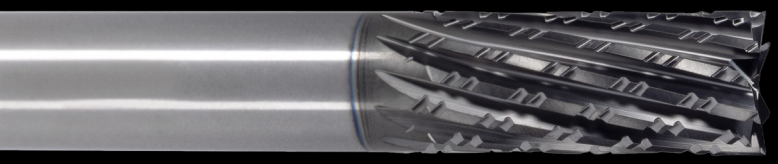
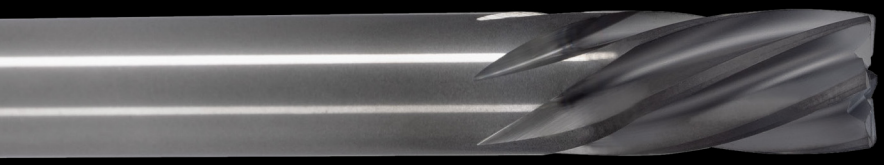
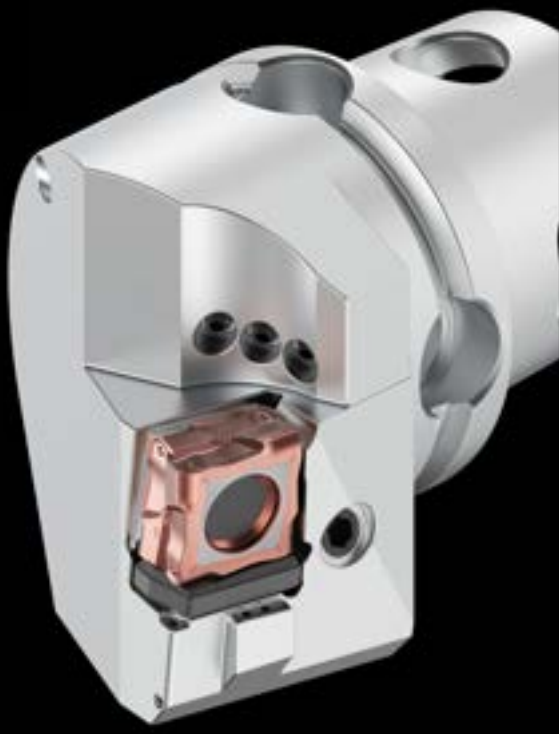
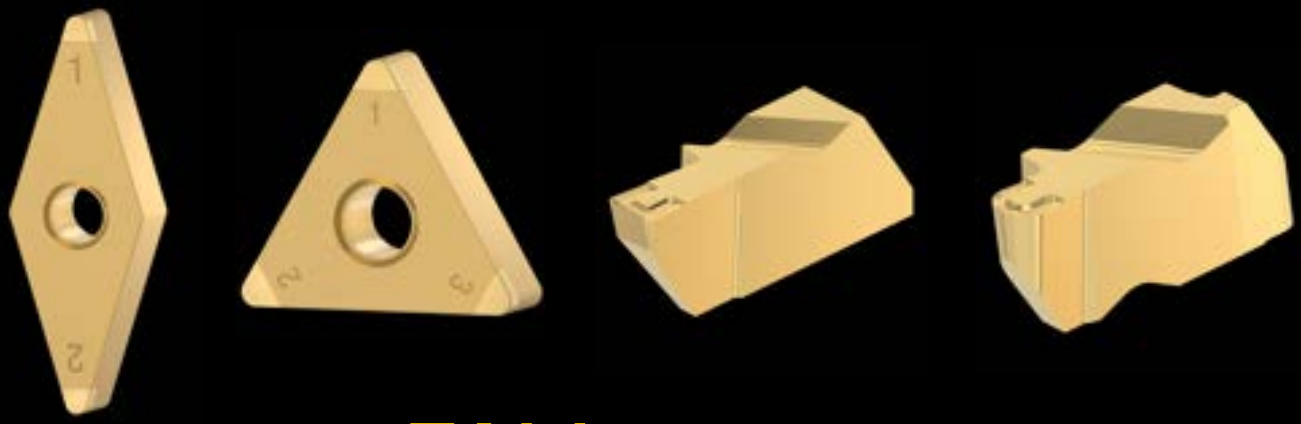
KENNAMETAL®









FALL 2025 INNOVATIONS

metric

METAL CUTTING SAFETY

IMPORTANT SAFETY INSTRUCTIONS

Read before using the tools in this catalog!

PROJECTILE AND FRAGMENTATION HAZARDS:

Modern metal cutting operations involve high spindle and cutter speeds and high temperatures and cutting forces. Hot metal chips may fly off the workpiece during metal cutting. Although cutting tools are designed and manufactured to withstand high cutting forces and temperatures, they can sometimes fragment, particularly if they are subjected to over-stress, severe impact, or other abuse.

- Always wear appropriate personal protective equipment, including safety goggles, when operating metal cutting machines or working nearby.
- Always make sure all machine guards are in place.

BREATHING AND SKIN CONTACT HAZARDS:

Grinding carbide or other advanced cutting tool materials produces dust or mist containing metallic particles. Breathing this dust or mist — especially over an extended period — can cause temporary or permanent lung disease or make existing medical conditions worse. Contact with this dust or mist can irritate eyes, skin, and mucous membranes and may make existing skin conditions worse.

- Always wear breathing protection and safety goggles when grinding.
- Provide ventilation control and collect and properly dispose of dust, mist, or sludge from grinding.
- Avoid skin contact with dust or mist.

For more information, read the applicable Material Safety Data Sheet provided by Kennametal and consult General Industry Safety and Health Regulations, Part 1910, Title 29 of the Code of Federal Regulations.

These safety instructions are general guidelines. Many variables affect machining operations. It is impossible to cover every specific situation. The technical information included in this catalog and recommendations on machining practices may not apply to your particular operation. For more information, consult the Kennametal Metal Cutting Safety booklet, available free from Kennametal at 724 539 5747 or fax 724 539 5439. For specific product safety and environmental questions, contact our Corporate Environmental Health and Safety Office at 724 539 5066 or fax 724 539 5372.

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Weldon ® is a registered trademark of Weldon Tool Company.

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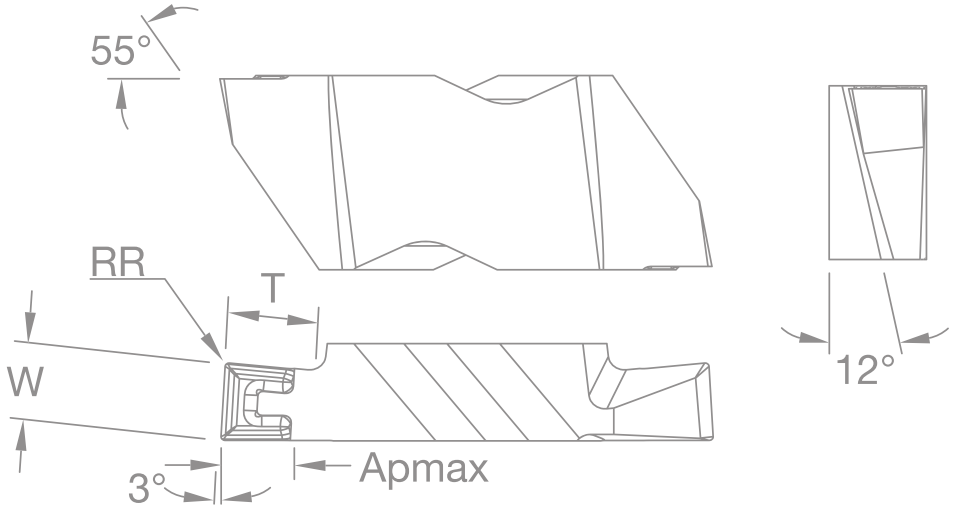
KENNAMETAL


55°
RR
T
W
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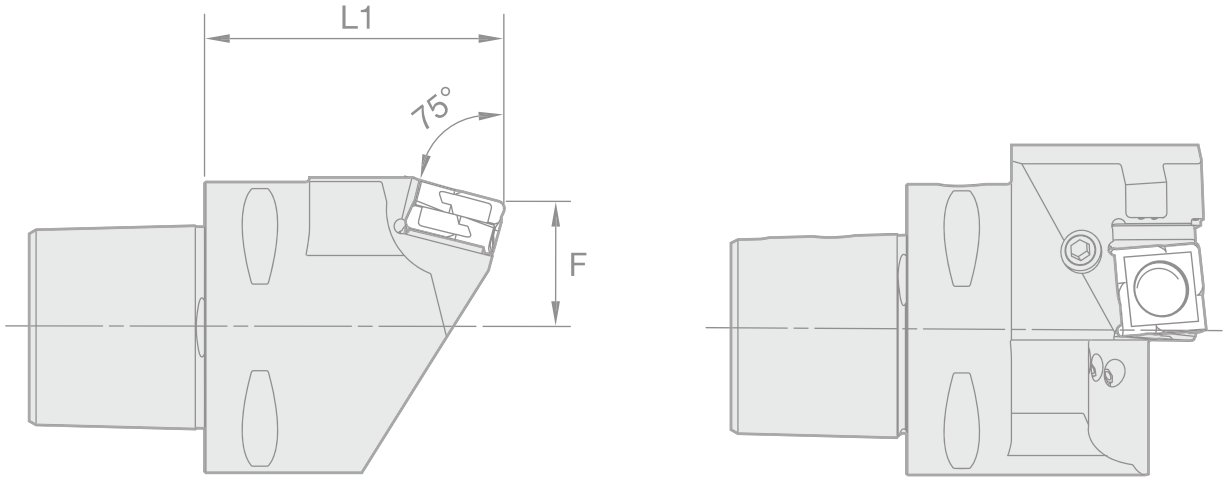
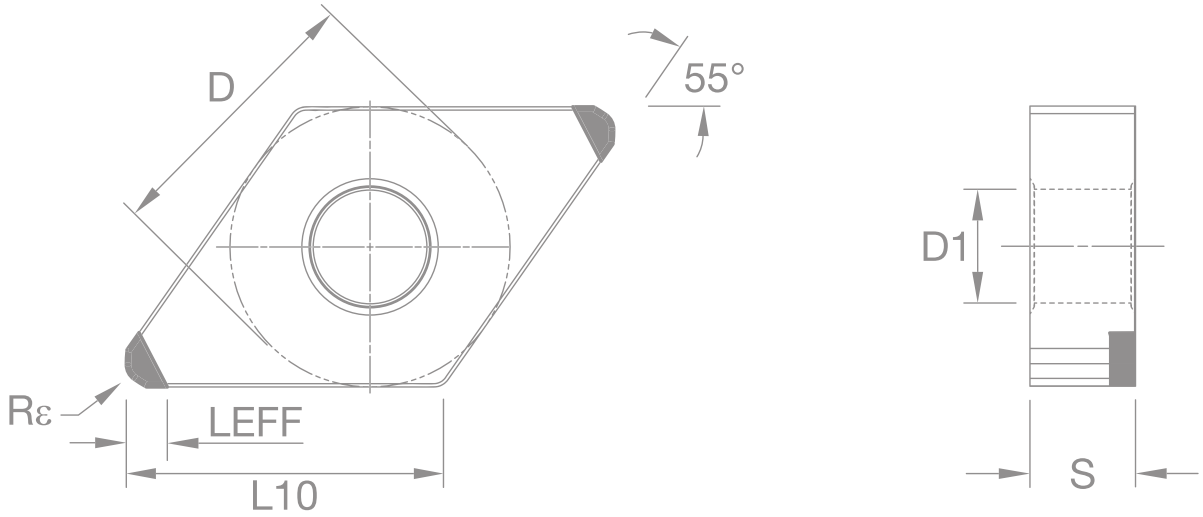
Apmax
12°


L1
75°
F


D
55°
D1
Rε
LEFF
L10
S

Top Notch™ Grooving KCU10B & KCU25B Inserts

The Indisputable Insert for Shallow Grooving is Now Available with KENGold™

KCU10B and KCU25B graded inserts featuring the KENGold PVD multilayer coating provide enhanced wear detection and performance, making them ideal for safe and efficient use in general engineering, automotive, aerospace and other industries. Experience consistent machining productivity across all materials with these precision-ground inserts, which offer stronger, tougher and more accurate indexing—resulting in reliability and repeatability.

Applications

PRIMARY

- Grooving
- Profiling
- Threading
- Cut-Off Operations
- Face Grooving
- I.D. Threading
- I.D. Grooving
- I.D. Face Grooving
- Back Boring
- Boring
- Face Turning

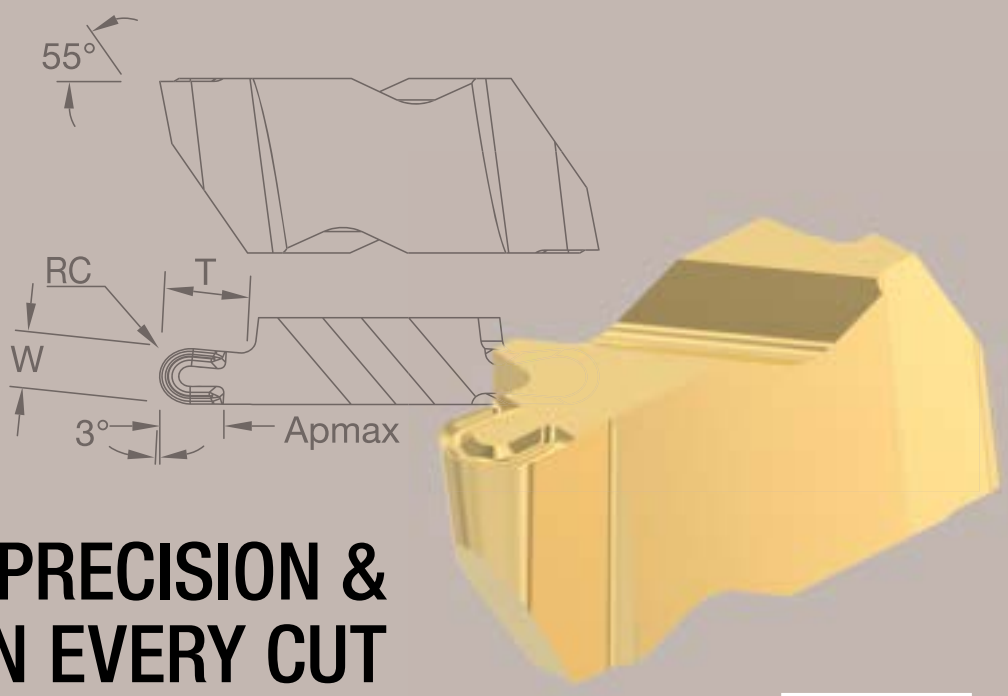
Materials

UNIVERSAL

P M K N S H

Industries

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



PRECISION & POWER IN EVERY CUT

EXPLORE
Top Notch

HOW DO CATALOG NUMBERS WORK?

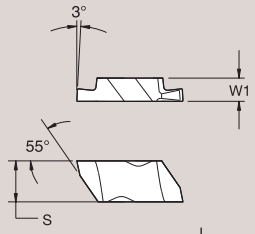
Each character in our Catalog Number signifies a specific trait of that product. Use the following key columns and corresponding images to easily identify which attributes apply.

NGC2C110R035K

N	G	C	2	C	110	R	035	K	
Type of Insert	**Insert Style**	**Additional Information**	**Insert Size**	**Size Identification**	**Groove Size****	**Hand of Insert**	**Cutting Depth**	**Chipbreaker Design**	**Definition of Inserts**
N = Top Notch 	**B =** Blank (for special forms) **F =** Face grooving **G =** Grooving **P =** Back **R =** Full radius **U =** Undercutting (or relieving) **V =** Poly-Vee	**D** = Deep grooving **P** = Positive **C** = Groove and chamfer		**M** = Metric insert groove width **C** = Circlip groove insert width is nominal circlip size ☐ = Blank indicates inch width insert Insert Number / W1 (in) / W1 (mm) 1 / .100 / 2,54 2 / .150 / 3,81 3 / .195 / 4,95 4 / .255 / 6,98 5 / .380 / 9,65 6 / .383 / 9,73	Position pertains to groove width for F-, G-, and U-style inserts, radii for R-style grooving inserts, and circlip size for groove and chamfer inserts. Dimension in .001" or 0,01mm. **Inch example:** 1/32" width groove or radius equals "031" catalog position number. **Metric example:** 3,25mm width groove or radius equals "325" catalog position number. **Width Tolerance:** ±.001" (±0,025mm) unless otherwise specified.	**L** = Left hand **R** = Right hand	Shown for groove and chamfer inserts in .0004" increments.	**E** = Hone only **K** = Standard chip control **S** = T Land and Hone **ST** = STD Tip (PcBN)	Groove size "J" or "L" for Poly-Vee inserts "I" indicates internal face grooving

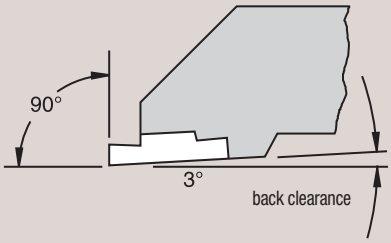
*Kennametal proprietary identification system.
**Omit position for Top Notch NB-style blanks.

Top Notch Threading and Grooving Insert Dimensions



insert size	S mm	S inch	W1 mm	W1 inch
1	2,54	.100	2,54	.100
2	5,56	.219	3,81	.150
3	8,74	.344	4,95	.195
4	11,51	.453	6,48	.255
5	17,48	.688	9,65	.380
6	11,51	.453	9,73	.383
8	7,93	.312	11,13	.438

Top Notch Holder Design



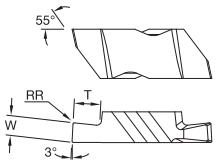
NOTE: Holders are designed to locate insert inclined to 3° to provide back clearance down open side.

Kennametal and Top Notch tooling technology combine to bring you the very best threading and grooving system available in the world today.

Insert Style	Application	Rake Angle	Page(s)
NG	• General-purpose grooving. • O-ring grooving. • Circlip grooving.	Neutral	8
NG-K	• Chip control geometry. • General-purpose grooving. • O-ring grooving. • Circlip grooving. • Light turning.	10° Positive	10
NGC-K	• Combined groove and chamfered edge break in one positive plunge with chip control. • Designed for DIN 471/472 standard circlip grooves.	10° Positive	18
NGD	• Deep grooving.	Neutral	12
NGD-K	• Chip control geometry. • Deep grooving. • Light turning.	10° Positive	12
NGP	• General-purpose grooving. • O-ring grooving. • Circlip grooving.	5° Positive	9
NF	• Face grooving. • Additional side clearance.	Neutral	15
NF-K	• Face grooving with chip control. • Additional side clearance.	10° Positive	15
NFD-K	• Deep face grooving with chip control. • Additional side clearance.	10° Positive	16

Insert Style	Application	Rake Angle	Page(s)
NFD-KI	• Internal deep face grooving with chip control. • For use in boring bars for internal face grooves.	10° Positive	16
NP-K NPD-K	• Turning. • Back turning positive. • Profiling with chip control.	10° Positive	17
NR	• Full radius grooving. • Turning and profiling.	Neutral	13
NR-K	• Chip control geometry. • Full radius grooving, turning, and profiling.	10° Positive	14
NRD	• Deep grooving. • Full radius end-form.	Neutral	14
NRP	• Full radius grooving. • Light-turning profiling.	5° Positive	13
NU	• Undercutting.	Neutral	17
NV	• Poly-Vee grooving.	Neutral	18

GROOVING APPLICATIONS



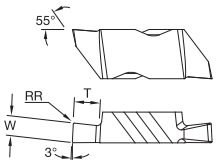
		KCU10B	KCU25B
P		●	●
M		●	●
K		○	○
N		●	○
S		●	●
H		○	

● Primary
○ Secondary

NG • Groove and Turn • Flat Top

Catalog Number	Insert Size	W	RR	T	KCU10B	KCU25B
Right Hand						
NG2031R	2	0,79	0,09	1,27	7229641	7249689
NG2041R	2	1,04	0,09	1,27	7229643	7249712
NG2047R	2	1,19	0,09	1,27	7229658	7249715
NG2058R	2	1,47	0,19	1,27	—	7249718
NG2062R	2	1,58	0,19	2,79	7229660	7249741
NG2094R	2	2,39	0,19	2,79	7229672	7249745
NG2125R	2	3,18	0,19	2,79	7229674	7249749
NG3047R	3	1,19	0,19	1,91	7229676	7249732
NG3062R	3	1,58	0,19	2,39	7229678	7249736
NG3072R	3	1,83	0,19	2,39	7229680	—
NG3078R	3	1,98	0,19	2,39	7229705	—
NG3088R	3	2,24	0,19	2,39	7229707	7249763
NG3094R	3	2,39	0,19	3,81	7229708	7249766
NG3097R	3	2,46	0,32	3,81	7229710	7249769
NG3105R	3	2,67	0,19	3,81	7229712	7249781
NG3110R	3	2,79	0,32	3,81	—	7249783
NG3122R	3	3,10	0,19	3,81	—	7249785
NG3125R	3	3,18	0,19	3,81	7229714	7249788
NG3142R	3	3,61	0,32	3,81	7229716	7249811
NG3156R	3	3,96	0,19	3,81	7229717	7249814
NG3178R	3	4,52	0,19	3,81	—	7249817
NG3185R	3	4,70	0,57	3,81	—	7249819
NG3189R	3	4,80	0,57	3,81	7229719	7249832
NG4125R	4	3,18	0,19	3,81	7229726	7250079
NG4189R	4	4,80	0,57	6,35	7229736	7250253
NG4213R	4	5,41	0,19	6,35	—	7250255
NG4250R	4	6,35	0,57	6,35	7229738	7250258
NG5312R	5	7,93	0,83	9,52	—	7255339
NG6375R	6	9,53	0,83	6,35	—	7255340
Left Hand						
NG1031L	1	0,79	0,19	1,27	—	7371787
NG1047L	1	1,19	0,19	1,91	—	7371788
NG1062L	1	1,58	0,19	1,91	—	7371789
NG1094L	1	2,39	0,19	1,91	—	7371790
NG2031L	2	0,79	0,09	1,27	7229620	7249686
NG2041L	2	1,04	0,09	1,27	7229642	7249711
NG2047L	2	1,19	0,09	1,27	7229644	7249713
NG2058L	2	1,47	0,19	1,27	—	7249717
NG2062L	2	1,58	0,19	2,79	7229659	7249719
NG2094L	2	2,39	0,19	2,79	7229671	7249743
NG2125L	2	3,18	0,19	2,79	7229673	7249747
NG3047L	3	1,19	0,19	1,91	7229675	7249590
NG3062L	3	1,57	0,19	2,38	7229677	7249734
NG3072L	3	1,83	0,19	2,39	7229679	—
NG3078L	3	1,98	0,19	2,39	7229691	—
NG3088L	3	2,24	0,19	2,39	7229706	7249762
NG3094L	3	2,39	0,19	3,81	7227146	7249764
NG3097L	3	2,46	0,32	3,81	7229709	7249768
NG3105L	3	2,67	0,19	3,81	7229711	7249770
NG3110L	3	2,79	0,32	3,81	—	7249782
NG3122L	3	3,10	0,19	3,81	—	7249784
NG3125L	3	3,18	0,19	3,81	7229713	7249786
NG3142L	3	3,61	0,32	3,81	7229715	7249790
NG3156L	3	3,96	0,19	3,81	—	7249812
NG3178L	3	4,52	0,19	3,81	—	7249816
NG3185L	3	4,70	0,57	3,81	—	7249818
NG3189L	3	4,80	0,57	3,81	7229718	7249820
NG4125L	4	3,18	0,19	3,81	7229720	7250077
NG4189L	4	4,80	0,57	6,35	7229735	7250251
NG4250L	4	6,35	0,57	6,35	7229737	7250256

NOTE: Right-hand insert shown; left-hand insert is mirror image
NG1 Inserts width tolerance is ±0.003" (0.075mm).



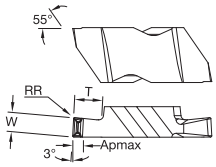
	KCU10B
P	●
M	●
K	○
N	●
S	●
H	○

● Primary
○ Secondary

NGP • Groove and Turn • Positive

Catalog Number	Insert Size	W	RR	T	KCU10B
Right Hand					
NGP2031R	2	0,79	0,09	1,27	7227452
NGP2062R	2	1,58	0,19	2,79	7227454
NGP2125R	2	3,18	0,19	2,79	7227456
NGP3088R	3	2,24	0,19	2,39	7227458
NGP3125R	3	3,18	0,19	3,81	7227460
NGP3156R	3	3,96	0,19	3,81	7227461
NGP4189R	4	4,80	0,57	6,35	7227462
NGP4250R	4	6,35	0,57	6,35	7227467
Left Hand					
NGP2031L	2	0,79	0,09	1,27	7227451
NGP2062L	2	1,57	0,19	2,79	7227453
NGP2125L	2	3,18	0,19	2,79	7227455
NGP3088L	3	2,24	0,19	2,39	7227457
NGP3125L	3	3,18	0,19	3,81	7227459
NGP4250L	4	6,35	0,57	6,35	7227464

NOTE: Right-hand insert shown; left-hand insert is mirror image.



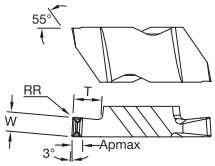
	KCU10B	KCU25B
P	●	●
M	●	●
K	○	○
N	●	○
S	●	●
H	○	

● Primary
○ Secondary

NG-K • Groove and Turn • Chip Control

Catalog Number	Insert Size	W	Ap max	RR	T	KCU10B	KCU25B
Right Hand							
NG2M050RK	2	0,50	0,64	0,09	0,64	7230405	7249772
NG2031RK	2	0,79	0,76	0,09	1,27	7230325	7249690
NG2M080RK	2	0,80	0,76	0,09	1,27	7230407	7249774
NG2M100RK	2	1,00	0,76	0,09	1,28	7230409	7249776
NG2047RK	2	1,19	0,76	0,09	1,27	7230327	7249716
NG2M120RK	2	1,20	0,76	0,09	1,27	7230421	7249778
NG2M140RK	2	1,40	0,76	0,09	1,28	7230423	7249780
NG2M150RK	2	1,50	1,09	0,19	2,81	—	7249792
NG2062RK	2	1,58	1,09	0,19	2,81	7230329	—
NG2M170RK	2	1,70	1,09	0,19	2,81	7230425	7249794
NG2M175RK	2	1,75	1,09	0,19	2,81	—	7249796
NG2M195RK	2	1,95	1,09	0,19	2,81	—	7249798
NG2M200RK	2	2,00	1,09	0,19	2,81	7230430	7249800
NG2M225RK	2	2,25	1,09	0,19	2,81	7230432	7249804
NG2094RK	2	2,39	1,09	0,19	2,79	7230401	7249746
NG2M250RK	2	2,50	1,09	0,19	2,81	—	7249806
NG2M275RK	2	2,75	1,09	0,19	2,81	7230434	7249808
NG2M300RK	2	3,00	1,09	0,19	2,81	7230436	7249810
NG2125RK	2	3,18	1,09	0,19	2,79	7230403	—
NG2M325RK	2	3,25	1,09	0,19	2,79	—	7249822
NG3M100RK	3	1,00	0,76	0,20	1,91	—	7249835
NG3047RK	3	1,19	0,76	0,19	1,91	7230438	7249733
NG3M120RK	3	1,20	0,76	0,19	1,91	7230474	7249837
NG3M150RK	3	1,50	1,02	0,19	2,39	—	7249839
NG3062RK	3	1,57	1,02	0,19	2,39	7230440	7249737
NG3M175RK	3	1,75	1,02	0,19	2,39	—	7249841
NG3072RK	3	1,83	1,02	0,19	2,39	7230462	7249739
NG3078RK	3	1,98	1,02	0,19	2,39	7230464	7249761
NG3M200RK	3	2,00	1,02	0,19	2,39	—	7249843
NG3M220RK	3	2,20	1,02	0,19	2,39	—	7249845
NG3M225RK	3	2,24	1,02	0,19	2,39	7230476	7249847
NG3094RK	3	2,39	1,02	0,19	3,81	7230466	7249767
NG3M250RK	3	2,50	1,02	0,19	3,81	—	7249849
NG3M275RK	3	2,75	1,02	0,19	3,81	7230478	7249871
NG3M300RK	3	3,00	1,02	0,19	3,81	7230480	7249873
NG3125RK	3	3,18	1,02	0,20	3,81	—	7249789
NG3M320RK	3	3,20	1,02	0,19	3,81	—	7249875
NG3M325RK	3	3,25	1,02	0,19	3,81	—	7249877
NG3M350RK	3	3,50	2,92	0,32	3,81	—	7249879
NG3156RK	3	3,96	2,92	0,19	3,81	7230470	7249815
NG3M400RK	3	4,00	2,92	0,32	3,81	7230482	7249881
NG3M425RK	3	4,25	2,92	0,32	3,81	7230484	7249883
NG3M450RK	3	4,50	2,92	0,32	3,81	—	7249885
NG3189RK	3	4,80	2,92	0,57	3,81	7230472	7249833
NG4M300RK	4	3,00	1,02	0,19	3,81	—	7250261
NG4125RK	4	3,18	1,34	0,19	3,81	7230486	7250080
NG4M350RK	4	3,50	2,92	0,57	6,35	—	7250263
NG4M400RK	4	4,00	2,92	0,57	6,35	7230492	7250265
NG4M450RK	4	4,50	2,92	0,57	6,35	—	7250267
NG4189RK	4	4,80	2,92	0,57	6,35	7230488	7250254
NG4M500RK	4	5,00	2,92	0,32	6,35	7230494	7250269
NG4M600RK	4	6,00	3,81	0,58	6,35	—	7250271
NG4250RK	4	6,35	3,81	0,57	6,35	7230490	7250259

NOTE: Right-hand insert shown; left-hand insert is mirror image.



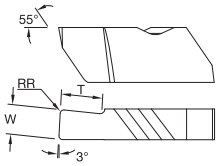
	KCU10B	KCU25B
P	●	●
M	●	●
K	○	○
N	●	○
S	●	●
H	○	

● Primary
○ Secondary

NG-K • Groove and Turn • Chip Control • Continued

Catalog Number	Insert Size	W	Ap max	RR	T	KCU10B	KCU25B
Left Hand							
NG2M050LK	2	0,50	0,64	0,09	0,64	7230404	7249771
NG2031LK	2	0,79	0,76	0,09	1,27	7230324	7249687
NG2M080LK	2	0,80	0,76	0,09	1,27	7230406	7249773
NG2M100LK	2	1,00	0,76	0,09	1,27	7230408	7249775
NG2047LK	2	1,19	0,76	0,09	1,27	7230326	7249714
NG2M120LK	2	1,20	0,76	0,09	1,27	7230410	—
NG2M140LK	2	1,40	0,76	0,09	1,27	7230422	7249779
NG2M150LK	2	1,50	1,09	0,19	2,79	—	7249791
NG2062LK	2	1,58	1,09	0,19	2,81	7230328	7249720
NG2M170LK	2	1,70	1,09	0,19	2,79	7230424	7249793
NG2M175LK	2	1,75	1,09	0,19	2,79	—	7249795
NG2M195LK	2	1,95	1,09	0,19	2,79	7230426	—
NG2M200LK	2	2,00	1,09	0,19	2,79	7230428	7249799
NG2M220LK	2	2,20	1,09	0,19	2,79	—	7249801
NG2M225LK	2	2,25	1,09	0,19	2,79	7230431	7249803
NG2094LK	2	2,39	1,09	0,19	2,79	7230330	—
NG2M250LK	2	2,50	1,09	0,19	2,79	—	7249805
NG2M275LK	2	2,75	1,09	0,19	2,80	7230433	7249807
NG2M300LK	2	3,00	1,09	0,19	2,80	—	7249809
NG2125LK	2	3,18	1,09	0,19	2,79	7230402	7249748
NG2M325LK	2	3,25	1,09	0,19	2,79	—	7249821
NG3M100LK	3	1,00	0,76	0,20	1,91	—	7249834
NG3047LK	3	1,19	0,76	0,19	1,90	7230437	7249731
NG3M120LK	3	1,20	0,76	0,19	1,91	7230473	7249836
NG3M150LK	3	1,50	1,02	0,19	2,39	—	7249838
NG3062LK	3	1,58	1,02	0,19	2,39	7230439	—
NG3M175LK	3	1,75	1,02	0,19	2,39	—	7249840
NG3072LK	3	1,83	1,02	0,19	2,39	7230461	—
NG3078LK	3	1,98	1,02	0,19	2,39	7230463	7249740
NG3M200LK	3	2,00	1,02	0,19	2,39	—	7249842
NG3M220LK	3	2,20	1,02	0,19	2,39	—	7249844
NG3M225LK	3	2,25	1,02	0,19	2,39	7230475	7249846
NG3094LK	3	2,39	1,02	0,19	3,81	7230465	7249765
NG3M250LK	3	2,50	1,02	0,19	3,81	—	7249848
NG3M275LK	3	2,75	1,02	0,19	3,81	7230477	7249850
NG3M300LK	3	3,00	1,02	0,19	3,81	7230479	7249872
NG3125LK	3	3,18	1,02	0,20	3,81	7230467	7249787
NG3M320LK	3	3,20	1,02	0,19	3,81	—	7249874
NG3M325LK	3	3,25	1,02	0,19	3,81	—	7249876
NG3M350LK	3	3,50	2,92	0,32	3,81	—	7249878
NG3M400LK	3	4,00	2,92	0,32	3,81	7230481	7249880
NG3M425LK	3	4,25	2,92	0,32	3,81	7230483	7249882
NG3M450LK	3	4,50	2,92	0,32	3,81	—	7249884
NG3189LK	3	4,80	2,92	0,57	3,81	7230471	7249831
NG4M300LK	4	3,00	1,02	0,19	3,81	—	7250260
NG4125LK	4	3,18	1,34	0,19	3,81	7230485	7250078
NG4M350LK	4	3,50	2,92	0,57	6,35	—	7250262
NG4M400LK	4	4,00	2,92	0,57	6,35	7230491	7250264
NG4M450LK	4	4,50	2,92	0,57	6,35	—	7250266
NG4189LK	4	4,80	2,92	0,57	6,35	7230487	7250252
NG4M500LK	4	5,00	2,92	0,32	6,34	7230493	7250268
NG4M600LK	4	6,00	3,81	0,57	6,34	—	7250270
NG4250LK	4	6,35	3,81	0,57	6,35	7230489	7250257

NOTE: Right-hand insert shown; left-hand insert is mirror image.



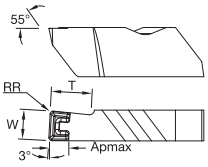
NGD • Groove and Turn • Deep Grooving • Flat Top

	KCU10B
P	●
M	●
K	○
N	●
S	●
H	○

● Primary
○ Secondary

Catalog Number	Insert Size	W	RR	T	KCU10B
Right Hand					
NGD3189R	3	4,80	0,57	6,35	7227148
NGD4250R	4	6,35	0,57	12,70	7227150
Left Hand					
NGD3189L	3	4,80	0,57	6,35	7227147
NGD4250L	4	6,35	0,57	12,70	7227149

NOTE: Inserts have one cutting edge.
Right-hand insert shown; left-hand insert is mirror image.



