KCP25
smooth cut, pre-turned surface	**KCU10B** KCU10 KCU25 KCU25B	**KCU10B** KCU10 KCP10 KCU25B	**KCU10B** KCU10 KCP10 KCU25B	**KCU10B** KCU10 KCP10 KCU25B	**KCU10B** KCU10 KCP10 KCU25B	**KCU10B** KCU10 KCP10 KCU25B
smooth cut, high precision / tight tolerance	**KCU10B** KCU10	**KCU10B** KCU10 KCP10	**KCU10B** KCU10 KCP10	**KCU10B** KCU10 KCP10	**KCU10B** KCU10 KCP10	**KCU10B** KCU10 KCP10

K - Lock				
Cutting Condition	RCMK	RCGK - FS	RCGK - HP	RCMK - MP
heavily interrupted cut	*	*	*	*
lightly interrupted cut	**KCU10B** KCU10 KCP25B K313	**KCS10B** KCU25B KCU10B KCU10	**KCU10B** KCU10 KC5410 K313	**KCS10**
varying depth of cut, casting, or forging skin	**KCU10B** KCU10 KCP25B K313	**KCS10B** KCU25B KCU10B KCU10	**KCU10B** KCU10 KC5410 K313	**KCS10**
smooth cut, pre-turned surface	**KCU10B** KCP25B KCU10 K313	**KCS10B** KCU10B KCU10	**KCU10B** KCU10 KC5410 K313	**KCS10**
smooth cut, high precision / tight tolerance	**KCU10B** KCU10 K313	**KCS10B** KCU10B KCU10	**KCU10B** KCU10 KC5410 K313	**KCS10**

NOTE: **Bold** is first choice when showing multiple grades.

STEP 3 - SELECT CUTTING SPEED

Low-Carbon (<0,3% C) and Free-Machining Steel		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
P0/P1	KTP10/KT315	180	475	590	1560
	KCU10B	165	395	540	1300
	KCU25B	135	360	443	1181
	KCP05B/KCP05/KCPK05	180	500	590	1640
	KCP10B/KCP10	180	440	590	1440
	KCP25C	150	430	490	1410
	KCP30B/KCP30/KCP40/KCP40B	115	235	380	770

Medium- and High-Carbon Steels (>0,3% C)		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
P2	KTP10/KT315	190	395	620	1300
	KCU10B	155	250	510	820
	KCU25B	125	220	410	722
	KCP05B/KCP05/KCPK05	180	400	590	1310
	KCP10B/KCP10	180	350	590	1150
	KCP25C	150	385	490	1260
	KCP30B/KCP30/KCP40/KCP40B	115	240	380	790

Alloy Steels and Tool Steels; <330 HB; <35 HRC		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
P3	KTP10/KT315	180	275	590	900
	KCU10B	150	250	490	820
	KCU25B	120	220	394	722
	KCP05B/KCP05/KCPK05	180	275	590	900
	KCP10B/KCP10	160	245	520	800
	KCP25C	150	275	490	900
	KCP30B/KCP30/KCP40/KCP40B	115	160	380	520

Alloy Steels and Tool Steels; 350–450 HB; 35–48 HRC		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
P4	KTP10/KT315	90	215	300	710
	KCU10B	85	195	280	640
	KCU25B	35	95	115	312
	KCP05B/KCP05/KCPK05	90	215	300	710
	KCP10B/KCP10	90	195	300	640
	KCP25C	75	215	250	710
	KCP30B/KCP30/KCP40/KCP40B	50	135	160	440

Ferritic, Martensitic, and PH Stainless Steels; <330 HB; <35 HRC		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
P5	KTP10/KT315	150	310	490	1020
	KCU10B	130	290	430	950
	KCU25B	60	145	197	476
	KCP05B/KCP05/KCPK05	150	270	490	890
	KCP10B/KCP10	150	300	490	980
	KCP25C	130	325	430	1070
	KCP30B/KCP30/KCP40/KCP40B	110	150	360	490

Ferritic, Martensitic, and PH Stainless Steels; 350–450 HB; 35–48 HRC		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
P6	KTP10/KT315	140	295	460	970
	KCU10B	115	250	380	820
	KCU25B	50	120	164	394
	KCP05B/KCP05/KCPK05	140	300	460	980
	KCP10B/KCP10	120	270	390	890
	KCP25C	115	265	380	870
	KCP30B/KCP30/KCP40/KCP40B	90	140	300	460

Austenitic Stainless Steel		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
M1	KTP10/KT315	145	300	480	980
	KCU10B	150	275	490	900
	KCU25B	100	265	328	869
	KCS10B	135	250	440	820
	KCM15B/KCM15	100	240	330	790
	KCM25B/KCM25	90	180	300	590
	KCM35B/KCM35	80	135	260	440

High Strength Austenitic Stainless and Cast Stainless Steels		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
M2	KTP10/KT315	140	290	460	950
	KCU10B	125	275	410	900
	KCU25B	90	250	295	820
	KCS10B	115	250	380	820
	KCM15B/KCM15	110	250	360	820
	KCM25B/KCM25	90	225	300	740
	KCM35B/KCM35	80	130	260	430

Duplex Stainless Steel (Ferritic and Austenitic Mixture)		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
M3	KTP10/KT315	140	290	460	950
	KCU10B	140	250	460	820
	KCU25B	90	220	295	722
	KCS10B	125	225	410	740
	KCM15B/KCM15	110	250	360	820
	KCM25B/KCM25	90	180	300	590
	KCM35B/KCM35	80	135	260	440

Gray Cast Iron		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
K1	KTP10/KT315	150	440	490	1440
	KCU10B	150	440	490	1440
	KCU25B	135	400	443	1312
	KCK05B/KCK05	240	615	790	2020
	KCK15B/KCK15	200	550	660	1800
	KCK20B/KCK20	200	550	660	1800
	KYHK15B	450	950	1480	3120
	KY3500/KYK25/KYK10	350	1040	1150	3410
	KBK45/ KB1340	600	1200	1970	3940
	KB5630/KB1345	550	1200	1800	3940

Low- and Medium-Strength Ductile Irons (Nodular Irons) and Compacted Graphite Irons (CGI); <600 MPa Tensile Strength		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
K2	KTP10/KT315	150	440	490	1440
	KCU10B	125	410	410	1350
	KCU25B	115	375	377	1230
	KCK05B/KCK05	240	500	790	1640
	KCK15B/KCK15	150	450	490	1480
	KCK20B/KCK20/KCPK05	150	420	490	1380
	KYHK15B	360	760	1180	2490

High-Strength Ductile and Austempered Ductile Iron (ADI) Malleable Cast Irons; >600 MPa Tensile Strength		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
K3	KTP10/KT315	150	440	490	1440
	KCU10B	110	375	360	1230
	KCU25B	115	375	377	1230
	KCK05B/KCK05	155	445	510	1460
	KCK15B/KCK15	140	380	460	1250
	KCK20B/KCK20/KCPK05	140	350	460	1150

Wrought Aluminum Alloys		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
N1	KC5410	200	1200	660	3940
	K313	198	617	650	2020
	KCU10B	200	900	660	2950
	KCU25B	200	900	660	2950

Low-Silicon Aluminum Alloys and Magnesium Alloys; Si12.2%		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
N2	KC5410	125	1000	410	3280
	K313	100	600	330	1970
	KCU10B	125	900	410	2950
	KCU25B	125	900	410	2950
	KD1400	250	2625	820	8610

High-Silicone Aluminum and Magnesium Alloys; Si>12.2%		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
N3	KD1405	250	1125	820	3690
	KD1425	250	1000	820	3280

Copper, Brass, Zinc-Based on a Machinability Index Range of 70-100		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
N4	KC5410	125	750	410	2460
	K68	125	360	410	1180
	K313	107	366	350	1200
	KCU10B	125	700	410	2300
	KD1400/KD1405	250	1000	820	3280
	KD1425	125	750	410	2460

Nylon, Plastics, Rubbers, Phenolics, Resins, Fiberglass		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
N5	KC5410	125	400	410	1310
	KCU10B	100	350	330	1150
	KD1400/KD1405	125	750	410	2460
	KD1425	125	500	410	1640

Iron-Based, Heat-Resistant Alloys; 160-260 HB; 25-48 HRC; 500-1200 Mpa Tensile Strength		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
S1	K313	10	75	30	250
	KCU10B	15	155	50	510
	KCS10B	15	140	50	460
	KCU25B	10	65	33	213
	KCM15B/KCM15	30	120	100	390
	KCM25B/KCM25/KCM35B/KCM35	10	60	30	200
	KYS25/KY4300	80	195	260	640
	KYS30	80	195	260	640
	KB1630	80	210	260	690

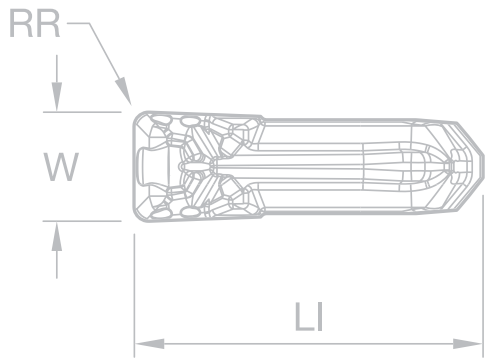
Cobalt-Based, Heat-Resistant Alloys; 250-450 HB; 25-48 HRC; 1000-1450 Tensile Strength		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
S2	K313	10	75	30	250
	KCU10B	15	155	50	510
	KCS10B	15	140	50	460
	KCU25B	10	85	33	279
	KCM15B/KCM15	30	120	100	390
	KCM25B/KCM25/KCM35B/KCM35	10	60	30	200
	KYHK15B	70	120	230	390
	KYS25/KY4300	85	215	280	710
	KYS30	85	215	280	710
	KB1630	85	225	280	740

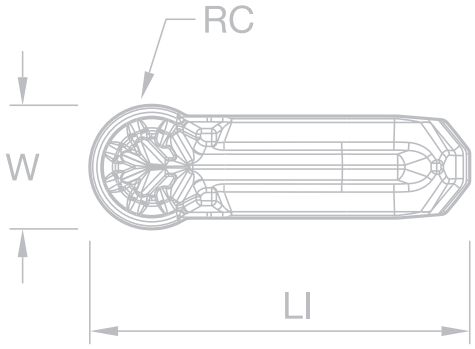
Nickel-Based, Heat-Resistant Alloys 160-450HB; <48 HRC; 600-1700 Tensile Strength		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
S3	K313	10	75	30	250
	KCU10B	15	155	50	510
	KCS10B	15	140	50	460
	KCU25B	15	85	49	279
	KCM15B/KCM15	30	120	100	390
	KCM25B/KCM25/KCM35B/KCM35	10	60	30	200
	KYS25/KY4300	100	250	330	820
	KYS30	100	250	330	820
	KB1630	100	270	330	890

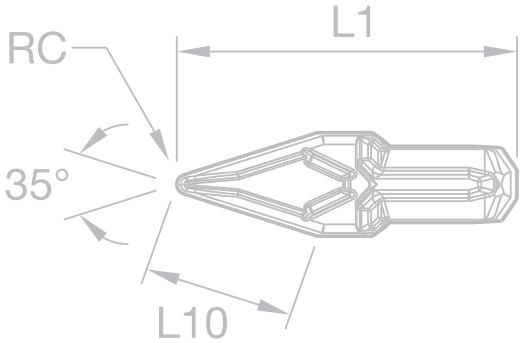
Titanium and Titanium Alloys 300-400 HB; 33-48 HRC; 900-1600 Tensile Strength		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
S4	K313	10	75	30	250
	KCU10B	15	185	50	610
	KCS10B	15	170	50	560
	KCU25B	10	115	33	377
	KD1405	150	350	490	1150

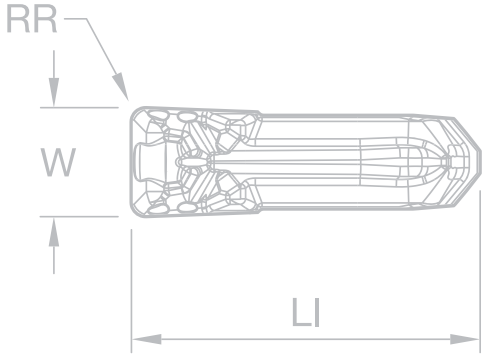
BEYOND EVOLUTION

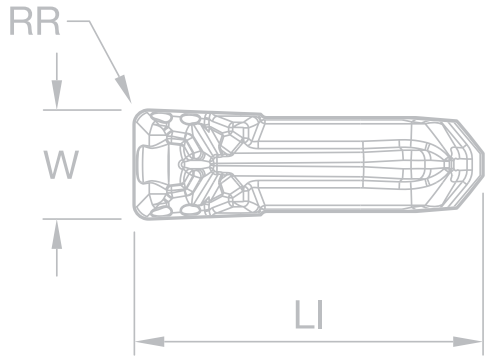
GROOVING & TURNING INSERTS

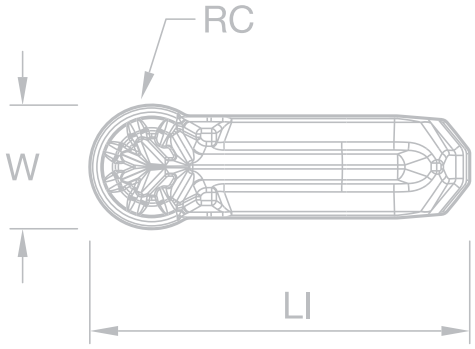


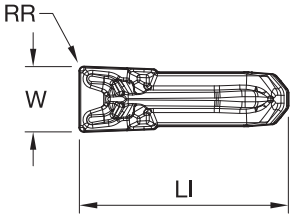












P	●
M	●
K	●
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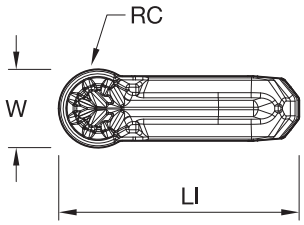
● Primary
○ Secondary

KCU25B

Beyond Evolution

Grooving & Turning Inserts • GUN • Precision Molded

		W		W Tol +/-		RR		LI		
Catalog Number	Seat Size	mm	in	mm	in	mm	in	mm	in	
EG0212M02U02GUN	2	2.125	0.084	0.050	0.002	0.20	0.008	8.97	0.353	•
EG0251M02U02GUN	2	2.510	0.099	0.050	0.002	0.20	0.008	8.97	0.353	•
EG0312M03U02GUN	3	3.125	0.123	0.075	0.003	0.20	0.008	9.60	0.378	•
EG0312M03U04GUN	3	3.125	0.123	0.075	0.003	0.40	0.016	9.60	0.378	•
EG0412M04U04GUN	4	4.125	0.162	0.075	0.003	0.40	0.016	10.19	0.401	•
EG0412M04U08GUN	4	4.125	0.162	0.075	0.003	0.80	0.031	10.19	0.401	•
EG0512M05U04GUN	5	5.125	0.202	0.075	0.003	0.40	0.016	12.20	0.481	•
EG0512M05U08GUN	5	5.125	0.202	0.075	0.003	0.80	0.031	12.20	0.481	•
EG0612M06U04GUN	6	6.125	0.241	0.075	0.003	0.40	0.016	14.60	0.575	•
EG0612M06U08GUN	6	6.125	0.241	0.075	0.003	0.80	0.031	14.60	0.574	•
EG0812M08U08GUN	8	8.125	0.320	0.075	0.003	0.80	0.031	17.50	0.687	•
EG0812M08U12GUN	8	8.125	0.320	0.075	0.003	1.20	0.047	17.50	0.687	•
EG1012M10U12GUN	10	10.125	0.399	0.075	0.003	1.20	0.047	20.80	0.817	•



P	●
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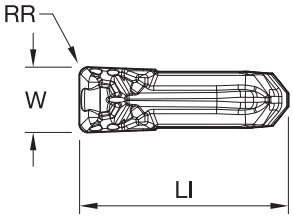
● Primary
○ Secondary

KCU25B

Beyond Evolution

Grooving & Turning Inserts • GUN • Full Radius • Precision Molded

		W		W Tol +/-		RC		LI		
Catalog Number	Seat Size	mm	in	mm	in	mm	in	mm	in	
ER0212M02U00GUN	2	2.120	0.083	0.050	0.002	1.06	0.042	8.97	0.353	•
ER0312M03U00GUN	3	3.125	0.123	0.075	0.003	1.56	0.062	9.60	0.378	•
ER0412M04U00GUN	4	4.125	0.162	0.075	0.003	2.06	0.081	10.20	0.401	•
ER0512M05U00GUN	5	5.125	0.202	0.075	0.003	2.56	0.101	12.20	0.482	•
ER0612M06U00GUN	6	6.125	0.241	0.075	0.003	3.06	0.121	14.60	0.575	•
ER0812M08U00GUN	8	8.125	0.320	0.075	0.003	4.06	0.160	17.47	0.688	•



P	●
M	●
K	●
N	○
S	●
H	

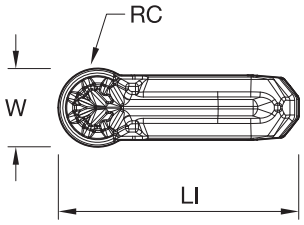
● Primary
○ Secondary

Beyond Evolution

Grooving & Turning Inserts • GUP • Precision Ground

KCU25B

		W		W Tol +/-		RR		LI		
Catalog Number	Seat Size	mm	in	mm	in	mm	in	mm	in	
EG0200M02P02GUP	2	2.00	0.079	0.025	0.001	0.20	0.008	8.92	0.351	•
EG0300M03P02GUP	3	3.00	0.118	0.025	0.001	0.20	0.008	9.55	0.376	•
EG0300M03P04GUP	3	3.00	0.118	0.025	0.001	0.40	0.016	9.55	0.376	•
EG0400M04P04GUP	4	4.00	0.158	0.025	0.001	0.40	0.016	10.15	0.399	•
EG0400M04P08GUP	4	4.00	0.158	0.025	0.001	0.80	0.032	10.15	0.399	•
EG0500M05P04GUP	5	5.00	0.197	0.025	0.001	0.40	0.016	12.18	0.480	•
EG0500M05P08GUP	5	5.00	0.197	0.025	0.001	0.80	0.032	12.20	0.480	•
EG0600M06P04GUP	6	6.00	0.236	0.025	0.001	0.40	0.016	14.53	0.057	•
EG0600M06P08GUP	6	6.00	0.236	0.025	0.001	0.80	0.032	14.54	0.572	•
EG0700M06P08GUP	6	7.00	0.276	0.025	0.001	0.80	0.031	14.50	0.572	•
EG0800M08P08GUP	8	8.00	0.315	0.025	0.001	0.80	0.031	17.40	0.685	•
EG0800M08P12GUP	8	8.00	0.315	0.025	0.001	1.20	0.047	17.40	0.685	•
EG1000M10P12GUP	10	10.00	0.394	0.025	0.001	1.20	0.047	20.70	0.815	•



P	●
M	●
K	●
N	○
S	●
H	

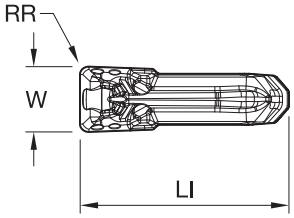
● Primary
○ Secondary

Beyond Evolution

Grooving & Turning Inserts • GUP • Full Radius • Precision Ground

KCU25B

		W		W Tol +/-		RC		LI		
Catalog Number	Seat Size	mm	in	mm	in	mm	in	mm	in	
ER0200M02P00GUP	2	2.00	0.079	0.025	0.001	1.00	0.039	8.91	0.351	•
ER0300M03P00GUP	3	3.00	0.118	0.025	0.001	1.50	0.059	9.50	0.376	•
ER0400M04P00GUP	4	4.00	0.157	0.025	0.001	2.00	0.079	10.10	0.399	•
ER0500M05P00GUP	5	5.00	0.197	0.025	0.001	2.50	0.098	12.20	0.480	•
ER0600M06P00GUP	6	6.00	0.236	0.025	0.001	3.00	0.118	14.50	0.572	•
ER0800M08P00GUP	8	8.00	0.315	0.025	0.001	4.00	0.157	17.40	0.685	•



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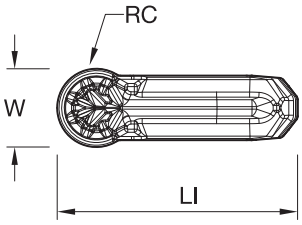
● Primary
○ Secondary

KCU25B

Beyond Evolution

Grooving & Turning Inserts • GUP • Precision Molded

		W		W Tol +/-		RR		LI		
Catalog Number	Seat Size	mm	in	mm	in	mm	in	mm	in	
EG0212M02U02GUP	2	2.125	0.084	0.050	0.002	0.20	0.008	8.97	0.353	•
EG0251M02U02GUP	2	2.511	0.099	0.050	0.002	0.20	0.008	8.97	0.353	•
EG0312M03U02GUP	3	3.125	0.123	0.075	0.003	0.20	0.008	9.60	0.378	•
EG0312M03U04GUP	3	3.125	0.123	0.075	0.003	0.40	0.016	9.60	0.378	•
EG0412M04U04GUP	4	4.125	0.162	0.075	0.003	0.40	0.016	10.19	0.401	•
EG0412M04U08GUP	4	4.125	0.162	0.075	0.003	0.80	0.031	10.19	0.401	•
EG0512M05U04GUP	5	5.125	0.202	0.075	0.003	0.40	0.016	12.25	0.482	•
EG0512M05U08GUP	5	5.125	0.202	0.075	0.003	0.80	0.031	12.25	0.482	•
EG0612M06U04GUP	6	6.125	0.241	0.075	0.003	0.40	0.016	14.60	0.575	•
EG0612M06U08GUP	6	6.125	0.241	0.075	0.003	0.80	0.031	14.60	0.574	•
EG0712M06U08GUP	6	7.125	0.281	0.075	0.003	0.80	0.032	14.60	0.574	•
EG0812M08U08GUP	8	8.125	0.320	0.075	0.003	0.80	0.031	17.47	0.688	•
EG0812M08U12GUP	8	8.125	0.320	0.075	0.003	1.18	0.046	17.45	0.687	•
EG1012M10U12GUP	10	10.125	0.399	0.075	0.003	1.20	0.047	20.80	0.817	•



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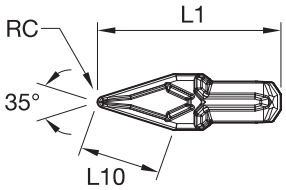
● Primary
○ Secondary

KCU25B

Beyond Evolution

Grooving & Turning Inserts • GUP • Full Radius • Precision Molded

		W		W Tol +/-		RC		LI		
Catalog Number	Seat Size	mm	in	mm	in	mm	in	mm	in	
ER0212M02U00GUP	2	2.120	0.084	0.050	0.002	1.06	0.042	8.97	0.353	•
ER0312M03U00GUP	3	3.125	0.123	0.075	0.003	1.56	0.062	9.60	0.378	•
ER0412M04U00GUP	4	4.125	0.162	0.075	0.003	2.06	0.081	10.20	0.401	•
ER0512M05U00GUP	5	5.125	0.202	0.075	0.003	2.56	0.101	12.20	0.482	•
ER0612M06U00GUP	6	6.125	0.241	0.075	0.003	3.06	0.121	14.60	0.575	•
ER0812M08U00GUP	8	8.125	0.320	0.075	0.003	4.06	0.160	17.50	0.688	•



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● Primary
○ Secondary

KCU25B

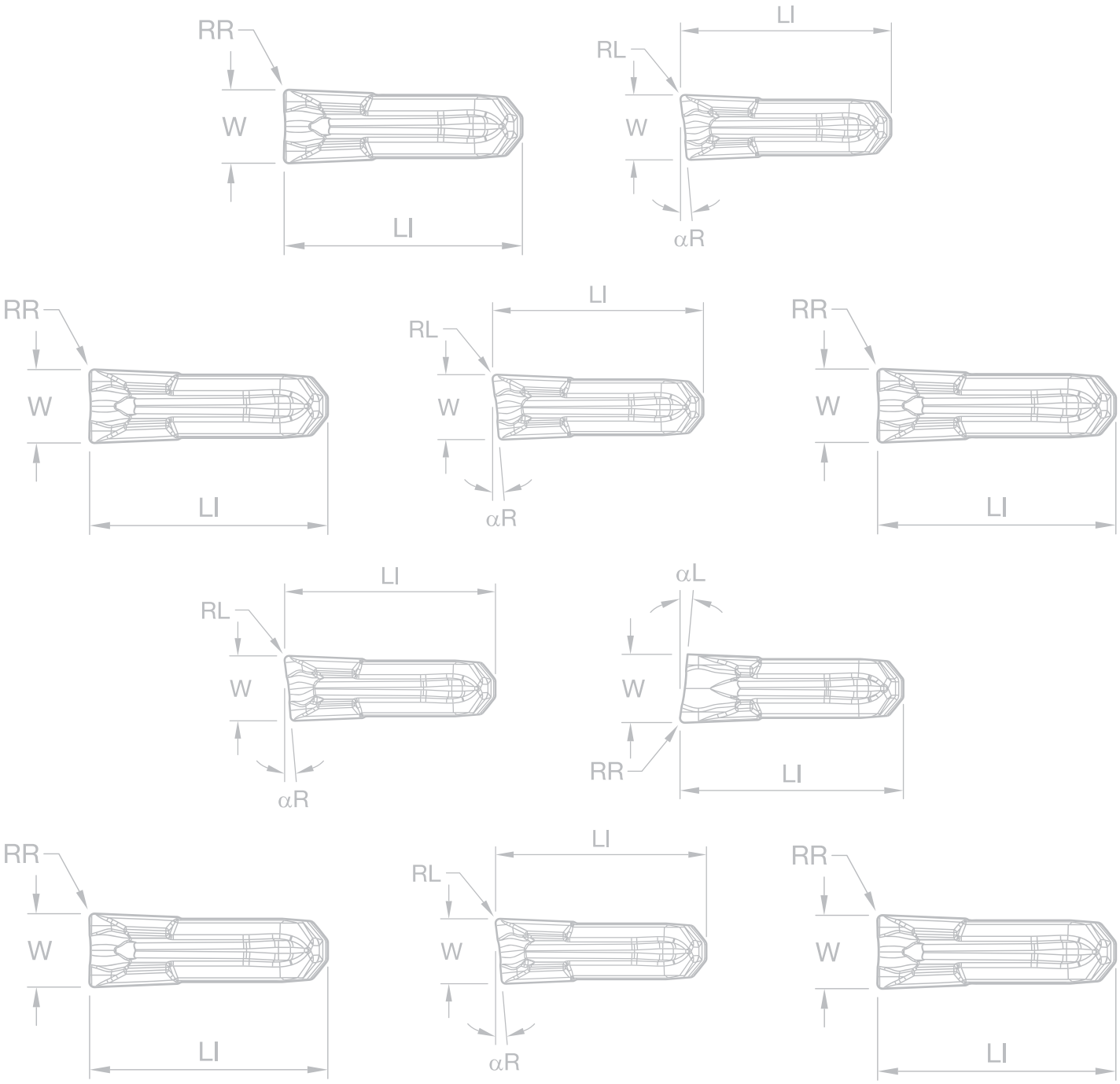
Beyond Evolution

Profiling Inserts • GUP • Precision Molded

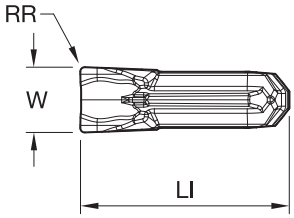
		RC		LI		L10		
Catalog Number	Seat Size	mm	in	mm	in	mm	in	
EV0000M03U02GUP	3	0.200	0.008	14.74	0.580	0.25	6.392	•
EV0000M06U08GUP	6	0.800	0.030	24.02	0.946	0.42	10.638	•

BEYOND EVOLUTION

CUT-OFF INSERTS



KENNAMETAL



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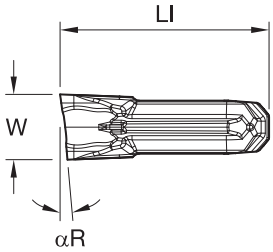
● Primary
○ Secondary

Beyond Evolution

Cut-Off Inserts • CF • Precision Ground • Neutral

KCU25B

		W		W Tol +/-		LI		RR		
Catalog Number	Seat Size	mm	in	mm	in	mm	in	mm	in	
EC014M1BPN00CF00	1B	1.40	0.055	0.025	0.001	9.00	0.355	-	-	•
EC014M1BPN00CF01	1B	1.40	0.055	0.025	0.001	9.11	0.359	0.15	0.006	•
EC020M02PN00CF00	2	2.00	0.079	0.025	0.001	8.94	0.352	-	-	•
EC020M02PN00CF02	2	2.00	0.079	0.025	0.001	9.04	0.356	0.20	0.008	•
EC030M03PN00CF00	3	3.00	0.118	0.025	0.001	9.48	0.373	-	-	•
EC030M03PN00CF02	3	3.00	0.118	0.025	0.001	9.63	0.379	0.20	0.008	•
EC040M04PN00CF00	4	4.00	0.158	0.025	0.001	10.01	0.394	-	-	•
EC040M04PN00CF02	4	4.00	0.158	0.025	0.001	10.16	0.400	0.20	0.008	•
EC050M05PN00CF00	5	5.00	0.197	0.025	0.001	12.07	0.475	-	-	•
EC050M05PN00CF03	5	5.00	0.197	0.025	0.001	12.22	0.481	0.30	0.012	•



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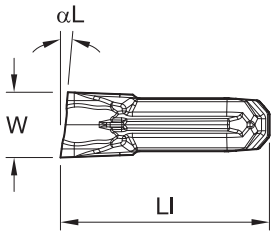
● Primary
○ Secondary

Beyond Evolution

Cut-Off Inserts • CF • Precision Ground • Right Hand

KCU25B

		W		W Tol +/-		LI		αR	
Catalog Number	Seat Size	mm	in	mm	in	mm	in		
EC014M1BPR06CF00	1B	1.40	0.055	0.025	0.001	9.00	0.355	6°	•
EC014M1BPR12CF00	1B	1.40	0.055	0.025	0.001	9.00	0.355	12°	•
EC020M02PR06CF00	2	2.00	0.079	0.025	0.001	8.94	0.352	6°	•
EC020M02PR12CF00	2	2.00	0.079	0.025	0.001	8.95	0.352	12°	•
EC030M03PR06CF00	3	3.00	0.118	0.025	0.001	9.48	0.373	6°	•
EC030M03PR12CF00	3	3.00	0.118	0.025	0.001	9.48	0.373	12°	•
EC040M04PR06CF00	4	4.00	0.158	0.025	0.001	10.01	0.394	6°	•
EC040M04PR12CF00	4	4.00	0.158	0.025	0.001	10.25	0.405	12°	•



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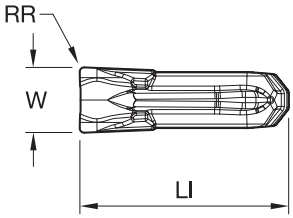
● Primary
○ Secondary

Beyond Evolution

Cut-Off Inserts • CF • Precision Ground • Left Hand

KCU25B

		W		W Tol +/-		LI		αL	
Catalog Number	Seat Size	mm	in	mm	in	mm	in		
EC014M1BPL06CF00	1B	1.40	0.055	0.025	0.001	9.00	0.355	6°	•
EC014M1BPL12CF00	1B	1.40	0.055	0.025	0.001	9.00	0.355	12°	•
EC020M02PL06CF00	2	2.00	0.079	0.025	0.001	8.95	0.352	6°	•
EC020M02PL12CF00	2	2.00	0.079	0.025	0.001	8.95	0.352	12°	•
EC030M03PL06CF00	3	3.00	0.118	0.025	0.001	9.48	0.373	6°	•
EC030M03PL12CF00	3	3.00	0.118	0.025	0.001	9.48	0.373	12°	•
EC040M04PL06CF00	4	4.00	0.158	0.025	0.001	10.01	0.394	6°	•
EC040M04PL12CF00	4	4.00	0.158	0.025	0.001	10.28	0.405	12°	•



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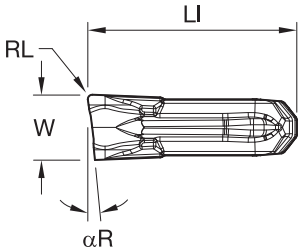
● Primary
○ Secondary

KCU25B

Beyond Evolution

Cut-Off Inserts • CF • Precision Molded • Neutral

		W		W Tol +/-		LI		RR		α	
Catalog Number	Seat Size	mm	in	mm	in	mm	in	mm	in		
EC014M1BN00CF01	1B	1.40	0.055	0.050	0.002	9.00	0.355	0.15	0.006	-	•
EC020M02N00CF02	2	2.00	0.079	0.050	0.002	8.97	0.353	0.20	0.008	-	•
EC030M03N00CF02	3	3.00	0.118	0.075	0.003	9.60	0.378	0.20	0.008	-	•
EC040M04N00CF02	4	4.00	0.158	0.075	0.003	10.19	0.401	0.20	0.008	-	•
EC050M05N00CF03	5	5.00	0.197	0.075	0.003	12.20	0.482	0.30	0.012	-	•
EC030M03PR12CF00	3	3.00	0.118	0.03	0.001	9.48	0.373	-	-	12°	•
EC040M04PR06CF00	4	4.00	0.158	0.03	0.001	10.01	0.394	-	-	6°	•
EC040M04PR12CF00	4	4.00	0.158	0.03	0.001	10.25	0.405	-	-	12°	•



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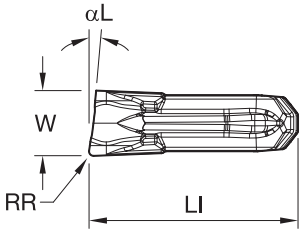
● Primary
○ Secondary

KCU25B

Beyond Evolution

Cut-Off Inserts • CF • Precision Molded • Right Hand

		W		W Tol +/-		LI		RL		αR	
Catalog Number	Seat Size	mm	in	mm	in	mm	in	mm	in		
EC014M1BR06CF01	1B	1.40	0.055	0.050	0.002	9.00	0.355	0.15	0.006	6°	•
EC020M02R06CF02	2	2.00	0.079	0.050	0.002	8.97	0.353	0.20	0.008	6°	•
EC030M03R06CF02	3	3.00	0.118	0.075	0.003	9.60	0.378	0.20	0.008	6°	•
EC040M04R06CF02	4	4.00	0.158	0.075	0.003	10.19	0.401	0.20	0.008	6°	•



P	●
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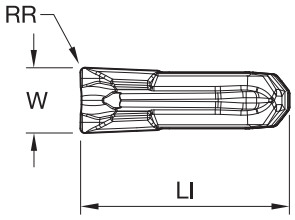
● Primary
○ Secondary

KCU25B

Beyond Evolution

Cut-Off Inserts • CF • Precision Molded • Left Hand

		W		W Tol +/-		LI		RR		αL	
Catalog Number	Seat Size	mm	in	mm	in	mm	in	mm	in		
EC014M1BL06CF01	1B	1.40	0.055	0.050	0.002	9.00	0.355	0.15	0.006	6°	•
EC020M02L06CF02	2	2.00	0.079	0.050	0.002	8.97	0.353	0.20	0.008	6°	•
EC030M03L06CF02	3	3.00	0.118	0.075	0.003	9.60	0.378	0.20	0.008	6°	•
EC040M04L06CF02	4	4.00	0.157	0.075	0.003	10.19	0.401	0.20	0.008	6°	•



P	●
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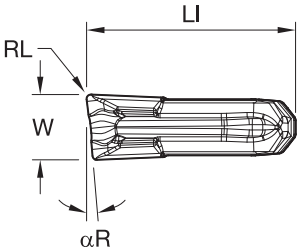
● Primary
○ Secondary

KCU25B

Beyond Evolution

Cut-Off Inserts • CL • Precision Molded • Neutral

		W		W Tol +/-		LI		RR		
Catalog Number	Seat Size	mm	in	mm	in	mm	in	mm	in	
EC014M1BN00CL01	1B	1.40	0.055	0.050	0.002	9.00	0.355	0.15	0.006	•
EC020M02N00CL02	2	2.00	0.079	0.050	0.002	8.97	0.353	0.20	0.008	•
EC030M03N00CL02	3	3.00	0.118	0.075	0.003	9.60	0.378	0.20	0.008	•
EC040M04N00CL02	4	4.00	0.157	0.075	0.003	10.20	0.401	0.20	0.008	•



P	●
M	●
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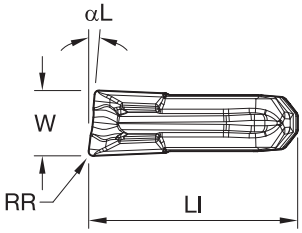
● Primary
○ Secondary

KCU25B

Beyond Evolution

Cut-Off Inserts • CL • Precision Molded • Right Hand

		W		W Tol +/-		LI		RL		αR	
Catalog Number	Seat Size	mm	in	mm	in	mm	in	mm	in		
EC014M1BR06CL01	1B	1.40	0.055	0.050	0.002	9.00	0.355	0.15	0.006	6°	•
EC020M02R06CL02	2	2.00	0.079	0.050	0.002	8.96	0.353	0.20	0.005	6°	•
EC030M03R06CL02	3	3.00	0.118	0.075	0.003	9.59	0.378	0.20	0.008	6°	•
EC040M04R06CL02	4	4.00	0.158	0.075	0.003	10.19	0.401	0.20	0.008	6°	•



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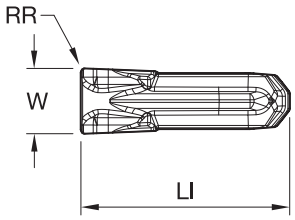
● Primary
○ Secondary

KCU25B

Beyond Evolution

Cut-Off Inserts • CL • Precision Molded • Left Hand

		W		W Tol +/-		LI		RR		αL	
Catalog Number	Seat Size	mm	in	mm	in	mm	in	mm	in		
EC014M1BL06CL01	1B	1.40	0.055	0.050	0.002	9.00	0.355	0.15	0.006	6°	•
EC020M02L06CL02	2	2.00	0.079	0.050	0.002	8.96	0.353	0.20	0.008	6°	•
EC030M03L06CL02	3	3.00	0.118	0.075	0.003	9.59	0.378	0.20	0.008	6°	•
EC040M04L06CL02	4	4.00	0.158	0.075	0.003	10.19	0.401	0.20	0.008	6°	•



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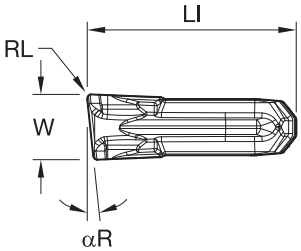
● Primary
○ Secondary

KCU25B

Beyond Evolution

Cut-Off Inserts • CM • Precision Molded • Neutral

		W		W Tol +/-		LI		RR		
Catalog Number	Seat Size	mm	in	mm	in	mm	in	mm	in	
EC014M1BN00CM01	1B	1.40	0.055	0.050	0.002	9.00	0.355	0.15	0.006	•
EC020M02N00CM02	2	2.00	0.079	0.050	0.002	8.98	0.353	0.20	0.008	•
EC030M03N00CM02	3	3.00	0.118	0.075	0.003	9.60	0.378	0.20	0.008	•
EC040M04N00CM02	4	4.00	0.158	0.075	0.003	10.20	0.402	0.20	0.008	•
EC050M05N00CM03	5	5.00	0.197	0.075	0.003	12.20	0.482	0.30	0.012	•
EC060M06N00CM03	6	6.00	0.236	0.075	0.003	14.59	0.574	0.30	0.012	•
EC070M06N00CM04	6	7.00	0.276	0.075	0.003	14.60	0.574	0.40	0.016	•
EC080M08N00CM04	8	8.00	0.315	0.075	0.003	17.50	0.688	0.40	0.016	•



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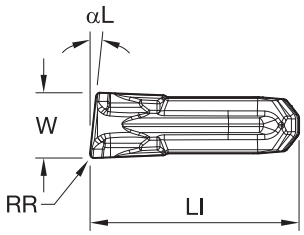
● Primary
○ Secondary

KCU25B

Beyond Evolution

Cut-Off Inserts • CM • Precision Molded • Right Hand

		W		W Tol +/-		LI		RL		αR	
Catalog Number	Seat Size	mm	in	mm	in	mm	in	mm	in		
EC014M1BR06CM02	1B	1.40	0.055	0.050	0.002	9.02	0.355	0.20	0.008	6°	•
EC020M02R06CM02	2	2.00	0.079	0.050	0.002	9.00	0.353	0.20	0.008	6°	•
EC030M03R06CM02	3	3.00	0.118	0.075	0.003	9.60	0.378	0.20	0.008	6°	•
EC040M04R06CM02	4	4.00	0.157	0.075	0.003	10.20	0.401	0.20	0.008	6°	•



P	●
M	●
K	●
N	○
S	●
H	

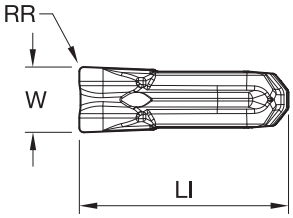
● Primary
○ Secondary

KCU25B

Beyond Evolution

Cut-Off Inserts • CM • Precision Molded • Left Hand

		W		W Tol +/-		LI		RR		αL	
Catalog Number	Seat Size	mm	in	mm	in	mm	in	mm	in		
EC014M1BL06CM02	1B	1.40	0.055	0.050	0.002	9.00	0.355	0.20	0.008	6°	•
EC020M02L06CM02	2	2.00	0.079	0.050	0.002	9.00	0.353	0.20	0.008	6°	•
EC030M03L06CM02	3	3.00	0.118	0.075	0.003	9.60	0.378	0.20	0.008	6°	•
EC040M04L06CM02	4	4.00	0.157	0.075	0.003	10.20	0.401	0.20	0.008	6°	•



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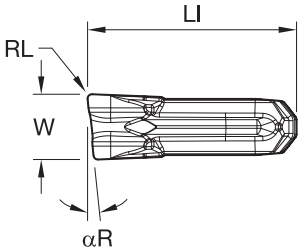
● Primary
○ Secondary

KCU25B

Beyond Evolution

Cut-Off Inserts • CR • Precision Molded • Neutral

		W		W Tol +/-		LI		RR		
Catalog Number	Seat Size	mm	in	mm	in	mm	in	mm	in	
EC020M02N00CR02	2	2.00	0.079	0.050	0.002	8.98	0.353	0.20	0.008	•
EC030M03N00CR02	3	3.00	0.118	0.075	0.003	9.60	0.378	0.20	0.008	•
EC040M04N00CR02	4	4.00	0.158	0.075	0.003	10.20	0.402	0.20	0.008	•
EC050M05N00CR03	5	5.00	0.197	0.075	0.003	12.25	0.482	0.30	0.012	•
EC060M06N00CR03	6	6.00	0.236	0.075	0.003	14.59	0.574	0.30	0.012	•
EC070M06N00CR04	6	7.00	0.276	0.075	0.003	14.60	0.574	0.40	0.016	•
EC080M08N00CR04	8	8.00	0.315	0.075	0.003	17.50	0.687	0.40	0.016	•



P	●
M	●
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H	

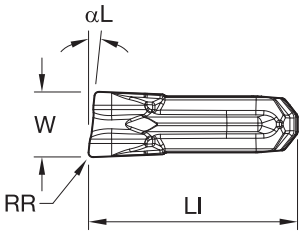
● Primary
○ Secondary

KCU25B

Beyond Evolution

Cut-Off Inserts • CR • Precision Molded • Right Hand

		W		W Tol +/-		LI		RL		αR	
Catalog Number	Seat Size	mm	in	mm	in	mm	in	mm	in		
EC020M02R06CR02	2	2.00	0.079	0.050	0.002	9.00	0.353	0.20	0.008	6°	•
EC030M03R06CR02	3	3.00	0.118	0.075	0.003	9.60	0.378	0.20	0.008	6°	•
EC040M04R06CR02	4	4.00	0.157	0.075	0.003	10.20	0.402	0.20	0.008	6°	•
EC060M06R06CR04	6	6.00	0.236	0.075	0.003	14.59	0.574	0.40	0.016	6°	•
EC080M08R06CR04	8	8.00	0.315	0.075	0.003	17.50	0.687	0.40	0.016	6°	•



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● Primary
○ Secondary

KCU25B

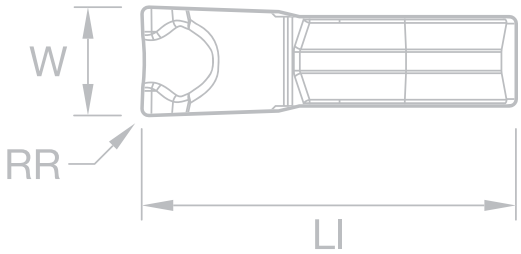
Beyond Evolution

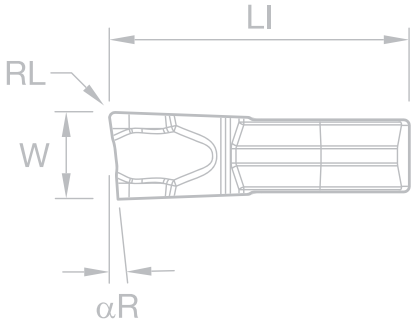
Cut-Off Inserts • CR • Precision Molded • Left Hand

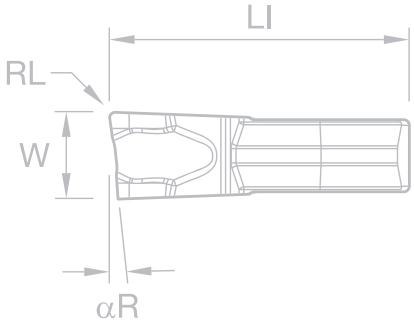
		W		W Tol +/-		LI		RR		αL	
Catalog Number	Seat Size	mm	in	mm	in	mm	in	mm	in		
EC020M02L06CR02	2	2.00	0.079	0.050	0.002	9.00	0.353	0.20	0.008	6°	•
EC030M03L06CR02	3	3.00	0.118	0.075	0.003	9.60	0.378	0.20	0.008	6°	•
EC040M04L06CR02	4	4.00	0.157	0.075	0.003	10.20	0.402	0.20	0.008	6°	•
EC060M06L06CR04	6	6.00	0.236	0.075	0.003	14.59	0.574	0.40	0.016	6°	•
EC080M08L06CR04	8	8.00	0.315	0.075	0.003	17.50	0.687	0.40	0.016	6°	•

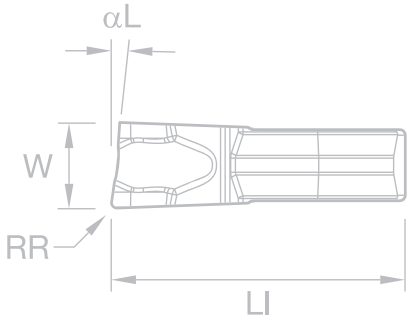
A2™

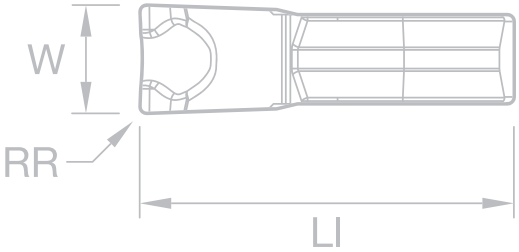
CUT-OFF INSERTS

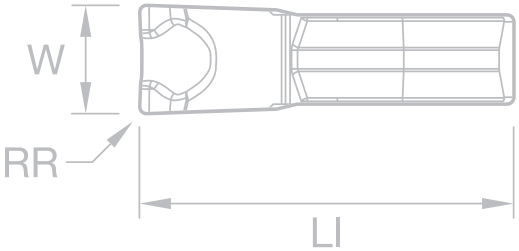


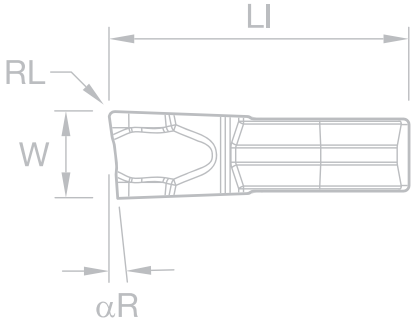


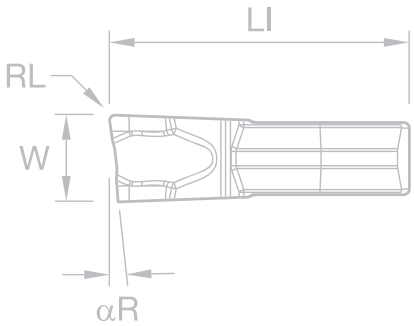


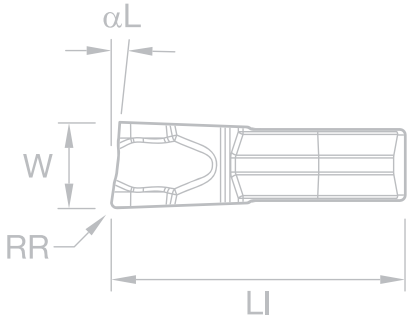


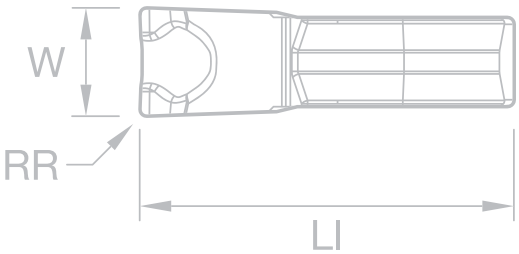


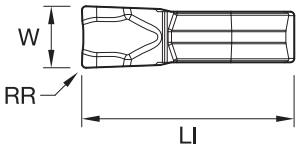












P	●
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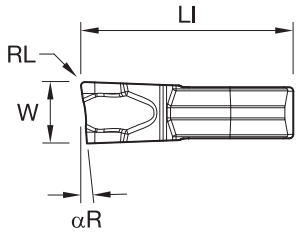
● Primary
○ Secondary

KCU25B

A2

Cut-Off Inserts • CF • Precision Molded • Neutral

		W		RR		LI		
Catalog Number	Seat Size	mm	in	mm	in	mm	in	
A2014N00CF01	1B	1.40	0.055	0.15	0.006	9.90	0.389	•
A2016N00CF00	1	1.55	0.061	-	-	10.50	0.414	•
A2016N00CF01	1	1.60	0.063	0.15	0.006	10.70	0.421	•
A2022N00CF00	2	2.20	0.087	-	-	10.45	0.412	•
A2022N00CF02	2	2.20	0.087	0.20	0.008	10.71	0.422	•
A2030N00CF00	3	3.10	0.122	-	-	10.50	0.413	•
A2030N00CF02	3	3.00	0.118	0.20	0.008	10.71	0.422	•
A2040N00CF00	4	4.05	0.159	-	-	10.50	0.413	•
A2040N00CF02	4	4.00	0.157	0.20	0.008	10.71	0.422	•
A2050N00CF03	5	5.00	0.197	0.30	0.012	12.50	0.492	•



P	●
M	●
K	●
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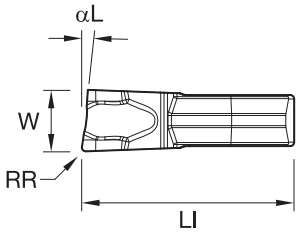
● Primary
○ Secondary

KCU25B

A2

Cut-Off Inserts • CF • Precision Molded • Right Hand

		W		RL		LI		αR	
Catalog Number	Seat Size	mm	in	mm	in	mm	in		
A2016R06CF00	1	1.60	0.063	-	-	10.53	0.415	6°	•
A2016R10CF00	1	1.60	0.063	-	-	10.53	0.415	10°	•
A2016R16CF00	1	1.60	0.063	-	-	10.53	0.415	16°	•
A2022R06CF02	2	2.20	0.087	0.20	0.008	10.69	0.421	6°	•
A2022R10CF00	2	2.20	0.087	-	-	10.49	0.413	10°	•
A2022R16CF00	2	2.20	0.087	-	-	10.50	0.413	16°	•
A2030R06CF02	3	3.00	0.118	0.20	0.008	10.80	0.425	6°	•
A2030R10CF00	3	3.00	0.118	-	-	10.50	0.413	10°	•
A2030R15CF00	3	3.00	0.118	-	-	10.50	0.413	15°	•
A2040R06CF02	4	4.00	0.157	0.20	0.008	10.80	0.425	6°	•
A2050R06CF03	5	5.00	0.197	0.30	0.012	12.48	0.491	6°	•



P	●
M	●
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H	

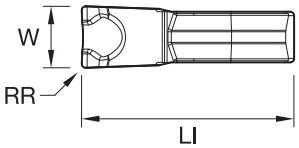
● Primary
○ Secondary

KCU25B

A2

Cut-Off Inserts • CF • Precision Molded • Left Hand

		W		RR		LI		αL	
Catalog Number	Seat Size	mm	in	mm	in	mm	in		
A2016L06CF00	1	1.60	0.063	-	-	10.53	0.415	6°	•
A2016L16CF00	1	1.60	0.063	-	-	10.53	0.415	16°	•
A2022L06CF02	2	2.20	0.087	0.20	0.008	10.69	0.421	6°	•
A2022L10CF00	2	2.20	0.087	-	-	10.49	0.413	10°	•
A2022L16CF00	2	2.20	0.087	-	-	10.50	0.413	16°	•
A2030L06CF02	3	3.00	0.118	0.20	0.008	10.80	0.425	6°	•
A2030L10CF00	3	3.00	0.118	-	-	10.50	0.413	10°	•
A2030L15CF00	3	3.00	0.118	-	-	10.50	0.413	15°	•
A2040L06CF02	4	4.00	0.157	0.20	0.008	10.80	0.425	6°	•



P	●
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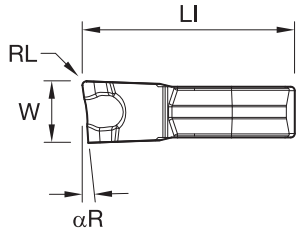
● Primary
○ Secondary

KCU25B

A2

Cut-Off Inserts • CL • Precision Molded • Neutral

		W		RR		LI		
Catalog Number	Seat Size	mm	in	mm	in	mm	in	
A2022N00CL02	2	2.20	0.087	0.20	0.008	10.45	0.411	•
A2030N00CL02	3	3.05	0.120	0.20	0.008	10.70	0.421	•
A2040N00CL02	4	4.05	0.159	0.20	0.008	10.71	0.422	•



P	●
M	●
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S	●
H	

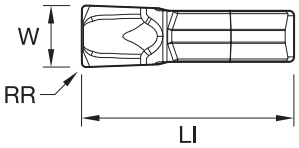
● Primary
○ Secondary

KCU25B

A2

Cut-Off Inserts • CL • Precision Molded • Right Hand

		W		RL		LI		αR	
Catalog Number	Seat Size	mm	in	mm	in	mm	in		
A2016R16CL01	1	1.60	0.063	0.15	0.006	10.49	0.413	16°	•
A2030R06CL02	3	3.05	0.120	0.20	0.008	10.70	0.421	6°	•
A2040R06CL02	4	4.05	0.159	0.20	0.008	10.72	0.422	6°	•



P	●
M	●
K	●
N	○
S	●
H	

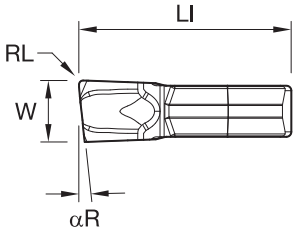
● Primary
○ Secondary

KCU25B

A2

Cut-Off Inserts • CM • Precision Molded • Neutral

		W		RR		LI		
Catalog Number	Seat Size	mm	in	mm	in	mm	in	
A2016N00CM01	1	1.60	0.063	0.10	0.004	10.70	0.421	•
A2022N00CM02	2	2.20	0.087	0.20	0.008	10.71	0.422	•
A2030N00CM02	3	3.00	0.118	0.20	0.008	10.71	0.422	•
A2040N00CM02	4	4.00	0.157	0.20	0.008	10.71	0.422	•
A2050N00CM03	5	5.00	0.197	0.30	0.012	12.50	0.492	•
A2060N00CM03	6	6.00	0.236	0.30	0.012	12.50	0.492	•
A2080N00CM04	8	8.00	0.315	0.40	0.016	16.50	0.650	•



P	●
M	●
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N	○
S	●
H	

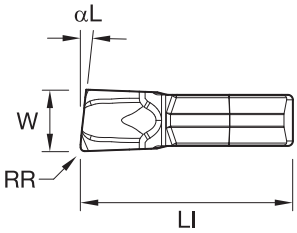
● Primary
○ Secondary

KCU25B

A2

Cut-Off Inserts • CM • Precision Molded • Right Hand

		W		RL		LI		αR	
Catalog Number	Seat Size	mm	in	mm	in	mm	in		
A2016R06CM00	1	1.60	0.063	-	-	10.52	0.414	6°	•
A2016R16CM00	1	1.60	0.063	-	-	10.60	0.417	16°	•
A2022R06CM00	2	2.20	0.087	-	-	10.50	0.413	6°	•
A2030R06CM01	3	3.00	0.118	0.10	0.004	10.50	0.413	6°	•



P	●
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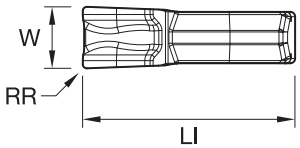
● Primary
○ Secondary

KCU25B

A2

Cut-Off Inserts • CM • Precision Molded • Left Hand

		W		RR		LI		αL	
Catalog Number	Seat Size	mm	in	mm	in	mm	in		
A2016L06CM00	1	1.60	0.063	-	-	10.52	0.414	6°	•
A2022L06CM00	2	2.20	0.087	-	-	10.50	0.413	6°	•
A2030L06CM01	3	3.00	0.118	0.10	0.004	10.50	0.413	6°	•
A2040N00CM02	4	4.00	0.157	0.20	0.008	10.71	0.422	-	•
A2050N00CM03	5	5.00	0.197	0.30	0.012	12.50	0.492	-	•
A2060N00CM03	6	6.00	0.236	0.30	0.012	12.50	0.492	-	•
A2080N00CM04	8	8.00	0.315	0.40	0.016	16.50	0.650	-	•



P	●
M	●
K	●
N	○
S	●
H	

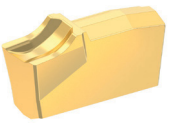
● Primary
○ Secondary

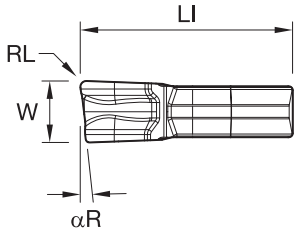
KCU25B

A2

Cut-Off Inserts • CR • Precision Molded • Neutral

		W		RR		LI		
Catalog Number	Seat Size	mm	in	mm	in	mm	in	
A2022N00CR02	2	2.20	0.087	0.20	0.008	10.71	0.422	•
A2030N00CR02	3	3.00	0.118	0.20	0.008	10.71	0.422	•
A2040N00CR02	4	4.05	0.159	0.20	0.008	10.71	0.422	•
A2050N00CR03	5	5.00	0.197	0.30	0.012	12.50	0.492	•
A2060N00CR03	6	6.00	0.236	0.30	0.012	12.50	0.492	•
A2080N00CR04	8	8.00	0.315	0.40	0.016	16.50	0.650	•





P	●
M	●
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S	●
H	

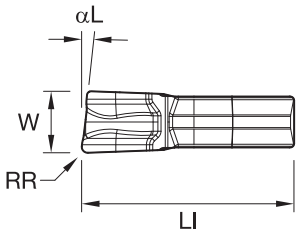
● Primary
○ Secondary

KCU25B

A2

Cut-Off Inserts • CR • Precision Molded • Right Hand

		W		RL		LI		αR	
Catalog Number	Seat Size	mm	in	mm	in	mm	in		
A2022R06CR03	2	2.20	0.087	0.30	0.012	10.71	0.422	6°	•
A2030R06CR03	3	3.00	0.118	0.30	0.012	10.71	0.422	6°	•
A2040R06CR03	4	4.00	0.157	0.30	0.012	10.85	0.427	6°	•
A2050R06CR04	5	5.00	0.197	0.40	0.016	13.10	0.516	6°	•
A2060R06CR04	6	6.00	0.236	0.40	0.016	13.10	0.516	6°	•