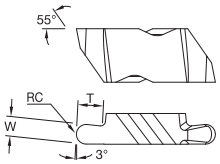
NGD-K • Groove and Turn • Deep Grooving • Chip Control

	KCU10B	KCU25B
P	●	●
M	●	●
K	○	○
N	●	○
S	●	●
H	○	

● Primary
○ Secondary

Catalog Number	Insert Size	W	Ap max	RR	T	KCU10B	KCU25B
Right Hand							
NGD2M150RK	2	1,50	1,09	0,19	4,06	7227333	7250282
NGD2M200RK	2	2,00	1,09	0,19	5,08	7227335	7250284
NGD2M250RK	2	2,50	1,09	0,19	5,08	7230497	7250286
NGD3M200RK	3	2,00	1,02	0,19	4,06	7227366	7250296
NGD3094RK	3	2,39	1,02	0,19	6,35	7227361	7250290
NGD3M250RK	3	2,50	1,02	0,19	6,35	7227367	7250298
NGD3M300RK	3	3,00	1,02	0,19	6,35	7227369	7250300
NGD3125RK	3	3,18	1,02	0,19	6,35	7227363	7250292
NGD3M400RK	3	4,00	2,92	0,32	6,35	7227370	7250303
NGD3189RK	3	4,80	2,92	0,58	6,35	7227365	7250294
NGD4189RK	4	4,80	2,92	0,57	9,53	7227374	7250307
NGD4M550RK	4	5,50	3,81	0,58	12,69	—	7250322
NGD4250RK	4	6,35	3,81	0,57	12,70	7227376	7250309
Left Hand							
NGD2M150LK	2	1,50	1,09	0,19	4,06	7230496	7250281
NGD2M200LK	2	2,00	1,09	0,19	5,08	7227334	7250283
NGD2M250LK	2	2,50	1,09	0,19	5,08	7227336	7250285
NGD3M200LK	3	2,00	1,02	0,19	4,06	—	7250295
NGD3094LK	3	2,39	1,02	0,19	6,34	7227340	7250289
NGD3M250LK	3	2,50	1,02	0,19	6,35	—	7250297
NGD3M300LK	3	3,00	1,02	0,19	6,35	7227368	7250299
NGD3125LK	3	3,18	1,02	0,19	6,35	7227362	7250291
NGD3M350LK	3	3,50	2,92	0,32	6,35	—	7250301
NGD3M400LK	3	4,00	2,92	0,32	6,35	7230498	7250302
NGD3189LK	3	4,80	2,92	0,57	6,35	7227364	7250293
NGD4M400LK	4	4,00	2,92	0,58	9,52	—	7250310
NGD4189LK	4	4,80	2,92	0,57	9,53	7227373	7250306
NGD4M500LK	4	5,00	2,92	0,58	12,70	—	7250321
NGD4250LK	4	6,35	3,80	0,57	12,70	7227375	7250308

NOTE: Inserts have one cutting edge. Right-hand insert shown; left-hand insert is mirror image.



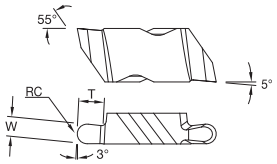
	KCU10B	KCU25B
P	●	●
M	●	●
K	○	○
N	●	○
S	●	●
H	○	

● Primary
○ Secondary

NR • Groove and Turn • Full Radius • Flat Top

Catalog Number	Insert Size	W	RC	T	KCU10B	KCU25B
Right Hand						
NR2M050R	2	1,00	0,50	1,27	7227392	7247917
NR2M075R	2	1,50	0,75	2,79	7227393	—
NR2031R	2	1,58	0,79	2,79	7227378	7247870
NR2M100R	2	2,00	1,00	2,79	7227394	7247919
NR2047R	2	2,39	1,19	2,79	—	7247912
NR2M125R	2	2,50	1,25	2,79	—	7247920
NR2M150R	2	3,00	1,50	2,79	—	7247922
NR2062R	2	3,18	1,59	2,79	7227380	7247914
NR2M175R	2	3,50	1,75	2,79	—	7247923
NR3031R	3	1,58	0,79	2,39	7227397	7247926
NR3M100R	3	2,00	1,00	2,39	—	7247941
NR3047R	3	2,39	1,19	3,81	7227402	7247930
NR3M150R	3	3,00	1,50	3,81	—	7247943
NR3062R	3	3,18	1,59	3,81	7227406	7247934
NR3M200R	3	4,00	2,00	3,81	—	7247945
NR3094R	3	4,78	2,39	3,81	7227411	7247939
NR4125R	4	6,35	3,18	6,35	7227419	7247953
Left Hand						
NR2M050L	2	1,00	0,50	1,27	7227391	7247916
NR2031L	2	1,58	0,79	2,79	7227377	7247869
NR2M100L	2	2,00	1,00	2,79	—	7247918
NR2047L	2	2,39	1,19	2,79	—	7247911
NR2M150L	2	3,00	1,50	2,79	—	7247921
NR2062L	2	3,18	1,59	2,79	7227379	7247913
NR3031L	3	1,58	0,79	2,39	7227395	7247924
NR3M100L	3	2,00	1,00	2,39	—	7247940
NR3047L	3	2,39	1,19	3,81	7227399	7247928
NR3M150L	3	3,00	1,50	3,81	7227412	7247942
NR3062L	3	3,18	1,59	3,81	7227404	7247932
NR3M200L	3	4,00	2,00	3,81	—	7247944
NR3094L	3	4,78	2,39	3,81	7227410	7247938
NR4125L	4	6,35	3,18	6,35	7227417	7247951

NOTE: Right-hand insert shown; left-hand insert is mirror image.



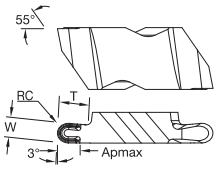
	KCU10B
P	●
M	●
K	○
N	●
S	●
H	○

● Primary
○ Secondary

NRP • Groove and Turn • Full Radius • Positive

Catalog Number	Insert Size	W	RC	T	KCU10B
Right Hand					
NRP3031R	3	1,58	0,79	2,39	7227505
NRP3047R	3	2,39	1,19	3,81	7227507
NRP3062R	3	3,18	1,59	3,81	7227521
NRP3094R	3	4,78	2,39	3,81	7227523
Left Hand					
NRP3031L	3	1,58	0,79	2,39	7227504
NRP3047L	3	2,39	1,19	3,81	7227506
NRP3062L	3	3,18	1,59	3,81	7227509
NRP3094L	3	4,78	2,39	3,81	7227522

NOTE: Right-hand insert shown; left-hand insert is mirror image.



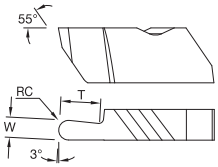
	KCU10B	KCU25B
P	●	●
M	●	●
K	○	○
N	●	○
S	●	●
H	○	

● Primary
○ Secondary

NR-K • Groove and Turn • Full Radius • Chip Control

Catalog Number	Insert Size	W	Ap max	RC	T	KCU10B	KCU25B
Right Hand							
NR3031RK	3	1,57	1,97	0,79	2,39	7227398	7247927
NR3047RK	3	2,39	1,91	1,19	3,81	7227403	7247931
NR3062RK	3	3,18	2,92	1,59	3,81	7227407	7247935
NR3078RK	3	3,97	2,54	1,98	3,81	7227409	7247937
NR4062RK	4	3,18	2,92	1,59	3,81	7227414	7247948
NR4094RK	4	4,79	3,81	2,39	6,35	7227416	7247950
NR4125RK	4	6,35	3,81	3,18	6,35	7227431	7247954
Left Hand							
NR3031LK	3	1,58	1,98	0,79	2,39	7227396	7247925
NR3047LK	3	2,39	3,81	1,20	3,81	7227400	7247929
NR3062LK	3	3,18	2,92	1,59	3,81	7227405	7247933
NR3078LK	3	3,96	2,54	1,98	3,81	7227408	7247936
NR4062LK	4	3,18	2,92	1,59	3,81	7227413	7247946
NR4094LK	4	4,79	3,81	2,39	6,35	7227415	7247949
NR4125LK	4	6,36	3,81	3,18	6,35	7227418	7247952

NOTE: Right-hand insert shown; left-hand insert is mirror image.



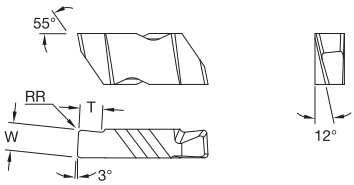
	KCU10B	KCU25B
P	●	●
M	●	●
K	○	○
N	●	○
S	●	●
H	○	

● Primary
○ Secondary

NRD • Groove and Turn • Deep Grooving • Full Radius • Flat Top

Catalog Number	Insert Size	W	RC	T	KCU10B	KCU25B
Right Hand						
NRD3062R	3	3,17	1,59	6,35	7227487	7247958
NRD4094R	4	4,78	2,39	12,70	7227501	—
NRD4125R	4	6,35	3,18	12,70	7227503	7247963
Left Hand						
NRD3062L	3	3,17	1,59	6,35	7227486	7247957
NRD4094L	4	4,78	2,39	12,70	7227490	7247961
NRD4125L	4	6,35	3,18	12,70	7227502	7247962

NOTE: Inserts have one cutting edge.
Right-hand insert shown; left-hand insert is mirror image.



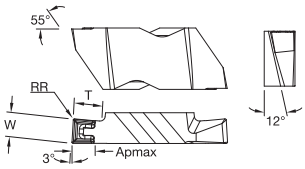
NF • Face Grooving • Flat Top

	KCU25B
P	●
M	●
K	○
N	○
S	●
H	

● Primary
○ Secondary

Catalog Number	Insert Size	W	RR	T	KCU25B
Right Hand					
NF3188R	3	4,78	0,57	3,81	7247746
Left Hand					
NF3188L	3	4,78	0,57	3,81	7247745

NOTE: Right-hand insert shown; left-hand insert is mirror image.



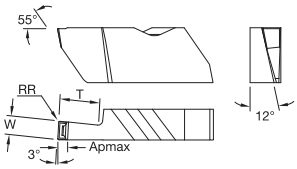
NF-K • Face Grooving • Chip Control

	KCU25B
P	●
M	●
K	○
N	○
S	●
H	

● Primary
○ Secondary

Catalog Number	Insert Size	W	Ap max	RR	T	KCU25B
Right Hand						
NF3M200RK	3	2,00	1,02	0,19	1,78	7247748
NF3M300RK	3	3,00	1,02	0,19	3,81	7247750
NF3125RK	3	3,18	1,02	0,19	3,81	7247742
NF3156RK	3	3,96	2,92	0,19	3,81	7247744
Left Hand						
NF3M200LK	3	2,00	1,02	0,19	1,78	7247747
NF3M300LK	3	3,00	1,02	0,19	3,81	7247749
NF3125LK	3	3,18	1,02	0,19	3,81	7247741
NF3156LK	3	3,96	2,92	0,19	3,81	7247743

NOTE: Right-hand insert shown; left-hand insert is mirror image.



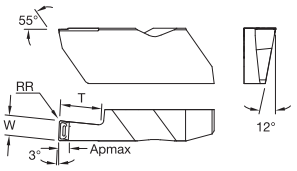
NFD-K • Face Grooving • Deep Grooving • Chip Control

	KCU25B
P	●
M	●
K	○
N	○
S	●
H	

● Primary
○ Secondary

Catalog Number	Insert Size	W	Ap max	RR	T	KCU25B
Right Hand						
NFD3M300RK	3	3,00	1,02	0,19	6,35	7247758
NFD3125RK	3	3,18	1,02	0,19	6,35	7247753
NFD4189RK	4	4,80	2,92	0,57	9,53	7247760
NFD4250RK	4	6,35	3,81	0,57	12,70	7247762
Left Hand						
NFD3M300LK	3	3,00	1,02	0,19	6,35	7247757
NFD3125LK	3	3,18	1,02	0,19	6,35	7247751
NFD4189LK	4	4,80	2,92	0,57	9,53	7247759
NFD4250LK	4	6,35	3,81	0,57	12,70	7247761

NOTE: Inserts have one cutting edge.
Right-hand insert shown; left-hand insert is mirror image.



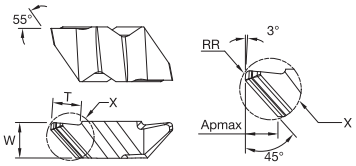
NFD-KI • Internal Face Grooving • Deep Grooving • Chip Control

	KCU25B
P	●
M	●
K	○
N	○
S	●
H	

● Primary
○ Secondary

Catalog Number	Insert Size	W	Ap max	RR	T	KCU25B
Right Hand						
NFD3125RKI	3	3,18	1,02	0,19	6,35	7247754
NFD3189RKI	3	4,80	2,92	0,57	6,35	7247756
Left Hand						
NFD3125LKI	3	3,18	1,02	0,19	6,35	7247752
NFD3189LKI	3	4,80	2,92	0,57	6,35	7247755

NOTE: Inserts have one cutting edge.
NFD-KI inserts are compatible with NS-style boring bars only.
Right-hand insert shown; left-hand insert is mirror image.



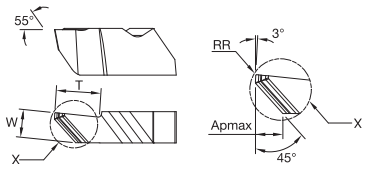
	KCU10B	KCU25B
P	●	●
M	●	●
K	○	○
N	●	○
S	●	●
H	○	

● Primary
○ Secondary

NP-K • Groove and Profile • Back Turning • Chip Control

Catalog Number	Insert Size	W	Ap max	RR	T	KCU10B	KCU25B
Right Hand							
NP2012RK	2	3,81	2,78	0,25	2,81	—	7247764
NP2002RK	2	3,73	2,75	0,25	2,81	7227468	7247763
NP3002RK	3	4,88	3,84	0,25	5,08	7227470	7247765
NP3012RK	3	4,95	3,86	0,25	5,08	—	7247766

NOTE: Right-hand insert shown; left-hand insert is mirror image.



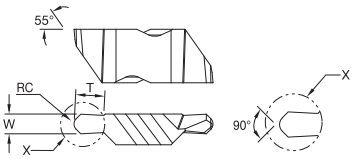
	KCU10B	KCU25B
P	●	●
M	●	●
K	○	○
N	●	○
S	●	●
H	○	

● Primary
○ Secondary

NPD-K • Groove and Profile • Back Turning • Deep • Chip Control

Catalog Number	Insert Size	W	Ap max	RR	T	KCU10B	KCU25B
Right Hand							
NPD2002RK	2	3,81	2,75	0,25	5,08	7227481	7247767
NPD3002RK	3	4,95	3,84	0,25	6,35	—	7247768
NPD3012RK	3	4,90	3,86	0,25	6,35	7227482	7247769

NOTE: Right-hand insert shown; left-hand insert is mirror image.



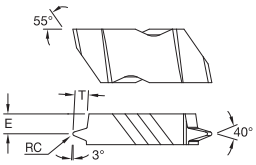
	KCU25B
P	●
M	●
K	○
N	○
S	●
H	

● Primary
○ Secondary

NU • Groove and Turn • 90º • Under Cut • Flat Top

Catalog Number	Insert Size	W	RC	T	KCU25B
Right Hand					
NU3094R	3	2,39	0,51	3,18	7255332
NU3125R	3	3,18	1,19	4,78	7255334
Left Hand					
NU3094L	3	2,39	0,51	3,18	7255331
NU3125L	3	3,18	1,19	4,78	7255333
NU3156L	3	3,96	1,19	4,78	7255335

NOTE: Right-hand insert shown; left-hand insert is mirror image.
Tolerance on W ± 0,13mm (± .005").



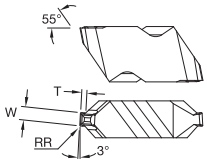
NV • Groove and Turn • Poly-Vee • Flat Top

	KCU25B
P	●
M	●
K	○
N	○
S	●
H	

● Primary
○ Secondary

Catalog Number	Insert Size	E	RC	T	KCU25B
Right Hand					
NV3RJ	3	3,18	0,32	2,21	7255336
NV4RL	4	3,00	0,32	5,11	7255380
Left Hand					
NV4LL	4	3,00	0,32	5,11	7255338

NOTE: Right-hand insert shown; left-hand insert is mirror image.



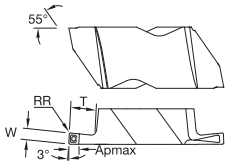
NGC-K • Groove and Chamfer • Circlip Norm DIN 471/472 • Chip Control

	KCU25B
P	●
M	●
K	○
N	○
S	●
H	

● Primary
○ Secondary

Catalog Number	Insert Size	Circlip Size	W	RR	T	KCU25B
Right Hand						
NGC2C130R055K	2	1,30	1,39	0,08	0,55	7250275
NGC2C185R125K	2	1,85	1,94	0,08	1,25	7369559
NGC2C215R150K	2	2,15	2,24	0,08	1,50	7250280
Left Hand						
NGC2C130L055K	2	1,30	1,39	0,08	0,55	7250272
NGC2C185L125K	2	1,85	1,94	0,08	1,25	7250278
NGC2C215L150K	2	2,15	2,24	0,08	1,50	7250279

NOTE: Groove and chamfer inserts for circlip grooves to DIN 471/472 specification.
Right-hand insert shown; left-hand insert is mirror image.



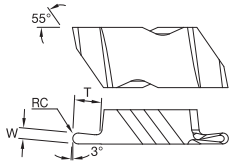
NGD-K-DBL • Groove and Turn • Deep Grooving • Double Ended • Chip Control

● Primary
○ Secondary

	KCU10B	KCU25B
P	●	●
M	●	●
K	○	○
N	●	○
S	●	●
H	○	

Catalog Number	Insert Size	W	Ap max	RR	T	KCU10B	KCU25B
Right Hand							
NGD3062RK	3	1,58	1,02	0,19	3,18	7227338	7250288
NGD4125RK	4	3,18	1,02	0,19	6,35	7227372	7250305
Left Hand							
NGD3062LK	3	1,57	1,02	0,19	3,18	7227337	7250287
NGD4125LK	4	3,18	1,02	0,19	6,35	7227371	7250304

NOTE: Inserts have one cutting edge. Right-hand insert shown; left-hand insert is mirror image.



NRD-DBL • Groove and Turn • Deep Grooving • Full Radius • Double Ended • Flat Top

● Primary
○ Secondary

	KCU10B	KCU25B
P	●	●
M	●	●
K	○	○
N	●	○
S	●	●
H	○	

Catalog Number	Insert Size	W	RC	T	KCU10B	KCU25B
Right Hand						
NRD3031R	3	1,58	0,79	3,18	7227485	7247956
NRD4062R	4	3,18	1,59	6,35	7227489	—
Left Hand						
NRD3031L	3	1,58	0,79	3,18	7227484	7247955
NRD4062L	4	3,18	1,59	6,35	7227488	7247959

NOTE: Inserts have one cutting edge. Right-hand insert shown; left-hand insert is mirror image.

THREADING APPLICATIONS

HOW DO CATALOG NUMBERS WORK?

Each character in our Catalog Number signifies a specific trait of that product. Use the following key columns and corresponding images to easily identify which attributes apply.

NDC38RDR75

N	D	C	3	8RD	R	75	
Type of Insert	Insert	Additional Information	Insert Size	Industry Thread Identification	Hand of Insert	Definition of Insert	Additional Information

N — Top Notch*

A — Acme

D — API or NPT

J — UNJ thread

T — 60° V thread

W — 55° V Whitworth

B — Buttress

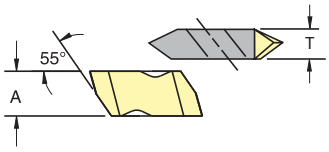
F — Fine pitch

S — Stub Acme

C — Cresting

P — Positive rake

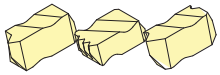
K — Fine pitch, positive



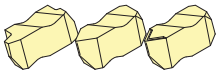
Top Notch insert dimensions

Insert Size	A inch	A mm	T inch	T mm
1	.100	2,54	.100	2,54
2	.219	5,56	.150	3,81
3	.344	8,74	.195	4,95
4	.453	11,51	.255	6,48
5	.688	17,48	.380	9,65
6	.453	11,51	.383	9,73
8	.312	7,93	.438	11,13

NJF NDC-V-M NTC



NA NT NT-K



Indicates API or drilling industry form designation (e.g., 10RD, 8RD, .038)
or
controlled root radius threading inserts indicate the root radius in .001" increments (NJ, NJF, NJP, NJK)
or
M indicates metric ISO thread

R — Right hand

L — Left hand

- Threads per inch or pitch (for metric)
- "A" or "B" type Buttress insert
- Taper per foot — API threads

I — Internal thread

E — External thread (used only if internal and external thread forms are different)

M — Multiple tooth

K — Standard chip control

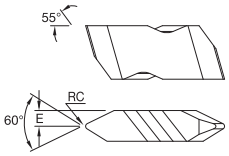
C — Coarse pitch

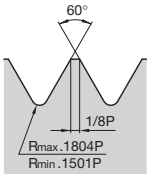
D — Dryseal

*Kennametal proprietary standard only.

Style						Thread Profile	Standard	Tolerance Class	Cresting	Application	Page(s)
Chip Control — K		Neutral		Positive							
NT-K		NT		NTP		Partial Profile 60°	–	–	N	General use for 60° thread forms, such as ISO and UN, where non-cresting inserts are desired to cut a variety of pitches.	24, 27
NT-CK						Partial Profile 60° — coarse pitch	–	–	N	Coarse pitch 60° thread forms, such as ISO and UN, where non-cresting inserts are desired to cut a variety of pitches.	27
		NTF		NTK		Partial Profile 60° — fine pitch	–	–	N	Fine pitch 60° thread forms, such as ISO and UN, where non-cresting inserts are desired to cut a variety of pitches — able to thread close to shoulders.	26, 27
		NTU				Partial Profile 60° — fine pitch	–	–	N	Four-edged insert for 60° partial profile threading — requires NSU-style toolholder for size 4U insert.	26
		NTC-M				Metric ISO	ISO R262, DIN 13	6g/6H	Y	Widely used metric 60° V-form for all industries.	26
		NTC				American UN	ANSI B1.1:74	2A/2B	Y	Widely used inch-based 60° V-form for all industries.	25
		NJ		NJP		UNJ	MIL-S-8879C	3A/3B	N	Controlled root radius on external threads for defense and aerospace industries.	22
		NJF		NJK		UNJ — fine pitch	MIL-S-8879C	3A/3B	N	Controlled root radius on external threads for defense and aerospace industries — able to thread close to shoulders.	23
		NDC-V				NPT	ANSI/ACME B1.201: 1983	Standard NPT	Y	National Pipe Thread standard forms for pipe fittings.	29
		NDC-V-M				NPT — multitooth	ANSI/ACME B1.201: 1983	Standard NPT	Y	High-productivity multi-tooth threading inserts for NPT threads.	28
		NWC-E				Whitworth, BSW, BSP	BS 84:1956, ISO 228/1:1982, DIN 259	Medium Class A	Y	Widely used 55° form for gas and water connections.	29
		ND				API Rotary Shoulder Connections — partial profile	API SPEC. 7:1990	Standard API	N	60° V-form used for rotary shoulder pipe connections in the oil and gas industry including V-.038R, V-.040, and V-.050 forms.	28
		NDC				API Rotary Shoulder Connections — cresting	API SPEC. 7:1990	Standard API	Y	60° V-form used for rotary shoulder pipe connections in the oil and gas industry including V-.038R, V-.040, and V-.050 forms — complete cresting form including taper.	28
		NDC-RD				API Round	API STD. 5B:1979	Standard API RD	Y	60° V-form with large radius for casing, tubing, and line pipe in the oil and gas industry, including 8 and 10 round forms.	32
		NDC-RD-M				API Round — multitooth	API STD. 5B:1979	Standard API RD	Y	High productivity multitooth threading inserts for API round threads.	30
		NA				Acme	ANSI B1.5:1988	3G	N	29° truncated thread form for motion applications in a wide variety of industries.	30
		NAS				Stub Acme	ANSI B1.8:1988	2G	N	Shallow depth 29° truncated thread form for motion applications in a wide variety of industries.	31
		NTB-A				American Buttress — 7° clearance flank leading (Push)	ANSI B1.9:1973	Class 2	N	Sawtooth form for axial load bearing applications in a variety of industries — use the "A" style when the 7° clearance flank is the leading flank.	31
		NTB-B				American Buttress — 45° clearance flank leading (Pull)	ANSI B1.9:1973	Class 2	N	Sawtooth form for axial load bearing applications in a variety of industries — use the "B" style when the 45° clearance flank is the leading flank.	32

THREADING APPLICATIONS





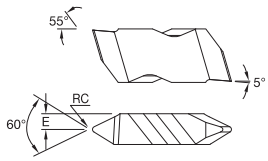
UNJ External

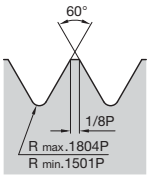
	KCU10B	KCU25B
P	●	●
M	●	●
K	○	○
N	●	○
S	●	●
H	●	

● Primary
○ Secondary

NJ

Catalog Number	Insert Size	Thread Series	RC mm	RC in	E mm	E in	External TPI	KCU10B	KCU25B
Right Hand									
NJ3010R16	3	UNJ	0,25	0.010	2,49	0.098	16	—	7247791
NJ3014R12	3	UNJ	0,33	0.013	2,49	0.098	12	7237228	7247793
NJ3020R8	3	UNJ	0,49	0.019	2,49	0.098	8	7237229	7247795
Left Hand									
NJ3010L16	3	UNJ	0,25	0.010	2,49	0.098	16	—	7247770
NJ3014L12	3	UNJ	0,33	0.013	2,49	0.098	12	7237227	7247792
NJ3020L8	3	UNJ	0,49	0.019	2,49	0.098	8	—	7247794





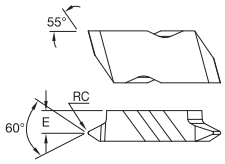
UNJ External

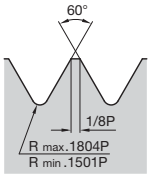
	KCU10B	KCU25B
P	●	●
M	●	●
K	○	○
N	●	○
S	●	●
H	○	

● Primary
○ Secondary

NJP

Catalog Number	Insert Size	Thread Series	RC mm	RC in	E mm	E in	External TPI	KCU10B	KCU25B
Right Hand									
NJP3010R16	3	UNJ	0,25	0.010	2,49	0.098	16	7237261	7247812
NJP3014R12	3	UNJ	0,33	0.013	2,49	0.098	12	7237263	7247813
NJP3020R8	3	UNJ	0,49	0.019	2,49	0.098	8	7237264	7247815
Left Hand									
NJP3010L16	3	UNJ	0,25	0.010	2,49	0.098	16	—	7247811
NJP3014L12	3	UNJ	0,33	0.013	2,49	0.098	12	7237262	—
NJP3020L8	3	UNJ	0,49	0.019	2,49	0.098	8	—	7247814





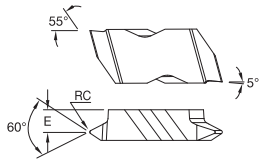
UNJ External

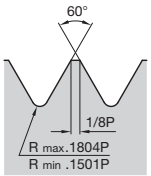
	KCU10B	KCU25B
P	●	●
M	●	●
K	○	○
N	●	○
S	●	●
H	○	

● Primary
○ Secondary

NJF

			RC		E				
Catalog Number	Insert Size	Thread Series	mm	in	mm	in	External TPI	KCU10B	KCU25B
Right Hand									
NJF3005R32	3	UNJ	0,13	0.005	3,58	0.141	32	7237230	—
NJF3006R28	3	UNJ	0,15	0.006	3,58	0.141	28	7237231	7247796
NJF3007R24	3	UNJ	0,17	0.007	3,58	0.141	24	7237233	7247797
NJF3008R20	3	UNJ	0,20	0.008	3,58	0.141	20	7237235	7247798
NJF3009R18	3	UNJ	0,22	0.009	3,58	0.141	18	7237236	7247799
NJF3010R16	3	UNJ	0,25	0.010	3,58	0.141	16	7237238	7247800
NJF3012R14	3	UNJ	0,28	0.011	3,58	0.141	14	7237239	7247801
Left Hand									
NJF3007L24	3	UNJ	0,17	0.007	3,58	0.141	24	7237232	—
NJF3008L20	3	UNJ	0,20	0.008	3,58	0.141	20	7237234	—
NJF3010L16	3	UNJ	0,25	0.010	3,58	0.141	16	7237237	—





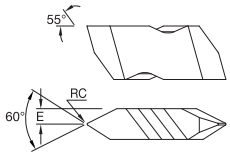
UNJ External

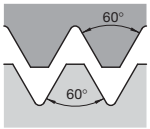
	KCU10B	KCU25B
P	●	●
M	●	●
K	○	○
N	●	○
S	●	●
H	●	

● Primary
○ Secondary

NJK

			RC		E				
Catalog Number	Insert Size	Thread Series	mm	in	mm	in	External TPI	KCU10B	KCU25B
Right Hand									
NJK3005R32	3	UNJ	0,13	0.005	3,58	0.141	32	7237241	7247803
NJK3006R28	3	UNJ	0,15	0.006	3,58	0.141	28	7237243	7247805
NJK3007R24	3	UNJ	0,17	0.007	3,58	0.141	24	7237245	7247806
NJK3008R20	3	UNJ	0,20	0.008	3,58	0.141	20	7237246	7247807
NJK3009R18	3	UNJ	0,22	0.009	3,58	0.141	18	7237248	7247808
NJK3010R16	3	UNJ	0,25	0.010	3,58	0.141	16	—	7247809
NJK3012R14	3	UNJ	0,28	0.011	3,58	0.141	14	7237250	7247810
Left Hand									
NJK3005L32	3	UNJ	0,13	0.005	3,58	0.141	32	—	7247802
NJK3006L28	3	UNJ	0,15	0.006	3,58	0.141	28	—	7247804





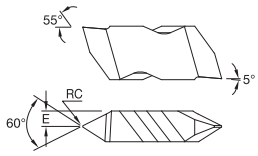
Partial Profile 60°

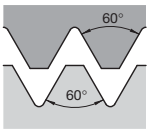
	KCU10B	KCU25B
P	●	●
M	●	●
K	○	○
N	●	○
S	●	●
H	○	

● Primary
○ Secondary

NT

			RC		E							
Catalog Number	Insert Size	Thread Series	mm	in	mm	in	External Thread Pitch mm	Internal Thread Pitch inch	External TPI	Internal TPI	KCU10B	KCU25B
Right Hand												
NT2R	2	60 Degree Partial	0,10	0.004	1,90	0.075	0,70-3,0	1.25-3.5	8-36	7-20	7236732	7247819
NT3R	3	60 Degree Partial	0,17	0.007	2,49	0.098	1,25-4,0	2.0-5.0	6-20	5-12	7236734	7247874
NT4R	4	60 Degree Partial	0,17	0.007	3,25	0.128	1,25-6,25	2.0-6.25	4-20	4-12	7236736	7247880
Left Hand												
NT2L	2	60 Degree Partial	0,10	0.004	1,90	0.075	0,70-3,0	1.25-3.5	8-36	7-20	7236731	7247817
NT3L	3	60 Degree Partial	0,17	0.007	2,49	0.098	1,25-4,0	2.0-5.0	6-20	5-12	7236733	7247871
NT4L	4	60 Degree Partial	0,17	0.007	3,25	0.128	1,25-6,25	2.0-6.25	4-20	4-12	7236735	7247877





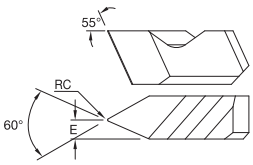
Partial Profile 60°

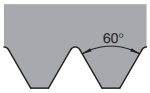
	KCU10B	KCU25B
P	●	●
M	●	●
K	○	○
N	●	○
S	●	●
H	●	

● Primary
○ Secondary

NTP

			RC		E							
Catalog Number	Insert Size	Thread Series	mm	in	mm	in	External Thread Pitch mm	Internal Thread Pitch inch	External TPI	Internal TPI	KCU10B	KCU25B
Right Hand												
NTP2R	2	UN	0,10	0.004	1,91	0.075	0,70-3,0	1.25-3.5	8-36	7-20	7236750	7247895
NTP3R	3	UN	0,17	0.007	2,49	0.098	1,25-4,0	2.0-5.0	6-20	5-12	7236752	7247897
NTP4R	4	UN	0,17	0.007	3,25	0.128	1,25-6,25	2.0-6.25	4-20	4-12	7236754	7247899
Left Hand												
NTP2L	2	UN	0,10	0.004	1,91	0.075	0,70-3,0	1.25-3.5	8-36	7-20	7236749	7247894
NTP3L	3	UN	0,17	0.007	2,49	0.098	1,25-4,0	2.0-5.0	6-20	5-12	7236751	7247896
NTP4L	4	UN	0,17	0.007	3,25	0.128	1,25-6,25	2.0-6.25	4-20	4-12	7236753	—





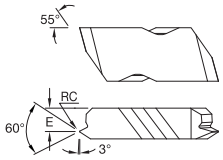
Partial Profile
60° Internal

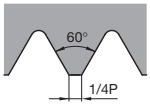
	KCU10B	KCU25B
P	●	●
M	●	●
K	○	○
N	●	○
S	●	●
H	○	

● Primary
○ Secondary

NT-1L

			RC		E					
Catalog Number	Insert Size	Thread Series	mm	in	mm	in	Internal Thread Pitch inch	Internal TPI	KCU10B	KCU25B
Left Hand										
NT1L	1	60 Degree Partial	0,08	0.003	1,09	0.043	1.0-2.0	12-24	7250010	7255315





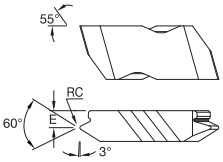
American
UN-Internal

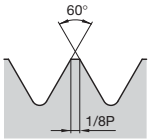
NTC-I

	KCU25B
P	●
M	●
K	○
N	○
S	●
H	

● Primary
○ Secondary

Catalog Number	Insert Size	Thread Series	RC mm	RC in	E mm	E in	Internal TPI	KCU25B
Right Hand								
NTC3R12I	3	UN	0,10	0.004	3,76	0.148	12	7255372
Left Hand								
NTC3L16I	3	UN	0,08	0.003	3,76	0.148	16	7255322
NTC3L14I	3	UN	0,09	0.004	3,76	0.148	14	7255321
NTC3L12I	3	UN	0,10	0.004	3,76	0.148	12	7255320
NTC3L10I	3	UN	0,13	0.005	2,72	0.107	10	7255319
NTC3L8I	3	UN	0,18	0.007	2,72	0.107	8	7255323