P	●
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H	

● Primary
○ Secondary

KCU25B

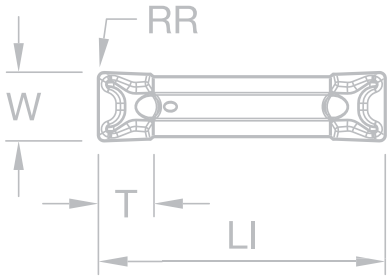
A2

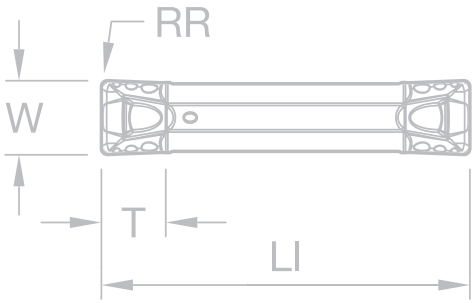
Cut-Off Inserts • CR • Precision Molded • Left Hand

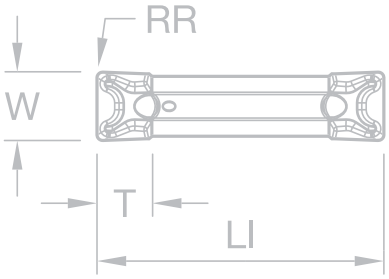
		W		RR		LI		αL	
Catalog Number	Seat Size	mm	in	mm	in	mm	in		
A2030L06CR03	3	3.00	0.118	0.30	0.012	10.71	0.422	6°	•
A2040L06CR03	4	4.00	0.157	0.30	0.012	10.85	0.427	6°	•

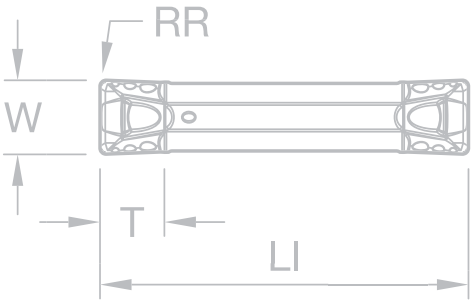
A4™

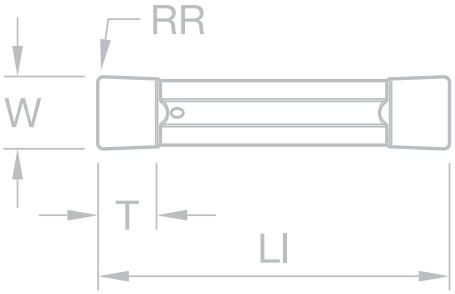
GROOVING INSERTS

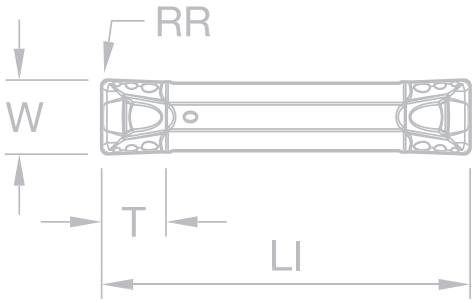


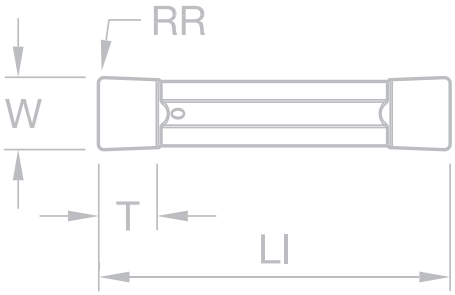


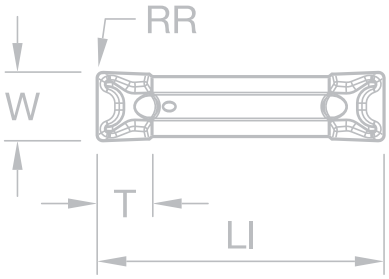


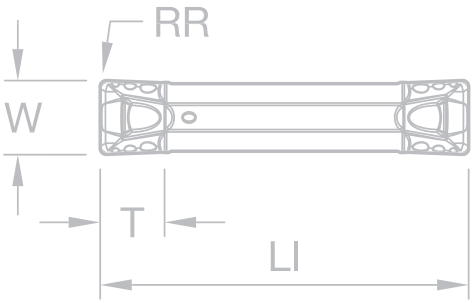


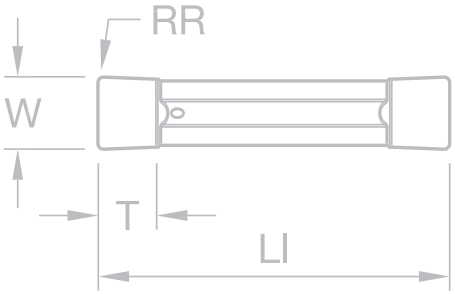


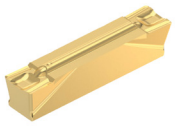


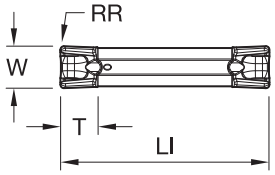












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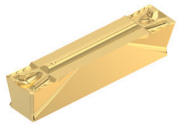
● Primary
○ Secondary

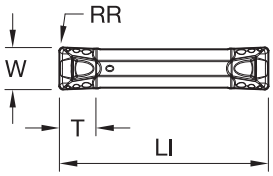
A4

Grooving Inserts • GMP • Precision Ground

KCU25B

		W		RR		LI		T		
Catalog Number	Seat Size	mm	in	mm	in	mm	in	mm	in	
A4G0200M02P02GMP	2	2.00	0.079	0.2	0.008	19.90	0.782	2.0	0.079	•
A4G0300M03P02GMP	3	3.00	0.118	0.2	0.008	19.90	0.784	3.5	0.138	•
A4G0300M03P04GMP	3	3.00	0.118	0.4	0.016	19.90	0.784	3.5	0.138	•
A4G0400M04P02GMP	4	4.00	0.158	0.2	0.008	19.90	0.783	3.2	0.124	•
A4G0400M04P04GMP	4	4.00	0.158	0.4	0.016	19.90	0.783	3.5	0.138	•
A4G0400M04P08GMP	4	4.00	0.158	0.8	0.032	19.90	0.784	3.5	0.138	•
A4G0500M05P04GMP	5	5.00	0.197	0.4	0.016	25.00	0.984	4.1	0.162	•
A4G0500M05P08GMP	5	5.00	0.197	0.8	0.032	25.00	0.984	3.9	0.155	•
A4G0600M06P04GMP	6	6.00	0.236	0.4	0.016	29.85	1.175	4.9	0.192	•
A4G0600M06P08GMP	6	6.00	0.236	0.8	0.031	29.85	1.175	4.9	0.192	•
A4G0800M08P08GMP	8	8.00	0.315	0.8	0.031	29.85	1.175	6.4	0.251	•





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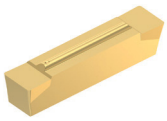
● Primary
○ Secondary

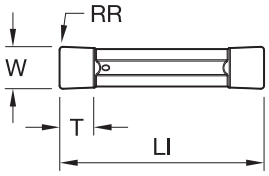
A4

Grooving Inserts • GUP • Precision Ground

KCU25B

		W		RR		LI		T		
Catalog Number	Seat Size	mm	in	mm	in	mm	in	mm	in	
A4G0200M02P02GUP	2	2.00	0.079	0.2	0.008	20.00	0.787	1.9	0.075	•
A4G0200M2SP02GUP	2S	2.00	0.079	0.2	0.008	20.00	0.787	1.9	0.075	•
A4G0300M03P02GUP	3	3.00	0.118	0.2	0.008	20.00	0.787	2.9	0.115	•
A4G0300M03P04GUP	3	3.00	0.118	0.4	0.016	20.00	0.787	2.9	0.115	•
A4G0300M3SP02GUP	3S	3.00	0.118	0.2	0.008	20.00	0.787	2.9	0.115	•
A4G0300M3SP04GUP	3S	3.00	0.118	0.4	0.016	20.00	0.787	2.9	0.115	•
A4G0400M04P02GUP	4	4.00	0.158	0.2	0.008	20.00	0.787	3.3	0.130	•
A4G0400M04P04GUP	4	4.00	0.158	0.4	0.016	20.00	0.787	3.3	0.130	•
A4G0400M04P08GUP	4	4.00	0.157	0.8	0.032	20.00	0.787	3.3	0.130	•
A4G0500M05P04GUP	5	5.00	0.197	0.4	0.016	25.00	0.984	4.1	0.162	•
A4G0500M05P08GUP	5	5.00	0.197	0.8	0.031	25.00	0.984	4.1	0.163	•
A4G0500M5SP04GUP	5S	5.00	0.197	0.4	0.016	25.00	0.984	4.1	0.163	•
A4G0600M06P04GUP	6	6.00	0.236	0.4	0.016	30.00	1.181	4.4	0.175	•
A4G0600M06P08GUP	6	6.00	0.236	0.8	0.032	30.00	1.181	4.4	0.175	•
A4G0800M08P08GUP	8	8.00	0.315	0.8	0.032	30.00	1.181	5.9	0.234	•
A4G0800M08P12GUP	8	8.00	0.315	1.2	0.048	30.00	1.181	5.9	0.234	•
A4G1000M10P08GUP	10	10.00	0.394	0.8	0.031	30.00	1.181	6.0	0.235	•
A4G1000M10P12GUP	10	10.00	0.394	1.2	0.048	30.00	1.181	5.9	0.234	•





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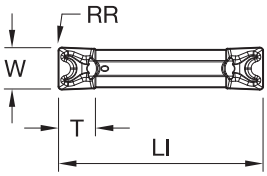
● Primary
○ Secondary

A4

Grooving Inserts • Flat Top • Precision Molded

KCU25B

		W		RR		LI		T		
Catalog Number	Seat Size	mm	in	mm	in	mm	in	mm	in	
A4G0305M03U02B	3	3.12	0.123	0.2	0.008	20.00	0.787	3.5	0.138	•
A4G0405M04U04B	4	4.12	0.162	0.4	0.015	20.00	0.787	3.4	0.134	•
A4G0505M05U04B	5	5.12	0.202	0.4	0.015	25.00	0.984	4.2	0.165	•
A4G0605M06U04B	6	6.13	0.241	0.4	0.016	30.00	1.181	4.9	0.193	•



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N	○
S	●
H	

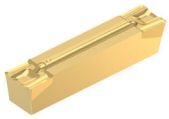
● Primary
○ Secondary

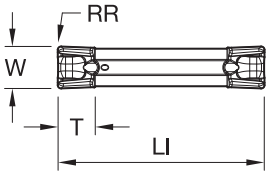
A4

Grooving Inserts • GMN • Precision Molded

KCU25B

		W		RR		LI		T		
Catalog Number	Seat Size	mm	in	mm	in	mm	in	mm	in	
A4G0205M02U02GMN	2	2.13	0.084	0.2	0.008	20.10	0.791	2.0	0.079	•
A4G0205M2SU02GMN	2S	2.13	0.084	0.2	0.008	20.10	0.791	2.0	0.079	•
A4G0255M2BU02GMN	2B	2.62	0.103	0.2	0.008	20.10	0.791	2.0	0.079	•
A4G0305M03U02GMN	3	3.12	0.123	0.2	0.008	20.00	0.787	3.5	0.138	•
A4G0305M03U04GMN	3	3.12	0.123	0.4	0.016	20.00	0.787	3.5	0.138	•
A4G0305M3SU02GMN	3S	3.13	0.123	0.2	0.008	20.00	0.787	3.5	0.138	•
A4G0305M3SU04GMN	3S	3.12	0.123	0.4	0.016	20.00	0.787	3.5	0.138	•
A4G0405M04U04GMN	4	4.12	0.162	0.4	0.016	20.00	0.787	3.4	0.134	•
A4G0405M04U08GMN	4	4.12	0.162	0.8	0.031	20.00	0.787	3.4	0.134	•
A4G0405M4SU04GMN	4S	4.12	0.162	0.4	0.016	20.00	0.787	3.6	0.143	•
A4G0405M4SU08GMN	4S	4.12	0.162	0.8	0.031	20.00	0.787	3.6	0.143	•
A4G0505M05U04GMN	5	5.12	0.202	0.4	0.016	25.00	0.984	4.2	0.165	•
A4G0505M05U08GMN	5	5.12	0.202	0.8	0.031	25.00	0.984	4.2	0.165	•
A4G0505M5SU04GMN	5S	5.12	0.202	0.4	0.016	25.00	0.984	4.2	0.165	•
A4G0605M06U04GMN	6	6.13	0.241	0.4	0.016	30.00	1.181	4.9	0.193	•
A4G0605M06U08GMN	6	6.13	0.241	0.8	0.031	30.00	1.181	4.9	0.193	•
A4G0605M06U12GMN	6	6.13	0.241	1.2	0.047	30.00	1.181	4.9	0.193	•
A4G0805M08U08GMN	8	8.13	0.320	0.8	0.031	30.00	1.181	6.4	0.252	•
A4G0805M08U12GMN	8	8.13	0.320	1.2	0.047	30.00	1.181	6.4	0.252	•
A4G1005M10U08GMN	10	10.13	0.399	0.8	0.031	30.00	1.181	8.1	0.319	•
A4G1005M10U12GMN	10	10.13	0.399	1.2	0.047	30.00	1.181	8.1	0.319	•





P	●
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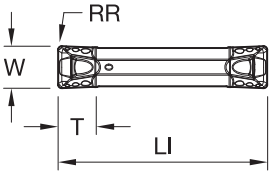
● Primary
○ Secondary

A4

Grooving Inserts • GMP • Precision Molded

KCU25B

		W		RR		LI		T		
Catalog Number	Seat Size	mm	in	mm	in	mm	in	mm	in	
A4G0205M02U02GMP	2	2.13	0.084	0.2	0.008	20.10	0.791	2.0	0.079	•
A4G0255M2BU02GMP	2B	2.62	0.103	0.2	0.008	20.10	0.791	2.0	0.079	•
A4G0305M03U02GMP	3	3.10	0.122	0.2	0.008	20.10	0.791	3.5	0.138	•
A4G0305M03U04GMP	3	3.10	0.122	0.4	0.016	20.10	0.791	3.5	0.138	•
A4G0405M04U04GMP	4	4.10	0.161	0.4	0.015	20.10	0.791	3.4	0.134	•
A4G0405M04U08GMP	4	4.10	0.161	0.8	0.031	20.10	0.791	3.4	0.134	•
A4G0505M05U04GMP	5	5.10	0.201	0.4	0.015	25.15	0.990	4.2	0.165	•
A4G0505M05U08GMP	5	5.10	0.201	0.8	0.032	25.15	0.990	4.2	0.165	•
A4G0605M06U04GMP	6	6.13	0.241	0.4	0.016	30.10	1.185	4.9	0.193	•
A4G0605M06U08GMP	6	6.13	0.241	0.8	0.031	30.10	1.185	4.9	0.193	•
A4G0805M08U08GMP	8	8.13	0.320	0.8	0.031	30.10	1.185	6.1	0.241	•
A4G1005M10U08GMP	10	10.13	0.399	0.8	0.031	30.10	1.185	8.1	0.319	•



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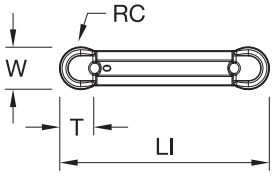
● Primary
○ Secondary

A4

Grooving Inserts • GUP • Precision Molded

KCU25B

		W		RR		LI		T		
Catalog Number	Seat Size	mm	in	mm	in	mm	in	mm	in	
A4G0205M02U02GUP	2	2.13	0.084	0.2	0.008	20.15	0.793	2.0	0.079	•
A4G0205M2SU02GUP	2S	2.13	0.084	0.2	0.008	20.15	0.793	2.0	0.079	•
A4G0305M03U02GUP	3	3.13	0.123	0.2	0.008	20.15	0.793	3.0	0.118	•
A4G0305M03U04GUP	3	3.13	0.123	0.4	0.016	20.15	0.793	3.0	0.118	•
A4G0305M3SU02GUP	3S	3.13	0.123	0.2	0.008	20.15	0.793	3.0	0.118	•
A4G0305M3SU04GUP	3S	3.13	0.123	0.4	0.016	20.15	0.793	3.0	0.118	•
A4G0405M04U04GUP	4	4.12	0.162	0.4	0.016	20.15	0.793	3.4	0.134	•
A4G0405M04U08GUP	4	4.12	0.162	0.8	0.031	20.15	0.793	3.4	0.134	•
A4G0405M4SU04GUP	4S	4.12	0.162	0.4	0.016	20.15	0.793	3.4	0.134	•
A4G0505M05U04GUP	5	5.13	0.202	0.4	0.016	25.15	0.990	4.2	0.165	•
A4G0505M05U08GUP	5	5.13	0.202	0.8	0.031	25.15	0.990	4.2	0.165	•
A4G0505M5SU04GUP	5S	5.13	0.202	0.4	0.016	25.15	0.990	4.2	0.165	•
A4G0505M5SU08GUP	5S	5.13	0.202	0.8	0.031	25.15	0.990	4.2	0.165	•
A4G0605M06U04GUP	6	6.12	0.241	0.4	0.016	30.10	1.185	4.5	0.177	•
A4G0605M06U08GUP	6	6.12	0.241	0.8	0.031	30.10	1.185	4.5	0.177	•
A4G0605M06U12GUP	6	6.12	0.241	1.2	0.047	30.10	1.185	4.5	0.177	•
A4G0805M08U08GUP	8	8.13	0.320	0.8	0.031	30.10	1.185	6.0	0.236	•
A4G0805M08U12GUP	8	8.13	0.320	1.2	0.047	30.10	1.185	6.0	0.236	•
A4G1005M10U08GUP	10	10.13	0.399	0.8	0.031	30.10	1.185	6.0	0.236	•
A4G1005M10U12GUP	10	10.13	0.399	1.2	0.047	30.10	1.185	6.1	0.238	•



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S	●
H	

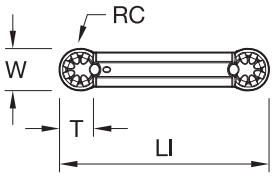
● Primary
○ Secondary

KCU25B

A4

Grooving Inserts • GMP • Full Radius • Precision Ground

		W		RC		LI		T		
Catalog Number	Seat Size	mm	in	mm	in	mm	in	mm	in	
A4R0200M02P00GMP	2	2.00	0.079	1.0	0.039	19.90	0.783	1.7	0.065	•
A4R0200M2SP00GMP	2S	2.00	0.079	1.0	0.039	19.86	0.782	1.6	0.064	•
A4R0300M03P00GMP	3	3.00	0.118	1.5	0.059	19.90	0.783	2.5	0.098	•
A4R0300M3SP00GMP	3S	3.00	0.118	1.5	0.059	19.90	0.783	2.5	0.098	•
A4R0400M04P00GMP	4	4.00	0.157	2.0	0.079	19.90	0.783	3.1	0.122	•
A4R0500M05P00GMP	5	5.00	0.197	2.5	0.098	24.90	0.980	4.1	0.160	•
A4R0500M5SP00GMP	5S	5.00	0.197	2.5	0.098	24.90	0.980	4.1	0.159	•
A4R0600M06P00GMP	6	6.00	0.236	3.0	0.118	29.85	1.175	4.8	0.189	•
A4R0800M08P00GMP	8	8.00	0.315	4.0	0.158	29.85	1.175	6.4	0.252	•



P	●
M	●
K	●
N	○
S	●
H	

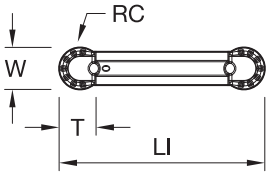
● Primary
○ Secondary

KCU25B

A4

Grooving Inserts • GUP • Full Radius • Precision Ground

		W		RC		LI		T		
Catalog Number	Seat Size	mm	in	mm	in	mm	in	mm	in	
A4R0300M03P00GUP	3	3.00	0.118	1.5	0.059	20.00	0.787	2.41	0.095	•
A4R0400M04P00GUP	4	4.00	0.157	2.0	0.079	20.00	0.787	3.4	0.134	•
A4R0500M05P00GUP	5	5.00	0.197	2.5	0.098	25.00	0.984	4	0.157	•
A4R0600M06P00GUP	6	6.00	0.236	3.0	0.118	30.00	1.181	4.75	0.187	•
A4R0800M08P00GUP	8	8.00	0.315	4.0	0.158	30.00	1.181	6.35	0.25	•
A4R1000M10P00GUP	10	10.00	0.394	5.0	0.197	30.00	1.181	8.06	0.318	•



P	●
M	●
K	●
N	○
S	●
H	

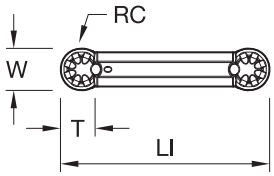
● Primary
○ Secondary

A4

Grooving Inserts • GMN • Full Radius • Precision Molded

KCU25B

		W		RC		LI		T		
Catalog Number	Seat Size	mm	in	mm	in	mm	in	mm	in	
A4R0205M02U00GMN	2	2.13	0.084	1.1	0.042	20.10	0.791	1.8	0.069	•
A4R0305M03U00GMN	3	3.12	0.123	1.5	0.060	20.10	0.791	2.6	0.101	•
A4R0405M04U00GMN	4	4.12	0.162	2.0	0.080	20.10	0.791	3.5	0.136	•
A4R0505M05U00GMN	5	5.12	0.202	2.5	0.099	25.15	0.990	4.2	0.163	•
A4R0605M06U00GMN	6	6.12	0.241	3.0	0.119	30.10	1.185	4.9	0.194	•
A4R0805M08U00GMN	8	8.12	0.320	4.0	0.159	30.10	1.185	6.5	0.256	•
A4R1005M10U00GMN	10	10.13	0.399	5.0	0.198	30.10	1.185	8.2	0.322	•



P	●
M	●
K	●
N	○
S	●
H	

● Primary
○ Secondary

A4

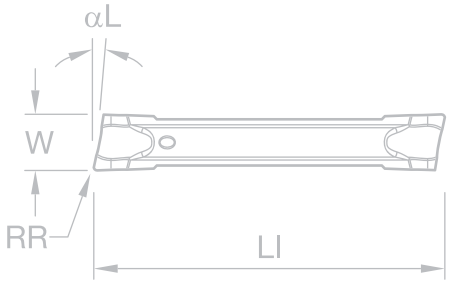
Grooving Inserts • GUP • Full Radius • Precision Molded

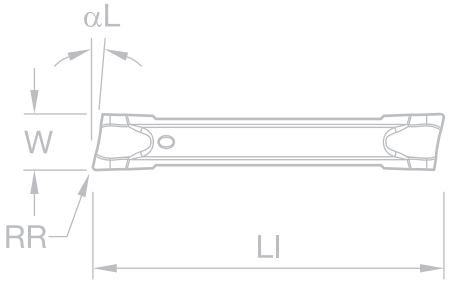
KCU25B

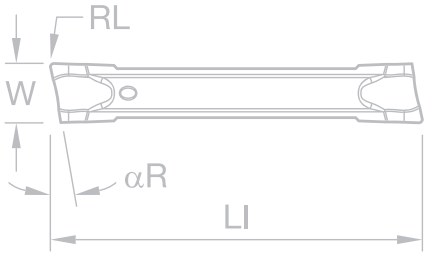
		W		RC		LI		T		
Catalog Number	Seat Size	mm	in	mm	in	mm	in	mm	in	
A4R0305M03U00GUP	3	3.12	0.123	1.5	0.060	20.10	0.791	2.57	0.101	•
A4R0405M04U00GUP	4	4.12	0.162	2.0	0.080	20.10	0.791	3.45	0.136	•
A4R0505M05U00GUP	5	5.12	0.202	2.5	0.099	25.15	0.990	4.15	0.163	•
A4R0605M06U00GUP	6	6.12	0.241	3.0	0.119	30.10	1.185	4.8	0.189	•
A4R0805M08U00GUP	8	8.13	0.320	4.0	0.159	30.10	1.185	6.52	0.257	•
A4R1005M10U00GUP	10	10.13	0.399	5.0	0.198	30.10	1.185	7.96	0.313	•

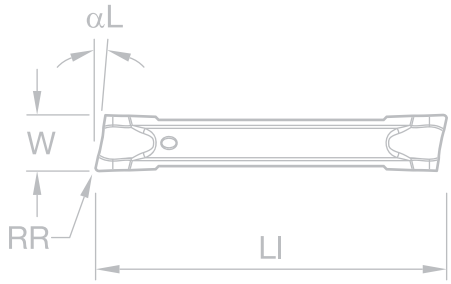
A4

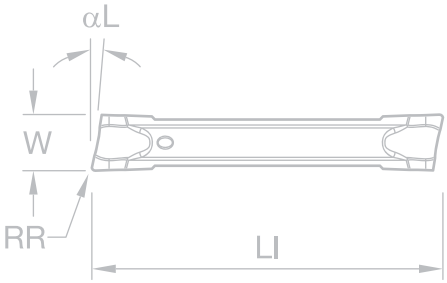
CUT-OFF INSERTS

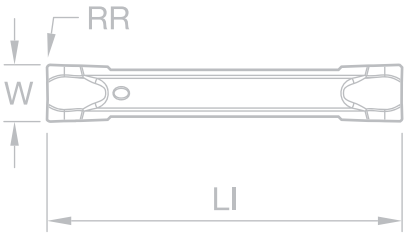


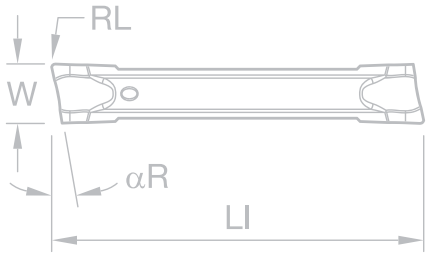


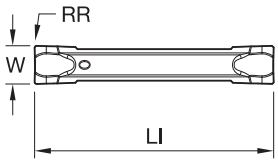












● Primary
○ Secondary

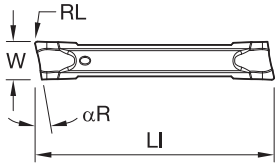
P	●
M	●
K	●
N	○
S	●
H	

A4

Cut-Off Inserts • CF • Precision Molded • Neutral

KCU25B

		W		RR		LI		α	
Catalog Number	Seat Size	mm	in	mm	in	mm	in		
A4C0155N00CF01	1	1.50	0.059	0.15	0.006	15.50	0.610	-	•
A4C0205N00CF02	2	2.00	0.079	0.20	0.008	20.02	0.788	-	•
A4C0255N00CF02	2B	2.50	0.098	0.20	0.008	20.02	0.788	-	•
A4C0305N00CF02	3	3.12	0.123	0.20	0.008	20.10	0.791	-	•
A4C0405N00CF02	4	4.12	0.162	0.20	0.008	20.10	0.791	-	•



● Primary
○ Secondary

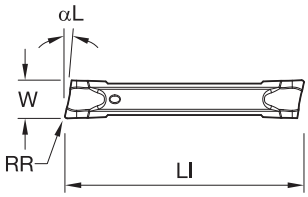
P	●
M	●
K	●
N	○
S	●
H	

A4

Cut-Off Inserts • CF • Precision Molded • Right Hand

KCU25B

		W		RL		LI		αR	
Catalog Number	Seat Size	mm	in	mm	in	mm	in		
A4C0155R06CF01	1	1.50	0.059	0.15	0.006	15.50	0.610	6	•
A4C0155R10CF01	1	1.50	0.059	0.15	0.006	15.50	0.610	10	•
A4C0155R16CF01	1	1.49	0.059	0.15	0.006	15.50	0.610	16	•
A4C0205R06CF02	2	2.00	0.079	0.20	0.008	20.03	0.788	6	•
A4C0205R10CF02	2	1.99	0.078	0.20	0.008	20.03	0.788	10	•
A4C0255R06CF02	2B	2.49	0.098	0.20	0.008	20.03	0.788	6	•
A4C0305R06CF02	3	3.11	0.123	0.20	0.008	20.10	0.791	6	•
A4C0305R10CF02	3	3.11	0.122	0.20	0.008	20.10	0.791	10	•
A4C0405R06CF02	4	4.11	0.162	0.20	0.008	20.10	0.791	6	•
A4C0405R10CF02	4	4.10	0.161	0.20	0.008	20.10	0.791	10	•



● Primary
○ Secondary

P	●
M	●
K	●
N	○
S	●
H	

A4

Cut-Off Inserts • CF • Precision Molded • Left Hand

KCU25B

		W		RR		LI		αL	
Catalog Number	Seat Size	mm	in	mm	in	mm	in		
A4C0155L06CF01	1	1.50	0.059	0.15	0.006	15.50	0.610	6	•
A4C0205L06CF02	2	2.00	0.079	0.20	0.008	20.03	0.788	6	•
A4C0205L10CF02	2	1.99	0.078	0.20	0.008	20.03	0.788	10	•
A4C0305L06CF02	3	3.11	0.123	0.20	0.008	20.10	0.791	6	•
A4C0305L10CF02	3	3.11	0.122	0.20	0.008	20.10	0.791	10	•
A4C0405L06CF02	4	4.11	0.162	0.20	0.008	20.10	0.791	6	•
A4C0405L10CF02	4	4.10	0.161	0.20	0.008	20.10	0.791	10	•

KCU25B APPLICATION DATA

Material Group		Grooving & Cut-Off • Application Data • Recommended Starting Speeds (m/min)																					
		K313		KCU10B		KCU25B		KCM35B		KCP10B		KCP25B		KCK20B		KCS10B		KY3500		KYS30		KB1630	
		MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
P	0–1	–	–	145	350	135	360	90	213	185	450	145	365	200	490	–	–	–	–	–	–	–	–
	2	–	–	145	255	125	220	90	155	185	350	145	305	200	380	–	–	–	–	–	–	–	–
	3	–	–	145	255	120	220	90	155	170	260	140	245	600	280	–	–	–	–	–	–	–	–
	4	–	–	80	180	35	95	50	110	90	200	75	180	100	220	–	–	–	–	–	–	–	–
	5	–	–	125	275	60	145	80	165	150	305	120	270	165	330	–	–	–	–	–	–	–	–
	6	–	–	115	240	50	120	70	145	120	275	110	230	130	300	–	–	–	–	–	–	–	–
M	1	60	120	145	275	100	265	75	135	–	–	–	–	–	–	135	250	–	–	–	–	–	–
	2	45	110	125	255	90	250	75	135	–	–	–	–	–	–	115	250	–	–	–	–	–	–
	3	35	100	125	255	90	220	75	135	–	–	–	–	–	–	125	225	–	–	–	–	–	–
K	1	30	120	125	255	135	400	–	–	170	440	140	360	210	550	–	–	350	1040	–	–	–	–
	2	25	110	95	220	115	375	–	–	120	340	100	280	150	430	–	–	–	–	–	–	–	–
	3	20	90	65	160	100	340	–	–	120	270	100	220	150	335	–	–	–	–	–	–	–	–
N	1–2	150	610	160	1025	115	820	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	4	120	430	125	640	115	635	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	5	45	150	95	255	90	320	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	6	40	150	125	320	90	410	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
S	1	8	75	15	140	10	65	8	60	–	–	–	–	–	–	35	105	–	–	80	195	110	275
	2	8	75	15	140	10	85	8	60	–	–	–	–	–	–	40	110	–	–	85	215	120	235
	3	8	75	15	140	15	85	15	60	–	–	–	–	–	–	45	115	–	–	100	250	100	250
	4	8	75	15	180	10	115	15	90	–	–	–	–	–	–	45	130	–	–	–	–	–	–
H	1	–	–	30	70	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	2	–	–	45	80	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

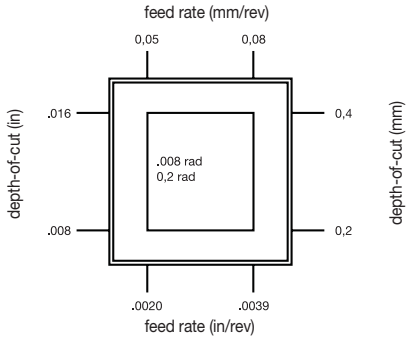
NOTE:
As the average chip thickness increases, the speed should be decreased.

KCU25B APPLICATION DATA

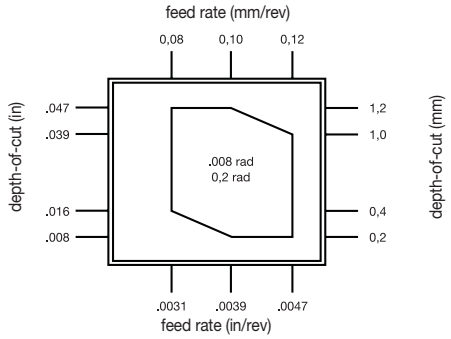
Grooving & Cut-Off • Application Data • Plunge Feed Rates							
Geometry	Seat Size	RR		fn (mm/rev)		fn (in/rev)	
		mm	in	MIN	MAX	MIN	MAX
GUP / GMP GMN / GUN	1F	0.20	0.008	0.05	0.08	0.002	0.003
	2	0.20	0.008	0.05	0.14	0.002	0.006
	3	0.20	0.008	0.05	0.16	0.002	0.006
		0.40	0.016	0.08	0.18	0.003	0.007
	4	0.40	0.016	0.08	0.22	0.003	0.009
		0.80	0.031	0.10	0.24	0.004	0.009
	5	0.40	0.016	0.10	0.23	0.004	0.009
		0.80	0.031	0.10	0.25	0.004	0.010
	6	0.40	0.016	0.10	0.22	0.004	0.009
		0.80	0.031	0.12	0.26	0.005	0.010
		1.20	0.047	0.14	0.30	0.006	0.012
	8	0.80	0.031	0.12	0.30	0.005	0.012
		1.20	0.047	0.14	0.32	0.006	0.013
	10	1.20	0.047	0.15	0.35	0.006	0.014
CL	1B	0.15	0.006	0.05	0.09	0.002	0.004
	2	0.20	0.008	0.05	0.11	0.002	0.004
	3	0.20	0.008	0.05	0.14	0.002	0.006
	4	0.20	0.008	0.05	0.18	0.002	0.007
CF	1B	0.00	0.000	0.04	0.08	0.002	0.003
		0.10	0.004	0.05	0.10	0.002	0.004
	2	0.00	0.000	0.04	0.08	0.002	0.003
		0.20	0.008	0.05	0.13	0.002	0.005
	3	0.00	0.000	0.04	0.12	0.002	0.005
		0.20	0.008	0.05	0.18	0.002	0.007
	4	0.00	0.000	0.04	0.12	0.002	0.005
		0.20	0.008	0.05	0.20	0.002	0.008
	5	0.00	0.000	0.04	0.14	0.002	0.006
		0.30	0.012	0.05	0.23	0.002	0.009
CM	1B	0.15	0.006	0.05	0.09	0.002	0.004
	2	0.20	0.008	0.05	0.13	0.002	0.005
	3	0.20	0.008	0.05	0.18	0.002	0.007
	4	0.20	0.008	0.05	0.20	0.002	0.008
	5	0.30	0.012	0.05	0.20	0.002	0.008
	6	0.30	0.012	0.05	0.20	0.002	0.008
		0.40	0.016	0.05	0.25	0.002	0.010
	8	0.40	0.016	0.05	0.30	0.002	0.012
CR	2	0.20	0.008	0.08	0.13	0.003	0.005
	3	0.20	0.008	0.08	0.23	0.003	0.009
	4	0.20	0.008	0.08	0.30	0.003	0.012
	5	0.30	0.012	0.10	0.35	0.004	0.014
	6	0.30	0.012	0.10	0.40	0.004	0.016
		0.40	0.016	0.10	0.40	0.004	0.016
	8	0.40	0.016	0.10	0.43	0.004	0.017

GROOVING & CUT-OFF APPLICATION DATA - TURN AND PROFILE FEED RATES

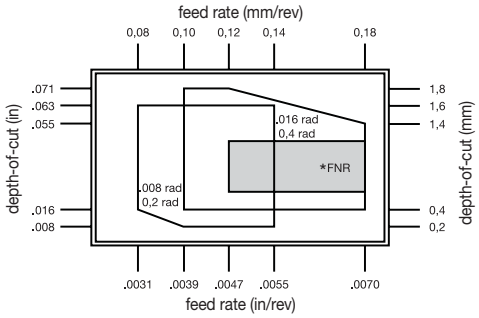
Seat Size 1F



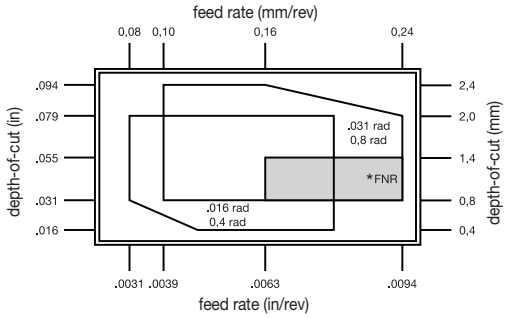
Seat Size 2



Seat Size 3

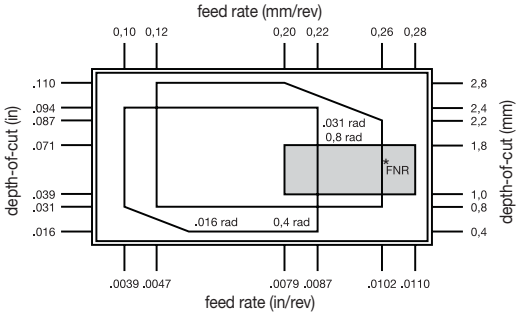


Seat Size 4



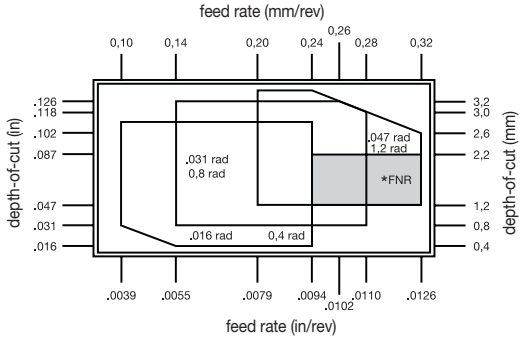
*FNR= Full Nose Radius

Seat Size 5



* **FNR** = Full Nose Radius

Seat Size 6



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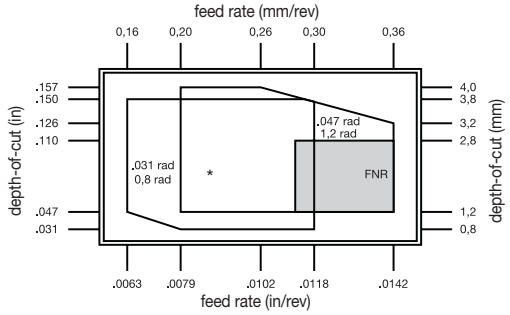

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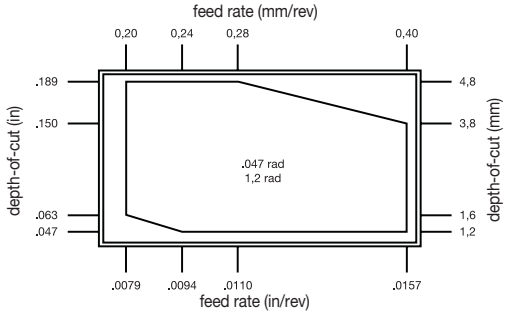
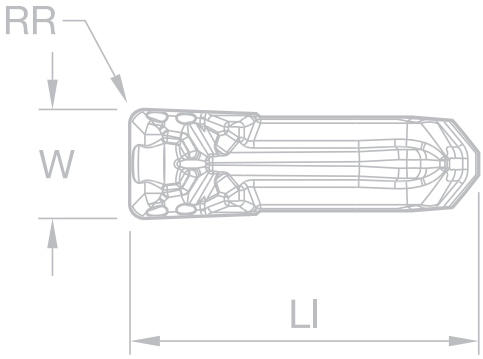
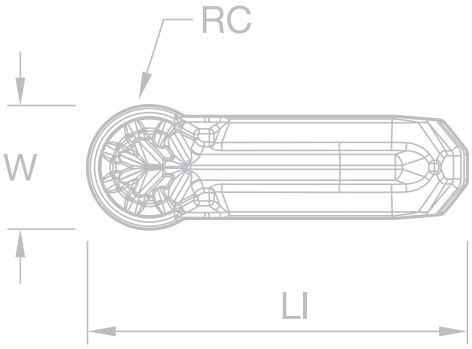


*FNR= Full Nose Radius

KCU25B
PRECISION & POWER
IN EVERY CUT
TAKE YOUR
MANUFACTURING TO
THE NEXT LEVEL
kennametal.com/KCU25B
KENNAMETAL


RR
W
LI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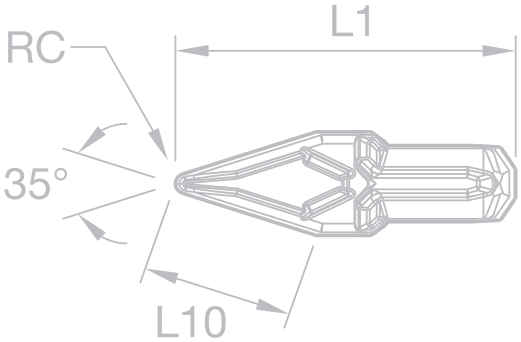
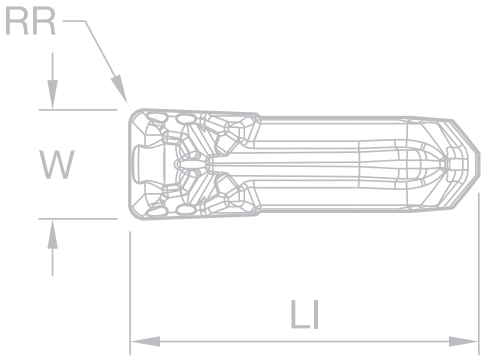
LI


RC
L1
35°
L10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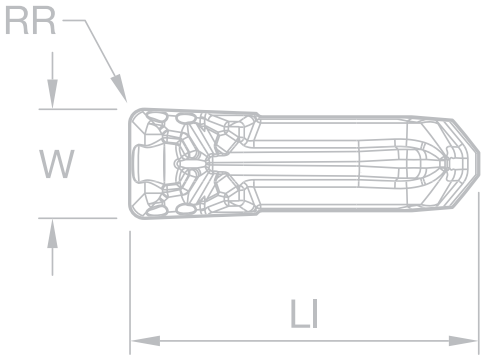
W
LI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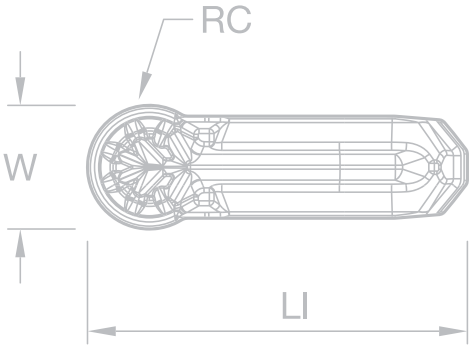
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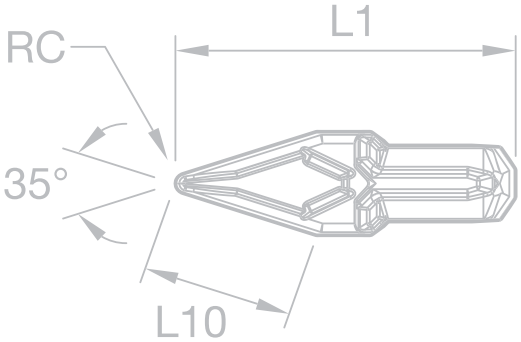
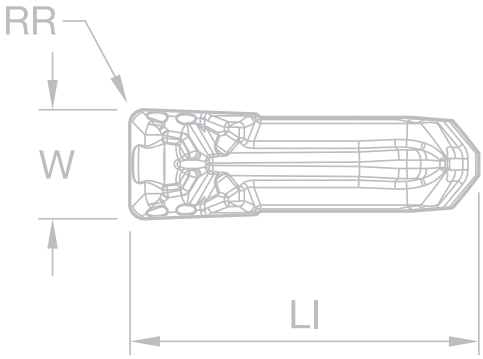

RC
L1
35°
L10


RR
W
LI

BEYOND EVOLUTION

GROOVING, TURNING & CUT-OFF

NEW! Select inserts now available in KCS10B turning grade for high-temp alloys

Run at higher speeds with increased heat and friction resistance in high-temp alloys with CF and CL geometry cut-off inserts

Applications (Roughing & Medium-Machining)

- Turning
- Profiling
- Facing
- Face Grooving
- Chamfering
- Grooving
- Cut-Off
- I.D. Turning
- I.D. Chamfering & Profiling
- I.D. Facing
- I.D. Grooving
- I.D. Face Grooving
- O.D. Deep Grooving

Materials

PRIMARY

- **P** Steels
- **M** Stainless Steels
- **K** Cast Iron
- **N** Non-Ferrous
- **S** High-Temp Alloys

SECONDARY

- **H** Hardened Materials

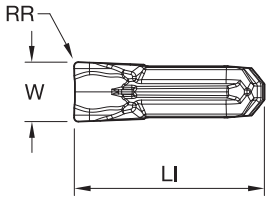
Single-Sided Grooving, Turning and Cut-Off System

Beyond Evolution is applicable with high- or low-pressure coolant supply. The active coolant control feature delivers longer tool life and higher metal removal rates (MRR). The proprietary triple-V seating feature with three contact surfaces provides functional stability and minimizes vibration, resulting in excellent surface finishes.

- **Fan Effect:** Directs coolant across the top of the insert precisely to the cutting zone underneath the chip and controls temperature
- **Chipbreaking Effect:** Improves chip control in all grooving, cut-off and multidirectional turning applications
- **Top and Bottom-V:** Precise and secure insert positioning for increased rigidity and dimensional accuracy
- **V-Back Design:** Unsurpassed grooving, cut-off and multi-directional turning load stability

Industries

- General Engineering
- Aerospace
- Medical
- Automotive
- Oil & Gas
- Wind & Solar



P	
M	
K	
N	
S	●
H	

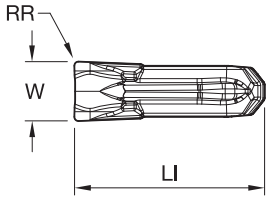
● Primary
○ Secondary

KCS10B

Beyond Evolution

Cut-Off Inserts • CF • Precision Ground • Neutral

ISO		W		W Tol +/-		LI		RR		α	
Catalog Number	Seat Size	mm	in	mm	in	mm	in	mm	in		
EC020M02PN00CF02	2	2.00	0.079	0.025	0.001	9.04	0.356	0.20	0.008	-	•
EC030M03PN00CF02	3	3.00	0.118	0.025	0.001	9.63	0.379	0.20	0.008	-	•
EC040M04PN00CF02	4	4.00	0.158	0.025	0.001	10.16	0.400	0.20	0.008	-	•
EC050M05PN00CF03	5	5.00	0.197	0.025	0.001	12.22	0.481	0.30	0.012	-	•



P	
M	
K	
N	
S	●
H	

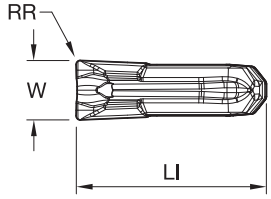
● Primary
○ Secondary

KCS10B

Beyond Evolution

Cut-Off Inserts • CF • Precision Molded • Neutral

ISO		W		W Tol +/-		LI		RR		α	
Catalog Number	Seat Size	mm	in	mm	in	mm	in	mm	in		
EC020M02N00CF02	2	2.00	0.079	0.050	0.002	8.97	0.353	0.20	0.008	-	•
EC030M03N00CF02	3	3.00	0.118	0.075	0.003	9.60	0.378	0.20	0.008	-	•
EC040M04N00CF02	4	4.00	0.158	0.075	0.003	10.19	0.401	0.20	0.008	-	•
EC050M05N00CF03	5	5.00	0.197	0.075	0.003	12.20	0.482	0.30	0.012	-	•



P	
M	
K	
N	
S	●
H	

● Primary
○ Secondary

KCS10B

Beyond Evolution

Cut-Off Inserts • CL • Precision Molded • Neutral

ISO		W		W Tol +/-		LI		RR		α	
Catalog Number	Seat Size	mm	in	mm	in	mm	in	mm	in		
EC020M02N00CL02	2	2.00	0.079	0.050	0.002	8.97	0.353	0.20	0.008	-	•
EC030M03N00CL02	3	3.00	0.118	0.075	0.003	9.60	0.378	0.20	0.008	-	•
EC040M04N00CL02	4	4.00	0.157	0.075	0.003	10.20	0.401	0.20	0.008	-	•

***Application Information on Page 109**

BEYOND EVOLUTION
GROOVING, TURNING & CUT-OFF
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TopSwiss™ MBS

PRECISION INTERNAL TURNING

TopSwiss Micro Boring Solid Carbide Boring Bars & Steel Holders for Turning Small Diameter Bores

Applications

- Boring
- Profiling
- Back Boring
- Grooving
- Chamfering
- Threading
- Face Grooving
- Multi-Direction

Materials

PRIMARY

- **P** Steels
- **M** Stainless Steels
- **K** Cast Iron
- **S** High-Temp Alloys
- **H** Hardened Materials

SECONDARY

- **C** Composite Materials
- **N** Non-Ferrous

Polished, Swiss & Small Parts Machining

When it comes to the precision and performance necessary to turn small diameter bores, grooves and threads, TopSwiss MBS has a versatile offering you can count on for next level internal turning.

- High performance internal turning in bores as small as Ø0.3mm (0.012")
- Exceptionally sharp cutting edges for best-in-class tool life and surface finishes
- Precision ground insert shanks for high accuracy and stability
- Over 1,100 standard items provide the right holder and insert for each application

Industries

Medical

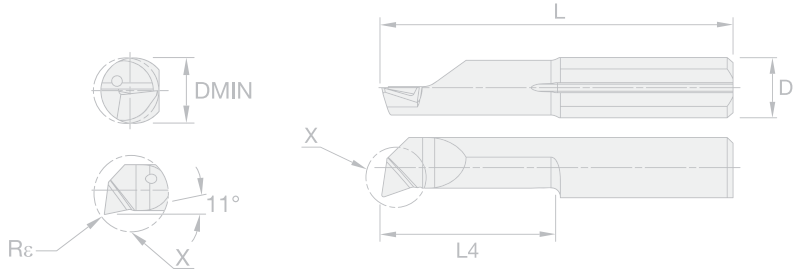
Aerospace

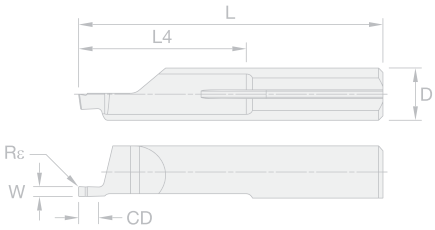
Automotive

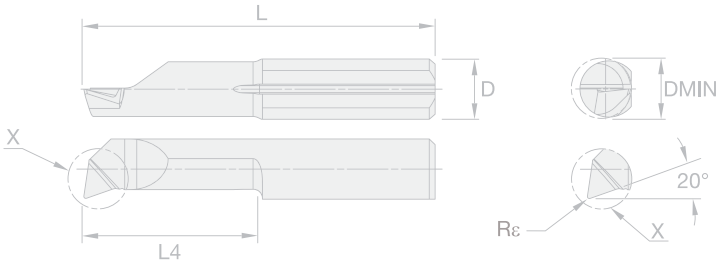
General Engineering

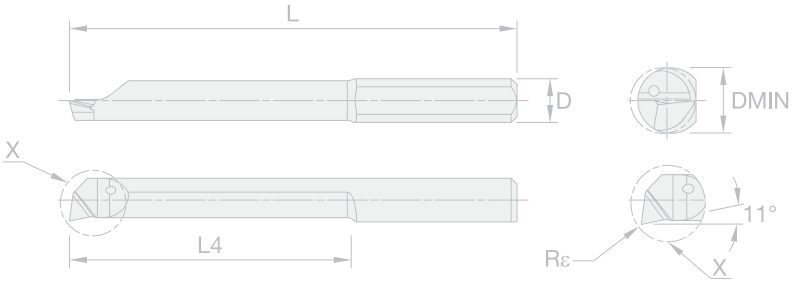
TopSwiss MBS

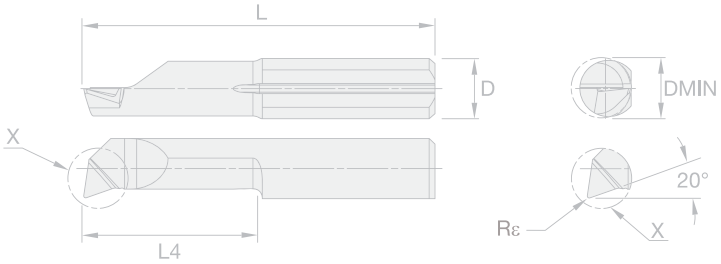
INSERTS

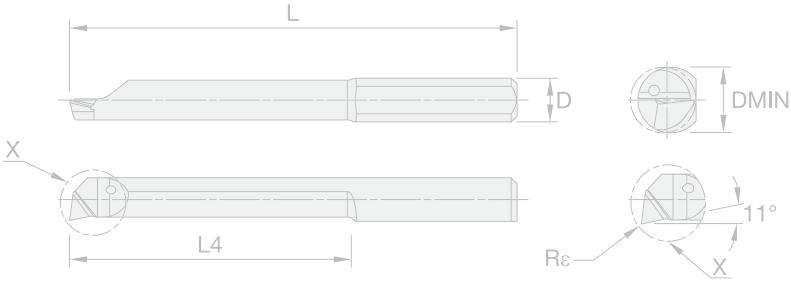


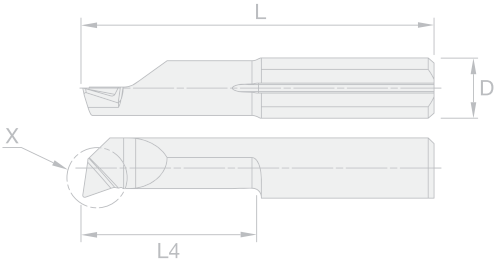


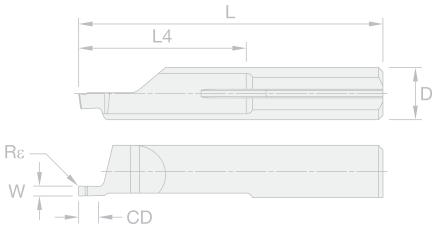


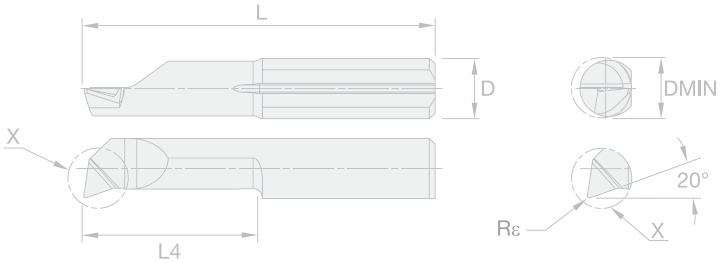




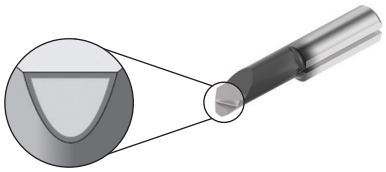








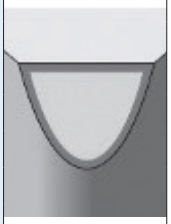
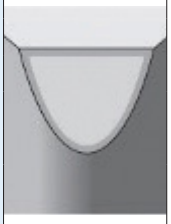
GRADES AND GRADE DESCRIPTIONS



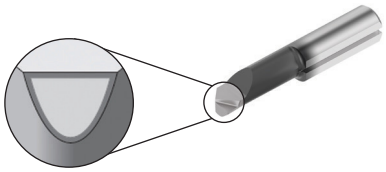
Coatings provide high-speed capability and are engineered for roughing to finishing.

P	Steel
M	Stainless Steel
K	Cast Iron
N	Non-Ferrous
S	High-Temp Alloys
H	Hardened Materials
C	CFRP Materials

Application Range: Wear Resistance ← → Toughness

Grade	Coating	Grade Description		05	10	15	20	25	30	35	40	45	50	WET	DRY
KCU25S		**Composition:** A universal TiAlN coating over a fine-grained carbide substrate. **Application:** The KCU25S grade was engineered for performance and consistency across multiple materials and is ideal for general machining of steels, stainless steels, irons and high-temp alloys in a wide range of metalcutting speeds and feeds.	P				■	■	■					•	•
			M				■	■	■					•	
			K				■	■	■					•	•
			N				■	■	■					•	
			S				■	■	■					•	
KCPM25S		**Composition:** An advanced AlTiCrN coating over a fine-grained carbide substrate. **Application:** The KCPM25S grade was specifically engineered for high production machining of steels and stainless steels. The fine-grained tungsten carbide substrate has excellent toughness and deformation resistance for long tool life, while the advanced coating allows metalcutting feeds double those of conventional coated cutting tools.	P			■	■	■	■	■				•	•
			M			■	■	■	■	■				•	
			K			■	■	■	■	■				•	•
KCSM25S		**Composition:** An advanced TiXCrN coating over a fine-grained tungsten carbide grade. **Application:** A specialized and proprietary coating, the KCSM25S grade was specifically engineered for high production machining of stainless steels and high-temp alloys. The fine-grained tungsten carbide substrate has excellent toughness and deformation resistance for long tool life, while the advanced coating allows metalcutting feeds double those of conventional coated cutting tools when machining stainless steels, titanium and cobalt chrome.	M			■	■	■	■	■				•	
			S			■	■	■	■	■				•	
KCHS25S		**Composition:** An advanced AlCrN coating over a fine-grained carbide substrate. **Application:** The KCHS25S grade was specifically engineered for high production machining of hardened materials and high-temp alloys from 48-66 HRC. The fine-grained tungsten carbide substrate has excellent toughness and deformation resistance for long tool life, while the advanced coating allows metalcutting feeds double those of conventional coated cutting tools.	P			■	■	■	■	■				•	
			K			■	■	■	■	■				•	
			S			■	■	■	■	■				•	
			H			■	■	■	■	■				•	

GRADES AND GRADE DESCRIPTIONS

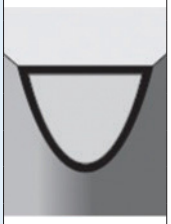


Coatings provide high-speed capability
and are engineered
for roughing to finishing.