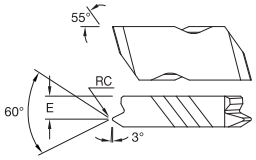
American
UN-External

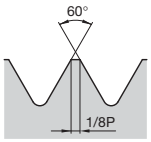
NTC-E

	KCU10B	KCU25B
P	●	●
M	●	●
K	○	○
N	●	○
S	●	●
H	○	

● Primary
○ Secondary

Catalog Number	Insert Size	Thread Series	RC mm	RC in	E mm	E in	External TPI	KCU10B	KCU25B
Right Hand									
NTC3R32E	3	UN	0,10	0.004	3,76	0.148	32	7250034	7255328
NTC3R28E	3	UN	0,12	0.005	3,76	0.148	28	—	7255327
NTC3R24E	3	UN	0,13	0.005	3,76	0.148	24	7247848	7255379
NTC3R20E	3	UN	0,16	0.006	3,76	0.148	20	7247847	7255378
NTC3R18E	3	UN	0,18	0.007	3,76	0.148	18	7247846	7255377
NTC3R16E	3	UN	0,19	0.008	3,76	0.148	16	7247845	7255376
NTC3R14E	3	UN	0,22	0.009	3,76	0.148	14	7247844	7255374
NTC3R13E	3	UN	0,24	0.010	3,76	0.148	13	7247843	7255373
NTC3R12E	3	UN	0,25	0.010	3,76	0.148	12	7247842	7255371
NTC3R11E	3	UN	0,28	0.011	2,72	0.107	11	7250042	7255326
NTC3R10E	3	UN	0,32	0.012	2,72	0.107	10	7250041	7255325
NTC3R9E	3	UN	0,36	0.014	2,72	0.107	9	7237283	—
NTC3R8E	3	UN	0,41	0.016	2,72	0.107	8	7250035	7255330
NTC3R7E	3	UN	0,47	0.019	2,72	0.107	7	—	7255329
Left Hand									
NTC3L16E	3	UN	0,19	0.008	3,76	0.148	16	7237270	—
NTC3L12E	3	UN	0,25	0.010	3,76	0.148	12	7237269	—
NTC3L10E	3	UN	0,32	0.012	2,72	0.107	10	7237268	—
NTC3L8E	3	UN	0,41	0.016	2,72	0.107	8	7237281	—





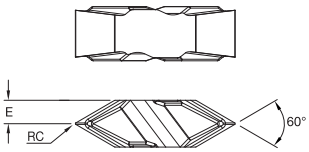
ISO Metric-External

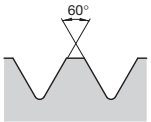
	KCU10B	KCU25B
P	●	●
M	●	●
K	○	○
N	●	○
S	●	●
H	○	

● Primary
○ Secondary

NTC-M-E

			RC		E				
Catalog Number	Insert Size	Thread Series	mm	in	mm	in	External Thread Pitch mm	KCU10B	KCU25B
Right Hand									
NTC3MR150E	3	M-Metric/ISO	0,20	0.008	3,68	0.145	1.50	—	7255324
NTC3MR200E	3	M-Metric/ISO	0,27	0.011	3,68	0.145	2.00	7237282	—





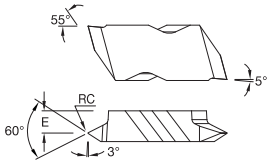
Partial Profile
60° External

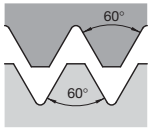
	KCU25B
P	●
M	●
K	○
N	○
S	●
H	

● Primary
○ Secondary

NTU • 4 Edges • Reversible

			RC		E				
Catalog Number	Insert Size	Thread Series	mm	in	mm	in	External Thread Pitch mm	External TPI	KCU25B
Right Hand									
NTU4R	4U	UN	0,11	0.005	3,18	0.125	1.25-6.25	4-20	7254268





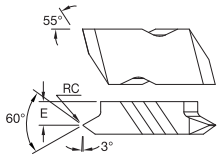
Partial Profile 60°

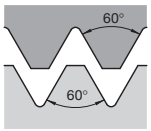
	KCU10B	KCU25B
P	●	●
M	●	●
K	○	○
N	●	○
S	●	●
H	○	

● Primary
○ Secondary

NTK

			RC		E							
Catalog Number	Insert Size	Thread Series	mm	in	mm	in	External Thread Pitch mm	Internal Thread Pitch inch	External TPI	Internal TPI	KCU10B	KCU25B
Right Hand												
NTK2R	2	UN	0,08	0.003	2,79	0.110	0,60-1,75	1.0-2.0	14-44	12-24	7236746	7247891
NTK3R	3	UN	0,08	0.003	3,58	0.141	0,60-2,50	1.0-2.5	10-44	9-24	7236748	7247893
Left Hand												
NTK2L	2	UN	0,08	0.003	2,79	0.110	0,60-1,75	1.0-2.0	14-44	12-24	7236745	7247890
NTK3L	3	UN	0,08	0.003	3,58	0.141	0,60-2,50	1.0-2.5	10-44	9-24	7236747	7247892





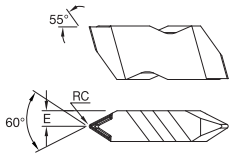
Partial Profile 60°

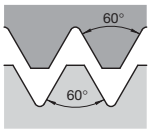
	KCU10B	KCU25B
P	●	●
M	●	●
K	○	○
N	●	○
S	●	●
H	○	

● Primary
○ Secondary

NTF

Catalog Number	Insert Size	Thread Series	RC mm	RC in	E mm	E in	External Thread Pitch mm	Internal Thread Pitch inch	External TPI	Internal TPI	KCU10B	KCU25B
Right Hand												
NTF2R	2	UN	0,08	0.003	2,79	0.110	0,60-1,75	1.0-2.0	14-44	12-24	7236742	—
NTF3R	3	UN	0,08	0.003	3,58	0.141	0,60-2,5	1.0-2.5	10-44	9-24	7236744	7247888
NTF4R	4	UN	0,08	0.003	5,11	0.201	0,60-2,5	1.0-2.5	10-44	9-24	—	7247889
Left Hand												
NTF2L	2	UN	0,08	0.003	2,79	0.110	0,60-1,75	1.0-2.0	14-44	12-24	7236741	7247885
NTF3L	3	UN	0,08	0.003	3,58	0.141	0,60-2,5	1.0-2.5	10-44	9-24	7236743	7247887





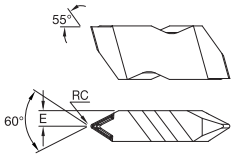
Partial Profile 60°

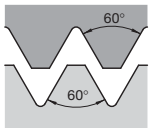
	KCU10B	KCU25B
P	●	●
M	●	●
K	○	○
N	●	○
S	●	●
H	○	

● Primary
○ Secondary

NT-CK

Catalog Number	Insert Size	Thread Series	RC mm	RC in	E mm	E in	External Thread Pitch mm	Internal Thread Pitch inch	External TPI	Internal TPI	KCU10B	KCU25B
Right Hand												
NT3RCK	3	60 Degree Partial	0,34	0.014	2,46	0.097	2,5-4,0	4.0	6-11	6	7227529	7247875
NT4RCK	4	60 Degree Partial	0,34	0.014	3,23	0.127	2,5-5,5	4.0-5.5	4.5-11	4.5-6	7227532	—
Left Hand												
NT3LCK	3	60 Degree Partial	0,34	0.014	2,46	0.097	2,5-4,0	4.0	6-11	6	7227527	7247872
NT4LCK	4	60 Degree Partial	0,34	0.014	3,23	0.127	2,5-5,5	4.0-5.5	4.5-11	4.5-6	—	7247878





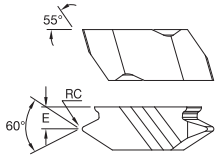
Partial Profile 60°

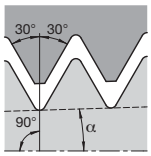
	KCU10B	KCU25B
P	●	●
M	●	●
K	○	○
N	●	○
S	●	●
H	○	

● Primary
○ Secondary

NT-K

Catalog Number	Insert Size	Thread Series	RC mm	RC in	E mm	E in	External Thread Pitch mm	Internal Thread Pitch inch	External TPI	Internal TPI	KCU10B	KCU25B
Right Hand												
NT2RK	2	60 Degree Partial	0,10	0.004	1,90	0.075	0,70-3,0	1.25-3.5	8-36	7-20	7227526	7247820
NT3RK	3	60 Degree Partial	0,17	0.007	2,49	0.098	1,25-4,0	2.0-5.0	6-20	5-12	7227530	7247876
NT4RK	4	60 Degree Partial	0,16	0.007	3,24	0.128	1,25-6,25	2.0-6.25	4-20	4-12	7227533	7247882
Left Hand												
NT2LK	2	60 Degree Partial	0,10	0.004	1,90	0.075	0,70-3,0	1.25-3.5	8-36	7-20	7227525	7247818
NT3LK	3	60 Degree Partial	0,17	0.007	2,49	0.098	1,25-4,0	2.0-5.0	6-20	5-12	7227528	7247873
NT4LK	4	60 Degree Partial	0,16	0.007	3,24	0.128	1,25-6,25	2.0-6.25	4-20	4-12	7227531	7247879





α =1/2arctg (tpf/12)

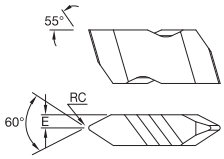
API Rotary Shoulder Connections

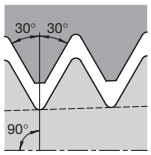
	KCU10B	KCU25B
P	●	●
M	●	●
K	○	○
N	●	○
S	●	●
H	●	

● Primary
○ Secondary

NDC (Cresting)

			RC		E					
Catalog Number	Insert Size	Thread Series	mm	in	mm	in	TPI	TPF	KCU10B	KCU25B
Right Hand										
NDC3040R3	3	API	0,45	0.018	3,73	0.147	5	3.000	—	7255305
NDC4040R3	4	API	0,45	0.018	3,73	0.147	5	3.000	—	7255357
NDC4038R2	4	API	0,90	0.036	4,65	0.183	4	2.000	—	7255309
NDC4050R2	4	API	0,57	0.023	4,65	0.183	4	2.000	—	7255311
NDC4050R3	4	API	0,57	0.023	4,65	0.183	4	3.000	—	7255312
Left Hand										
NDC3040L3	3	API	0,45	0.018	3,73	0.147	5	3.000	7237284	—
NDC4050L3	4	API	0,57	0.023	4,65	0.183	4	3.000	7237290	—
NDC4038L2	4	API	0,90	0.036	4,65	0.183	4	2.000	—	7255308
NDC4050L2	4	API	0,57	0.023	4,65	0.183	4	2.000	—	7255310





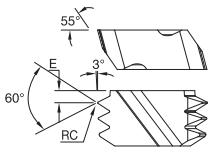
API Rotary Shoulder Connections

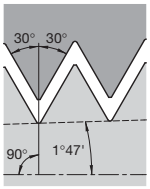
	KCU25B
P	●
M	●
K	○
N	○
S	●
H	

● Primary
○ Secondary

ND (Partial Profile)

			RC		E			
Catalog Number	Insert Size	Thread Series	mm	in	mm	in	TPI	KCU25B
Right Hand								
ND3040R	3	API	0,45	0.018	2,08	0.082	5	7255303
ND3038R	3	API	0,90	0.036	2,08	0.082	4	7255302
ND4050R	4	API	0,57	0.023	3,25	0.128	4	7255304
Left Hand								
ND3040L	3	API	0,45	0.018	2,08	0.082	5	7255354
ND3038L	3	API	0,90	0.036	2,08	0.082	4	7255353





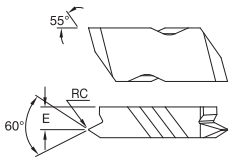
NPT

	KCU10B
P	●
M	●
K	○
N	●
S	●
H	○

● Primary
○ Secondary

NDC-V-M (MULTI-TOOTH)

			RC		E				
Catalog Number	Insert Size	Thread Series	mm	in	mm	in	TPI	TPF	KCU10B
Right Hand									
NDC8115VR75M	8	NPT	0,10	0.004	2,59	0.102	11.5	0.750	7237292
NDC88VR75M	8	NPT	0,13	0.005	2,41	0.095	8	0.750	7237294
Left Hand									
NDC88VL75M	8	NPT	0,13	0.005	2,41	0.095	8	0.750	7237293

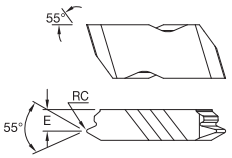


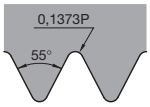
NDC-V

	KCU10B
P	●
M	●
K	○
N	●
S	●
H	○

● Primary
○ Secondary

			RC		E				
Catalog Number	Insert Size	Thread Series	mm	in	mm	in	TPI	TPF	KCU10B
Right Hand									
NDC327VR75	3	NPT	0,05	0.002	3,66	0.144	27	0.750	7237226
NDC314VR75	3	NPT	0,08	0.003	3,66	0.144	14	0.750	7237287
NDC3115VR75	3	NPT	0,10	0.004	3,66	0.144	11.5	0.750	7237286
NDC38VR75	3	NPT	0,13	0.005	2,54	0.100	8	0.750	7237289
Left Hand									
NDC3115VL75	3	NPT	0,10	0.004	3,66	0.144	11.5	0.750	7237285
NDC38VL75	3	NPT	0,13	0.005	2,54	0.100	8	0.750	7237288





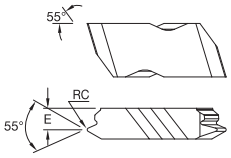
Whitworth BSW,
BSP-Internal

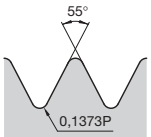
NWC-I

	KCU25B
P	●
M	●
K	○
N	○
S	●
H	

● Primary
○ Secondary

			RC		E			
Catalog Number	Insert Size	Thread Series	mm	in	mm	in	TPI	KCU25B
Left Hand								
NWC3L11I	3	Whitworth	0,30	0.012	3,43	0.135	11	7255358





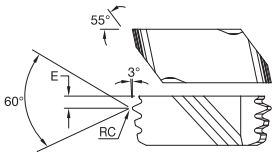
Whitworth BSW,
BSP-External

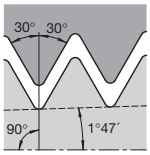
NWC-E

	KCU10B	KCU25B
P	●	●
M	●	●
K	○	○
N	●	○
S	●	●
H	○	

● Primary
○ Secondary

			RC		E				
Catalog Number	Insert Size	Thread Series	mm	in	mm	in	TPI	KCU10B	KCU25B
Right Hand									
NWC3R14E	3	Whitworth	0,24	0.009	3,43	0.135	14	7250037	7255314
NWC3R11E	3	Whitworth	0,30	0.012	3,43	0.135	11	7250036	7255313





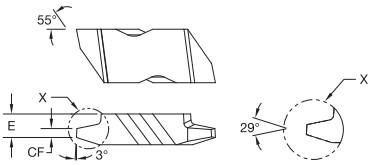
API Round

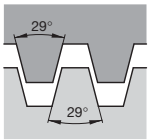
	KCU10B
P	●
M	●
K	○
N	●
S	●
H	○

● Primary
○ Secondary

NDC-RD-M (MULTI-TOOTH)

			RC		E				
Catalog Number	Insert Size	Thread Series	mm	in	mm	in	TPI	TPF	KCU10B
Right Hand									
NDC68RDR75M	6	API Round	0,41	0.016	2,62	0.103	8	0.750	7237291





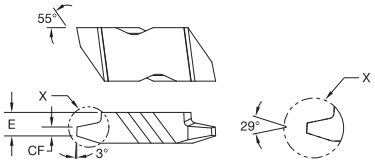
Acme

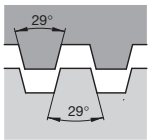
	KCU10B	KCU25B
P	●	●
M	●	●
K	○	○
N	●	○
S	●	●
H	○	

● Primary
○ Secondary

NA

			E				
Catalog Number	Insert Size	Thread Series	mm	in	TPI	KCU10B	KCU25B
Right Hand							
NA3R16	3	ACME	3,79	0.149	16	7237212	—
NA3R12	3	ACME	3,79	0.149	12	7237211	7237315
NA3R10	3	ACME	3,79	0.149	10	—	7237314
NA3R8	3	ACME	3,79	0.149	8	7237216	7237319
NA3R6	3	ACME	3,79	0.149	6	7237215	7237318
NA3R5	3	ACME	3,79	0.149	5	7237214	7237317
NA3R4	3	ACME	3,38	0.133	4	7237213	7237316
NA4R6	4	ACME	5,13	0.202	6	—	7255293
NA4R5	4	ACME	5,13	0.202	5	—	7255292
NA6R3	6	ACME	7,19	0.283	3	—	7255301
NA6R25	6	ACME	7,19	0.283	2.5	—	7255300
NA6R2	6	ACME	7,19	0.283	2	7250039	7255299
Left Hand							
NA3L16	3	ACME	3,79	0.149	16	7237205	—
NA3L12	3	ACME	3,79	0.149	12	7237204	7237297
NA3L10	3	ACME	3,79	0.149	10	—	7237296
NA3L8	3	ACME	3,79	0.149	8	7237209	7237313
NA3L6	3	ACME	3,79	0.149	6	7237208	7237312
NA3L5	3	ACME	3,79	0.149	5	7237207	7237311
NA3L4	3	ACME	3,38	0.133	4	7237206	7237298
NA4L8	4	ACME	5,13	0.202	8	—	7255291
NA4L6	4	ACME	5,13	0.202	6	—	7255230
NA4L5	4	ACME	5,13	0.202	5	—	7255229
NA4L4	4	ACME	5,13	0.202	4	7250009	7255228
NA6L3	6	ACME	7,19	0.283	3	—	7255296
NA6L25	6	ACME	7,19	0.283	2.5	—	7255295
NA6L2	6	ACME	7,19	0.283	2	7250038	7255294





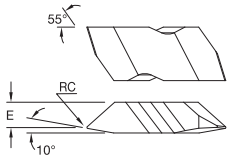
Stub Acme

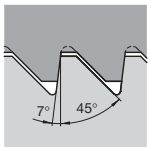
	KCU10B	KCU25B
P	●	●
M	●	●
K	○	○
N	●	○
S	●	●
H	○	

● Primary
○ Secondary

NAS

			E				
Catalog Number	Insert Size	Thread Series	mm	in	TPI	KCU10B	KCU25B
Right Hand							
NAS3R16	3	STUB ACME	3,79	0.149	16	—	7237338
NAS3R12	3	STUB ACME	3,79	0.149	12	—	7237337
NAS3R10	3	STUB ACME	3,79	0.149	10	—	7237336
NAS3R8	3	STUB ACME	3,79	0.149	8	7237225	7237342
NAS3R6	3	STUB ACME	3,79	0.149	6	—	7237341
NAS3R5	3	STUB ACME	3,79	0.149	5	7237223	7237340
NAS3R4	3	STUB ACME	3,79	0.149	4	—	7237339
Left Hand							
NAS3L12	3	STUB ACME	3,79	0.149	12	—	7237331
NAS3L10	3	STUB ACME	3,79	0.149	10	7237218	7237320
NAS3L8	3	STUB ACME	3,79	0.149	8	—	7237335
NAS3L6	3	STUB ACME	3,79	0.149	6	7237220	7237334
NAS3L5	3	STUB ACME	3,79	0.149	5	7237219	7237333
NAS3L4	3	STUB ACME	3,79	0.149	4	—	7237332





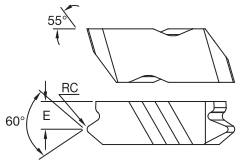
American
Buttress-Push

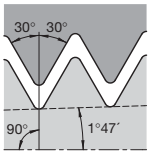
	KCU10B	KCU25B
P	●	●
M	●	●
K	○	○
N	●	○
S	●	●
H	○	

● Primary
○ Secondary

NTB-A

			RC		E				
Catalog Number	Insert Size	Thread Series	mm	in	mm	in	TPI	KCU10B	KCU25B
Right Hand									
NTB3RA	3	Buttress	0,17	0.007	4,17	0.164	8-16	7250032	7255317
NTB4RA	4	Buttress	0,25	0.010	5,23	0.206	4-6	7236739	—
Left Hand									
NTB3LA	3	Buttress	0,17	0.007	4,17	0.164	8-16	7247669	7255359





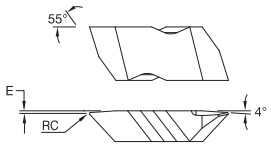
API Round

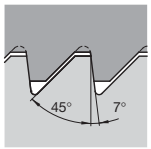
NDC-RD

	KCU10B	KCU25B
P	●	●
M	●	●
K	○	○
N	●	○
S	●	●
H	○	

● Primary
○ Secondary

			RC		E					
Catalog Number	**Insert Size**	**Thread Series**	**mm**	**in**	**mm**	**in**	**TPI**	**TPF**	**KCU10B**	**KCU25B**
Right Hand										
NDC310RDR75	3	API Round	0,36	0.014	3,18	0.125	10	0.750	—	7255307
NDC38RDR75	3	API Round	0,41	0.016	3,18	0.125	8	0.750	7247667	7255356
Left Hand										
NDC310RDL75	3	API Round	0,36	0.014	3,18	0.125	10	0.750	—	7255306
NDC38RDL75	3	API Round	0,41	0.016	3,18	0.125	8	0.750	7247850	7255355





American
Buttress-Pull

NTB-B

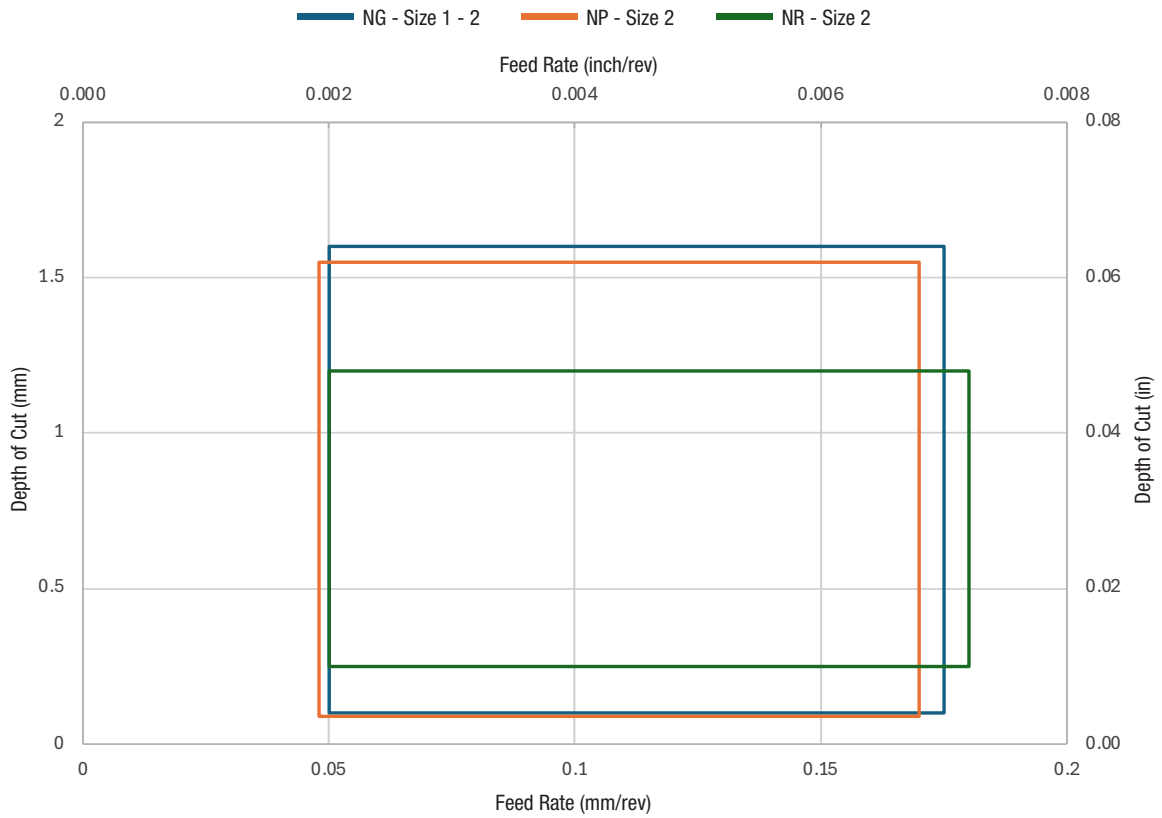
	KCU10B	KCU25B
P	●	●
M	●	●
K	○	○
N	●	○
S	●	●
H	○	

● Primary
○ Secondary

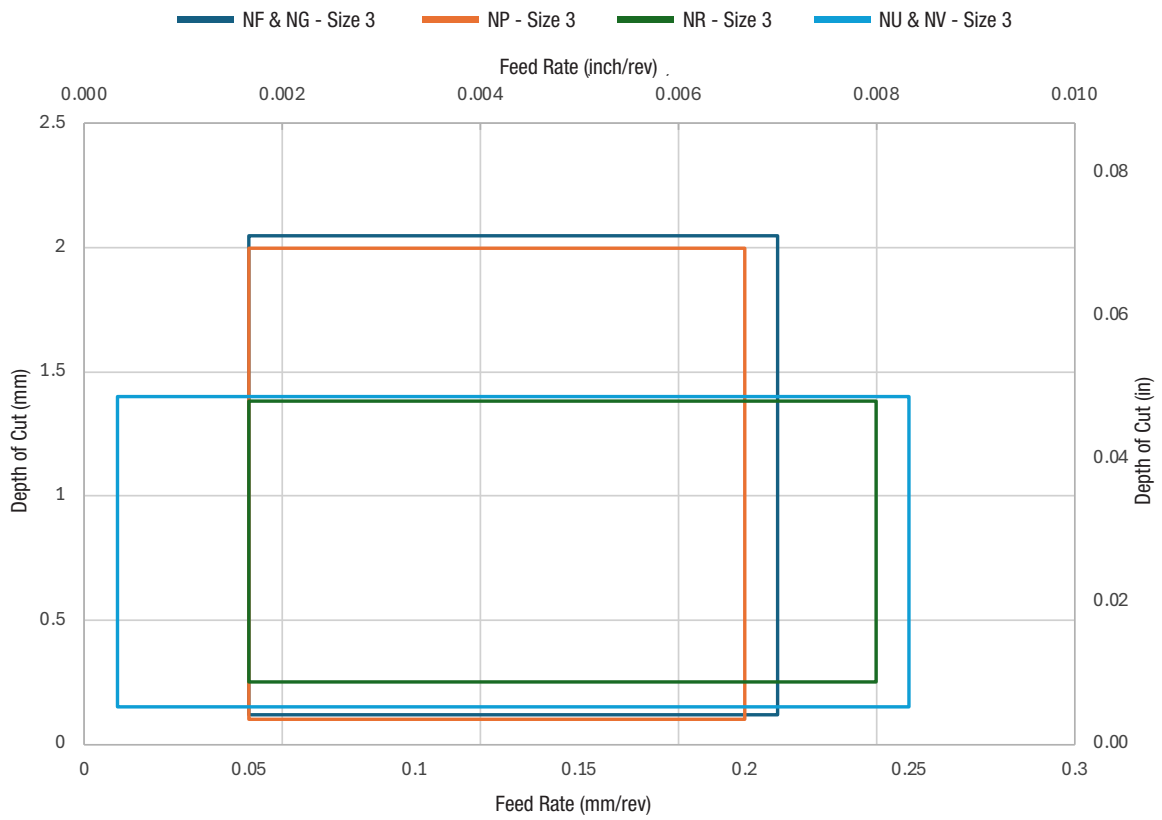
			RC		E				
Catalog Number	**Insert Size**	**Thread Series**	**mm**	**in**	**mm**	**in**	**TPI**	**KCU10B**	**KCU25B**
Right Hand									
NTB2RB	2	Buttress	0,08	0.003	0,25	0.010	16-20	7237267	—
NTB3R12B	3	Buttress	0,15	0.006	2,49	0.098	12	7247841	—
NTB3RB	3	Buttress	0,17	0.007	0,31	0.012	8-16	7250033	7255318
NTB4RB	4	Buttress	0,25	0.010	0,41	0.016	4-6	7236740	7247884
Left Hand									
NTB2LB	2	Buttress	0,08	0.003	0,25	0.010	16-20	7236737	—
NTB3L12B	3	Buttress	0,15	0.006	2,49	0.098	12	7247668	—
NTB3LB	3	Buttress	0,17	0.007	0,31	0.012	8-16	7250031	7255316
NTB4LB	4	Buttress	0,25	0.010	0,41	0.016	4-6	7236738	7247883

Top Notch
Application Data • Feed & Depth of Cut

Seat Size 1 and 2 • NG - NP - NR • OD Groove & Turn

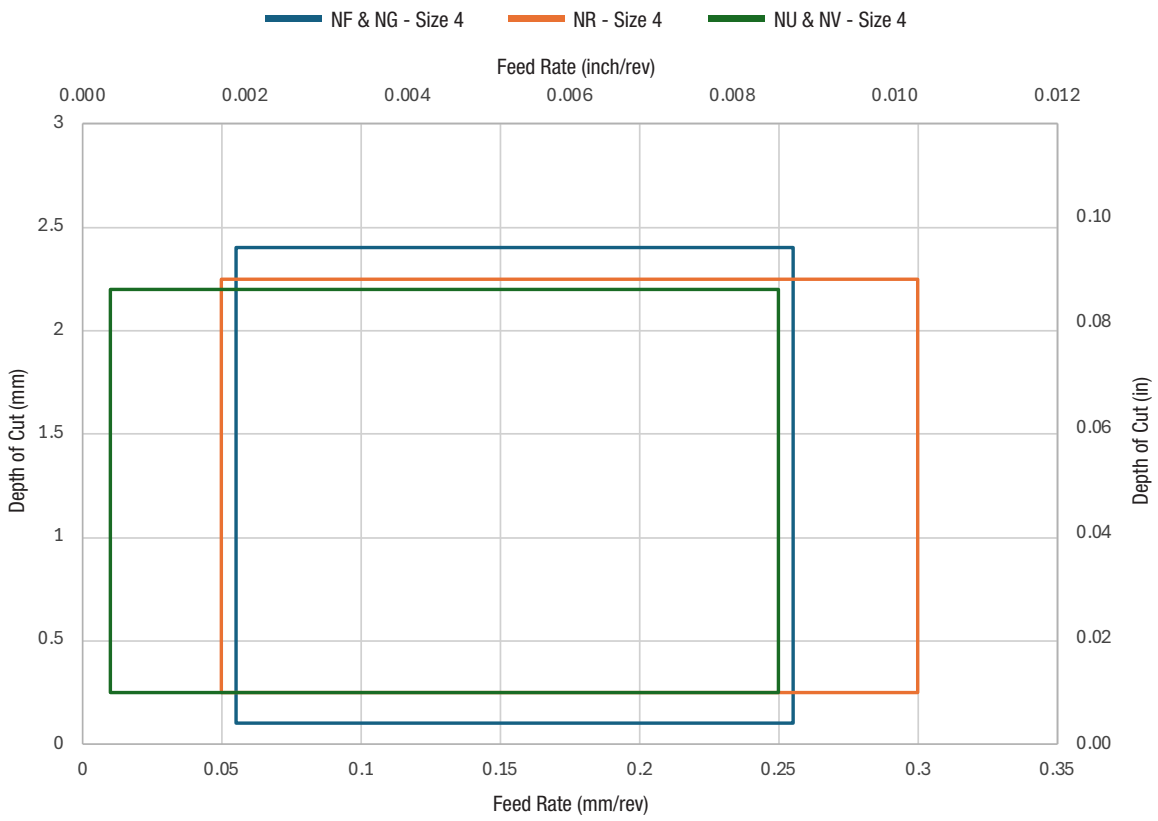


Seat Size 3 • NG - NF - NP - NR - NU - NV • Groove & Turn

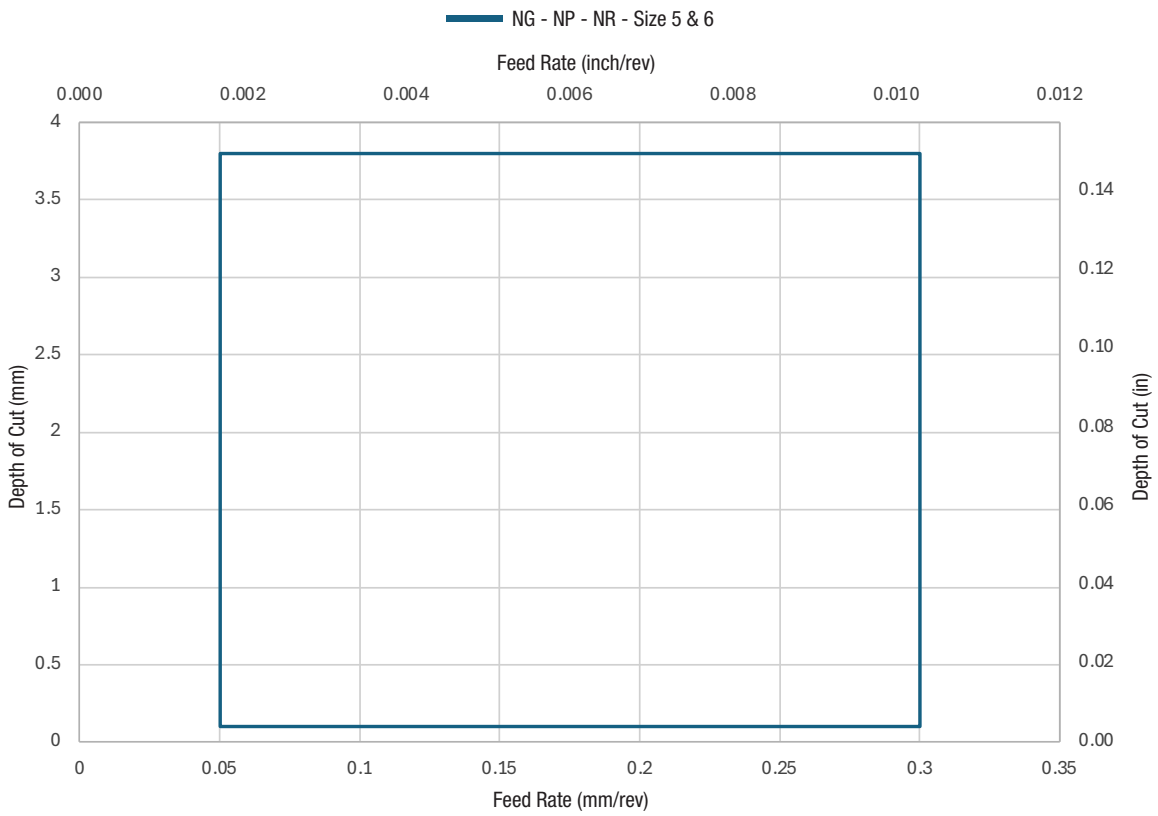


Top Notch
Application Data • Feed & Depth of Cut

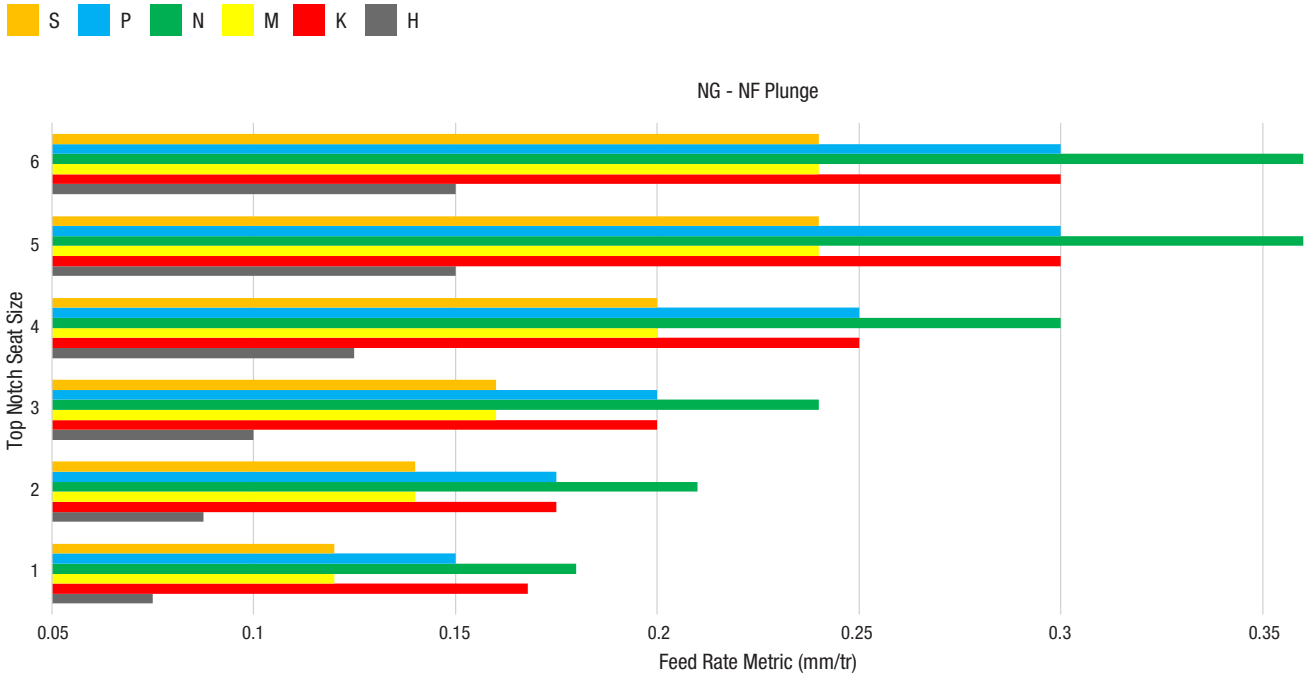
Seat Size 4 • NG - NP - NR - NU - NV - NF • Groove & Turn