P	Steel
M	Stainless Steel
K	Cast Iron
N	Non-Ferrous
S	High-Temp Alloys
H	Hardened Materials
C	CFRP Materials

Application Range

Wear Resistance ← → Toughness

Grade	Coating	Grade Description		05	10	15	20	25	30	35	40	45	50	WET	DRY
KN25S		***Available by request** **Composition:** A hard, low binder content, unalloyed WC/Co fine-grained uncoated carbide. **Application:** The KN25S grade combines wear resistance with high strength for machining non-ferrous metals and non-metals. The grain structure is well controlled for minimal pits and flaws, which contributes to long, reliable service.	N				■	■	■					•	
KCU30S		***Available by request** **Composition:** A universal TiN coating over a fine-grained carbide substrate. **Application:** The KCU30S grade was engineered for performance and consistency across multiple materials and is ideal for general machining of steels, stainless steels and irons in low speed applications.	P						■	■	■			•	•
			M						■	■	■			•	
			K						■	■	■			•	•
KCN25S		***Available by request** **Composition:** An advanced DLC (diamond like coating) over a fine-grained carbide substrate. **Application:** The KCN25S grade provides high wear resistance and reduced friction, increasing tool life and improving chip flow in the machining of non-ferrous materials and composites.	N		■	■	■	■	■					•	

KENNAMETAL

NOMENCLATURE BORING & PROFILING INSERTS

Example:
R4BPML003C01
R002 - KCSM25S

R	4	BP	ML	003	C	01	R002	-	KCSM25S
Hand	Shank Diameter	Application Area	Style (lead & relief angles)	Min Bore Size	Coolant	Machining Depth	Corner Radius	Separator	Grade
R: right hand	4: 4mm Ø	BP: boring & profiling	GA: geometry A (8° & 20°)	003: 0.3mm	C: coolant channel	01: 1mm	R000: 0.00mm (0.0000")		KCU25S
L: left hand	5: 5mm Ø	MF: multi-function	GB: geometry B (0° & 20°)	005: 0.5mm	H: coolant hole	05: 5mm	R002: 0.02mm (0.0008")		KCPM25S
	6: 6mm Ø		GC: geometry C (8° & 47°)	070: 7.0mm	D: double coolant hole	10: 10mm	R005: 0.05mm (0.002")		KCSM25S
	7: 7mm Ø		ML: medical line (8° & 11°)	160: 16.0mm		25: 25mm	R015: 0.15mm (0.006")		KCHS25S
	8: 8mm Ø		HP: high performance (6° & 7°)				R020: 0.20mm (0.008")		
			HM: hard machining (8° & 20°)				R150: 1.5mm (0.060")		
			DB: drill & bore (0° & 0°)						

NOMENCLATURE GROOVING & SPECIALIZED BORING

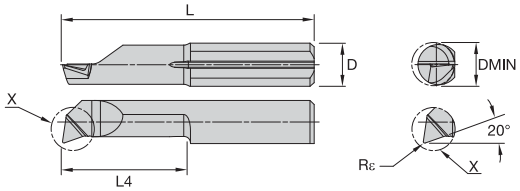
Example:
R4GR08003C01
R002 - KCHS25S

R	4	GR	08	003	C	01	R002	-	KCHS25S
Hand	Shank Diameter	Application Area	Width	Min Bore Size	Coolant	Machining Depth	Corner Radius	Separator	Grade
R: right hand	4: 4mm Ø	BB: back boring	03: 0.30mm	003: 0.3mm	C: coolant channel	01: 1mm	R000: 0.00mm (0.0000")		KCU25S
L: left hand	5: 5mm Ø	PG: pregroove	08: 0.80mm	005: 0.5mm	H: coolant hole	05: 5mm	R002: 0.02mm (0.0008")		KCPM25S
	6: 6mm Ø	BC: bore & chamfer	10: 1.00mm	070: 7.0mm	D: double coolant hole	10: 10mm	R005: 0.05mm (0.002")		KCSM25S
	7: 7mm Ø	GS: internal groove with sharp corner	20: 2.00mm	160: 16.0mm		25: 25mm	R015: 0.15mm (0.006")		KCHS25S
	8: 8mm Ø	GR: internal groove with radius corner	40: 4.00mm				R020: 0.20mm (0.008")		
		GF: internal groove with full nose radius					R150: 1.5mm (0.060")		
		FI: face groove, inboard sweep							
		FO: face groove, outboard sweep							

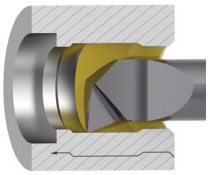
NOMENCLATURE THREADING

Example:
R4TPME070C01
T025 - KCU25S

R	4	TP	ME	070	C	01	T025	-	KCU25S
Hand	Shank Diameter	Application Area	Style	Min Bore Size	Coolant	Machining Depth	Pitch	Separator	Grade
R: right hand	4: 4mm Ø	TP: threading, partial profile	ME: metric ISO	003: 0.3mm	C: coolant channel	01: 1mm	T025: Metric pitch 0.25		KCU25S
L: left hand	5: 5mm Ø	TF: threading, full profile	UN: unified national	005: 0.5mm	H: coolant hole	05: 5mm	T024: UN pitch 24		KCPM25S
	6: 6mm Ø		WH: whitworth	070: 7.0mm	D: double coolant hole	10: 10mm	T016: Whitworth pitch 16		KCSM25S
	7: 7mm Ø		NP: national pipe	160: 16.0mm		25: 25mm	T018: NP pitch 18		KCHS25S
	8: 8mm Ø								
							For partial profiles		
							Indicates start of pitch range		
							T025: Metric pitch (0.25-0.3)		
							T024: UN pitch (24-28)		



APPLICATIONS



P	●
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S	○
H	

● Primary
○ Secondary

Boring & Profiling

GA

KCU25S

			DMIN		L4		L		Rε		ANGLE		
Order Number	Catalog Number	D	in	mm	in	mm	in	mm	in	mm	LEAD	RELIEF	
7219715	L4BPGA003C01R002 KCU25S	4	0.012	0.30	0.047	1.20	0.787	20	0.001	0.02	8.0°	20°	•
7219716	L4BPGA004C01R002 KCU25S	4	0.016	0.40	0.063	1.60	0.787	20	0.001	0.02	8.0°	20°	•
7219717	L4BPGA005C02R004 KCU25S	4	0.020	0.50	0.071	1.80	0.787	20	0.002	0.04	8.0°	20°	•
7219718	L4BPGA006C02R004 KCU25S	4	0.024	0.60	0.071	1.80	0.787	20	0.002	0.04	8.0°	20°	•
7219720	L4BPGA006C03R004 KCU25S	4	0.024	0.60	0.110	2.80	0.787	20	0.002	0.04	8.0°	20°	•
7219721	L4BPGA008C04R004 KCU25S	4	0.032	0.80	0.150	3.80	0.787	20	0.002	0.04	8.0°	20°	•
7219722	L4BPGA010C05R005 KCU25S	4	0.039	1.00	0.177	4.50	0.787	20	0.002	0.05	8.0°	20°	•
7219723	L4BPGA010C07R005 KCU25S	4	0.039	1.00	0.256	6.50	0.866	22	0.002	0.05	8.0°	20°	•
7219724	L4BPGA010C08R005 KCU25S	4	0.039	1.00	0.295	7.50	0.866	22	0.002	0.05	8.0°	20°	•
7219725	L4BPGA015C05R005 KCU25S	4	0.059	1.50	0.177	4.50	0.748	19	0.002	0.05	8.0°	20°	•
7219726	L4BPGA015C10R005 KCU25S	4	0.059	1.50	0.354	9.00	0.945	24	0.002	0.05	8.0°	20°	•
7219727	L4BPGA015C12R005 KCU25S	4	0.059	1.50	0.433	11.00	1.024	26	0.002	0.05	8.0°	20°	•
7219728	L4BPGA020C05R005 KCU25S	4	0.079	2.00	0.177	4.50	0.748	19	0.002	0.05	8.0°	20°	•
7219729	L4BPGA020C10R005 KCU25S	4	0.079	2.00	0.354	9.00	0.945	24	0.002	0.05	8.0°	20°	•
7219730	L4BPGA020C15R005 KCU25S	4	0.079	2.00	0.551	14.00	1.142	29	0.002	0.05	8.0°	20°	•
7219741	L4BPGA025C05R005 KCU25S	4	0.098	2.50	0.177	4.50	0.748	19	0.002	0.05	8.0°	20°	•
7219742	L4BPGA025C10R005 KCU25S	4	0.098	2.50	0.354	9.00	0.945	24	0.002	0.05	8.0°	20°	•
7219743	L4BPGA025C16R005 KCU25S	4	0.098	2.50	0.591	15.00	1.181	30	0.002	0.05	8.0°	20°	•
7220066	L4BPGA028C10R005 KCU25S	4	0.110	2.80	0.354	9.00	0.945	24	0.002	0.05	8.0°	20°	•
7219745	L4BPGA028C10R010 KCU25S	4	0.110	2.80	0.354	9.00	0.945	24	0.004	0.10	8.0°	20°	•
7220067	L4BPGA028C16R005 KCU25S	4	0.110	2.80	0.591	15.00	1.181	30	0.002	0.05	8.0°	20°	•
7219746	L4BPGA028C16R010 KCU25S	4	0.110	2.80	0.591	15.00	1.181	30	0.004	0.10	8.0°	20°	•
7220068	L4BPGA028C20R005 KCU25S	4	0.110	2.80	0.748	19.00	1.339	34	0.002	0.05	8.0°	20°	•
7219747	L4BPGA028C20R010 KCU25S	4	0.110	2.80	0.748	19.00	1.339	34	0.004	0.10	8.0°	20°	•
7220063	L4BPGA02XC05R005 KCU25S	4	0.083	2.10	0.177	4.50	0.748	19	0.002	0.05	8.0°	20°	•
7220064	L4BPGA02XC10R005 KCU25S	4	0.083	2.10	0.177	4.50	0.748	19	0.002	0.05	8.0°	20°	•
7220065	L4BPGA02XC15R005 KCU25S	4	0.083	2.10	0.551	14.00	1.142	29	0.002	0.05	8.0°	20°	•
7219748	L4BPGA035C10R010 KCU25S	4	0.138	3.50	0.354	9.00	0.945	24	0.004	0.10	8.0°	20°	•
7219749	L4BPGA035C16R010 KCU25S	4	0.138	3.50	0.591	15.00	1.181	30	0.004	0.10	8.0°	20°	•
7219750	L4BPGA035C20R010 KCU25S	4	0.138	3.50	0.748	19.00	1.339	34	0.004	0.10	8.0°	20°	•
7219751	L4BPGA035C24R010 KCU25S	4	0.138	3.50	0.906	23.00	1.496	38	0.004	0.10	8.0°	20°	•
7220069	L4BPGA040C10R005 KCU25S	4	0.158	4.00	0.354	9.00	0.945	24	0.002	0.05	8.0°	20°	•
7219752	L4BPGA040C10R010 KCU25S	4	0.158	4.00	0.354	9.00	0.945	24	0.004	0.10	8.0°	20°	•
7220070	L4BPGA040C16R005 KCU25S	4	0.158	4.00	0.591	15.00	1.181	30	0.002	0.05	8.0°	20°	•
7219753	L4BPGA040C16R010 KCU25S	4	0.158	4.00	0.591	15.00	1.181	30	0.004	0.10	8.0°	20°	•
7220071	L4BPGA040C20R005 KCU25S	4	0.158	4.00	0.748	19.00	1.339	34	0.002	0.05	8.0°	20°	•
7219754	L4BPGA040C20R010 KCU25S	4	0.158	4.00	0.748	19.00	1.339	34	0.004	0.10	8.0°	20°	•
7220072	L4BPGA040C24R005 KCU25S	4	0.158	4.00	0.906	23.00	1.496	38	0.002	0.05	8.0°	20°	•
7219755	L4BPGA040C24R010 KCU25S	4	0.158	4.00	0.906	23.00	1.496	38	0.004	0.10	8.0°	20°	•
7220073	L4BPGA040C28R005 KCU25S	4	0.158	4.00	1.063	27.00	1.654	42	0.002	0.05	8.0°	20°	•
7219756	L4BPGA040C28R010 KCU25S	4	0.158	4.00	1.063	27.00	1.654	42	0.004	0.10	8.0°	20°	•
7220074	L5BPGA050C10R005 KCU25S	5	0.197	5.00	0.354	9.00	0.984	25	0.002	0.05	8.0°	20°	•
7219757	L5BPGA050C10R015 KCU25S	5	0.197	5.00	0.354	9.00	0.984	25	0.006	0.15	8.0°	20°	•
7220075	L5BPGA050C15R005 KCU25S	5	0.197	5.00	0.551	14.00	1.181	30	0.002	0.05	8.0°	20°	•
7219758	L5BPGA050C15R015 KCU25S	5	0.197	5.00	0.551	14.00	1.181	30	0.006	0.15	8.0°	20°	•
7220077	L5BPGA050C20R005 KCU25S	5	0.197	5.00	0.748	19.00	1.378	35	0.002	0.05	8.0°	20°	•
7219759	L5BPGA050C20R015 KCU25S	5	0.197	5.00	0.748	19.00	1.378	35	0.006	0.15	8.0°	20°	•
7220079	L5BPGA050C25R005 KCU25S	5	0.197	5.00	0.945	24.00	1.575	40	0.002	0.05	8.0°	20°	•

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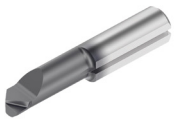
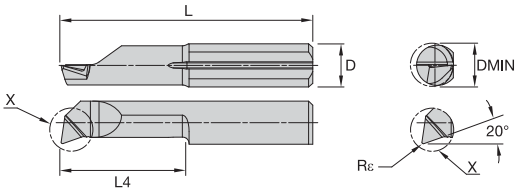
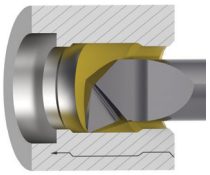




APPLICATIONS



P	●
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● Primary
○ Secondary

Boring & Profiling Continued

GA

KCU25S

			DMIN		L4		L		Rε		ANGLE		
Order Number	Catalog Number	D	in	mm	in	mm	in	mm	in	mm	LEAD	RELIEF	
7219760	L5BPGA050C25R015 KCU25S	5	0.197	5.00	0.945	24.00	1.575	40	0.006	0.15	8.0°	20°	•
7220081	L5BPGA050C30R005 KCU25S	5	0.197	5.00	1.142	29.00	1.772	45	0.002	0.05	8.0°	20°	•
7219761	L5BPGA050C30R015 KCU25S	5	0.197	5.00	1.142	29.00	1.772	45	0.006	0.15	8.0°	20°	•
7220083	L5BPGA050C35R005 KCU25S	5	0.197	5.00	1.339	34.00	1.969	50	0.002	0.05	8.0°	20°	•
7219762	L5BPGA050C35R015 KCU25S	5	0.197	5.00	1.339	34.00	1.969	50	0.004	0.10	8.0°	20°	•
7219763	L5BPGA050C40R015 KCU25S	5	0.197	5.00	1.535	39.00	2.165	55	0.006	0.15	8.0°	20°	•
7220085	L6BPGA060C15R005 KCU25S	6	0.236	6.00	0.551	14.00	1.181	30	0.002	0.05	8.0°	20°	•
7219764	L6BPGA060C15R015 KCU25S	6	0.236	6.00	0.551	14.00	1.181	30	0.006	0.15	8.0°	20°	•
7220087	L6BPGA060C22R005 KCU25S	6	0.236	6.00	0.827	21.00	1.457	37	0.002	0.05	8.0°	20°	•
7219765	L6BPGA060C22R015 KCU25S	6	0.236	6.00	0.827	21.00	1.457	37	0.006	0.15	8.0°	20°	•
7220089	L6BPGA060C25R005 KCU25S	6	0.236	6.00	0.945	24.00	1.575	40	0.002	0.05	8.0°	20°	•
7219766	L6BPGA060C25R015 KCU25S	6	0.236	6.00	0.945	24.00	1.575	40	0.006	0.15	8.0°	20°	•
7220091	L6BPGA060C30R005 KCU25S	6	0.236	6.00	1.142	29.00	1.772	45	0.002	0.05	8.0°	20°	•
7219767	L6BPGA060C30R015 KCU25S	6	0.236	6.00	1.142	29.00	1.772	45	0.006	0.15	8.0°	20°	•
7220093	L6BPGA060C35R005 KCU25S	6	0.236	6.00	1.339	34.00	1.969	50	0.002	0.05	8.0°	20°	•
7219769	L6BPGA060C35R015 KCU25S	6	0.236	6.00	1.339	34.00	1.969	50	0.006	0.15	8.0°	20°	•
7220095	L6BPGA060C42R005 KCU25S	6	0.236	6.00	1.614	41.00	2.244	57	0.002	0.05	8.0°	20°	•
7219770	L6BPGA060C42R015 KCU25S	6	0.236	6.00	1.614	41.00	2.244	57	0.006	0.15	8.0°	20°	•
7219771	L7BPGA068C20R015 KCU25S	7	0.268	6.80	0.748	19.00	1.378	35	0.006	0.15	8.0°	20°	•
7219772	L7BPGA068C25R015 KCU25S	7	0.268	6.80	0.945	24.00	1.575	40	0.006	0.15	8.0°	20°	•
7219773	L7BPGA068C30R015 KCU25S	7	0.268	6.80	1.142	29.00	1.772	45	0.006	0.15	8.0°	20°	•
7219774	L7BPGA068C35R015 KCU25S	7	0.268	6.80	1.339	34.00	1.969	50	0.006	0.15	8.0°	20°	•
7219775	L7BPGA068C40R015 KCU25S	7	0.268	6.80	1.535	39.00	2.165	55	0.006	0.15	8.0°	20°	•
7219776	L7BPGA068C45R015 KCU25S	7	0.268	6.80	1.732	44.00	2.362	60	0.006	0.15	8.0°	20°	•
7219777	L7BPGA068C50R015 KCU25S	7	0.268	6.80	1.929	49.00	2.559	65	0.006	0.15	8.0°	20°	•
7219778	L8BPGA078C50R020 KCU25S	8	0.307	7.80	1.929	49.00	2.756	70	0.008	0.20	8.0°	20°	•
7219779	L8BPGA078C60R020 KCU25S	8	0.307	7.80	2.323	59.00	3.150	80	0.008	0.20	8.0°	20°	•
7219780	R4BPGA003C01R002 KCU25S	4	0.012	0.30	0.047	1.20	0.787	20	0.001	0.02	8.0°	20°	•
7219781	R4BPGA004C01R002 KCU25S	4	0.016	0.40	0.063	1.60	0.787	20	0.001	0.02	8.0°	20°	•
7219782	R4BPGA005C02R004 KCU25S	4	0.020	0.50	0.071	1.80	0.787	20	0.002	0.04	8.0°	20°	•
7219783	R4BPGA006C02R004 KCU25S	4	0.024	0.60	0.071	1.80	0.787	20	0.002	0.04	8.0°	20°	•
7219784	R4BPGA006C03R004 KCU25S	4	0.024	0.60	0.079	2.00	0.787	20	0.002	0.04	8.0°	20°	•
7219785	R4BPGA008C04R004 KCU25S	4	0.032	0.80	0.150	3.80	0.787	20	0.002	0.04	8.0°	20°	•
7219786	R4BPGA010C05R005 KCU25S	4	0.039	1.00	0.177	4.50	0.787	20	0.002	0.05	8.0°	20°	•
7219787	R4BPGA010C07R005 KCU25S	4	0.039	1.00	0.256	6.50	0.866	22	0.002	0.05	8.0°	20°	•
7219788	R4BPGA010C08R005 KCU25S	4	0.039	1.00	0.295	7.50	0.866	22	0.002	0.05	8.0°	20°	•
7219789	R4BPGA015C05R005 KCU25S	4	0.059	1.50	0.177	4.50	0.748	19	0.002	0.05	8.0°	20°	•
7219790	R4BPGA015C10R005 KCU25S	4	0.059	1.50	0.354	9.00	0.945	24	0.002	0.05	8.0°	20°	•
7219791	R4BPGA015C12R005 KCU25S	4	0.059	1.50	0.433	11.00	1.024	26	0.002	0.05	8.0°	20°	•
7219792	R4BPGA020C05R005 KCU25S	4	0.079	2.00	0.177	4.50	0.748	19	0.002	0.05	8.0°	20°	•
7219794	R4BPGA020C10R005 KCU25S	4	0.079	2.00	0.354	9.00	0.945	24	0.002	0.05	8.0°	20°	•
7219795	R4BPGA020C15R005 KCU25S	4	0.079	2.00	0.551	14.00	1.142	29	0.002	0.05	8.0°	20°	•
7219796	R4BPGA025C05R005 KCU25S	4	0.098	2.50	0.177	4.50	0.748	19	0.002	0.05	8.0°	20°	•
7219797	R4BPGA025C10R005 KCU25S	4	0.098	2.50	0.354	9.00	0.945	24	0.002	0.05	8.0°	20°	•
7219798	R4BPGA025C16R005 KCU25S	4	0.098	2.50	0.591	15.00	1.181	30	0.002	0.05	8.0°	20°	•
7220103	R4BPGA028C10R005 KCU25S	4	0.110	2.80	0.354	9.00	0.945	24	0.002	0.05	8.0°	20°	•
7219799	R4BPGA028C10R010 KCU25S	4	0.110	2.80	0.354	9.00	0.945	24	0.004	0.10	8.0°	20°	•
7220105	R4BPGA028C16R005 KCU25S	4	0.110	2.80	0.591	15.00	1.181	30	0.002	0.05	8.0°	20°	•

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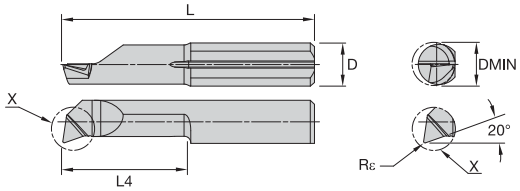
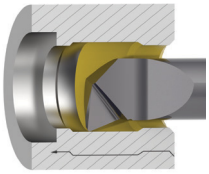


APPLICATIONS



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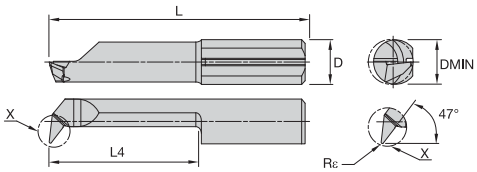
● Primary
○ Secondary

Boring & Profiling Continued

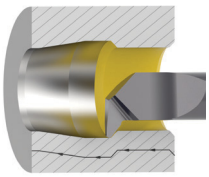
GA

KCU25S

			DMIN		L4		L		Rε		ANGLE		
Order Number	Catalog Number	D	in	mm	in	mm	in	mm	in	mm	LEAD	RELIEF	
7219800	R4BPGA028C16R010 KCU25S	4	0.110	2.80	0.591	15.00	1.181	30	0.004	0.10	8.0°	20°	•
7220107	R4BPGA028C20R005 KCU25S	4	0.110	2.80	0.748	19.00	1.339	34	0.002	0.05	8.0°	20°	•
7219811	R4BPGA028C20R010 KCU25S	4	0.110	2.80	0.748	19.00	1.339	34	0.004	0.10	8.0°	20°	•
7220097	R4BPGA02XC05R005 KCU25S	4	0.079	2.00	0.177	4.50	0.748	19	0.002	0.05	8.0°	20°	•
7220099	R4BPGA02XC10R005 KCU25S	4	0.079	2.00	0.354	9.00	0.945	24	0.002	0.05	8.0°	20°	•
7220101	R4BPGA02XC15R005 KCU25S	4	0.079	2.00	0.551	14.00	1.142	29	0.002	0.05	8.0°	20°	•
7219812	R4BPGA035C10R010 KCU25S	4	0.138	3.50	0.354	9.00	0.945	24	0.004	0.10	8.0°	20°	•
7219813	R4BPGA035C16R010 KCU25S	4	0.138	3.50	0.591	15.00	1.181	30	0.004	0.10	8.0°	20°	•
7219814	R4BPGA035C20R010 KCU25S	4	0.138	3.50	0.748	19.00	1.339	34	0.004	0.10	8.0°	20°	•
7219815	R4BPGA035C24R010 KCU25S	4	0.138	3.50	0.906	23.00	1.496	38	0.004	0.10	8.0°	20°	•
7220109	R4BPGA040C10R005 KCU25S	4	0.158	4.00	0.354	9.00	0.945	24	0.002	0.05	8.0°	20°	•
7219817	R4BPGA040C10R010 KCU25S	4	0.158	4.00	0.354	9.00	0.945	24	0.004	0.10	8.0°	20°	•
7220111	R4BPGA040C16R005 KCU25S	4	0.158	4.00	0.591	15.00	1.181	30	0.002	0.05	8.0°	20°	•
7219818	R4BPGA040C16R010 KCU25S	4	0.158	4.00	0.591	15.00	1.181	30	0.004	0.10	8.0°	20°	•
7220113	R4BPGA040C20R005 KCU25S	4	0.158	4.00	0.748	19.00	1.339	34	0.002	0.05	8.0°	20°	•
7219819	R4BPGA040C20R010 KCU25S	4	0.158	4.00	0.748	19.00	1.339	34	0.004	0.10	8.0°	20°	•
7220115	R4BPGA040C24R005 KCU25S	4	0.158	4.00	0.906	23.00	1.496	38	0.002	0.05	8.0°	20°	•
7219820	R4BPGA040C24R010 KCU25S	4	0.158	4.00	0.906	23.00	1.496	38	0.004	0.10	8.0°	20°	•
7220117	R4BPGA040C28R005 KCU25S	4	0.158	4.00	1.063	27.00	1.654	42	0.002	0.05	8.0°	20°	•
7219821	R4BPGA040C28R010 KCU25S	4	0.158	4.00	1.063	27.00	1.654	42	0.004	0.10	8.0°	20°	•
7220119	R5BPGA050C10R005 KCU25S	5	0.197	5.00	0.354	9.00	0.984	25	0.002	0.05	8.0°	20°	•
7219822	R5BPGA050C10R015 KCU25S	5	0.197	5.00	0.354	9.00	0.984	25	0.006	0.15	8.0°	20°	•
7220121	R5BPGA050C15R005 KCU25S	5	0.197	5.00	0.551	14.00	1.181	30	0.002	0.05	8.0°	20°	•
7219823	R5BPGA050C15R015 KCU25S	5	0.197	5.00	0.551	14.00	1.181	30	0.006	0.15	8.0°	20°	•
7220123	R5BPGA050C20R005 KCU25S	5	0.197	5.00	0.748	19.00	1.378	35	0.002	0.05	8.0°	20°	•
7219824	R5BPGA050C20R015 KCU25S	5	0.197	5.00	0.748	19.00	1.378	35	0.006	0.15	8.0°	20°	•
7220125	R5BPGA050C25R005 KCU25S	5	0.197	5.00	0.945	24.00	1.575	40	0.002	0.05	8.0°	20°	•
7219825	R5BPGA050C25R015 KCU25S	5	0.197	5.00	0.945	24.00	1.575	40	0.006	0.15	8.0°	20°	•
7220127	R5BPGA050C30R005 KCU25S	5	0.197	5.00	1.142	29.00	1.772	45	0.002	0.05	8.0°	20°	•
7219826	R5BPGA050C30R015 KCU25S	5	0.197	5.00	1.142	29.00	1.772	45	0.006	0.15	8.0°	20°	•
7220129	R5BPGA050C35R005 KCU25S	5	0.197	5.00	1.339	34.00	1.969	50	0.002	0.05	8.0°	20°	•
7219827	R5BPGA050C35R015 KCU25S	5	0.197	5.00	1.339	34.00	1.969	50	0.004	0.10	8.0°	20°	•
7219828	R5BPGA050C40R015 KCU25S	5	0.197	5.00	1.535	39.00	2.165	55	0.006	0.15	8.0°	20°	•
7220131	R6BPGA060C15R005 KCU25S	6	0.236	6.00	0.551	14.00	1.181	30	0.002	0.05	8.0°	20°	•
7219829	R6BPGA060C15R015 KCU25S	6	0.236	6.00	0.551	14.00	1.181	30	0.006	0.15	8.0°	20°	•
7220133	R6BPGA060C22R005 KCU25S	6	0.236	6.00	0.827	21.00	1.457	37	0.002	0.05	8.0°	20°	•
7219830	R6BPGA060C22R015 KCU25S	6	0.236	6.00	0.827	21.00	1.457	37	0.006	0.15	8.0°	20°	•
7220135	R6BPGA060C25R005 KCU25S	6	0.236	6.00	0.945	24.00	1.575	40	0.002	0.05	8.0°	20°	•
7219831	R6BPGA060C25R015 KCU25S	6	0.236	6.00	0.945	24.00	1.575	40	0.006	0.15	8.0°	20°	•
7220137	R6BPGA060C30R005 KCU25S	6	0.236	6.00	1.142	29.00	1.772	45	0.002	0.05	8.0°	20°	•
7219832	R6BPGA060C30R015 KCU25S	6	0.236	6.00	1.142	29.00	1.772	45	0.006	0.15	8.0°	20°	•
7220139	R6BPGA060C35R005 KCU25S	6	0.236	6.00	1.339	34.00	1.969	50	0.002	0.05	8.0°	20°	•
7219833	R6BPGA060C35R015 KCU25S	6	0.236	6.00	1.339	34.00	1.969	50	0.006	0.15	8.0°	20°	•
7220141	R6BPGA060C42R005 KCU25S	6	0.236	6.00	1.614	41.00	2.244	57	0.002	0.05	8.0°	20°	•
7219834	R6BPGA060C42R015 KCU25S	6	0.236	6.00	1.614	41.00	2.244	57	0.006	0.15	8.0°	20°	•
7219835	R7BPGA068C20R015 KCU25S	7	0.268	6.80	0.748	19.00	1.378	35	0.006	0.15	8.0°	20°	•
7219836	R7BPGA068C25R015 KCU25S	7	0.268	6.80	0.945	24.00	1.575	40	0.006	0.15	8.0°	20°	•
7219837	R7BPGA068C30R015 KCU25S	7	0.268	6.80	1.142	29.00	1.772	45	0.006	0.15	8.0°	20°	•
7219838	R7BPGA068C35R015 KCU25S	7	0.268	6.80	1.339	34.00	1.969	50	0.006	0.15	8.0°	20°	•
7219839	R7BPGA068C40R015 KCU25S	7	0.268	6.80	1.535	39.00	2.165	55	0.006	0.15	8.0°	20°	•
7219840	R7BPGA068C45R015 KCU25S	7	0.268	6.80	1.732	44.00	2.362	60	0.006	0.15	8.0°	20°	•
7219841	R7BPGA068C50R015 KCU25S	7	0.268	6.80	1.929	49.00	2.559	65	0.006	0.15	8.0°	20°	•
7219843	R8BPGA078C50R020 KCU25S	8	0.307	7.80	1.929	49.00	2.756	70	0.008	0.20	8.0°	20°	•
7219844	R8BPGA078C60R020 KCU25S	8	0.307	7.80	2.323	59.00	3.150	80	0.008	0.20	8.0°	20°	•



APPLICATIONS



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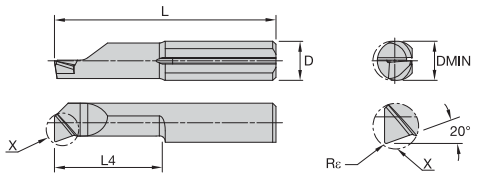
Boring & Profiling

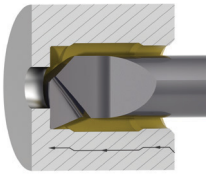
GC

KCU25S

			DMIN		L4		L		Rε		ANGLE		
Order Number	Catalog Number	D	in	mm	in	mm	in	mm	in	mm	LEAD	RELIEF	
7220076	L4BPGC020C10R005 KCU25S	4	0.079	2.00	0.354	9	0.945	24	0.002	0.05	8.0°	47°	•
7220078	L4BPGC028C15R010 KCU25S	4	0.110	2.80	0.551	14	1.142	29	0.004	0.10	8.0°	47°	•
7220080	L4BPGC040C10R010 KCU25S	4	0.158	4.00	0.354	9	0.945	24	0.004	0.10	8.0°	47°	•
7220082	L4BPGC040C20R010 KCU25S	4	0.158	4.00	0.748	19	1.339	34	0.004	0.10	8.0°	47°	•
7220084	L4BPGC040C2TR010 KCU25S	4	0.158	4.00	0.748	19	1.339	34	0.004	0.10	8.0°	47°	•
7220086	L5BPGC050C15R015 KCU25S	5	0.197	5.00	0.551	14	1.181	30	0.006	0.15	8.0°	47°	•
7220088	L5BPGC050C25R015 KCU25S	5	0.197	5.00	0.945	24	1.575	40	0.006	0.15	8.0°	47°	•
7220090	L5BPGC050C2TR015 KCU25S	5	0.197	5.00	0.945	24	1.181	30	0.006	0.15	8.0°	47°	•
7220092	L6BPGC060C22R015 KCU25S	6	0.236	6.00	0.827	21	1.457	37	0.006	0.15	8.0°	47°	•
7220094	L6BPGC060C30R015 KCU25S	6	0.236	6.00	1.142	29	1.772	45	0.006	0.15	8.0°	47°	•
7220096	L6BPGC060C3TR015 KCU25S	6	0.236	6.00	1.142	29	1.457	37	0.006	0.15	8.0°	47°	•
7220098	R4BPGC020C10R005 KCU25S	4	0.079	2.00	0.354	9	0.945	24	0.002	0.05	8.0°	47°	•
7220100	R4BPGC028C15R010 KCU25S	4	0.110	2.80	0.551	14	1.142	29	0.004	0.10	8.0°	47°	•
7220102	R4BPGC040C10R010 KCU25S	4	0.158	4.00	0.354	9	0.945	24	0.004	0.10	8.0°	47°	•
7220104	R4BPGC040C20R010 KCU25S	4	0.158	4.00	0.748	19	1.339	34	0.004	0.10	8.0°	47°	•
7220106	R4BPGC040C2TR010 KCU25S	4	0.158	4.00	0.748	19	1.339	34	0.004	0.10	8.0°	47°	•
7220108	R5BPGC050C15R015 KCU25S	5	0.197	5.00	0.551	14	1.181	30	0.006	0.15	8.0°	47°	•
7220110	R5BPGC050C25R015 KCU25S	5	0.197	5.00	0.945	24	1.575	40	0.006	0.15	8.0°	47°	•
7220112	R5BPGC050C2TR015 KCU25S	5	0.197	5.00	0.945	24	1.181	30	0.006	0.15	8.0°	47°	•
7220114	R6BPGC060C22R015 KCU25S	6	0.236	6.00	0.827	21	1.457	37	0.006	0.15	8.0°	47°	•
7220116	R6BPGC060C30R015 KCU25S	6	0.236	6.00	1.142	29	1.772	45	0.006	0.15	8.0°	47°	•
7220118	R6BPGC060C3TR015 KCU25S	6	0.236	6.00	1.142	29	1.457	37	0.006	0.15	8.0°	47°	•



APPLICATIONS



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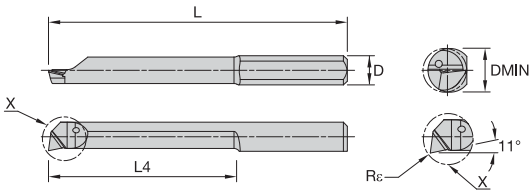
Boring & Profiling

GB

KCU25S

			DMIN		L4		L		Rε		ANGLE		
Order Number	Catalog Number	D	in	mm	in	mm	in	mm	in	mm	LEAD	RELIEF	
7220120	L4BPGB028C10R010 KCU25S	4	0.110	2.80	0.354	9	0.945	24	0.004	0.10	0.0°	20°	•
7220122	L4BPGB028C16R010 KCU25S	4	0.110	2.80	0.591	15	1.181	30	0.004	0.10	0.0°	20°	•
7220124	L4BPGB040C10R010 KCU25S	4	0.158	4.00	0.354	9	0.945	24	0.004	0.10	0.0°	20°	•
7220126	L4BPGB040C16R010 KCU25S	4	0.158	4.00	0.591	15	1.181	30	0.004	0.10	0.0°	20°	•
7220128	L4BPGB040C20R010 KCU25S	4	0.158	4.00	0.748	19	1.339	34	0.004	0.10	0.0°	20°	•
7220130	L5BPGB050C10R015 KCU25S	5	0.197	5.00	0.354	9	0.984	25	0.006	0.15	0.0°	20°	•
7220132	L5BPGB050C15R015 KCU25S	5	0.197	5.00	0.551	14	1.181	30	0.006	0.15	0.0°	20°	•
7220134	L5BPGB050C20R015 KCU25S	5	0.197	5.00	0.748	19	1.378	35	0.006	0.15	0.0°	20°	•
7220136	L5BPGB050C25R015 KCU25S	5	0.197	5.00	0.945	24	1.575	40	0.006	0.15	0.0°	20°	•
7220138	L6BPGB060C15R015 KCU25S	6	0.236	6.00	0.551	14	1.181	30	0.006	0.15	0.0°	20°	•
7220140	L6BPGB060C22R015 KCU25S	6	0.236	6.00	0.827	21	1.457	37	0.006	0.15	0.0°	20°	•
7220142	L6BPGB060C25R015 KCU25S	6	0.236	6.00	0.945	24	1.575	40	0.006	0.15	0.0°	20°	•
7220143	L6BPGB060C30R015 KCU25S	6	0.236	6.00	1.142	29	1.772	45	0.006	0.15	0.0°	20°	•
7220144	R4BPGB028C10R010 KCU25S	4	0.110	2.80	0.354	9	0.945	24	0.004	0.10	0.0°	20°	•
7220145	R4BPGB028C16R010 KCU25S	4	0.110	2.80	0.591	15	1.181	30	0.004	0.10	0.0°	20°	•
7220146	R4BPGB040C10R010 KCU25S	4	0.158	4.00	0.354	9	0.945	24	0.004	0.10	0.0°	20°	•
7220147	R4BPGB040C16R010 KCU25S	4	0.158	4.00	0.591	15	1.181	30	0.004	0.10	0.0°	20°	•
7220148	R4BPGB040C20R010 KCU25S	4	0.158	4.00	0.748	19	1.339	34	0.004	0.10	0.0°	20°	•
7220149	R5BPGB050C10R015 KCU25S	5	0.197	5.00	0.354	9	0.984	25	0.006	0.15	0.0°	20°	•
7220150	R5BPGB050C15R015 KCU25S	5	0.197	5.00	0.551	14	1.181	30	0.006	0.15	0.0°	20°	•
7220151	R5BPGB050C20R015 KCU25S	5	0.197	5.00	0.748	19	1.378	35	0.006	0.15	0.0°	20°	•
7220152	R5BPGB050C25R015 KCU25S	5	0.197	5.00	0.945	24	1.575	40	0.006	0.15	0.0°	20°	•



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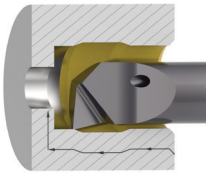

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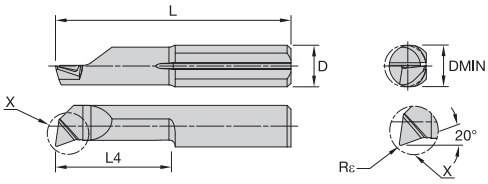
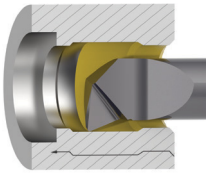
Boring & Profiling

ML • Medical Line

			DMIN		L4		L		Rε		ANGLE		KCSM25S
Order Number	Catalog Number	D	in	mm	in	mm	in	mm	in	mm	LEAD	RELIEF	
7233060	L4BPML005H02R002 KCSM25S	4	0.020	0.50	0.079	2	0.787	20	0.001	0.02	8.0°	11°	•
7233082	L4BPML008H04R002 KCSM25S	4	0.032	0.80	0.158	4	0.787	20	0.001	0.02	8.0°	11°	•
7233083	L4BPML010H05R002 KCSM25S	4	0.039	1.00	0.197	5	0.787	20	0.001	0.02	8.0°	11°	•
7233084	L4BPML010H07R002 KCSM25S	4	0.039	1.00	0.276	7	0.866	22	0.001	0.02	8.0°	11°	•
7233085	L4BPML015H05R002 KCSM25S	4	0.059	1.50	0.197	5	0.748	19	0.001	0.02	8.0°	11°	•
7233086	L4BPML015H10R002 KCSM25S	4	0.059	1.50	0.394	10	0.945	24	0.001	0.02	8.0°	11°	•
7233087	L4BPML020H05R002 KCSM25S	4	0.079	2.00	0.197	5	0.748	19	0.001	0.02	8.0°	11°	•
7233088	L4BPML020H10R002 KCSM25S	4	0.079	2.00	0.394	10	0.945	24	0.001	0.02	8.0°	11°	•
7233089	L4BPML025H05R002 KCSM25S	4	0.098	2.50	0.197	5	0.748	19	0.001	0.02	8.0°	11°	•
7233090	L4BPML025H10R002 KCSM25S	4	0.098	2.50	0.394	10	0.945	24	0.001	0.02	8.0°	11°	•
7233091	L4BPML030H10R002 KCSM25S	4	0.118	3.00	0.394	10	0.945	24	0.001	0.02	8.0°	11°	•
7233093	L4BPML030H16R002 KCSM25S	4	0.118	3.00	0.630	16	1.181	30	0.001	0.02	8.0°	11°	•
7233094	L4BPML035H10R002 KCSM25S	4	0.138	3.50	0.394	10	0.945	24	0.001	0.02	8.0°	11°	•
7233096	L4BPML035H16R002 KCSM25S	4	0.138	3.50	0.630	16	1.181	30	0.001	0.02	8.0°	11°	•
7233097	L4BPML035H20R002 KCSM25S	4	0.138	3.50	0.787	20	1.339	34	0.001	0.02	8.0°	11°	•
7233098	L4BPML040H10R002 KCSM25S	4	0.158	4.00	0.394	10	0.945	24	0.001	0.02	8.0°	11°	•
7233099	L4BPML040H16R002 KCSM25S	4	0.158	4.00	0.630	16	1.181	30	0.001	0.02	8.0°	11°	•
7233100	L4BPML040H20R002 KCSM25S	4	0.158	4.00	0.787	20	1.339	34	0.001	0.02	8.0°	11°	•
7233101	L4BPML040H24R002 KCSM25S	4	0.158	4.00	0.945	24	1.496	38	0.001	0.02	8.0°	11°	•
7233102	R4BPML005H02R002 KCSM25S	4	0.020	0.50	0.079	2	0.787	20	0.001	0.02	8.0°	11°	•
7233103	R4BPML008H04R002 KCSM25S	4	0.032	0.80	0.158	4	0.787	20	0.001	0.02	8.0°	11°	•
7233104	R4BPML010H05R002 KCSM25S	4	0.039	1.00	0.197	5	0.787	20	0.001	0.02	8.0°	11°	•
7233105	R4BPML010H07R002 KCSM25S	4	0.039	1.00	0.276	7	0.866	22	0.001	0.02	8.0°	11°	•
7233106	R4BPML015H05R002 KCSM25S	4	0.059	1.50	0.197	5	0.748	19	0.001	0.02	8.0°	11°	•
7233107	R4BPML015H10R002 KCSM25S	4	0.059	1.50	0.394	10	0.945	24	0.001	0.02	8.0°	11°	•
7233108	R4BPML020H05R002 KCSM25S	4	0.079	2.00	0.197	5	0.748	19	0.001	0.02	8.0°	11°	•
7233109	R4BPML020H10R002 KCSM25S	4	0.079	2.00	0.394	10	0.945	24	0.001	0.02	8.0°	11°	•
7233110	R4BPML025H05R002 KCSM25S	4	0.098	2.50	0.197	5	0.748	19	0.001	0.02	8.0°	11°	•
7233111	R4BPML025H10R002 KCSM25S	4	0.098	2.50	0.394	10	0.945	24	0.001	0.02	8.0°	11°	•
7233112	R4BPML030H10R002 KCSM25S	4	0.118	3.00	0.394	10	0.945	24	0.001	0.02	8.0°	11°	•
7233113	R4BPML030H16R002 KCSM25S	4	0.118	3.00	0.630	16	1.181	30	0.001	0.02	8.0°	11°	•
7233114	R4BPML035H10R002 KCSM25S	4	0.138	3.50	0.394	10	0.945	24	0.001	0.02	8.0°	11°	•
7233115	R4BPML035H16R002 KCSM25S	4	0.138	3.50	0.630	16	1.181	30	0.001	0.02	8.0°	11°	•
7233116	R4BPML035H20R002 KCSM25S	4	0.138	3.50	0.787	20	1.339	34	0.001	0.02	8.0°	11°	•
7233117	R4BPML040H10R002 KCSM25S	4	0.158	4.00	0.394	10	0.945	24	0.001	0.02	8.0°	11°	•
7233119	R4BPML040H16R002 KCSM25S	4	0.158	4.00	0.630	16	1.181	30	0.001	0.02	8.0°	11°	•
7233120	R4BPML040H20R002 KCSM25S	4	0.158	4.00	0.787	20	1.339	34	0.001	0.02	8.0°	11°	•
7233131	R4BPML040H24R002 KCSM25S	4	0.158	4.00	0.945	24	1.496	38	0.001	0.02	8.0°	11°	•



APPLICATIONS



● Primary
○ Secondary

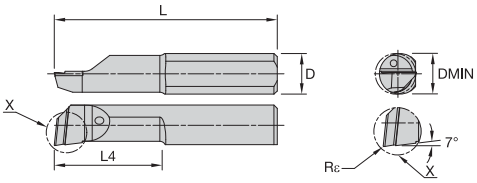
P			○
M			
K			○
N			
S			●
H			●

Boring & Profiling

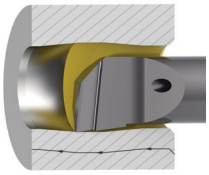
HM • Hardened Materials

KCHS25S

			DMIN		L4		L		Rε		ANGLE		
Order Number	Catalog Number	D	in	mm	in	mm	in	mm	in	mm	LEAD	RELIEF	
7233132	L4BPHM020C05R005 KCHS25S	4	0.079	2.00	0.197	5	0.748	19	0.002	0.05	8.0°	20°	•
7233134	L4BPHM020C10R005 KCHS25S	4	0.079	2.00	0.394	10	0.945	24	0.002	0.05	8.0°	20°	•
7233135	L4BPHM020C15R005 KCHS25S	4	0.079	2.00	0.591	15	1.142	29	0.002	0.05	8.0°	20°	•
7233136	L4BPHM028C10R010 KCHS25S	4	0.110	2.80	0.394	10	0.945	24	0.004	0.10	8.0°	20°	•
7233137	L4BPHM028C16R010 KCHS25S	4	0.110	2.80	0.630	16	1.181	30	0.004	0.10	8.0°	20°	•
7233151	L4BPHM028C20R010 KCHS25S	4	0.110	2.80	0.787	20	1.339	34	0.004	0.10	8.0°	20°	•
7233152	L4BPHM040C10R010 KCHS25S	4	0.158	4.00	0.394	10	0.945	24	0.004	0.10	8.0°	20°	•
7233153	L4BPHM040C16R010 KCHS25S	4	0.158	4.00	0.630	16	1.181	30	0.004	0.10	8.0°	20°	•
7233154	L4BPHM040C20R010 KCHS25S	4	0.158	4.00	0.787	20	1.339	34	0.004	0.10	8.0°	20°	•
7233156	L4BPHM040C24R010 KCHS25S	4	0.158	4.00	0.945	24	1.496	38	0.004	0.10	8.0°	20°	•
7233157	L4BPHM040C28R010 KCHS25S	4	0.158	4.00	1.102	28	1.654	42	0.004	0.10	8.0°	20°	•
7233158	L5BPHM050C10R015 KCHS25S	5	0.197	5.00	0.394	10	0.984	25	0.006	0.15	8.0°	20°	•
7233159	L5BPHM050C15R015 KCHS25S	5	0.197	5.00	0.591	15	1.181	30	0.006	0.15	8.0°	20°	•
7233160	L5BPHM050C20R015 KCHS25S	5	0.197	5.00	0.787	20	1.378	35	0.006	0.15	8.0°	20°	•
7233161	L5BPHM050C25R015 KCHS25S	5	0.197	5.00	0.984	25	1.575	40	0.006	0.15	8.0°	20°	•
7233162	L5BPHM050C30R015 KCHS25S	5	0.197	5.00	1.181	30	1.772	45	0.006	0.15	8.0°	20°	•
7233163	L5BPHM050C35R015 KCHS25S	5	0.197	5.00	1.378	35	1.969	50	0.006	0.15	8.0°	20°	•
7233164	L6BPHM060C15R015 KCHS25S	6	0.236	6.00	0.591	15	1.181	30	0.006	0.15	8.0°	20°	•
7233165	L6BPHM060C22R015 KCHS25S	6	0.236	6.00	0.866	22	1.457	37	0.006	0.15	8.0°	20°	•
7233166	L6BPHM060C25R015 KCHS25S	6	0.236	6.00	0.984	25	1.575	40	0.006	0.15	8.0°	20°	•
7233167	L6BPHM060C30R015 KCHS25S	6	0.236	6.00	1.181	30	1.772	45	0.006	0.15	8.0°	20°	•
7233168	L6BPHM060C35R015 KCHS25S	6	0.236	6.00	1.378	35	1.969	50	0.006	0.15	8.0°	20°	•
7233169	L6BPHM060C42R015 KCHS25S	6	0.236	6.00	1.654	42	2.244	57	0.006	0.15	8.0°	20°	•
7233170	L7BPHM068C20R015 KCHS25S	7	0.268	6.80	0.787	20	1.378	35	0.006	0.15	8.0°	20°	•
7233171	L7BPHM068C25R015 KCHS25S	7	0.268	6.80	0.984	25	1.575	40	0.006	0.15	8.0°	20°	•
7233172	L7BPHM068C30R015 KCHS25S	7	0.268	6.80	1.181	30	1.772	45	0.006	0.15	8.0°	20°	•
7233173	L7BPHM068C35R015 KCHS25S	7	0.268	6.80	1.378	35	1.969	50	0.006	0.15	8.0°	20°	•
7233174	L7BPHM068C40R015 KCHS25S	7	0.268	6.80	1.575	40	2.165	55	0.006	0.15	8.0°	20°	•
7233175	L7BPHM068C45R015 KCHS25S	7	0.268	6.80	1.772	45	2.362	60	0.006	0.15	8.0°	20°	•
7233176	L7BPHM068C50R015 KCHS25S	7	0.268	6.80	1.969	50	2.559	65	0.006	0.15	8.0°	20°	•
7233177	R4BPHM020C05R005 KCHS25S	4	0.079	2.00	0.197	5	0.748	19	0.002	0.05	8.0°	20°	•
7233179	R4BPHM020C10R005 KCHS25S	4	0.079	2.00	0.394	10	0.945	24	0.002	0.05	8.0°	20°	•
7233180	R4BPHM020C15R005 KCHS25S	4	0.079	2.00	0.591	15	1.142	29	0.002	0.05	8.0°	20°	•
7233181	R4BPHM028C10R010 KCHS25S	4	0.110	2.80	0.394	10	0.945	24	0.004	0.10	8.0°	20°	•
7233183	R4BPHM028C16R010 KCHS25S	4	0.110	2.80	0.630	16	1.181	30	0.004	0.10	8.0°	20°	•
7233184	R4BPHM028C20R010 KCHS25S	4	0.110	2.80	0.787	20	1.339	34	0.004	0.10	8.0°	20°	•
7233185	R4BPHM040C10R010 KCHS25S	4	0.158	4.00	0.394	10	0.945	24	0.004	0.10	8.0°	20°	•
7233186	R4BPHM040C16R010 KCHS25S	4	0.158	4.00	0.630	16	1.181	30	0.004	0.10	8.0°	20°	•
7233187	R4BPHM040C20R010 KCHS25S	4	0.158	4.00	0.787	20	1.339	34	0.004	0.10	8.0°	20°	•
7233188	R4BPHM040C24R010 KCHS25S	4	0.158	4.00	0.945	24	1.496	38	0.004	0.10	8.0°	20°	•
7233189	R4BPHM040C28R010 KCHS25S	4	0.158	4.00	1.102	28	1.654	42	0.004	0.10	8.0°	20°	•
7233191	R5BPHM050C10R015 KCHS25S	5	0.197	5.00	0.394	10	0.984	25	0.006	0.15	8.0°	20°	•
7233192	R5BPHM050C15R015 KCHS25S	5	0.197	5.00	0.591	15	1.181	30	0.006	0.15	8.0°	20°	•
7233193	R5BPHM050C20R015 KCHS25S	5	0.197	5.00	0.787	20	1.378	35	0.006	0.15	8.0°	20°	•
7233194	R5BPHM050C25R015 KCHS25S	5	0.197	5.00	0.984	25	1.575	40	0.006	0.15	8.0°	20°	•
7233195	R5BPHM050C30R015 KCHS25S	5	0.197	5.00	1.181	30	1.772	45	0.006	0.15	8.0°	20°	•
7233196	R5BPHM050C35R015 KCHS25S	5	0.197	5.00	1.378	35	1.969	50	0.006	0.15	8.0°	20°	•
7233200	R6BPHM060C25R015 KCHS25S	6	0.236	6.00	0.984	25	1.575	40	0.006	0.15	8.0°	20°	•
7233201	R6BPHM060C30R015 KCHS25S	6	0.236	6.00	1.181	30	1.772	45	0.006	0.15	8.0°	20°	•
7233202	R6BPHM060C35R015 KCHS25S	6	0.236	6.00	1.378	35	1.969	50	0.006	0.15	8.0°	20°	•
7233203	R6BPHM060C42R015 KCHS25S	6	0.236	6.00	1.654	42	2.244	57	0.006	0.15	8.0°	20°	•
7233197	R6BPHM060C15R015 KCHS25S	6	0.236	6.00	0.590	15	1.181	30	0.006	0.15	8.0°	20°	•
7233199	R6BPHM060C22R015 KCHS25S	6	0.236	6.00	0.866	22	1.456	37	0.006	0.15	8.0°	20°	•
7233204	R7BPHM068C20R015 KCHS25S	7	0.268	6.80	0.787	20	1.378	35	0.006	0.15	8.0°	20°	•
7233205	R7BPHM068C25R015 KCHS25S	7	0.268	6.80	0.984	25	1.575	40	0.006	0.15	8.0°	20°	•
7233206	R7BPHM068C30R015 KCHS25S	7	0.268	6.80	1.181	30	1.772	45	0.006	0.15	8.0°	20°	•
7233207	R7BPHM068C35R015 KCHS25S	7	0.268	6.80	1.378	35	1.969	50	0.006	0.15	8.0°	20°	•
7233208	R7BPHM068C40R015 KCHS25S	7	0.268	6.80	1.575	40	2.165	55	0.006	0.15	8.0°	20°	•
7233209	R7BPHM068C45R015 KCHS25S	7	0.268	6.80	1.772	45	2.362	60	0.006	0.15	8.0°	20°	•
7233210	R7BPHM068C50R015 KCHS25S	7	0.268	6.80	1.969	50	2.559	65	0.006	0.15	8.0°	20°	•



APPLICATIONS



P	●
M	●
K	○
N	
S	
H	

● Primary
○ Secondary

Boring & Profiling

HP • High Performance

			DMIN		L4		L		Rε		ANGLE		KCPM25S
Order Number	Catalog Number	D	in	mm	in	mm	in	mm	in	mm	LEAD	RELIEF	
7232827	L4BPHP010H05R005 KCPM25S	4	0.039	1.00	0.197	5	0.787	20	0.002	0.05	6.0°	7.0°	•
7232828	L4BPHP015H07R010 KCPM25S	4	0.059	1.50	0.276	7	0.827	21	0.004	0.10	6.0°	7.0°	•
7232829	L4BPHP020H05R015 KCPM25S	4	0.079	2.00	0.197	5	0.748	19	0.006	0.15	6.0°	7.0°	•
7232830	L4BPHP020H10R005 KCPM25S	4	0.079	2.00	0.394	10	0.945	24	0.002	0.05	6.0°	7.0°	•
7232851	L4BPHP020H10R015 KCPM25S	4	0.079	2.00	0.394	10	0.945	24	0.006	0.15	6.0°	7.0°	•
7232852	L4BPHP020H15R015 KCPM25S	4	0.079	2.00	0.591	15	1.142	29	0.006	0.15	6.0°	7.0°	•
7232853	L4BPHP030H10R005 KCPM25S	4	0.118	3.00	0.394	10	0.945	24	0.002	0.05	6.0°	7.0°	•
7232855	L4BPHP030H10R020 KCPM25S	4	0.118	3.00	0.394	10	0.945	24	0.008	0.20	6.0°	7.0°	•
7232856	L4BPHP030H16R005 KCPM25S	4	0.118	3.00	0.630	16	1.181	30	0.002	0.05	6.0°	7.0°	•
7232857	L4BPHP030H16R010 KCPM25S	4	0.118	3.00	0.630	16	1.181	30	0.004	0.10	6.0°	7.0°	•
7232858	L4BPHP030H16R020 KCPM25S	4	0.118	3.00	0.630	16	1.181	30	0.008	0.20	6.0°	7.0°	•
7232859	L4BPHP040H10R010 KCPM25S	4	0.158	4.00	0.394	10	0.945	24	0.004	0.10	6.0°	7.0°	•
7232860	L4BPHP040H10R020 KCPM25S	4	0.158	4.00	0.394	10	0.945	24	0.008	0.20	6.0°	7.0°	•
7232861	L4BPHP040H16R005 KCPM25S	4	0.158	4.00	0.630	16	1.181	30	0.002	0.05	6.0°	7.0°	•
7232862	L4BPHP040H16R010 KCPM25S	4	0.158	4.00	0.630	16	1.181	30	0.004	0.10	6.0°	7.0°	•
7232863	L4BPHP040H16R020 KCPM25S	4	0.158	4.00	0.630	16	1.181	30	0.008	0.20	6.0°	7.0°	•
7232864	L4BPHP040H16R040 KCPM25S	4	0.158	4.00	0.630	16	1.181	30	0.016	0.40	6.0°	7.0°	•
7232865	L4BPHP040H24R010 KCPM25S	4	0.158	4.00	0.945	24	1.496	38	0.004	0.10	6.0°	7.0°	•
7232866	L4BPHP040H24R020 KCPM25S	4	0.158	4.00	0.945	24	1.496	38	0.008	0.20	6.0°	7.0°	•
7232867	L4BPHP040H24R040 KCPM25S	4	0.158	4.00	0.945	24	1.496	38	0.016	0.40	6.0°	7.0°	•
7232868	L5BPHP050H15R005 KCPM25S	5	0.197	5.00	0.591	15	1.181	30	0.002	0.05	6.0°	7.0°	•
7232869	L5BPHP050H15R010 KCPM25S	5	0.197	5.00	0.591	15	1.181	30	0.004	0.10	6.0°	7.0°	•
7232870	L5BPHP050H15R020 KCPM25S	5	0.197	5.00	0.591	15	1.181	30	0.008	0.20	6.0°	7.0°	•
7232871	L5BPHP050H15R040 KCPM25S	5	0.197	5.00	0.591	15	1.181	30	0.016	0.40	6.0°	7.0°	•
7232872	L5BPHP050H25R010 KCPM25S	5	0.197	5.00	0.984	25	1.575	40	0.004	0.10	6.0°	7.0°	•
7232873	L5BPHP050H25R020 KCPM25S	5	0.197	5.00	0.984	25	1.575	40	0.008	0.20	6.0°	7.0°	•
7232874	L5BPHP050H30R010 KCPM25S	5	0.197	5.00	1.181	30	1.772	45	0.004	0.10	6.0°	7.0°	•
7232875	L5BPHP050H30R020 KCPM25S	5	0.197	5.00	1.181	30	1.772	45	0.008	0.20	6.0°	7.0°	•
7232876	L5BPHP050H30R040 KCPM25S	5	0.197	5.00	1.181	30	1.772	45	0.016	0.40	6.0°	7.0°	•
7232877	L6BPHP060H15R005 KCPM25S	6	0.236	6.00	0.591	15	1.181	30	0.002	0.05	6.0°	7.0°	•
7232878	L6BPHP060H15R010 KCPM25S	6	0.236	6.00	0.591	15	1.181	30	0.004	0.10	6.0°	7.0°	•
7232879	L6BPHP060H15R020 KCPM25S	6	0.236	6.00	0.591	15	1.181	30	0.008	0.20	6.0°	7.0°	•
7232880	L6BPHP060H15R040 KCPM25S	6	0.236	6.00	0.591	15	1.181	30	0.016	0.40	6.0°	7.0°	•
7232881	L6BPHP060H22R020 KCPM25S	6	0.236	6.00	0.866	22	1.457	37	0.008	0.20	6.0°	7.0°	•
7232882	L6BPHP060H30R020 KCPM25S	6	0.236	6.00	1.181	30	1.772	45	0.008	0.20	6.0°	7.0°	•
7232883	L6BPHP060H30R040 KCPM25S	6	0.236	6.00	1.181	30	1.772	45	0.016	0.40	6.0°	7.0°	•
7232884	L6BPHP060H35R020 KCPM25S	6	0.236	6.00	1.378	35	1.969	50	0.008	0.20	6.0°	7.0°	•
7232885	L6BPHP060H42R020 KCPM25S	6	0.236	6.00	1.653	42	2.244	57	0.008	0.20	6.0°	7.0°	•
7232886	L6BPHP060H50R020 KCPM25S	6	0.236	6.00	1.968	50	2.559	65	0.008	0.20	6.0°	7.0°	•
7232887	L7BPHP070H25R020 KCPM25S	7	0.276	7.00	0.984	25	1.575	40	0.008	0.20	6.0°	7.0°	•
7232888	L7BPHP070H30R020 KCPM25S	7	0.276	7.00	1.181	30	1.772	45	0.008	0.20	6.0°	7.0°	•
7232889	L7BPHP070H30R040 KCPM25S	7	0.276	7.00	1.181	30	1.772	45	0.016	0.40	6.0°	7.0°	•
7232890	L7BPHP070H35R020 KCPM25S	7	0.276	7.00	1.378	35	1.969	50	0.008	0.20	6.0°	7.0°	•
7232891	L7BPHP070H40R020 KCPM25S	7	0.276	7.00	1.575	40	2.165	55	0.008	0.20	6.0°	7.0°	•
7232892	L7BPHP070H45R020 KCPM25S	7	0.276	7.00	1.772	45	2.362	60	0.008	0.20	6.0°	7.0°	•
7232893	L7BPHP070H50R020 KCPM25S	7	0.276	7.00	1.969	50	2.559	65	0.008	0.20	6.0°	7.0°	•