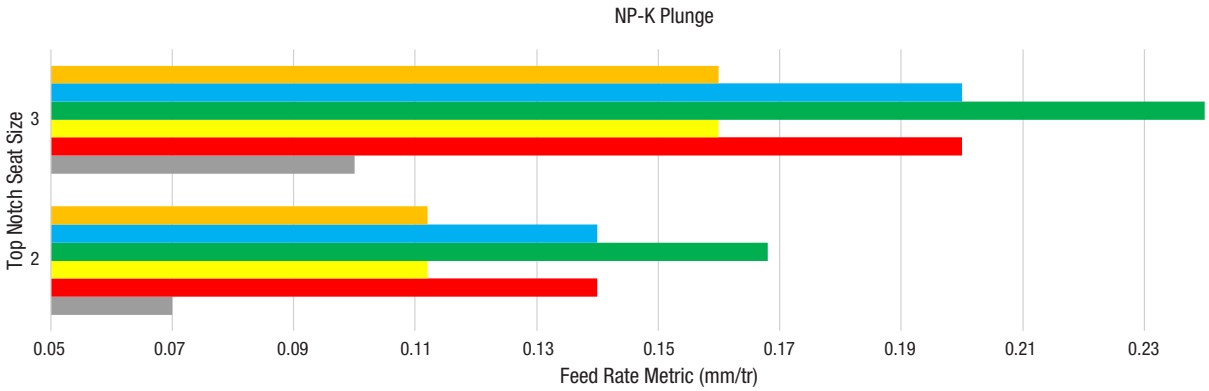


Seat Size • 5-6 NG - NP - NR • Groove & Turn

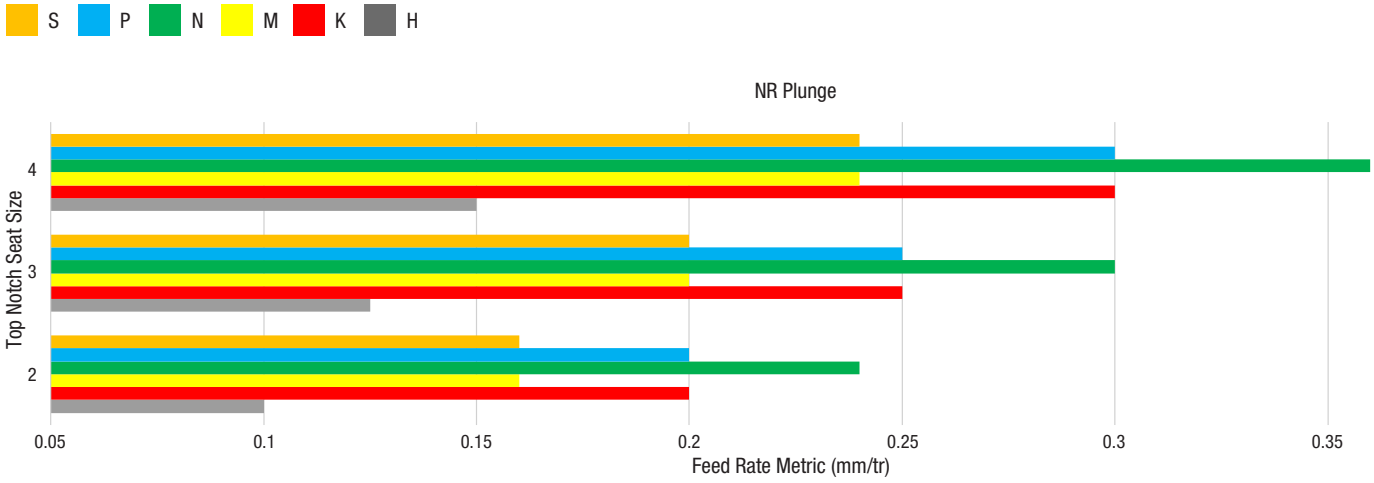


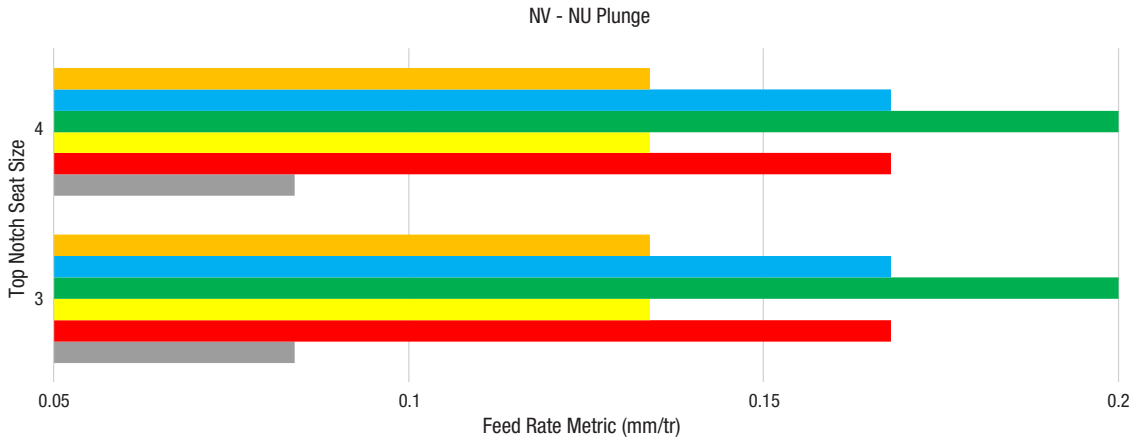
Top Notch
Application Data • Plunging Data





Top Notch
Application Data • Plunging Data • Continued





KCU10B - KCU25B: Top Notch
Application Data • (General Machining)

Groove & Turn and Cut-Off • Application Data • Recommended Starting Speed (m/min)				
Material Group	KCU10B		KCU25B	
	MIN	MAX	MIN	MAX
P0	140	350	90	230
P1	140	295	90	230
P2	140	255	90	165
P3	140	255	90	165
P4	75	180	50	115
P5	120	275	80	180
P6	110	240	70	160
M1	110	220	100	205
M2	95	205	75	180
M3	95	205	50	125
K1	75	165	90	255
K2	55	140	90	255
K3	40	100	90	220
N1	150	1025	100	655
N2	150	1025	100	655
N3	-	-	80	410
N4	90	640	80	410
N5	90	255	60	165
N6	120	320	80	205
S1	10	115	8	65
S2	10	115	8	80
S3	10	115	15	80
S4	10	140	8	115
H1	30	65	-	-

Maximum Feed Rate Values

Material Group	Feed Factor
M	0.8
N	1.2
S	0.8
H	0.5

Data above is for P and K material groups. Maximum feed rates should be adjusted by multiplying max feed rate values by following factors for shown material groups.

Top Notch Grooving KCU10B & KCU25B Inserts

LET'S TAKE YOUR **MANUFACTURING** TO THE **NEXT LEVEL**

kennametal.com/**Top-Notch**

FIX8™ TURNING

Heavy-Duty Turning

FIX8 is the perfect heavy-duty turning solution featuring eight cutting edges per insert. The rigid design is ideal for medium machining and roughing applications, offering the lowest cost per edge. The unique clamping system pulls the insert into the pocket seat, ensuring a secure fit and the ability to withstand large cutting forces and vibrations.

With its large depth of cut (up to 12mm) and feed rate (up to 1.4mm) capabilities, FIX8 ensures the highest possible metal removal rates in steel, cast iron and stainless steels. Additionally, FIX8 reduces cutting forces by up to 15%, making the inserts ideal for low-horsepower lathes.

The tangential design increases the amount of carbide between the workpiece and the tool holder, allowing the system to take higher loads. A carbide shim protects the pocket against deformation and ensures process safety.

PRECISION COOLANT TECHNOLOGY

Coolant exit holes directed toward the insert flank control heat in the cutting zone and prolong tool life, while three coolant nozzles aimed at the rake face control the temperature, facilitate chip evacuation and support chip formation.

Features & Benefits

- Precision 3D coolant technology supplied directly to the cutting edge
- Low cutting forces and excellent chip control
- Heavy-duty chip geometry for the largest feed rates
- High-performance, cutting-edge strength and rigid clamping system
- Eight cutting edges per insert
- RN geometry for small and large depths of cut without sacrificing chip control and chip breakage

Applications

Turning

Facing

Chamfer Turning

Materials

P Steels

M Stainless Steels

K Cast Iron

Industries

General Engineering

Automotive

EV

Oil & Gas

Wind & Solar

EXPLORE FIX8

FIX8 • TOOL SELECTION GUIDES

	Tool Selection Guide - FIX8			
Internal Coolant		✔		✔
Main Operation				
Clamping	Kenlever™ P-Clamping		Kenlever P-Clamping	
Style	FIX8PCJN…		FIX8PCBN…	
Approach Angle [KRI]	93°		75°	
Shank Height [H]	25-40mm		32-40mm	

FIX8 • TOOL SELECTION GUIDES

	Tool Selection Guide			
	KM	KM	PSC	PSC
Internal Coolant	✔	✔	✔	✔
Main Operation				
Clamping	Kenlever™ P-Clamping	Kenlever P-Clamping	Kenlever P-Clamping	Kenlever P-Clamping
Style	KM...PCJN...FIX8HPC	KM...PCBN...FIX8HPC	PSC...PCJN...FIX8HPC	PSC...PCBN...FIX8HPC
Approach Angle [KRI]	93°	75°	93°	75°
System Size [CSMS]	KM50, KM63 & KM80	KM50, KM63 & KM80	PSC50, PSC63, PSC80	PSC50, PSC63, PSC80

ISO TOOLHOLDERS • CATALOG NUMBERING SYSTEM

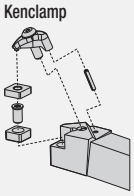
Each character in our Catalog Number signifies a specific trait of that product. Use the following key columns to easily identify which attributes apply.

FIX8PCJNR2525M19C

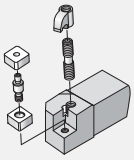
FIX8	S	C	L	C	R	
Family Name	Insert Holding Method	Insert Shape	Tool Style or Lead Angle	Insert Clearance Angle	Hand of Tool	Additional Information

S – Insert Holding Method

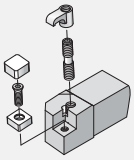
Kenclamp



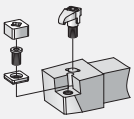
KENLOC



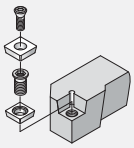
KENDEX



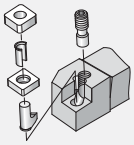
TOP NOTCH Profiling



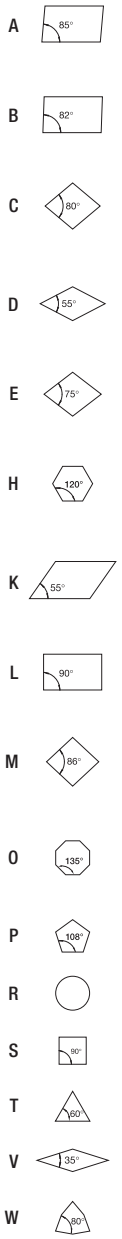
Screw-On



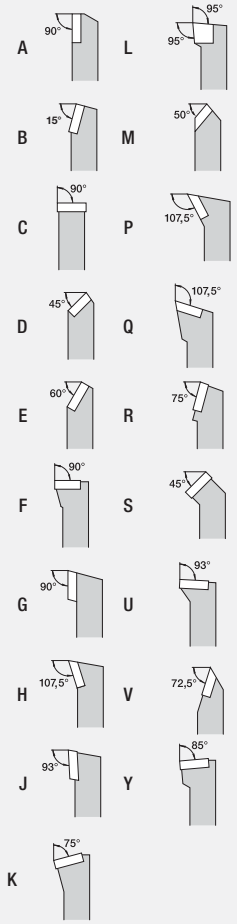
Kenlever



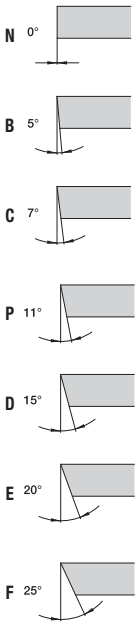
C – Insert Shape



L – Tool Style or Lead Angle

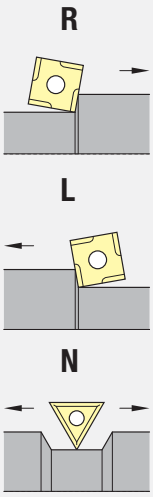


C – Insert Clearance Angle



R – Hand of Tool

R = Right hand
L = Left hand
N = Neutral



Additional Information

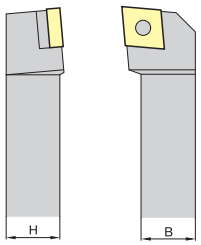
C = Deep pocket for ceramic insert
S = Single pocket locating wall
F = Straight shank, no offset

ISO TOOLHOLDERS • CATALOG NUMBERING SYSTEM • Continued

Each character in our Catalog Number signifies a specific trait of that product. Use the following key columns to easily identify which attributes apply.

FIX8PCJNR**2525M19C**

20	20	X	09	C	03
Shank Dimensions		Tool Length	Insert Size	Additional Information	Insert Thickness (optional)



The seventh and eighth position shall be a significant two-digit number that indicates the holder cross section.

- If the dimension for the width "B" or the height "H" is represented by a one-digit number, a 0 (zero) will be used in front of it.

Example: 8,0mm = 08

L1	ISO
32	A
40	B
50	C
60	D
70	E
80	F
90	G
100	H
110	J
125	K
140	L
150	M
160	N
170	P
180	Q
200	R
250	S
300	T
350	U
400	V
450	W
500	Y
Special Design	X

Cutting Edge Length L10					
H	Hexagon 120°		C	Rhomboid 80°	
			D	55°	
O	Octagon 135°		E	75°	
			M	86°	
			V	35°	
P	Pentagon 108°		W	Trigon 80° with enlarged corner angles	
S	Square 90°		L	Rectangular 90°	
T	Triangular 60°		A	Parallelogram 85°	
R	Round —		B	82°	
			K	55°	

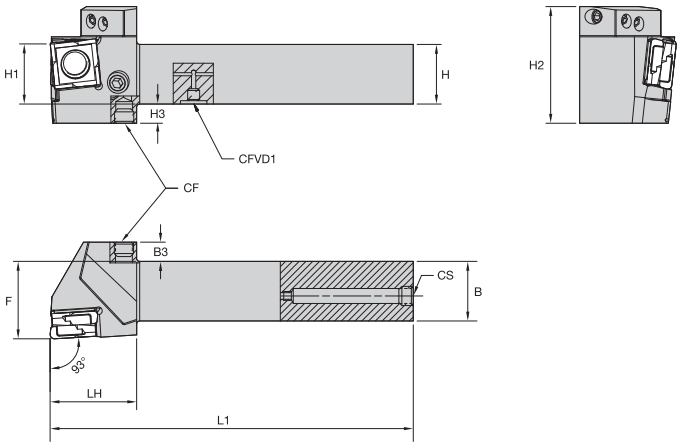
KC = Kenclamp

H4 = Wedgelock clamping system

M = MTS clamping system for ceramic and PcBN inserts

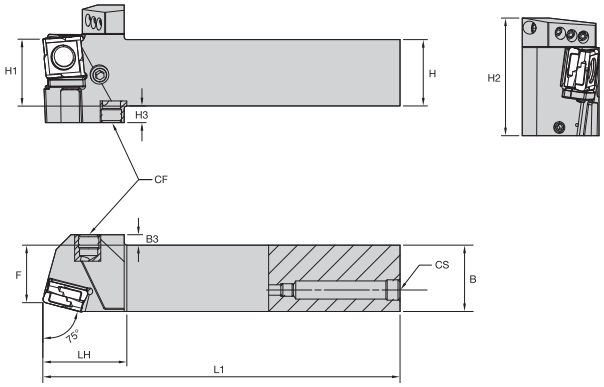
C = Through coolant

04 = 4,76mm
06 = 6,35mm



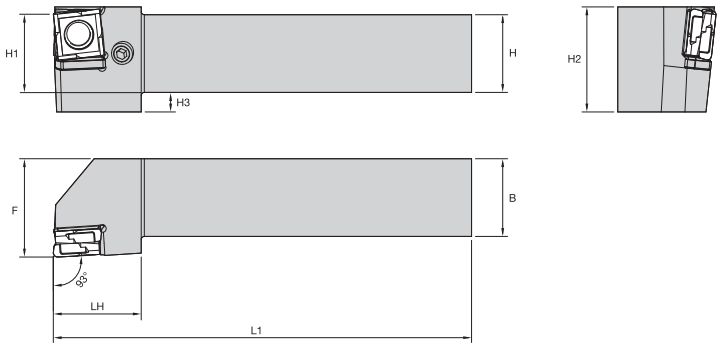
FIX8 • Toolholder • PCJN • 93° • Through Coolant

Order Number	Catalog Number	H	B	F	L1	LH	B3	H1	H3	CS	CF	CFVDI	GI
Right Hand													
6913114	FIX8PCJNR2525M19C	25	25	32,3	150,0	36	8	25	8	M8 X 1	M8 X 1	M5 X 0.8	CNUX191016R
6913091	FIX8PCJNR3232P19C	32	32	40,3	170,0	36	—	32	8	G1/8 - 28	G1/8 - 28	—	CNUX191016R
Left Hand													
6913115	FIX8PCJNL2525M19C	25	25	32,3	150,0	36	8	25	8	M8 X 1	M8 X 1	M5 X 0.8	CNUX191016L
6913092	FIX8PCJNL3232P19C	32	32	40,3	170,0	36	—	32	8	G1/8 - 28	G1/8 - 28	—	CNUX191016L



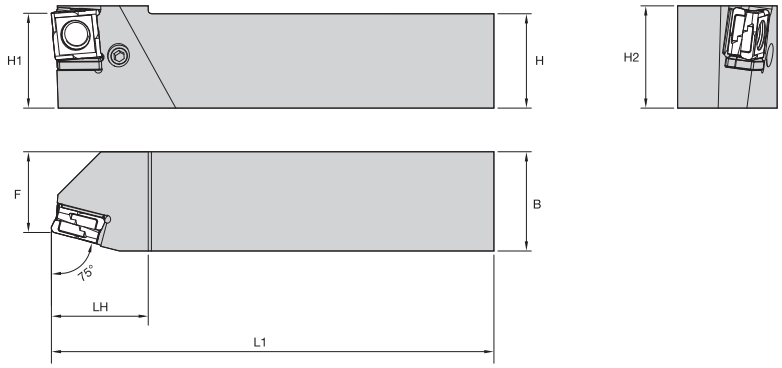
FIX8 • Toolholder • PCBN • 75° • Through Coolant

Order Number	Catalog Number	H	B	F	L1	LH	B3	H1	H3	CS	CF	GI
Right Hand												
6913106	FIX8PCBNR3232P19C	32	32	27,3	172,5	39	5	32	8	G1/8 - 28	G1/8 - 28	CNUX191016R
Left Hand												
6913107	FIX8PCBNL3232P19C	32	32	27,3	172,5	39	5	32	8	G1/8 - 28	G1/8 - 28	CNUX191016L



FIX8 • Toolholder • PCJN • 93°

Order Number	Catalog Number	H	B	F	L1	LH	H1	H2	H3	GI
Right Hand										
6913093	FIX8PCJNR3232P19	32	32	40,3	170,0	36	32	40	8	CNUX191016R
6913095	FIX8PCJNR4040R19	40	40	50,3	200,0	36	40	43	—	CNUX191016R
Left Hand										
6913094	FIX8PCJNL3232P19	32	32	40,3	170,0	36	32	40	8	CNUX191016L
6913096	FIX8PCJNL4040R19	40	40	50,3	200,0	36	40	43	—	CNUX191016L



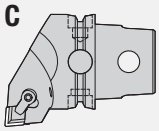
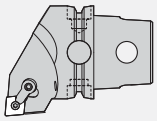
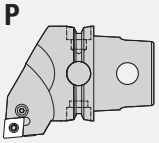
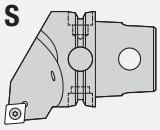
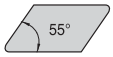
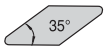
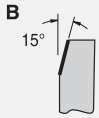
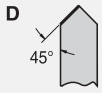
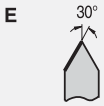
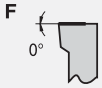
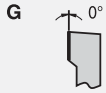
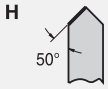
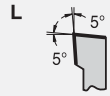
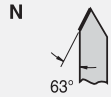
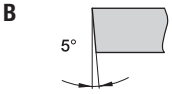
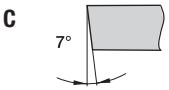
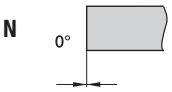
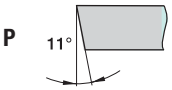
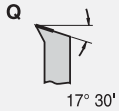
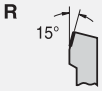
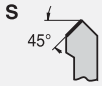
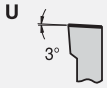
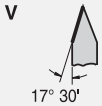
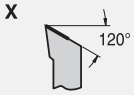
FIX8 • Toolholder • PCBN • 75°

Order Number	Catalog Number	H	B	F	L1	LH	H1	H2	GI
Right Hand									
6913108	FIX8PCBNR4040R19	40	40	35,3	202,5	39	40	43	CNUX191016R
Left Hand									
6913109	FIX8PCBNL4040R19	40	40	35,3	202,5	39	40	43	CNUX191016L

KM™ QUICK CHANGE • CATALOG NUMBERING SYSTEM

Each character in our Catalog Number signifies a specific trait of that product. Use the following key columns to easily identify which attributes apply.

KM63TSPCJNR12FIX8HPC

KM	63	TS	P	C	J	N
Connection Style Machine Side (CSMS)	System Size	Feature	Insert Holding Method	Insert Shape	Toolholder Style	Insert Clearance Angle
KM™ KM4X™ PSC	30 32 40 50 63 80 100 125	TS XMZ ATC 4X	**C**  **C-Clamping** Top clamping by clamping finger for inserts without hole **M**  **M-Clamping** Top and hole clamping for inserts with hole **P**  **P-Clamping** Insert clamping by toggle lever for insert with hole **S**  **S-Clamping** Center clamping by screw for inserts with hole	**C** **D** **K**  **R** **S** **T** **V**  **W** 	**B**  **D**  **E**  **F**  **G**  **H**  **J** **K** **L**  **N**  **P** 	**B**  **C**  **N**  **P**  **Q**  **R**  **S**  **U**  **V**  **X** 

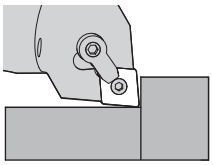
KM QUICK CHANGE • CATALOG NUMBERING SYSTEM • Continued

Each character in our Catalog Number signifies a specific trait of that product. Use the following key columns to easily identify which attributes apply.

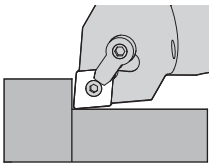
KM63TSPCJN**R12FIX8HPC**

R	12	FIX8	HPC
Hand of Tool	Insert Size Cutting Edge Length L10	Family Name	Additional Information
R = Right hand L = Left hand N = Neutral		MX = Ceramic inserts	HPC = High Pressure Coolant

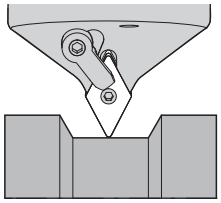
R



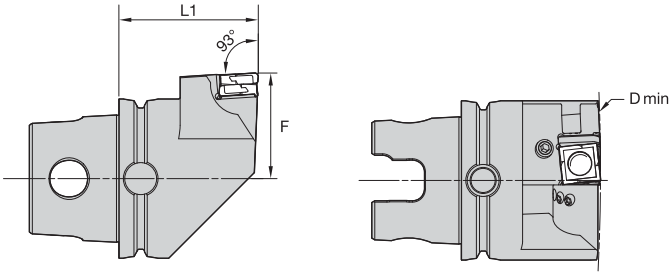
L



N

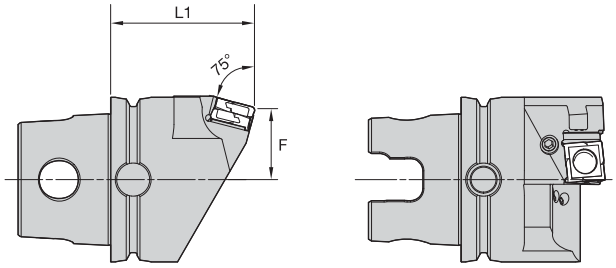


IC	C	D	K	R	S	T	V	W
3,97	—	04	—	03	03	06	—	—
4,76	04	05	—	04	04	08	08	S3
5,56	05	06	03	05	05	09	09	03
6,00	—	—	—	06	—	—	—	—
6,35	06	07	04	06	06	11	11	04
7,94	08	09	05	07	07	13	13	05
8,00	—	—	—	08	—	—	11	—
9,52	09	11	06	09	09	16	16	06
9,52	—	—	—	—	—	—	—	—
10,00	—	—	—	10	—	—	—	—
11,11	11	13	07	11	11	19	19	07
12,00	—	—	—	12	—	—	—	—
12,70	12	15	08	12	12	22	22	08
14,29	14	17	09	14	14	24	24	09
15,88	16	19	10	15	15	27	27	10
16,00	—	—	—	16	—	—	—	—
17,46	17	21	11	17	17	30	30	11
19,05	19	23	13	19	19	33	33	13
20,00	—	—	—	20	—	—	—	—
22,22	22	27	15	22	22	38	38	15
25,00	—	—	—	25	—	—	—	—
25,40	25	31	17	25	25	44	44	17
31,75	32	38	21	31	31	54	54	21
32,00	—	—	—	32	—	—	—	—



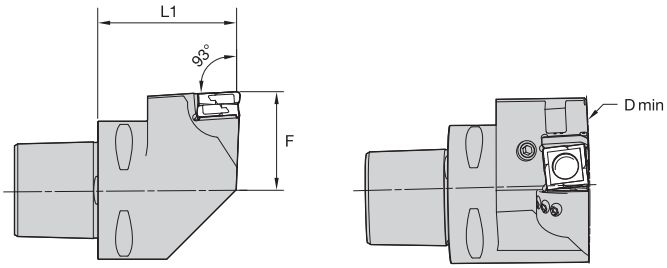
FIX8 • Toolholder • KM • PCJN • 93° • Through Coolant

Order Number	Catalog Number	CSMS System Size	D min	F	L1	GI
Right Hand						
6939711	KM50TSPCJNR19FIX8HPC	KM50TS	850	35,0	60,0	CNUX191016R
6741041	KM63TSPCJNR19FIX8HPC	KM63TS	2000	43,0	60,0	CNUX191016R
6741045	KM80TSPCJNR19FIX8HPC	KM80TS	2000	53,0	70,0	CNUX191016R
Left Hand						
6939712	KM50TSPCJNL19FIX8HPC	KM50TS	850	35,0	60,0	CNUX191016L
6741042	KM63TSPCJNL19FIX8HPC	KM63TS	2000	43,0	60,0	CNUX191016L
6741046	KM80TSPCJNL19FIX8HPC	KM80TS	2000	53,0	70,0	CNUX191016L



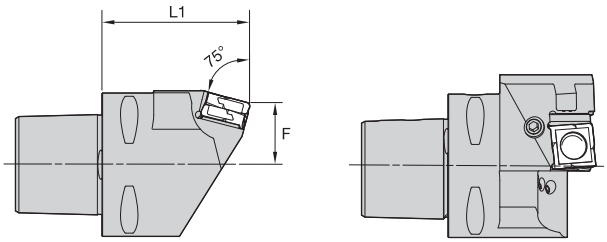
FIX8 • Toolholder • KM • PCBN • 75° • Through Coolant

Order Number	Catalog Number	CSMS System Size	F	L1	GI
Right Hand					
6939713	KM50TSPCBNR19FIX8HPC	KM50TS	20,5	60,0	CNUX191016R
6741043	KM63TSPCBNR19FIX8HPC	KM63TS	27,0	60,0	CNUX191016R
6741047	KM80TSPCBNR19FIX8HPC	KM80TS	35,0	70,0	CNUX191016R
Left Hand					
6939719	KM50TSPCBNL19FIX8HPC	KM50TS	20,5	60,0	CNUX191016L
6741044	KM63TSPCBNL19FIX8HPC	KM63TS	27,0	60,0	CNUX191016L
6741048	KM80TSPCBNL19FIX8HPC	KM80TS	35,0	70,0	CNUX191016L



FIX8 • Toolholder • PSC • PCJN • 93° • Through Coolant

Order Number	Catalog Number	CSMS System Size	D min	F	L1	Gl
Right Hand						
6939657	PSC50PCJNR19FIX8HPC	PSC50	850	35	60	CNUX191016R
6921218	PSC63PCJNR19FIX8HPC	PSC63	2000	45	65	CNUX191016R
6990519	PSC80PCJNR19FIX8HPC	PSC80	2000	55	80	CNUX191016R
Left Hand						
6939658	PSC50PCJNL19FIX8HPC	PSC50	850	35	60	CNUX191016L
6921219	PSC63PCJNL19FIX8HPC	PSC63	2000	45	65	CNUX191016L
6990520	PSC80PCJNL19FIX8HPC	PSC80	2000	55	80	CNUX191016L



FIX8 • Toolholder • PSC • PCBN • 75° • Through Coolant

Order Number	Catalog Number	CSMS System Size	F	L1	Gl
Right Hand					
6939659	PSC50PCBNR19FIX8HPC	PSC50	22	60	CNUX191016R
6921220	PSC63PCBNR19FIX8HPC	PSC63	27	65	CNUX191016R
6990641	PSC80PCBNR19FIX8HPC	PSC80	35	80	CNUX191016R
Left Hand					
6939660	PSC50PCBNL19FIX8HPC	PSC50	22	60	CNUX191016L
6921351	PSC63PCBNL19FIX8HPC	PSC63	27	65	CNUX191016L
6990642	PSC80PCBNL19FIX8HPC	PSC80	35	80	CNUX191016L

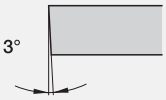
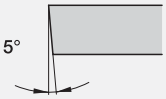
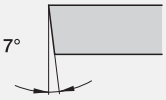
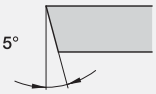
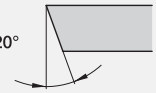
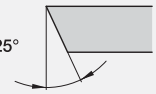
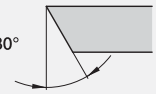
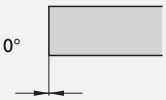
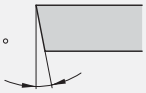
CATALOG NUMBERING SYSTEM

Each character in our Catalog Number signifies a specific trait of that product. Use the following key columns and corresponding images to easily identify which attributes apply.

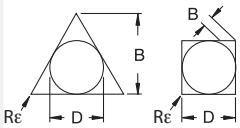
CNMG120408FP

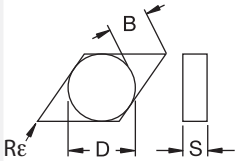
C	N	M	G	12
Insert Shape	Insert Clearance Angle	Tolerance Class	Insert Features	Size

H	Hexagon 120°	
O	Octagon 135°	
P	Pentagon 108°	
R	Round—	
S	Square 90°	
T	Triangular 60°	
C **D** **E** **M** **V**	Rhomboid 80° 55° 75° 86° 35°	
W	Trigon 80° with enlarged corner angles	
L	Rectangular 90°	
A **B** **N/K**	Parallelogram 85° 82° 55°	

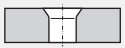
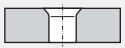
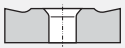
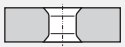
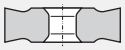
A	3°	
B	5°	
C	7°	
D	15°	
E	20°	
F	25°	
G	30°	
N	0°	
P	11°	
O	Indicated for other clearance angles requiring descriptions.	

Tolerances apply prior to edge prep and coating





D = Theoretical diameter of the insert inscribed circle
S = Thickness
B = See figures below

N	
R	
F	
A	
M	
G	
W	
T	
Q	
U	
B	
H	
C	
J	
X	Special Design

Code for inch cutting edge length "L10"

"D" mm	C	D	R	S	T	V	W
3,97	S4	04	03	03	06	—	—
4,76	04	05	04	04	08	08	S3
5,56	05	06	05	05	09	09	03
6,00	—	—	06	—	—	—	—
6,35	06	07	06	06	11	11	04
7,94	08	09	07	07	13	13	05
8,00	—	—	08	—	—	—	—
9,52	09	11	09	09	16	16	06
10,00	—	—	10	—	—	—	—
11,11	11	13	11	11	19	19	07
12,00	—	—	12	—	—	—	—
12,70	12	15	12	12	22	22	08
14,29	14	17	14	14	24	24	09
15,88	16	19	15	15	27	27	10
16,00	—	—	16	—	—	—	—
17,46	17	21	17	17	30	30	11
19,05	19	23	19	19	33	33	13
20,00	—	—	20	—	—	—	—
22,22	22	27	22	22	38	38	15
25,00	—	—	25	—	—	—	—
25,40	25	31	25	25	44	44	17
31,75	32	38	31	31	54	54	21
32,00	—	—	32	—	—	—	—

Tolerance Class	Tolerance on "D"	Tolerance on "B"	Tolerance on "S"
C	±0,025	±0,013	±0,025
H	±0,013	±0,013	±0,025
E	±0,025	±0,025	±0,025
G	±0,025	±0,025	±0,013
M	See tables on next page		±0,013
U	See tables on next page		±0,013

CATALOG NUMBERING SYSTEM • Continued

Each character in our Catalog Number signifies a specific trait of that product. Use the following key columns and corresponding images to easily identify which attributes apply.