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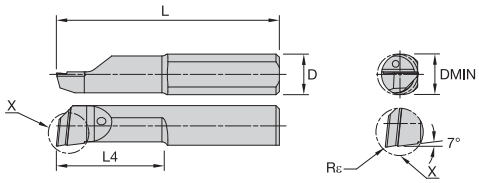
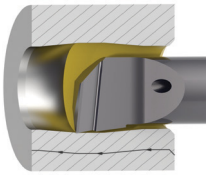


APPLICATIONS



P	●
M	●
K	○
N	
S	
H	

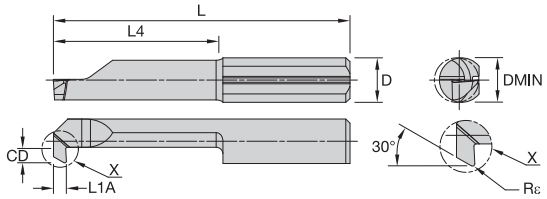
● Primary
○ Secondary

Boring & Profiling Continued

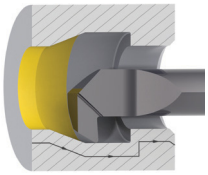
HP • High Performance

KCPM25S

			DMIN		L4		L		Rε		ANGLE		
Order Number	Catalog Number	D	in	mm	in	mm	in	mm	in	mm	LEAD	RELIEF	
7232894	R4BPHP010H05R005 KCPM25S	4	0.039	1.00	0.197	5	0.787	20	0.002	0.05	6.0°	7.0°	•
7232895	R4BPHP015H07R010 KCPM25S	4	0.059	1.50	0.276	7	0.827	21	0.004	0.10	6.0°	7.0°	•
7232896	R4BPHP020H05R015 KCPM25S	4	0.079	2.00	0.197	5	0.748	19	0.006	0.15	6.0°	7.0°	•
7232897	R4BPHP020H10R005 KCPM25S	4	0.079	2.00	0.394	10	0.945	24	0.002	0.05	6.0°	7.0°	•
7232898	R4BPHP020H10R015 KCPM25S	4	0.079	2.00	0.394	10	0.945	24	0.006	0.15	6.0°	7.0°	•
7232899	R4BPHP020H15R015 KCPM25S	4	0.079	2.00	0.591	15	1.142	29	0.006	0.15	6.0°	7.0°	•
7232900	R4BPHP030H10R005 KCPM25S	4	0.118	3.00	0.394	10	0.945	24	0.002	0.05	6.0°	7.0°	•
7232911	R4BPHP030H10R020 KCPM25S	4	0.118	3.00	0.394	10	0.945	24	0.008	0.20	6.0°	7.0°	•
7232912	R4BPHP030H16R005 KCPM25S	4	0.118	3.00	0.630	16	1.181	30	0.002	0.05	6.0°	7.0°	•
7232913	R4BPHP030H16R010 KCPM25S	4	0.118	3.00	0.630	16	1.181	30	0.004	0.10	6.0°	7.0°	•
7232914	R4BPHP030H16R020 KCPM25S	4	0.118	3.00	0.630	16	1.181	30	0.008	0.20	6.0°	7.0°	•
7232915	R4BPHP040H10R010 KCPM25S	4	0.158	4.00	0.394	10	0.945	24	0.004	0.10	6.0°	7.0°	•
7232916	R4BPHP040H10R020 KCPM25S	4	0.158	4.00	0.394	10	0.945	24	0.008	0.20	6.0°	7.0°	•
7232917	R4BPHP040H16R005 KCPM25S	4	0.158	4.00	0.630	16	1.181	30	0.002	0.05	6.0°	7.0°	•
7232918	R4BPHP040H16R010 KCPM25S	4	0.158	4.00	0.630	16	1.181	30	0.004	0.10	6.0°	7.0°	•
7232919	R4BPHP040H16R020 KCPM25S	4	0.158	4.00	0.630	16	1.181	30	0.008	0.20	6.0°	7.0°	•
7232920	R4BPHP040H16R040 KCPM25S	4	0.158	4.00	0.630	16	1.181	30	0.016	0.40	6.0°	7.0°	•
7232921	R4BPHP040H24R010 KCPM25S	4	0.158	4.00	0.945	24	1.496	38	0.004	0.10	6.0°	7.0°	•
7232922	R4BPHP040H24R020 KCPM25S	4	0.158	4.00	0.945	24	1.496	38	0.008	0.20	6.0°	7.0°	•
7232923	R4BPHP040H24R040 KCPM25S	4	0.158	4.00	0.945	24	1.496	38	0.016	0.40	6.0°	7.0°	•
7232924	R5BPHP050H15R005 KCPM25S	5	0.197	5.00	0.591	15	1.181	30	0.002	0.05	6.0°	7.0°	•
7232925	R5BPHP050H15R010 KCPM25S	5	0.197	5.00	0.591	15	1.181	30	0.004	0.10	6.0°	7.0°	•
7232926	R5BPHP050H15R020 KCPM25S	5	0.197	5.00	0.591	15	1.181	30	0.008	0.20	6.0°	7.0°	•
7232927	R5BPHP050H15R040 KCPM25S	5	0.197	5.00	0.591	15	1.181	30	0.016	0.40	6.0°	7.0°	•
7232928	R5BPHP050H25R010 KCPM25S	5	0.197	5.00	0.984	25	1.575	40	0.004	0.10	6.0°	7.0°	•
7232929	R5BPHP050H25R020 KCPM25S	5	0.197	5.00	0.984	25	1.575	40	0.008	0.20	6.0°	7.0°	•
7232930	R5BPHP050H30R010 KCPM25S	5	0.197	5.00	1.181	30	1.772	45	0.004	0.10	6.0°	7.0°	•
7232941	R5BPHP050H30R020 KCPM25S	5	0.197	5.00	1.181	30	1.772	45	0.008	0.20	6.0°	7.0°	•
7232942	R5BPHP050H30R040 KCPM25S	5	0.197	5.00	1.181	30	1.772	45	0.016	0.40	6.0°	7.0°	•
7232943	R6BPHP060H15R005 KCPM25S	6	0.236	6.00	0.591	15	1.181	30	0.002	0.05	6.0°	7.0°	•
7232944	R6BPHP060H15R010 KCPM25S	6	0.236	6.00	0.591	15	1.181	30	0.004	0.10	6.0°	7.0°	•
7232945	R6BPHP060H15R020 KCPM25S	6	0.236	6.00	0.591	15	1.181	30	0.008	0.20	6.0°	7.0°	•
7232946	R6BPHP060H15R040 KCPM25S	6	0.236	6.00	0.591	15	1.181	30	0.016	0.40	6.0°	7.0°	•
7232947	R6BPHP060H22R020 KCPM25S	6	0.236	6.00	0.866	22	1.457	37	0.008	0.20	6.0°	7.0°	•
7232948	R6BPHP060H30R020 KCPM25S	6	0.236	6.00	1.181	30	1.772	45	0.008	0.20	6.0°	7.0°	•
7232949	R6BPHP060H30R040 KCPM25S	6	0.236	6.00	1.181	30	1.772	45	0.016	0.40	6.0°	7.0°	•
7232950	R6BPHP060H35R020 KCPM25S	6	0.236	6.00	1.378	35	1.969	50	0.008	0.20	6.0°	7.0°	•
7232951	R6BPHP060H42R020 KCPM25S	6	0.236	6.00	1.653	42	2.244	57	0.008	0.20	6.0°	7.0°	•
7232952	R6BPHP060H50R020 KCPM25S	6	0.236	6.00	1.968	50	2.559	65	0.008	0.20	6.0°	7.0°	•
7232953	R7BPHP070H25R020 KCPM25S	7	0.276	7.00	0.984	25	1.575	40	0.008	0.20	6.0°	7.0°	•
7232954	R7BPHP070H30R020 KCPM25S	7	0.276	7.00	1.181	30	1.772	45	0.008	0.20	6.0°	7.0°	•
7232955	R7BPHP070H30R040 KCPM25S	7	0.276	7.00	1.181	30	1.772	45	0.016	0.40	6.0°	7.0°	•
7232956	R7BPHP070H35R020 KCPM25S	7	0.276	7.00	1.378	35	1.969	50	0.008	0.20	6.0°	7.0°	•
7232957	R7BPHP070H40R020 KCPM25S	7	0.276	7.00	1.575	40	2.165	55	0.008	0.20	6.0°	7.0°	•
7232958	R7BPHP070H45R020 KCPM25S	7	0.276	7.00	1.772	45	2.362	60	0.008	0.20	6.0°	7.0°	•
7232959	R7BPHP070H50R020 KCPM25S	7	0.276	7.00	1.969	50	2.559	65	0.008	0.20	6.0°	7.0°	•



APPLICATIONS



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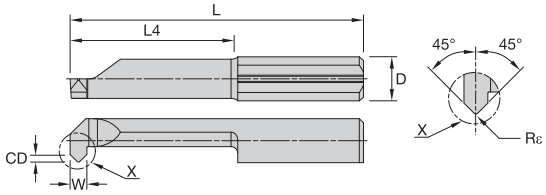
● Primary
○ Secondary

Back Boring

BB

KCU25S

		CD			DMIN		L4		L		Rε		W		ANGLE		
Order Number	Catalog Number	in	mm	D	in	mm	in	mm	in	mm	in	mm	in	mm	LEAD	RELIEF	
7221350	L4BB15030C15R010 KCU25S	0.020	0.50	4	0.118	3	1.181	30	0.532	13.50	0.004	0.10	0.059	1.50	3.0°	30°	•
7221411	L4BB15030C20R010 KCU25S	0.020	0.50	4	0.118	3	1.339	34	0.728	18.50	0.004	0.10	0.059	1.50	3.0°	30°	•
7221413	L4BB15040C15R015 KCU25S	0.031	0.80	4	0.158	4	1.181	30	0.532	13.50	0.006	0.15	0.059	1.50	3.0°	30°	•
7221414	L4BB15040C25R015 KCU25S	0.031	0.80	4	0.158	4	1.535	39	0.925	23.50	0.006	0.15	0.059	1.50	3.0°	30°	•
7221415	L5BB15050C20R020 KCU25S	0.039	1.00	5	0.197	5	1.378	35	0.728	18.50	0.008	0.20	0.059	1.50	3.0°	30°	•
7221416	L5BB15050C30R020 KCU25S	0.039	1.00	5	0.197	5	1.772	45	1.122	28.50	0.008	0.20	0.059	1.50	3.0°	30°	•
7221417	L6BB15060C20R020 KCU25S	0.071	1.80	6	0.236	6	1.378	35	0.728	18.50	0.008	0.20	0.059	1.50	3.0°	30°	•
7221418	L6BB15060C30R020 KCU25S	0.071	1.80	6	0.236	6	1.772	45	1.122	28.50	0.008	0.20	0.059	1.50	3.0°	30°	•
7221419	L7BB15070C20R020 KCU25S	0.098	2.50	7	0.276	7	1.378	35	0.728	18.50	0.008	0.20	0.059	1.50	3.0°	30°	•
7221420	L7BB15070C30R020 KCU25S	0.098	2.50	7	0.276	7	1.772	45	1.122	28.50	0.008	0.20	0.059	1.50	3.0°	30°	•
7221421	R4BB15030C15R010 KCU25S	0.020	0.50	4	0.118	3	1.181	30	0.532	13.50	0.004	0.10	0.059	1.50	3.0°	30°	•
7221422	R4BB15030C20R010 KCU25S	0.020	0.50	4	0.118	3	1.339	34	0.728	18.50	0.004	0.10	0.059	1.50	3.0°	30°	•
7221423	R4BB15040C15R015 KCU25S	0.031	0.80	4	0.158	4	1.181	30	0.532	13.50	0.006	0.15	0.059	1.50	3.0°	30°	•
7221424	R4BB15040C25R015 KCU25S	0.031	0.80	4	0.158	4	1.535	39	0.925	23.50	0.006	0.15	0.059	1.50	3.0°	30°	•
7221425	R5BB15050C20R020 KCU25S	0.039	1.00	5	0.197	5	1.378	35	0.728	18.50	0.008	0.20	0.059	1.50	3.0°	30°	•
7221426	R5BB15050C30R020 KCU25S	0.039	1.00	5	0.197	5	1.772	45	1.122	28.50	0.008	0.20	0.059	1.50	3.0°	30°	•
7221427	R6BB15060C20R020 KCU25S	0.071	1.80	6	0.236	6	1.378	35	0.728	18.50	0.008	0.20	0.059	1.50	3.0°	30°	•
7221428	R6BB15060C30R020 KCU25S	0.071	1.80	6	0.236	6	1.772	45	1.122	28.50	0.008	0.20	0.059	1.50	3.0°	30°	•
7221429	R7BB15070C20R020 KCU25S	0.098	2.50	7	0.276	7	1.378	35	0.728	18.50	0.008	0.20	0.059	1.50	3.0°	30°	•
7221430	R7BB15070C30R020 KCU25S	0.098	2.50	7	0.276	7	1.772	45	1.122	28.50	0.008	0.20	0.059	1.50	3.0°	30°	•



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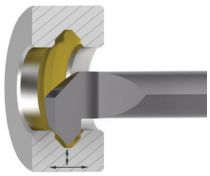

P	●
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K	○
N	○
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H	

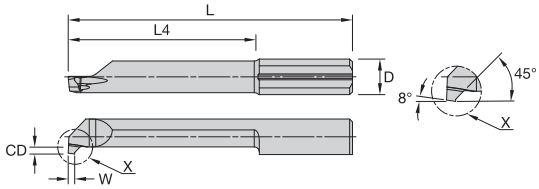
● Primary
○ Secondary

Boring & Chamfering

BC

KCU25S

		CD		DMIN		L4		L		Rε		W		ANGLE		
Order Number	Catalog Number	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	LEAD	RELIEF	
7219478	L4BC12030C10R020 KCU25S	0.016	0.40	0.118	3.00	0.394	10	0.945	24	0.008	0.20	0.047	1.20	45°	45°	•
7219481	L4BC15040C16R020 KCU25S	0.020	0.50	0.158	4.00	0.630	16	1.181	30	0.008	0.20	0.059	1.50	45°	45°	•
7219483	L5BC20050C15R020 KCU25S	0.028	0.70	0.197	5.00	0.591	15	1.181	30	0.008	0.20	0.079	2.00	45°	45°	•
7219485	L5BC20050C20R020 KCU25S	0.028	0.70	0.197	5.00	0.787	20	1.378	35	0.008	0.20	0.079	2.00	45°	45°	•
7219487	L6BC20060C20R020 KCU25S	0.028	0.70	0.236	6.00	0.787	20	1.378	35	0.008	0.20	0.079	2.00	45°	45°	•
7219490	L6BC20060C25R020 KCU25S	0.028	0.70	0.236	6.00	0.984	25	1.575	40	0.008	0.20	0.079	2.00	45°	45°	•
7219492	L7BC20068C20R020 KCU25S	0.028	0.70	0.268	6.80	0.787	20	1.378	35	0.008	0.20	0.079	2.00	45°	45°	•
7219493	L7BC20068C40R020 KCU25S	0.028	0.70	0.268	6.80	1.575	40	2.165	55	0.008	0.20	0.079	2.00	45°	45°	•
7219494	R4BC12030C10R020 KCU25S	0.016	0.40	0.118	3.00	0.394	10	0.945	24	0.008	0.20	0.047	1.20	45°	45°	•
7219495	R4BC15040C16R020 KCU25S	0.020	0.50	0.158	4.00	0.630	16	1.181	30	0.008	0.20	0.059	1.50	45°	45°	•
7219496	R5BC20050C15R020 KCU25S	0.028	0.70	0.197	5.00	0.591	15	1.181	30	0.008	0.20	0.079	2.00	45°	45°	•
7219497	R5BC20050C20R020 KCU25S	0.028	0.70	0.197	5.00	0.787	20	1.378	35	0.008	0.20	0.079	2.00	45°	45°	•
7219498	R6BC20060C20R020 KCU25S	0.028	0.70	0.236	6.00	0.787	20	1.378	35	0.008	0.20	0.079	2.00	45°	45°	•
7219499	R6BC20060C25R020 KCU25S	0.028	0.70	0.236	6.00	0.984	25	1.575	40	0.008	0.20	0.079	2.00	45°	45°	•
7219511	R7BC20068C20R020 KCU25S	0.028	0.70	0.268	6.80	0.787	20	1.378	35	0.008	0.20	0.079	2.00	45°	45°	•
7219512	R7BC20068C40R020 KCU25S	0.028	0.70	0.268	6.80	1.575	40	2.165	55	0.008	0.20	0.079	2.00	45°	45°	•



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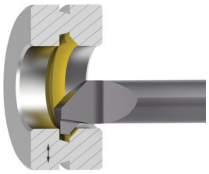

P	●
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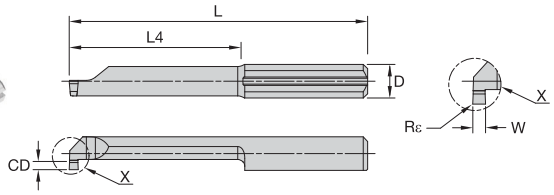
H	

● Primary
○ Secondary

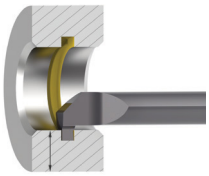
Pre-Groove

PG

		CD			DMIN		L4		L		W		ANGLE		KCU25S
Order Number	Catalog Number	in	mm	D	in	mm	in	mm	in	mm	in	mm	LEAD	RELIEF	
7219513	L4PG10040C10R000 KCU25S	0.032	0.80	4	0.158	4	0.394	10	0.984	25	0.039	1	8.0°	45°	•
7219514	L4PG10040C16R000 KCU25S	0.032	0.80	4	0.158	4	0.630	16	1.181	30	0.039	1	8.0°	45°	•
7219515	L5PG10050C15R000 KCU25S	0.039	1.00	5	0.197	5	0.591	15	1.181	30	0.039	1	8.0°	45°	•
7219517	L5PG10050C20R000 KCU25S	0.039	1.00	5	0.197	5	0.787	20	1.378	35	0.039	1	8.0°	45°	•
7219518	L5PG10050C30R000 KCU25S	0.039	1.00	5	0.197	5	1.181	30	1.772	45	0.039	1	8.0°	45°	•
7219519	L6PG10060C30R000 KCU25S	0.039	1.00	6	0.236	6	1.181	30	1.772	45	0.039	1	8.0°	45°	•
7219520	L6PG10060C42R000 KCU25S	0.039	1.00	6	0.236	6	1.654	42	2.244	57	0.039	1	8.0°	45°	•
7219541	R4PG10040C10R000 KCU25S	0.032	0.80	4	0.158	4	0.394	10	0.984	25	0.039	1	8.0°	45°	•
7219542	R4PG10040C16R000 KCU25S	0.032	0.80	4	0.158	4	0.630	16	1.181	30	0.039	1	8.0°	45°	•
7219544	R5PG10050C15R000 KCU25S	0.039	1.00	5	0.197	5	0.591	15	1.181	30	0.039	1	8.0°	45°	•
7219546	R5PG10050C20R000 KCU25S	0.039	1.00	5	0.197	5	0.787	20	1.378	35	0.039	1	8.0°	45°	•
7219548	R5PG10050C30R000 KCU25S	0.039	1.00	5	0.197	5	1.181	30	1.772	45	0.039	1	8.0°	45°	•
7219550	R6PG10060C30R000 KCU25S	0.039	1.00	6	0.236	6	1.181	30	1.772	45	0.039	1	8.0°	45°	•
7219552	R6PG10060C42R000 KCU25S	0.039	1.00	6	0.236	6	1.654	42	2.244	57	0.039	1	8.0°	45°	•



APPLICATIONS



P	●
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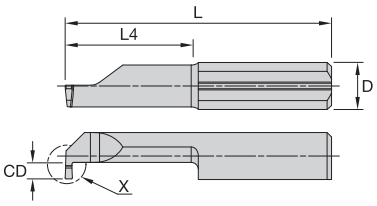
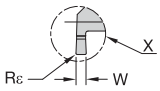
● Primary
○ Secondary

Grooving

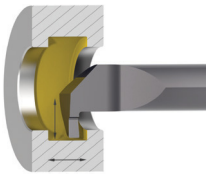
Sharp Corner • GS

		CD			DMIN		L4		L		Rε		W		KCU25S
Order Number	Catalog Number	in	mm	D	in	mm	in	mm	in	mm	in	mm	in	mm	
7221431	L4GS03010C04R000 KCU25S	0.008	0.20	4	0.039	1	0.158	4	0.787	20	0	0	0.012	0.30	•
7221432	L4GS03010C07R000 KCU25S	0.008	0.20	4	0.039	1	0.276	7	0.866	22	0	0	0.012	0.30	•
7221433	L4GS04015C05R000 KCU25S	0.016	0.40	4	0.059	1.5	0.197	5	0.866	22	0	0	0.016	0.40	•
7221434	L4GS04015C10R000 KCU25S	0.016	0.40	4	0.059	1.5	0.394	10	0.984	25	0	0	0.016	0.40	•
7221435	L4GS04015C12R000 KCU25S	0.016	0.40	4	0.059	1.5	0.472	12	1.063	27	0	0	0.016	0.40	•
7221436	L4GS05020C05R000 KCU25S	0.016	0.40	4	0.079	2	0.197	5	0.945	24	0	0	0.020	0.50	•
7221437	L4GS05020C10R000 KCU25S	0.016	0.40	4	0.079	2	0.394	10	0.945	24	0	0	0.020	0.50	•
7221438	L4GS05020C15R000 KCU25S	0.024	0.60	4	0.079	2	0.591	15	0.748	19	0	0	0.020	0.50	•
7221443	L4GS05040C10R000 KCU25S	0.031	0.80	4	0.158	4	0.394	10	0.945	24	0	0	0.020	0.50	•
7221444	L4GS05040C16R000 KCU25S	0.031	0.80	4	0.158	4	0.630	16	1.181	30	0	0	0.020	0.50	•
7221445	L4GS05040C20R000 KCU25S	0.031	0.80	4	0.158	4	0.787	20	1.339	34	0	0	0.020	0.50	•
7221439	L4GS07030C05R000 KCU25S	0.024	0.60	4	0.118	3	0.197	5	0.748	19	0	0	0.028	0.70	•
7221441	L4GS07030C10R000 KCU25S	0.024	0.60	4	0.118	3	0.394	10	0.945	24	0	0	0.028	0.70	•
7221442	L4GS07030C16R000 KCU25S	0.024	0.60	4	0.118	3	0.630	16	1.181	30	0	0	0.028	0.70	•
7221446	L4GS10040C10R000 KCU25S	0.031	0.80	4	0.158	4	0.394	10	0.945	24	0	0	0.039	1.00	•
7221447	L4GS10040C16R000 KCU25S	0.031	0.80	4	0.158	4	0.630	16	1.181	30	0	0	0.039	1.00	•
7221449	L4GS10040C20R000 KCU25S	0.031	0.80	4	0.158	4	0.787	20	1.339	34	0	0	0.039	1.00	•
7221450	R4GS03010C04R000 KCU25S	0.008	0.20	4	0.039	1	0.158	4	0.787	20	0	0	0.012	0.30	•
7221451	R4GS03010C07R000 KCU25S	0.008	0.20	4	0.039	1	0.276	7	0.866	22	0	0	0.012	0.30	•
7221452	R4GS04015C05R000 KCU25S	0.016	0.40	4	0.059	1.5	0.197	5	0.866	22	0	0	0.016	0.40	•
7221453	R4GS04015C10R000 KCU25S	0.016	0.40	4	0.059	1.5	0.394	10	0.984	25	0	0	0.016	0.40	•
7221454	R4GS04015C12R000 KCU25S	0.016	0.40	4	0.059	1.5	0.472	12	1.063	27	0	0	0.016	0.40	•
7221456	R4GS05020C05R000 KCU25S	0.016	0.40	4	0.079	2	0.197	5	0.748	19	0	0	0.020	0.50	•
7221457	R4GS05020C10R000 KCU25S	0.016	0.40	4	0.079	2	0.394	10	0.945	24	0	0	0.020	0.50	•
7221458	R4GS05020C15R000 KCU25S	0.016	0.40	4	0.079	2	0.591	15	1.142	29	0	0	0.020	0.50	•
7221462	R4GS05040C10R000 KCU25S	0.031	0.80	4	0.158	4	0.394	10	0.945	24	0	0	0.020	0.50	•
7221463	R4GS05040C16R000 KCU25S	0.031	0.80	4	0.158	4	0.630	16	1.181	30	0	0	0.020	0.50	•
7221464	R4GS05040C20R000 KCU25S	0.031	0.80	4	0.158	4	0.787	20	1.339	34	0	0	0.020	0.50	•
7221459	R4GS07030C05R000 KCU25S	0.024	0.60	4	0.118	3	0.197	5	0.748	19	0	0	0.028	0.70	•
7221460	R4GS07030C10R000 KCU25S	0.024	0.60	4	0.118	3	0.394	10	0.945	24	0	0	0.028	0.70	•
7221461	R4GS07030C16R000 KCU25S	0.024	0.60	4	0.118	3	0.630	16	1.181	30	0	0	0.028	0.70	•
7221465	R4GS10040C10R000 KCU25S	0.031	0.80	4	0.158	4	0.394	10	0.945	24	0	0	0.039	1.00	•
7221466	R4GS10040C16R000 KCU25S	0.031	0.80	4	0.158	4	0.630	16	1.181	30	0	0	0.039	1.00	•
7221467	R4GS10040C20R000 KCU25S	0.031	0.80	4	0.158	4	0.787	20	1.339	34	0	0	0.039	1.00	•





APPLICATIONS



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● Primary
○ Secondary

Grooving

Radius Corner • GR

KCU25S

		CD		DMIN		L4		L		Rε		W		
Order Number	Catalog Number	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	
7220157	L4GR08040C20R010 KCU25S	0.031	0.80	0.158	4.00	0.787	20	1.339	34	0.004	0.10	0.032	0.80	•
7220158	L4GR10040C10R010 KCU25S	0.031	0.80	0.158	4.00	0.394	10	0.945	24	0.004	0.10	0.039	1.00	•
7220159	L4GR10040C16R010 KCU25S	0.031	0.80	0.158	4.00	0.630	16	1.181	30	0.004	0.10	0.039	1.00	•
7220160	L4GR10040C20R010 KCU25S	0.031	0.80	0.158	4.00	0.787	20	1.339	34	0.004	0.10	0.039	1.00	•
7220161	L5GR10050C10R010 KCU25S	0.039	1.00	0.197	5.00	0.394	10	0.984	25	0.004	0.10	0.039	1.00	•
7220162	L5GR10050C15R010 KCU25S	0.039	1.00	0.197	5.00	0.591	15	1.181	30	0.004	0.10	0.039	1.00	•
7220163	L5GR10050C20R010 KCU25S	0.039	1.00	0.197	5.00	0.787	20	1.378	35	0.004	0.10	0.039	1.00	•
7220164	L5GR10050C25R010 KCU25S	0.039	1.00	0.197	5.00	0.984	25	1.575	40	0.004	0.10	0.039	1.00	•
7220165	L5GR10050C30R010 KCU25S	0.039	1.00	0.197	5.00	1.181	30	1.772	45	0.004	0.10	0.039	1.00	•
7220166	L5GR15050C10R010 KCU25S	0.039	1.00	0.197	5.00	0.394	10	0.984	25	0.004	0.10	0.059	1.50	•
7220167	L5GR15050C15R010 KCU25S	0.039	1.00	0.197	5.00	0.591	15	1.181	30	0.004	0.10	0.059	1.50	•
7220168	L5GR15050C20R010 KCU25S	0.039	1.00	0.197	5.00	0.787	20	1.378	35	0.004	0.10	0.059	1.50	•
7220169	L5GR15050C25R010 KCU25S	0.039	1.00	0.197	5.00	0.984	25	1.575	40	0.004	0.10	0.059	1.50	•
7220170	L5GR15050C30R010 KCU25S	0.039	1.00	0.197	5.00	1.181	30	1.772	45	0.004	0.10	0.059	1.50	•
7220171	L5GR16050C20R010 KCU25S	0.039	1.00	0.197	5.00	0.787	20	1.378	35	0.004	0.10	0.063	1.60	•
7220172	L5GR20050C10R010 KCU25S	0.039	1.00	0.197	5.00	0.394	10	0.984	25	0.004	0.10	0.079	2.00	•
7220173	L5GR20050C15R010 KCU25S	0.039	1.00	0.197	5.00	0.591	15	1.181	30	0.004	0.10	0.079	2.00	•
7220174	L5GR20050C20R010 KCU25S	0.039	1.00	0.197	5.00	0.787	20	1.378	35	0.004	0.10	0.079	2.00	•
7220175	L5GR20050C25R010 KCU25S	0.039	1.00	0.197	5.00	0.984	25	1.575	40	0.004	0.10	0.079	2.00	•
7220176	L5GR20050C30R010 KCU25S	0.039	1.00	0.197	5.00	1.181	30	1.772	45	0.004	0.10	0.079	2.00	•
7220177	L6GR08060C15R010 KCU25S	0.071	1.80	0.236	6.00	0.591	15	1.181	30	0.004	0.10	0.032	0.80	•
7220178	L6GR10060C10R010 KCU25S	0.071	1.80	0.236	6.00	0.394	10	0.984	25	0.004	0.10	0.039	1.00	•
7220179	L6GR10060C15R010 KCU25S	0.071	1.80	0.236	6.00	0.591	15	1.181	30	0.004	0.10	0.039	1.00	•
7220180	L6GR10060C22R010 KCU25S	0.071	1.80	0.236	6.00	0.866	22	1.457	37	0.004	0.10	0.039	1.00	•
7220181	L6GR10060C25R010 KCU25S	0.071	1.80	0.236	6.00	0.984	25	1.575	40	0.004	0.10	0.039	1.00	•
7220182	L6GR10060C30R010 KCU25S	0.071	1.80	0.236	6.00	1.181	30	1.772	45	0.004	0.10	0.039	1.00	•
7220183	L6GR12060C15R010 KCU25S	0.071	1.80	0.236	6.00	0.591	15	1.181	30	0.004	0.10	0.047	1.20	•
7220184	L6GR15060C10R010 KCU25S	0.071	1.80	0.236	6.00	0.394	10	0.984	25	0.004	0.10	0.059	1.50	•
7220185	L6GR15060C15R010 KCU25S	0.071	1.80	0.236	6.00	0.591	15	1.181	30	0.004	0.10	0.059	1.50	•
7220186	L6GR15060C22R010 KCU25S	0.071	1.80	0.236	6.00	0.866	22	1.457	37	0.004	0.10	0.059	1.50	•
7220187	L6GR15060C25R010 KCU25S	0.071	1.80	0.236	6.00	0.984	25	1.575	40	0.004	0.10	0.059	1.50	•
7220188	L6GR15060C30R010 KCU25S	0.071	1.80	0.236	6.00	1.181	30	1.772	45	0.004	0.10	0.059	1.50	•
7220189	L6GR19060C15R010 KCU25S	0.071	1.80	0.236	6.00	0.591	15	1.181	30	0.004	0.10	0.075	1.90	•
7220190	L6GR20060C10R010 KCU25S	0.071	1.80	0.236	6.00	0.394	10	1.181	30	0.004	0.10	0.079	2.00	•
7220191	L6GR20060C15R010 KCU25S	0.071	1.80	0.236	6.00	0.591	15	1.181	30	0.004	0.10	0.079	2.00	•
7220192	L6GR20060C22R010 KCU25S	0.071	1.80	0.236	6.00	0.866	22	1.457	37	0.004	0.10	0.079	2.00	•
7220193	L6GR20060C25R010 KCU25S	0.071	1.80	0.236	6.00	0.984	25	1.575	40	0.004	0.10	0.079	2.00	•
7220194	L6GR20060C30R010 KCU25S	0.071	1.80	0.236	6.00	1.181	30	1.772	45	0.004	0.10	0.079	2.00	•
7220195	L7GR10068C10R010 KCU25S	0.098	2.50	0.268	6.80	0.394	10	0.984	25	0.004	0.10	0.039	1.00	•
7220196	L7GR10068C15R010 KCU25S	0.098	2.50	0.268	6.80	0.591	15	1.181	30	0.004	0.10	0.039	1.00	•
7220197	L7GR10068C22R010 KCU25S	0.098	2.50	0.268	6.80	0.866	22	1.457	37	0.004	0.10	0.039	1.00	•
7220198	L7GR10068C25R010 KCU25S	0.098	2.50	0.268	6.80	0.984	25	1.575	40	0.004	0.10	0.039	1.00	•
7220199	L7GR10068C30R010 KCU25S	0.098	2.50	0.268	6.80	1.181	30	1.772	45	0.004	0.10	0.039	1.00	•
7220200	L7GR12068C10R010 KCU25S	0.098	2.50	0.268	6.80	0.394	10	0.984	25	0.004	0.10	0.047	1.20	•
7220201	L7GR12068C22R010 KCU25S	0.000	2.50	0.2677	6.80	0.866	22	1.457	37	0.004	0.10	0.047	1.20	•
7220202	L7GR15068C10R010 KCU25S	0.098	2.50	0.268	6.80	0.394	10	0.984	25	0.004	0.10	0.059	1.50	•
7220203	L7GR15068C15R010 KCU25S	0.098	2.50	0.268	6.80	0.591	15	1.181	30	0.004	0.10	0.059	1.50	•
7220204	L7GR15068C22R010 KCU25S	0.098	2.50	0.268	6.80	0.866	22	1.457	37	0.004	0.10	0.059	1.50	•
7220205	L7GR15068C25R010 KCU25S	0.098	2.50	0.268	6.80	0.984	25	1.575	40	0.004	0.10	0.059	1.50	•
7220206	L7GR15068C30R010 KCU25S	0.098	2.50	0.268	6.80	1.181	30	1.772	45	0.004	0.10	0.059	1.50	•
7220207	L7GR16068C10R010 KCU25S	0.098	2.50	0.268	6.80	0.394	10	0.984	25	0.004	0.10	0.063	1.60	•
7220208	L7GR16068C25R010 KCU25S	0.098	2.50	0.268	6.80	0.984	25	1.575	40	0.004	0.10	0.063	1.60	•
7220209	L7GR19068C22R010 KCU25S	0.098	2.50	0.268	6.80	0.866	22	1.457	37	0.004	0.10	0.075	1.90	•
7220210	L7GR20068C10R010 KCU25S	0.098	2.50	0.268	6.80	0.394	10	0.984	25	0.004	0.10	0.079	2.00	•
7220211	L7GR20068C15R010 KCU25S	0.098	2.50	0.268	6.80	0.591	15	1.181	30	0.004	0.10	0.079	2.00	•

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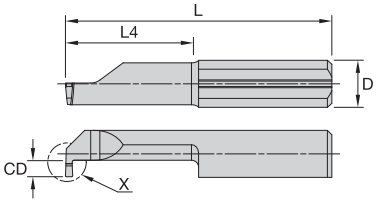
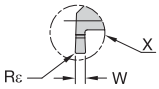
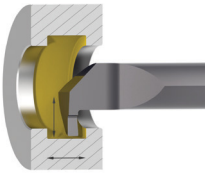




APPLICATIONS



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● Primary
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Grooving Continued

Radius Corner • GR

KCU25S

		CD		DMIN		L4		L		Rε		W		
Order Number	Catalog Number	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	
7220212	L7GR20068C22R010 KCU25S	0.098	2.50	0.268	6.80	0.866	22	1.457	37	0.004	0.10	0.079	2.00	•
7220213	L7GR20068C25R010 KCU25S	0.098	2.50	0.268	6.80	0.984	25	1.575	40	0.004	0.10	0.079	2.00	•
7220214	L7GR20068C30R010 KCU25S	0.098	2.50	0.268	6.80	1.181	30	1.772	45	0.004	0.10	0.079	2.00	•
7220215	L8GR10078C30R010 KCU25S	0.118	3.00	0.307	7.80	1.181	30	1.969	50	0.004	0.10	0.039	1.00	•
7220216	L8GR10078C40R010 KCU25S	0.118	3.00	0.307	7.80	1.575	40	2.362	60	0.004	0.10	0.039	1.00	•
7220217	L8GR20078C30R010 KCU25S	0.118	3.00	0.307	7.80	1.181	30	1.969	50	0.004	0.10	0.079	2.00	•
7220218	L8GR20078C40R010 KCU25S	0.118	3.00	0.307	7.80	1.575	40	2.362	60	0.004	0.10	0.079	2.00	•
7220219	L8GR25078C30R010 KCU25S	0.118	3.00	0.307	7.80	1.181	30	1.969	50	0.004	0.10	0.098	2.50	•
7220220	L8GR25078C40R010 KCU25S	0.118	3.00	0.307	7.80	1.575	40	2.362	60	0.004	0.10	0.098	2.50	•
7220221	R4GR08040C20R010 KCU25S	0.031	0.80	0.158	4.00	0.787	20	1.339	34	0.004	0.10	0.032	0.80	•
7220222	R4GR10040C10R010 KCU25S	0.031	0.80	0.158	4.00	0.394	10	0.945	24	0.004	0.10	0.039	1.00	•
7220223	R4GR10040C16R010 KCU25S	0.031	0.80	0.158	4.00	0.630	16	1.181	30	0.004	0.10	0.039	1.00	•
7220224	R4GR10040C20R010 KCU25S	0.031	0.80	0.158	4.00	0.787	20	1.339	34	0.004	0.10	0.039	1.00	•
7220226	R5GR10050C15R010 KCU25S	0.039	1.00	0.197	5.00	0.591	15	1.181	30	0.004	0.10	0.039	1.00	•
7220227	R5GR10050C20R010 KCU25S	0.039	1.00	0.197	5.00	0.787	20	1.378	35	0.004	0.10	0.039	1.00	•
7220225	R5GR10050C10R010 KCU25S	0.000	1.00	0.197	5.00	0.394	10	0.984	25	0.004	0.10	0.039	1.00	•
7220228	R5GR10050C25R010 KCU25S	0.000	1.00	0.197	5.00	0.984	25	1.575	40	0.004	0.10	0.039	1.00	•
7220229	R5GR10050C30R010 KCU25S	0.039	1.00	0.197	5.00	1.181	30	1.772	45	0.004	0.10	0.039	1.00	•
7220230	R5GR15050C10R010 KCU25S	0.039	1.00	0.197	5.00	0.394	10	0.984	25	0.004	0.10	0.059	1.50	•
7220231	R5GR15050C15R010 KCU25S	0.039	1.00	0.197	5.00	0.591	15	1.181	30	0.004	0.10	0.059	1.50	•
7220232	R5GR15050C20R010 KCU25S	0.039	1.00	0.197	5.00	0.787	20	1.378	35	0.004	0.10	0.059	1.50	•
7220233	R5GR15050C25R010 KCU25S	0.039	1.00	0.197	5.00	0.984	25	1.575	40	0.004	0.10	0.059	1.50	•
7220234	R5GR15050C30R010 KCU25S	0.039	1.00	0.197	5.00	1.181	30	1.772	45	0.004	0.10	0.059	1.50	•
7220235	R5GR16050C20R010 KCU25S	0.039	1.00	0.197	5.00	0.787	20	1.378	35	0.004	0.10	0.063	1.60	•
7220236	R5GR20050C10R010 KCU25S	0.039	1.00	0.197	5.00	0.394	10	0.984	25	0.004	0.10	0.079	2.00	•
7220237	R5GR20050C15R010 KCU25S	0.039	1.00	0.197	5.00	0.591	15	1.181	30	0.004	0.10	0.079	2.00	•
7220238	R5GR20050C20R010 KCU25S	0.039	1.00	0.197	5.00	0.787	20	1.378	35	0.004	0.10	0.079	2.00	•
7220239	R5GR20050C25R010 KCU25S	0.039	1.00	0.197	5.00	0.984	25	1.575	40	0.004	0.10	0.079	2.00	•
7220240	R5GR20050C30R010 KCU25S	0.039	1.00	0.197	5.00	1.181	30	1.772	45	0.004	0.10	0.079	2.00	•
7220241	R6GR08060C15R010 KCU25S	0.071	1.80	0.236	6.00	0.591	15	1.181	30	0.004	0.10	0.032	0.80	•
7220242	R6GR10060C10R010 KCU25S	0.071	1.80	0.236	6.00	0.394	10	0.984	25	0.004	0.10	0.039	1.00	•
7220243	R6GR10060C15R010 KCU25S	0.071	1.80	0.236	6.00	0.591	15	1.181	30	0.004	0.10	0.039	1.00	•
7220244	R6GR10060C22R010 KCU25S	0.071	1.80	0.236	6.00	0.866	22	1.457	37	0.004	0.10	0.039	1.00	•
7220245	R6GR10060C25R010 KCU25S	0.071	1.80	0.236	6.00	0.984	25	1.575	40	0.004	0.10	0.039	1.00	•
7220246	R6GR10060C30R010 KCU25S	0.071	1.80	0.236	6.00	1.181	30	1.772	45	0.004	0.10	0.039	1.00	•
7220247	R6GR12060C15R010 KCU25S	0.071	1.80	0.236	6.00	0.591	15	1.181	30	0.004	0.10	0.047	1.20	•
7220248	R6GR15060C10R010 KCU25S	0.071	1.80	0.236	6.00	0.394	10	0.984	25	0.004	0.10	0.059	1.50	•
7220249	R6GR15060C15R010 KCU25S	0.071	1.80	0.236	6.00	0.591	15	1.181	30	0.004	0.10	0.059	1.50	•
7220250	R6GR15060C22R010 KCU25S	0.071	1.80	0.236	6.00	0.866	22	1.457	37	0.004	0.10	0.059	1.50	•
7220251	R6GR15060C25R010 KCU25S	0.071	1.80	0.236	6.00	0.984	25	1.575	40	0.004	0.10	0.059	1.50	•
7220252	R6GR15060C30R010 KCU25S	0.071	1.80	0.236	6.00	1.181	30	1.772	45	0.004	0.10	0.059	1.50	•
7220253	R6GR19060C15R010 KCU25S	0.071	1.80	0.236	6.00	0.591	15	1.181	30	0.004	0.10	0.075	1.90	•
7220254	R6GR20060C10R010 KCU25S	0.071	1.80	0.236	6.00	0.394	10	0.984	25	0.004	0.10	0.079	2.00	•
7220255	R6GR20060C15R010 KCU25S	0.071	1.80	0.236	6.00	0.591	15	1.181	30	0.004	0.10	0.079	2.00	•
7220256	R6GR20060C22R010 KCU25S	0.071	1.80	0.236	6.00	0.866	22	1.457	37	0.004	0.10	0.079	2.00	•
7220257	R6GR20060C25R010 KCU25S	0.071	1.80	0.236	6.00	0.984	25	1.575	40	0.004	0.10	0.079	2.00	•
7220258	R6GR20060C30R010 KCU25S	0.071	1.80	0.236	6.00	1.181	30	1.772	45	0.004	0.10	0.079	2.00	•
7220259	R7GR10068C10R010 KCU25S	0.098	2.50	0.268	6.80	0.394	10	0.984	25	0.004	0.10	0.039	1.00	•
7220260	R7GR10068C15R010 KCU25S	0.098	2.50	0.268	6.80	0.591	15	1.181	30	0.004	0.10	0.039	1.00	•
7220261	R7GR10068C22R010 KCU25S	0.098	2.50	0.268	6.80	0.866	22	1.457	37	0.004	0.10	0.039	1.00	•
7220262	R7GR10068C25R010 KCU25S	0.098	2.50	0.268	6.80	0.984	25	1.575	40	0.004	0.10	0.039	1.00	•
7220263	R7GR10068C30R010 KCU25S	0.098	2.50	0.268	6.80	1.181	30	1.772	45	0.004	0.10	0.039	1.00	•
7220264	R7GR12068C10R010 KCU25S	0.098	2.50	0.268	6.80	0.394	10	0.984	25	0.004	0.10	0.047	1.20	•
7220265	R7GR12068C22R010 KCU25S	0.098	2.50	0.268	6.80	0.866	22	1.457	37	0.004	0.10	0.047	1.20	•
7220266	R7GR15068C10R010 KCU25S	0.098	2.50	0.268	6.80	0.394	10	0.984	25	0.004	0.10	0.059	1.50	•

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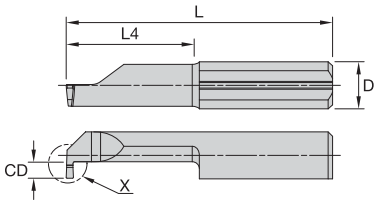

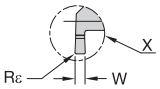

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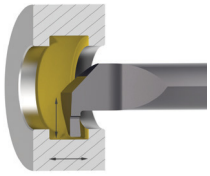

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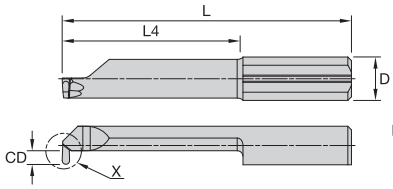
● Primary
○ Secondary

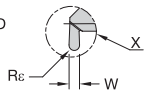
Grooving Continued

Radius Corner • GR

KCU25S

		CD		DMIN		L4		L		Rε		W		
Order Number	Catalog Number	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	
7220267	R7GR15068C15R010 KCU25S	0.098	2.50	0.268	6.80	0.591	15	1.181	30	0.004	0.10	0.059	1.50	•
7220268	R7GR15068C22R010 KCU25S	0.098	2.50	0.268	6.80	0.866	22	1.457	37	0.004	0.10	0.059	1.50	•
7220269	R7GR15068C25R010 KCU25S	0.098	2.50	0.268	6.80	0.984	25	1.575	40	0.004	0.10	0.059	1.50	•
7220270	R7GR15068C30R010 KCU25S	0.098	2.50	0.268	6.80	1.181	30	1.772	45	0.004	0.10	0.059	1.50	•
7220271	R7GR16068C10R010 KCU25S	0.098	2.50	0.268	6.80	0.394	10	0.984	25	0.004	0.10	0.063	1.60	•
7220272	R7GR16068C25R010 KCU25S	0.098	2.50	0.268	6.80	0.984	25	1.575	40	0.004	0.10	0.063	1.60	•
7220273	R7GR19068C22R010 KCU25S	0.098	2.50	0.268	6.80	0.866	22	1.457	37	0.004	0.10	0.075	1.90	•
7220274	R7GR20068C10R010 KCU25S	0.098	2.50	0.268	6.80	0.394	10	0.984	25	0.004	0.10	0.079	2.00	•
7220275	R7GR20068C15R010 KCU25S	0.098	2.50	0.268	6.80	0.591	15	1.181	30	0.004	0.10	0.079	2.00	•
7220276	R7GR20068C22R010 KCU25S	0.098	2.50	0.268	6.80	0.866	22	1.457	37	0.004	0.10	0.079	2.00	•
7220277	R7GR20068C25R010 KCU25S	0.098	2.50	0.268	6.80	0.984	25	1.575	40	0.004	0.10	0.079	2.00	•
7220278	R7GR20068C30R010 KCU25S	0.098	2.50	0.268	6.80	1.181	30	1.772	45	0.004	0.10	0.079	2.00	•
7220279	R8GR10078C30R010 KCU25S	0.118	3.00	0.307	7.80	1.181	30	1.969	50	0.004	0.10	0.039	1.00	•
7220280	R8GR10078C40R010 KCU25S	0.118	3.00	0.307	7.80	1.575	40	2.362	60	0.004	0.10	0.039	1.00	•
7220281	R8GR20078C30R010 KCU25S	0.118	3.00	0.307	7.80	1.181	30	1.969	50	0.004	0.10	0.079	2.00	•
7220282	R8GR20078C40R010 KCU25S	0.118	3.00	0.307	7.80	1.575	40	2.362	60	0.004	0.10	0.079	2.00	•
7220283	R8GR25078C30R010 KCU25S	0.118	3.00	0.307	7.80	1.181	30	1.969	50	0.004	0.10	0.098	2.50	•
7220284	R8GR25078C40R010 KCU25S	0.118	3.00	0.307	7.80	1.575	40	2.362	60	0.004	0.10	0.098	2.50	•





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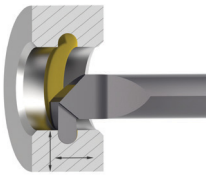

P	●
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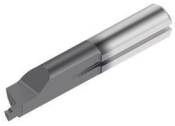
● Primary
○ Secondary

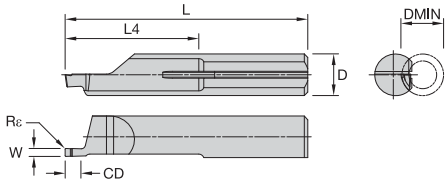
Grooving

Full Nose Radius • GF

KCU25S

		CD			DMIN		L4		L		Rε		W		
Order Number	Catalog Number	in	mm	D	in	mm	in	mm	in	mm	in	mm	in	mm	
7219543	L4GF10040C16R050 KCU25S	0.031	0.80	4	0.158	4.00	0.591	15	1.181	30	0.020	0.50	0.039	1.00	•
7219545	L5GF10050C20R050 KCU25S	0.039	1.00	5	0.197	5.00	0.748	19	1.378	35	0.020	0.50	0.039	1.00	•
7219547	L5GF15050C20R075 KCU25S	0.039	1.00	5	0.197	5.00	0.748	19	1.378	35	0.030	0.75	0.059	1.50	•
7219549	L5GF20050C20R100 KCU25S	0.039	1.00	5	0.197	5.00	0.748	19	1.378	35	0.039	1.00	0.079	2.00	•
7219551	L6GF10060C25R050 KCU25S	0.071	1.80	6	0.236	6.00	0.945	24	1.575	40	0.020	0.50	0.039	1.00	•
7219553	L6GF15060C25R075 KCU25S	0.071	1.80	6	0.236	6.00	0.945	24	1.575	40	0.030	0.75	0.059	1.50	•
7219554	L6GF20060C25R100 KCU25S	0.071	1.80	6	0.236	6.00	0.945	24	1.575	40	0.039	1.00	0.079	2.00	•
7219555	L7GF10068C30R050 KCU25S	0.098	2.50	7	0.268	6.80	1.142	29	1.772	45	0.020	0.50	0.039	1.00	•
7219556	L7GF15068C30R075 KCU25S	0.098	2.50	7	0.268	6.80	1.142	29	1.772	45	0.030	0.75	0.059	1.50	•
7219557	L7GF20068C30R100 KCU25S	0.098	2.50	7	0.268	6.80	1.142	29	1.772	45	0.039	1.00	0.079	2.00	•
7219558	R4GF10040C16R050 KCU25S	0.031	0.80	4	0.158	4.00	0.591	15	1.181	30	0.020	0.50	0.039	1.00	•
7219559	R5GF10050C20R050 KCU25S	0.039	1.00	5	0.197	5.00	0.748	19	1.378	35	0.020	0.50	0.039	1.00	•
7219560	R5GF15050C20R075 KCU25S	0.039	1.00	5	0.197	5.00	0.748	19	1.378	35	0.030	0.75	0.059	1.50	•
7219561	R5GF20050C20R100 KCU25S	0.039	1.00	5	0.197	5.00	0.748	19	1.378	35	0.039	1.00	0.079	2.00	•
7219562	R6GF10060C25R050 KCU25S	0.071	1.80	6	0.236	6.00	0.945	24	1.575	40	0.020	0.50	0.039	1.00	•
7219564	R6GF15060C25R075 KCU25S	0.071	1.80	6	0.236	6.00	0.945	24	1.575	40	0.030	0.75	0.059	1.50	•
7219566	R6GF20060C25R100 KCU25S	0.071	1.80	6	0.236	6.00	0.945	24	1.575	40	0.039	1.00	0.079	2.00	•
7219568	R7GF10068C30R050 KCU25S	0.098	2.50	7	0.268	6.80	1.142	29	1.772	45	0.020	0.50	0.039	1.00	•
7219570	R7GF15068C30R075 KCU25S	0.098	2.50	7	0.268	6.80	1.142	29	1.772	45	0.030	0.75	0.059	1.50	•
7219572	R7GF20068C30R100 KCU25S	0.098	2.50	7	0.268	6.80	1.142	29	1.772	45	0.039	1.00	0.079	2.00	•





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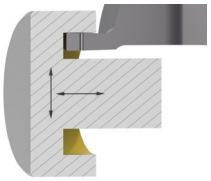

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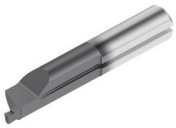
● Primary
○ Secondary

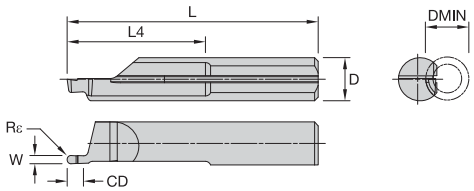
Face Grooving

Outboard Sweep • FO • Radius Corner

KCU25S

		CD			DMIN		L4		L		Rε		W		
Order Number	Catalog Number	in	mm	D	in	mm	in	mm	in	mm	in	mm	in	mm	
7219342	L6FO10060C20R010 KCU25S	0.079	2	6	0.236	6	0.748	19.00	1.378	35	0.004	0.10	0.039	1.00	•
7219343	L6FO15060C20R010 KCU25S	0.118	3	6	0.236	6	0.748	19.00	1.378	35	0.004	0.10	0.059	1.50	•
7219344	L6FO20060C20R010 KCU25S	0.157	4	6	0.236	6	0.748	19.00	1.378	35	0.004	0.10	0.079	2.00	•
7219345	L6FO25060C20R010 KCU25S	0.197	5	6	0.236	6	0.768	19.50	1.378	35	0.004	0.10	0.098	2.50	•
7219346	L6FO30060C20R010 KCU25S	0.236	6	6	0.236	6	0.748	19.00	1.378	35	0.004	0.10	0.118	3.00	•
7219347	R6FO10060C20R010 KCU25S	0.079	2	6	0.236	6	0.748	19.00	1.378	35	0.004	0.10	0.039	1.00	•
7219348	R6FO15060C20R010 KCU25S	0.118	3	6	0.236	6	0.748	19.00	1.378	35	0.004	0.10	0.059	1.50	•
7219349	R6FO20060C20R010 KCU25S	0.157	4	6	0.236	6	0.748	19.00	1.378	35	0.004	0.10	0.079	2.00	•
7219350	R6FO25060C20R010 KCU25S	0.197	5	6	0.236	6	0.768	19.50	1.378	35	0.004	0.10	0.098	2.50	•
7219431	R6FO30060C20R010 KCU25S	0.236	6	6	0.236	6	0.748	19.00	1.378	35	0.004	0.10	0.118	3.00	•





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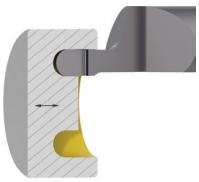

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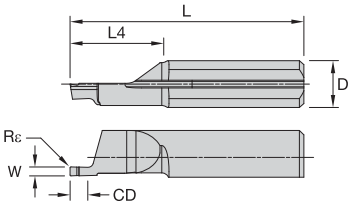
● Primary
○ Secondary

Face Grooving

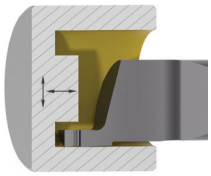
Outboard Sweep • FO • Full Nose Radius

KCU25S

		CD			DMIN		L4		L		Rε		W		
Order Number	Catalog Number	in	mm	D	in	mm	in	mm	in	mm	in	mm	in	mm	
7219432	L6FO10060C20R050 KCU25S	0.079	2	6	0.236	6	0.748	19	1.378	35	0.020	0.50	0.039	1.00	•
7219433	L6FO16060C20R080 KCU25S	0.118	3	6	0.236	6	0.748	19	1.378	35	0.032	0.80	0.063	1.60	•
7219434	L6FO20060C20R100 KCU25S	0.157	4	6	0.236	6	0.748	19	1.378	35	0.039	1.00	0.079	2.00	•
7219436	L6FO25060C20R125 KCU25S	0.197	5	6	0.236	6	0.748	19	1.378	35	0.049	1.25	0.098	2.50	•
7219438	L6FO30060C20R150 KCU25S	0.236	6	6	0.236	6	0.748	19	1.378	35	0.059	1.50	0.118	3.00	•
7219440	R6FO10060C20R050 KCU25S	0.079	2	6	0.236	6	0.748	19	1.378	35	0.020	0.50	0.039	1.00	•
7219452	R6FO16060C20R080 KCU25S	0.118	3	6	0.236	6	0.748	19	1.378	35	0.032	0.80	0.063	1.60	•
7219454	R6FO20060C20R100 KCU25S	0.157	4	6	0.236	6	0.748	19	1.378	35	0.039	1.00	0.079	2.00	•
7219456	R6FO25060C20R125 KCU25S	0.197	5	6	0.236	6	0.748	19	1.378	35	0.049	1.25	0.098	2.50	•
7219458	R6FO30060C20R150 KCU25S	0.236	6	6	0.236	6	0.748	19	1.378	35	0.059	1.50	0.118	3.00	•



APPLICATIONS



P	●
M	●
K	○
N	○
S	○
H	

● Primary
○ Secondary

Face Grooving

Inboard Sweep • FI • Radius Corner

KCU25S

		CD			DMIN		L4		L		Rε		W		
Order Number	Catalog Number	in	mm	D	in	mm	in	mm	in	mm	in	mm	in	mm	
7220799	L5FI05050C11R005 KCU25S	0.039	1	5	0.197	5	0.433	11	1.024	26	0.002	0.05	0.020	0.50	•
7220800	L5FI08050C11R005 KCU25S	0.079	2	5	0.197	5	0.433	11	1.024	26	0.002	0.05	0.032	0.80	•
7220951	L5FI10050C11R005 KCU25S	0.079	2	5	0.197	5	0.433	11	1.024	26	0.002	0.05	0.039	1.00	•
7220954	L5FI10050C20R005 KCU25S	0.079	2	5	0.197	5	0.787	20	1.378	35	0.002	0.05	0.039	1.00	•
7220952	L5FI15050C11R005 KCU25S	0.118	3	5	0.197	5	0.433	11	1.024	26	0.002	0.05	0.059	1.50	•
7220955	L5FI15050C20R005 KCU25S	0.118	3	5	0.197	5	0.787	20	1.378	35	0.002	0.05	0.059	1.50	•
7220953	L5FI20050C11R005 KCU25S	0.157	4	5	0.197	5	0.433	11	1.024	26	0.002	0.05	0.079	2.00	•
7220956	L5FI20050C20R005 KCU25S	0.157	4	5	0.197	5	0.787	20	1.378	35	0.002	0.05	0.079	2.00	•
7220957	L6FI10060C11R010 KCU25S	0.079	2	6	0.236	6	0.433	11	1.024	26	0.004	0.10	0.039	1.00	•
7220962	L6FI10060C20R010 KCU25S	0.079	2	6	0.236	6	0.787	20	1.378	35	0.004	0.10	0.039	1.00	•
7220967	L6FI10060C30R010 KCU25S	0.079	2	6	0.236	6	1.181	30	1.772	45	0.004	0.10	0.039	1.00	•
7220958	L6FI15060C11R010 KCU25S	0.118	3	6	0.236	6	0.433	11	1.024	26	0.004	0.10	0.059	1.50	•
7220963	L6FI15060C20R010 KCU25S	0.118	3	6	0.236	6	0.787	20	1.378	35	0.004	0.10	0.059	1.50	•
7220968	L6FI15060C30R010 KCU25S	0.118	3	6	0.236	6	1.181	30	1.772	45	0.004	0.10	0.059	1.50	•
7220959	L6FI20060C11R010 KCU25S	0.157	4	6	0.236	6	0.433	11	1.024	26	0.004	0.10	0.079	2.00	•
7220964	L6FI20060C20R010 KCU25S	0.157	4	6	0.236	6	0.787	20	1.378	35	0.004	0.10	0.079	2.00	•
7220969	L6FI20060C30R010 KCU25S	0.157	4	6	0.236	6	1.181	30	1.772	45	0.004	0.10	0.079	2.00	•
7220960	L6FI25060C11R010 KCU25S	0.197	5	6	0.236	6	0.433	11	1.024	26	0.004	0.10	0.098	2.50	•
7220965	L6FI25060C20R010 KCU25S	0.197	5	6	0.236	6	0.787	20	1.378	35	0.004	0.10	0.098	2.50	•
7220970	L6FI25060C30R010 KCU25S	0.197	5	6	0.236	6	1.181	30	1.772	45	0.004	0.10	0.098	2.50	•
7220961	L6FI30060C11R010 KCU25S	0.197	5	6	0.236	6	0.433	11	1.024	26	0.004	0.10	0.118	3.00	•
7220966	L6FI30060C20R010 KCU25S	0.197	5	6	0.236	6	0.787	20	1.024	26	0.004	0.10	0.118	3.00	•
7220981	L6FI30060C30R010 KCU25S	0.236	6	6	0.236	6	1.181	30	1.772	45	0.004	0.10	0.118	3.00	•
7221005	L7FI10080C11R010 KCU25S	0.079	2	7	0.315	8	0.433	11	1.024	26	0.004	0.10	0.039	1.00	•
7221011	L7FI10080C20R010 KCU25S	0.079	2	7	0.315	8	0.787	20	1.378	35	0.004	0.10	0.039	1.00	•
7221006	L7FI15080C11R010 KCU25S	0.118	3	7	0.315	8	0.433	11	1.024	26	0.004	0.10	0.059	1.50	•
7221012	L7FI15080C20R010 KCU25S	0.118	3	7	0.315	8	0.787	20	1.378	35	0.004	0.10	0.059	1.50	•
7221007	L7FI16080C11R010 KCU25S	0.118	3	7	0.315	8	0.433	11	1.024	26	0.004	0.10	0.063	1.60	•
7221008	L7FI20080C11R010 KCU25S	0.157	4	7	0.315	8	0.433	11	1.024	26	0.004	0.10	0.079	2.00	•
7221013	L7FI20080C20R010 KCU25S	0.157	4	7	0.315	8	0.787	20	1.378	35	0.004	0.10	0.079	2.00	•
7221014	L7FI24080C20R010 KCU25S	0.197	5	7	0.315	8	0.787	20	1.378	35	0.004	0.10	0.095	2.40	•
7221009	L7FI25080C11R010 KCU25S	0.197	5	7	0.315	8	0.433	11	1.024	26	0.004	0.10	0.098	2.50	•
7221015	L7FI25080C20R010 KCU25S	0.197	5	7	0.315	8	0.787	20	1.378	35	0.004	0.10	0.098	2.50	•
7221010	L7FI30080C11R010 KCU25S	0.236	6	7	0.315	8	0.433	11	1.024	26	0.004	0.10	0.118	3.00	•
7221016	L7FI30080C20R010 KCU25S	0.236	6	7	0.315	8	0.787	20	1.378	35	0.004	0.10	0.118	3.00	•
7220982	R5FI05050C11R005 KCU25S	0.039	1	5	0.197	5	0.433	11	1.024	26	0.002	0.05	0.020	0.50	•
7220983	R5FI08050C11R005 KCU25S	0.079	2	5	0.197	5	0.433	11	1.024	26	0.002	0.05	0.032	0.80	•
7220984	R5FI10050C11R005 KCU25S	0.079	2	5	0.197	5	0.433	11	1.024	26	0.002	0.05	0.039	1.00	•
7220987	R5FI10050C20R005 KCU25S	0.079	2	5	0.197	5	0.787	20	1.378	35	0.002	0.05	0.039	1.00	•
7220985	R5FI15050C11R005 KCU25S	0.118	3	5	0.197	5	0.433	11	1.024	26	0.002	0.05	0.059	1.50	•
7220988	R5FI15050C20R005 KCU25S	0.118	3	5	0.197	5	0.787	20	1.378	35	0.002	0.05	0.059	1.50	•
7220986	R5FI20050C11R005 KCU25S	0.157	4	5	0.197	5	0.433	11	1.024	26	0.002	0.05	0.079	2.00	•
7220989	R5FI20050C20R005 KCU25S	0.157	4	5	0.197	5	0.787	20	1.378	35	0.002	0.05	0.079	2.00	•
7220990	R6FI10060C11R010 KCU25S	0.079	2	6	0.236	6	0.433	11	1.024	26	0.004	0.10	0.039	1.00	•
7220995	R6FI10060C20R010 KCU25S	0.079	2	6	0.236	6	0.787	20	1.378	35	0.004	0.10	0.039	1.00	•
7221000	R6FI10060C30R010 KCU25S	0.079	2	6	0.236	6	1.181	30	1.772	45	0.004	0.10	0.039	1.00	•
7220991	R6FI15060C11R010 KCU25S	0.118	3	6	0.236	6	0.433	11	1.024	26	0.004	0.10	0.059	1.50	•
7220996	R6FI15060C20R010 KCU25S	0.118	3	6	0.236	6	0.787	20	1.378	35	0.004	0.10	0.059	1.50	•
7221001	R6FI15060C30R010 KCU25S	0.118	3	6	0.236	6	1.181	30	1.772	45	0.004	0.10	0.059	1.50	•
7220992	R6FI20060C11R010 KCU25S	0.157	4	6	0.236	6	0.433	11	1.024	26	0.004	0.10	0.079	2.00	•
7220997	R6FI20060C20R010 KCU25S	0.157	4	6	0.236	6	0.787	20	1.378	35	0.004	0.10	0.079	2.00	•
7221002	R6FI20060C30R010 KCU25S	0.157	4	6	0.236	6	1.181	30	1.772	45	0.004	0.10	0.079	2.00	•
7220993	R6FI25060C11R010 KCU25S	0.197	5	6	0.236	6	0.433	11	1.024	26	0.004	0.10	0.098	2.50	•
7220998	R6FI25060C20R010 KCU25S	0.197	5	6	0.236	6	0.787	20	1.378	35	0.004	0.10	0.098	2.50	•
7221003	R6FI25060C30R010 KCU25S	0.197	5	6	0.236	6	1.181	30	1.772	45	0.004	0.10	0.098	2.50	•
7220994	R6FI30060C11R010 KCU25S	0.197	5	6	0.236	6	0.433	11	1.024	26	0.004	0.10	0.118	3.00	•
7220999	R6FI30060C20R010 KCU25S	0.236	6	6	0.236	6	0.787	20	1.378	35	0.004	0.10	0.118	3.00	•
7221004	R6FI30060C30R010 KCU25S	0.236	6	6	0.236	6	1.181	30	1.772	45	0.004	0.10	0.118	3.00	•
7221017	R7FI10080C11R010 KCU25S	0.079	2	7	0.315	8	0.433	11	1.024	26	0.004	0.10	0.039	1.00	•
7221023	R7FI10080C20R010 KCU25S	0.079	2	7	0.315	8	0.787	20	1.378	35	0.004	0.10	0.039	1.00	•
7221018	R7FI15080C11R010 KCU25S	0.118	3	7	0.315	8	0.433	11	1.024	26	0.004	0.10	0.059	1.50	•
7221024	R7FI15080C20R010 KCU25S	0.118	3	7	0.315	8	0.787	20	1.378	35	0.004	0.10	0.059	1.50	•

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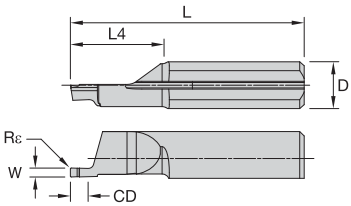
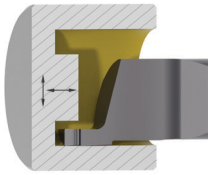


APPLICATIONS



P	●
M	●
K	○
N	○
S	○
H	

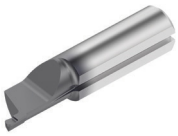
● Primary
○ Secondary

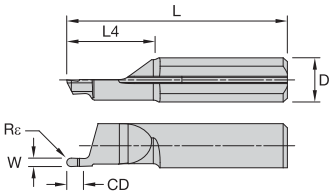
Face Grooving Continued

Inboard Sweep • FI • Radius Corner

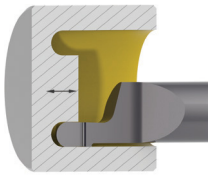
KCU25S

		CD			DMIN		L4		L		Rε		W		
Order Number	Catalog Number	in	mm	D	in	mm	in	mm	in	mm	in	mm	in	mm	
7221019	R7FI16080C11R010 KCU25S	0.118	3	7	0.315	8	0.433	11	1.024	26	0.004	0.10	0.063	1.60	•
7221020	R7FI20080C11R010 KCU25S	0.157	4	7	0.315	8	0.433	11	1.024	26	0.004	0.10	0.079	2.00	•
7221025	R7FI20080C20R010 KCU25S	0.157	4	7	0.315	8	0.787	20	1.378	35	0.004	0.10	0.079	2.00	•
7221026	R7FI24080C20R010 KCU25S	0.197	5	7	0.315	8	0.787	20	1.378	35	0.004	0.10	0.095	2.40	•
7221021	R7FI25080C11R010 KCU25S	0.197	5	7	0.315	8	0.433	11	1.024	26	0.004	0.10	0.098	2.50	•
7221027	R7FI25080C20R010 KCU25S	0.197	5	7	0.315	8	0.787	20	1.378	35	0.004	0.10	0.098	2.50	•
7221022	R7FI30080C11R010 KCU25S	0.236	6	7	0.315	8	0.433	11	1.024	26	0.004	0.10	0.118	3.00	•
7221028	R7FI30080C20R010 KCU25S	0.236	6	7	0.315	8	0.787	20	1.378	35	0.004	0.10	0.118	3.00	•





APPLICATIONS



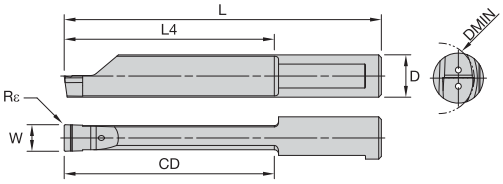
P	●
M	●
K	○
N	○
S	○
H	

● Primary
○ Secondary

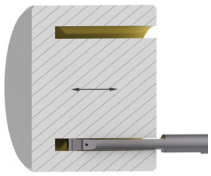
Face Grooving

Inboard Sweep • FI • Full Nose Radius

		CD			DMIN		L4		L		Rε		W		KCU25S
Order Number	Catalog Number	in	mm	D	in	mm	in	mm	in	mm	in	mm	in	mm	
7221031	L6FI10060C11R050 KCU25S	0.079	2	6	0.236	6	0.433	11	1.024	26	0.020	0.50	0.039	1.00	•
7221032	L6FI16060C11R080 KCU25S	0.118	3	6	0.236	6	0.433	11	1.024	26	0.032	0.80	0.063	1.60	•
7221033	L6FI20060C11R100 KCU25S	0.157	4	6	0.236	6	0.433	11	1.024	26	0.039	1.00	0.079	2.00	•
7221034	L6FI25060C11R125 KCU25S	0.197	5	6	0.236	6	0.433	11	1.024	26	0.049	1.25	0.098	2.50	•
7221035	L6FI30060C11R150 KCU25S	0.236	6	6	0.236	6	0.433	11	1.024	26	0.059	1.50	0.118	3.00	•
7221036	L6FI10060C20R050 KCU25S	0.079	2	6	0.236	6	0.787	20	1.378	35	0.020	0.50	0.039	1.00	•
7221037	L6FI16060C20R080 KCU25S	0.118	3	6	0.236	6	0.787	20	1.378	35	0.032	0.80	0.063	1.60	•
7221038	L6FI20060C20R100 KCU25S	0.157	4	6	0.236	6	0.787	20	1.378	35	0.039	1.00	0.079	2.00	•
7221039	L6FI25060C20R125 KCU25S	0.197	5	6	0.236	6	0.787	20	1.378	35	0.049	1.25	0.098	2.50	•
7221040	L6FI30060C20R150 KCU25S	0.236	6	6	0.236	6	0.787	20	1.378	35	0.059	1.50	0.118	3.00	•
7221061	L7FI10080C11R050 KCU25S	0.079	2	7	0.315	8	0.433	11	1.024	26	0.020	0.50	0.039	1.00	•
7221062	L7FI15080C11R078 KCU25S	0.118	3	7	0.315	8	0.433	11	1.024	26	0.031	0.78	0.059	1.50	•
7221063	L7FI16080C11R080 KCU25S	0.118	3	7	0.315	8	0.433	11	1.024	26	0.032	0.80	0.063	1.60	•
7221064	L7FI19080C11R099 KCU25S	0.157	4	7	0.315	8	0.433	11	1.024	26	0.039	0.99	0.075	1.90	•
7221065	L7FI20080C11R100 KCU25S	0.157	4	7	0.315	8	0.433	11	1.024	26	0.039	1.00	0.079	2.00	•
7221066	L7FI25080C11R125 KCU25S	0.197	5	7	0.315	8	0.433	11	1.024	26	0.049	1.25	0.098	2.50	•
7221067	L7FI30080C11R150 KCU25S	0.236	6	7	0.315	8	0.433	11	1.024	26	0.059	1.50	0.118	3.00	•
7221068	L7FI10080C22R050 KCU25S	0.079	2	7	0.315	8	0.866	22	1.378	35	0.020	0.50	0.039	1.00	•
7221069	L7FI16080C22R080 KCU25S	0.118	3	7	0.315	8	0.866	22	1.378	35	0.032	0.80	0.063	1.60	•
7221070	L7FI20080C22R100 KCU25S	0.157	4	7	0.315	8	0.866	22	1.378	35	0.039	1.00	0.079	2.00	•
7221091	L7FI25080C22R125 KCU25S	0.197	5	7	0.315	8	0.866	22	1.378	35	0.049	1.25	0.098	2.50	•
7221092	L7FI30080C22R150 KCU25S	0.236	6	7	0.315	8	0.866	22	1.378	35	0.059	1.50	0.118	3.00	•
7221041	R6FI10060C11R050 KCU25S	0.079	2	6	0.236	6	0.433	11	1.024	26	0.020	0.50	0.039	1.00	•
7221042	R6FI16060C11R080 KCU25S	0.118	3	6	0.236	6	0.433	11	1.024	26	0.032	0.80	0.063	1.60	•
7221043	R6FI20060C11R100 KCU25S	0.157	4	6	0.236	6	0.433	11	1.024	26	0.039	1.00	0.079	2.00	•
7221044	R6FI25060C11R125 KCU25S	0.197	5	6	0.236	6	0.433	11	1.024	26	0.049	1.25	0.098	2.50	•
7221045	R6FI30060C11R150 KCU25S	0.236	6	6	0.236	6	0.433	11	1.024	26	0.059	1.50	0.118	3.00	•
7221046	R6FI10060C20R050 KCU25S	0.079	2	6	0.236	6	0.787	20	1.378	35	0.020	0.50	0.039	1.00	•
7221047	R6FI16060C20R080 KCU25S	0.118	3	6	0.236	6	0.787	20	1.378	35	0.032	0.80	0.063	1.60	•
7221048	R6FI20060C20R100 KCU25S	0.157	4	6	0.236	6	0.787	20	1.378	35	0.039	1.00	0.079	2.00	•
7221049	R6FI25060C20R125 KCU25S	0.197	5	6	0.236	6	0.787	20	1.378	35	0.049	1.25	0.098	2.50	•
7221050	R6FI30060C20R150 KCU25S	0.236	6	6	0.236	6	0.787	20	1.378	35	0.059	1.50	0.118	3.00	•
7221093	R7FI10080C11R050 KCU25S	0.079	2	7	0.315	8	0.433	11	1.024	26	0.020	0.50	0.039	1.00	•
7221094	R7FI15080C11R078 KCU25S	0.118	3	7	0.315	8	0.433	11	1.024	26	0.031	0.78	0.059	1.50	•
7221095	R7FI16080C11R080 KCU25S	0.118	3	7	0.315	8	0.433	11	1.024	26	0.032	0.80	0.063	1.60	•
7221096	R7FI19080C11R099 KCU25S	0.157	4	7	0.315	8	0.433	11	1.024	26	0.039	0.99	0.075	1.90	•
7221097	R7FI20080C11R100 KCU25S	0.157	4	7	0.315	8	0.433	11	1.024	26	0.039	1.00	0.079	2.00	•
7221098	R7FI25080C11R125 KCU25S	0.197	5	7	0.315	8	0.433	11	1.024	26	0.049	1.25	0.098	2.50	•
7221099	R7FI30080C11R150 KCU25S	0.236	6	7	0.315	8	0.433	11	1.024	26	0.059	1.50	0.118	3.00	•
7221100	R7FI10080C22R050 KCU25S	0.079	2	7	0.315	8	0.866	22	1.378	35	0.020	0.50	0.039	1.00	•
7221111	R7FI16080C22R080 KCU25S	0.118	3	7	0.315	8	0.866	22	1.378	35	0.032	0.80	0.063	1.60	•
7221112	R7FI20080C22R100 KCU25S	0.157	4	7	0.315	8	0.866	22	1.378	35	0.039	1.00	0.079	2.00	•
7221113	R7FI25080C22R125 KCU25S	0.197	5	7	0.315	8	0.866	22	1.378	35	0.049	1.25	0.098	2.50	•
7221114	R7FI30080C22R150 KCU25S	0.236	6	7	0.315	8	0.866	22	1.378	35	0.059	1.50	0.118	3.00	•



APPLICATIONS



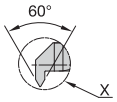
P	●
M	●
K	○
N	○
S	○
H	

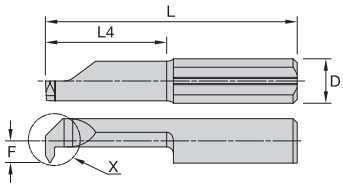
● Primary
○ Secondary

Face Grooving

Inboard Sweep • FI • Extended Depth of Cut • Radius Corner

		CD			DMIN		L4		L		Rε		W		KCU25S
Order Number	Catalog Number	in	mm	D	in	mm	in	mm	in	mm	in	mm	in	mm	
7219563	L8FI20120D10R020 KCU25S	0.394	10	8	0.472	12	0.394	10	1.181	30	0.008	0.20	0.079	2.00	•
7219565	L8FI20120D15R020 KCU25S	0.591	15	8	0.472	12	0.591	15	1.378	35	0.008	0.20	0.079	2.00	•
7219567	L8FI25120D10R020 KCU25S	0.394	10	8	0.472	12	0.394	10	1.181	30	0.008	0.20	0.098	2.50	•
7219569	L8FI25120D20R020 KCU25S	0.787	20	8	0.472	12	0.787	20	1.575	40	0.008	0.20	0.098	2.50	•
7219571	L8FI30160D10R020 KCU25S	0.394	10	8	0.630	16	0.394	10	1.181	30	0.008	0.20	0.118	3.00	•
7219573	L8FI30160D20R020 KCU25S	0.787	20	8	0.630	16	0.787	20	1.575	40	0.008	0.20	0.118	3.00	•
7219576	L8FI30200D25R020 KCU25S	0.984	25	8	0.787	20	0.984	25	1.772	45	0.008	0.20	0.118	3.00	•
7219577	L8FI30200D30R020 KCU25S	1.181	30	8	0.787	20	1.181	30	1.969	50	0.008	0.20	0.118	3.00	•
7219578	L8FI30200D35R020 KCU25S	1.378	35	8	0.787	20	1.378	35	2.165	55	0.008	0.20	0.118	3.00	•
7219579	L8FI30200D40R020 KCU25S	1.575	40	8	0.787	20	1.575	40	2.362	60	0.008	0.20	0.118	3.00	•
7219574	L8FI40160D10R020 KCU25S	0.394	10	8	0.630	16	0.394	10	1.181	30	0.008	0.20	0.158	4.00	•
7219575	L8FI40160D20R020 KCU25S	0.787	20	8	0.630	16	0.787	20	1.575	40	0.008	0.20	0.158	4.00	•
7219580	L8FI40200D25R020 KCU25S	0.984	25	8	0.787	20	0.984	25	1.772	45	0.008	0.20	0.158	4.00	•
7219581	L8FI40200D30R020 KCU25S	1.181	30	8	0.787	20	1.181	30	1.969	50	0.008	0.20	0.158	4.00	•
7219582	L8FI40200D35R020 KCU25S	1.378	35	8	0.787	20	1.378	35	2.165	55	0.008	0.20	0.158	4.00	•
7219583	L8FI40200D40R020 KCU25S	1.575	40	8	0.787	20	1.575	40	2.362	60	0.008	0.20	0.158	4.00	•
7219584	L8FI50200D20R020 KCU25S	0.787	20	8	0.787	20	0.787	20	1.575	40	0.008	0.20	0.197	5.00	•
7219585	L8FI50200D25R020 KCU25S	0.984	25	8	0.787	20	0.984	25	1.772	45	0.008	0.20	0.197	5.00	•
7219586	L8FI50200D30R020 KCU25S	1.181	30	8	0.787	20	1.181	30	1.969	50	0.008	0.20	0.197	5.00	•
7219587	L8FI50200D35R020 KCU25S	1.378	35	8	0.787	20	1.378	35	2.165	55	0.008	0.20	0.197	5.00	•
7219588	L8FI50200D40R020 KCU25S	1.575	40	8	0.787	20	1.575	40	2.362	60	0.008	0.20	0.197	5.00	•
7219589	R8FI20120D10R020 KCU25S	0.394	10	8	0.472	12	0.394	10	1.181	30	0.008	0.20	0.079	2.00	•
7219590	R8FI20120D15R020 KCU25S	0.591	15	8	0.472	12	0.591	15	1.378	35	0.008	0.20	0.079	2.00	•
7219591	R8FI25120D10R020 KCU25S	0.394	10	8	0.472	12	0.394	10	1.181	30	0.008	0.20	0.098	2.50	•
7219592	R8FI25120D20R020 KCU25S	0.787	20	8	0.472	12	0.787	20	1.575	40	0.008	0.20	0.098	2.50	•
7219593	R8FI30160D10R020 KCU25S	0.394	10	8	0.630	16	0.394	10	1.181	30	0.008	0.20	0.118	3.00	•
7219594	R8FI30160D20R020 KCU25S	0.787	20	8	0.630	16	0.787	20	1.575	40	0.008	0.20	0.118	3.00	•
7219597	R8FI30200D25R020 KCU25S	0.984	25	8	0.787	20	0.984	25	1.772	45	0.008	0.20	0.118	3.00	•
7219598	R8FI30200D30R020 KCU25S	1.181	30	8	0.787	20	1.181	30	1.969	50	0.008	0.20	0.118	3.00	•
7219599	R8FI30200D35R020 KCU25S	1.378	35	8	0.787	20	1.378	35	2.165	55	0.008	0.20	0.118	3.00	•
7219600	R8FI30200D40R020 KCU25S	1.575	40	8	0.787	20	1.575	40	2.362	60	0.008	0.20	0.118	3.00	•
7219595	R8FI40160D10R020 KCU25S	0.394	10	8	0.630	16	0.394	10	1.181	30	0.008	0.20	0.158	4.00	•
7219596	R8FI40160D20R020 KCU25S	0.787	20	8	0.630	16	0.787	20	1.575	40	0.008	0.20	0.158	4.00	•
7219621	R8FI40200D25R020 KCU25S	0.984	25	8	0.787	20	0.984	25	1.772	45	0.008	0.20	0.158	4.00	•
7219622	R8FI40200D30R020 KCU25S	1.181	30	8	0.787	20	1.181	30	1.969	50	0.008	0.20	0.158	4.00	•
7219623	R8FI40200D35R020 KCU25S	1.378	35	8	0.787	20	1.378	35	2.165	55	0.008	0.20	0.158	4.00	•
7219624	R8FI40200D40R020 KCU25S	1.575	40	8	0.787	20	1.575	40	2.362	60	0.008	0.20	0.158	4.00	•
7219625	R8FI50200D20R020 KCU25S	0.787	20	8	0.787	20	0.787	20	1.575	40	0.008	0.20	0.197	5.00	•
7219626	R8FI50200D25R020 KCU25S	0.984	25	8	0.787	20	0.984	25	1.772	45	0.008	0.20	0.197	5.00	•
7219627	R8FI50200D30R020 KCU25S	1.181	30	8	0.787	20	1.181	30	1.969	50	0.008	0.20	0.197	5.00	•
7219628	R8FI50200D35R020 KCU25S	1.378	35	8	0.787	20	1.378	35	2.165	55	0.008	0.20	0.197	5.00	•
7219629	R8FI50200D40R020 KCU25S	1.575	40	8	0.787	20	1.575	40	2.362	60	0.008	0.20	0.197	5.00	•





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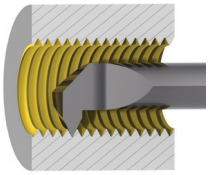


P	●
M	●
K	○
N	○
S	○
H	

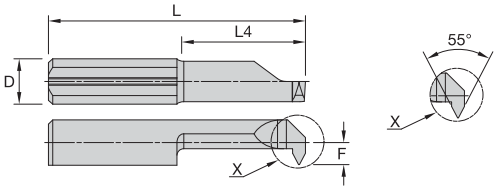
● Primary
○ Secondary

Threading

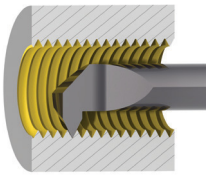
Partial Profile • TP

KCU25S

			DMIN		F		L4		L				
Order Number	Catalog Number	D	in	mm	in	mm	in	mm	in	mm	KRx	Pitch	
7221187	L4TPME007H03T025 KCU25S	4	0.028	0.70	-	-	0.118	3	0.787	20	60°	0.25 - 0.30	•
7221189	L4TPME012H04T035 KCU25S	41	0.047	1.20	0.014	0.35	0.158	4	0.787	20	60°	0.35 - 0.40	•
7221223	L4TPME015C05T040 KCU25S	4	0.059	1.50	-	-	0.197	5	0.787	20	60°	0.40 - 0.45	•
7221224	L4TPME017C06T045 KCU25S	4	0.067	1.70	-	-	0.236	6	0.866	22	60°	0.45 - 0.50	•
7221225	L4TPME024C08T050 KCU25S	4	0.095	2.40	0.012	0.30	0.315	8	0.866	22	60°	0.50 - 0.70	•
7221226	L4TPME032C10T050 KCU25S	4	0.126	3.20	0.039	1.00	0.394	10	0.945	24	60°	0.50 - 0.75	•
7221227	L4TPME032C12T050 KCU25S	4	0.126	3.20	0.039	1.00	0.472	12	1.024	26	60°	0.50 - 0.75	•
7221229	L4TPME040C15T050 KCU25S	4	0.158	4.00	0.059	1.50	0.591	15	1.181	30	60°	0.50 - 0.70	•
7221228	L4TPME032C10T070 KCU25S	4	0.126	3.20	0.035	0.90	0.394	10	0.945	24	60°	0.70 - 0.80	•
7221230	L4TPME040C15T080 KCU25S	4	0.158	4.00	0.035	0.90	0.591	15	0.945	24	60°	0.80 - 1.0	•
7221231	L5TPME050C15T050 KCU25S	5	0.197	5.00	0.075	1.90	0.591	15	1.181	30	60°	0.50 - 0.75	•
7221232	L5TPME050C20T050 KCU25S	5	0.197	5.00	0.075	1.90	0.787	20	1.378	35	60°	0.50 - 0.75	•
7221233	L5TPME050C25T050 KCU25S	5	0.197	5.00	0.075	1.90	0.984	25	1.575	40	60°	0.50 - 0.75	•
7221234	L5TPME050C15T075 KCU25S	5	0.197	5.00	0.075	1.90	0.591	15	1.181	30	60°	0.75 - 1.0	•
7221235	L5TPME050C20T075 KCU25S	5	0.197	5.00	0.075	1.90	0.787	20	1.378	35	60°	0.75 - 1.0	•
7221236	L5TPME050C15T100 KCU25S	5	0.197	5.00	0.075	1.90	0.591	15	1.181	30	60°	1.0 - 1.25	•
7221237	L5TPME050C20T100 KCU25S	5	0.197	5.00	0.075	1.90	0.787	20	1.378	35	60°	1.0 -1.25	•
7221238	L5TPME050C25T100 KCU25S	5	0.197	5.00	0.075	1.90	0.984	25	1.575	40	60°	1.0 - 1.25	•
7221239	L6TPME060C15T100 KCU25S	6	0.236	6.00	0.091	2.30	0.591	15	1.181	30	60°	1.0 - 1.25	•
7221240	L6TPME060C22T100 KCU25S	6	0.236	6.00	0.091	2.30	0.866	22	1.457	37	60°	1.0 - 1.25	•
7221241	L6TPME060C15T125 KCU25S	6	0.236	6.00	0.091	2.30	0.591	15	1.181	30	60°	1.25 - 1.50	•
7221242	L6TPME060C22T125 KCU25S	6	0.236	6.00	0.091	2.30	0.866	22	1.457	37	60°	1.25 - 1.50	•
7221243	L6TPME060C30T125 KCU25S	6	0.236	6.00	0.091	2.30	1.181	30	1.772	45	60°	1.25 - 1.50	•
7221244	L6TPME060C15T150 KCU25S	6	0.236	6.00	0.091	2.30	0.591	15	1.181	30	60°	1.50 - 1.75	•
7221245	L6TPME060C22T150 KCU25S	6	0.236	6.00	0.091	2.30	0.866	22	1.457	37	60°	1.50 - 1.75	•
7221246	L7TPME070C15T150 KCU25S	7	0.276	7.00	0.106	2.70	0.591	15	1.181	30	60°	1.50 - 1.75	•
7221247	L7TPME070C25T150 KCU25S	7	0.276	7.00	0.106	2.70	0.984	25	1.575	40	60°	1.50 - 1.75	•
7221248	R4TPME007H03T025 KCU25S	4	0.028	0.70	-	-	0.118	3	0.787	20	60°	0.25 - 0.30	•
7221249	R4TPME012H04T035 KCU25S	4	0.047	1.20	0.014	0.35	0.158	4	0.787	20	60°	0.35 - 0.40	•
7221250	R4TPME015C05T040 KCU25S	4	0.059	1.50	-	-	0.197	5	0.787	20	60°	0.40 - 0.45	•
7221251	R4TPME017C06T045 KCU25S	4	0.067	1.70	-	-	0.236	6	0.866	22	60°	0.45 - 0.50	•
7221252	R4TPME024C08T050 KCU25S	4	0.095	2.40	0.012	0.30	0.315	8	0.866	22	60°	0.50 - 0.70	•
7221253	R4TPME032C10T050 KCU25S	4	0.126	3.20	0.039	1.00	0.394	10	0.945	24	60°	0.50 - 0.75	•
7221254	R4TPME032C12T050 KCU25S	4	0.126	3.20	0.039	1.00	0.472	12	1.024	26	60°	0.50 - 0.75	•
7221256	R4TPME040C15T050 KCU25S	4	0.158	4.00	0.059	1.50	0.591	15	1.181	30	60°	0.50 - 0.70	•
7221255	R4TPME032C10T070 KCU25S	4	0.126	3.20	0.035	0.90	0.394	10	0.945	24	60°	0.70 - 0.80	•
7221257	R4TPME040C15T080 KCU25S	4	0.158	4.00	0.059	1.50	0.591	15	1.181	30	60°	0.80 - 1.0	•
7221258	R5TPME050C15T050 KCU25S	5	0.197	5.00	0.075	1.90	0.591	15	1.181	30	60°	0.50 - 0.75	•
7221259	R5TPME050C20T050 KCU25S	5	0.197	5.00	0.075	1.90	0.787	20	1.378	35	60°	0.50 - 0.75	•
7221260	R5TPME050C25T050 KCU25S	5	0.197	5.00	0.075	1.90	0.984	25	1.575	40	60°	0.50 - 0.75	•
7221261	R5TPME050C15T075 KCU25S	5	0.197	5.00	0.075	1.90	0.591	15	1.181	30	60°	0.75 - 1.0	•
7221262	R5TPME050C20T075 KCU25S	5	0.197	5.00	0.075	1.90	0.787	20	1.378	35	60°	0.75 - 1.0	•
7221263	R5TPME050C15T100 KCU25S	5	0.197	5.00	0.075	1.90	0.591	15	1.181	30	60°	1.0 - 1.25	•
7221264	R5TPME050C20T100 KCU25S	5	0.197	5.00	0.075	1.90	0.787	20	1.378	35	60°	1.0 -1.25	•
7221265	R5TPME050C25T100 KCU25S	5	0.197	5.00	0.075	1.90	0.984	25	1.575	40	60°	1.0 - 1.25	•
7221266	R6TPME060C15T100 KCU25S	6	0.236	6.00	0.091	2.30	0.591	15	1.181	30	60°	1.0 - 1.25	•
7221267	R6TPME060C22T100 KCU25S	6	0.236	6.00	0.091	2.30	0.866	22	1.457	37	60°	1.0 - 1.25	•
7221268	R6TPME060C15T125 KCU25S	6	0.236	6.00	0.091	2.30	0.591	15	1.181	30	60°	1.25 - 1.50	•
7221269	R6TPME060C22T125 KCU25S	6	0.236	6.00	0.091	2.30	0.866	22	1.457	37	60°	1.25 - 1.50	•
7221270	R6TPME060C30T125 KCU25S	6	0.236	6.00	0.091	2.30	1.181	30	1.772	45	60°	1.25 - 1.50	•
7221271	R6TPME060C15T150 KCU25S	6	0.236	6.00	0.091	2.30	0.591	15	1.181	30	60°	1.50 - 1.75	•
7221272	R6TPME060C22T150 KCU25S	6	0.236	6.00	0.091	2.30	0.866	22	1.457	37	60°	1.50 - 1.75	•
7221273	R7TPME070C15T150 KCU25S	7	0.276	7.00	0.106	2.70	0.591	15	1.181	30	60°	1.50 - 1.75	•
7221274	R7TPME070C25T150 KCU25S	7	0.276	7.00	0.106	2.70	0.984	25	1.575	40	60°	1.50 - 1.75	•



APPLICATIONS



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● Primary
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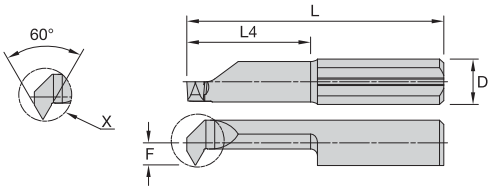
Threading

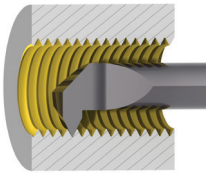
Partial Profile • TP • Whitworth • WH

KCU25S

			DMIN		F		L4		L			
Order Number	Catalog Number	D	in	mm	in	mm	in	mm	in	mm	KRx	Pitch
7219435	L5TPWH048C15T024 KCU25S	5	0.189	4.80	0.075	1.90	0.591	15	1.181	30	55°	24 - 48
7219439	L6TPWH060C15T016 KCU25S	6	0.236	6.00	0.091	2.30	0.591	15	1.181	30	55°	16 - 24
7219437	L6TPWH060C15T024 KCU25S	6	0.236	6.00	0.091	2.30	0.591	15	1.181	30	55°	24 - 48
7219451	L7TPWH070C15T016 KCU25S	7	0.276	7.00	0.110	2.80	0.591	15	1.181	30	55°	16 - 24
7219453	R5TPWH048C15T024 KCU25S	5	0.189	4.80	0.075	1.90	0.591	15	1.181	30	55°	24 - 48
7219457	R6TPWH060C15T016 KCU25S	6	0.236	6.00	0.091	2.30	0.591	15	1.181	30	55°	16 - 24
7219455	R6TPWH060C15T024 KCU25S	6	0.236	6.00	0.091	2.30	0.591	15	1.181	30	55°	24 - 48
7219459	R7TPWH070C15T016 KCU25S	7	0.276	7.00	0.110	2.80	0.591	15	1.181	30	55°	16 - 24



APPLICATIONS



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● Primary
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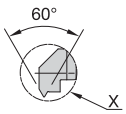
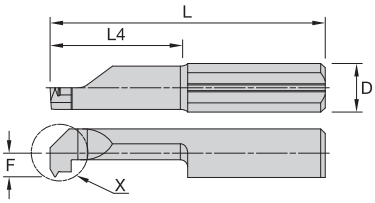
Threading

Partial Profile • TP National Pipe Thread • NPT

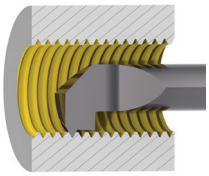
KCU25S

			DMIN		F		L4		L			
Order Number	Catalog Number	D	in	mm	in	mm	in	mm	in	mm	KRx	Pitch
7219476	L6TPNP060C15T018 KCU25S	6	0.236	6	0.091	2.30	0.591	15	1.181	30	60°	18
7219480	L6TPNP060C15T027 KCU25S	6	0.236	6	0.091	2.30	0.591	15	1.181	30	60°	27
7219477	L6TPNP060C22T018 KCU25S	6	0.236	6	0.091	2.30	0.866	22	1.457	37	60°	18
7219482	L6TPNP060C22T027 KCU25S	6	0.236	6	0.091	2.30	0.866	22	1.457	37	60°	27
7219484	R6TPNP060C15T018 KCU25S	6	0.236	6	0.091	2.30	0.591	15	1.181	30	60°	18
7219489	R6TPNP060C15T027 KCU25S	6	0.236	6	0.091	2.30	0.591	15	1.181	30	60°	27
7219486	R6TPNP060C22T018 KCU25S	6	0.236	6	0.091	2.30	0.866	22	1.457	37	60°	18
7219491	R6TPNP060C22T027 KCU25S	6	0.236	6	0.091	2.30	0.866	22	1.457	37	60°	27





APPLICATIONS



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● Primary
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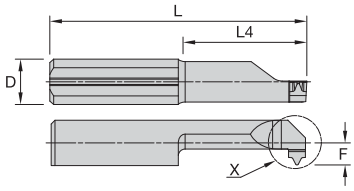
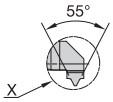
Threading

Full Profile • TF

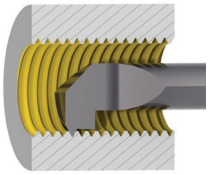
KCU25S

			DMIN		F		L4		L				
Order Number	Catalog Number	D	in	mm	in	mm	in	mm	in	mm	KRx	Pitch	
7221081	L4TFME024C10T050 KCU25S	4	0.095	2.40	0.008	0.20	0.394	10	0.984	25	60°	0.50	•
7221082	L4TFME024C15T050 KCU25S	4	0.095	2.40	0.008	0.20	0.591	15	1.181	30	60°	0.50	•
7221083	L4TFME032C15T070 KCU25S	4	0.126	3.20	0.035	0.90	0.591	15	1.181	30	60°	0.70	•
7221084	L4TFME032C20T070 KCU25S	4	0.126	3.20	0.035	0.90	0.787	20	1.378	35	60°	0.70	•
7221085	L4TFME040C15T050 KCU25S	4	0.158	4.00	0.059	1.50	0.591	15	1.181	30	60°	0.50	•
7221086	L4TFME040C15T080 KCU25S	4	0.158	4.00	0.059	1.50	0.591	15	1.181	30	60°	0.80	•
7221087	L4TFME040C25T080 KCU25S	4	0.158	4.00	0.059	1.50	0.984	25	1.575	40	60°	0.80	•
7221088	L5TFME050C15T050 KCU25S	5	0.197	5.00	0.075	1.90	0.591	15	1.181	30	60°	0.50	•
7221089	L5TFME050C15T075 KCU25S	5	0.197	5.00	0.075	1.90	0.591	15	1.181	30	60°	0.75	•
7221090	L5TFME050C15T080 KCU25S	5	0.197	5.00	0.075	1.90	0.591	15	1.181	30	60°	0.80	•
7221101	L5TFME050C15T100 KCU25S	5	0.197	5.00	0.075	1.90	0.591	15	1.181	30	60°	1.00	•
7221102	L5TFME050C20T100 KCU25S	5	0.197	5.00	0.075	1.90	0.787	20	1.378	35	60°	1.00	•
7221103	L5TFME050C25T100 KCU25S	5	0.197	5.00	0.075	1.90	0.984	25	1.575	40	60°	1.00	•
7221104	L5TFME050C30T100 KCU25S	5	0.197	5.00	0.075	1.90	1.181	30	1.772	45	60°	1.00	•
7221105	L6TFME060C15T100 KCU25S	6	0.236	6.00	0.091	2.30	0.591	15	1.181	30	60°	1.00	•
7221106	L6TFME060C15T125 KCU25S	6	0.236	6.00	0.091	2.30	0.591	15	1.181	30	60°	1.25	•
7221109	L6TFME060C15T150 KCU25S	6	0.236	6.00	0.091	2.30	0.591	15	1.181	30	60°	1.50	•
7221107	L6TFME060C20T125 KCU25S	6	0.236	6.00	0.091	2.30	0.787	20	1.378	35	60°	1.25	•
7221108	L6TFME060C30T125 KCU25S	6	0.236	6.00	0.091	2.30	1.181	30	1.772	45	60°	1.25	•
7221110	L7TFME070C15T150 KCU25S	7	0.276	7.00	0.110	2.80	0.591	15	1.181	30	60°	1.50	•
7221121	R4TFME024C10T050 KCU25S	4	0.095	2.40	0.008	0.20	0.394	10	0.984	25	60°	0.50	•
7221122	R4TFME024C15T050 KCU25S	4	0.095	2.40	0.008	0.20	0.591	15	1.181	30	60°	0.50	•
7221123	R4TFME032C15T070 KCU25S	4	0.126	3.20	0.035	0.90	0.591	15	1.181	30	60°	0.70	•
7221124	R4TFME032C20T070 KCU25S	4	0.126	3.20	0.035	0.90	0.787	20	1.378	35	60°	0.70	•
7221125	R4TFME040C15T050 KCU25S	4	0.158	4.00	0.059	1.50	0.591	15	1.181	30	60°	0.50	•
7221126	R4TFME040C15T080 KCU25S	4	0.158	4.00	0.059	1.50	0.591	15	1.181	30	60°	0.80	•
7221127	R4TFME040C25T080 KCU25S	4	0.158	4.00	0.059	1.50	0.984	25	1.575	40	60°	0.80	•
7221128	R5TFME050C15T050 KCU25S	5	0.197	5.00	0.075	1.90	0.591	15	1.181	30	60°	0.50	•
7221129	R5TFME050C15T075 KCU25S	5	0.197	5.00	0.075	1.90	0.591	15	1.181	30	60°	0.75	•
7221130	R5TFME050C15T080 KCU25S	5	0.197	5.00	0.075	1.90	0.591	15	1.181	30	60°	0.80	•
7221131	R5TFME050C15T100 KCU25S	5	0.197	5.00	0.075	1.90	0.591	15	1.181	30	60°	1.00	•
7221132	R5TFME050C20T100 KCU25S	5	0.197	5.00	0.075	1.90	0.787	20	1.378	35	60°	1.00	•
7221133	R5TFME050C25T100 KCU25S	5	0.197	5.00	0.075	1.90	0.984	25	1.575	40	60°	1.00	•
7221134	R5TFME050C30T100 KCU25S	5	0.197	5.00	0.075	1.90	1.181	30	1.772	45	60°	1.00	•
7221135	R6TFME060C15T100 KCU25S	6	0.236	6.00	0.091	2.30	0.591	15	1.181	30	60°	1.00	•
7221136	R6TFME060C15T125 KCU25S	6	0.236	6.00	0.091	2.30	0.591	15	1.181	30	60°	1.25	•
7221139	R6TFME060C15T150 KCU25S	6	0.236	6.00	0.091	2.30	0.591	15	1.181	30	60°	1.50	•
7221137	R6TFME060C20T125 KCU25S	6	0.236	6.00	0.091	2.30	0.787	20	1.378	35	60°	1.25	•
7221138	R6TFME060C30T125 KCU25S	6	0.236	6.00	0.091	2.30	1.181	30	1.772	45	60°	1.25	•
7221140	R7TFME070C15T150 KCU25S	7	0.276	7.00	0.110	2.80	0.591	15	1.181	30	60°	1.50	•





APPLICATIONS



● Primary
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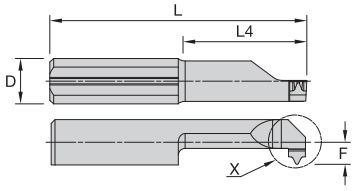
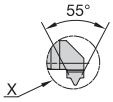
Threading

Full Profile • TF • Whitworth

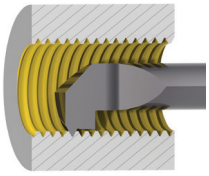
KCU25S

			DMIN		F		L4		L				
Order Number	Catalog Number	D	in	mm	in	mm	in	mm	in	mm	KRx	Pitch	
7219460	L6TFWH060C15T019 KCU25S	6	0.236	6	0.091	2.30	0.591	15	1.181	30	55°	19	•
7219471	L6TFWH060C15T022 KCU25S	6	0.236	6	0.091	2.30	0.591	15	1.181	30	55°	22	•
7219472	L6TFWH060C15T028 KCU25S	6	0.236	6	0.091	2.30	0.591	15	1.181	30	55°	28	•
7219473	R6TFWH060C15T019 KCU25S	6	0.236	6	0.091	2.30	0.591	15	1.181	30	55°	19	•
7219474	R6TFWH060C15T022 KCU25S	6	0.236	6	0.091	2.30	0.591	15	1.181	30	55°	22	•
7219475	R6TFWH060C15T028 KCU25S	6	0.236	6	0.091	2.30	0.591	15	1.181	30	55°	28	•





APPLICATIONS



● Primary
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Threading

Full Profile • TF • Whitworth

KCU25S

			DMIN		F		L4		L				
Order Number	Catalog Number	D	in	mm	in	mm	in	mm	in	mm	KRx	Pitch	
7219460	L6TFWH060C15T019 KCU25S	6	0.236	6	0.091	2.30	0.591	15	1.181	30	55°	19	•
7219471	L6TFWH060C15T022 KCU25S	6	0.236	6	0.091	2.30	0.591	15	1.181	30	55°	22	•
7219472	L6TFWH060C15T028 KCU25S	6	0.236	6	0.091	2.30	0.591	15	1.181	30	55°	28	•
7219473	R6TFWH060C15T019 KCU25S	6	0.236	6	0.091	2.30	0.591	15	1.181	30	55°	19	•
7219474	R6TFWH060C15T022 KCU25S	6	0.236	6	0.091	2.30	0.591	15	1.181	30	55°	22	•
7219475	R6TFWH060C15T028 KCU25S	6	0.236	6	0.091	2.30	0.591	15	1.181	30	55°	28	•

SELECT CUTTING SPEED

Low-Carbon (<0,3% C) and Free-Machining Steels		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
P0/P1	KCPM25S	40	260	130	850
	KCU25S	30	200	100	680

Medium and High-Carbon Steels (>0,3% C)		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
P2	KCPM25S	20	180	60	590
	KCU25S	15	140	50	470

Alloy Steels and Tool Steels; <330 HB; <35 HRC		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
P3	KCPM25S	20	130	60	420
	KCU25S	15	100	50	330

Alloy Steels and Tool Steels; 350–450 HB; 35–48 HRC		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
P4	KCPM25S	10	130	30	425
	KCHS25S	10	130	30	425
	KCU25S	10	100	25	340

Ferritic, Martensitic, and PH Stainless Steels; <330 HB; <35 HRC		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
P5	KCPM25S	20	160	60	520
	KCU25S	15	130	50	410

Ferritic, Martensitic, and PH Stainless Steels; 350–450 HB; 35–48 HRC		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
P6	KCPM25S	10	100	30	330
	KCHS25S	10	100	30	330
	KCU25S	10	80	25	260

SELECT CUTTING SPEED

Austenitic Stainless Steels		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
M1	KCSM25S	30	180	100	590
	KCPM25S	30	180	100	590
	KCU25S	25	140	80	470

High Strength Austenitic Stainless and Cast Stainless Steels		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
M2	KCSM25S	20	140	60	460
	KCPM25S	20	140	60	460
	KCU25S	15	110	50	370

Duplex Stainless Steels (Ferritic and Austenitic Mixture)		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
M3	KCSM25S	20	110	60	360
	KCPM25S	20	110	60	360
	KCU25S	15	90	50	290

SELECT CUTTING SPEED

Iron-Based, Heat-Resistant Alloys; 160-260 HB; 25-48 HRC; 500-1200 MPa Tensile Strength		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
S1	KCSM25S	10	100	30	330
	KCHS25S	10	100	30	330
	KCU25S	10	80	25	260

Cobalt-Based, Heat-Resistant Alloys; 250-450 HB; 25-48 HRC; 1000-1450 Tensile Strength		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
S2	KCSM25S	10	60	30	200
	KCHS25S	10	60	30	200
	KCU25S	10	50	25	160

Nickel-Based, Heat-Resistant Alloys 160-450HB; <48 HRC; 600-1700 Tensile Strength		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
S3	KCSM25S	10	100	30	330
	KCHS25S	10	100	30	330
	KCU25S	10	80	25	260

Titanium and Titanium Alloys 300-400 HB; 33-48 HRC; 900-1600 Tensile Strength		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
S4	KCSM25S	10	100	30	330
	KCHS25S	10	100	30	330
	KCU25S	10	80	25	260

SELECT CUTTING SPEED

Hardened Materials; 44-48 HRC		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
H1	KCHS25S	10	90	30	290
	KCU25S	10	60	20	200

Hardened Materials; 48-55 HRC		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
H2	KCHS25S	10	90	30	290
	KCU25S	10	60	20	200

Hardened Materials; 55-60 HRC		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
H3	KCHS25S	10	80	30	260
	KCU25S	10	55	20	180

Hardened Materials; 60-66 HRC		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
H4	KCHS25S	10	60	30	200

SELECT CUTTING SPEED

Grey Cast Iron		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
K1	KCU25S	15	180	50	600
	KCPM25S	20	230	60	750
	KCHS25S	20	230	60	750

Low & Medium Strength Ductile Irons (Nodular Irons) and Compacted Graphite Irons (CGI)		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
K2	KCU25S	15	120	50	390
	KCPM25S	20	150	60	490
	KCHS25S	20	150	60	490

High Strength Ductile and Austempered Ductile Iron (ADI) and Malleable Cast Irons		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
K3	KCU25S	25	180	80	600
	KCPM25S	30	230	100	750
	KCHS25S	30	230	100	750

SELECT CUTTING SPEED

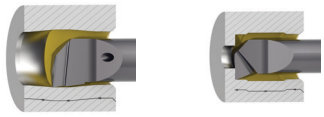
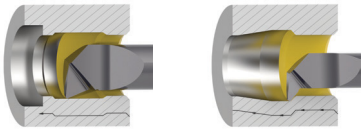
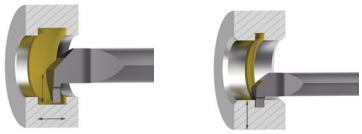
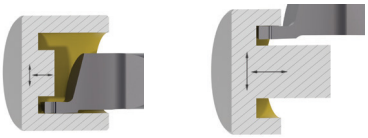
Low-Silicon Aluminum Alloys and Magnesium Alloys; Si12.2%		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
N2	KCU25S	60	440	200	1450

High-Silicone Aluminum and Magnesium Alloys; Si>12.2%		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
N3	KCU25S	30	290	100	950

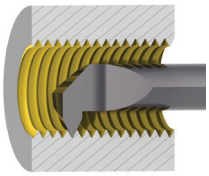
Copper, Brass, Zinc-Based on a Machinability Index Range of 70-100		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
N4	KCU25S	40	390	130	1280

Nylon, Plastics, Rubbers, Phenolics, Resins, Fiberglass		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
N5	KCU25S	40	290	130	950

FEED RATE & DEPTH OF CUT

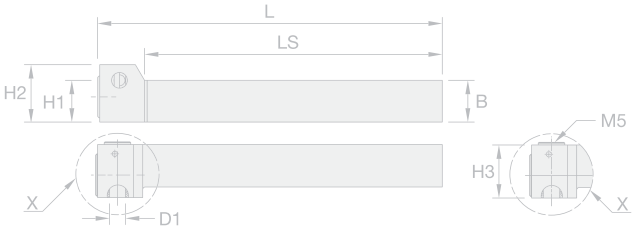
	Applications	Feed Rate (mm/rev)		Depth of Cut (mm)	
		MIN	MAX	MIN	MAX
High-Performance Boring & Profiling KCPM25S KCSM25S KCHS25S		0.005	0.25	0.005	0.77
Boring & Profiling KCU25S		0.005	0.08	0.005	0.5
Internal Grooving KCU25S		0.01	0.03	0.03	0.05
Face Grooving KCU25S		0.02	0.05	0.03	0.05

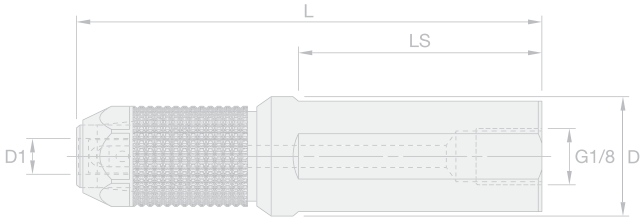
THREADING SPEED & NUMBER OF PASSES

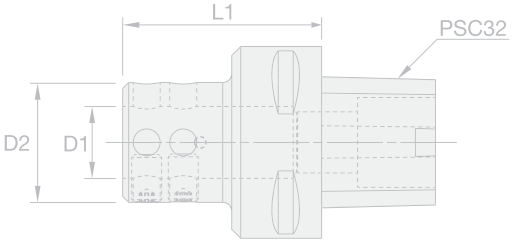
Internal Threading KCU25S									
Material		P0	P1	P2	P3	P4	M	K	N
m/min		160	140	120	90	70	90	100	300
SFM		520	460	390	290	230	290	330	980
Thread Pitch		Number of passes							
mm	TPI								
0.5	48	5	5	5	5	8	8	5	5
0.8	32	6	6	6	6	8	8	6	6
1	24	7	7	7	7	8	8	7	7
1.25	20	8	8	8	8	10	10	8	8
1.5	16	10	10	10	10	12	12	10	10
1.75	14	12	12	12	12	14	14	12	12
2	12	13	13	13	13	15	15	13	13
2.5	10	15	15	16	16	18	18	16	15
3	8	16	16	17	17	20	20	17	16
4	6	18	18	19	19	22	22	19	18
5	5	20	20	21	21	24	24	21	20
6	4	22	22	23	23	26	26	23	22

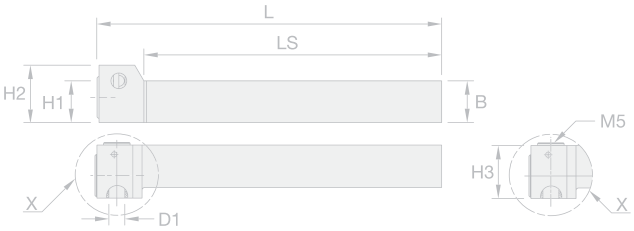
TopSwiss MBS

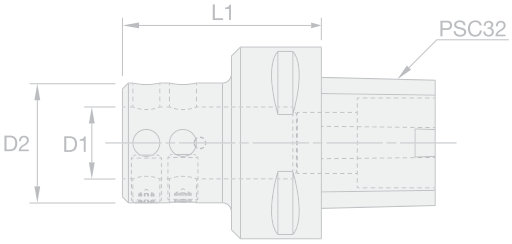
HOLDERS

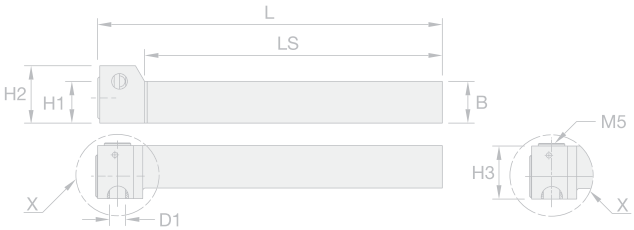


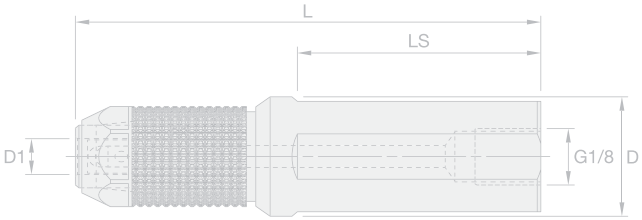


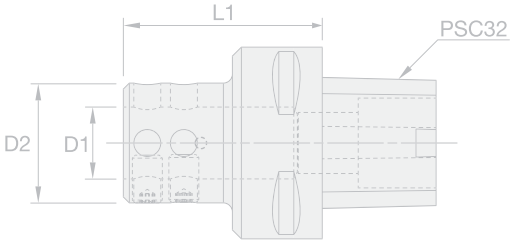


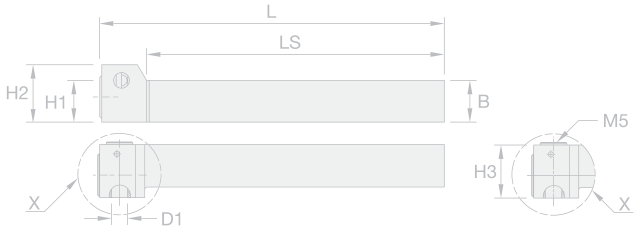


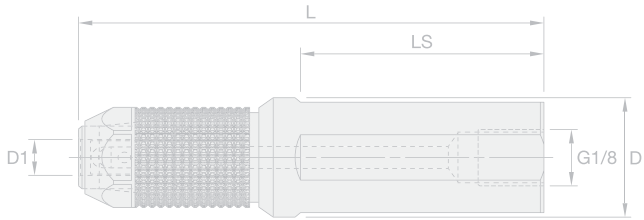












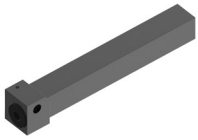
KENNAMETAL

NOMENCLATURE ROUND SHANK HOLDERS

Example:
A16RMBSSPD45M

A	16	R	MBS	SP	D	45	M
Bar Type	**Bar Diameter**	**Bar Length**	**Family Name**	**Tool Type**	**Tool Style**	**Insert Size(s)**	**Unit**
A: steel bar with coolant	METRIC: two digit # indicates bar Ø in mm	A: 32mm (30-35)	Micro Boring Solid	SP: standard performance	S: single end	4: 4mm insert	M: metric
E: carbide bar with coolant	08: 8mm	B: 40mm (40-45)		PP: premium performance	D: double end	5: 5mm insert	I: inch
	16: 16mm	D: 60mm (60-65)		HP: high performance		6: 6mm insert	
		E: 70mm (70-75)		DB: drill bore (multi-function)		7: 7mm insert	
		G: 90mm (3.5") (90-95)		BS: bushing style		8: 8mm insert	
		H: 100mm (4.0") (100-105)				45: 4mm & 5mm	
		J: 110mm (4.5") (110-115)				56: 5mm & 6mm	
		K: 125mm (5.0") (120-135)				67: 6mm & 7mm	
		M: 150mm (6.0") (150-155)				78: 7mm & 8mm	
						0: all insert sizes	
	INCH: two digit # indicates bar Ø in 1/16"						
	08: 8/16 or 1/2"						
	16: 16/16 or 1"						

NOMENCLATURE SQUARE SHANK HOLDERS



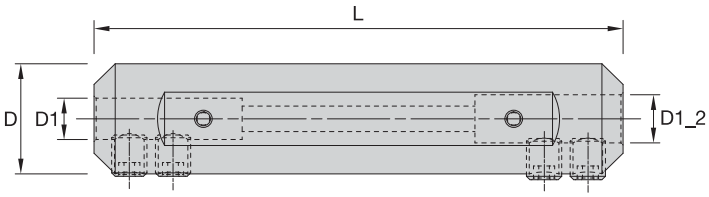
Example:
MBSAR1212M6C

MBS	A	R	1212	M	6	C
Family Name	**Tool Style**	**Hand**	**Shank Size**	**Unit**	**Insert Size(s)**	**Coolant**
Micro Boring Solid	A: 90 degree	R: right hand	METRIC: height x width in mm	M: metric	4: 4mm insert	C: coolant through
		L: left hand	1212: 12mm x 12mm	I: inch	5: 5mm insert	
					6: 6mm insert	
					7: 7mm insert	
					8: 8mm insert	
					0: all insert sizes	
			INCH: height x width in 1/16" increments			
			0808: 1/2" x 1/2"			