CNMG12**0408FP**

04	**08**			**FP**
Thickness S	**Corner Radius "Rε"**	**Hand of Insert (optional)**	**Cutting Edge (optional)**	**Chipbreaker (optional)**

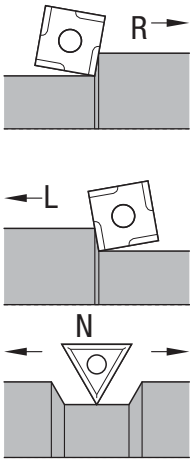
symbol mm	thickness mm
—	0,79
T0	1,00
01	1,59
T1	1,98
02	2,38
03	3,18
T3	3,97
04	4,76
05	5,56
06	6,35
07	7,94
9	9,52
11	11,11
12	12,70

symbol mm	corner radius mm
X0	0,04
01	0,1
02	0,2
04	0,4
08	0,8
12	1,2
16	1,6
20	2,0
24	2,4
28	2,8
32	3,2
00	round insert
M0	round insert
—	round insert

R = Right hand

L = Left hand

N = Neutral



F Sharp

E Rounded

T Chamfered

S Chamfered and Rounded

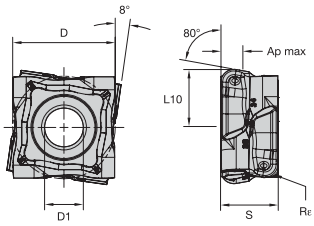
K Double-Chamfered

P Double-Chamfered and Rounded

F = Sharp
FF = Fine Finishing
FN = Finishing Negative
MV = Medium Versatile
MN = Medium Negative
MR = Medium Roughing
RN = Roughing Negative
UN = Universal Medium
FP = Finishing Positive
MP = Medium Positive
RP = Roughing Positive
RM = Roughing Medium
RH = Roughing Heavy
FW = Finishing Wiper
MW = Medium Wiper
FS = Finishing Sharp
MS = Medium Sharp
RW = Roughing Wiper
HP = High Positive
UP = Universal Positive
K = Light-Feed Chip Control
UF = Ultra-Fine Finishing
LF = Light Finishing
MF = Medium Finishing
E = Hone Only
T = Negative Land
S = Negative Land Plus Hone
MP-K = Medium Positive

"D"	± Tolerance on "D"			
	Class M Tolerance			Class U Tolerance
	Shapes S, T, C, R, & W	Shape D	Shape V	Shapes S, T, & C
mm	mm	mm	mm	mm
3,97	0,05	–	–	–
4,76	0,05	–	–	0,08
5,56	0,05	0,05	0,05	0,08
6,35	0,05	0,05	0,05	0,08
7,94	0,05	0,05	0,05	0,08
9,52	0,05	0,05	0,05	0,08
11,11	0,08	0,08	0,08	0,13
12,70	0,08	0,08	0,08	0,13
14,29	0,08	0,08	0,08	0,13
15,88	0,10	0,10	0,10	0,18
17,46	0,10	0,10	0,10	0,18
19,05	0,10	0,10	0,10	0,18
22,22	0,13	–	–	0,25
25,40	0,13	–	–	0,25
31,75	0,15	–	–	0,25

"D"	± Tolerance on "B"			
	Class M Tolerance			Class U Tolerance
	Shapes S, T, C, R, & W	Shape D	Shape V	Shapes S, T, & C
mm	mm	mm	mm	mm
3,97	0,08	–	–	–
4,76	0,08	–	–	0,13
5,56	0,08	0,11	–	0,13
6,35	0,08	0,11	–	0,13
7,94	0,08	0,11	–	0,13
9,52	0,08	0,11	0,18	0,13
11,11	0,13	0,15	–	–
12,70	0,13	0,15	0,25	0,20
14,29	0,13	0,15	–	–
15,88	0,15	0,18	–	0,27
17,46	0,15	0,18	–	0,27
19,05	0,15	0,18	–	0,27
22,22	0,15	–	–	0,38
25,40	0,18	–	–	0,38
31,75	0,20	–	–	0,38



FIX8 • Negative Insert • CNUX-RN

	KCP10B	KCP25B	KCP40B	KCPK05
P	●	●	●	●
M			○	
K	○	○		●
N				
S				
H				

● Primary
○ Secondary

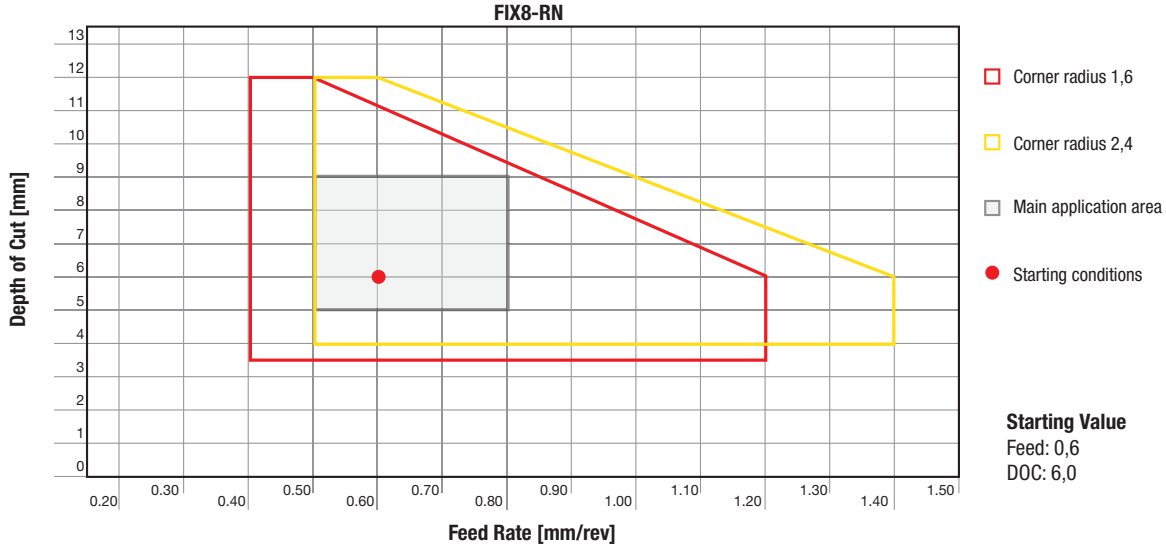
Catalog Number	D	D1	L10	S	Rε	KCP10B	KCP25B	KCP40B	KCPK05
Right Hand									
CNUX191016RRN	19,05	7,21	12,00	10,58	1,60	6710681	6710685	6710689	6917560
CNUX191024RRN	19,05	7,21	12,00	10,58	2,40	6710683	6710687	6710701	6917612
Left Hand									
CNUX191016LRN	19,05	7,21	12,00	10,58	1,60	6710682	6710686	6710690	6917611
CNUX191024LRN	19,05	7,21	12,00	10,58	2,40	6710684	6710688	6710702	6917613

FIX8
Application Data • Grade Recommendations

● Primary
○ Secondary

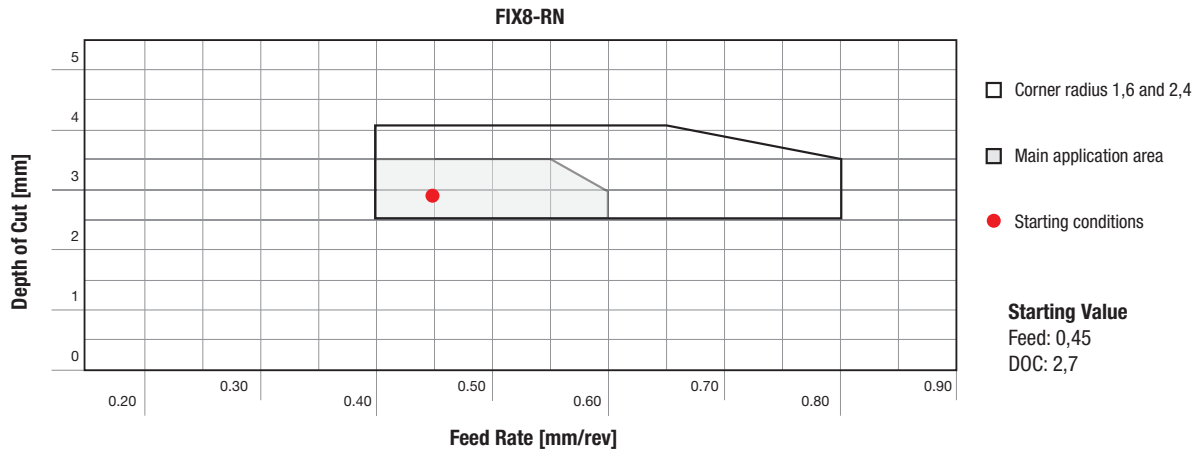
	Conditions	Negative Geometry -RN			
		KCP10B	KCP25B	KCP40B	KCPK05
P	Heavily Interrupted Cut		○	●	
	Lightly Interrupted Cut	●	●	●	
	Varying Depth of Cut	●	●		●
	Smooth Cut	●			●
M	Heavily Interrupted Cut			○	
	Lightly Interrupted Cut			○	
K	Heavily Interrupted Cut	○	○		
	Lightly Interrupted Cut	○	○		●
	Varying Depth of Cut	○	○		●
	Smooth Cut	○			●

FIX8
Application Data • Feed & Depth of Cut • Longitudinal Turning



NOTE: For the 25mm toolholders, KM50 and PSC50, it is recommended to not surpass 80% of the maximum depth of cut or the maximum feed rate due to toolholder stability.

FIX8
Application Data • Feed & Depth of Cut • Face Turning



NOTE: For the 25mm toolholders, KM50 and PSC50, it is recommended to not surpass 80% of the maximum depth of cut or the maximum feed rate due to toolholder stability.

FIX8
Application Data • Speed

Material Group		KCPK05		KCP10B		KCP25B		KCP40B	
		Speed – m/min							
		min	max	min	max	min	max	min	max
P	0-1	125	320	100	315	95	250	90	170
	2	125	280	125	245	95	225	90	160
	3	125	195	120	175	95	160	70	120
	4	65	145	65	140	50	125	35	100
	5	105	190	105	210	85	190	75	105
	6	105	190	75	190	75	155	55	100
M	1	–	–	–	–	–	–	55	95
	2	–	–	–	–	–	–	55	90
	3	–	–	–	–	–	–	55	95
K	1	215	460	180	460	180	430	–	–
	2	110	290	110	270	110	250	–	–
	3	120	270	125	270	125	250	–	–

FIX8

LET'S TAKE YOUR **MANUFACTURING**
TO THE **NEXT LEVEL**

kennametal.com/**FIX8**

KBH10B & KBH20B HARDENED STEEL GRADES

Precision PcBN Mini Tip Inserts Make Hard Turning Look Easy

Kenloc™ and Screw-On PVD coated mini tip inserts are the latest additions to the KBH10B and KBH20B PcBN hard-turning portfolio. These robust inserts are designed with an improved edge prep and wiper design for optimal surface finish and cost-efficiency without compromising performance.

Features & Benefits

- Gold top layer for easy identification of flank wear
- Improved edge prep and wiper design offer optimal surface finishes
- PVD multilayer coating with thermal barrier to reduce crater wear and enhance adhesion strength
- Increased material removal rates for high productivity without compromising tool life

Applications

Turning
Facing
Profiling
Boring
Back Boring
I.D. Facing
O.D. Facing

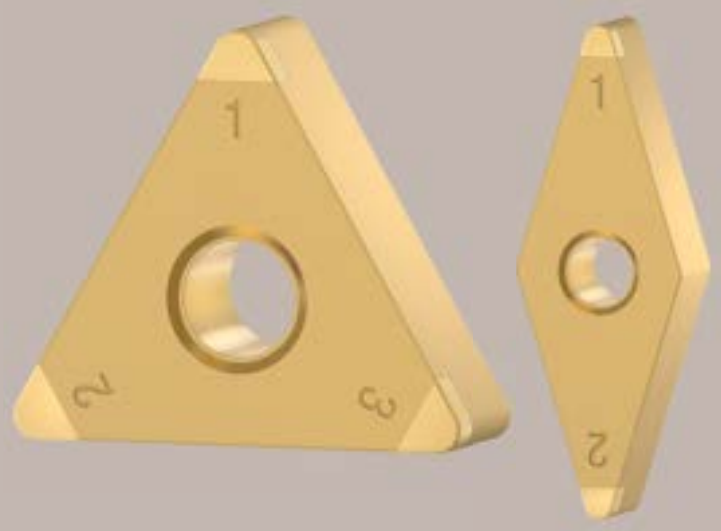
Materials

H Hardened Steels

Industries

General Engineering
Automotive
EV
Wind & Solar

WE DON'T CUT CORNERS. WE CUT METAL.



EXPLORE
KBH10B & KBH20B

ISO INSERTS • CATALOG NUMBERING SYSTEM

Each character in our catalog number signifies a specific trait of that product. Use the following key columns and corresponding images to easily identify which attributes apply.

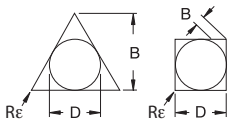
CNGN120408T02020

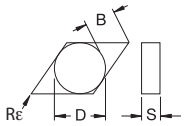
C	N	G	N	12
Insert Shape	Insert Clearance Angle	Tolerance Class	Insert Features	Size

H	Hexagon 120°	
O	Octagon 135°	
P	Pentagon 108°	
R	Round —	
S	Square 90°	
T	Triangular 60°	
C D E M V	Rhomboid 80° 55° 75° 86° 35°	
W	Trigon 80° with enlarged corner angles	
L	Rectangular 90°	
A B N/K	Parallelogram 85° 82° 55°	

A	3°
B	5°
C	7°
D	15°
E	20°
F	25°
G	30°
N	0°
P	11°
O	For other clearance angles requiring descriptions.

Tolerances apply prior to edge prep and coating





D = Theoretical diameter of the insert inscribed circle
S = Thickness
B = See figures below

N	
R	
F	
A	
M	
G	
W	
T	
Q	
U	
B	
H	
C	
J	
X V	Special Design

"D" mm	Code for metric cutting edge length "L10" C	D	R	S	T	V	W
3,97	S4	04	03	03	06	—	—
4,76	04	05	04	04	08	08	S3
5,56	05	06	05	05	09	09	03
6,00	—	—	06	—	—	—	—
6,35	06	07	06	06	11	11	04
7,94	08	09	07	07	13	13	05
8,00	—	—	08	—	—	—	—
9,52	09	11	09	09	16	16	06
10,00	—	—	10	—	—	—	—
11,11	11	13	11	11	19	19	07
12,00	—	—	12	—	—	—	—
12,70	12	15	12	12	22	22	08
14,29	14	17	14	14	24	24	09
15,88	16	19	15	15	27	27	10
16,00	—	—	16	—	—	—	—
17,46	17	21	17	17	30	30	11
19,05	19	23	19	19	33	33	13
20,00	—	—	20	—	—	—	—
22,22	22	27	22	22	38	38	15
25,00	—	—	25	—	—	—	—
25,40	25	31	25	25	44	44	17
31,75	32	38	31	31	54	54	21
32,00	—	—	32	—	—	—	—

tolerance class*	tolerance on "D"	tolerance on "B"	tolerance on "S"
C	±0,025	±0,013	±0,025
H	±0,013	±0,013	±0,025
E	±0,025	±0,025	±0,025
G	±0,025	±0,025	±0,013
M	See tables on next page		±0,013
U	See tables on next page		±0,013

*Tolerances apply prior to edge prep and coating.

ISO INSERTS • CATALOG NUMBERING SYSTEM • Continued

Each character in our catalog number signifies a specific trait of that product. Use the following key columns and corresponding images to easily identify which attributes apply.

CNGN012**0408T02020**

04	08		T	020	20		
Thickness "S"	**Corner Radius "Rε"**	**Hand of Insert (optional)**	**Cutting Edge (optional)**	**T-Land Width (optional)**	**T-Land Angle (optional)**	**Tip Style (optional)**	**Chipbreaker (optional)**

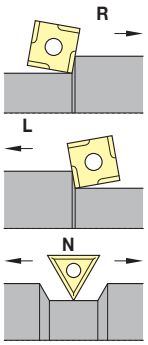
symbol mm	thick-ness mm
—	0,79
T0	1,00
01	11,59
T1	1,98
02	2,38
03	3,18
T3	3,97
04	4,76
05	5,56
06	6,35
07	7,94
09	9,52
11	11,11
12	12,70

symbol mm	corner radius mm
X0	0,4
01	0,1
02	0,2
04	0,4
08	0,8
12	1,2
16	1,6
20	2,0
24	2,4
28	2,8
32	3,2
00	round insert
M0	round insert

R = Right hand

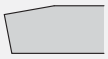
L = Left hand

N = Neutral



F*
Sharp

E
Rounded

T* 
Chamfered

S*
Chamfered and Rounded

K
Double-Chamfered

P
Double-Chamfered and Rounded

*Also available in wiper style.

symbol ISO	size mm
010	0,01
020	0,02

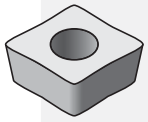
symbol	size
10	10°
15	15°
20	20°
25	25°
30	30°

FW = Finishing Wiper

MW = Medium Wiper

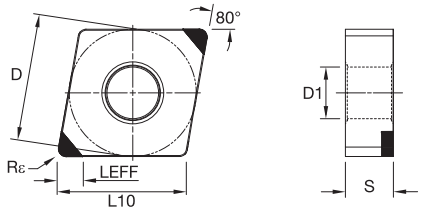
GW = General Wiper

symbol	usage
C	full tip
M	mini tip
MT	multi-tip
MMT	multi mini tip
ST	single tip
DMT	double-sided mini-tip



	± Tolerance on "D"			
	Class M Tolerance			Class U Tolerance
"D"	Shapes S, T, C, R, & W	Shape D	Shape V	Shapes S, T, & C
mm	mm	mm	mm	mm
3,97	0,05	–	–	–
4,76	0,05	–	–	0,08
5,56	0,05	0,05	0,05	0,08
6,35	0,05	0,05	0,05	0,08
7,94	0,05	0,05	0,05	0,08
9,52	0,05	0,05	0,05	0,08
11,11	0,08	0,08	0,08	0,13
12,70	0,08	0,08	0,08	0,13
14,29	0,08	0,08	0,08	0,13
15,88	0,10	0,10	0,10	0,18
17,46	0,10	0,10	0,10	0,18
19,05	0,10	0,10	0,10	0,18
22,22	0,13	–	–	0,25
25,40	0,13	–	–	0,25
31,75	0,15	–	–	0,25

	± Tolerance on "B"			
	Class M Tolerance			Class U Tolerance
"D"	Shapes S, T, C, R, & W	Shape D	Shape V	Shapes S, T, & C
mm	mm	mm	mm	mm
3,97	0,08	–	–	–
4,76	0,08	–	–	0,13
5,56	0,08	0,11	–	0,13
6,35	0,08	0,11	–	0,13
7,94	0,08	0,11	–	0,13
9,52	0,08	0,11	0,18	0,13
11,11	0,13	0,15	–	–
12,70	0,13	0,15	0,25	0,20
14,29	0,13	0,15	–	–
15,88	0,15	0,18	–	0,27
17,46	0,15	0,18	–	0,27
19,05	0,15	0,18	–	0,27
22,22	0,15	–	–	0,38
25,40	0,18	–	–	0,38
31,75	0,20	–	–	0,38

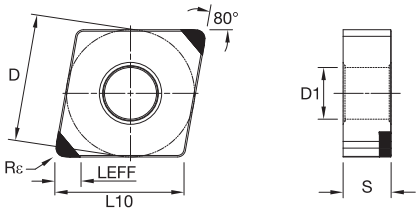


Kenloc • Negative Inserts • CNGA • Single-Sided Mini Tip

● Primary
○ Secondary

	KBH10B	KBH20B
P		
M		
K		
N		
S		
H	●	●

ANSI Catalog Number	ISO Catalog Number	D	D1	L10	S	Rε	LEFF	KBH10B	KBH20B
CNGA431S0415MMT	CNGA120404S01015MMT	12,70	5,16	12,90	4,78	0,40	2,444	7309689	7309814
CNGA431S0525MMT	CNGA120404S01225MMT	12,70	5,16	12,90	4,79	0,40	2,444	7309690	7309815
CNGA432EMMT	CNGA120408EMMT	12,70	5,16	12,90	4,78	0,80	2,367	—	7309817
CNGA432S0415MMT	CNGA120408S01015MMT	12,70	5,16	12,90	4,79	0,80	2,367	7309735	7309818
CNGA432S0525MMT	CNGA120408S01225MMT	12,70	5,16	12,90	4,79	0,80	2,367	7309736	7309819
CNGA432S0735MMT	CNGA120408S01735MMT	12,70	5,16	12,90	4,78	0,80	2,367	—	7316667
CNGA433S0415MMT	CNGA120412S01015MMT	12,70	5,16	12,90	4,79	1,20	2,382	7309738	7309832
CNGA433S0525MMT	CNGA120412S01225MMT	12,70	5,16	12,90	4,79	1,20	2,382	7309739	7309833
CNGA433S0735MMT	CNGA120412S01735MMT	12,70	5,16	12,90	4,79	1,20	2,382	—	7309835

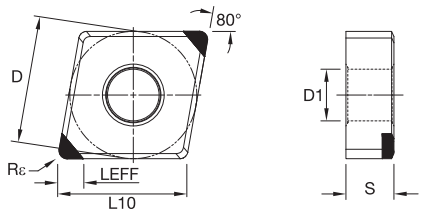


Kenloc • Negative Inserts • CNGA • Wiper • Single-Sided Mini Tip

● Primary
○ Secondary

	KBH10B	KBH20B
P		
M		
K		
N		
S		
H	●	●

ANSI Catalog Number	ISO Catalog Number	D	D1	L10	S	Rε	LEFF	KBH10B	KBH20B
CNGA431S0615GWMMT	CNGA120404S01515GWMMT	12,70	5,16	12,90	4,79	0,40	2,378	7309733	7309816
CNGA432S0615GWMMT	CNGA120408S01515GWMMT	12,70	5,16	12,90	4,79	0,80	2,306	7309737	7309831
CNGA433S0615GWMMT	CNGA120412S01515GWMMT	12,70	5,16	12,90	4,79	1,20	2,325	7309740	7309834

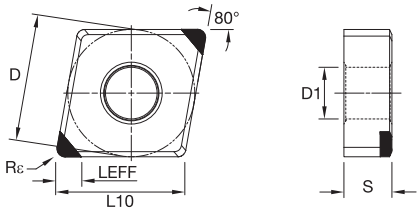


Kenloc • Negative Inserts • CNGM • Chipbreaker • Single-Sided Mini Tip

● Primary
○ Secondary

	KBH10B	KBH20B
P		
M		
K		
N		
S		
H	●	●

ANSI Catalog Number	ISO Catalog Number	D	D1	L10	S	Rε	LEFF	KBH10B	KBH20B
CNGM431S0525CB1MMT	CNGM120404S01225CB1MMT	12,70	5,16	12,90	4,78	0,40	2,444	7316669	7316668
CNGM432S0525CB1MMT	CNGM120408S01225CB1MMT	12,70	5,16	12,90	4,78	0,80	2,367	7316692	7316693

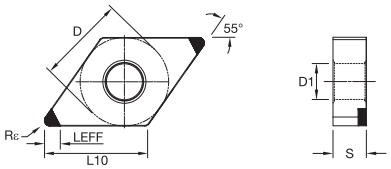


Kenloc • Negative Inserts • CNGM • Wiper with Chipbreaker • Single-Sided Mini Tip

● Primary
○ Secondary

	KBH10B	KBH20B
P		
M		
K		
N		
S		
H	●	●

ANSI Catalog Number	ISO Catalog Number	D	D1	L10	S	Rε	LEFF	KBH10B	KBH20B
CNGM431S0525GWCB1MMT	CNGM120404S01225GWCB1MMT	12,70	5,16	12,90	4,78	0,40	2,378	7316691	7316670
CNGM432S0525GWCB1MMT	CNGM120408S01225GWCB1MMT	12,70	5,16	12,90	4,78	0,80	2,306	7316694	7316695

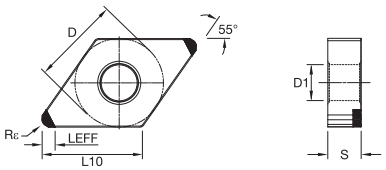


Kenloc • Negative Inserts • DNGA • Single-Sided Mini Tip

● Primary
○ Secondary

	KBH10B	KBH20B
P		
M		
K		
N		
S		
H	●	●

ANSI Catalog Number	ISO Catalog Number	D	D1	L10	S	Rε	LEFF	KBH10B	KBH20B
DNGA431S0415MMT	DNGA150404S01015MMT	12,70	5,16	15,50	4,78	0,40	2,618	7309741	7309836
DNGA431S0525MMT	DNGA150404S01225MMT	12,70	5,16	15,50	4,79	0,40	2,618	7316734	7309837
DNGA432EMMT	DNGA150408EMMT	12,70	5,16	15,50	4,79	0,80	2,249	—	7309838
DNGA432S0415MMT	DNGA150408S01015MMT	12,70	5,16	15,50	4,79	0,80	2,249	7309743	7309839
DNGA432S0525MMT	DNGA150408S01225MMT	12,70	5,16	15,50	4,79	0,80	2,246	7309744	7309840
DNGA432S0735MMT	DNGA150408S01735MMT	12,70	5,16	15,50	4,78	0,80	2,249	—	7316736
DNGA433S0415MMT	DNGA150412S01015MMT	12,70	5,16	15,50	4,79	1,20	2,219	7309745	—
DNGA433S0525MMT	DNGA150412S01225MMT	12,70	5,16	15,50	4,79	1,20	2,219	7309746	7309852
DNGA433S0735MMT	DNGA150412S01735MMT	12,70	5,16	15,50	4,78	1,20	2,219	—	7316737
DNGA441S0415MMT	DNGA150604S01015MMT	12,70	5,16	15,50	6,37	0,40	2,618	7309747	7309853
DNGA441S0525MMT	DNGA150604S01225MMT	12,70	5,16	15,50	6,37	0,40	2,618	7316738	7309854
DNGA442EMMT	DNGA150608EMMT	12,70	5,16	15,50	6,37	0,80	2,249	—	7316739
DNGA442S0415MMT	DNGA150608S01015MMT	12,70	5,16	15,50	6,37	0,80	2,249	7309748	7309855
DNGA442S0525MMT	DNGA150608S01225MMT	12,70	5,16	15,50	6,37	0,80	2,249	7309774	7309856
DNGA442S0735MMT	DNGA150608S01735MMT	12,70	5,16	15,50	6,35	0,80	2,249	—	7309857
DNGA443S0415MMT	DNGA150612S01015MMT	12,70	5,16	15,50	6,37	1,20	2,219	7309775	—
DNGA443S0525MMT	DNGA150612S01225MMT	12,70	5,16	15,50	6,37	1,20	2,219	7309749	7309858
DNGA443S0735MMT	DNGA150612S01735MMT	12,70	5,16	15,50	6,37	1,20	2,219	—	7316742

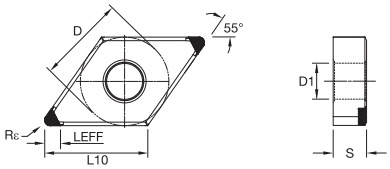


Kenloc • Negative Inserts • DNGA • Wiper • Single-Sided Mini Tip

● Primary
○ Secondary

	KBH10B	KBH20B
P		
M		
K		
N		
S		
H	●	●

ANSI Catalog Number	ISO Catalog Number	D	D1	L10	S	Rε	LEFF	KBH10B	KBH20B
DNGA432S0615GWMMT	DNGA150408S01515GWMMT	12,70	5,16	15,50	4,79	0,80	1,838	7316735	7309851
DNGA442S0615GWMMT	DNGA150608S01515GWMMT	12,70	5,16	15,50	6,37	0,80	1,838	7316740	7316741

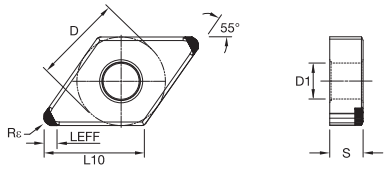


Kenloc • Negative Inserts • DNGM • Chipbreaker • Single-Sided Mini Tip

● Primary
○ Secondary

	KBH20B
P	
M	
K	
N	
S	
H	●

ANSI Catalog Number	ISO Catalog Number	D	D1	L10	S	Rε	LEFF	KBH20B
DNGM431S0525CB1MMT	DNGM150404S01225CB1MMT	12,70	5,16	15,50	4,78	0,40	2,618	7316743
DNGM432S0525CB1MMT	DNGM150408S01225CB1MMT	12,70	5,16	15,50	4,78	0,80	2,249	7316745
DNGM441S0525CB1MMT	DNGM150604S01225CB1MMT	12,70	5,16	15,50	6,37	0,40	2,618	7316747
DNGM442S0525CB1MMT	DNGM150608S01225CB1MMT	12,70	5,16	15,50	6,37	0,80	2,249	7316749

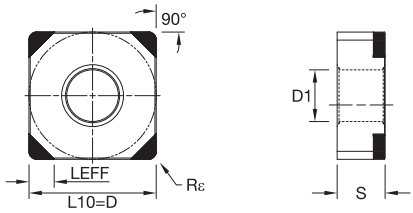


Kenloc • Negative Inserts • DNGM • Wiper with Chipbreaker • Single-Sided Mini Tip

● Primary
○ Secondary

	KBH20B
P	
M	
K	
N	
S	
H	●

ANSI Catalog Number	ISO Catalog Number	D	D1	L10	S	Rε	LEFF	KBH20B
DNGM431S0525GWCB1MMT	DNGM150404S01225GWCB1MMT	12,70	5,16	15,50	4,78	0,40	2,071	7316744
DNGM432S0525GWCB1MMT	DNGM150408S01225GWCB1MMT	12,70	5,16	15,50	4,78	0,80	1,838	7316746
DNGM441S0525GWCB1MMT	DNGM150604S01225GWCB1MMT	12,70	5,16	15,50	6,37	0,40	2,618	7316748
DNGM442S0525GWCB1MMT	DNGM150608S01225GWCB1MMT	12,70	5,16	15,50	6,37	0,80	1,838	7316750



Kenloc • Negative Inserts • SNGA • Single-Sided Mini Tip

● Primary
○ Secondary

	KBH10B	KBH20B
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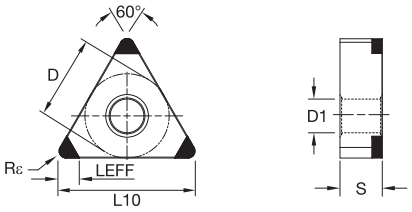
ANSI Catalog Number	ISO Catalog Number	D	D1	L10	S	Rε	LEFF	KBH10B	KBH20B
SNGA432S0415MMT	SNGA120408S01015MMT	12,70	5,16	12,70	4,78	0,80	2,499	7316773	7316774
SNGA432S0525MMT	SNGA120408S01225MMT	12,70	5,16	12,70	4,79	0,80	2,499	7309750	7309859
SNGA433S0415MMT	SNGA120412S01015MMT	12,70	5,16	12,70	4,79	1,20	2,596	7316775	7316776
SNGA433S0525MMT	SNGA120412S01225MMT	12,70	5,16	12,70	4,79	1,20	2,596	7316777	7309860



Kenloc • Negative Inserts • TNGA • Single-Sided Mini Tip

● Primary
○ Secondary

	KBH10B	KBH20B
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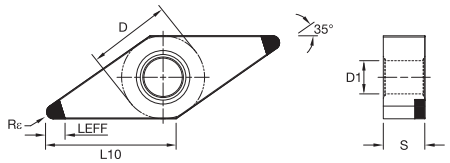
ANSI Catalog Number	ISO Catalog Number	D	D1	L10	S	Rε	LEFF	KBH10B	KBH20B
TNGA331S0415MMT	TNGA160404S01015MMT	9,53	3,81	16,50	4,78	0,40	2,536	7309751	7309861
TNGA331S0525MMT	TNGA160404S01225MMT	9,53	3,81	16,50	4,78	0,40	2,536	7316781	7309863
TNGA332S0415MMT	TNGA160408S01015MMT	9,53	3,81	16,50	4,78	0,80	2,536	7309752	7309864
TNGA332S0525MMT	TNGA160408S01225MMT	9,53	3,81	16,50	4,78	0,80	2,243	7309753	7309865
TNGA332S0735MMT	TNGA160408S01735MMT	9,53	3,81	16,50	4,78	0,80	2,243	7309754	7309866
TNGA333S0415MMT	TNGA160412S01015MMT	9,53	3,81	16,50	4,78	1,20	2,222	7316783	7316784
TNGA333S0525MMT	TNGA160412S01225MMT	9,53	3,81	16,50	4,78	1,20	2,222	7309755	7309867
TNGA333S0735MMT	TNGA160412S01735MMT	9,53	3,81	16,50	4,78	1,20	2,222	7309756	—



Kenloc • Negative Inserts • VNGA • Single-Sided Mini Tip

● Primary
○ Secondary

	KBH10B	KBH20B
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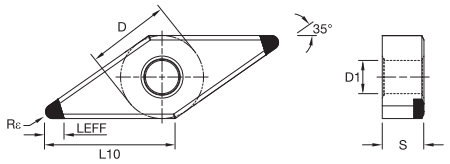
H	●	●

ANSI Catalog Number	ISO Catalog Number	D	D1	L10	S	Rε	LEFF	KBH10B	KBH20B
VNGA331S0415MMT	VNGA160404S01015MMT	9,53	3,81	16,61	4,79	0,40	2,988	7309757	7309868
VNGA331S0525MMT	VNGA160404S01225MMT	9,53	3,81	16,61	4,78	0,40	2,988	7309759	7309869
VNGA331S0735MMT	VNGA160404S01735MMT	9,53	3,81	16,61	4,78	0,40	2,988	—	7309871
VNGA332S0415MMT	VNGA160408S01015MMT	9,53	3,81	16,61	4,78	0,80	2,119	7309760	7309872
VNGA332S0525MMT	VNGA160408S01225MMT	9,53	3,81	16,61	4,78	0,80	2,119	7309771	7309873
VNGA332S0735MMT	VNGA160408S01735MMT	9,53	3,81	16,61	4,78	0,80	2,119	—	7316796
VNGA333S0525MMT	VNGA160412S01225MMT	9,53	3,81	16,61	4,79	1,20	2,278	7316797	7309874



Kenloc • Negative Inserts • VNGM • Chipbreaker • Single-Sided Mini Tip

● Primary
○ Secondary

	KBH10B	KBH20B
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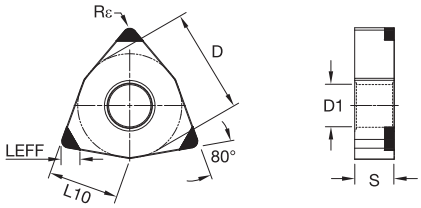
ANSI Catalog Number	ISO Catalog Number	D	D1	L10	S	Rε	LEFF	KBH10B	KBH20B
VNGM331S0525CB1MMT	VNGM160404S01225CB1MMT	9,53	3,81	16,61	4,78	0,40	2,988	7316798	7316799
VNGM332S0525CB1MMT	VNGM160408S01225CB1MMT	9,53	3,81	16,61	4,78	0,80	2,119	7316801	7316800