NOMENCLATURE QUICK CHANGE HOLDERS

Example:
PSC3MBSBS0

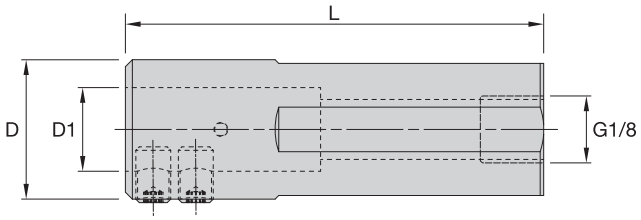
PSC3	MBS	BS	0
System & Size	**Family Name**	**Tool Style**	**Insert Size(s)**
PSC3	Micro Boring Solid	BS: bushing style	0: all insert sizes
PSC4			
KM1612			
KM2016			



Round Shank • Standard Performance

Centerline Accuracy ±0.0008" (0,020mm)

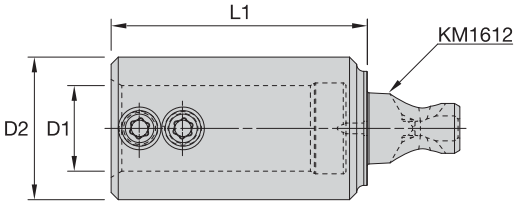
		D1 (1)	D1 (2)	D		L	
Order Number	Catalog Number	mm	mm	in	mm	in	mm
7187242	A12GMBSSPD45I	4	5	0.750	19.05	3.543	90
7187248	A12GMBSSPD67I	6	7	0.750	19.05	3.543	90
7187246	A16GMBSSPD45I	4	5	1.000	25.40	3.740	95
7187262	A16GMBSSPD67I	6	7	1.000	25.40	3.740	95
7187266	A16GMBSSPD78I	7	8	1.000	25.40	3.740	95
7187190	A12EMBSSPD45M	4	5	0.472	12.00	2.953	75
7187241	A16EMBSSPD45M	4	5	0.630	16.00	2.953	75
7187247	A16EMBSSPD67M	6	7	0.630	16.00	2.953	75
7187263	A16EMBSSPD78M	7	8	0.630	16.00	2.953	75
7187243	A20GMBSSPD45M	4	5	0.787	20.00	3.543	90
7187249	A20GMBSSPD67M	6	7	0.787	20.00	3.543	90
7187264	A20GMBSSPD78M	7	8	0.787	20.00	3.543	90
7187244	A22GMBSSPD45M	4	5	0.866	22.00	3.543	90
7187250	A22GMBSSPD67M	6	7	0.866	22.00	3.543	90
7187245	A25GMBSSPD45M	4	5	0.984	25.00	3.740	95
7187261	A25GMBSSPD67M	6	7	0.984	25.00	3.740	95
7187265	A25GMBSSPD78M	7	8	0.984	25.00	3.740	95



Round Shank • Bushing Style • Standard Performance

Centerline Accuracy ±0.0008" (0,020mm)

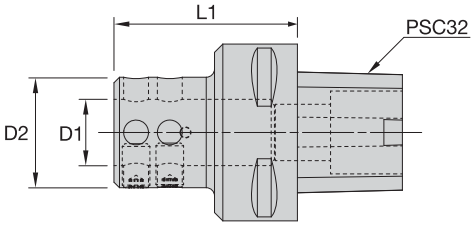
		D1	D		L		
Order Number	Catalog Number	mm	in	mm	in	mm	G3
7188876	A12DMBSBSS0I	12	0.750	19.05	2.362	60	G 1/8
7188858	A12KMBSBSS0I	12	0.750	19.05	4.724	120	G 1/8
7188880	A16DMBSBSS0I	12	1.000	25.40	2.362	60	G 1/8
7188875	A16KMBSBSS0I	12	1.000	25.40	4.724	120	G 1/8
7188857	A16KMBSBSS0M	12	0.630	16.00	4.724	120	G 1/8
7188877	A20DMBSBSS0M	12	0.787	20.00	2.362	60	G 1/8
7188859	A20KMBSBSS0M	12	0.787	20.00	4.724	120	G 1/8
7188860	A20MMBSBSS0M	12	0.787	20.00	5.906	150	G 1/8
7188878	A22DMBSBSS0M	12	0.866	22.00	2.362	60	G 1/8
7188871	A22KMBSBSS0M	12	0.866	22.00	4.724	120	G 1/8
7188872	A22MMBSBSS0M	12	0.866	22.00	5.906	150	G 1/8
7188879	A25DMBSBSS0M	12	0.984	25.00	2.362	60	G 1/8
7188873	A25KMBSBSS0M	12	0.984	25.00	4.724	120	G 1/8
7188874	A25MMBSBSS0M	12	0.984	25.00	5.906	150	G 1/8



KM • Bushing Style • Standard Performance

Centerline Accuracy ±0.0008" (0,020mm)

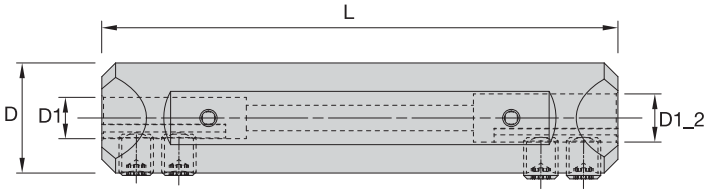
			D1	D2		L1	
Order Number	Catalog Number	CSMS	mm	in	mm	in	mm
7255887	KM1612MBSBS0	KM1612	12	0.787	20	1.417	36
7255888	KM2016MBSBS0	KM2016	12	0.787	20	1.417	36



PSC • Bushing Style • Standard Performance

Centerline Accuracy ±0.0008" (0,020mm)

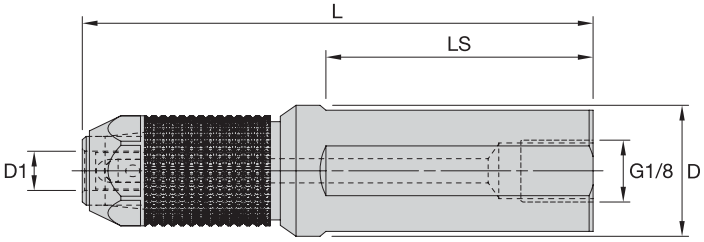
			D1	D2		L1	
Order Number	Catalog Number	CSMS	mm	in	mm	in	mm
7188855	PSC3MBSBS0	PSC32	12	0.787	20	1.307	33.20
7188856	PSC4MBSBS0	PSC40	12	0.787	20	1.504	38.20



Round Shank • Premium Performance

Centerline Accuracy ±0.0004" (0,010mm)

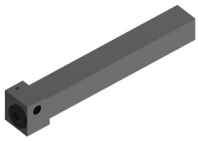
		D1 (1)	D1 (2)	D		L	
Order Number	Catalog Number	mm	mm	in	mm	in	mm
7187268	A08EMBSPPD45I	4	5	0.500	12.70	2.953	75
7187269	A10EMBSPPD45I	4	5	0.625	15.87	2.953	75
7187276	A10EMBSPPD67I	6	7	0.625	15.87	2.953	75
7187271	A12GMBSPPD45I	4	5	0.750	19.05	3.543	90
7187278	A12GMBSPPD67I	6	7	0.750	19.05	3.543	90
7187275	A16GMBSPPD45I	4	5	1.000	25.40	3.740	95
7187293	A16GMBSPPD67I	6	7	1.000	25.40	3.740	95
7187267	A12EMBSPPD45M	4	5	0.472	12.00	2.953	75
7187270	A16EMBSPPD45M	4	5	0.630	16.00	2.953	75
7187277	A16EMBSPPD67M	6	7	0.630	16.00	2.953	75
7187294	A16EMBSPPD78M	7	8	0.630	16.00	2.953	75
7187272	A20GMBSPPD45M	4	5	0.787	20.00	3.543	90
7187280	A20GMBSPPD67M	6	7	0.787	20.00	3.543	90
7187295	A20GMBSPPD78M	7	8	0.787	20.00	3.543	90
7187273	A22GMBSPPD45M	4	5	0.866	22.00	3.543	90
7187291	A22GMBSPPD67M	6	7	0.866	22.00	3.543	90
7187274	A25GMBSPPD45M	4	5	0.984	25.00	3.740	95
7187292	A25GMBSPPD67M	6	7	0.984	25.00	3.740	95

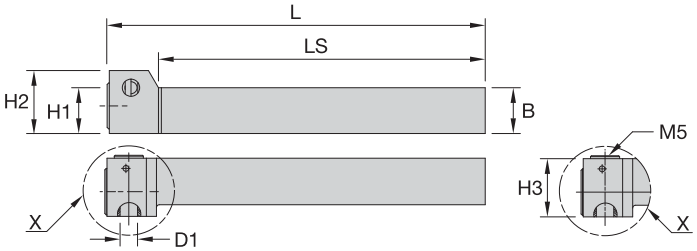


Round Shank • High Performance

Centerline Accuracy ±0.0002" (0,005mm)

		D1	D		L		LS		
Order Number	Catalog Number	mm	in	mm	in	mm	in	mm	G3
7188779	A12DMBSHPS4I	4	0.75	19.05	2.559	65	1.299	33.00	G 1/8
7188780	A12DMBSHPS5I	5	0.75	19.05	2.559	65	1.299	33.00	G 1/8
7188781	A12DMBSHPS6I	6	0.75	19.05	2.559	65	1.339	34.00	G 1/8
7188782	A12DMBSHPS7I	7	0.75	19.05	2.559	65	1.508	38.30	G 1/8
7188745	A12JMBSHPS4I	4	0.75	19.05	4.528	115	2.677	68.00	G 1/8
7188746	A12JMBSHPS5I	5	0.75	19.05	4.528	115	2.677	68.00	G 1/8
7188747	A12JMBSHPS6I	6	0.75	19.05	4.528	115	2.677	68.00	G 1/8
7188748	A12JMBSHPS7I	7	0.75	19.05	4.528	115	2.677	68.00	G 1/8
7188797	A16DMBSHPS4I	4	1.00	25.40	2.559	65	1.181	30.00	G 1/8
7188798	A16DMBSHPS5I	5	1.00	25.40	2.559	65	1.173	29.80	G 1/8
7188799	A16DMBSHPS6I	6	1.00	25.40	2.559	65	1.221	31.00	G 1/8
7188800	A16DMBSHPS7I	7	1.00	25.40	2.559	65	1.221	31.00	G 1/8
7188771	A16JMBSHPS4I	4	1.00	25.40	4.528	115	2.677	68.00	G 1/8
7188772	A16JMBSHPS5I	5	1.00	25.40	4.528	115	2.677	68.00	G 1/8
7188773	A16JMBSHPS6I	6	1.00	25.40	4.528	115	2.677	68.00	G 1/8
7188774	A16JMBSHPS7I	7	1.00	25.40	4.528	115	2.677	68.00	G 1/8
7188727	A12JMBSHPS4M	4	0.47	12.00	4.528	115	2.677	68.00	G 1/8
7188728	A12JMBSHPS5M	5	0.47	12.00	4.528	115	2.677	68.00	G 1/8
7188729	A12JMBSHPS6M	6	0.47	12.00	4.528	115	2.677	68.00	G 1/8
7188730	A12JMBSHPS7M	7	0.47	12.00	4.528	115	2.835	72.00	G 1/8
7188775	A16DMBSHPS4M	4	0.63	16.00	2.559	65	1.370	34.80	G 1/8
7188776	A16DMBSHPS5M	5	0.63	16.00	2.559	65	1.370	34.80	G 1/8
7188777	A16DMBSHPS6M	6	0.63	16.00	2.559	65	1.370	34.80	G 1/8
7188778	A16DMBSHPS7M	7	0.63	16.00	2.559	65	1.476	37.50	G 1/8
7188741	A16JMBSHPS4M	4	0.63	16.00	4.528	115	2.677	68.00	G 1/8
7188742	A16JMBSHPS5M	5	0.63	16.00	4.528	115	2.677	68.00	G 1/8
7188743	A16JMBSHPS6M	6	0.63	16.00	4.528	115	2.677	68.00	G 1/8
7188744	A16JMBSHPS7M	7	0.63	16.00	4.528	115	2.677	68.00	G 1/8
7188783	A20DMBSHPS4M	4	0.79	20.00	2.559	65	1.260	32.00	G 1/8
7188785	A20DMBSHPS5M	5	0.79	20.00	2.559	65	1.299	33.00	G 1/8
7188786	A20DMBSHPS6M	6	0.79	20.00	2.559	65	1.339	34.00	G 1/8
7188787	A20DMBSHPS7M	7	0.79	20.00	2.559	65	1.339	34.00	G 1/8
7188749	A20JMBSHPS4M	4	0.79	20.00	4.528	115	2.677	68.00	G 1/8
7188750	A20JMBSHPS5M	5	0.79	20.00	4.528	115	2.677	68.00	G 1/8
7188751	A20JMBSHPS6M	6	0.79	20.00	4.528	115	2.677	68.00	G 1/8
7188752	A20JMBSHPS7M	7	0.79	20.00	4.528	115	2.677	68.00	G 1/8
7188788	A22DMBSHPS4M	4	0.87	22.00	2.559	65	1.260	32.00	G 1/8
7188789	A22DMBSHPS5M	5	0.87	22.00	2.559	65	1.260	32.00	G 1/8
7188791	A22DMBSHPS6M	6	0.87	22.00	2.559	65	1.260	32.00	G 1/8
7188792	A22DMBSHPS7M	7	0.87	22.00	2.559	65	1.339	34.00	G 1/8
7188753	A22JMBSHPS4M	4	0.87	22.00	4.528	115	2.677	68.00	G 1/8
7188754	A22JMBSHPS5M	5	0.87	22.00	4.528	115	2.677	68.00	G 1/8
7188755	A22JMBSHPS6M	6	0.87	22.00	4.528	115	2.677	68.00	G 1/8
7188756	A22JMBSHPS7M	7	0.87	22.00	4.528	115	2.677	68.00	G 1/8
7188793	A25DMBSHPS4M	4	0.98	25.00	2.559	65	1.260	32.00	G 1/8
7188794	A25DMBSHPS5M	5	0.98	25.00	2.559	65	1.260	32.00	G 1/8
7188795	A25DMBSHPS6M	6	0.98	25.00	2.559	65	1.260	32.00	G 1/8
7188796	A25DMBSHPS7M	7	0.98	25.00	2.559	65	1.260	32.00	G 1/8
7188757	A25JMBSHPS4M	4	0.98	25.00	4.528	115	2.677	68.00	G 1/8
7188758	A25JMBSHPS5M	5	0.98	25.00	4.528	115	2.677	68.00	G 1/8
7188759	A25JMBSHPS6M	6	0.98	25.00	4.528	115	2.677	68.00	G 1/8
7188760	A25JMBSHPS7M	7	0.98	25.00	4.528	115	2.677	68.00	G 1/8





Square Shank • Standard Performance

Centerline Accuracy ±0.0008" (0,020mm)

		B		D1	F	H1		H2		H3			L		LS		
Order Number	Catalog Number	in	mm	mm	mm	in	mm	in	mm	in	mm	KAP	in	mm	in	mm	CS
7188832	MBSAL0808I4C	0.500	12.70	4	20	0.500	12.70	0.709	18	-	-	90.000°	3.543	90	2.874	73	M5
7188834	MBSAL0808I5C	0.500	12.70	5	20	0.500	12.70	0.709	18	-	-	90.000°	3.543	90	2.874	73	M5
7188836	MBSAL0808I6C	0.500	12.70	6	20	0.500	12.70	0.827	21	0.118	3	90.000°	3.543	90	2.874	73	M5
7188841	MBSAL0808I7C	0.500	12.70	7	20	0.500	12.70	0.827	21	0.118	3	90.000°	3.543	90	2.874	73	M5
7188843	MBSAL1010I4C	0.625	15.88	4	20	0.625	15.88	0.866	22	-	-	90.000°	5.118	130	4.449	113	M5
7188845	MBSAL1010I5C	0.625	15.88	5	20	0.625	15.88	0.866	22	-	-	90.000°	5.118	130	4.449	113	M5
7188847	MBSAL1010I6C	0.625	15.88	6	20	0.625	15.88	0.866	22	-	-	90.000°	5.118	130	4.449	113	M5
7188849	MBSAL1010I7C	0.625	15.88	7	20	0.625	15.88	0.866	22	-	-	90.000°	5.118	130	4.449	113	M5
7188831	MBSAR0808I4C	0.500	12.70	4	20	0.500	12.70	0.709	18	-	-	90.000°	3.543	90	2.874	73	M5
7188833	MBSAR0808I5C	0.500	12.70	5	20	0.500	12.70	0.709	18	-	-	90.000°	3.543	90	2.874	73	M5
7188835	MBSAR0808I6C	0.500	12.70	6	20	0.500	12.70	0.827	21	0.118	3	90.000°	3.543	90	2.874	73	M5
7188839	MBSAR0808I7C	0.500	12.70	7	20	0.500	12.70	0.827	21	0.118	3	90.000°	3.543	90	2.874	73	M5
7188842	MBSAR1010I4C	0.625	15.88	4	20	0.625	15.88	0.866	22	-	-	90.000°	5.118	130	4.449	113	M5
7188844	MBSAR1010I5C	0.625	15.88	5	20	0.625	15.88	0.866	22	-	-	90.000°	5.118	130	4.449	113	M5
7188846	MBSAR1010I6C	0.625	15.88	6	20	0.625	15.88	0.866	22	-	-	90.000°	5.118	130	4.449	113	M5
7188848	MBSAR1010I7C	0.625	15.88	7	20	0.625	15.88	0.866	22	-	-	90.000°	5.118	130	4.449	113	M5
7188802	MBSAL1212M4C	0.472	12.00	4	20	0.472	12.00	0.709	18	-	-	90.000°	3.543	90	2.874	73	M5
7188806	MBSAL1212M5C	0.472	12.00	5	20	0.472	12.00	0.709	18	-	-	90.000°	3.543	90	2.874	73	M5
7188808	MBSAL1212M6C	0.472	12.00	6	20	0.472	12.00	0.827	21	0.118	3	90.000°	3.543	90	2.874	73	M5
7188810	MBSAL1212M7C	0.472	12.00	7	20	0.472	12.00	0.827	21	0.118	3	90.000°	3.543	90	2.874	73	M5
7188812	MBSAL1616M4C	0.630	16.00	4	20	0.630	16.00	0.866	22	-	-	90.000°	5.118	130	4.449	113	M5
7188815	MBSAL1616M5C	0.630	16.00	5	20	0.630	16.00	0.866	22	-	-	90.000°	5.118	130	4.449	113	M5
7188818	MBSAL1616M6C	0.630	16.00	6	20	0.630	16.00	0.866	22	-	-	90.000°	5.118	130	4.449	113	M5
7188820	MBSAL1616M7C	0.630	16.00	7	20	0.630	16.00	0.866	22	-	-	90.000°	5.118	130	4.449	113	M5
7188801	MBSAR1212M4C	0.472	12.00	4	20	0.472	12.00	0.709	18	-	-	90.000°	3.543	90	2.874	73	M5
7188805	MBSAR1212M5C	0.472	12.00	5	20	0.472	12.00	0.709	18	-	-	90.000°	3.543	90	2.874	73	M5
7188807	MBSAR1212M6C	0.472	12.00	6	20	0.472	12.00	0.827	21	0.118	3	90.000°	3.543	90	2.874	73	M5
7188809	MBSAR1212M7C	0.472	12.00	7	20	0.472	12.00	0.827	21	0.118	3	90.000°	3.543	90	2.874	73	M5
7188811	MBSAR1616M4C	0.630	16.00	4	20	0.630	16.00	0.866	22	-	-	90.000°	5.118	130	4.449	113	M5
7188813	MBSAR1616M5C	0.630	16.00	5	20	0.630	16.00	0.866	22	-	-	90.000°	5.118	130	4.449	113	M5
7188817	MBSAR1616M6C	0.630	16.00	6	20	0.630	16.00	0.866	22	-	-	90.000°	5.118	130	4.449	113	M5
7188819	MBSAR1616M7C	0.630	16.00	7	20	0.630	16.00	0.866	22	-	-	90.000°	5.118	130	4.449	113	M5

Bushings

Bushing Style Holders

		D1	D	L	
Order Number	Catalog Number	mm	mm	in	m
7206143	MBSBS004	4	12	0.858	21.80
7206144	MBSBS005	5	12	0.858	21.80
7206145	MBSBS006	6	12	0.858	21.80
7206146	MBSBS007	7	12	0.858	21.80
7206147	MBSBS008	8	12	0.858	21.80

Screws

		L		
Order Number	Catalog Number	in	mm	WST
7206123	MBSS001	0.158	4	2.50
7206125	MBSS002	0.315	8	2.50
7206130	MBSS003	0.158	4	10.00
7206131	MBSS004	0.236	6	10.00
7206132	MBSS005	0.315	8	10.00
7206133	MBSS006	0.394	10	10.00
7206124	MBSS007	0.236	6	2.50
7206126	MBSS008	0.236	6	3.00

Locking Elements

Square Shank Holders

			Shank Size	
Order Number	Catalog Number	L	in	m
7206140	MBSLE001	0.532	0.5000	12mm
7206141	MBSLE002	0.551	0.6250	16mm

Locking Nut

Union Nuts • High Performance Holders

		L		
Order Number	Catalog Number	in	mm	insert size
7206139	MBSLN001	0.366	9.30	4, 5, 6, 7
7206135	MBSUN001	0.906	23.00	4
7206136	MBSUN002	0.906	23.00	5
7206137	MBSUN003	0.906	23.00	6
7206138	MBSUN004	0.906	23.00	7

Wrenches

		L		
Order Number	Catalog Number	in	mm	WSMS
7206128	MBSW001	2.210	56.00	SW2.5
7206134	MBSW002	2.126	54.00	T10
7206142	MBSW003	3.260	83.00	SW5
7206129	MBSW004	2.590	66.00	SW3

MBS SETS

Set 1		MBSSET1MD		TopSwiss MBS, SET 1, dbl ended METRIC (16mm)
Order # 7179993	7187270	A16EMBSPPD45M		TopSwiss MBS holder, dbl end, premium
	7187277	A16EMBSPPD67M		TopSwiss MBS holder, dbl end, premium
	7219800	R4BPGA028C16R010	KCU25S	TopSwiss MBS insert, Boring & Profiling
	7219818	R4BPGA040C16R010	KCU25S	TopSwiss MBS insert, Boring & Profiling
	7219824	R5BPGA050C20R015	KCU25S	TopSwiss MBS insert, Boring & Profiling
	7219830	R6BPGA060C22R015	KCU25S	TopSwiss MBS insert, Boring & Profiling
	7221460	R4GS07030C10R000	KCU25S	TopSwiss MBS insert, Grooving
	7220223	R4GR10040C16R010	KCU25S	TopSwiss MBS insert, Grooving
	7220232	R5GR15050C20R010	KCU25S	TopSwiss MBS insert, Grooving
	7220256	R6GR20060C22R010	KCU25S	TopSwiss MBS insert, Grooving
	7206134	MBSW002		Wrench, TopSwiss MBS

Set 2		MBSSET2ID		TopSwiss MBS, SET 2, dbl ended INCH (0.625")
Order # 7179994	7187269	A10EMBSPPD45I		TopSwiss MBS holder, dbl end, premium
	7187276	A10EMBSPPD67I		TopSwiss MBS holder, dbl end, premium
	7219800	R4BPGA028C16R010	KCU25S	TopSwiss MBS insert, Boring & Profiling
	7219818	R4BPGA040C16R010	KCU25S	TopSwiss MBS insert, Boring & Profiling
	7219824	R5BPGA050C20R015	KCU25S	TopSwiss MBS insert, Boring & Profiling
	7219830	R6BPGA060C22R015	KCU25S	TopSwiss MBS insert, Boring & Profiling
	7221460	R4GS07030C10R000	KCU25S	TopSwiss MBS insert, Grooving
	7220223	R4GR10040C16R010	KCU25S	TopSwiss MBS insert, Grooving
	7220232	R5GR15050C20R010	KCU25S	TopSwiss MBS insert, Grooving
	7220256	R6GR20060C22R010	KCU25S	TopSwiss MBS insert, Grooving
	7206134	MBSW002		Wrench, TopSwiss MBS

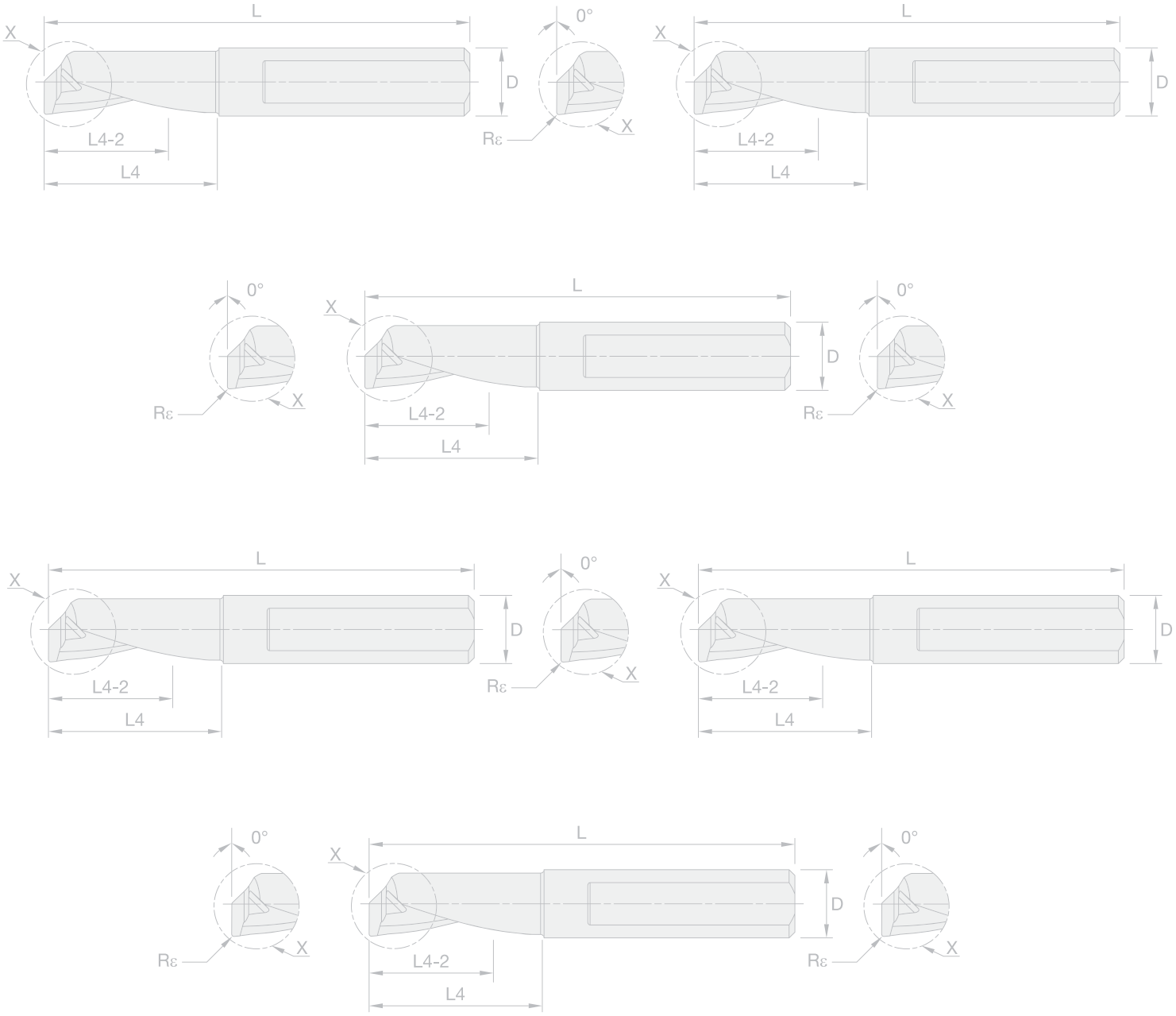
MBS SETS

Set 3		MBSSET3MB		TopSwiss MBS, SET 3, bushing METRIC (20mm)
Order # 7179995	7188877	A20DMBSBSS0M		TopSwiss MBS holder, sgl end, short BS
	7206143	MBSBS004		Bushing, TopSwiss MBS holder, size 4
	7206144	MBSBS005		Bushing, TopSwiss MBS holder, size 5
	7206145	MBSBS006		Bushing, TopSwiss MBS holder, size 6
	7206146	MBSBS007		Bushing, TopSwiss MBS holder, size 7
	7219818	R4BPGA040C16R010	KCU25S	TopSwiss MBS insert, Boring & Profiling
	7219824	R5BPGA050C20R015	KCU25S	TopSwiss MBS insert, Boring & Profiling
	7219830	R6BPGA060C22R015	KCU25S	TopSwiss MBS insert, Boring & Profiling
	7219836	R7BPGA068C25R015	KCU25S	TopSwiss MBS insert, Boring & Profiling
	7206134	MBSW002		Wrench, TopSwiss MBS

Set 4		MBSSET4IB		TopSwiss MBS, SET 4, bushing INCH (0.750")
Order # 7179996	7188876	A12DMBSBSS0I		TopSwiss MBS holder, sgl end, short BS
	7206143	MBSBS004		Bushing, TopSwiss MBS holder, size 4
	7206144	MBSBS005		Bushing, TopSwiss MBS holder, size 5
	7206145	MBSBS006		Bushing, TopSwiss MBS holder, size 6
	7206146	MBSBS007		Bushing, TopSwiss MBS holder, size 7
	7219818	R4BPGA040C16R010	KCU25S	TopSwiss MBS insert, Boring & Profiling
	7219824	R5BPGA050C20R015	KCU25S	TopSwiss MBS insert, Boring & Profiling
	7219830	R6BPGA060C22R015	KCU25S	TopSwiss MBS insert, Boring & Profiling
	7219836	R7BPGA068C25R015	KCU25S	TopSwiss MBS insert, Boring & Profiling
	7206134	MBSW002		Wrench, TopSwiss MBS

TopSwiss MBS

MULTI-FUNCTION (MF) INSERTS

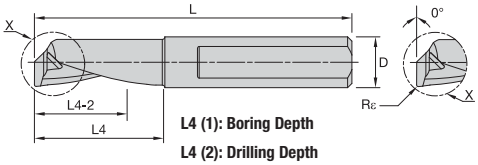


KENNAMETAL

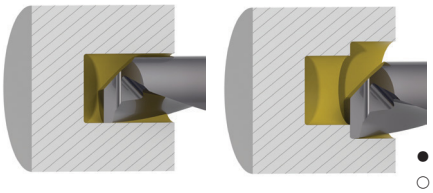
NOMENCLATURE MULTI-FUNCTION INSERTS

Example:
R4BPML003C01
R002 - KCSM25S

R	4	BP	ML	003	C	01	R002	-	KCSM25S
Hand	**Shank Diameter**	**Application Area**	**Style (lead & relief angles)**	**Min Bore Size**	**Coolant**	**Machining Depth**	**Corner Radius**	**Separator**	**Grade**
R: right hand	4: 4mm Ø	BP: boring & profiling	GA: geometry A (8° & 20°)	003: 0.3mm	C: coolant channel	01: 1mm	R000: 0.00mm (0.0000")		KCU25S
L: left hand	5: 5mm Ø	MF: multi-function	GB: geometry B (0° & 20°)	005: 0.5mm	H: coolant hole	05: 5mm	R002: 0.02mm (0.0008")		KCPM25S
	6: 6mm Ø		GC: geometry C (8° & 47°)	070: 7.0mm	D: double coolant hole	10: 10mm	R005: 0.05mm (0.002")		KCSM25S
	7: 7mm Ø		ML: medical line (8° & 11°)	160: 16.0mm		25: 25mm	R015: 0.15mm (0.006")		KCHS25S
	8: 8mm Ø		HP: high performance (6° & 7°)				R020: 0.20mm (0.008")		
			HM: hard machining (8° & 20°)				R150: 1.5mm (0.060")		
			DB: drill & bore (0° & 0°)						



APPLICATIONS



● Primary
○ Secondary

P		●
M		●
K		○
N		○
S		○
H		

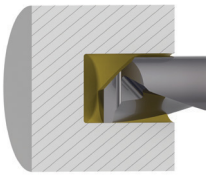
Multi-Function

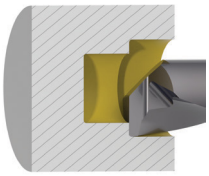
MF

KCU25S

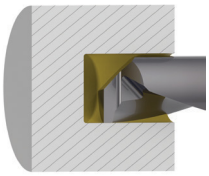
		D	DMIN		L		L4 (1)		L4 (2)		Rε			
Order Number	Catalog Number	mm	in	mm	in	mm	in	mm	in	mm	in	mm	KRA	
7221275	L4MFDB029H10R020 KCU25S	4	0.114	2.90	1.457	37	0.394	10	0.394	10	0.008	0.20	0.000 deg	•
7221276	L4MFDB029H13R020 KCU25S	4	0.114	2.90	1.575	40	0.512	13	0.512	13	0.008	0.20	0.000 deg	•
7221277	L4MFDB037H15R020 KCU25S	4	0.146	3.70	1.457	37	0.591	15	0.394	10	0.008	0.20	0.000 deg	•
7221278	L4MFDB037H20R020 KCU25S	4	0.146	3.70	1.654	42	0.787	20	0.630	16	0.008	0.20	0.000 deg	•
7221279	L5MFDB047H15R020 KCU25S	5	0.185	4.70	1.457	37	0.591	15	0.394	10	0.008	0.20	0.000 deg	•
7221280	L5MFDB047H20R020 KCU25S	5	0.185	4.70	1.654	42	0.787	20	0.591	15	0.008	0.20	0.000 deg	•
7221281	L5MFDB047H25R020 KCU25S	5	0.185	4.70	1.850	47	0.984	25	0.787	20	0.008	0.20	0.000 deg	•
7221282	L6MFDB057H15R020 KCU25S	6	0.224	5.70	1.457	37	0.591	15	0.394	10	0.008	0.20	0.000 deg	•
7221283	L6MFDB057H20R020 KCU25S	6	0.224	5.70	1.654	42	0.787	20	0.591	15	0.008	0.20	0.000 deg	•
7221284	L6MFDB057H25R020 KCU25S	6	0.224	5.70	1.850	47	0.984	25	0.787	20	0.008	0.20	0.000 deg	•
7221285	L6MFDB057H35R020 KCU25S	6	0.224	5.70	2.047	52	1.378	35	0.984	25	0.008	0.20	0.000 deg	•
7221286	L7MFDB067H20R020 KCU25S	7	0.264	6.70	1.654	42	0.787	20	0.591	15	0.008	0.20	0.000 deg	•
7221287	L7MFDB067H25R020 KCU25S	7	0.264	6.70	1.850	47	0.984	25	0.787	20	0.008	0.20	0.000 deg	•
7221288	L7MFDB067H30R020 KCU25S	7	0.264	6.70	2.047	52	1.181	30	0.984	25	0.008	0.20	0.000 deg	•
7221289	L7MFDB067H35R020 KCU25S	7	0.264	6.70	2.244	57	1.378	35	1.181	30	0.008	0.20	0.000 deg	•
7221290	L8MFDB077H25R020 KCU25S	8	0.303	7.70	1.969	50	0.984	25	0.787	20	0.008	0.20	0.000 deg	•
7221291	L8MFDB077H30R020 KCU25S	8	0.303	7.70	2.165	55	1.181	30	0.984	25	0.008	0.20	0.000 deg	•
7221292	L8MFDB077H35R020 KCU25S	8	0.303	7.70	2.362	60	1.378	35	1.181	30	0.008	0.20	0.000 deg	•
7221293	L8MFDB077H40R020 KCU25S	8	0.303	7.70	2.559	65	1.575	40	1.378	35	0.008	0.20	0.000 deg	•
7221294	R4MFDB020H08R005 KCU25S	4	0.079	2.00	1.575	40	0.315	8	0.315	8	0.002	0.05	0.000 deg	•
7221295	R4MFDB020H08R010 KCU25S	4	0.079	2.00	1.575	40	0.315	8	0.315	8	0.004	0.10	0.000 deg	•
7221297	R4MFDB029H10R005 KCU25S	4	0.114	2.90	1.457	37	0.394	10	0.394	10	0.002	0.05	0.000 deg	•
7221298	R4MFDB029H10R010 KCU25S	4	0.114	2.90	1.457	37	0.394	10	0.394	10	0.004	0.10	0.000 deg	•
7221296	R4MFDB029H10R020 KCU25S	4	0.114	2.90	1.457	37	0.394	10	0.394	10	0.008	0.20	0.000 deg	•
7221300	R4MFDB029H13R005 KCU25S	4	0.114	2.90	1.575	40	0.512	13	0.512	13	0.002	0.05	0.000 deg	•
7221311	R4MFDB029H13R010 KCU25S	4	0.114	2.90	1.575	40	0.512	13	0.512	13	0.004	0.10	0.000 deg	•
7221299	R4MFDB029H13R020 KCU25S	4	0.114	2.90	1.575	40	0.512	13	0.512	13	0.008	0.20	0.000 deg	•
7221313	R4MFDB037H15R010 KCU25S	4	0.146	3.70	1.457	37	0.591	15	0.394	10	0.004	0.10	0.000 deg	•
7221312	R4MFDB037H15R020 KCU25S	4	0.146	3.70	1.457	37	0.591	15	0.394	10	0.008	0.20	0.000 deg	•
7221314	R4MFDB037H20R020 KCU25S	4	0.146	3.70	1.654	42	0.787	20	0.630	16	0.008	0.20	0.000 deg	•
7221316	R5MFDB047H15R010 KCU25S	5	0.185	4.70	1.457	37	0.591	15	0.394	10	0.004	0.10	0.000 deg	•
7221315	R5MFDB047H15R020 KCU25S	5	0.185	4.70	1.457	37	0.591	15	0.394	10	0.008	0.20	0.000 deg	•
7221318	R5MFDB047H20R010 KCU25S	5	0.185	4.70	1.654	42	0.787	20	0.591	15	0.004	0.10	0.000 deg	•
7221317	R5MFDB047H20R020 KCU25S	5	0.185	4.70	1.654	42	0.787	20	0.591	15	0.008	0.20	0.000 deg	•
7221319	R5MFDB047H25R020 KCU25S	5	0.185	4.70	1.850	47	0.984	25	0.787	20	0.008	0.20	0.000 deg	•
7221331	R6MFDB057H15R010 KCU25S	6	0.224	5.70	1.457	37	0.591	15	0.394	10	0.004	0.10	0.000 deg	•
7221320	R6MFDB057H15R020 KCU25S	6	0.224	5.70	1.457	37	0.591	15	0.394	10	0.008	0.20	0.000 deg	•
7221333	R6MFDB057H20R010 KCU25S	6	0.224	5.70	1.654	42	0.787	20	0.591	15	0.004	0.10	0.000 deg	•
7221332	R6MFDB057H20R020 KCU25S	6	0.224	5.70	1.654	42	0.787	20	0.591	15	0.008	0.20	0.000 deg	•
7221334	R6MFDB057H25R020 KCU25S	6	0.224	5.70	1.850	47	0.984	25	0.787	20	0.008	0.20	0.000 deg	•
7221335	R6MFDB057H35R020 KCU25S	6	0.224	5.70	2.047	52	1.378	35	0.984	25	0.008	0.20	0.000 deg	•
7221336	R7MFDB067H20R020 KCU25S	7	0.264	6.70	1.654	42	0.787	20	0.591	15	0.008	0.20	0.000 deg	•
7221337	R7MFDB067H25R020 KCU25S	7	0.264	6.70	1.850	47	0.984	25	0.787	20	0.008	0.20	0.000 deg	•
7221338	R7MFDB067H30R020 KCU25S	7	0.264	6.70	2.047	52	1.181	30	0.984	25	0.008	0.20	0.000 deg	•
7221339	R7MFDB067H35R020 KCU25S	7	0.264	6.70	2.244	57	1.378	35	1.181	30	0.008	0.20	0.000 deg	•
7221340	R8MFDB077H25R020 KCU25S	8	0.303	7.70	1.969	50	0.984	25	0.787	20	0.008	0.20	0.000 deg	•
7221341	R8MFDB077H30R020 KCU25S	8	0.303	7.70	2.165	55	1.181	30	0.984	25	0.008	0.20	0.000 deg	•
7221342	R8MFDB077H35R020 KCU25S	8	0.303	7.70	2.362	60	1.378	35	1.181	30	0.008	0.20	0.000 deg	•
7221343	R8MFDB077H40R020 KCU25S	8	0.303	7.70	2.559	65	1.575	40	1.378	35	0.008	0.20	0.000 deg	•

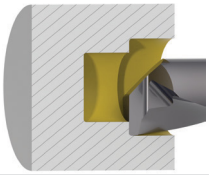
FEED RATE DRILLING & TURNING

Drilling (metric) Multi-Function KCU25S			
		Feed Rate (mm/rev)	
MF Insert Size (mm)	Drilling Depth (mm)	MIN	MAX
Ø ≤ 3	10	0.0025	0.0125
	13	0.0025	0.0100
Ø 3 - 4	15	0.005	0.030
	20	0.005	0.015
Ø 4 - 5	15	0.005	0.040
	25	0.005	0.020
Ø 5 - 6	15	0.005	0.030
	30	0.005	0.020
Ø 6 - 7	20	0.005	0.035
	35	0.005	0.025
Ø 7 - 8	25	0.005	0.040
	40	0.005	0.030

Turning (metric) Multi-Function KCU25S			
		Feed Rate (mm/rev)	
MF Insert Size (mm)	Turning Depth (mm)	MIN	MAX
Ø ≤ 3	10	0.005	0.070
	13	0.005	0.050
Ø 3 - 4	15	0.010	0.100
	20	0.005	0.100
Ø 4 - 5	15	0.010	0.100
	25	0.005	0.100
Ø 5 - 6	15	0.010	0.100
	30	0.005	0.100
Ø 6 - 7	20	0.010	0.100
	35	0.010	0.100
Ø 7 - 8	25	0.010	0.100
	40	0.010	0.100

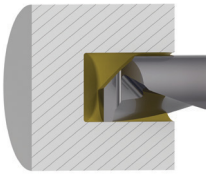
DRILLING & TURNING MULTI-FUNCTION

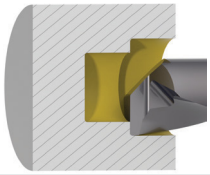




		Drilling				Turning			
Low-Carbon (<0,3% C) and Free-Machining Steels		m/min		SFM		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
P0/P1	KCU25S	80	110	260	360	80	260	260	850
Medium- and High-Carbon Steels (>0,3% C)		m/min		SFM		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
P2	KCU25S	70	90	230	290	70	230	230	750
Alloy Steels and Tool Steels; <330 HB; <35 HRC		m/min		SFM		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
P3	KCU25S	50	70	160	230	50	180	160	590
Alloy Steels and Tool Steels; 350–450 HB; 35–48 HRC		m/min		SFM		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
P4	KCU25S	50	60	160	200	50	150	160	490
Ferritic, Martensitic, and PH Stainless Steels; <330 HB; <35 HRC		m/min		SFM		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
P5	KCU25S	50	60	160	200	50	160	160	520
Ferritic, Martensitic, and PH Stainless Steels; 350–450 HB; 35–48 HRC		m/min		SFM		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
P6	KCU25S	30	40	100	130	30	100	100	330

DRILLING & TURNING MULTI-FUNCTION



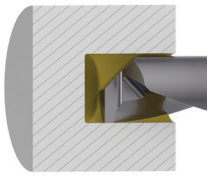


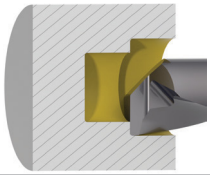
Austenitic Stainless Steels		Drilling				Turning			
		m/min		SFM		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
M1	KCU25S	50	70	160	230	50	180	160	590

High Strength Austenitic Stainless and Cast Stainless Steels		m/min		SFM		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
M2	KCU25S	40	60	130	200	40	140	130	460

Duplex Stainless Steels (Ferritic and Austenitic Mixture)		m/min		SFM		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
M3	KCU25S	30	50	100	160	30	110	100	360

DRILLING & TURNING MULTI-FUNCTION





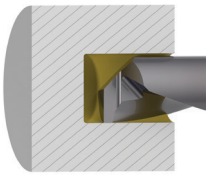
Iron-Based, Heat-Resistant Alloys; 160-260 HB; 25-48 HRC; 500-1200 Tensile Strength		Drilling				Turning			
		m/min		SFM		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
S1	KCU25S	20	30	60	100	20	80	60	260

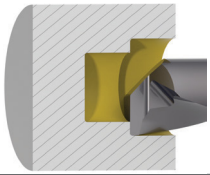
Cobalt-Based, Heat-Resistant Alloys; 250-450 HB; 25-48 HRC; 1000-1450 Tensile Strength		m/min		SFM		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
S2	KCU25S	20	30	60	100	20	60	60	200

Nickel-Based, Heat-Resistant Alloys 160-450HB; <48 HRC; 600-1700 Tensile Strength		m/min		SFM		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
S3	KCU25S	30	40	100	130	30	100	100	330

Titanium and Titanium Alloys 300-400 HB; 33-48 HRC; 900-1600 Tensile Strength		m/min		SFM		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
S4	KCU25S	30	40	100	130	30	100	100	330

DRILLING & TURNING MULTI-FUNCTION

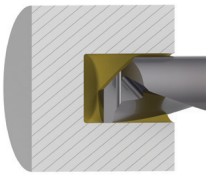


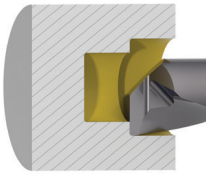


Hardened Materials; 44-48 HRC		Drilling				Turning			
		m/min		SFM		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
H1	KCU25S	*	*	*	*	30	90	100	300

Hardened Materials; 48-55 HRC		m/min		SFM		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
H2	KCU25S	*	*	*	*	20	60	60	200

DRILLING & TURNING MULTI-FUNCTION



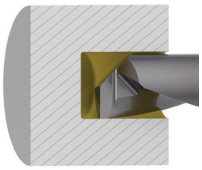


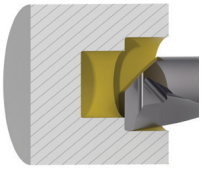
Grey Cast Iron		Drilling				Turning			
		m/min		SFM		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
K1	KCU25S	70	90	230	300	70	230	230	750

Low & Medium Strength Ductile Irons and Compacted Graphite Irons (CGI)		m/min		SFM		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
K2	KCU25S	50	60	160	200	50	150	160	490

High Strength Ductile and Austempered Ductile Iron and Malleable Cast Irons		m/min		SFM		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
K3	KCU25S	60	80	200	260	60	190	200	620

DRILLING & TURNING MULTI-FUNCTION - KCU25S





Wrought Aluminum Alloys		Drilling				Turning			
		m/min		SFM		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
N1	KCU25S	90	110	290	360	160	540	520	1770

Low-Silicon Aluminum Alloys and Magnesium Alloys; Si12.2%		m/min		SFM		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
N2	KCU25S	70	90	230	290	130	440	430	1440

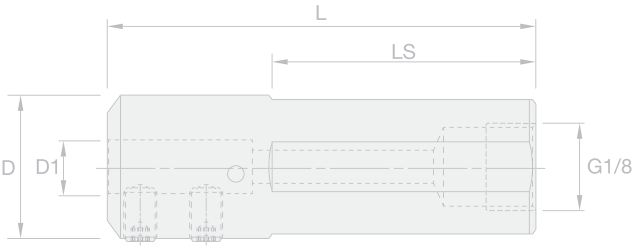
High-Silicone Aluminum and Magnesium Alloys; Si>12.2%		m/min		SFM		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
N3	KCU25S	20	60	60	200	30	290	100	950

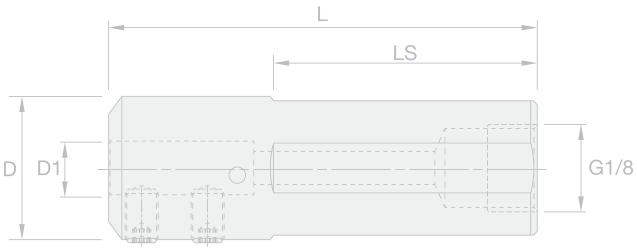
Copper, Brass, Zinc-Based on a Machinability Index Range of 70-100		m/min		SFM		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
N4	KCU25S	60	80	200	260	120	390	390	1280

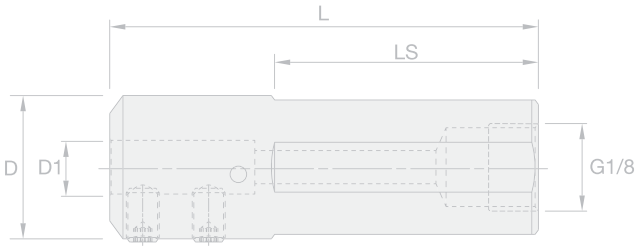
Nylon, Plastics, Rubbers, Phenolics, Resins, Fiberglass		m/min		SFM		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
N5	KCU25S	50	70	160	230	100	330	330	1080

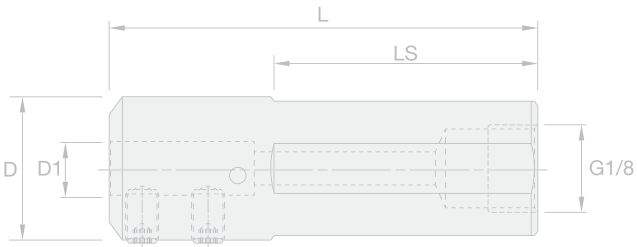
TopSwiss MBS

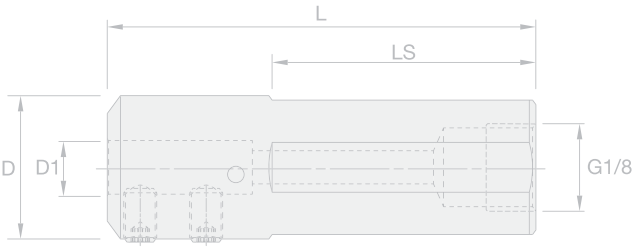
MF HOLDERS

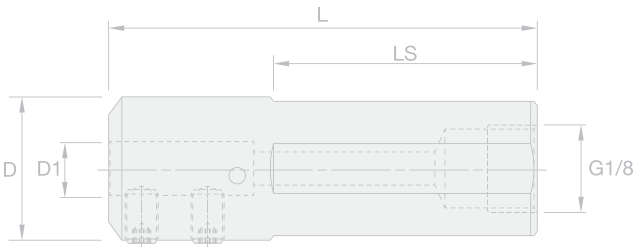


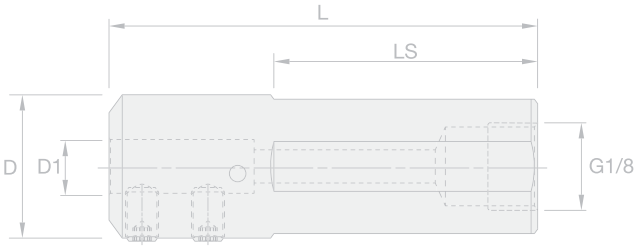


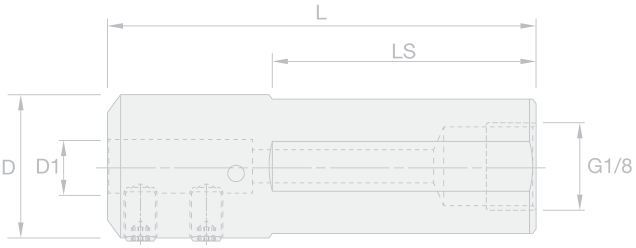








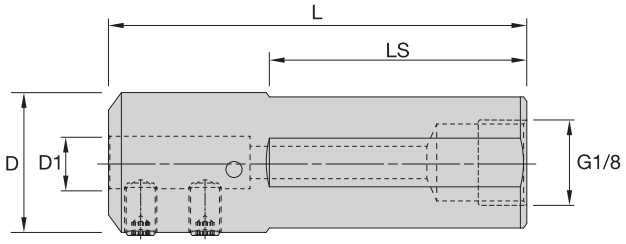




NOMENCLATURE ROUND SHANK HOLDERS

Example:
A16RMBSSPD45M

A	16	R	MBS	SP	D	45	M
Bar Type	**Bar Diameter**	**Bar Length**	**Family Name**	**Tool Type**	**Tool Style**	**Insert Size(s)**	**Unit**
A: steel bar with coolant	METRIC: two digit # indicates bar Ø in mm	A: 32mm (30-35)	Micro Boring Solid	SP: standard performance	S: single end	4: 4mm insert	M: metric
E: carbide bar with coolant	08: 8mm	B: 40mm (40-45)		PP: premium performance	D: double end	5: 5mm insert	I: inch
	16: 16mm	D: 60mm (60-65)		HP: high performance		6: 6mm insert	
		E: 70mm (70-75)		DB: drill bore (multi-function)		7: 7mm insert	
		G: 90mm (3.5") (90-95)		BS: bushing style		8: 8mm insert	
		H: 100mm (4.0") (100-105)				45: 4mm & 5mm	
		J: 110mm (4.5") (110-115)				56: 5mm & 6mm	
		K: 125mm (5.0") (120-135)				67: 6mm & 7mm	
		M: 150mm (6.0") (150-155)				78: 7mm & 8mm	
						0: all insert sizes	
	INCH: two digit # indicates bar Ø in 1/16"						
	08: 8/16 or 1/2"						
	16: 16/16 or 1"						



Round Shank

Multi-Function • MF • Centerline Accuracy ±0.0004" (0,010mm)

		D1	D		L		LS		
Order Number	Catalog Number	mm	in	mm	in	mm	in	mm	G3
7188895	A12DMBSDBS4I	4	0.750	19.05	2.559	65	1.575	40	G 1/8
7188911	A12DMBSDBS5I	5	0.750	19.05	2.559	65	1.575	40	G 1/8
7188917	A12DMBSDBS6I	6	0.750	19.05	2.559	65	1.575	40	G 1/8
7188933	A12DMBSDBS7I	7	0.750	19.05	2.559	65	1.575	40	G 1/8
7188939	A12DMBSDBS8I	8	0.750	19.05	2.559	65	1.575	40	G 1/8
7188899	A16DMBSDBS4I	4	1.000	25.40	2.559	65	1.575	40	G 1/8
7188915	A16DMBSDBS5I	5	1.000	25.40	2.559	65	1.575	40	G 1/8
7188931	A16DMBSDBS6I	6	1.000	25.40	2.559	65	1.575	40	G 1/8
7188937	A16DMBSDBS7I	7	1.000	25.40	2.559	65	1.575	40	G 1/8
7188943	A16DMBSDBS8I	8	1.000	25.40	2.559	65	1.575	40	G 1/8
7188894	A16DMBSDBS4M	4	0.630	16.00	2.559	65	1.575	40	G 1/8
7188900	A16DMBSDBS5M	5	0.630	16.00	2.559	65	1.575	40	G 1/8
7188916	A16DMBSDBS6M	6	0.630	16.00	2.559	65	1.575	40	G 1/8
7188932	A16DMBSDBS7M	7	0.630	16.00	2.559	65	1.575	40	G 1/8
7188938	A16DMBSDBS8M	8	0.630	16.00	2.559	65	1.575	40	G 1/8
7188896	A20DMBSDBS4M	4	0.787	20.00	2.559	65	1.575	40	G 1/8
7188912	A20DMBSDBS5M	5	0.787	20.00	2.559	65	1.575	40	G 1/8
7188918	A20DMBSDBS6M	6	0.787	20.00	2.559	65	1.575	40	G 1/8
7188934	A20DMBSDBS7M	7	0.787	20.00	2.559	65	1.575	40	G 1/8
7188940	A20DMBSDBS8M	8	0.787	20.00	2.559	65	1.575	40	G 1/8
7188897	A22DMBSDBS4M	4	0.866	22.00	2.559	65	1.575	40	G 1/8
7188913	A22DMBSDBS5M	5	0.866	22.00	2.559	65	1.575	40	G 1/8
7188919	A22DMBSDBS6M	6	0.866	22.00	2.559	65	1.575	40	G 1/8
7188935	A22DMBSDBS7M	7	0.866	22.00	2.559	65	1.575	40	G 1/8
7188941	A22DMBSDBS8M	8	0.866	22.00	2.559	65	1.575	40	G 1/8
7188898	A25DMBSDBS4M	4	0.984	25.00	2.559	65	1.575	40	G 1/8
7188914	A25DMBSDBS5M	5	0.984	25.00	2.559	65	1.575	40	G 1/8
7188920	A25DMBSDBS6M	6	0.984	25.00	2.559	65	1.575	40	G 1/8
7188936	A25DMBSDBS7M	7	0.984	25.00	2.559	65	1.575	40	G 1/8
7188942	A25DMBSDBS8M	8	0.984	25.00	2.559	65	1.575	40	G 1/8

TopSwiss MBS

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MANUFACTURING TO
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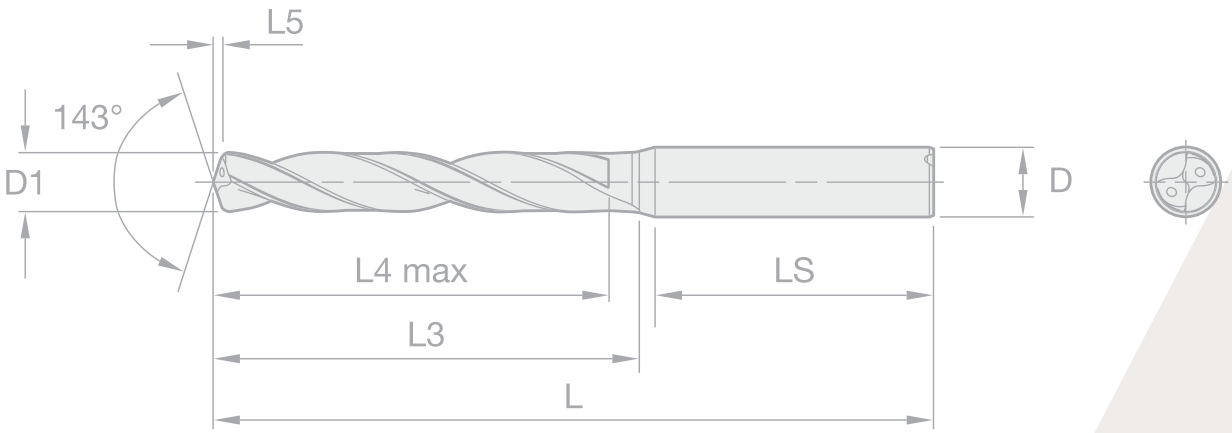
L5
143°
D1
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L4 max
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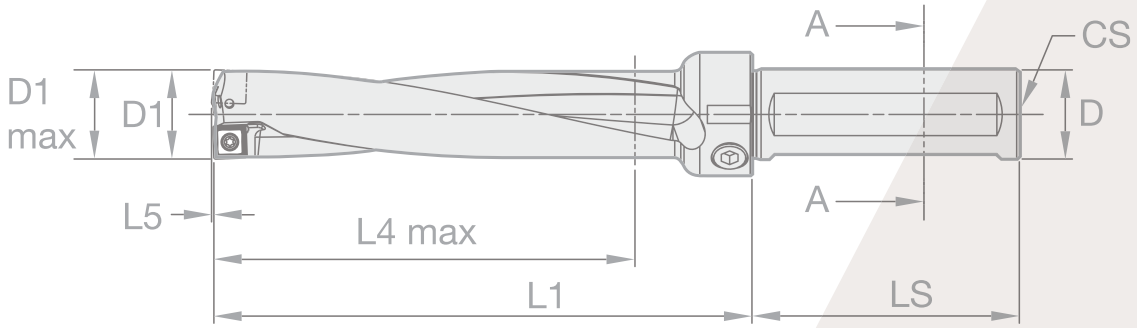
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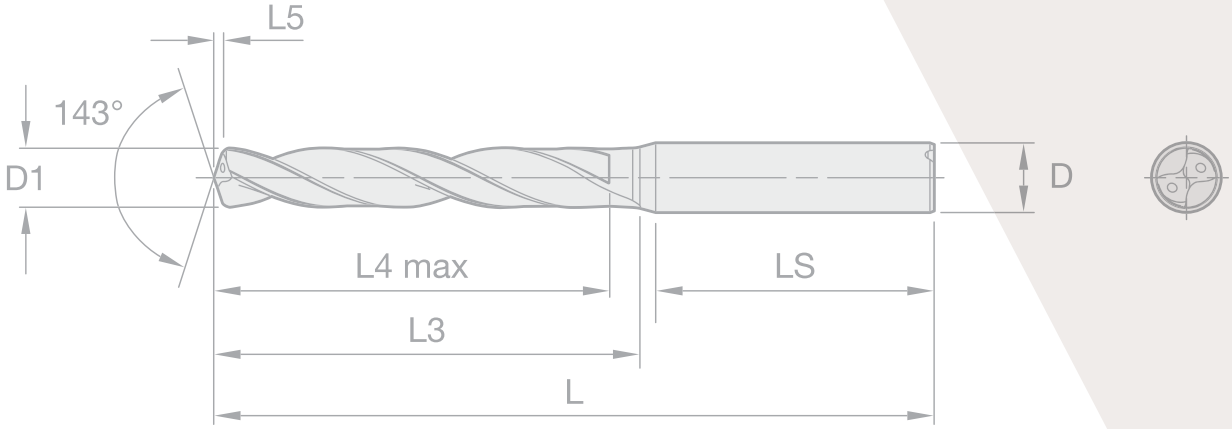
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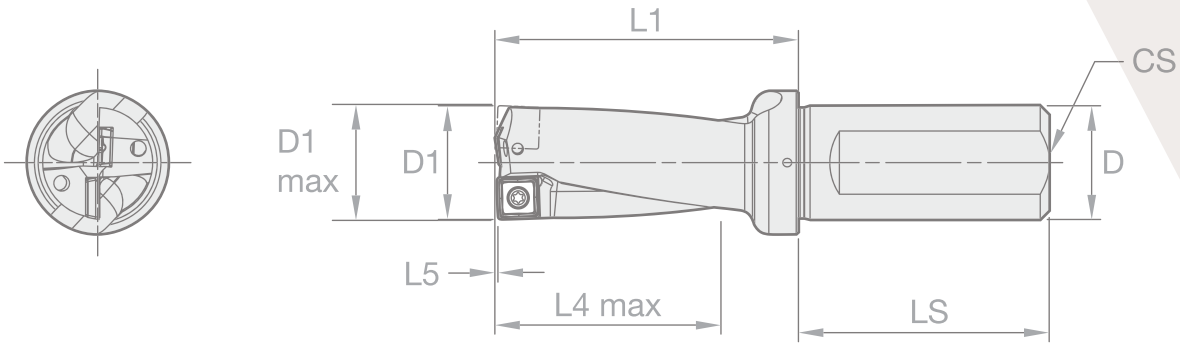
143°
D1
D
L4 max
LS
L3
L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max
D1
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L5
L4 max
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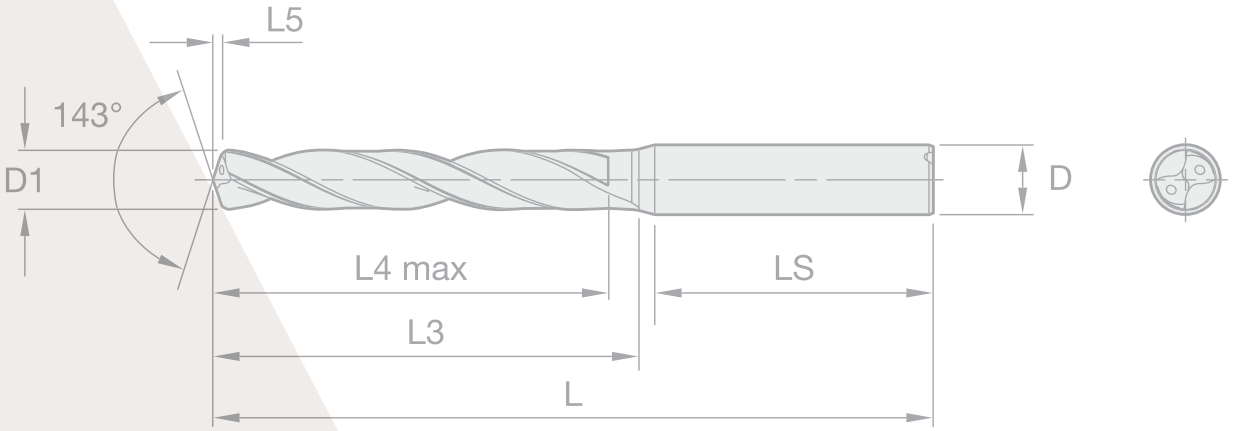
HOLEMAKING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143°
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L4 max
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L3
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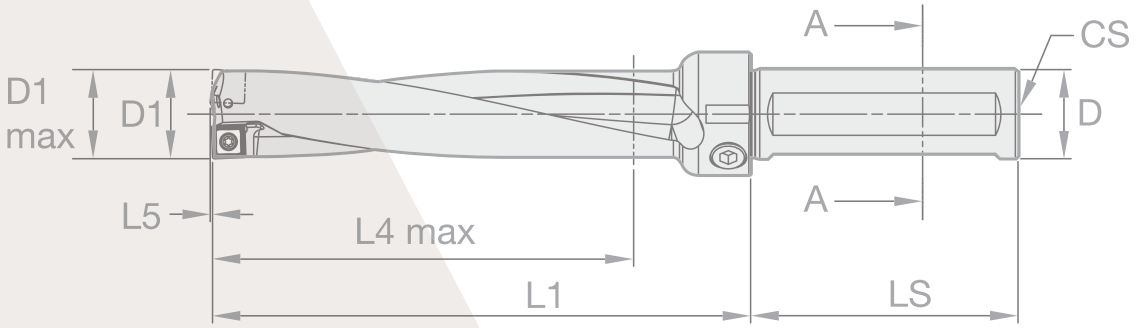
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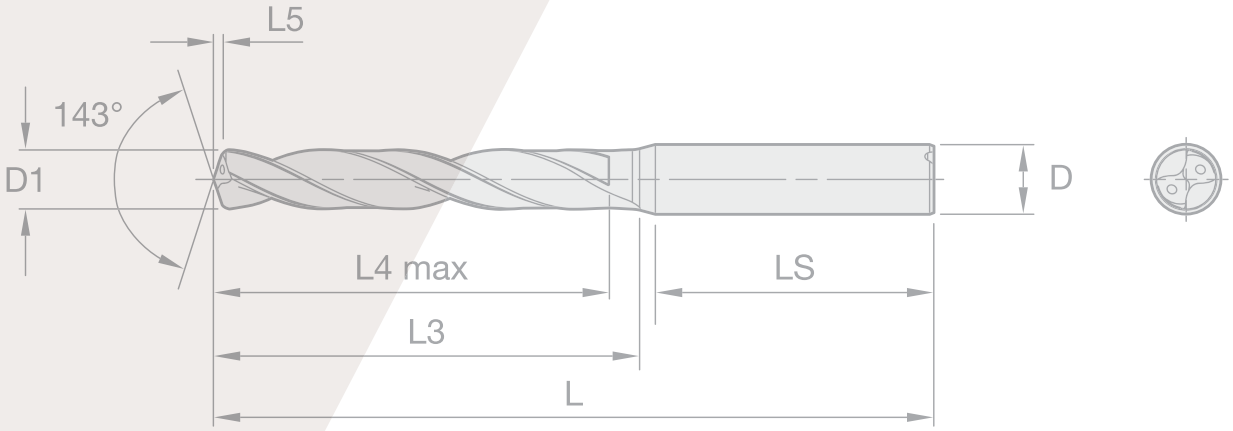
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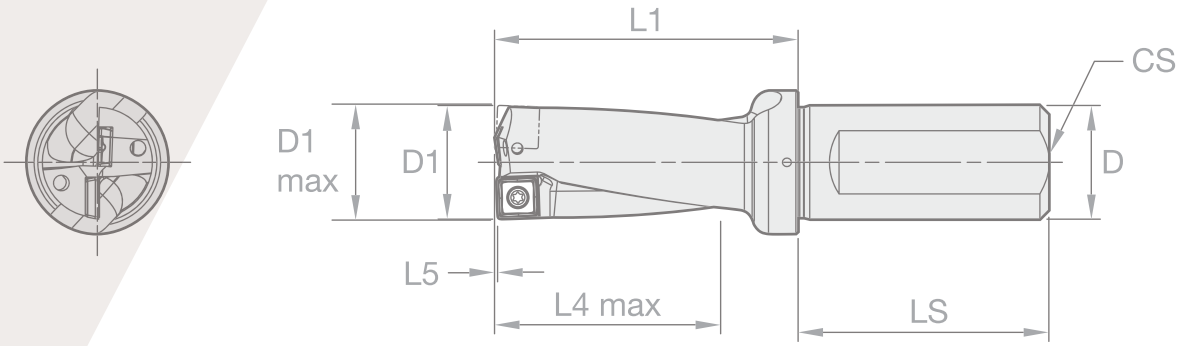
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L4 max
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Drill Fix PRO™

INDEXABLE DRILLING

NEW! Smaller Cylindrical Shanks
Additional KM Drills

Applications

- Drilling
- Convex Entries
- Inclined Entries
- Stacked Plates
- Flat Bottom
- Half Cylinder
- Inclined Exits
- Cross Holes
- X-Offset
- Chain-Drilling
- Corner-Drilling 45°

Materials

- **P** Steels
- **M** Stainless Steels
- **K** Cast Iron
- **S** High-Temp Alloys

KENNAMETAL

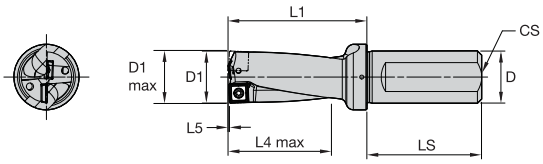
Improve Your Machining with Our New Drill Fix PRO

Our Drill Fix PRO indexable drilling platform comes standard with a wiper included in every outboard insert. The platform's versatility is also elevated with four cutting edges on its inboard and outboard inserts, resulting in an extended application range that makes Drill Fix PRO incredibly cost effective. It also features larger coolant channels for higher-volume coolant flow. This innovative design element brings customers not only a strong, quiet drilling experience but also a longer tool life.

- **Cost-Effective & Versatile Indexable Drilling:** Drill Fix PRO offers an economic drilling platform that covers a broad spectrum of materials and applications
- **Robust Toolholder Design:** Extreme rigidity resulting in less deviations, vibrations and noise
- **Wiper Geometry on All Outboard Inserts:** Creating superior surface finish and hole quality
- **Optimized Coolant Delivery System:** Large twin coolant channels provide enhanced coolant flow, resulting in higher metal removal rates, tool-life and productivity

Industries

- General Engineering
- Automotive
- Oil & Gas
- Wind & Solar
- Aerospace

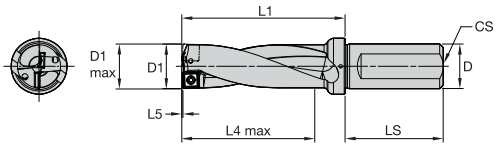


Drill Fix PRO

Drill Body • 2xD • WB Shank

Smaller Shank Diameter

Order Number	Catalog Number	D1	D1 Max	L5	L1	L4 Max	LS	D	CS	Insert 1 Outside	Insert 2 Inside
7214601	DFPR265R2WB32M	26.50	27.50	0.78	77.00	53.00	60.00	32.00	1/4-18 NPT	DFPR090305__0	DFPR100305__I
7214527	DFPR450R2WB40M	45.00	46.00	1.50	116.00	90.00	70.00	40.00	1/4-18 NPT	DFPR140408__0	DFPR140406__I
7214769	DFPR460R2WB40M	46.00	47.00	1.20	120.00	92.00	70.00	40.00	1/4-18 NPT	DFPR150508__0	DFPR170508__I
7214770	DFPR470R2WB40M	47.00	48.00	1.28	122.00	94.00	70.00	40.00	1/4-18 NPT	DFPR150508__0	DFPR170508__I
7214811	DFPR480R2WB40M	48.00	49.00	1.36	125.00	96.00	70.00	40.00	1/4-18 NPT	DFPR150508__0	DFPR170508__I
7214812	DFPR490R2WB40M	49.00	50.00	1.44	126.00	98.00	70.00	40.00	1/4-18 NPT	DFPR150508__0	DFPR170508__I
7214813	DFPR500R2WB40M	50.00	51.00	1.52	128.00	100.00	70.00	40.00	1/4-18 NPT	DFPR150508__0	DFPR170508__I
7214814	DFPR510R2WB40M	51.00	52.00	1.60	132.00	102.00	70.00	40.00	1/4-18 NPT	DFPR150508__0	DFPR170508__I
7214815	DFPR520R2WB40M	52.00	53.00	1.69	134.00	104.00	70.00	40.00	1/4-18 NPT	DFPR150508__0	DFPR170508__I
7214816	DFPR530R2WB40M	53.00	54.00	1.77	136.00	106.00	70.00	40.00	1/4-18 NPT	DFPR150508__0	DFPR170508__I
7214817	DFPR540R2WB40M	54.00	55.00	1.85	138.00	108.00	70.00	40.00	1/4-18 NPT	DFPR150508__0	DFPR170508__I
7214653	DFPR550R2WB40M	55.00	56.00	1.37	142.00	110.00	70.00	40.00	1/4-18 NPT	DFPR180610__0	DFPR200608__I
7214654	DFPR560R2WB40M	56.00	57.00	1.45	144.00	112.00	70.00	40.00	1/4-18 NPT	DFPR180610__0	DFPR200608__I
7214655	DFPR570R2WB40M	57.00	58.00	1.53	146.00	114.00	70.00	40.00	1/4-18 NPT	DFPR180610__0	DFPR200608__I
7214656	DFPR580R2WB40M	58.00	59.00	1.61	148.00	116.00	70.00	40.00	1/4-18 NPT	DFPR180610__0	DFPR200608__I
7214657	DFPR590R2WB40M	59.00	60.00	1.70	152.00	118.00	70.00	40.00	1/4-18 NPT	DFPR180610__0	DFPR200608__I
7214659	DFPR600R2WB40M	60.00	61.00	1.78	154.00	120.00	70.00	40.00	1/4-18 NPT	DFPR180610__0	DFPR200608__I
7214660	DFPR610R2WB40M	61.00	62.00	1.86	156.00	122.00	70.00	40.00	1/4-18 NPT	DFPR180610__0	DFPR200608__I
7214671	DFPR620R2WB40M	62.00	63.00	1.94	158.00	124.00	70.00	40.00	1/4-18 NPT	DFPR180610__0	DFPR200608__I
7214672	DFPR630R2WB40M	63.00	64.00	2.02	161.00	126.00	70.00	40.00	1/4-18 NPT	DFPR180610__0	DFPR200608__I
7214673	DFPR640R2WB40M	64.00	65.00	2.10	163.00	128.00	70.00	40.00	1/4-18 NPT	DFPR180610__0	DFPR200608__I
7214674	DFPR650R2WB40M	65.00	66.00	2.19	165.00	130.00	70.00	40.00	1/4-18 NPT	DFPR180610__0	DFPR200608__I

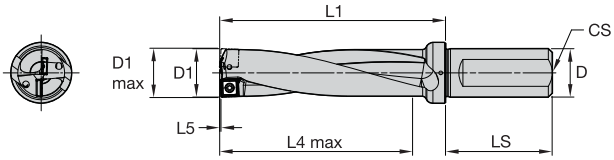


Drill Fix PRO

Drill Body • 3xD • WB Shank

Smaller Shank Diameter

Order Number	Catalog Number	D1	D1 Max	L5	L1	L4 Max	LS	D	CS	Insert 1 Outside	Insert 2 Inside
7214602	DFPR265R3WB32M	26.50	27.50	0.78	103.50	79.50	60.00	32.00	1/4-18 NPT	DFPR090305__0	DFPR100305__I
7214528	DFPR450R3WB40M	45.00	46.00	1.50	161.00	135.00	70.00	40.00	1/4-18 NPT	DFPR140408__0	DFPR140406__I
7214818	DFPR460R3WB40M	46.00	47.00	1.20	166.00	138.00	70.00	40.00	1/4-18 NPT	DFPR150508__0	DFPR170508__I
7214819	DFPR470R3WB40M	47.00	48.00	1.28	169.00	141.00	70.00	40.00	1/4-18 NPT	DFPR150508__0	DFPR170508__I
7214820	DFPR480R3WB40M	48.00	49.00	1.36	173.00	144.00	70.00	40.00	1/4-18 NPT	DFPR150508__0	DFPR170508__I
7214821	DFPR490R3WB40M	49.00	50.00	1.44	175.00	147.00	70.00	40.00	1/4-18 NPT	DFPR150508__0	DFPR170508__I
7214822	DFPR500R3WB40M	50.00	51.00	1.52	178.00	150.00	70.00	40.00	1/4-18 NPT	DFPR150508__0	DFPR170508__I
7214823	DFPR510R3WB40M	51.00	52.00	1.60	183.00	153.00	70.00	40.00	1/4-18 NPT	DFPR150508__0	DFPR170508__I
7214824	DFPR520R3WB40M	52.00	53.00	1.69	186.00	156.00	70.00	40.00	1/4-18 NPT	DFPR150508__0	DFPR170508__I
7214825	DFPR530R3WB40M	53.00	54.00	1.77	189.00	159.00	70.00	40.00	1/4-18 NPT	DFPR150508__0	DFPR170508__I
7214826	DFPR540R3WB40M	54.00	55.00	1.85	192.00	162.00	70.00	40.00	1/4-18 NPT	DFPR150508__0	DFPR170508__I
7214675	DFPR550R3WB40M	55.00	56.00	1.37	197.00	165.00	70.00	40.00	1/4-18 NPT	DFPR180610__0	DFPR200608__I
7214676	DFPR560R3WB40M	56.00	57.00	1.45	200.00	200.00	70.00	40.00	1/4-18 NPT	DFPR180610__0	DFPR200608__I
7214678	DFPR570R3WB40M	57.00	58.00	1.53	203.00	203.00	70.00	40.00	1/4-18 NPT	DFPR180610__0	DFPR200608__I
7214679	DFPR580R3WB40M	58.00	59.00	1.61	206.00	174.00	70.00	40.00	1/4-18 NPT	DFPR180610__0	DFPR200608__I
7214680	DFPR590R3WB40M	59.00	60.00	1.70	211.00	177.00	70.00	40.00	1/4-18 NPT	DFPR180610__0	DFPR200608__I
7214681	DFPR600R3WB40M	60.00	61.00	1.78	214.00	180.00	70.00	40.00	1/4-18 NPT	DFPR180610__0	DFPR200608__I
7214683	DFPR610R3WB40M	61.00	62.00	1.86	217.00	183.00	70.00	40.00	1/4-18 NPT	DFPR180610__0	DFPR200608__I
7214684	DFPR620R3WB40M	62.00	63.00	1.94	220.00	186.00	70.00	40.00	1/4-18 NPT	DFPR180610__0	DFPR200608__I
7214685	DFPR630R3WB40M	63.00	64.00	2.02	224.00	189.00	70.00	40.00	1/4-18 NPT	DFPR180610__0	DFPR200608__I
7214686	DFPR640R3WB40M	64.00	65.00	2.10	227.00	192.00	70.00	40.00	1/4-18 NPT	DFPR180610__0	DFPR200608__I
7214687	DFPR650R3WB40M	65.00	66.00	2.19	230.00	195.00	70.00	40.00	1/4-18 NPT	DFPR180610__0	DFPR200608__I

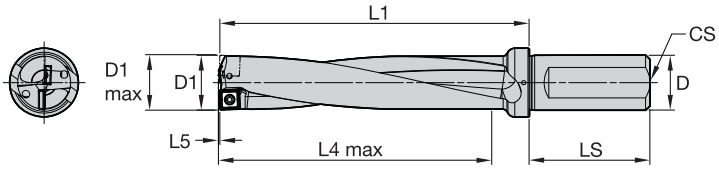


Drill Fix PRO

Drill Body • 4xD • WB Shank

Smaller Shank Diameter

Order Number	Catalog Number	D1	D1 Max	L5	L1	L4 Max	LS	D	CS	Insert 1 Outside	Insert 2 Inside
7214603	DFPR265R4WB32M	26.50	27.50	0.78	130.00	106.00	60.00	32.00	1/4-18 NPT	DFPR090305__0	DFPR100305__I
7214529	DFPR450R4WB40M	45.00	46.00	1.50	206.00	180.00	70.00	40.00	1/4-18 NPT	DFPR140408__0	DFPR140406__I
7214536	DFPR460R4WB40M	46.00	47.00	1.20	189.00	184.00	70.00	40.00	1/4-18 NPT	DFPR150508__0	DFPR170508__I
7214538	DFPR470R4WB40M	47.00	48.00	1.28	193.00	188.00	70.00	40.00	1/4-18 NPT	DFPR150508__0	DFPR170508__I
7214539	DFPR480R4WB40M	48.00	49.00	1.36	221.00	192.00	70.00	40.00	1/4-18 NPT	DFPR150508__0	DFPR170508__I
7214540	DFPR490R4WB40M	49.00	50.00	1.44	224.00	196.00	70.00	40.00	1/4-18 NPT	DFPR150508__0	DFPR170508__I
7214611	DFPR500R4WB40M	50.00	51.00	1.52	228.00	200.00	70.00	40.00	1/4-18 NPT	DFPR150508__0	DFPR170508__I
7214612	DFPR510R4WB40M	51.00	52.00	1.60	234.00	204.00	70.00	40.00	1/4-18 NPT	DFPR150508__0	DFPR170508__I
7214613	DFPR520R4WB40M	52.00	53.00	1.69	238.00	208.00	70.00	40.00	1/4-18 NPT	DFPR150508__0	DFPR170508__I
7214614	DFPR530R4WB40M	53.00	54.00	1.77	242.00	212.00	70.00	40.00	1/4-18 NPT	DFPR150508__0	DFPR170508__I
7214615	DFPR540R4WB40M	54.00	55.00	1.85	246.00	216.00	70.00	40.00	1/4-18 NPT	DFPR150508__0	DFPR170508__I
7214597	DFPR550R4WB40M	55.00	56.00	1.37	252.00	220.00	70.00	40.00	1/4-18 NPT	DFPR180610__0	DFPR200608__I
7214598	DFPR560R4WB40M	56.00	57.00	1.45	256.00	224.00	70.00	40.00	1/4-18 NPT	DFPR180610__0	DFPR200608__I
7214599	DFPR570R4WB40M	57.00	58.00	1.53	260.00	228.00	70.00	40.00	1/4-18 NPT	DFPR180610__0	DFPR200608__I
7214600	DFPR580R4WB40M	58.00	59.00	1.61	264.00	232.00	70.00	40.00	1/4-18 NPT	DFPR180610__0	DFPR200608__I
7214701	DFPR590R4WB40M	59.00	60.00	1.70	270.00	236.00	70.00	40.00	1/4-18 NPT	DFPR180610__0	DFPR200608__I
7214702	DFPR600R4WB40M	60.00	61.00	1.78	274.00	240.00	70.00	40.00	1/4-18 NPT	DFPR180610__0	DFPR200608__I
7214703	DFPR610R4WB40M	61.00	62.00	1.86	278.00	244.00	70.00	40.00	1/4-18 NPT	DFPR180610__0	DFPR200608__I
7214704	DFPR620R4WB40M	62.00	63.00	1.94	282.00	248.00	70.00	40.00	1/4-18 NPT	DFPR180610__0	DFPR200608__I
7214705	DFPR630R4WB40M	63.00	64.00	2.02	287.00	252.00	70.00	40.00	1/4-18 NPT	DFPR180610__0	DFPR200608__I
7214706	DFPR640R4WB40M	64.00	65.00	2.10	291.00	256.00	70.00	40.00	1/4-18 NPT	DFPR180610__0	DFPR200608__I
7214707	DFPR650R4WB40M	65.00	66.00	2.19	295.00	260.00	70.00	40.00	1/4-18 NPT	DFPR180610__0	DFPR200608__I



Drill Fix PRO

Drill Body • 5xD • WB Shank

Smaller Shank Diameter

Order Number	Catalog Number	D1	D1 Max	L5	L1	L4 Max	LS	D	CS	Insert 1 Outside	Insert 2 Inside
7214604	DFPR265R5WB32M	26.50	27.50	0.78	156.50	132.50	60.00	32.00	1/4-18 NPT	DFPR090305__0	DFPR100305__I
7214530	DFPR450R5WB40M	45.00	46.00	1.50	251.00	225.00	70.00	40.00	1/4-18 NPT	DFPR140408__0	DFPR140406__I
7214616	DFPR460R5WB40M	46.00	47.00	1.20	258.00	230.00	70.00	40.00	1/4-18 NPT	DFPR150508__0	DFPR170508__I
7214617	DFPR470R5WB40M	47.00	48.00	1.28	263.00	235.00	70.00	40.00	1/4-18 NPT	DFPR150508__0	DFPR170508__I
7214618	DFPR480R5WB40M	48.00	49.00	1.36	269.00	240.00	70.00	40.00	1/4-18 NPT	DFPR150508__0	DFPR170508__I
7214619	DFPR490R5WB40M	49.00	50.00	1.44	273.00	245.00	70.00	40.00	1/4-18 NPT	DFPR150508__0	DFPR170508__I
7214620	DFPR500R5WB40M	50.00	51.00	1.52	278.00	250.00	70.00	40.00	1/4-18 NPT	DFPR150508__0	DFPR170508__I
7214621	DFPR510R5WB40M	51.00	52.00	1.60	285.00	255.00	70.00	40.00	1/4-18 NPT	DFPR150508__0	DFPR170508__I
7214622	DFPR520R5WB40M	52.00	53.00	1.69	290.00	260.00	70.00	40.00	1/4-18 NPT	DFPR150508__0	DFPR170508__I
7214623	DFPR530R5WB40M	53.00	54.00	1.77	295.00	265.00	70.00	40.00	1/4-18 NPT	DFPR150508__0	DFPR170508__I
7214624	DFPR540R5WB40M	54.00	55.00	1.85	300.00	270.00	70.00	40.00	1/4-18 NPT	DFPR150508__0	DFPR170508__I
7214708	DFPR550R5WB40M	55.00	56.00	1.37	307.00	275.00	70.00	40.00	1/4-18 NPT	DFPR180610__0	DFPR200608__I
7214709	DFPR560R5WB40M	56.00	57.00	1.45	312.00	280.00	70.00	40.00	1/4-18 NPT	DFPR180610__0	DFPR200608__I
7214710	DFPR570R5WB40M	57.00	58.00	1.53	317.00	285.00	70.00	40.00	1/4-18 NPT	DFPR180610__0	DFPR200608__I
7214711	DFPR580R5WB40M	58.00	59.00	1.61	322.00	290.00	70.00	40.00	1/4-18 NPT	DFPR180610__0	DFPR200608__I
7214712	DFPR590R5WB40M	59.00	60.00	1.70	329.00	295.00	70.00	40.00	1/4-18 NPT	DFPR180610__0	DFPR200608__I
7214713	DFPR600R5WB40M	60.00	61.00	1.78	334.00	300.00	70.00	40.00	1/4-18 NPT	DFPR180610__0	DFPR200608__I
7214714	DFPR610R5WB40M	61.00	62.00	1.86	339.00	305.00	70.00	40.00	1/4-18 NPT	DFPR180610__0	DFPR200608__I
7214715	DFPR620R5WB40M	62.00	63.00	1.94	344.00	310.00	70.00	40.00	1/4-18 NPT	DFPR180610__0	DFPR200608__I
7214716	DFPR630R5WB40M	63.00	64.00	2.02	350.00	315.00	70.00	40.00	1/4-18 NPT	DFPR180610__0	DFPR200608__I
7214717	DFPR640R5WB40M	64.00	65.00	2.10	355.00	320.00	70.00	40.00	1/4-18 NPT	DFPR180610__0	DFPR200608__I
7214718	DFPR650R5WB40M	65.00	66.00	2.19	360.00	325.00	70.00	40.00	1/4-18 NPT	DFPR180610__0	DFPR200608__I

Drill Fix PRO APPLICATION DATA - SPEED VC IN M/MIN AND FEED FZ IN MM/REV

MG = Material Group **CC =** Cutting Condition **S =** Stable **U =** Unstable **I =** Interrupted **IP =** Insert Position **O =** Outboard **I =** Inboard **GEO =** Insert Geometry

							Ø 12–13,99mm		Ø 14–16,49mm		Ø 16,5–19,99mm	
MG	CC	IP	GEO	Grade	Min	Max	Min	Max	Min	Max	Min	Max
P0												
	S	O	LC	KCMS35	310	360	0,05	0,10	0,05	0,12	0,05	0,13
	S	I	LC	KCMS40	310	360	0,05	0,10	0,05	0,12	0,05	0,13
	U	O	LC	KCMS35	200	240	0,04	0,07	0,04	0,08	0,04	0,09
	U	I	LC	KCMS40	200	240	0,04	0,07	0,04	0,08	0,04	0,09
	I	O	LC	KCMS35	125	145	0,04	0,06	0,04	0,07	0,04	0,08
	I	I	LC	KCMS40	125	145	0,04	0,06	0,04	0,07	0,04	0,08
P1												
	S	O	PK	KCPK10	310	360	0,06	0,16	0,07	0,18	0,07	0,20
	S	I	PK	KC7140	310	360	0,06	0,16	0,07	0,18	0,07	0,20
	U	O	PK	KCU25	200	240	0,05	0,11	0,06	0,13	0,06	0,14
	U	I	PK	KC7140	200	240	0,05	0,11	0,06	0,13	0,06	0,14
	I	O	PK	KCU40	125	145	0,05	0,10	0,06	0,11	0,06	0,12
	I	I	PK	KC7140	125	145	0,05	0,10	0,06	0,11	0,06	0,12
P2												
	S	O	PK	KCPK10	310	360	0,06	0,16	0,07	0,18	0,07	0,20
	S	I	PK	KC7140	310	360	0,06	0,16	0,07	0,18	0,07	0,20
	U	O	PK	KCU25	200	240	0,05	0,11	0,06	0,13	0,06	0,14
	U	I	PK	KC7140	200	240	0,05	0,11	0,06	0,13	0,06	0,14
	I	O	PK	KCU40	125	145	0,05	0,10	0,06	0,11	0,06	0,12
	I	I	PK	KC7140	125	145	0,05	0,10	0,06	0,11	0,06	0,12
P3												
	S	O	PK	KCPK10	260	320	0,06	0,16	0,07	0,18	0,07	0,20
	S	I	PK	KC7140	260	320	0,06	0,16	0,07	0,18	0,07	0,20
	U	O	PK	KCU25	170	210	0,05	0,11	0,06	0,13	0,06	0,14
	U	I	PK	KC7140	170	210	0,05	0,11	0,06	0,13	0,06	0,14
	I	O	PK	KCU40	105	135	0,05	0,10	0,06	0,11	0,06	0,12
	I	I	PK	KC7140	105	135	0,05	0,10	0,06	0,11	0,06	0,12
P4												
	S	O	PK	KCPK10	220	300	0,06	0,16	0,07	0,18	0,07	0,20
	S	I	PK	KC7140	220	300	0,06	0,16	0,07	0,18	0,07	0,20
	U	O	PK	KCU25	145	195	0,05	0,11	0,06	0,13	0,06	0,14
	U	I	PK	KC7140	145	195	0,05	0,11	0,06	0,13	0,06	0,14
	I	O	PK	KCU40	90	120	0,05	0,10	0,06	0,11	0,06	0,12
	I	I	PK	KC7140	90	120	0,05	0,10	0,06	0,11	0,06	0,12
P5												
	S	O	PK	KCU25	180	220	0,06	0,16	0,07	0,18	0,07	0,20
	S	I	PK	KC7140	180	220	0,06	0,16	0,07	0,18	0,07	0,20
	U	O	PK	KCU40	115	145	0,05	0,11	0,06	0,13	0,06	0,14
	U	I	PK	KC7140	115	145	0,05	0,11	0,06	0,13	0,06	0,14
	I	O	PK	KC7140	70	90	0,05	0,10	0,06	0,11	0,06	0,12
	I	I	PK	KC7140	70	90	0,05	0,10	0,06	0,11	0,06	0,12
P6												
	S	O	PK	KCU25	180	220	0,06	0,16	0,07	0,18	0,07	0,20
	S	I	PK	KC7140	180	220	0,06	0,16	0,07	0,18	0,07	0,20
	U	O	PK	KCU40	115	145	0,05	0,11	0,06	0,13	0,06	0,14
	U	I	PK	KC7140	115	145	0,05	0,11	0,06	0,13	0,06	0,14
	I	O	PK	KC7140	70	90	0,05	0,10	0,06	0,11	0,06	0,12
	I	I	PK	KC7140	70	90	0,05	0,10	0,06	0,11	0,06	0,12

MG = Material Group **CC =** Cutting Condition **S =** Stable **U =** Unstable **I =** Interrupted **IP =** Insert Position **O =** Outboard **I =** Inboard **GEO =** Insert Geometry

							Ø 20–24,49mm		Ø 25–30,49mm		Ø 30,5–37,49mm	
MG	CC	IP	GEO	Grade	Min	Max	Min	Max	Min	Max	Min	Max
P0												
	S	O	LC	KCMS35	310	360	0,05	0,14	0,06	0,16	0,07	0,18
	S	I	LC	KCMS40	310	360	0,05	0,14	0,06	0,16	0,07	0,18
	U	O	LC	KCMS35	200	240	0,04	0,10	0,05	0,11	0,06	0,13
	U	I	LC	KCMS40	200	240	0,04	0,10	0,05	0,11	0,06	0,13
	I	O	LC	KCMS35	125	145	0,04	0,08	0,05	0,10	0,06	0,11
	I	I	LC	KCMS40	125	145	0,04	0,08	0,05	0,10	0,06	0,11
P1												
	S	O	PK	KCPK10	310	360	0,08	0,22	0,08	0,25	0,09	0,28
	S	I	PK	KC7140	310	360	0,08	0,22	0,08	0,25	0,09	0,28
	U	O	PK	KCU25	200	240	0,06	0,15	0,06	0,18	0,07	0,20
	U	I	PK	KC7140	200	240	0,06	0,15	0,06	0,18	0,07	0,20
	I	O	PK	KCU40	125	145	0,06	0,13	0,06	0,15	0,07	0,17
	I	I	PK	KC7140	125	145	0,06	0,13	0,06	0,15	0,07	0,17
P2												
	S	O	PK	KCPK10	310	360	0,08	0,22	0,08	0,25	0,09	0,28
	S	I	PK	KC7140	310	360	0,08	0,22	0,08	0,25	0,09	0,28
	U	O	PK	KCU25	200	240	0,06	0,15	0,06	0,18	0,07	0,20
	U	I	PK	KC7140	200	240	0,06	0,15	0,06	0,18	0,07	0,20
	I	O	PK	KCU40	125	145	0,06	0,13	0,06	0,15	0,07	0,17
	I	I	PK	KC7140	125	145	0,06	0,13	0,06	0,15	0,07	0,17
P3												
	S	O	PK	KCPK10	260	320	0,08	0,22	0,08	0,25	0,09	0,28
	S	I	PK	KC7140	260	320	0,08	0,22	0,08	0,25	0,09	0,28
	U	O	PK	KCU25	170	210	0,06	0,15	0,06	0,18	0,07	0,20
	U	I	PK	KC7140	170	210	0,06	0,15	0,06	0,18	0,07	0,20
	I	O	PK	KCU40	105	135	0,06	0,13	0,06	0,15	0,07	0,17
	I	I	PK	KC7140	105	135	0,06	0,13	0,06	0,15	0,07	0,17
P4												
	S	O	PK	KCPK10	220	300	0,08	0,22	0,08	0,25	0,09	0,28
	S	I	PK	KC7140	220	300	0,08	0,22	0,08	0,25	0,09	0,28
	U	O	PK	KCU25	145	195	0,06	0,15	0,06	0,18	0,07	0,20
	U	I	PK	KC7140	145	195	0,06	0,15	0,06	0,18	0,07	0,20
	I	O	PK	KCU40	90	120	0,06	0,13	0,06	0,15	0,07	0,17
	I	I	PK	KC7140	90	120	0,06	0,13	0,06	0,15	0,07	0,17
P5												
	S	O	PK	KCU25	180	220	0,08	0,22	0,08	0,25	0,09	0,28
	S	I	PK	KC7140	180	220	0,08	0,22	0,08	0,25	0,09	0,28
	U	O	PK	KCU40	115	145	0,06	0,15	0,06	0,18	0,07	0,20
	U	I	PK	KC7140	115	145	0,06	0,15	0,06	0,18	0,07	0,20
	I	O	PK	KC7140	70	90	0,06	0,13	0,06	0,15	0,07	0,17
	I	I	PK	KC7140	70	90	0,06	0,13	0,06	0,15	0,07	0,17
P6												
	S	O	PK	KCU25	180	220	0,08	0,22	0,08	0,25	0,09	0,28
	S	I	PK	KC7140	180	220	0,08	0,22	0,08	0,25	0,09	0,28
	U	O	PK	KCU40	115	145	0,06	0,15	0,06	0,18	0,07	0,20
	U	I	PK	KC7140	115	145	0,06	0,15	0,06	0,18	0,07	0,20
	I	O	PK	KC7140	70	90	0,06	0,13	0,06	0,15	0,07	0,17
	I	I	PK	KC7140	70	90	0,06	0,13	0,06	0,15	0,07	0,17

MG = Material Group **CC =** Cutting Condition **S =** Stable **U =** Unstable **I =** Interrupted **IP =** Insert Position **O =** Outboard **I =** Inboard **GEO =** Insert Geometry

							Ø 37,5–45,49mm		Ø 45,5–54,49mm		Ø 54,5–65mm	
MG	CC	IP	GEO	Grade	Min	Max	Min	Max	Min	Max	Min	Max
P0												
	S	O	LC	KCMS35	310	360	0,07	0,20	0,08	0,21	0,08	0,23
	S	I	LC	KCMS40	310	360	0,07	0,20	0,08	0,21	0,08	0,23
	U	O	LC	KCMS35	200	240	0,06	0,14	0,06	0,15	0,06	0,16
	U	I	LC	KCMS40	200	240	0,06	0,14	0,06	0,15	0,06	0,16
	I	O	LC	KCMS35	125	145	0,06	0,12	0,06	0,13	0,06	0,14
	I	I	LC	KCMS40	125	145	0,06	0,12	0,06	0,13	0,06	0,14
P1												
	S	O	PK	KCPK10	310	360	0,10	0,31	0,10	0,33	0,11	0,36
	S	I	PK	KC7140	310	360	0,10	0,31	0,10	0,33	0,11	0,36
	U	O	PK	KCU25	200	240	0,08	0,22	0,08	0,23	0,09	0,25
	U	I	PK	KC7140	200	240	0,08	0,22	0,08	0,23	0,09	0,25
	I	O	PK	KCU40	125	145	0,08	0,19	0,08	0,20	0,09	0,22
	I	I	PK	KC7140	125	145	0,08	0,19	0,08	0,20	0,09	0,22
P2												
	S	O	PK	KCPK10	310	360	0,10	0,31	0,10	0,33	0,11	0,36
	S	I	PK	KC7140	310	360	0,10	0,31	0,10	0,33	0,11	0,36
	U	O	PK	KCU25	200	240	0,08	0,22	0,08	0,23	0,09	0,25
	U	I	PK	KC7140	200	240	0,08	0,22	0,08	0,23	0,09	0,25
	I	O	PK	KCU40	125	145	0,08	0,19	0,08	0,20	0,09	0,22
	I	I	PK	KC7140	125	145	0,08	0,19	0,08	0,20	0,09	0,22
P3												
	S	O	PK	KCPK10	260	320	0,10	0,31	0,10	0,33	0,11	0,36
	S	I	PK	KC7140	260	320	0,10	0,31	0,10	0,33	0,11	0,36
	U	O	PK	KCU25	170	210	0,08	0,22	0,08	0,23	0,09	0,25
	U	I	PK	KC7140	170	210	0,08	0,22	0,08	0,23	0,09	0,25
	I	O	PK	KCU40	105	135	0,08	0,19	0,08	0,20	0,09	0,22
	I	I	PK	KC7140	105	135	0,08	0,19	0,08	0,20	0,09	0,22
P4												
	S	O	PK	KCPK10	220	300	0,10	0,31	0,10	0,33	0,11	0,36
	S	I	PK	KC7140	220	300	0,10	0,31	0,10	0,33	0,11	0,36
	U	O	PK	KCU25	145	195	0,08	0,22	0,08	0,23	0,09	0,25
	U	I	PK	KC7140	145	195	0,08	0,22	0,08	0,23	0,09	0,25
	I	O	PK	KCU40	90	120	0,08	0,19	0,08	0,20	0,09	0,22
	I	I	PK	KC7140	90	120	0,08	0,19	0,08	0,20	0,09	0,22
P5												
	S	O	PK	KCU25	180	220	0,10	0,31	0,10	0,33	0,11	0,36
	S	I	PK	KC7140	180	220	0,10	0,31	0,10	0,33	0,11	0,36
	U	O	PK	KCU40	115	145	0,08	0,22	0,08	0,23	0,09	0,25
	U	I	PK	KC7140	115	145	0,08	0,22	0,08	0,23	0,09	0,25
	I	O	PK	KC7140	70	90	0,08	0,19	0,08	0,20	0,09	0,22
	I	I	PK	KC7140	70	90	0,08	0,19	0,08	0,20	0,09	0,22
P6												
	S	O	PK	KCU25	180	220	0,10	0,31	0,10	0,33	0,11	0,36
	S	I	PK	KC7140	180	220	0,10	0,31	0,10	0,33	0,11	0,36
	U	O	PK	KCU40	115	145	0,08	0,22	0,08	0,23	0,09	0,25
	U	I	PK	KC7140	115	145	0,08	0,22	0,08	0,23	0,09	0,25
	I	O	PK	KC7140	70	90	0,08	0,19	0,08	0,20	0,09	0,22
	I	I	PK	KC7140	70	90	0,08	0,19	0,08	0,20	0,09	0,22

MG = Material Group **CC =** Cutting Condition **S =** Stable **U =** Unstable **I =** Interrupted **IP =** Insert Position **O =** Outboard **I =** Inboard **GEO =** Insert Geometry

							Ø 12–13,99mm		Ø 14–16,49mm		Ø 16,5–19,99mm	
MG	CC	IP	GEO	Grade	Min	Max	Min	Max	Min	Max	Min	Max
M1												
	S	O	MS	KCMS35	150	230	0,05	0,10	0,05	0,12	0,05	0,14
	S	I	MS	KCMS40	150	230	0,05	0,10	0,05	0,12	0,05	0,14
	U	O	MS	KCMS40	100	150	0,04	0,07	0,04	0,08	0,04	0,10
	U	I	MS	KCMS40	100	150	0,04	0,07	0,04	0,08	0,04	0,10
	I	O	MS	KCMS40	60	90	0,04	0,06	0,04	0,07	0,04	0,08
	I	I	MS	KCMS40	60	90	0,04	0,06	0,04	0,07	0,04	0,08
M2												
	S	O	MS	KCMS35	150	210	0,05	0,10	0,05	0,12	0,05	0,14
	S	I	MS	KCMS40	150	210	0,05	0,10	0,05	0,12	0,05	0,14
	U	O	MS	KCMS40	100	140	0,04	0,07	0,04	0,08	0,04	0,10
	U	I	MS	KCMS40	100	140	0,04	0,07	0,04	0,08	0,04	0,10
	I	O	MS	KCMS40	60	90	0,04	0,06	0,04	0,07	0,04	0,08
	I	I	MS	KCMS40	60	90	0,04	0,06	0,04	0,07	0,04	0,08
M3												
	S	O	MS	KCMS35	100	160	0,04	0,09	0,04	0,10	0,04	0,12
	S	I	MS	KCMS40	100	160	0,04	0,09	0,04	0,10	0,04	0,12
	U	O	MS	KCMS40	65	105	0,03	0,06	0,03	0,07	0,03	0,08
	U	I	MS	KCMS40	65	105	0,03	0,06	0,03	0,07	0,03	0,08
	I	O	MS	KCMS40	40	70	0,03	0,05	0,03	0,06	0,03	0,07
	I	I	MS	KCMS40	40	70	0,03	0,05	0,03	0,06	0,03	0,07

							Ø 20–24,49mm		Ø 25–30,49mm		Ø 30,5–37,49mm	
MG	CC	IP	GEO	Grade	Min	Max	Min	Max	Min	Max	Min	Max
M1												
	S	O	MS	KCMS35	150	230	0,05	0,15	0,06	0,16	0,07	0,18
	S	I	MS	KCMS40	150	230	0,05	0,15	0,06	0,16	0,07	0,18
	U	O	MS	KCMS40	100	150	0,04	0,11	0,05	0,11	0,06	0,13
	U	I	MS	KCMS40	100	150	0,04	0,11	0,05	0,11	0,06	0,13
	I	O	MS	KCMS40	60	90	0,04	0,09	0,05	0,10	0,06	0,11
	I	I	MS	KCMS40	60	90	0,04	0,09	0,05	0,10	0,06	0,11
M2												
	S	O	MS	KCMS35	150	210	0,05	0,15	0,06	0,16	0,07	0,18
	S	I	MS	KCMS40	150	210	0,05	0,15	0,06	0,16	0,07	0,18
	U	O	MS	KCMS40	100	140	0,04	0,11	0,05	0,11	0,06	0,13
	U	I	MS	KCMS40	100	140	0,04	0,11	0,05	0,11	0,06	0,13
	I	O	MS	KCMS40	60	90	0,04	0,09	0,05	0,10	0,06	0,11
	I	I	MS	KCMS40	60	90	0,04	0,09	0,05	0,10	0,06	0,11
M3												
	S	O	MS	KCMS35	100	160	0,04	0,13	0,05	0,14	0,06	0,15
	S	I	MS	KCMS40	100	160	0,04	0,13	0,05	0,14	0,06	0,15
	U	O	MS	KCMS40	65	105	0,03	0,09	0,04	0,10	0,05	0,11
	U	I	MS	KCMS40	65	105	0,03	0,09	0,04	0,10	0,05	0,11
	I	O	MS	KCMS40	40	70	0,03	0,08	0,04	0,08	0,05	0,09
	I	I	MS	KCMS40	40	70	0,03	0,08	0,04	0,08	0,05	0,09

							Ø 37,5–45,49mm		Ø 45,5–54,49mm		Ø 54,5–65mm	
MG	CC	IP	GEO	Grade	Min	Max	Min	Max	Min	Max	Min	Max
M1												
	S	O	MS	KCMS35	150	230	0,07	0,20	0,08	0,22	0,08	0,24
	S	I	MS	KCMS40	150	230	0,07	0,20	0,08	0,22	0,08	0,24
	U	O	MS	KCMS40	100	150	0,06	0,14	0,06	0,15	0,06	0,17
	U	I	MS	KCMS40	100	150	0,06	0,14	0,06	0,15	0,06	0,17
	I	O	MS	KCMS40	60	90	0,06	0,12	0,06	0,13	0,06	0,14
	I	I	MS	KCMS40	60	90	0,06	0,12	0,06	0,13	0,06	0,14
M2												
	S	O	MS	KCMS35	150	210	0,07	0,20	0,08	0,22	0,08	0,24
	S	I	MS	KCMS40	150	210	0,07	0,20	0,08	0,22	0,08	0,24
	U	O	MS	KCMS40	100	140	0,06	0,14	0,06	0,15	0,06	0,17
	U	I	MS	KCMS40	100	140	0,06	0,14	0,06	0,15	0,06	0,17
	I	O	MS	KCMS40	60	90	0,06	0,12	0,06	0,13	0,06	0,14
	I	I	MS	KCMS40	60	90	0,06	0,12	0,06	0,13	0,06	0,14
M3												
	S	O	MS	KCMS35	100	160	0,06	0,17	0,07	0,19	0,07	0,20
	S	I	MS	KCMS40	100	160	0,06	0,17	0,07	0,19	0,07	0,20
	U	O	MS	KCMS40	65	105	0,05	0,12	0,05	0,13	0,05	0,14
	U	I	MS	KCMS40	65	105	0,05	0,12	0,05	0,13	0,05	0,14
	I	O	MS	KCMS40	40	70	0,05	0,10	0,05	0,11	0,05	0,12
	I	I	MS	KCMS40	40	70	0,05	0,10	0,05	0,11	0,05	0,12

MG = Material Group **CC** = Cutting Condition **S** = Stable **U** = Unstable **I** = Interrupted **IP** = Insert Position **O** = Outboard **I** = Inboard **GEO** = Insert Geometry

							Ø 12–13,99mm		Ø 14–16,49mm		Ø 16,5–19,99mm	
MG	CC	IP	GEO	Grade	Min	Max	Min	Max	Min	Max	Min	Max
K1												
	S	O	PK	KCPK10	200	300	0,07	0,18	0,08	0,20	0,08	0,22
	S	I	PK	KC7140	200	300	0,07	0,18	0,08	0,20	0,08	0,22
	U	O	PK	KCU25	130	200	0,05	0,12	0,06	0,14	0,06	0,15
	U	I	PK	KC7140	130	200	0,05	0,12	0,06	0,14	0,06	0,15
	I	O	PK	KCU40	80	120	0,05	0,11	0,06	0,12	0,06	0,13
	I	I	PK	KC7140	80	120	0,05	0,11	0,06	0,12	0,06	0,13
K2												
	S	O	PK	KCPK10	180	260	0,07	0,18	0,08	0,20	0,08	0,22
	S	I	PK	KC7140	180	260	0,07	0,18	0,08	0,20	0,08	0,22
	U	O	PK	KCU25	120	170	0,05	0,12	0,06	0,14	0,06	0,15
	U	I	PK	KC7140	120	170	0,05	0,12	0,06	0,14	0,06	0,15
	I	O	PK	KCU40	70	110	0,05	0,11	0,06	0,12	0,06	0,13
	I	I	PK	KC7140	70	110	0,05	0,11	0,06	0,12	0,06	0,13
K3												
	S	O	PK	KCPK10	180	260	0,07	0,18	0,08	0,20	0,08	0,22
	S	I	PK	KC7140	180	260	0,07	0,18	0,08	0,20	0,08	0,22
	U	O	PK	KCU25	120	170	0,05	0,12	0,06	0,14	0,06	0,15
	U	I	PK	KC7140	120	170	0,05	0,12	0,06	0,14	0,06	0,15
	I	O	PK	KCU40	70	110	0,05	0,11	0,06	0,12	0,06	0,13
	I	I	PK	KC7140	70	110	0,05	0,11	0,06	0,12	0,06	0,13

							Ø 20–24,49mm		Ø 25–30,49mm		Ø 30,5–37,49mm	
MG	CC	IP	GEO	Grade	Min	Max	Min	Max	Min	Max	Min	Max
K1												
	S	O	PK	KCPK10	200	300	0,09	0,24	0,09	0,28	0,10	0,31
	S	I	PK	KC7140	200	300	0,09	0,24	0,09	0,28	0,10	0,31
	U	O	PK	KCU25	130	200	0,07	0,17	0,07	0,19	0,08	0,22
	U	I	PK	KC7140	130	200	0,07	0,17	0,07	0,19	0,08	0,22
	I	O	PK	KCU40	80	120	0,07	0,15	0,07	0,17	0,08	0,18
	I	I	PK	KC7140	80	120	0,07	0,15	0,07	0,17	0,08	0,18
K2												
	S	O	PK	KCPK10	180	260	0,09	0,24	0,09	0,28	0,10	0,31
	S	I	PK	KC7140	180	260	0,09	0,24	0,09	0,28	0,10	0,31
	U	O	PK	KCU25	120	170	0,07	0,17	0,07	0,19	0,08	0,22
	U	I	PK	KC7140	120	170	0,07	0,17	0,07	0,19	0,08	0,22
	I	O	PK	KCU40	70	110	0,07	0,15	0,07	0,17	0,08	0,18
	I	I	PK	KC7140	70	110	0,07	0,15	0,07	0,17	0,08	0,18
K3												
	S	O	PK	KCPK10	180	260	0,09	0,24	0,09	0,28	0,10	0,31
	S	I	PK	KC7140	180	260	0,09	0,24	0,09	0,28	0,10	0,31
	U	O	PK	KCU25	120	170	0,07	0,17	0,07	0,19	0,08	0,22
	U	I	PK	KC7140	120	170	0,07	0,17	0,07	0,19	0,08	0,22
	I	O	PK	KCU40	70	110	0,07	0,15	0,07	0,17	0,08	0,18
	I	I	PK	KC7140	70	110	0,07	0,15	0,07	0,17	0,08	0,18

							Ø 37,5–45,49mm		Ø 45,5–54,49mm		Ø 54,5–65mm	
MG	CC	IP	GEO	Grade	Min	Max	Min	Max	Min	Max	Min	Max
K1												
	S	O	PK	KCPK10	200	300	0,11	0,34	0,11	0,36	0,12	0,40
	S	I	PK	KC7140	200	300	0,11	0,34	0,11	0,36	0,12	0,40
	U	O	PK	KCU25	130	200	0,09	0,24	0,09	0,25	0,10	0,28
	U	I	PK	KC7140	130	200	0,09	0,24	0,09	0,25	0,10	0,28
	I	O	PK	KCU40	80	120	0,09	0,20	0,09	0,22	0,10	0,24
	I	I	PK	KC7140	80	120	0,09	0,20	0,09	0,22	0,10	0,24
K2												
	S	O	PK	KCPK10	180	260	0,11	0,34	0,11	0,36	0,12	0,40
	S	I	PK	KC7140	180	260	0,11	0,34	0,11	0,36	0,12	0,40
	U	O	PK	KCU25	120	170	0,09	0,24	0,09	0,25	0,10	0,28
	U	I	PK	KC7140	120	170	0,09	0,24	0,09	0,25	0,10	0,28
	I	O	PK	KCU40	70	110	0,09	0,20	0,09	0,22	0,10	0,24
	I	I	PK	KC7140	70	110	0,09	0,20	0,09	0,22	0,10	0,24
K3												
	S	O	PK	KCPK10	180	260	0,11	0,34	0,11	0,36	0,12	0,40
	S	I	PK	KC7140	180	260	0,11	0,34	0,11	0,36	0,12	0,40
	U	O	PK	KCU25	120	170	0,09	0,24	0,09	0,25	0,10	0,28
	U	I	PK	KC7140	120	170	0,09	0,24	0,09	0,25	0,10	0,28
	I	O	PK	KCU40	70	110	0,09	0,20	0,09	0,22	0,10	0,24
	I	I	PK	KC7140	70	110	0,09	0,20	0,09	0,22	0,10	0,24

MG = Material Group **CC =** Cutting Condition **S =** Stable **U =** Unstable **I =** Interrupted **IP =** Insert Position **O =** Outboard **I =** Inboard **GEO =** Insert Geometry

							Ø 37,5–45,49mm		Ø 45,5–54,49mm		Ø 54,5–65mm	
MG	CC	IP	GEO	Grade	Min	Max	Min	Max	Min	Max	Min	Max
N1												
	S	O	MS	KCMS35	350	650	0,10	0,31	0,10	0,33	0,11	0,36
	S	I	MS	KCMS40	350	650	0,10	0,31	0,10	0,33	0,11	0,36
	U	O	MS	KCMS35	300	550	0,08	0,22	0,08	0,23	0,09	0,25
	U	I	MS	KCMS40	300	550	0,08	0,22	0,08	0,23	0,09	0,25
	I	O	MS	KCMS40	210	390	0,08	0,19	0,08	0,20	0,09	0,22
	I	I	MS	KCMS40	210	390	0,08	0,19	0,08	0,20	0,09	0,22
N2												
	S	O	MS	KCMS35	300	500	0,10	0,31	0,10	0,33	0,11	0,36
	S	I	MS	KCMS40	300	500	0,10	0,31	0,10	0,33	0,11	0,36
	U	O	MS	KCMS35	250	420	0,08	0,22	0,08	0,23	0,09	0,25
	U	I	MS	KCMS40	250	420	0,08	0,22	0,08	0,23	0,09	0,25
	I	O	MS	KCMS40	180	300	0,08	0,19	0,08	0,20	0,09	0,22
	I	I	MS	KCMS40	180	300	0,08	0,19	0,08	0,20	0,09	0,22
N3												
	S	O	MS	KCMS35	300	500	0,10	0,31	0,10	0,33	0,11	0,36
	S	I	MS	KCMS40	300	500	0,10	0,31	0,10	0,33	0,11	0,36
	U	O	MS	KCMS35	250	420	0,08	0,22	0,08	0,23	0,09	0,25
	U	I	MS	KCMS40	250	420	0,08	0,22	0,08	0,23	0,09	0,25
	I	O	MS	KCMS40	180	300	0,08	0,19	0,08	0,20	0,09	0,22
	I	I	MS	KCMS40	180	300	0,08	0,19	0,08	0,20	0,09	0,22
N4												
	S	O	MS	KCMS35	300	500	0,10	0,31	0,10	0,33	0,11	0,36
	S	I	MS	KCMS40	300	500	0,10	0,31	0,10	0,33	0,11	0,36
	U	O	MS	KCMS35	250	420	0,08	0,22	0,08	0,23	0,09	0,25
	U	I	MS	KCMS40	250	420	0,08	0,22	0,08	0,23	0,09	0,25
	I	O	MS	KCMS40	180	300	0,08	0,19	0,08	0,20	0,09	0,22
	I	I	MS	KCMS40	180	300	0,08	0,19	0,08	0,20	0,09	0,22
N5												
	S	O	MS	KCMS35	300	500	0,10	0,31	0,10	0,33	0,11	0,36
	S	I	MS	KCMS40	300	500	0,10	0,31	0,10	0,33	0,11	0,36
	U	O	MS	KCMS35	250	420	0,08	0,22	0,08	0,23	0,09	0,25
	U	I	MS	KCMS40	250	420	0,08	0,22	0,08	0,23	0,09	0,25
	I	O	MS	KCMS40	180	300	0,08	0,19	0,08	0,20	0,09	0,22
	I	I	MS	KCMS40	180	300	0,08	0,19	0,08	0,20	0,09	0,22
N6												
	S	O	MS	KCMS35	400	500	0,10	0,31	0,10	0,33	0,11	0,36
	S	I	MS	KCMS40	400	500	0,10	0,31	0,10	0,33	0,11	0,36
	U	O	MS	KCMS35	340	420	0,08	0,22	0,08	0,23	0,09	0,25
	U	I	MS	KCMS40	340	420	0,08	0,22	0,08	0,23	0,09	0,25
	I	O	MS	KCMS40	240	300	0,08	0,19	0,08	0,20	0,09	0,22
	I	I	MS	KCMS40	240	300	0,08	0,19	0,08	0,20	0,09	0,22

MG = Material Group **CC** = Cutting Condition **S** = Stable **U** = Unstable **I** = Interrupted **IP** = Insert Position **O** = Outboard **I** = Inboard **GEO** = Insert Geometry