Kenloc • Negative Inserts • WNGA • Single-Sided Mini Tip

● Primary
○ Secondary

	KBH10B	KBH20B
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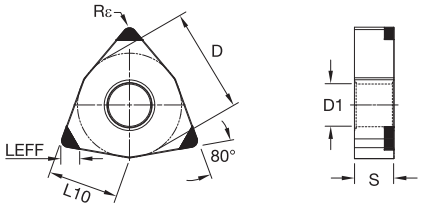
ANSI Catalog Number	ISO Catalog Number	D	D1	L10	S	Rε	LEFF	KBH10B	KBH20B
WNGA431S0415MMT	WNGA080404S01015MMT	12,70	5,16	8,69	4,78	0,40	2,444	7316802	7309877
WNGA431S0525MMT	WNGA080404S01225MMT	12,70	5,16	8,69	4,78	0,40	2,444	7316803	7316804
WNGA432S0415MMT	WNGA080408S01015MMT	12,70	5,16	8,69	4,78	0,80	2,367	7309772	—
WNGA432S0525MMT	WNGA080408S01225MMT	12,70	5,16	8,69	4,78	0,80	2,367	7309773	7309878
WNGA432S0735MMT	WNGA080408S01735MMT	12,70	5,16	8,69	4,78	0,80	2,367	—	7309880



Kenloc • Negative Inserts • WNGA • Wiper • Single-Sided Mini Tip

● Primary
○ Secondary

	KBH10B	KBH20B
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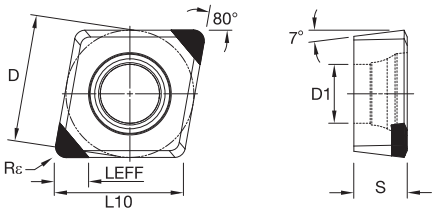
ANSI Catalog Number	ISO Catalog Number	D	D1	L10	S	Rε	LEFF	KBH10B	KBH20B
WNGA432S0615GWMMT	WNGA080408S01515GWMMT	12,70	5,16	8,69	4,78	0,80	2,303	7316805	7309879



Screw-On • Positive Inserts • CCGT • Chipbreaker • Single-Sided Mini Tip

● Primary
○ Secondary

	KBH20B
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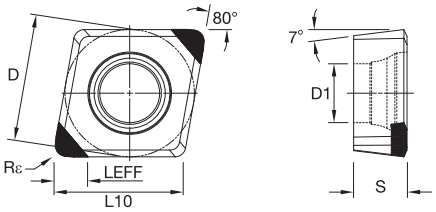
ANSI Catalog Number	ISO Catalog Number	D	D1	L10	S	Rε	LEFF	KBH20B
CCGT3251S0525CB1MMT	CCGT09T304S01225CB1MMT	9,53	4,40	9,67	3,99	0,40	2,503	7316275
CCGT3252S0525CB1MMT	CCGT09T308S01225CB1MMT	9,53	4,40	9,67	3,99	0,80	2,427	7316277



Screw-On • Positive Inserts • CCGT • Wiper with Chipbreaker • Single-Sided Mini Tip

● Primary
○ Secondary

	KBH20B
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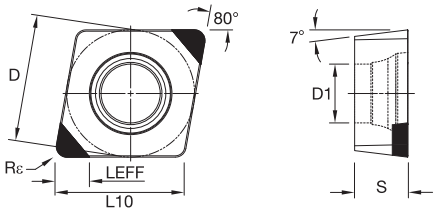
H	●

ANSI Catalog Number	ISO Catalog Number	D	D1	L10	S	Rε	LEFF	KBH20B
CCGT3251S0525GWCB1MMT	CCGT09T304S01225GWCB1MMT	9,53	4,40	9,67	3,99	0,40	2,438	7316276
CCGT3252S0525GWCB1MMT	CCGT09T308S01225GWCB1MMT	9,53	4,40	9,67	3,99	0,80	2,365	7316278



Screw-On • Positive Inserts • CCGW • Single-Sided Mini Tip

● Primary
○ Secondary

	KBH10B	KBH20B
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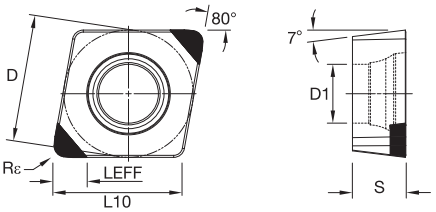
ANSI Catalog Number	ISO Catalog Number	D	D1	L10	S	Rε	LEFF	KBH10B	KBH20B
CCGW21505S0415MMT	CCGW060202S01015MMT	6,35	2,80	6,45	2,40	0,20	2,577	7309698	7316279
CCGW21505S0525MMT	CCGW060202S01225MMT	6,35	2,80	6,45	2,40	0,20	2,577	—	7310631
CCGW2151S0415MMT	CCGW060204S01015MMT	6,35	2,80	6,45	2,40	0,40	2,539	7309699	7316280
CCGW2151S0525MMT	CCGW060204S01225MMT	6,35	2,80	6,45	2,40	0,40	2,538	7316661	7310632
CCGW2152EMMT	CCGW060208EMMT	6,35	2,80	6,45	2,40	0,80	2,461	7309700	—
CCGW32505S0415MMT	CCGW09T302S01015MMT	9,53	4,40	9,67	3,99	0,20	2,542	7309891	—
CCGW3251EMMT	CCGW09T304EMMT	9,53	4,40	9,67	3,99	0,40	2,509	—	7316664
CCGW3251S0415MMT	CCGW09T304S01015MMT	9,53	4,40	9,67	3,99	0,40	2,503	7309892	7310633
CCGW3251S0525MMT	CCGW09T304S01225MMT	9,53	4,40	9,67	3,99	0,40	2,496	7309893	7310634
CCGW3252EMMT	CCGW09T308EMMT	9,53	4,40	9,67	3,99	0,80	2,433	—	7316665
CCGW3252S0415MMT	CCGW09T308S01015MMT	9,53	4,40	9,67	3,99	0,80	2,427	7309894	7310636
CCGW3252S0525MMT	CCGW09T308S01225MMT	9,53	4,40	9,67	3,99	0,80	2,419	7309895	7310637
CCGW432S0415MMT	CCGW120408S01015MMT	12,70	5,50	12,90	4,78	0,80	2,358	—	7310639
CCGW432S0525MMT	CCGW120408S01225MMT	12,70	5,50	12,90	4,78	0,80	2,354	—	7316666



Screw-On • Positive Inserts • CCGW • Wiper • Single-Sided Mini Tip

● Primary
○ Secondary

	KBH10B	KBH20B
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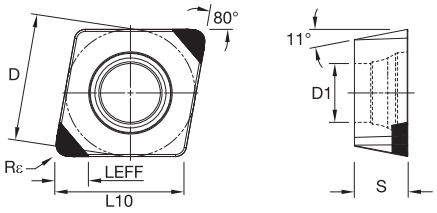
ANSI Catalog Number	ISO Catalog Number	D	D1	L10	S	Rε	LEFF	KBH10B	KBH20B
CCGW3251S0615GWMMT	CCGW09T304S01515GWMMT	9,53	4,40	9,67	3,99	0,40	2,440	—	7310635
CCGW3252S0615GWMMT	CCGW09T308S01515GWMMT	9,53	4,40	9,67	3,99	0,80	2,367	7309896	7310638



Screw-On • Positive Inserts • CPGW • Single-Sided Mini Tip

● Primary
○ Secondary

	KBH10B	KBH20B
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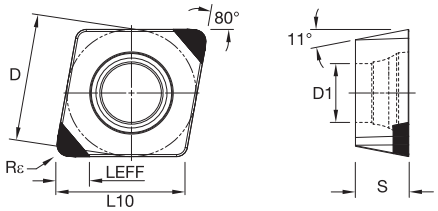
H	●	●

ANSI Catalog Number	ISO Catalog Number	D	D1	L10	S	Rε	LEFF	KBH10B	KBH20B
CPGW21505EMMT	CPGW060202EMMT	6,35	2,80	6,45	2,40	0,20	2,551	7316696	7316697
CPGW21505S0415MMT	CPGW060202S01015MMT	6,35	2,80	6,45	2,40	0,20	2,577	—	7316698
CPGW21505S0525MMT	CPGW060202S01225MMT	6,35	2,80	6,45	2,40	0,20	2,577	—	7316699
CPGW2151S0415MMT	CPGW060204S01015MMT	6,35	2,80	6,45	2,40	0,40	2,538	7316701	7316700
CPGW2151S0525MMT	CPGW060204S01225MMT	6,35	2,80	6,45	2,40	0,40	2,538	—	7316702
CPGW2152S0415MMT	CPGW060208S01015MMT	6,35	2,80	6,45	2,40	0,80	2,432	7316704	7316703
CPGW2152S0525MMT	CPGW060208S01225MMT	6,35	2,80	6,45	2,40	0,80	2,462	—	7316705
CPGW3251S0415MMT	CPGW09T304S01015MMT	9,53	4,40	9,67	3,99	0,40	2,500	7309897	—
CPGW3252S0415MMT	CPGW09T308S01015MMT	9,53	4,40	9,67	3,99	0,80	2,423	7309898	—



Screw-On • Positive Inserts • CPGW • Wiper • Single-Sided Mini Tip

● Primary
○ Secondary

	KBH10B	KBH20B
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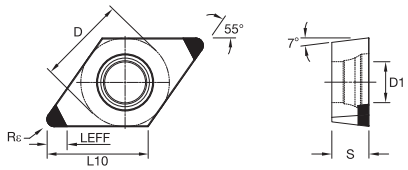
ANSI Catalog Number	ISO Catalog Number	D	D1	L10	S	Rε	LEFF	KBH10B	KBH20B
		mm	mm	mm	mm	mm	mm		
CPGW2152S0615GWMMT	CPGW060208S01515GWMMT	6,35	2,80	6,45	2,40	0,80	2,368	—	7316706
CPGW3251S0615GWMMT	CPGW09T304S01515GWMMT	9,53	4,40	9,67	3,99	0,40	2,437	7316707	—
CPGW3252S0615GWMMT	CPGW09T308S01515GWMMT	9,67	4,40	9,67	3,99	0,80	2,365	7309911	—



Screw-On • Positive Inserts • DCGW • Single-Sided Mini Tip

	KBH10B	KBH20B
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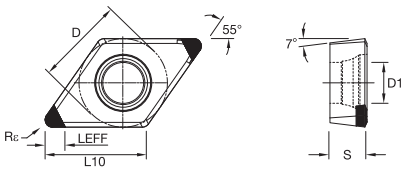
● Primary
○ Secondary

ANSI Catalog Number	ISO Catalog Number	D	D1	L10	S	Rε	LEFF	KBH10B	KBH20B
DCGW21505EMMT	DCGW070202EMMT	6,35	2,80	7,75	2,40	0,20	2,844	7316712	7316713
DCGW21505S0415MMT	DCGW070202S01015MMT	6,35	2,80	7,75	2,40	0,20	2,839	7309912	7316714
DCGW21505S0525MMT	DCGW070202S01225MMT	6,35	2,80	7,75	2,40	0,20	2,833	—	7310640
DCGW2151S0415MMT	DCGW070204S01015MMT	6,35	2,80	7,75	2,40	0,40	2,655	7309913	7310641
DCGW2151S0525MMT	DCGW070204S01225MMT	6,35	2,80	7,75	2,40	0,40	2,649	7309914	7310642
DCGW2152S0415MMT	DCGW070208S01015MMT	6,35	2,80	7,75	2,40	0,80	2,286	—	7316715
DCGW2152S0525MMT	DCGW070208S01225MMT	6,35	2,80	7,75	2,40	0,80	2,280	—	7316716
DCGW32505S0415MMT	DCGW11T302S01015MMT	9,53	4,40	11,63	3,99	0,20	2,727	7309915	7316717
DCGW32505S0525MMT	DCGW11T302S01225MMT	9,53	4,40	11,63	3,99	0,20	2,727	—	7310643
DCGW3251EMMT	DCGW11T304EMMT	9,53	4,40	11,63	3,99	0,40	2,521	—	7316718
DCGW3251S0415MMT	DCGW11T304S01015MMT	9,53	4,40	11,63	3,99	0,40	2,543	7309916	7310646
DCGW3251S0525MMT	DCGW11T304S01225MMT	9,53	4,40	11,63	3,99	0,40	2,543	7309917	7310647
DCGW3252EMMT	DCGW11T308EMMT	9,53	4,40	11,63	3,99	0,80	2,152	7316719	7316720
DCGW3252S0415MMT	DCGW11T308S01015MMT	9,53	4,40	11,63	3,99	0,80	2,175	7309918	7310648
DCGW3252S0525MMT	DCGW11T308S01225MMT	9,53	4,40	11,63	3,99	0,80	2,175	7309919	7310649
DCGW3253S0525MMT	DCGW11T312S01225MMT	9,53	4,40	11,63	3,99	1,20	2,112	—	7316731



Screw-On • Positive Inserts • DCGT • Chipbreaker • Single-Sided Mini Tip

	KBH20B
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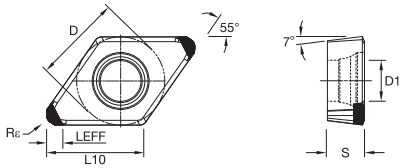
● Primary
○ Secondary

ANSI Catalog Number	ISO Catalog Number	D	D1	L10	S	Rε	LEFF	KBH20B
DCGT3251S0525CB1MMT	DCGT11T304S01225CB1MMT	9,53	4,40	11,63	3,99	0,40	2,517	7316708
DCGT3252S0525CB1MMT	DCGT11T308S01225CB1MMT	9,53	4,40	11,63	3,99	0,80	2,149	7316710



Screw-On • Positive Inserts • DCGT • Wiper with Chipbreaker • Single-Sided Mini Tip

	KBH20B
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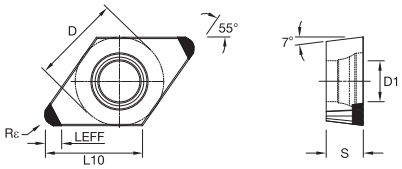
● Primary
○ Secondary

ANSI Catalog Number	ISO Catalog Number	D	D1	L10	S	Rε	LEFF	KBH20B
DCGT3251S0525GWCB1MMT	DCGT11T304S01225GWCB1MMT	9,53	4,40	11,63	3,99	0,40	1,971	7316709
DCGT3252S0525GWCB1MMT	DCGT11T308S01225GWCB1MMT	9,53	4,40	11,63	3,99	0,80	1,738	7316711



Screw-On • Positive Inserts • DCGW • Wiper • Single-Sided Mini Tip

	KBH10B	KBH20B
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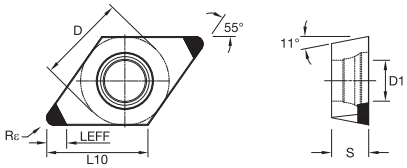
H	●	●

● Primary
○ Secondary

ANSI Catalog Number	ISO Catalog Number	D	D1	L10	S	Rε	LEFF	KBH10B	KBH20B
DCGW3252S0615GWMMT	DCGW11T308S01515GWMMT	9,53	4,40	11,63	3,99	0,79	1,756	7309920	7310650
DCGW3253S0615GWMMT	DCGW11T312S01515GWMMT	9,53	4,40	11,63	3,99	1,20	1,843	—	7316733

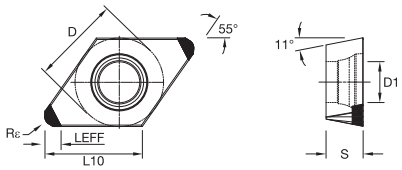


Screw-On • Positive Inserts • DPGW • Single-Sided Mini Tip

	KBH10B	KBH20B
P		
M		
K		
N		
S		
H	●	●

● Primary
○ Secondary

ANSI Catalog Number	ISO Catalog Number	D	D1	L10	S	Rε	LEFF	KBH10B	KBH20B
DPGW2151S0415MMT	DPGW070204S01015MMT	6,35	2,80	7,75	2,40	0,40	2,652	7316752	7316751
DPGW2151S0525MMT	DPGW070204S01225MMT	6,35	2,80	7,75	2,40	0,40	2,642	7316753	7316754
DPGW2152S0415MMT	DPGW070208S01015MMT	6,35	2,80	7,75	2,40	0,80	2,283	7316755	—
DPGW2152S0525MMT	DPGW070208S01225MMT	6,35	2,80	7,75	2,40	0,80	2,274	7316756	—
DPGW32505S0415MMT	DPGW11T302S01015MMT	9,53	4,40	11,63	3,99	0,20	2,727	7316758	7316757
DPGW32505S0525MMT	DPGW11T302S01225MMT	9,53	4,40	11,63	3,99	0,20	2,727	—	7316759
DPGW3251S0415MMT	DPGW11T304S01015MMT	9,53	4,40	11,63	3,99	0,40	2,543	7309931	7316760
DPGW3251S0525MMT	DPGW11T304S01225MMT	9,53	4,40	11,63	3,99	0,20	2,727	7316762	7316761
DPGW3252EMMT	DPGW11T308EMMT	9,53	4,40	11,63	3,99	0,80	2,175	7316763	—
DPGW3252S0415MMT	DPGW11T308S01015MMT	9,53	4,40	11,63	3,99	0,80	2,175	7316764	—
DPGW3252S0525MMT	DPGW11T308S01225MMT	9,53	4,40	11,63	3,99	0,80	2,146	7316765	—

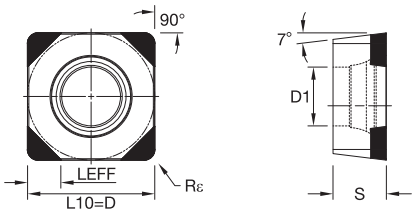


Screw-On • Positive Inserts • DPGW • Wiper • Single-Sided Mini Tip

	KBH10B
P	
M	
K	
N	
S	
H	●

● Primary
○ Secondary

ANSI Catalog Number	ISO Catalog Number	D	D1	L10	S	Rε	LEFF	KBH10B
DPGW3252S0615GWMMT	DPGW11T308S01515GWMMT	9,53	4,40	11,63	3,99	0,80	1,737	7316766

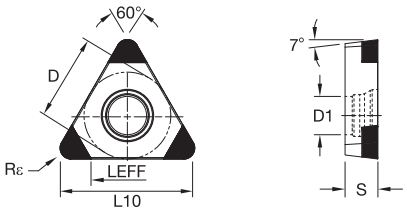


Screw-On • Positive Inserts • SCGW • Single-Sided Mini Tip

● Primary
○ Secondary

	KBH10B	KBH20B
P		
M		
K		
N		
S		
H	●	●

ANSI Catalog Number	ISO Catalog Number	D	D1	L10	S	Rε	LEFF	KBH10B	KBH20B
SCGW3251S0415MMT	SCGW09T304S01015MMT	9,53	4,40	9,53	3,97	0,40	3,000	—	7316767
SCGW3251S0525MMT	SCGW09T304S01225MMT	9,53	4,40	9,53	3,99	0,40	2,485	—	7316768
SCGW3252S0415MMT	SCGW09T308S01015MMT	9,53	4,40	9,53	3,99	0,80	2,493	7316770	7316769
SCGW3252S0525MMT	SCGW09T308S01225MMT	9,53	4,40	9,53	3,99	0,80	2,485	7316771	7316772

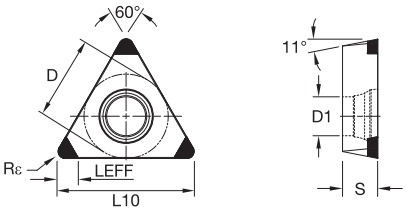


Screw-On • Positive Inserts • TCGW • Single-Sided Mini Tip

● Primary
○ Secondary

	KBH10B	KBH20B
P		
M		
K		
N		
S		
H	●	●

ANSI Catalog Number	ISO Catalog Number	D	D1	L10	S	Rε	LEFF	KBH10B	KBH20B
TCGW21505S0415MMT	TCGW110202S01015MMT	6,35	2,80	11,00	2,40	0,20	2,534	7316778	7316779
TCGW2151S0415MMT	TCGW110204S01015MMT	6,35	2,80	11,00	2,40	0,40	2,534	7309932	7310651
TCGW2151S0525MMT	TCGW110204S01225MMT	6,35	2,80	11,00	2,40	0,40	2,532	7309933	—
TCGW2152EMMT	TCGW110208EMMT	6,35	2,80	11,00	2,40	0,80	2,243	7316780	—
TCGW2152S0415MMT	TCGW110208S01015MMT	6,35	2,80	11,00	2,40	0,80	2,241	7309934	7310652
TCGW2152S0525MMT	TCGW110208S01225MMT	6,35	2,80	11,00	2,40	0,80	2,239	7309935	—

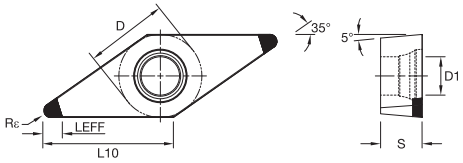


Screw-On • Positive Inserts • TPGW • Single-Sided Mini Tip

● Primary
○ Secondary

	KBH10B	KBH20B
P		
M		
K		
N		
S		
H	●	●

ANSI Catalog Number	ISO Catalog Number	D	D1	L10	S	Rε	LEFF	KBH10B	KBH20B
TPGW2151S0415MMT	TPGW110204S01015MMT	6,35	2,80	11,00	2,40	0,40	2,533	7316785	7310653
TPGW2152S0415MMT	TPGW110208S01015MMT	6,35	2,80	11,00	2,40	0,80	2,240	7316786	7310654
TPGW3252S0415MMT	TPGW16T308S01015MMT	9,53	4,40	16,50	3,99	0,80	2,240	—	7316787
TPGW3252S0525MMT	TPGW16T308S01225MMT	9,53	4,40	16,50	3,99	0,80	2,237	—	7316788

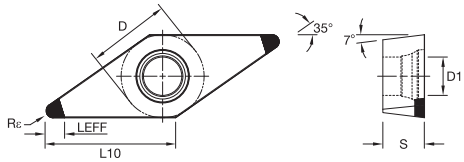


Screw-On • Positive Inserts • VBGW • Single-Sided Mini Tip

● Primary
○ Secondary

	KBH10B	KBH20B
P		
M		
K		
N		
S		
H	●	●

ANSI Catalog Number	ISO Catalog Number	D	D1	L10	S	Rε	LEFF	KBH10B	KBH20B
VBGW221S0415MMT	VBGW110304S01015MMT	6,35	2,80	11,07	3,20	0,40	2,986	7309936	7310655
VBGW221S0525MMT	VBGW110304S01225MMT	6,35	2,80	11,07	3,20	0,40	2,985	7316789	7310656
VBGW222S0415MMT	VBGW110308S01015MMT	6,35	2,80	11,07	3,20	0,80	2,117	7309937	7316790
VBGW222S0525MMT	VBGW110308S01225MMT	6,35	2,80	11,07	3,20	0,80	2,117	7316791	7310657
VBGW331S0415MMT	VBGW160404S01015MMT	9,53	4,40	16,61	4,78	0,40	2,987	7309938	7310658
VBGW332S0415MMT	VBGW160408S01015MMT	9,53	4,40	16,61	4,78	0,80	2,118	7309939	7310659
VBGW333S0415MMT	VBGW160412S01015MMT	9,53	4,40	16,61	4,78	1,20	2,277	—	7316792



Screw-On • Positive Inserts • VCGW • Single-Sided Mini Tip

● Primary
○ Secondary

	KBH10B	KBH20B
P		
M		
K		
N		
S		
H	●	●

ANSI Catalog Number	ISO Catalog Number	D	D1	L10	S	Rε	LEFF	KBH10B	KBH20B
VCGW331S0415MMT	VCGW160404S01015MMT	9,53	4,40	16,61	4,78	0,40	2,987	7316793	7316794
VCGW331S0525MMT	VCGW160404S01225MMT	9,53	4,40	16,61	4,78	0,40	2,985	—	7310660
VCGW332S0415MMT	VCGW160408S01015MMT	9,53	4,40	16,61	4,78	0,80	2,118	7316795	7310661
VCGW332S0525MMT	VCGW160408S01225MMT	9,53	4,40	16,61	4,78	0,80	2,117	—	7310662

KBH10B & KBH20B
Application Data

Hardened Materials; 44-48 HRC		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
H1	KBH10B	175	320	574	1050
	KBH20B	125	275	410	902

Hardened Materials; 48-55 HRC		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
H2	KBH10B	160	290	525	951
	KBH20B	115	250	377	820

Hardened Materials; 55-60 HRC		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
H3	KBH10B	140	260	459	853
	KBH20B	100	220	328	722

Hardened Materials; 60-66 HRC		m/min		SFM	
Material Group	Grade	MIN	MAX	MIN	MAX
H4	KBH10B	120	220	394	722
	KBH20B	90	180	295	591

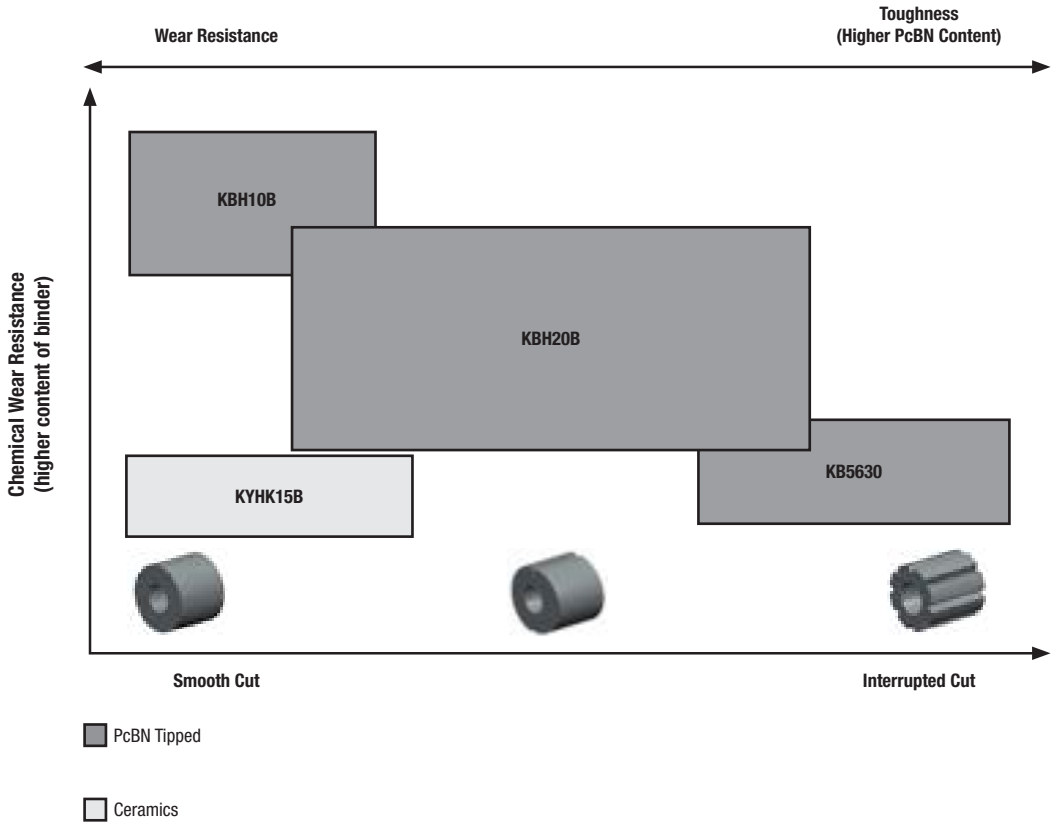
KBH10B & KBH20B
Application Data • Negative Rake

.NGA… & .NGM…		C-Style, D-Style, S-Style & W-Style							V-Style & T-Style					
		…MMT							…MMT					
		Feed			DOC				Feed			DOC		
Edge Prep	CR	MIN	START	MAX	MIN	START	MAX		MIN	START	MAX	MIN	START	MAX
E	0,8	0,05	**0,15**	0,25	0,03	**0,20**	0,30		0,05	**0,15**	0,25	0,03	**0,20**	0,30
S01015	0,4	0,05	**0,15**	0,25	0,03	**0,20**	0,30		0,05	**0,12**	0,20	0,03	**0,12**	0,20
	0,8	0,05	**0,15**	0,25	0,03	**0,20**	0,30		0,05	**0,15**	0,25	0,03	**0,20**	0,30
	1,2	0,05	**0,15**	0,25	0,03	**0,20**	0,30		0,05	**0,15**	0,25	0,03	**0,20**	0,30
S01225	0,4	0,05	**0,15**	0,25	0,03	**0,20**	0,30		0,05	**0,12**	0,20	0,03	**0,12**	0,20
	0,8	0,05	**0,15**	0,25	0,03	**0,20**	0,30		0,05	**0,15**	0,25	0,03	**0,20**	0,30
	1,2	0,05	**0,15**	0,25	0,03	**0,20**	0,30		0,05	**0,15**	0,25	0,03	**0,20**	0,30
S01735	0,4								0,05	**0,12**	0,20	0,03	**0,12**	0,20
	0,8	0,05	**0,15**	0,25	0,03	**0,20**	0,30		0,05	**0,15**	0,25	0,03	**0,20**	0,30
	1,2	0,05	**0,15**	0,25	0,03	**0,20**	0,30		0,05	**0,15**	0,25	0,03	**0,20**	0,30
S01225CB1	0,4	0,05	**0,18**	0,30	0,03	**0,30**	0,50		0,05	**0,18**	0,30	0,03	**0,27**	0,45
	0,8	0,05	**0,20**	0,35	0,03	**0,40**	0,70		0,05	**0,20**	0,35	0,03	**0,27**	0,45
S01515GW	0,4	0,05	**0,18**	0,30	0,03	**0,16**	0,25							
	0,8	0,05	**0,21**	0,35	0,03	**0,18**	0,28							
	1,2	0,05	**0,24**	0,40	0,03	**0,20**	0,30							
S01225GWCB1	0,4	0,05	**0,18**	0,30	0,03	**0,30**	0,50							
	0,8	0,05	**0,20**	0,35	0,03	**0,40**	0,70							

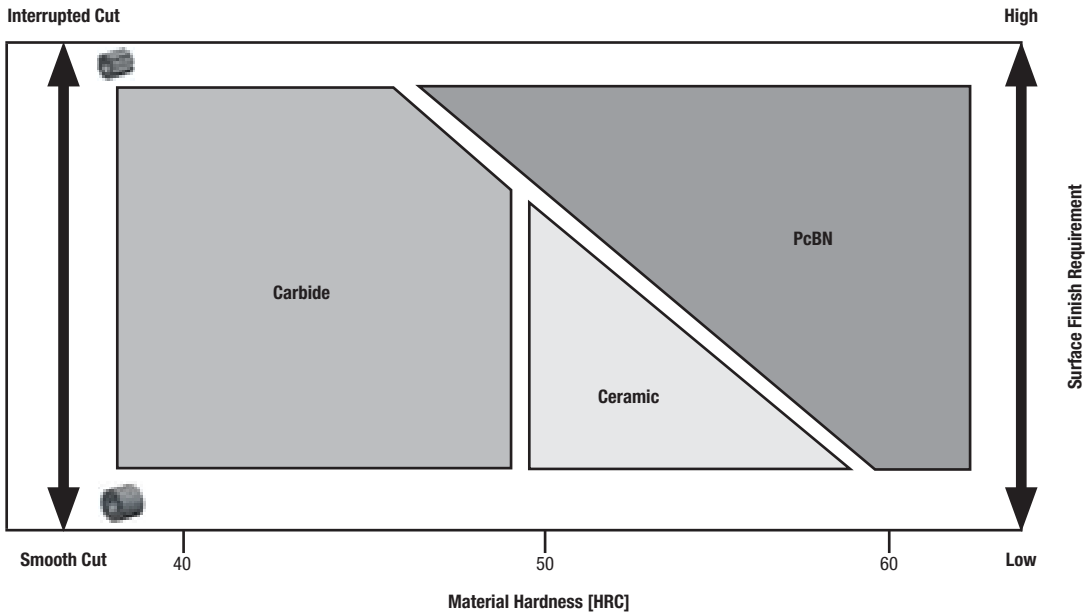
KBH10B & KBH20B
Application Data • Postive Rake

..GW… & ..GT…		C.GW09 / D.GW11 / S.GW09							C.GW06 / D.GW07 / T.GW11 / V.GW11 / V.GW16					
		…MMT							…MMT					
		Feed			DOC				Feed			DOC		
Edge Prep	CR	MIN	START	MAX	MIN	START	MAX		MIN	START	MAX	MIN	START	MAX
E	0,2								0,05	**0,09**	0,15	0,03	**0,13**	0,20
	0,4	0,05	**0,12**	0,20	0,03	**0,13**	0,20		0,05	**0,12**	0,20	0,03	**0,13**	0,20
	0,8	0,05	**0,15**	0,25	0,03	**0,20**	0,30		0,05	**0,15**	0,25	0,03	**0,16**	0,25
S01015	0,2	0,05	**0,09**	0,15	0,03	**0,13**	0,20		0,05	**0,09**	0,15	0,03	**0,13**	0,20
	0,4	0,05	**0,12**	0,20	0,03	**0,13**	0,20		0,05	**0,12**	0,20	0,03	**0,13**	0,20
	0,8	0,05	**0,15**	0,25	0,03	**0,20**	0,30		0,05	**0,12**	0,20	0,03	**0,16**	0,25
	1,2	0,05	**0,15**	0,25	0,03	**0,20**	0,30		0,05	**0,15**	0,25	0,03	**0,20**	0,30
S01225	0,2	0,05	**0,09**	0,15	0,03	**0,13**	0,20		0,05	**0,09**	0,15	0,03	**0,13**	0,20
	0,4	0,05	**0,12**	0,20	0,03	**0,13**	0,20		0,05	**0,12**	0,20	0,03	**0,13**	0,20
	0,8	0,05	**0,15**	0,25	0,03	**0,16**	0,25		0,05	**0,12**	0,20	0,03	**0,16**	0,25
	1,2	0,05	**0,15**	0,25	0,03	**0,20**	0,30							
S01225CB1	0,4	0,05	**0,18**	0,30	0,03	**0,30**	0,50							
	0,8	0,05	**0,20**	0,35	0,03	**0,40**	0,70							
S01515GW	0,4	0,05	**0,18**	0,30	0,03	**0,16**	0,25							
	0,8	0,05	**0,21**	0,35	0,03	**0,18**	0,28							
	1,2	0,05	**0,24**	0,40	0,03	**0,20**	0,30							
S01225GWCB1	0,4	0,05	**0,18**	0,30	0,03	**0,33**	0,50							
	0,8	0,05	**0,21**	0,35	0,03	**0,33**	0,50							

TOOL SELECTION – CHOOSING THE RIGHT CUTTING MATERIAL



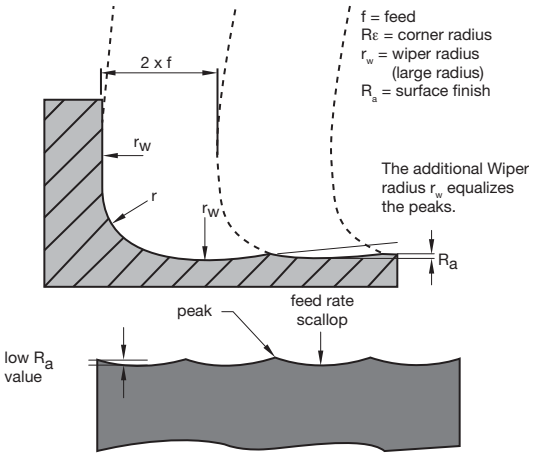
KYHK15B can be an excellent choice to reduce insert cost while almost obtaining the same performance of PcBN. Whenever it comes to smooth-cut applications and the need for high chemical wear resistance, KBH10B is the best choice.



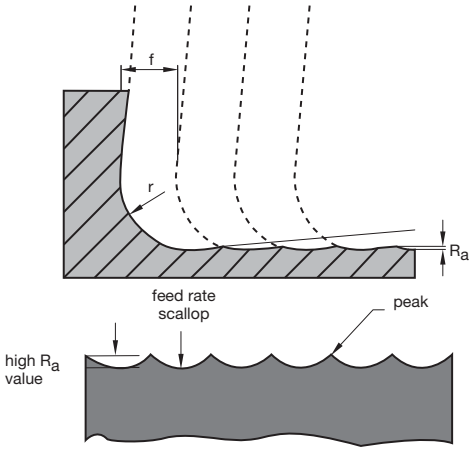
Depending on the surface requirement and the type of cut, the ceramic grade KYHK15B can be an economic alternative to PcBN inserts when machining hard materials >48 HRC.

PRINCIPLE OF A WIPER INSERT

Wiper insert

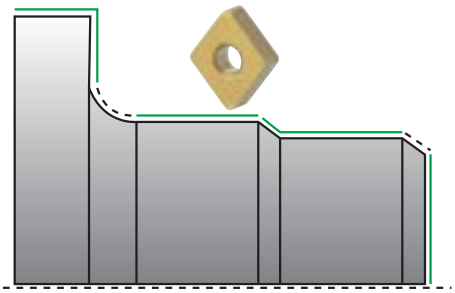


Regular insert

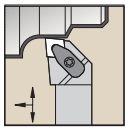


CHOOSING THE RIGHT INSERT STYLE

C-Style longitudinal turning and facing



Toolholder

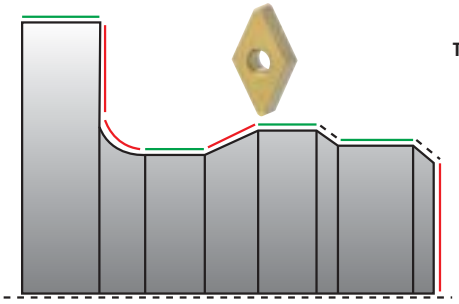


CN..80º insert for DCLN, PCLN, MCLN, CCLN 95º/-5º toolholder.

Surface finish with wiper effect.

Surface with effective corner radius.

D-Style longitudinal turning and facing



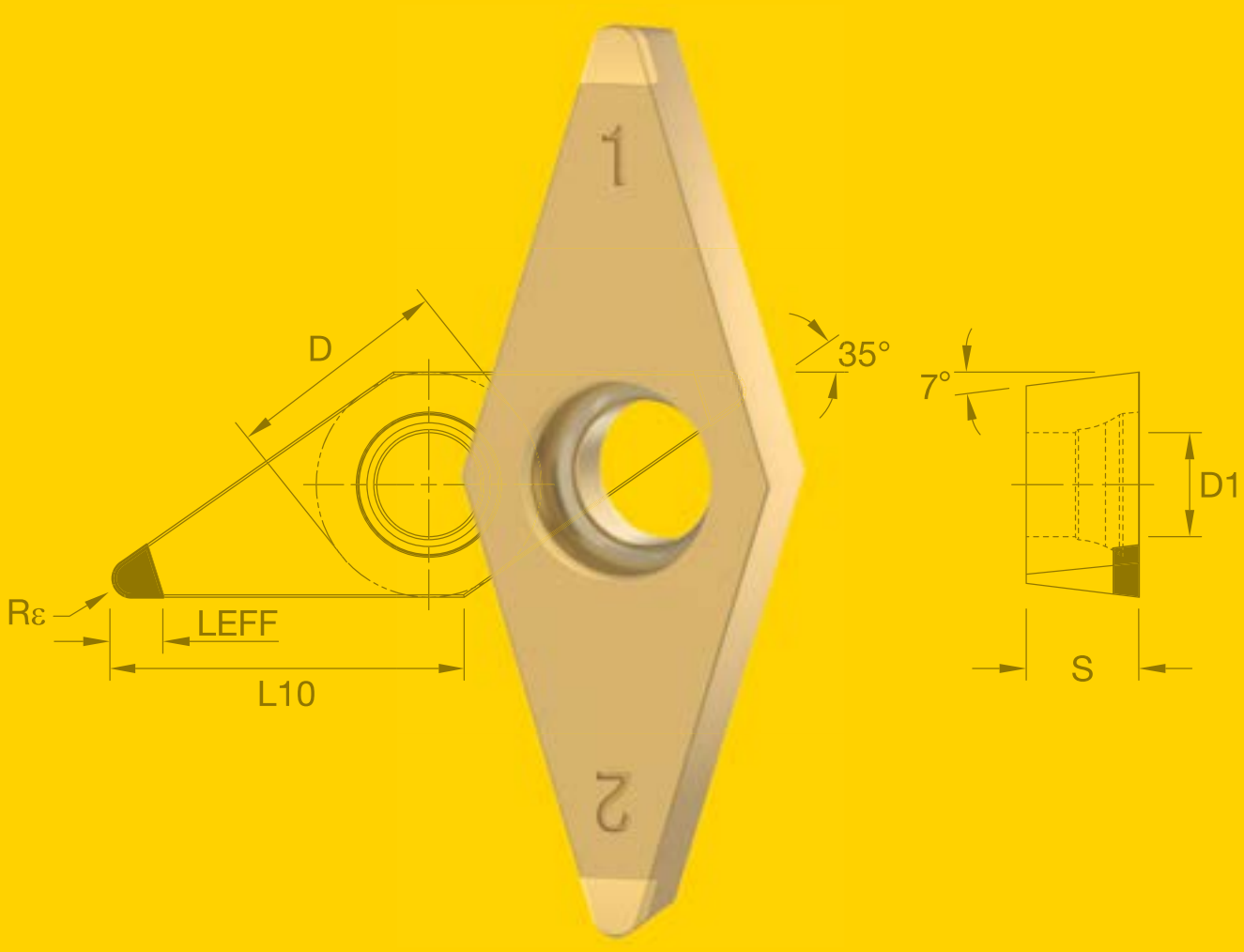
Toolholder

DN..55º insert for DDJN, PCJN, MDJN, 93º/-3º toolholder.

Surface finish with wiper effect.

Surface finish with effective corner radius, no wiper effect.

No profiling and facing possible.

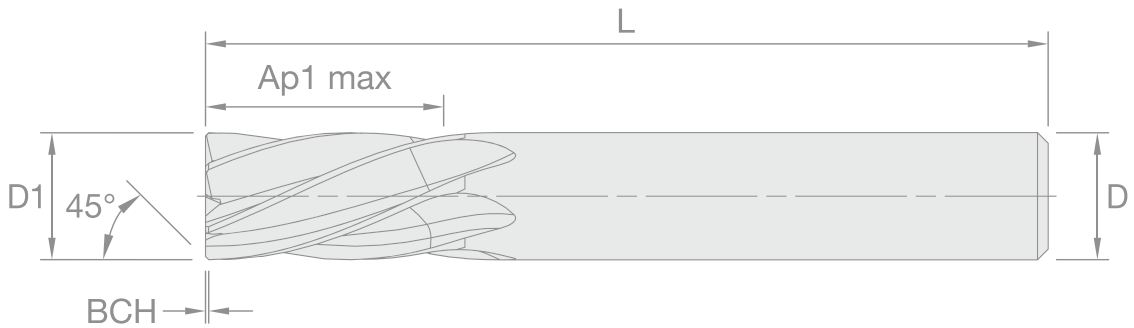

D
35°
7°
D1
Rε
LEFF
L10
S
1
2

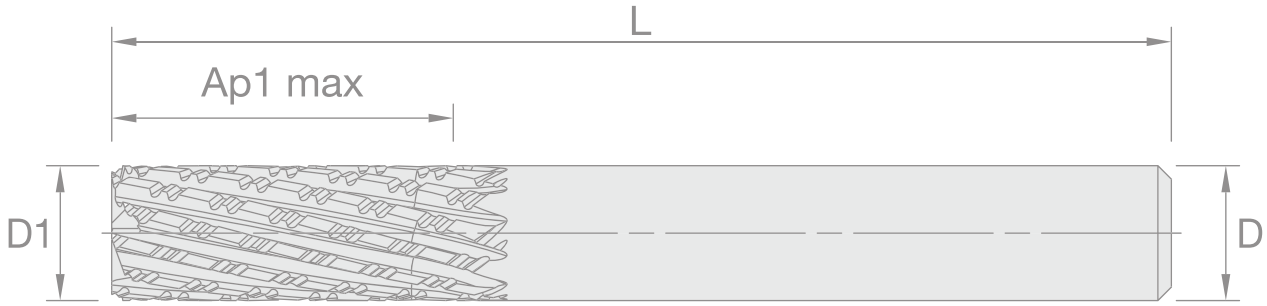
KBH10B & KBH20B HARDENED STEEL GRADES

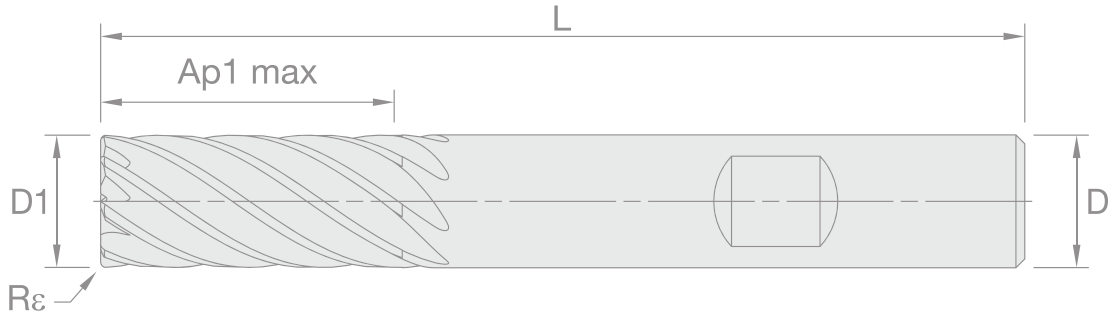
LET'S TAKE YOUR **MANUFACTURING**
TO THE **NEXT LEVEL**

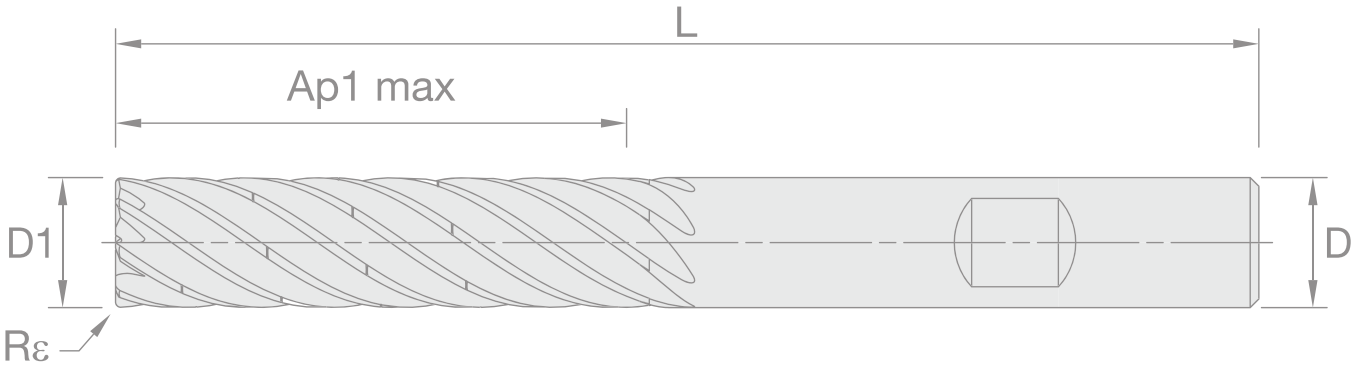
kennametal.com

KM4X


L
Ap1 max
D1
45°
D
BCH


L
Ap1 max
D1
D


L
Ap1 max
D1
D
Rε


L
Ap1 max
D1
D
Rε

ROCO™ BURR & DOWN-CUT ROUTERS

Your High-Performance Routers for Machining Composites

Introducing the ROCO platform, the home for our composite router lineup. ROCO burr and down-cut routers feature the new and advanced, high-performance KCC05A grade, ensuring a uniform coating thickness along the tool axis for achieving sharper cutting edges and minimal wear without flaking on the coating edge.

Features & Benefits

- Ideal for machining a wide range of composite materials
- Perfect for side milling, slotting, pocketing, trimming and ramping applications
- Burr routers available in sizes 3mm-12mm
- Down-cut routers available in sizes 6mm-12mm
- Both burr and down-cut router geometries are designed to reduce delamination, providing high quality surface finishes

Applications

PRIMARY

Side Milling

Slotting

Pocketing

Ramping

SECONDARY

Plunging

Materials

PRIMARY

C Composites

SECONDARY

N Non-Ferrous

Industries

Aerospace

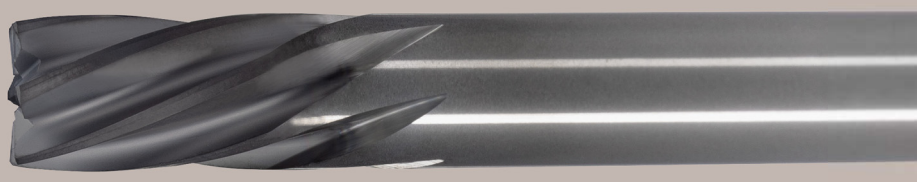
Automotive

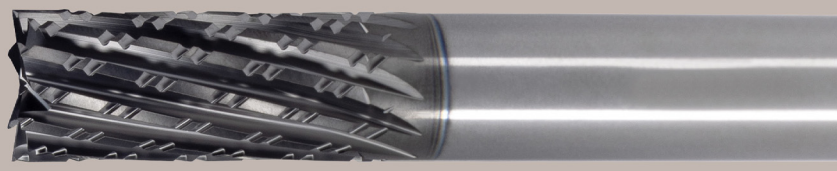
General Engineering

Medical

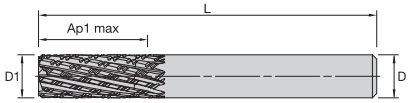
Wind & Solar

THE NEWEST ROUTERS IN COMPOSITE MILLING





EXPLORE ROCO

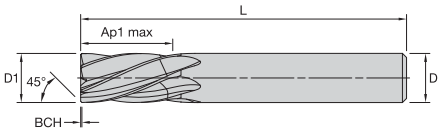


	KCC05A
P	
M	
K	
N	○
S	
H	
C	●

● Primary
○ Secondary

ROCO BR • Square End • Multi Flute • Plain Shank

Catalog Number	D1	D	Ap1 Max	[L] Overall Length	Z U	KCC05A
ROBR8SE0300S006HAM	3,00	3,00	6,00	50,00	8	7312435
ROBR8SE0300R009HAM	3,00	3,00	9,00	50,00	8	7312436
ROBR8SE0400L012HAM	4,00	4,00	12,00	50,00	8	7312438
ROBR8SE0500R015HAM	5,00	5,00	15,00	50,00	10	7312439
ROBRMSE0600S006HAM	6,00	6,00	6,00	63,00	10	7312440
ROBRMSE0600R015HAM	6,00	6,00	15,00	50,00	10	7312441
ROBRMSE0600L020HAM	6,00	6,00	20,00	63,00	10	7312442
ROBRMSE0600X026HAM	6,00	6,00	26,00	75,00	10	7312443
ROBRMSE0800R020HAM	8,00	8,00	20,00	63,00	12	7312444
ROBRMSE0800L026HAM	8,00	8,00	26,00	63,00	12	7312445
ROBRMSE1000R015HAM	10,00	10,00	15,00	63,00	12	7312446
ROBRMSE1000L026HAM	10,00	10,00	26,00	63,00	12	7312447
ROBRMSE1000S032HAM	10,00	10,00	32,00	75,00	12	7312448
ROBRMSE1000R035HAM	10,00	10,00	35,00	80,00	12	7312449
ROBRMSE1000L035HAM	10,00	10,00	35,00	100,00	12	7312450
ROBRMSE1200S018HAM	12,00	12,00	18,00	63,00	12	7312451
ROBRMSE1200R026HAM	12,00	12,00	26,00	75,00	12	7312452
ROBRMSE1200L045HAM	12,00	12,00	45,00	100,00	12	7312453



ROCO DC • Chamfered • 6 Flutes • Plain Shank

● Primary
○ Secondary

	KCC05A
P	
M	
K	
N	○
S	
H	
C	●

Catalog Number	D1	D	Ap1 Max	[L] Overall Length	[BCH] Corner Chamfer Width	KCC05A
RODC6CH0600R020HAM	6.00	6.00	20.00	63.00	0.25	7312234
RODC6CH0600L026HAM	6.00	6.00	26.00	75.00	0.25	7312233
RODC6CH1000R015HAM	10.00	10.00	15.00	63.00	0.25	7312232
RODC6CH1000L032HAM	10.00	10.00	32.00	75.00	0.25	7312231
RODC6CH1200R026HAM	12.00	12.00	26.00	75.00	0.25	7312220
RODC6CH1200L045HAM	12.00	12.00	45.00	100.00	0.25	7312219

ROCO BR
Application Data

Material Group		Side Milling		Slotting	KCC05A Cutting Speed Vc m/min		Recommended Feed per Rev (Fn=mm/rev) is for Side Milling (A). For Slotting (B) Reduce Fn by 20%.							
								D1 - Diameter						
		Ap	Ae	Ap	Min	Max	mm	3.0	4.0	5.0	6.0	8.0	10.0	12.0
N	N6	1.0xD	0.2xD	1.0xD	100	150	Fn	0.058	0.077	0.096	0.144	0.230	0.288	0.346
C	C1	1.0xD	0.2xD	1.0xD	100	150	Fn	0.058	0.077	0.096	0.144	0.230	0.288	0.346

ROCO DC
Application Data

Material Group		Side Milling		Slotting	KCC05A 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	3.0	4.0	5.0	6.0	8.0	10.0	12.0
N	N6	1.0xD	0.5xD	1.0xD	100	150	Fz	0.009	0.012	0.015	0.018	0.024	0.030	0.036
C	C1	1.0xD	0.2xD	1.0xD	100	150	Fz	0.009	0.012	0.015	0.018	0.024	0.030	0.036

ROCO BURR & DOWN-CUT ROUTERS

LET'S TAKE YOUR **MANUFACTURING** TO THE **NEXT LEVEL**

kennametal.com/**ROCO**

HARVI IV™ 8-FLUTE END MILLS

The latest addition to Kennametal's HARVI family of high-performance and versatile end mills

With a unique design that offers higher metal removal rates and feed rates than 7-flute end mills and more versatility than traditional 9-flute end mills, HARVI IV 8-Flute End Mills keep you cutting in difficult-to-machine materials. Rough and finish with one reliable tool in high-temp alloys, stainless steels, steels and hardened materials while achieving powerful chip evacuation from internal coolant channels.

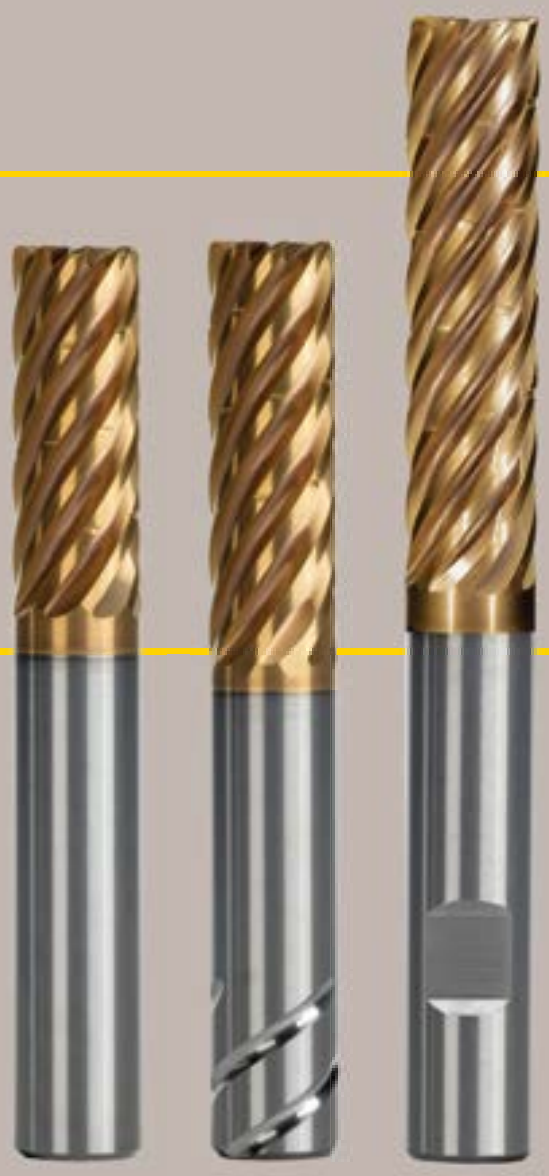
- Diameter range 10-25mm
- Length range 1.8-4xD
- Internal through coolant
- Chip splitters featured on versions greater than 2xD length of cut
- Plain and SAFE-λOCK™ shanks
- Now available in Weldon Shanks for price effective pullout protection

The incredibly versatile HARVI IV 8-Flute End Mills are complemented by our new stainless steels, titanium and other high-temp alloys solid end milling grade KCSM15A. This new grade features an innovative coating technology that's delivering extended tool life for users and the best wear resistance in Kennametal's history of solid carbide end milling.

Applications

- HEM
- Dynamic Milling
- Side Milling
- Trochoidal Milling
- Ramping up to 2°
- Helical Ramping up to 2°

NEW!



Materials

PRIMARY

- **S** High-Temp Alloys
- **M** Stainless Steels

SECONDARY

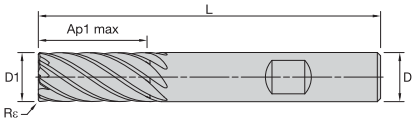
- **P** Steels
- **H** Hardened Steels

Industries

- Aerospace
- Wind & Solar
- Medical
- General Engineering

WE DON'T CUT CORNERS. WE CUT METAL.

EXPLORE HARVI IV

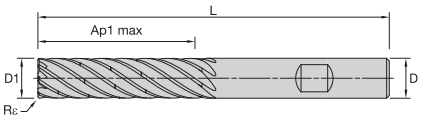


HARVI IV • Radiused • 8 Flutes • Internal Coolant • Weldon Shank

	KCSM15A
P	○
M	●
K	
N	
S	●
H	○

● Primary
○ Secondary

Catalog Number	D1	D	Ap1 Max	L	Rε	KCSM15A
HA4R8RA1000R022HBR050IM	10,00	10,00	22,00	72,00	0,50	7321395
HA4R8RA1000R022HBR100IM	10,00	10,00	22,00	72,00	1,00	7321396
HA4R8RA1000R022HBR200IM	10,00	10,00	22,00	72,00	2,00	7321399
HA4R8RA1000R022HBR300IM	10,00	10,00	22,00	72,00	3,00	7321449
HA4R8RA1200R026HBR050IM	12,00	12,00	26,00	83,00	0,50	7321454
HA4R8RA1200R026HBR100IM	12,00	12,00	26,00	83,00	1,00	7321455
HA4R8RA1200R026HBR200IM	12,00	12,00	26,00	83,00	2,00	7321456
HA4R8RA1200R026HBR300IM	12,00	12,00	26,00	83,00	3,00	7321457
HA4R8RA1600R032HBR050IM	16,00	16,00	32,00	92,00	0,50	7321458
HA4R8RA1600R032HBR100IM	16,00	16,00	32,00	92,00	1,00	7321459
HA4R8RA1600R032HBR200IM	16,00	16,00	32,00	92,00	2,00	7321460
HA4R8RA1600R032HBR300IM	16,00	16,00	32,00	92,00	3,00	7321461
HA4R8RA2000R038HBR050IM	20,00	20,00	38,00	104,00	0,50	7321462
HA4R8RA2000R038HBR100IM	20,00	20,00	38,00	104,00	1,00	7321463
HA4R8RA2000R038HBR200IM	20,00	20,00	38,00	104,00	2,00	7321464
HA4R8RA2000R038HBR300IM	20,00	20,00	38,00	104,00	3,00	7321465
HA4R8RA2500R045HBR050IM	25,00	25,00	45,00	121,00	0,50	7321466
HA4R8RA2500R045HBR100IM	25,00	25,00	45,00	121,00	1,00	7321467
HA4R8RA2500R045HBR200IM	25,00	25,00	45,00	121,00	2,00	7321468
HA4R8RA2500R045HBR300IM	25,00	25,00	45,00	121,00	3,00	7321469



HARVI IV • Radiused • 8 Flutes • Internal Coolant • Chipbreaker • Weldon Shank

● Primary
○ Secondary

	KCSM15A
P	○
M	●
K	
N	
S	●
H	○

Catalog Number	D1	D	Ap1 Max	L	Rε	KCSM15A
HA4R8RA1000X040HBR050DM	10,00	10,00	40,00	90,00	0,50	7321140
HA4R8RA1000X040HBR100DM	10,00	10,00	40,00	90,00	1,00	7321481
HA4R8RA1000X040HBR200DM	10,00	10,00	40,00	90,00	2,00	7321482
HA4R8RA1000X040HBR300DM	10,00	10,00	40,00	90,00	3,00	7321483
HA4R8RA1200X048HBR050DM	12,00	12,00	48,00	105,00	0,50	7321484
HA4R8RA1200X048HBR100DM	12,00	12,00	48,00	105,00	1,00	7321485
HA4R8RA1200X048HBR200DM	12,00	12,00	48,00	105,00	2,00	7321486
HA4R8RA1200X048HBR300DM	12,00	12,00	48,00	105,00	3,00	7321487
HA4R8RA1600X064HBR050DM	16,00	16,00	64,00	125,00	0,50	7321488
HA4R8RA1600X064HBR100DM	16,00	16,00	64,00	125,00	1,00	7321489
HA4R8RA1600X064HBR200DM	16,00	16,00	64,00	125,00	2,00	7321490
HA4R8RA1600X064HBR300DM	16,00	16,00	64,00	125,00	3,00	7321501
HA4R8RA2000X080HBR050DM	20,00	20,00	80,00	145,00	0,50	7321502
HA4R8RA2000X080HBR100DM	20,00	20,00	80,00	145,00	1,00	7321503
HA4R8RA2000X080HBR200DM	20,00	20,00	80,00	145,00	2,00	7321504
HA4R8RA2000X080HBR300DM	20,00	20,00	80,00	145,00	3,00	7321505
HA4R8RA2500X100HBR050DM	25,00	25,00	100,00	175,00	0,50	7321506
HA4R8RA2500X100HBR100DM	25,00	25,00	100,00	175,00	1,00	7321507
HA4R8RA2500X100HBR200DM	25,00	25,00	100,00	175,00	2,00	7321508
HA4R8RA2500X100HBR300DM	25,00	25,00	100,00	175,00	3,00	7321509

HARVI IV
Application Data

Material Group		Max Ae Factor (KAp)	KCSM15A Base Cutting Speed Vc m/min	Feed per Tooth (fz=mm/th) D1 - Diameter (mm) 10	12	16	20	25
P	3	1	130	0,049	0,044	0,067	0,080	0,095
	4	1	100	0,044	0,049	0,059	0,069	0,081
	5	0,8	65	0,038	0,043	0,053	0,063	0,076
	6	0,7	50	0,032	0,036	0,043	0,050	0,060
M	1	1	80	0,049	0,055	0,067	0,080	0,095
	2	0,8	60	0,038	0,043	0,053	0,063	0,076
	3	0,8	60	0,032	0,036	0,043	0,050	0,060
S	1	0,5	50	0,049	0,055	0,067	0,080	0,095
	2	0,5	30	0,038	0,043	0,053	0,063	0,076
	3	0,5	25	0,026	0,030	0,036	0,043	0,051
	4	0,7	45	0,041	0,051	0,061	0,069	0,081
H	1	0,8	80	0,044	0,049	0,059	0,069	0,081
	2	0,5	70	0,037	0,041	0,050	0,059	0,070

NOTE: These guidelines may require variations to achieve optimum results. Above parameters are based on ideal conditions. For smaller taper machining centers, please adjust parameters accordingly on >12 mm diameter. Maximum ramp angle is 2°. Tools with chip splitters can be used as finishers.

HARVI IV
Maximum Cutting Width and Adjustment Factors for Speed & Feed Calculation

Maximum cutting width (Ae) for given cutting depth (Ap)

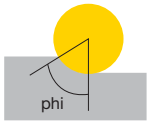
Ap	≤0,125 x D1	>0,125xD1 ≤ 0,5xD1	>0,5xD1 ≤ 1xD1	>1xD1 ≤ 2xD1	>2xD1 ≤ 3xD1	>3xD1 ≤ 4xD1	>4 x D1
Max Ae	100% x D1	50% x D1 x KAp	40% x D1 x KAp	30% x D1 x KAp	20% x D1 x KAp	15% x D1 x KAp	10% x D1 x KAp

Adjustment factors for speed (Vc) and feed (Fz)

Ae/D1	≤2%	>2% ≤ 5%	>5 ≤ 7,5%	>7,5% ≤ 10%	>10% ≤ 15%	>15% ≤ 20%	>20% ≤ 30%	>30% ≤ 40%	>40% ≤ 50%	>50% ≤ 100%
Kv	3	2,5	1,9	1,4	1,35	1,3	1,2	1,1	1	0,9
KFz	3,28	2,3	1,95	1,7	1,5	1,25	1,09	1,02	1	1

Angle of engagement (phi°) relative to cutting width (Ae)

Ae	2%	5%	7,50%	10%	15%	20%	30%	40%	50%	100%
Angle of Engagement - (phi°)	16,26	25,84	31,79	36,87	45,57	53,13	66,42	78,46	90	180



To calculate application specific cutting data, please use KAp, Kv, and Kfz from tables above for adaption of cutting speeds and feeds respectively:

Maximum Ae= KAp * D1 * Ap1Max/D1
Vc new = Vc * Kv
Fz new = Fz * KFz

Sample Calculation
Material: S4
D1: 25 mm
Ap: 2xD1

Max Ae: 30% x Kap x D1	30% x 0,7 x D1 = 21%xD1
M/Min: Base x Kv	45 x 1,2 = 54
Fz: Base x KFz	0,081 x 1,09 = 0,088

Final cutting data recommendation:

Max Ae = 30% * 0,7 * 25 = 5,25 mm
Vc new = 45 * 1,2 = 54 m/min
Fz new = 0,081 * 1,09 = 0,088 mm/th

HARVI IV
Application Data • Minimum Helical Interpolation Diameter

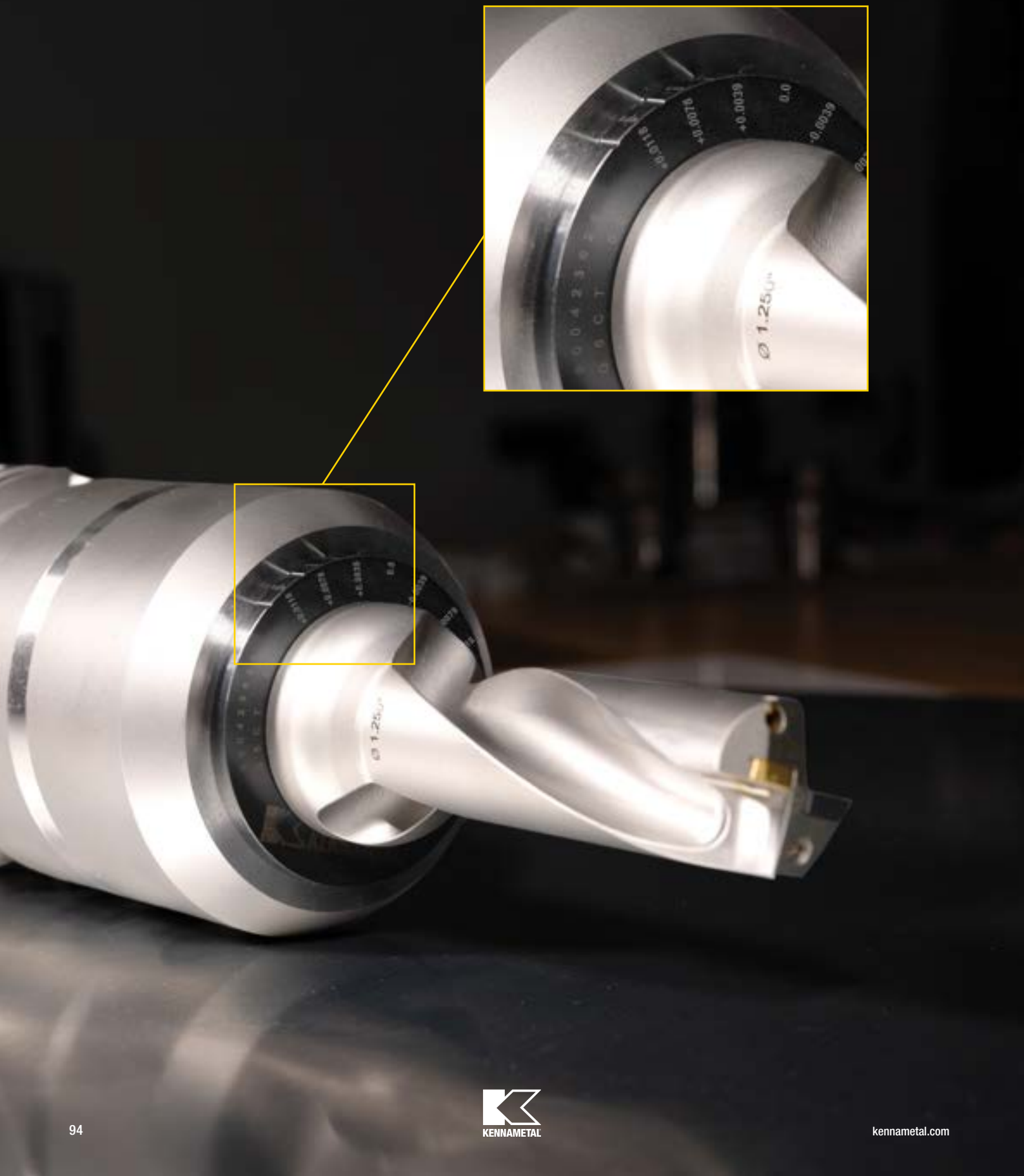
Tool. Dia. Mm	Interpolation Dia. Mm
10	14,25
12	16,25
16	21,31
20	26,38
25	32,44

Maximum ramp angle is 2° on centerline.