							Ø 12–13,99mm		Ø 14–16,49mm		Ø 16,5–19,99mm	
MG	CC	IP	GEO	Grade	Min	Max	Min	Max	Min	Max	Min	Max
S1												
	S	O	MS	KCMS35	60	80	0,05	0,08	0,05	0,10	0,05	0,11
	S	I	MS	KCMS40	60	80	0,05	0,08	0,05	0,10	0,05	0,11
	U	O	MS	KCMS40	40	50	0,04	0,06	0,04	0,07	0,04	0,08
	U	I	MS	KCMS40	40	50	0,04	0,06	0,04	0,07	0,04	0,08
	I	O	MS	KCMS40	25	40	0,04	0,05	0,04	0,06	0,04	0,07
	I	I	MS	KCMS40	25	40	0,04	0,05	0,04	0,06	0,04	0,07
S2												
	S	O	MS	KCMS35	50	70	0,05	0,08	0,05	0,10	0,05	0,11
	S	I	MS	KCMS40	50	70	0,05	0,08	0,05	0,10	0,05	0,11
	U	O	MS	KCMS40	30	50	0,04	0,06	0,04	0,07	0,04	0,08
	U	I	MS	KCMS40	30	50	0,04	0,06	0,04	0,07	0,04	0,08
	I	O	MS	KCMS40	25	40	0,04	0,05	0,04	0,06	0,04	0,07
	I	I	MS	KCMS40	25	40	0,04	0,05	0,04	0,06	0,04	0,07
S3												
	S	O	MS	KCMS35	70	90	0,05	0,08	0,05	0,10	0,05	0,11
	S	I	MS	KCMS40	70	90	0,05	0,08	0,05	0,10	0,05	0,11
	U	O	MS	KCMS40	50	70	0,04	0,06	0,04	0,07	0,04	0,08
	U	I	MS	KCMS40	50	70	0,04	0,06	0,04	0,07	0,04	0,08
	I	O	MS	KCMS40	30	40	0,04	0,05	0,04	0,06	0,04	0,07
	I	I	MS	KCMS40	30	40	0,04	0,05	0,04	0,06	0,04	0,07
S4												
	S	O	MS	KCMS35	70	90	0,05	0,08	0,05	0,10	0,05	0,11
	S	I	MS	KCMS40	70	90	0,05	0,08	0,05	0,10	0,05	0,11
	U	O	MS	KCMS40	45	65	0,04	0,06	0,04	0,07	0,04	0,08
	U	I	MS	KCMS40	45	65	0,04	0,06	0,04	0,07	0,04	0,08
	I	O	MS	KCMS40	30	50	0,04	0,05	0,04	0,06	0,04	0,07
	I	I	MS	KCMS40	30	50	0,04	0,05	0,04	0,06	0,04	0,07

MG = Material Group **CC** = Cutting Condition **S** = Stable **U** = Unstable **I** = Interrupted **IP** = Insert Position **O** = Outboard **I** = Inboard **GEO** = Insert Geometry

							Ø 20–24,49mm		Ø 25–30,49mm		Ø 30,5–37,49mm	
MG	CC	IP	GEO	Grade	Min	Max	Min	Max	Min	Max	Min	Max
S1												
	S	O	MS	KCMS35	60	80	0,05	0,12	0,06	0,13	0,07	0,14
	S	I	MS	KCMS40	60	80	0,05	0,12	0,06	0,13	0,07	0,14
	U	O	MS	KCMS40	40	50	0,04	0,08	0,05	0,09	0,06	0,10
	U	I	MS	KCMS40	40	50	0,04	0,08	0,05	0,09	0,06	0,10
	I	O	MS	KCMS40	25	40	0,04	0,07	0,05	0,08	0,06	0,09
	I	I	MS	KCMS40	25	40	0,04	0,07	0,05	0,08	0,06	0,09
S2												
	S	O	MS	KCMS35	50	70	0,05	0,12	0,06	0,13	0,07	0,14
	S	I	MS	KCMS40	50	70	0,05	0,12	0,06	0,13	0,07	0,14
	U	O	MS	KCMS40	30	50	0,04	0,08	0,05	0,09	0,06	0,10
	U	I	MS	KCMS40	30	50	0,04	0,08	0,05	0,09	0,06	0,10
	I	O	MS	KCMS40	25	40	0,04	0,07	0,05	0,08	0,06	0,09
	I	I	MS	KCMS40	25	40	0,04	0,07	0,05	0,08	0,06	0,09
S3												
	S	O	MS	KCMS35	70	90	0,05	0,12	0,06	0,13	0,07	0,14
	S	I	MS	KCMS40	70	90	0,05	0,12	0,06	0,13	0,07	0,14
	U	O	MS	KCMS40	50	70	0,04	0,08	0,05	0,09	0,06	0,10
	U	I	MS	KCMS40	50	70	0,04	0,08	0,05	0,09	0,06	0,10
	I	O	MS	KCMS40	30	40	0,04	0,07	0,05	0,08	0,06	0,09
	I	I	MS	KCMS40	30	40	0,04	0,07	0,05	0,08	0,06	0,09
S4												
	S	O	MS	KCMS35	70	90	0,05	0,12	0,06	0,13	0,07	0,14
	S	I	MS	KCMS40	70	90	0,05	0,12	0,06	0,13	0,07	0,14
	U	O	MS	KCMS40	45	65	0,04	0,08	0,05	0,09	0,06	0,10
	U	I	MS	KCMS40	45	65	0,04	0,08	0,05	0,09	0,06	0,10
	I	O	MS	KCMS40	30	50	0,04	0,07	0,05	0,08	0,06	0,09
	I	I	MS	KCMS40	30	50	0,04	0,07	0,05	0,08	0,06	0,09

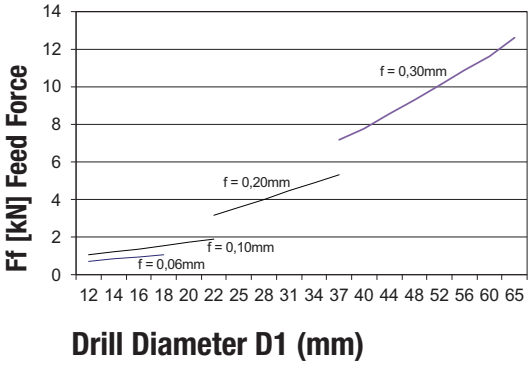
MG = Material Group **CC =** Cutting Condition **S =** Stable **U =** Unstable **I =** Interrupted **IP =** Insert Position **O =** Outboard **I =** Inboard **GEO =** Insert Geometry

							Ø 37,5–45,49mm		Ø 45,5–54,49mm		Ø 54,5–65mm	
MG	CC	IP	GEO	Grade	Min	Max	Min	Max	Min	Max	Min	Max
S1												
	S	O	MS	KCMS35	60	80	0,07	0,16	0,08	0,18	0,08	0,19
	S	I	MS	KCMS40	60	80	0,07	0,16	0,08	0,18	0,08	0,19
	U	O	MS	KCMS40	40	50	0,06	0,11	0,06	0,12	0,06	0,13
	U	I	MS	KCMS40	40	50	0,06	0,11	0,06	0,12	0,06	0,13
	I	O	MS	KCMS40	25	40	0,06	0,10	0,06	0,11	0,06	0,12
	I	I	MS	KCMS40	25	40	0,06	0,10	0,06	0,11	0,06	0,12
S2												
	S	O	MS	KCMS35	50	70	0,07	0,16	0,08	0,18	0,08	0,19
	S	I	MS	KCMS40	50	70	0,07	0,16	0,08	0,18	0,08	0,19
	U	O	MS	KCMS40	30	50	0,06	0,11	0,06	0,12	0,06	0,13
	U	I	MS	KCMS40	30	50	0,06	0,11	0,06	0,12	0,06	0,13
	I	O	MS	KCMS40	25	40	0,06	0,10	0,06	0,11	0,06	0,12
	I	I	MS	KCMS40	25	40	0,06	0,10	0,06	0,11	0,06	0,12
S3												
	S	O	MS	KCMS35	70	90	0,07	0,16	0,08	0,18	0,08	0,19
	S	I	MS	KCMS40	70	90	0,07	0,16	0,08	0,18	0,08	0,19
	U	O	MS	KCMS40	50	70	0,06	0,11	0,06	0,12	0,06	0,13
	U	I	MS	KCMS40	50	70	0,06	0,11	0,06	0,12	0,06	0,13
	I	O	MS	KCMS40	30	40	0,06	0,10	0,06	0,11	0,06	0,12
	I	I	MS	KCMS40	30	40	0,06	0,10	0,06	0,11	0,06	0,12
S4												
	S	O	MS	KCMS35	70	90	0,07	0,16	0,08	0,18	0,08	0,19
	S	I	MS	KCMS40	70	90	0,07	0,16	0,08	0,18	0,08	0,19
	U	O	MS	KCMS40	45	65	0,06	0,11	0,06	0,12	0,06	0,13
	U	I	MS	KCMS40	45	65	0,06	0,11	0,06	0,12	0,06	0,13
	I	O	MS	KCMS40	30	50	0,06	0,10	0,06	0,11	0,06	0,12
	I	I	MS	KCMS40	30	50	0,06	0,10	0,06	0,11	0,06	0,12

FEED FORCE REQUIREMENT

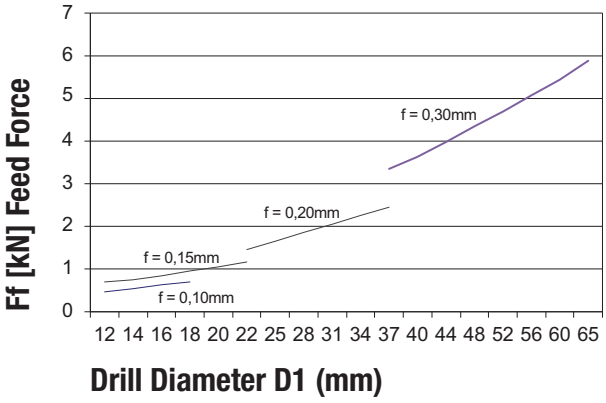
P

Steel 42CrMo4



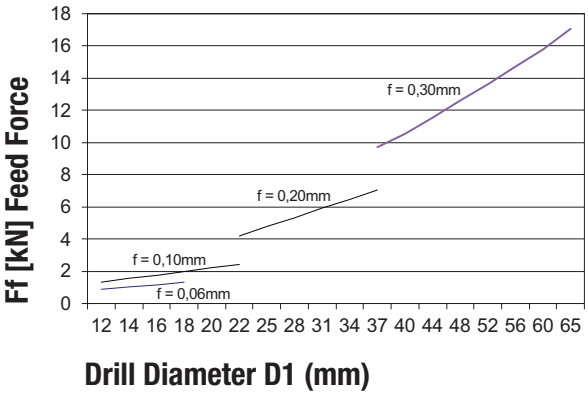
N

Non-Ferrous Material 1.3535 AlMg3



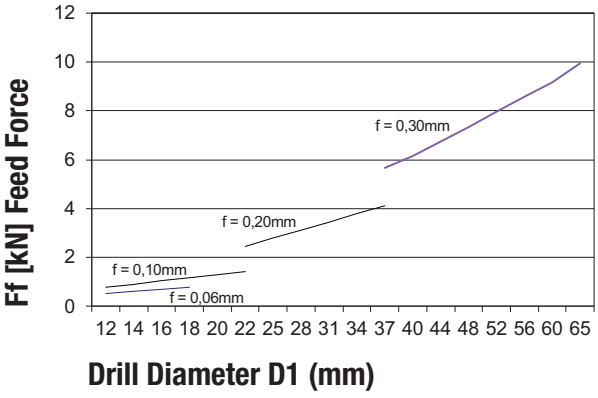
M

Stainless Steel 1.4301 (304H)



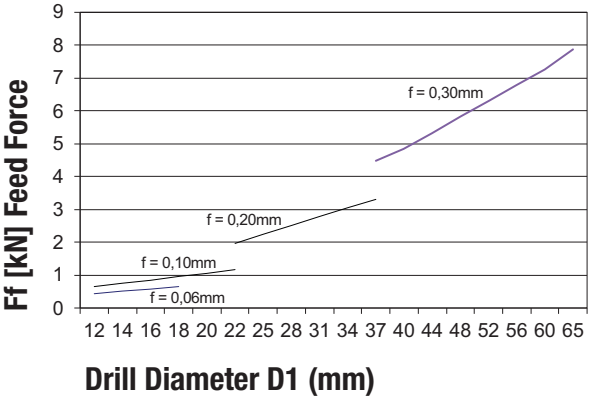
S

High-Temperature Alloys 3.7164 TiAl6V4



K

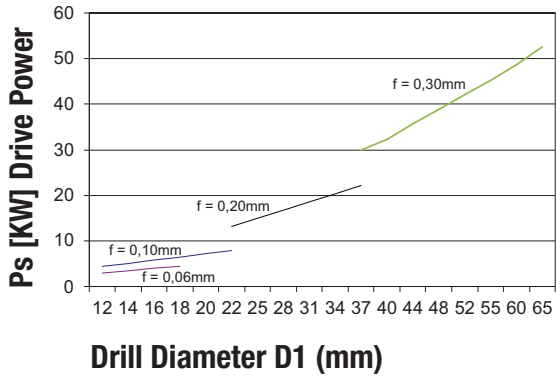
Cast Iron GGG 40



POWER RECOMMENDATION

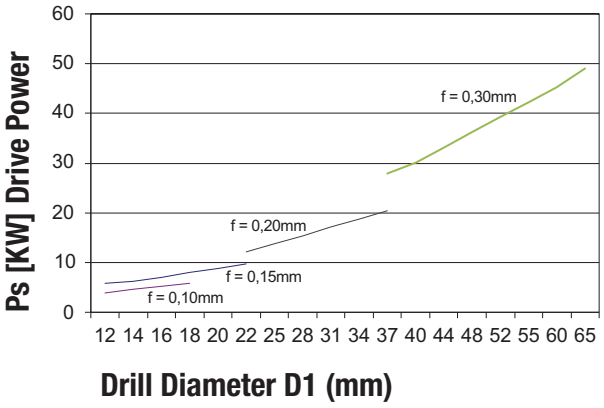
P

Steel 42CrMo4



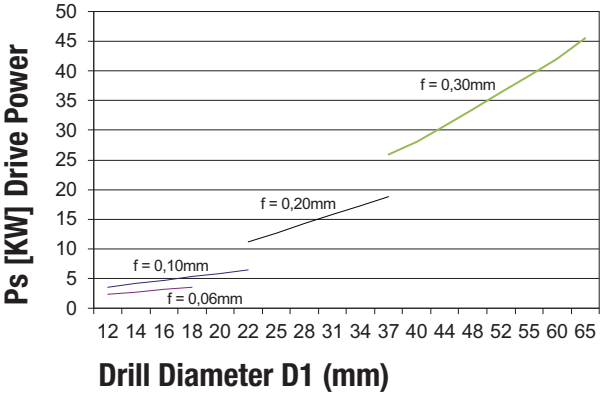
N

Non-Ferrous Material 1.3535 AlMg3



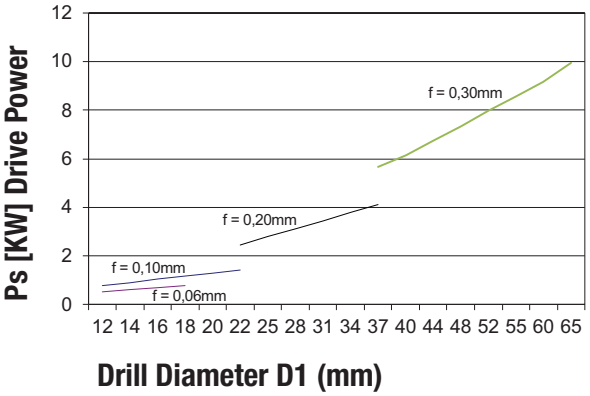
M

Stainless Steel 1.4301 (304H)



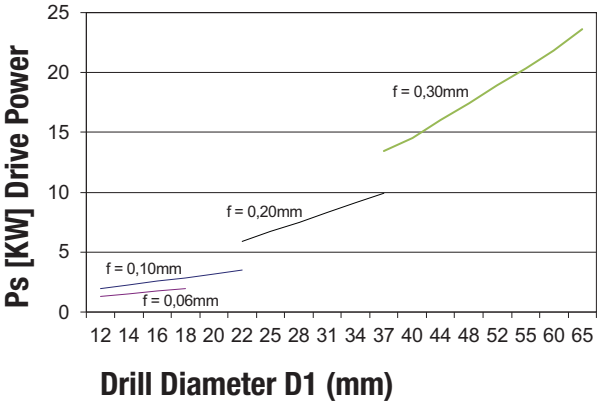
S

High-Temperature Alloys 3.7164 TiAl6V4



K

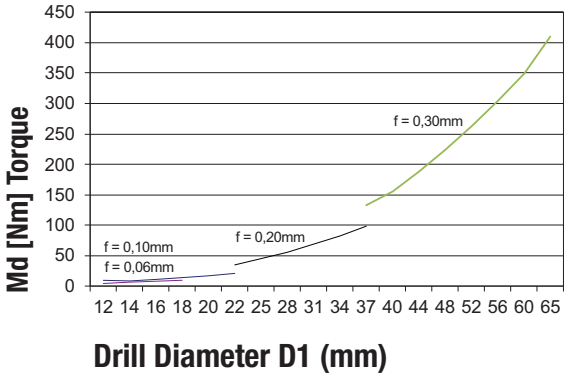
Cast Iron GGG 40



TORQUE RECOMMENDATION

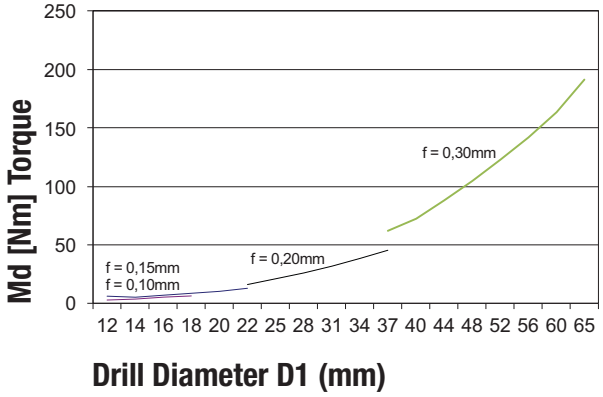
P

Steel 42CrMo4



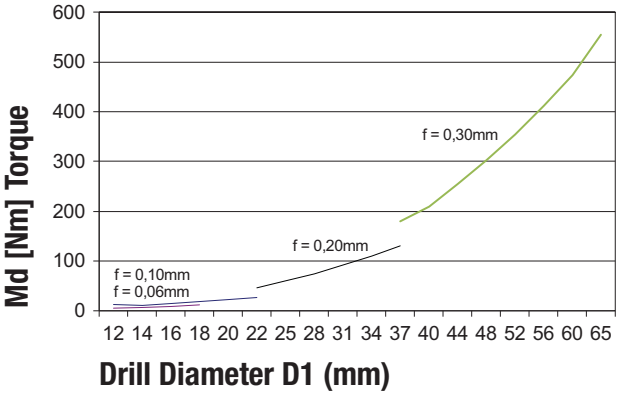
N

Non-Ferrous Material 1.3535 AlMg3



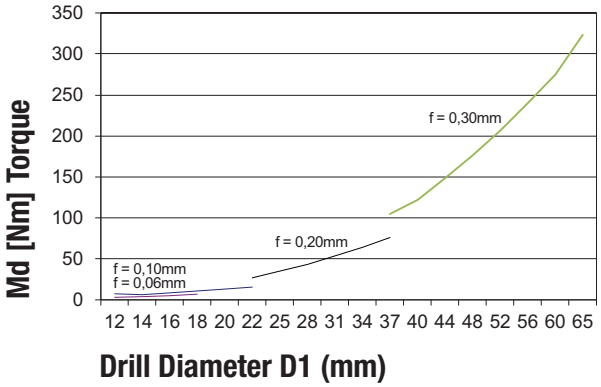
M

Stainless Steel 1.4301 (304H)



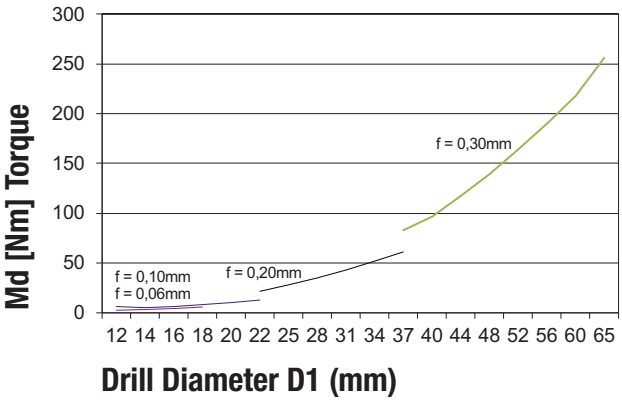
S

High-Temperature Alloys 3.7164 TiAl6V4



K

Cast Iron GGG 40



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Drill Fix PRO

OUR MOST ROBUST, VERSATILE & ECONOMIC INDEXABLE DRILLING PLATFORM

TAKE YOUR **MANUFACTURING** TO THE **NEXT LEVEL**

kennametal.com/**DFP**

KENNAMETAL

KenDrill™ HPR

SOLID CARBIDE DRILLS

Applications

- Drilling
- Inclined Exit
- Through Coolant: Radial: Drilling
- MQL (Minimum Quantity Lubricant): Drilling
- Cross-Hole Drilling
- Stacked Plates
- Helix Angle 30°
- Plain Shank ≤h6
- 2 Flute/ 4 Margin/ Coolant
- DIN 6535

Materials

- K Cast Iron
- P Steels

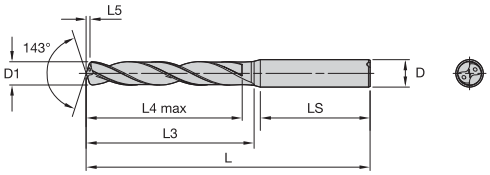
KENNAMETAL

Kennametal's latest addition to its HPR drilling platform completes the lineup's range capabilities with 12xD and 50xD drilling solutions for steels and cast iron.

- 135° HPR point with Radius design at cutting edge corner for long tool life at higher feed rates, lower cost per part and better quality hole exits
- Patented gashing delivers less heat and thermal shocks for longer integrity of cutting edge
- Featuring KCK10A Grade with ultra fine grain substrate for longer tool life in steel and cast iron materials and reduced catastrophic failure risk
- 4 margin design for good hole accuracy and straightness (even in X-holes or inclined exits)
- Highly polished surfaces for superior chip evacuation even when low-pressure coolant is applied

Industries

- Automotive
- General Engineering
- Wind & Solar
- Oil & Gas
- Aerospace



P	
M	
K	●
N	
S	
H	

● Primary
○ Secondary

HPR

B269 • 12xD • Internal Coolant

KCK10A

Order Number	Catalog Number	D1	L	L3	L4 Max	L5	LS	D	
7214128	B269A02400KMR	2.40	75	42	35	0.4	28	4	•
7214129	B269A02500KMR	2.50	75	42	35	0.5	28	4	•
7214130	B269A02600KMR	2.60	75	42	35	0.5	28	4	•
7214211	B269A02800KMR	2.80	75	43	36	0.5	28	4	•
7214212	B269A02900KMR	2.90	75	43	36	0.5	28	4	•
7214213	B269A03000KMR	3.00	93	52	44	0.6	36	6	•
7214215	B269A03264KMR	3.26	93	53	44	0.6	36	6	•
7214216	B269A03300KMR	3.30	93	53	44	0.6	36	6	•
7214217	B269A03400KMR	3.40	93	53	44	0.6	36	6	•
7214218	B269A03500KMR	3.50	93	53	44	0.7	36	6	•
7214219	B269A03600KMR	3.60	93	54	45	0.7	36	6	•
7214220	B269A03700KMR	3.70	93	54	45	0.7	36	6	•
7214221	B269A03800KMR	3.80	107	65	55	0.7	36	6	•
7214222	B269A03970KMR	3.97	107	66	56	0.8	36	6	•
7214223	B269A04000KMR	4.00	107	66	56	0.8	36	6	•
7214224	B269A04100HPR	4.10	107	66	56	1.4	36	6	•
7214225	B269A04200HPR	4.20	107	67	56	1.4	36	6	•
7214226	B269A04300HPR	4.30	107	67	56	1.4	36	6	•
7214227	B269A04500HPR	4.50	107	67	56	1.5	36	6	•
7214228	B269A04550HPR	4.55	107	68	57	1.5	36	6	•
7214229	B269A04600HPR	4.60	107	68	57	1.5	36	6	•
7214230	B269A04700HPR	4.70	107	68	57	1.6	36	6	•
7214242	B269A04800HPR	4.80	125	82	70	1.6	36	6	•
7214243	B269A05000HPR	5.00	125	83	70	1.7	36	6	•
7214244	B269A05100HPR	5.10	125	83	70	1.7	36	6	•
7214245	B269A05200HPR	5.20	125	83	70	1.7	36	6	•
7214246	B269A05300HPR	5.30	125	84	71	1.8	36	6	•
7214247	B269A05410HPR	5.41	125	84	71	1.8	36	6	•
7214248	B269A05500HPR	5.50	125	84	71	1.8	36	6	•
7214249	B269A05558HPR	5.56	125	84	71	1.9	36	6	•
7214250	B269A05600HPR	5.60	125	85	72	1.9	36	6	•
7214251	B269A05700HPR	5.70	125	85	72	1.9	36	6	•
7214252	B269A05800HPR	5.80	125	85	72	1.9	36	6	•
7214253	B269A06000HPR	6.00	125	86	72	2.0	36	6	•
7214254	B269A06100HPR	6.10	139	97	82	2.0	36	8	•
7214255	B269A06200HPR	6.20	139	97	82	2.1	36	8	•
7214257	B269A06400HPR	6.40	139	98	83	2.1	36	8	•
7214258	B269A06500HPR	6.50	139	98	83	2.2	36	8	•
7214259	B269A06528HPR	6.53	139	98	83	2.2	36	8	•
7214260	B269A06600HPR	6.60	139	99	84	2.2	36	8	•
7214261	B269A06746HPR	6.75	139	99	83	2.3	36	8	•
7214262	B269A06800HPR	6.80	139	99	83	2.3	36	8	•
7214263	B269A06909HPR	6.91	139	100	84	2.3	36	8	•
7214264	B269A07000HPR	7.00	139	100	84	2.3	36	8	•
7214265	B269A07145HPR	7.15	153	111	94	2.4	36	8	•
7214266	B269A07500HPR	7.50	153	112	95	2.5	36	8	•
7214268	B269A07700HPR	7.70	153	113	96	2.6	36	8	•
7214269	B269A07800HPR	7.80	153	113	95	2.6	36	8	•
7214271	B269A08000HPR	8.00	153	114	96	2.7	36	8	•
7214272	B269A08100HPR	8.10	185	136	116	2.7	40	10	•
7214273	B269A08200HPR	8.20	185	136	116	2.7	40	10	•
7214275	B269A08433HPR	8.43	185	137	117	2.8	40	10	•
7214276	B269A08500HPR	8.50	185	137	117	2.8	40	10	•
7214277	B269A08525HPR	8.53	185	137	117	2.9	40	10	•
7214278	B269A08600HPR	8.60	185	138	118	2.9	40	10	•
7214279	B269A08700HPR	8.70	185	138	118	2.9	40	10	•
7214280	B269A08733HPR	8.73	185	138	117	2.9	40	10	•
7214281	B269A08800HPR	8.80	185	138	117	2.9	40	10	•
7214282	B269A09000HPR	9.00	185	139	118	3.0	40	10	•
7214283	B269A09100HPR	9.10	185	139	118	3.0	40	10	•
7214284	B269A09129HPR	9.13	185	139	118	3.1	40	10	•
7214285	B269A09500HPR	9.50	185	140	119	3.2	40	10	•
7214287	B269A09800HPR	9.80	185	141	119	3.3	40	10	•
7214288	B269A09921HPR	9.92	185	142	120	3.3	40	10	•

Continued On Next Page

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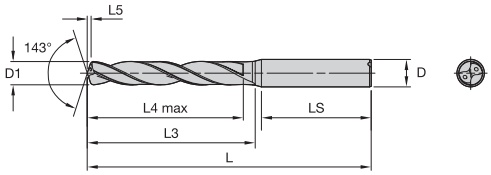


P	
M	
K	●
N	
S	
H	

● Primary
○ Secondary

HPR Continued

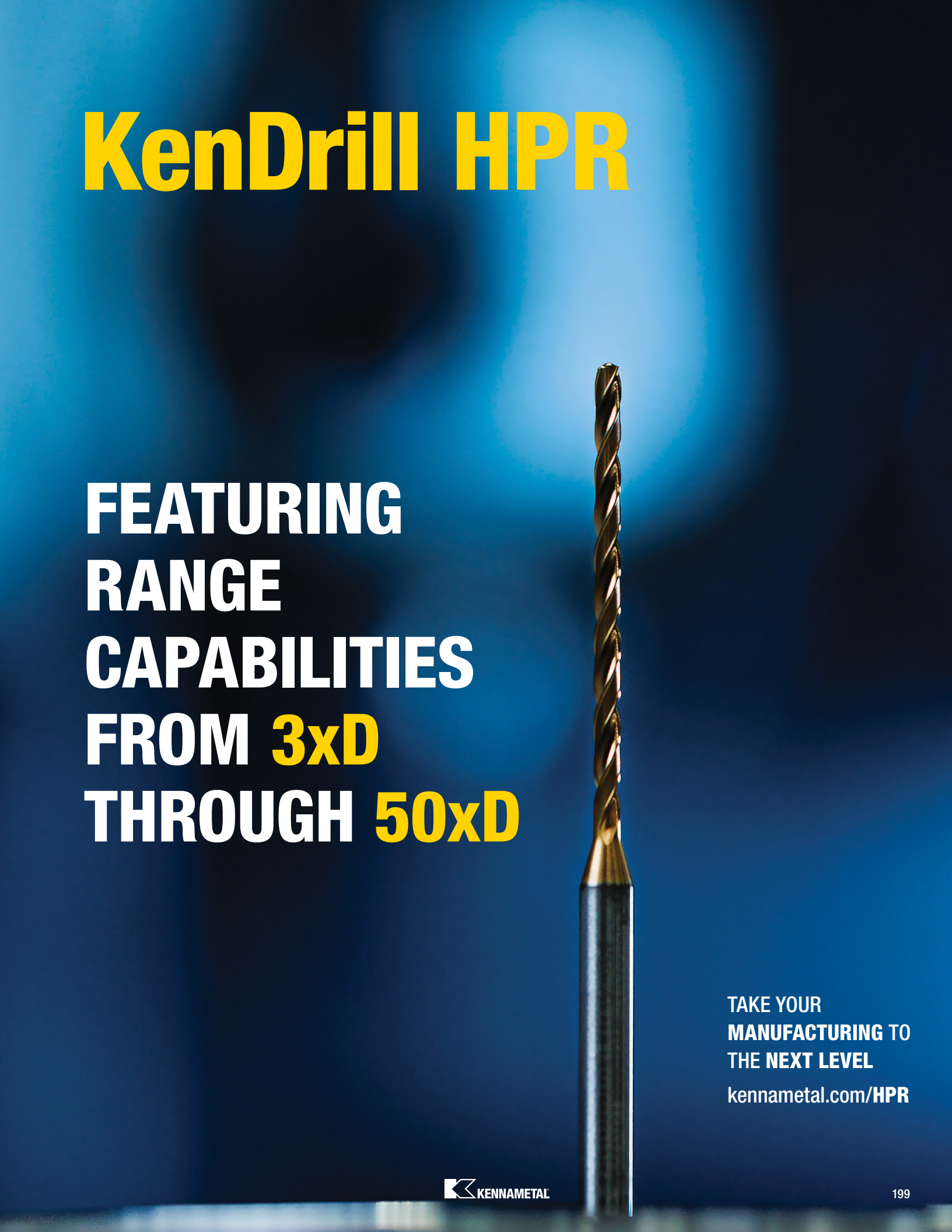
B269 • 12xD • Internal Coolant

KCK10A

Order Number	Catalog Number	D1	L	L3	L4 Max	L5	LS	D	
7214289	B269A10000HPR	10.00	185	142	120	3.3	40	10	•
7214290	B269A10200HPR	10.20	218	164	140	3.4	45	12	•
7214291	B269A10300HPR	10.30	218	165	141	3.4	45	12	•
7214292	B269A10320HPR	10.32	218	165	141	3.5	45	12	•
7214293	B269A10500HPR	10.50	218	165	141	3.5	45	12	•
7214295	B269A10800HPR	10.80	218	166	141	3.6	45	12	•
7214296	B269A11000HPR	11.00	218	167	142	3.7	45	12	•
7214298	B269A11200HPR	11.20	218	167	142	3.7	45	12	•
7214300	B269A11500HPR	11.50	218	168	143	3.8	45	12	•
7214301	B269A11700HPR	11.70	218	169	144	3.9	45	12	•
7214302	B269A11800HPR	11.80	218	169	143	3.9	45	12	•
7214303	B269A12000HPR	12.00	218	170	144	4.0	45	12	•
7214304	B269A12100HPR	12.10	246	192	164	4.0	45	14	•
7214305	B269A12200HPR	12.20	246	192	164	4.1	45	14	•
7214306	B269A12304HPR	12.30	246	193	165	4.1	45	14	•
7214307	B269A12500HPR	12.50	246	193	165	4.2	45	14	•
7214309	B269A13000HPR	13.00	246	195	166	4.3	45	14	•
7214310	B269A13100HPR	13.10	246	195	166	4.4	45	14	•
7214311	B269A13500HPR	13.50	246	196	167	4.5	45	14	•
7214312	B269A13800HPR	13.80	246	197	168	4.6	45	14	•
7214313	B269A14000HPR	14.00	246	198	168	4.7	45	14	•
7214314	B269A14100HPR	14.10	277	220	188	4.7	48	16	•
7214317	B269A14500HPR	14.50	277	221	189	4.8	48	16	•
7214319	B269A15000HPR	15.00	277	223	190	5.0	48	16	•
7214320	B269A15200HPR	15.20	277	223	190	5.1	48	16	•
7214331	B269A15500HPR	15.50	277	224	191	5.2	48	16	•
7214333	B269A16000HPR	16.00	277	226	192	5.4	48	16	•
7214334	B269A16500HPR	16.50	305	249	213	5.5	48	18	•
7214335	B269A17000HPR	17.00	305	250	214	5.7	48	18	•
7214337	B269A17100HPR	17.10	305	251	214	5.7	48	18	•
7214339	B269A17500HPR	17.50	305	252	215	5.9	48	18	•
7214340	B269A17600HPR	17.60	305	252	215	5.9	48	18	•
7214351	B269A18000HPR	18.00	305	253	216	6.0	48	18	•
7214352	B269A18500HPR	18.50	334	277	237	6.2	50	20	•
7214354	B269A19000HPR	19.00	334	278	238	6.4	50	20	•
7214356	B269A19500HPR	19.50	334	280	239	6.5	50	20	•
7214357	B269A20000HPR	20.00	334	281	240	6.7	50	20	•

HPR DRILLS APPLICATION DATA

Material Group		Cutting Speed — Vc Range — m/min		Metric Recommended Feed Rate per Rev								
		Min	Max		3,0	4,0	6,0	8,0	10,0	12,0	16,0	20,0
P	P0	140	290	mm/r	0.13 - 0.24	0.14 - 0.26	0.15 - 0.30	0.17 - 0.34	0.19 - 0.38	0.21 - 0.42	0.24 - 0.50	0.28 - 0.58
	P1	130	290	mm/r	0.15 - 0.30	0.16 - 0.33	0.18 - 0.39	0.20 - 0.45	0.22 - 0.51	0.24 - 0.57	0.28 - 0.69	0.32 - 0.81
	P2	190	270	mm/r	0.14 - 0.29	0.15 - 0.32	0.18 - 0.38	0.21 - 0.43	0.24 - 0.49	0.27 - 0.55	0.33 - 0.66	0.39 - 0.77
	P3	130	190	mm/r	0.15 - 0.30	0.17 - 0.33	0.20 - 0.38	0.23 - 0.44	0.26 - 0.50	0.29 - 0.56	0.36 - 0.67	0.42 - 0.79
	P4	110	170	mm/r	0.13 - 0.25	0.15 - 0.27	0.19 - 0.33	0.22 - 0.38	0.26 - 0.43	0.30 - 0.48	0.37 - 0.59	0.44 - 0.69
	P5	70	110	mm/r	0.11 - 0.21	0.13 - 0.24	0.15 - 0.28	0.18 - 0.33	0.21 - 0.38	0.24 - 0.42	0.29 - 0.51	0.35 - 0.61
	P6	60	100	mm/r	0.11 - 0.21	0.13 - 0.24	0.15 - 0.28	0.18 - 0.33	0.21 - 0.38	0.24 - 0.42	0.29 - 0.51	0.35 - 0.61
K	K1	130	210	mm/r	0.12 - 0.27	0.15 - 0.33	0.21 - 0.43	0.26 - 0.51	0.30 - 0.59	0.34 - 0.65	0.41 - 0.77	0.47 - 0.87
	K2	90	180	mm/r	0.12 - 0.27	0.15 - 0.33	0.21 - 0.43	0.26 - 0.51	0.30 - 0.59	0.34 - 0.65	0.41 - 0.77	0.47 - 0.87
	K3	70	130	mm/r	0.10 - 0.22	0.13 - 0.27	0.18 - 0.36	0.23 - 0.43	0.27 - 0.49	0.31 - 0.55	0.37 - 0.65	0.43 - 0.74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FEATURING RANGE CAPABILITIES FROM 3xD THROUGH 50xD
TAKE YOUR MANUFACTURING TO THE NEXT LEVEL
kennametal.com/HPR
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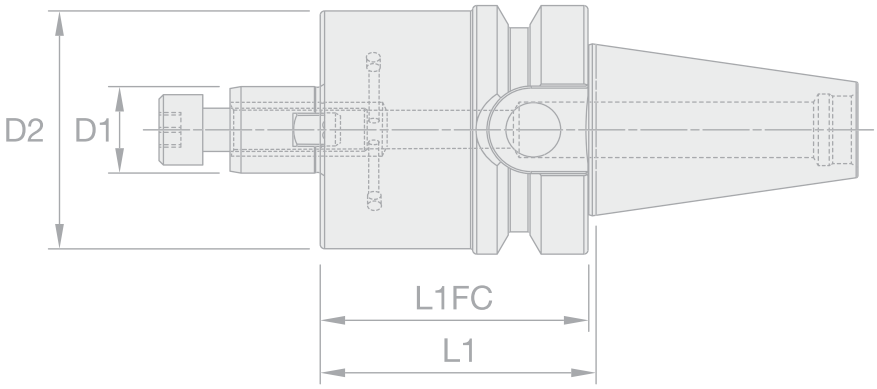
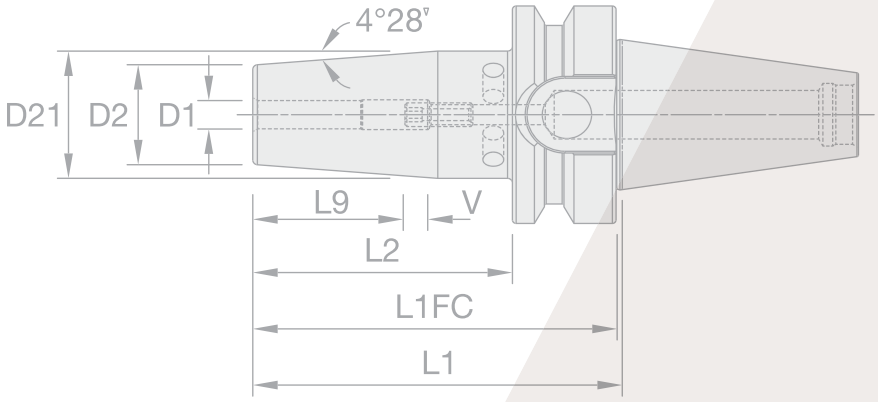
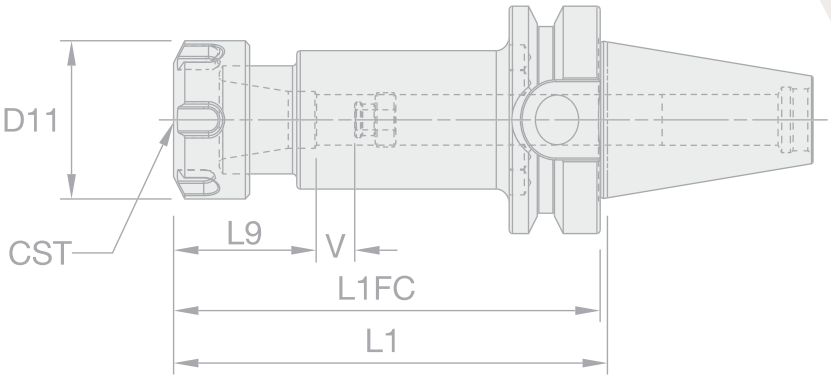
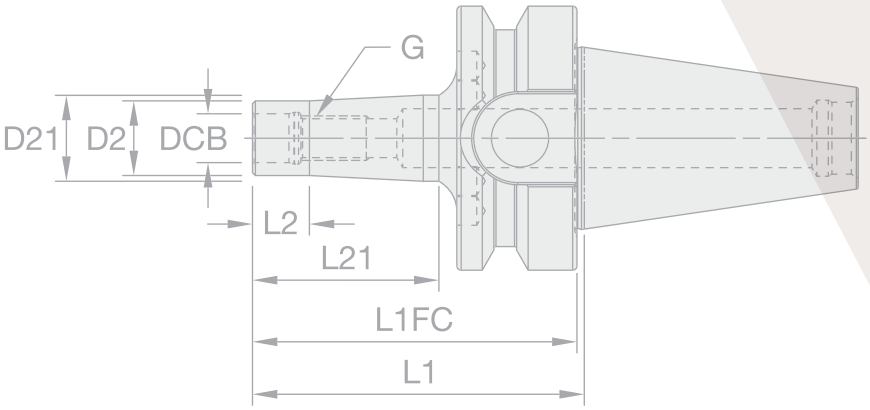
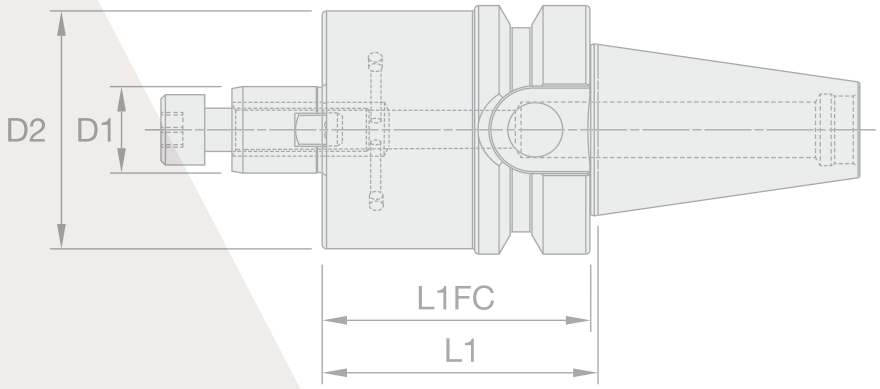

D2
D1
L1FC
L1


4°28'
D21
D2
D1
L9
V
L2
L1FC
L1


D11
CST
L9
V
L1FC
L1


G
D21
D2
DCB
L2
L21
L1FC
L1

SYSTEMS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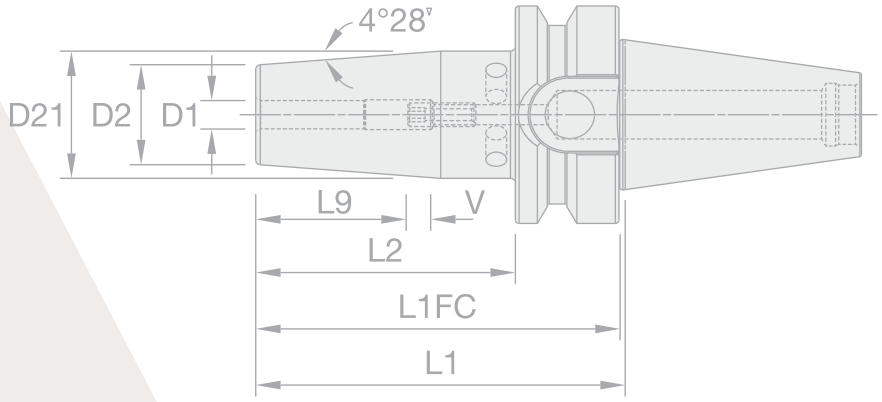
D1
L1FC
L1


4°28'
D21
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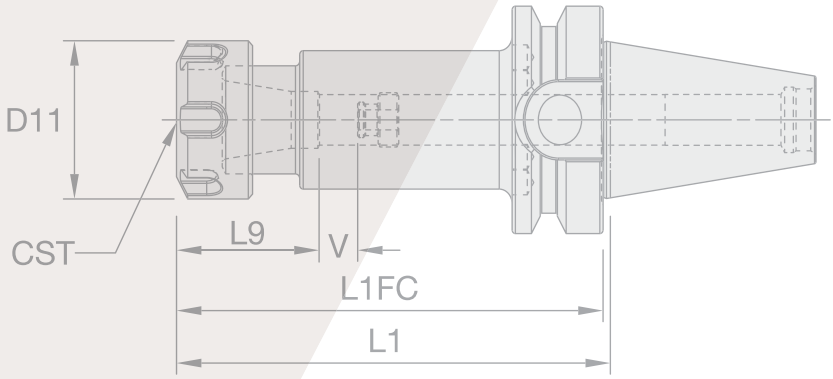
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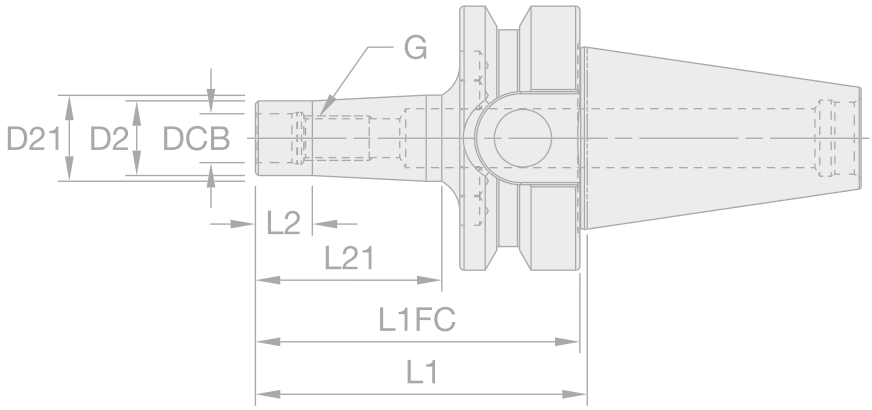
G
D21
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DCB
L2
L21
L1FC
L1

BTKV30

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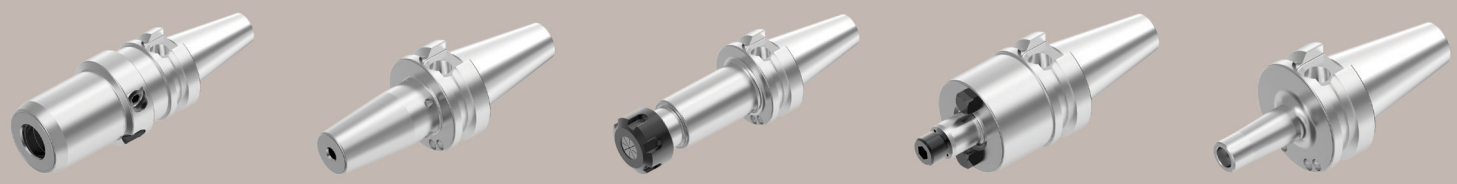
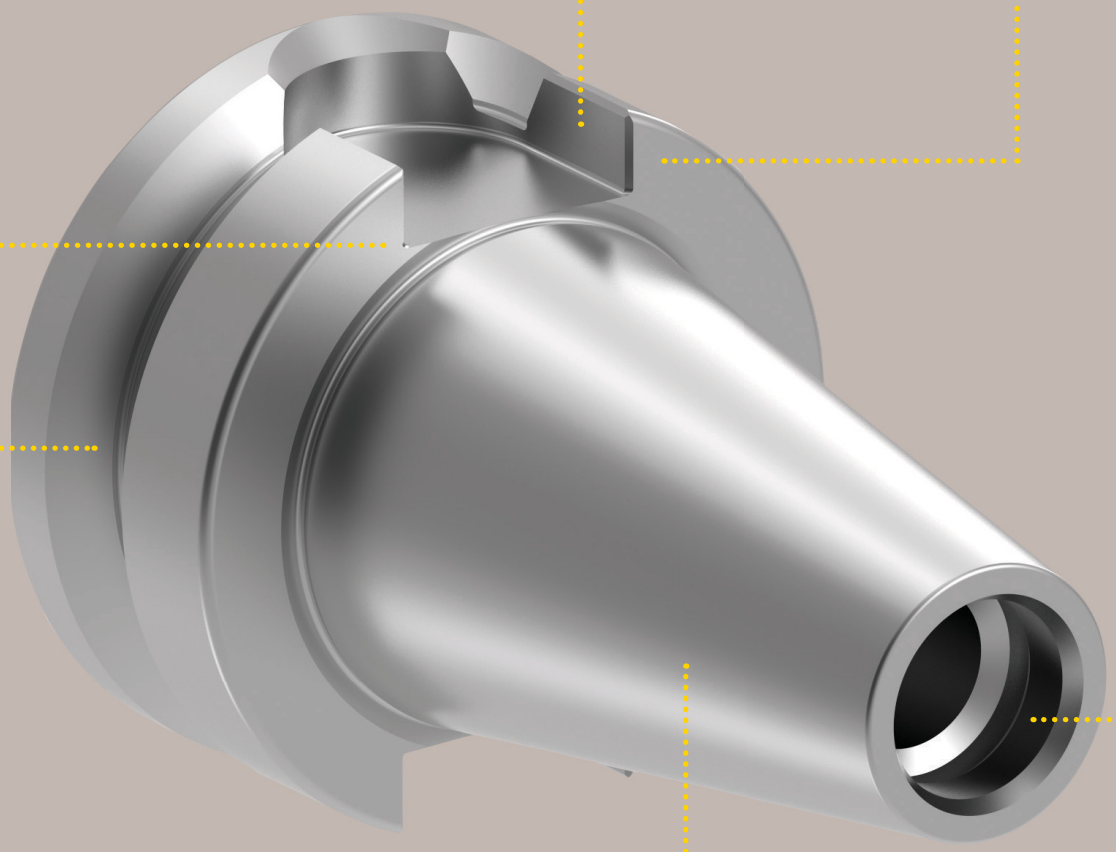


FEATURING



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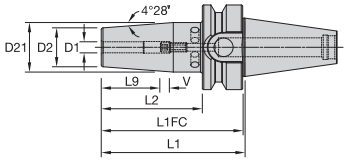


BALANCED G2.5 AT 25000 R/MIN

- Fine balancing with optional M6 set screws.
- Suitable for carbide and HSS cutting tools.
- Do not overheat. Overheating will destroy the accuracy and functionality of the toolholder.
- Supplied with stop screw.
- RFID Capable: 10mm diameter

BTKV30

Shrink Fit Toolholders

Order Number	Catalog Number	D1	D2	D21	L1	L1FC	L2	L9	V	Stop Screw	Wrench Size Stop Screw	kg
7195533	BTKV30HPVTT06075M	6	21	26.9	75.0	74.0	52.9	26	10	TTSS05014M	2,5mm	0.56
7195534	BTKV30HPVTT08075M	8	21	26.9	75.0	74.0	52.9	26	10	TTS06014M	3mm	0.547
7195535	BTKV30HPVTT10075M	10	24	31	75.0	74.0	52.9	31	10	TTSS08014M	4mm	0.591
7195536	BTKV30HPVTT12075M	12	24	31	75.0	74.0	52.9	36	10	TTSS10014M	5mm	0.578
7195537	BTKV30HPVTT16075M	16	27	31.9	75.0	74.0	52.9	39	10	TTSS12014M	6mm	0.591
7195538	BTKV30HPVTT20090M	20	33	40.92	90.0	89.0	67.9	41	10	TTSS16014M	8mm	0.813

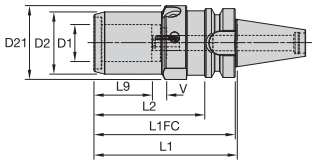
Stop Screws

Order Number	Catalog Number
3960479	TTSS05014M
3960480	TTS06014M
3960481	TTSS08014M
3960482	TTSS10014M
3960493	TTSS12014M
3960494	TTSS16014M

Other Spare Parts

Description	Order Number	Catalog Number
BALANCE SCREWS (M5-0.8p x 4)	4107495	MS-1937

Tool shank tolerance requirement: h6 (per ISO standard for precision fit)	
Cutting Tool Shank Diameter	**Tolerance, mm**
6mm	0,000/-0,008
8mm, 10mm	0,000/-0,009
12mm, 16mm	0,000/-0,011
20mm	0,000/-0,013



BALANCED G2.5 AT 25000 R/MIN

- Do not overtorque actuation screw. Tighten by hand until stop is felt.
- Wrenches must be ordered separately.
- Supplied with stop screw.
- Reduction sleeves are available and must be ordered separately.
- RFID Capable: 10mm diameter

BTKV30

Hydraulic Chucks • HP

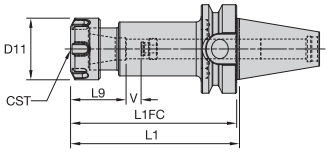
Order Number	Catalog Number	D1	D2	D21	L1	L2	L9	V	Actuation Wrench	Wrench Size Actuation Screw	Stop Screw Wrench	Wrench Size Stop Screw	kg
7195563	BTKV30HC12085M	12	31.54	31.85	85	40	36	10	170.135	5mm	170.002	2.5mm	0.686
7195564	BTKV30HC20100M	20	41.54	49.85	100	48	42	10	170.135	5mm	170.003	3mm	1.091

Actuation Wrench

Description	Order Number	Catalog Number
SCREW DRIVER SW5	1138748	170.135

Stop Screw Wrench

Description	Order Number	Catalog Number
WRENCH DIN 911 SW 2.5	1138297	170.002
WRENCH DIN 911 SW 3	1138307	170.003



BALANCED G2.5 AT 20000 R/MIN

- Collet must be loaded into locknut first. Before loading into the chuck body, insert the cutting tool, then tighten to the recommended tightening torque.
- Supplied with locknut and stop screw.
- Locknut wrench must be ordered separately.
- RFID Capable: 10mm diameter

BTKV30

ER Collet Chucks

Order Number	Catalog Number	Collet Series	D11	L1	L1FC	L9	V	kg
7195558	BTKV30ER16100M	ER16	32	100	99	32	48	0.668
7195559	BTKV30ER20100M	ER20	35	100	99	36	44	0.723
7195560	BTKV30ER25100M	ER25	42	100	99	40	40	0.732
7195561	BTKV30ER32100M	ER32	50	100	99	46	34	0.937
7195562	BTKV30ER40100M	ER40	63	100	99	52	10	1.159

Spare parts

Catalog Number	Locknut	Wrench	Regular Collet Torque	Stop Screw	Stop Screw Cone Caps	Wrench Size Stop Screw
BTKV30ER16100M	LNSRER16M	ER16WM	56	SS044038G	1021138	4mm & 5/32
BTKV30ER20100M	LNSRER20M	ER20WM	80	SS056041G	1021142	4mm & 5/32
BTKV30ER25100M	LNSRER25M	ER25WM	104	SS075041G	1021154	4mm & 5/32
BTKV30ER32100M	LNSRER32M	ER32WM	136	SS075041G	1021154	4mm & 5/32
BTKV30ER40100M	LNSRER40M	ER40WM	175	SS112041G	1021160	4mm & 5/32

Solid Round Locknuts

Description	Order Number	Catalog Number
ER16 Solid Lock Nut	6459219	LNSRER16M
ER20 Solid Lock Nut	6459251	LNSRER20M
ER25 Solid Lock Nut	6459253	LNSRER25M
ER32 Solid Lock Nut	6459254	LNSRER32M
ER40 Solid Lock Nut	6459274	LNSRER40M

Wrenches

Description	Order Number	Catalog Number
WRENCH	1136106	ER16WM
WRENCH	1024641	ER20WM
WRENCH	1136113	ER25WM
WRENCH	1136087	ER32WM
WRENCH	1136096	ER40WM

Coolant Caps

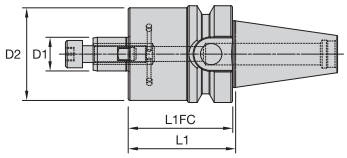
Description	Order Number	Catalog Number
Shank Sealing Coolant Cone Cap for Stop screw MM# 1019977	1021138	SSCC044
Shank Sealing Coolant Cone Cap for Stop screw MM# 1019981	1021142	SSCC056
Shank Sealing Coolant Cone Cap for Stop screw MM# 1019985	1021154	SSCC075
Shank Sealing Coolant Cone Cap for Stop screw MM# 1019991	1021160	SSCC112

Bearing Locknuts

Description	Order Number	Catalog Number
ER25 Bearing Locknut	6459271	LNAGRER25M
ER32 Bearing Locknut	6459273	LNAGRER32M
ER40 Bearing Locknut	6465674	LNAGRER40M

Stop Screws

Description	Order Number	Catalog Number
ER25 Bearing Locknut	6459271	LNAGRER25M
ER32 Bearing Locknut	6459273	LNAGRER32M
ER40 Bearing Locknut	6465674	LNAGRER40M



Balance quality G2.5 at 15000 r/min

Coolant through holes in the face of the pilot

- Do not overtighten lock screw.
- Supplied with lock screw and drive keys.
- Lock screw wrench not included.
- RFID Capable: 10mm diameter

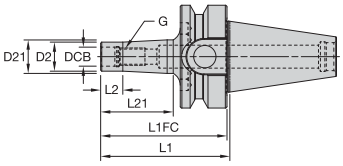
BTKV30

Shell Mill Adapters

Order Number	Catalog Number	D1	D2	L1	L1FC	Lock Screw	Drive Key	Wrench Size Lock Screw	kg
7195460	BTKV30SMC16050M	16	44	50	49	MS-1294	KDK16M	6mm	0.732
7195531	BTKV30SMC22040M	22	49	40	39	125.025	KDK22M	8mm	0.679

Spare Parts

Description	Order Number	Catalog Number
6mm Lock Screw	MS-1294	1905810
8mm Lock Screw	125.025	1136777
6mm Drive Key	KDK16M	1020606
8mm Drive Key	KDK22M	1243417



BALANCED BY DESIGN

Balance quality G6.3 at 15000 r/min

- Through-coolant capability.
- High accuracy — low runout.
- Stable system for helix, pocket milling, contour cutting and ramping.
- RFID Capable: 10mm diameter

BTKV30

Screw-On Adapters

Order Number	Catalog Number	DCB	G	D2	L1	L2	L21
7195565	BTKV30ST08058M	8.5080	M8	13	58	10	30
7195566	BTKV30ST10078M	10.5090	M10	18	78	10	50
7195569	BTKV30ST16078M	12.5090	M12	21	78	10	50
7195568	BTKV30ST12078M	17.0090	M16	29	78	10	50

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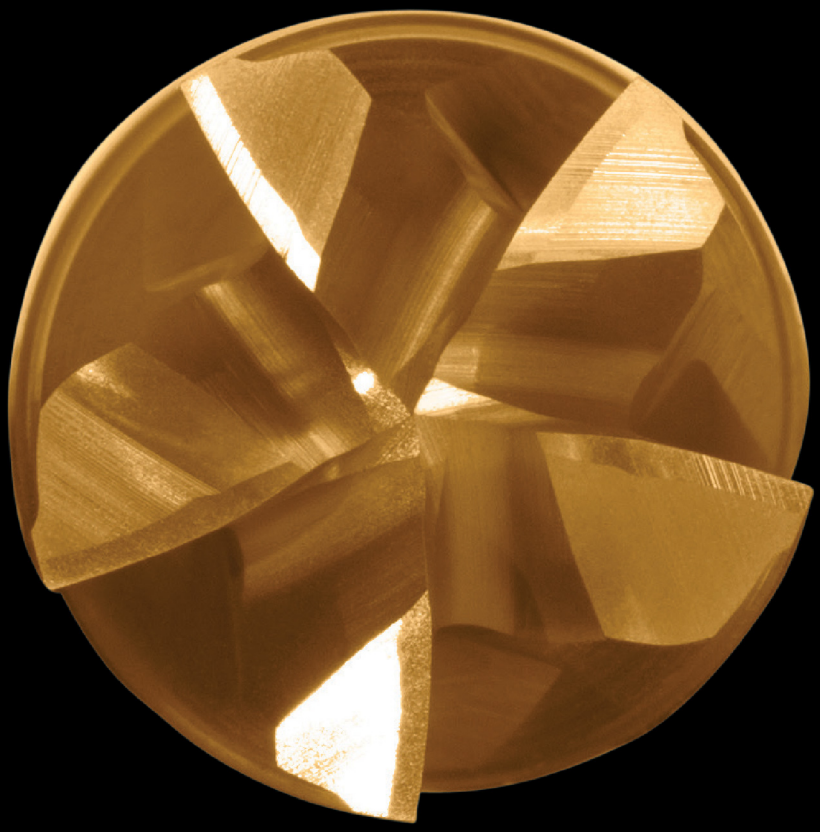
NOTES



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