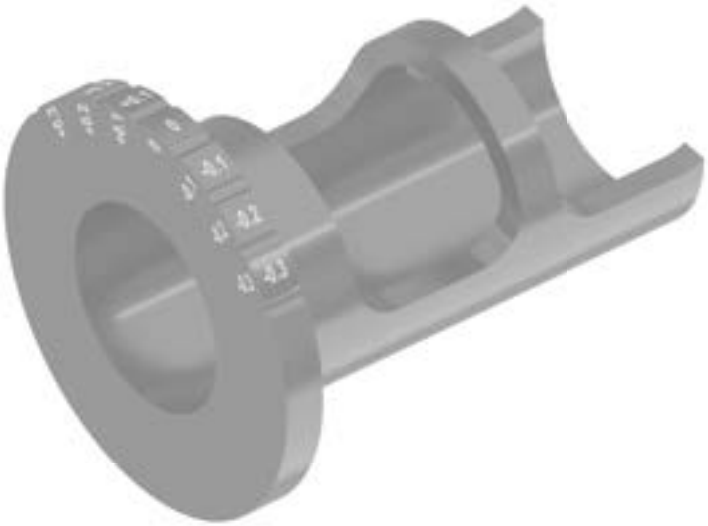
HARVI IV 8-FLUTE END MILLS

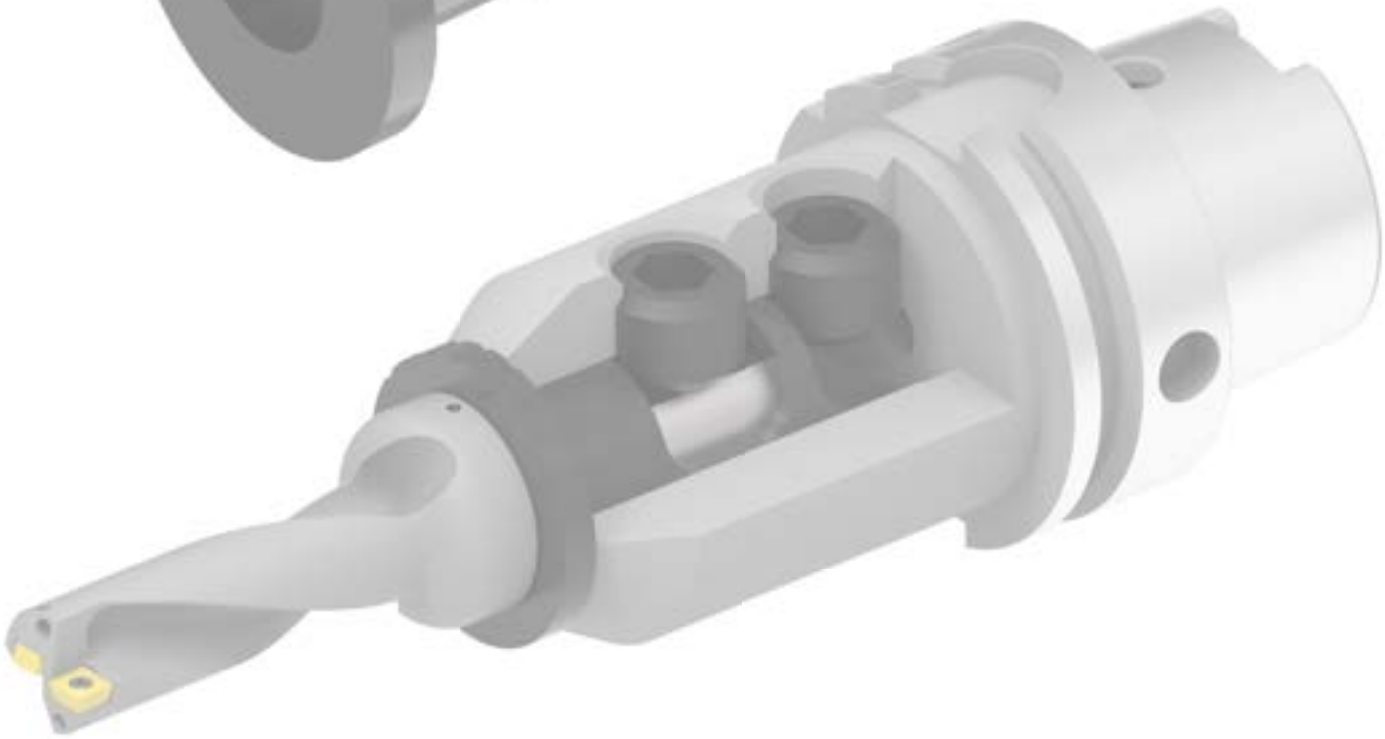
LET'S TAKE YOUR **MANUFACTURING** TO THE **NEXT LEVEL**

kennametal.com/**HARVI-IV**



HOLEMAKING



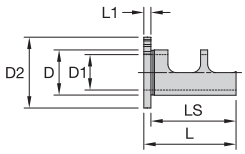


ECCENTRIC SLEEVES

Easily adjust cutting diameters with eccentric sleeves for Drill Fix PRO™ indexable drills. By rotating the sleeve within the adapter, precise and controlled drill movement is enabled for high accuracy and reliability.

Features & Benefits

- Ideal for use up to a length-to-diameter (L/D) ratio of 3xD on rotary applications
- Adjusts both upward and downward to attain larger or smaller diameters
- Achieves a diameter range of plus/minus 0.3mm
- Available in sizes 20mm, 25mm, 32mm, 40mm
- Compatible with Kennametal adapters



Eccentric Sleeves for Drill Fix PRO • Diameter Adjustment Range: ±0.3mm

Order Number	Catalog Number	D	D1	D2	LS	L1	L
7315984	25ECCSL20M	25	20	40	56	5	61
7315985	32ECCSL25M	32	25	50	60	5	65
7315986	40ECCSL32M	40	32	58	70	5	75
7315987	50ECCSL40M	50	40	69	80	5	85

SYSTEMS

FACE COOLANT END MILL ADAPTERS

Maximize cooling efficiency with the new face coolant end mill adapters for Weldon™ shanks. Designed to deliver two coolant solutions directly to the cutting edges, these adapters prevent chip overcutting and jamming by efficiently clearing the cutting zone, reducing fan-out enhancing process stability and component quality in milling applications.

Applications

PRIMARY

Milling

SECONDARY

Drilling

Materials

UNIVERSAL

P M K N S H

Industries

General Engineering

Aerospace

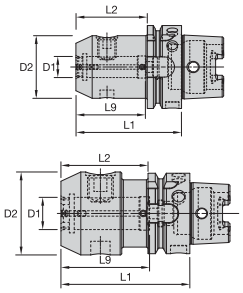
Automotive

Medical

Oil & Gas

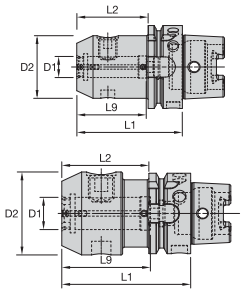
Earthworks

THE COOLEST CHANNELS IN MILLING ADAPTERS NOW DELIVER TWICE THE PERFORMANCE



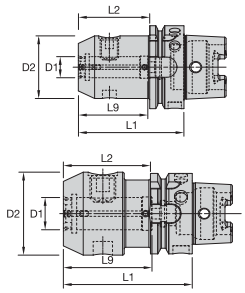
HSK50A • End Mill Adapters • Face Coolant Form AD

Order Number	ANSI Catalog Number	D1	D2	L1	L2	L9	kg
7291790	HSK50AEMFC10065M	10	34,50	65,00	39,05	38,50	0,61
7291831	HSK50AEMFC12080M	12	41,50	80,00	54,05	43,50	0,86
7291833	HSK50AEMFC16080M	16	47,50	80,00	54,05	46,50	0,94
7291834	HSK50AEMFC20080M	20	51,50	80,00	54,05	48,50	0,97
7291835	HSK50AEMFC25110M	25	64,50	110,00	84,05	53,50	1,94



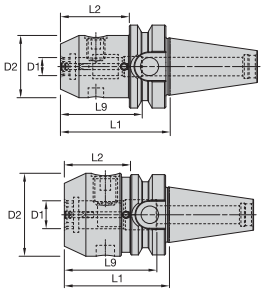
HSK63A • End Mill Adapters • Face Coolant Form AD

Order Number	ANSI Catalog Number	D1	D2	L1	L2	L9	kg
7291813	HSK63AEMFC10065M	10	34,50	65,00	39,05	38,50	0,86
7291814	HSK63AEMFC12080M	12	41,50	80,00	54,05	43,50	1,12
7291815	HSK63AEMFC16080M	16	47,50	80,00	54,05	46,50	1,24
7291816	HSK63AEMFC20080M	20	51,50	80,00	54,05	48,50	1,32
7291817	HSK63AEMFC25110M	25	64,50	110,00	84,05	38,50	2,29



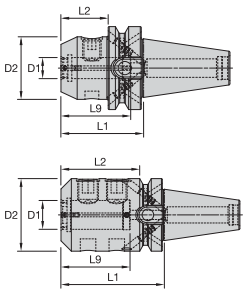
HSK100A • End Mill Adapters • Face Coolant Form AD

Order Number	ANSI Catalog Number	D1	D2	L1	L2	L9	kg
7291708	HSK100AEMFC10080M	10	34,50	80,00	51,05	38,50	2,30
7291709	HSK100AEMFC12080M	12	41,50	80,00	51,05	43,50	2,44
7291710	HSK100AEMFC16100M	16	47,50	100,00	71,05	46,50	2,82
7291751	HSK100AEMFC20100M	20	51,50	100,00	71,05	48,50	2,93
7291752	HSK100AEMFC25100M	25	64,50	100,00	71,05	53,50	3,45



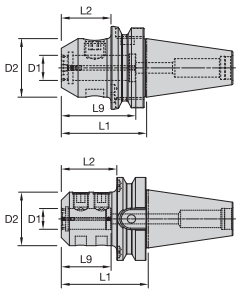
BT30 • End Mill Adapters • Face Coolant Form AD

Order Number	ANSI Catalog Number	D1	D2	L1	L2	L9	kg
7291769	BT30EMFC10060M	10	34,50	60,00	37,90	38,50	0,59
7291770	BT30EMFC12060M	12	41,50	60,00	37,90	43,50	0,68
7291811	BT30EMFC16060M	16	47,50	60,00	37,90	53,00	0,74
7291812	BT30EMFC20080M	20	51,50	80,00	57,90	55,00	1,01



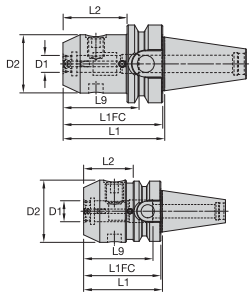
BT40 • End Mill Adapters • Face Coolant Form B/AD

Order Number	ANSI Catalog Number	D1	D2	L1	L2	L9	kg
7350591	BT40BEMFC10063M	10	34,50	63,00	36,00	45,00	1,16
7350593	BT40BEMFC12063M	12	41,50	63,00	36,00	43,50	1,24
7350594	BT40BEMFC16063M	16	47,50	63,00	36,00	46,50	1,31
7350595	BT40BEMFC20063M	20	51,50	63,00	36,00	48,50	1,33
7350596	BT40BEMFC25090M	25	62,95	90,00	36,00	60,00	2,14



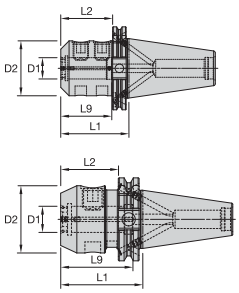
BT50 • End Mill Adapters • Face Coolant Form AD

Order Number	ANSI Catalog Number	D1	D2	L1	L2	L9	kg
7353387	BT50EMFC10080M	10	34,50	80,00	55,00	45,00	3,87
7353388	BT50EMFC12080M	12	41,50	80,00	55,00	50,00	3,96
7353389	BT50EMFC16080M	16	47,50	80,00	55,00	53,00	4,06
7353390	BT50EMFC20080M	20	51,50	80,00	55,00	55,00	4,11
7353451	BT50EMFC25105M	25	64,50	105,00	70,00	60,00	4,97



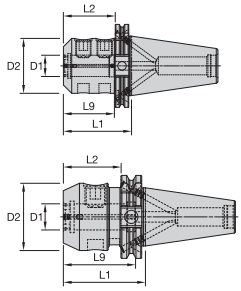
BTKV30 • End Mill Adapters • Face Coolant Form AD

Order Number	ANSI Catalog Number	D1	D2	L1	L2	L9	kg
7291778	BTKV30EMFC10060M	10	34,50	60,00	37,90	45,00	0,59
7291779	BTKV30EMFC12060M	12	41,50	60,00	37,90	50,00	0,68
7291780	BTKV30EMFC16060M	16	47,50	60,00	37,90	46,50	0,75
7291821	BTKV30EMFC20080M	20	51,50	80,00	57,90	48,50	1,01



DV40 • End Mill Adapters • Face Coolant Form B/AD

Order Number	ANSI Catalog Number	D1	D2	L1	L2	L9	kg
7354098	DV40BEMFC10050M	10	34,50	50,00	30,95	45,00	0,97
7354099	DV40BEMFC12050M	12	41,50	50,00	30,95	50,00	1,03
7354100	DV40BEMFC16063M	16	47,50	63,00	43,95	53,00	1,26
7354141	DV40BEMFC20063M	20	51,50	63,00	43,95	55,00	1,24
7354142	DV40BEMFC25100M	25	64,50	100,00	80,95	60,00	2,30



DV50 • End Mill Adapters • Face Coolant Form B/AD

Order Number	ANSI Catalog Number	D1	D2	L1	L2	L9	kg
7354026	DV50BEMFC16063M	16	47,50	63,00	43,95	53,00	3,07
7354027	DV50BEMFC20063M	20	51,50	63,00	43,95	55,00	3,12
7354030	DV50BEMFC25080M	25	64,50	80,00	60,95	60,00	3,80

FACE COOLANT END MILL ADAPTERS

LET'S TAKE YOUR **MANUFACTURING** TO THE **NEXT LEVEL**

kennametal.com

KM™ & PSC MODULAR ADAPTERS

Give Machining a New Altitude!

Introducing KM63, KM80, PSC63 and PSC80 adapters for aerospace and heavy machining. These modular adapters feature high-pressure coolant nozzles that optimize chip control, extend tool life and reduce costs.

Features & Benefits

- Increases productivity with easier setups and less downtime
- Compatible with standard ISO inserts for increased versatility
- Great for holding round inserts in high-temp alloy applications
- Provides flexibility, rigidity and stability for demanding machining operations

Applications

PRIMARY

O.D. Turning

SECONDARY

Facing

Profiling

Materials

UNIVERSAL

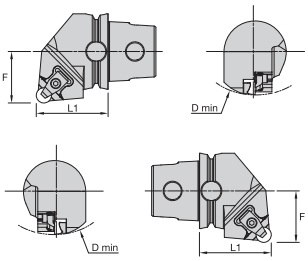
P M K N S H

Industries

Aerospace

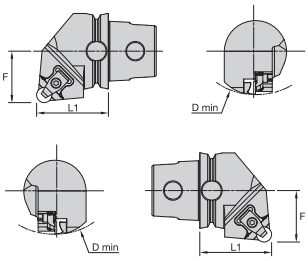
General Engineering

MAKE A QUICK CONNECTION FOR AEROSPACE MACHINING



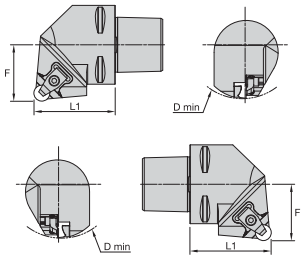
KM63TS Cutting Units • Kendex™ CRSC 45º • RC_ Style Inserts • High Pressure Coolant

Order Number	L1	F	D min	Gage Insert
Right Hand				
7326326	60	43	180	RCGX090700__
7326324	60	43	180	RCGX120700__
Left Hand				
7326327	60	43	180	RCGX090700__
7326325	60	43	180	RCGX120700__



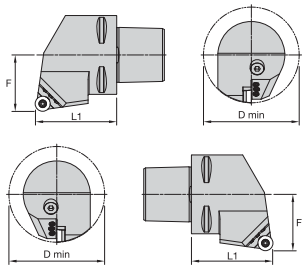
KM80TS Cutting Units • Kendex CRSC 45º • RC_ Style Inserts • High Pressure Coolant

Order Number	L1	F	D min	Gage Insert
Right Hand				
7326330	70	53	180	RCGX090700__
7326328	70	53	180	RCGX120700__
Left Hand				
7326651	70	53	180	RCGX090700__
7326329	70	53	180	RCGX120700__



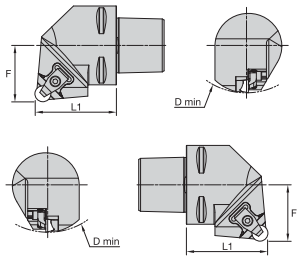
PSC63 Cutting Units • Kendex CRSC 45º • RC_ Style Inserts • High Pressure Coolant

Order Number	Catalog Number	L1	F	D min	Gage Insert
Right Hand					
7326934	PSC63CRSCR09HPC	65	45	180	RCGX090700E
7326932	PSC63CRSCR12HPC	65	45	180	RCGX120700
Left Hand					
7326935	PSC63CRSCL09HPC	65	45	180	RCGX090700E
7326933	PSC63CRSCL12HPC	65	45	180	RCGX120700



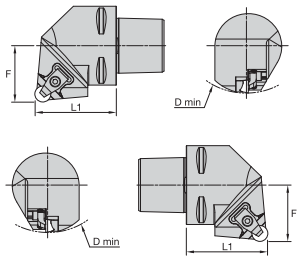
PSC80 Cutting Units • Screw-On SRSC 45º • RC_ Style Inserts • High Pressure Coolant

Order Number	Catalog Number	L1	F	D min	Gage Insert
		Right Hand			
7327037	PSC80SRSCR10HPC	80	55	125	RCMT1004M0
7327035	PSC80SRSCR12HPC	80	55	110	RCMT1204M0
		Left Hand			
7327038	PSC80SRSCL10HPC	80	55	125	RCMT1004M0
7327036	PSC80SRSCL12HPC	80	55	110	RCMT1204M0



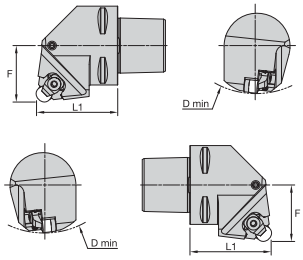
PSC63 Cutting Units • Kendex CRSP 45º • RP_ Style Inserts • High Pressure Coolant

Order Number	Catalog Number	L1	F	D min	Gage Insert
		Right Hand			
7327008	PSC63CRSPR09HPC	65	45	180	RPGX090700E
7327005	PSC63CRSPR12HPC	65	45	180	RPGX120700E
		Left Hand			
7327009	PSC63CRSPL09HPC	65	45	180	RPGX090700E
7327006	PSC63CRSPL12HPC	65	45	180	RPGX120700E



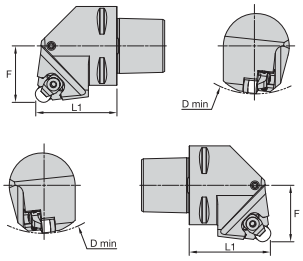
PSC80 Cutting Units • Kendex CRSP 45º • RP_ Style Inserts • High Pressure Coolant

Order Number	Catalog Number	L1	F	D min	Gage Insert
		Right Hand			
7327022	PSC80CRSPR09HPC	80	55	180	RPGX090700E
7327010	PSC80CRSPR12HPC	80	55	180	RPGX120700E
		Left Hand			
7327023	PSC80CRSPL09HPC	80	55	180	RPGX090700E
7327021	PSC80CRSPL12HPC	80	55	180	RPGX120700E



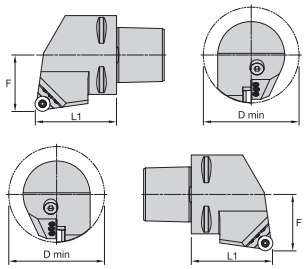
PSC63 Cutting Units • Kendex CRSN 45º • RN_ Style Inserts • High Pressure Coolant

Order Number	Catalog Number	L1	F	D min	Gage Insert
Right Hand					
7326998	PSC63CRSNR12HPC	65	45	130	RNGN120700__
Left Hand					
7326999	PSC63CRSNL12HPC	65	45	130	RNGN120700__



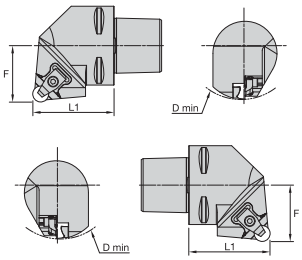
PSC80 Cutting Units • Kendex CRSN 45º • RN_ Style Inserts • High Pressure Coolant

Order Number	Catalog Number	L1	F	D min	Gage Insert
Right Hand					
7327000	PSC80CRSNR12HPC	80	55	180	RNGN120700__
Left Hand					
7327051	PSC80CRSNL12HPC	80	55	180	RNGN120700__



PSC63 Cutting Units • Screw-On SRSC 45º • RC_ Style Inserts • High Pressure Coolant

Order Number	Catalog Number	L1	F	D min	Gage Insert
Right Hand					
7327033	PSC63SRSCR10HPC	65	45	115	RCMT10T3M0
7327031	PSC63SRSCR12HPC	65	45	90	RCMT1204M0
Left Hand					
7327034	PSC63SRSCL10HPC	65	45	115	RCMT10T3M0
7327032	PSC63SRSCL12HPC	65	45	90	RCMT1204M0



PSC80 Cutting Units • Kendex CRSC 45º • RC_ Style Inserts • High Pressure Coolant

Order Number	Catalog Number	L1	F	D min	Gage Insert
Right Hand					
7326938	PSC80CRSCR09HPC	80	55	180	RCGX090700E
7326936	PSC80CRSCR12HPC	80	55	180	RCGX120700
Left Hand					
7326940	PSC80CRSCL09HPC	80	55	180	RCGX090700E
7326937	PSC80CRSCL12HPC	80	55	180	RCMT10T3M0

CV AND CVKV 40 & 50 ADAPTERS

Introducing the newest adapters for machining setups. These shell mills, shrink fit and screw-on adapters allow for the use of a broader range of metric milling cutters and drills. Compatible with the steep taper (CV 40 & 50) and face contact (CVKV 40 & 50) spindle interfaces, this upgrade ensures greater flexibility and efficiency in your operations.

Features & Benefits

Shell Mill Adapters (Metric CV40, CV50, CVKV40, CVKV50)

- Seamless integration into common machining centers
- Enhances milling reliability and surface finish, especially in heavy-duty operations
- Improves coolant flow and increases axial load capacity
- Enhances tool life and ensures part quality during high-speed machining

Shrink Fit Adapters Extended Gauge Length (Inch & Metric CVKV40 and CVKV50)

- Ideal for deep cavities and 5-axis machining without compromising stability
- Supports high-speed machining with less vibration and better surface finish
- Fine balancing supports smooth operations at high speeds
- Seamless integration with global tooling standards
- Reliable performance in long-reach and high-load applications
- Enhanced rigidity and precision for demanding applications

Screw-On Adapters (Metric CVKV40, CVKV50)

- Expand application range with flexible tool combinations
- Increase stability and rigidity during heavy and interrupted cuts
- Improve performance in tight machining areas and high-speed operations
- Supports smooth, high-RPM cutting with extended tool life

Applications

PRIMARY

Milling

SECONDARY

Drilling

Materials

UNIVERSAL

P M K N S H

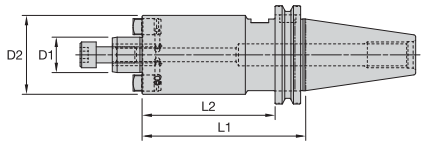
Industries

Aerospace

General Engineering

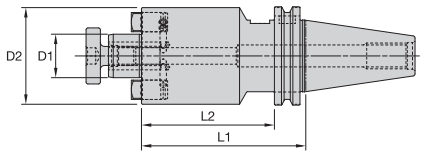
Oil & Gas

Wind & Solar



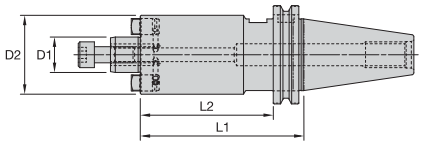
CV40 • Shell Mill Adapters • Cap Lock Screw • Coolant Through AD

Order Number	Catalog Number	D1	D2	L1	L2	kg
7134016	CV40SMC16M350	16,0	44,0	88,90	71,43	1.61
7134017	CV40SMC22M400	22,0	49,0	101,60	80,35	1.97



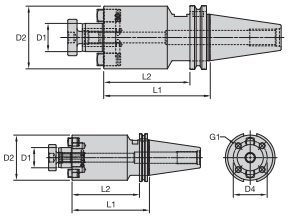
CV40 • Shell Mill Adapters • Flange Lock Screw • Coolant Through AD

Order Number	Catalog Number	D1	D2	L1	L2	kg
7134018	CV40SMC27M400	27,0	60,0	101,60	80,35	2.49



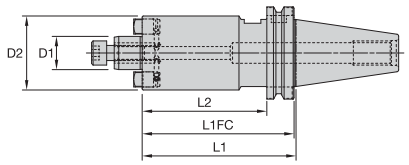
CV50 • Shell Mill Adapters • Cap Screw • Coolant Through AD

Order Number	Catalog Number	D1	D2	L1	L2	kg
7134019	CV50SMC22M400	22,0	49,0	101,60	84,13	3.71



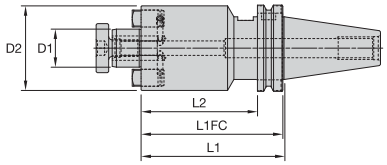
CV50 • Shell Mill Adapters • Flange Lock Screw • Coolant Through AD

Order Number	Catalog Number	D1	D2	D4	G1	L1	L2	kg
7134020	CV50SMC27M550	27,0	60,0	—	—	139,70	122,23	5.19
7134031	CV50SMC32M550	32,0	78,0	—	—	139,70	122,73	6.95
7134032	CV50SMC40M600	40,0	89,3	66,7	M12,0 X 1,75	152,40	134,93	8.75



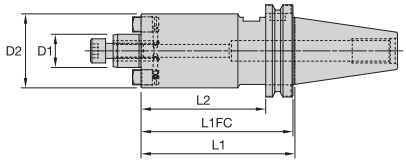
CVKV40 • Shell Mill Adapters • Cap Lock Screw • Coolant Through AD

Order Number	Catalog Number	D1	D2	L1	L1FC	L2	kg
7229130	CVKV40SMC16M350	16,0	44,0	88,90	87,89	69,85	1.63
7229151	CVKV40SMC22M400	22,0	49,0	101,60	100,59	82,55	2.00



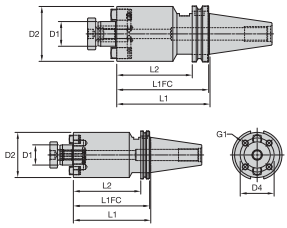
CVKV40 • Shell Mill Adapters • Flange Lock Screw • Coolant Through AD

Order Number	Catalog Number	D1	D2	L1	L1FC	L2	kg
7229152	CVKV40SMC27M400	27,0	60,0	101,60	100,59	82,55	2.52



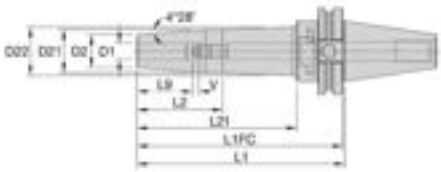
CVKV50 • Shell Mill Adapters • Cap Lock Screw • Coolant Through AD

Order Number	Catalog Number	D1	D2	L1	L1FC	L2	kg
7229153	CVKV50SMC22M400	22,0	49,0	101,60	100,10	82,55	3.74



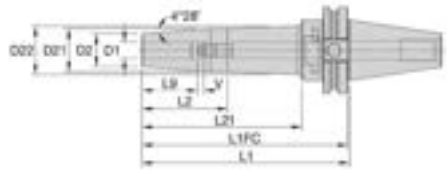
CVKV50 • Shell Mill Adapters • Flange Lock Screw • Coolant Through AD

Order Number	Catalog Number	D1	D2	D4	G1	L1	L1FC	L2	kg
7229154	CVKV50SMC27M550	27,0	60,0	—	—	139,70	138,20	120,65	5.23
7229155	CVKV50SMC32M550	32,0	78,0	—	—	139,70	138,20	120,65	6.99
7229156	CVKV50SMC40M600	40,0	89,3	66,7	M12,0 X 1,75	152,40	150,90	133,35	8.90



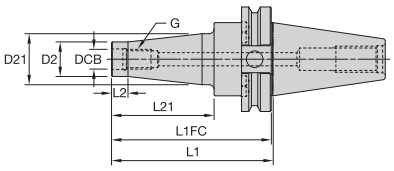
CVKV40 • Shrink Fit Adapters • GP Line • Coolant Through AD

Order Number	Catalog Number	D1	D2	D21	D22	L1	L1FC	L2	L21	L9	V	kg
7229104	CVKV40HPVTT06M600	6	21	27	32	152	151	50	117	26	10	1.51
7229105	CVKV40HPVTT08M600	8	21	27	32	152	151	50	117	26	10	1.50
7229106	CVKV40HPVTT10M600	10	24	32	36	152	151	50	117	31	10	1.65
7229107	CVKV40HPVTT12M600	12	24	32	36	152	151	63	117	36	10	1.59
7229108	CVKV40HPVTT16M600	16	27	34	38	152	151	63	117	44	10	1.66
7229109	CVKV40HPVTT20M600	20	33	42	44	152	151	57	117	46	10	1.91



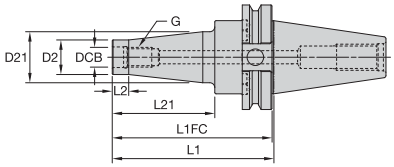
CVKV50 • Shrink Fit Adapters • GP Line • Coolant Through AD

Order Number	Catalog Number	D1	D2	D21	D22	L1	L1FC	L2	L21	L9	V	kg
7229110	CVKV50HPVTT06M800	6	21	27	35	203	202	50	168	26	10	3.79
7229121	CVKV50HPVTT08M800	8	21	27	35	203	202	50	168	26	10	3.79
7229122	CVKV50HPVTT10M800	10	24	32	39	203	202	63	168	31	10	4.04
7229123	CVKV50HPVTT12M800	12	24	32	39	203	202	63	168	36	10	3.94
7229124	CVKV50HPVTT14M800	14	27	34	41	203	202	63	168	39	10	4.04
7229125	CVKV50HPVTT16M800	16	27	34	41	203	202	63	168	39	10	4.01
7229126	CVKV50HPVTT20M800	20	33	42	49	203	202	70	168	41	10	4.49
7229128	CVKV50HPVTT25M800	25	44	53	60	203	202	70	168	47	10	5.50



CVKV40 • Screw-On Adapters • Coolant Through AD

Order Number	Catalog Number	DCB	G	D2	D21	L1	L1FC	L2	L21	kg
7229051	CVKV40ST12M228	12,5	M12 X 1,75	21,0	24,00	57,91	56,90	10,00	22,16	1.07
7229052	CVKV40ST12M386	12,5	M12 X 1,75	21,0	31,00	98,05	97,04	10,00	62,29	1.25
7229053	CVKV40ST16M228	17,0	M16 X 2	29,0	—	57,91	56,90	21,15	—	1.09
7229054	CVKV40ST16M386	17,0	M16 X 2	29,0	34,00	98,04	97,03	10,00	62,29	1.34



CVKV50 • Screw-On Adapters • Coolant Through AD

Order Number	Catalog Number	DCB	G	D2	D21	L1	L1FC	L2	L21	kg
7229055	CVKV50ST12M343	12,5	M12 X 1,75	21,0	24,00	87,12	85,62	10,00	49,87	3.23
7229056	CVKV50ST12M539	12,5	M12 X 1,75	21,0	31,00	136,91	135,41	10,00	99,66	3.48
7229057	CVKV50ST12M736	12,5	M12 X 1,75	21,0	39,00	186,94	185,44	10,00	151,19	3.89
7229058	CVKV50ST16M343	17,0	M16 X 2	29,0	34,00	87,12	85,62	10,00	51,37	3.36
7229059	CVKV50ST16M539	17,0	M16 X 2	29,0	39,00	136,91	135,41	10,00	99,66	3.76
7229060	CVKV50ST16M736	17,0	M16 X 2	29,0	39,00	186,94	185,44	10,00	151,19	4.10

COOLANT THROUGH ER COLLET SETS

Our steel sealed ER collets are now available in sets, providing more flexibility and supporting a variety of machining applications, reducing the need for additional tooling options. These sealed collets enable through coolant while maintaining the expected grip and runout, taking your operations to the next level.

Features & Benefits

- Industry standard grip for process security
- Industry standard runout for better tool life and application
- Through coolant for better tool life and part quality
- Compatible with standard adapters, requiring less optional tooling inventory

ER Through-Coolant Collet Set

Order Number	Catalog Number	Series	Quantity	Dimensional Range	Incremental Division
7291764	16ERSSS000MSET	ER16	8	3 mm - 10 mm	1
7291765	20ERSSS000MSET	ER20	8	3 mm - 13 mm	1
7291766	25ERSSS000MSET	ER25	14	3 mm - 16 mm	1
7291767	32ERSSS000MSET	ER32	18	3 mm - 20 mm	1
7291768	40ERSSS000MSET	ER40	20	6 mm - 25 mm	1

WE'VE BEEN CUTTING METAL **SINCE 1938.**

Our Story Is One of Continuous Innovation

It starts in 1938 with our founder, metallurgist Philip M. McKenna, who after years of research created revolutionary tungsten-titanium carbide alloy cutting tools specifically for working with steel. That single development not only led to a new class of machining tools that cut faster, lasted longer and drove productivity in everything from the automobile to the airplane, but also led to the opening of McKenna Metals Company in Latrobe, Pennsylvania, United States. Today, that company is Kennametal Inc.—a recognized leader in metalworking serving customers across continents and industries including transportation, construction, aerospace and defense, machining and cutting, energy and general engineering. We have a reputation for building innovative solutions for our customers' most challenging applications. The name Kennametal is synonymous for high-quality, high-performance tools that can withstand the most strenuous conditions and bring ease to a wide range of machining operations. We help our customers' operations run longer, faster and with greater precision.

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WORLD HEADQUARTERS
Kennametal Inc.
525 William Penn Place | Suite 3300
Pittsburgh, PA 15219 USA
Tel: 1 800 446 7738
ftmill.service@kennametal.com

EUROPEAN HEADQUARTERS
Kennametal Europe GmbH
Rheingoldstrasse 50
CH 8212 Neuhausen am Rheinfall
Switzerland
Tel: +41 52 6750 100
neuhausen.info@kennametal.com

ASIA-PACIFIC HEADQUARTERS
Kennametal Singapore Pte. Ltd.
3A International Business Park
Unit #01-02/03/05, ICON@IBP
Singapore 609935
Tel: +65 6265 9222
k-sg.sales@kennametal.com

INDIA HEADQUARTERS
Kennametal India Limited
CIN: L27109KA1964PLC001546
8/9th Mile, Tumkur Road
Bangalore - 560073
Tel: +91 080 22198444 or +91 080 43281444
bangalore.information@kennametal.com

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