THE TOOLING PROGRAM AS **VERSATILE** AS YOUR JOB SHOP!

TURNING

MILLING

HOLEMAKING

TOOLING SYSTEMS

CUTTING TOOLS

KENNA UNIVERSAL™ TOOLING

KENNAMETAL®
ENGINEERING YOUR COMPETITIVE EDGE

Catalog 5090
INCH & METRIC

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Engineering Your Competitive Edge®

KENNA UNIVERSAL

VERSATILITY — only 6 grades needed for virtually all your machining requirements!

QUALITY — from the world's premier tooling solutions supplier!

VALUE — decrease your inventory costs by up to 50%!

Introducing

Kennametal's KENNA UNIVERSAL™ Tooling — brought to you by Kennametal and your local authorized Kennametal distributor...

…specifically designed to enable job shops to grow business, increase profitability, and reduce everyday production worries!

IN JOB SHOPS

LATHE

- ***3 brand-new grades*** for maximum versatility in all general lathe applications:
  - **KU10T** – for medium to finish machining of steels, stainless steels, cast irons, non-ferrous materials, and superalloys
  - **KU25T** – for threading and cut-off work in virtually all workpiece materials
  - **KU30T** – for most roughing through semi-finishing cuts
- A complete product range: turning, boring, grooving, threading, and cut-off!
- Plus, our ***A4 Turn & Groove System*** – and so much more!

MILLING

- ***2 brand-new grades*** for outstanding results in all general milling applications:
  - **KUC20M** – for face-milling of steels, stainless steels, cast irons, non-ferrous materials, and superalloys
  - **KUC30M** – for even the toughest workpiece challenges
- A ***KSSM Face-Milling*** platform where one insert style works in three different cutters (face, slotting, helical)!
- Plus, a wide variety of inch and metric ***Solid Carbide End Mills***!

HOLEMAKING

- ***A brand-new grade*** for superior drilling productivity:
  - **KU40D** – for general-purpose holemaking tasks
- Just the right combination of Solid Carbide, QPV Spade Blade, and Indexable-Insert Drills – in inch and metric!

TOOLING SYSTEMS

- Unsurpassed global standard ***Toolholding Systems***!
- Plus, ***KM25***™ — our latest quick-change offering that replaces conventional 1" (or 25mm) square-shank tooling — no machine modifications required!

Kennametal understands the unique business needs of today's global job shops.

Let us prove it.

Call us or your local authorized Kennametal distributor for full program details!

KENNAMETAL®

ENGINEERING YOUR COMPETITIVE EDGE

www.kennametal.com

Grade Selection and Naming

GRADE SELECTION

Available for turning, holemaking, and milling operations in six highly versatile grades –

KU10T, KU25T, and **KU30T** for turning; **KU40D** for holemaking; and **KUC20M** and **KUC30M** for milling.

	(P) STEEL	(M) STAINLESS STEEL	(K) CAST IRON	(N) NON-FERROUS	(S) HIGH-TEMP ALLOY	(H) HARDENED MATERIALS
TURNING	KU10T	KU10T	KU10T	KU10T	KU10T	KU10T
	KU25T	KU25T	KU25T	KU25T	KU25T	KU25T
	KU30T	KU30T	KU30T		KU30T	
MILLING	KUC20M	KUC20M	KUC20M	KUC20M	KUC20M	
	KUC30M	KUC30M			KUC30M	
HOLEMAKING	KU40D	KU40D	KU40D	KU40D	KU40D	

Grade Naming

by Grade…

KU(C)10T

1 2 3

1 KU – KENNA UNIVERSAL Turning and Holemaking Grade
KUC – KENNA UNIVERSAL Milling Grade

2 WEAR/TOUGHNESS
ISO RANGE:
0 = Highly Wear Resistant
to
50 = Extremely Tough

3 T - Turning
M- Milling
D - Drilling

Turning Products

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Engineering Your Competitive Edge IN JOB SHOPS

LATHE

- ***3 brand-new grades*** for exceptional performance in all general lathe applications:
  - KU10T
  - KU25T
  - KU30T
- A complete product range: turning, boring, grooving, threading, and cut-off!
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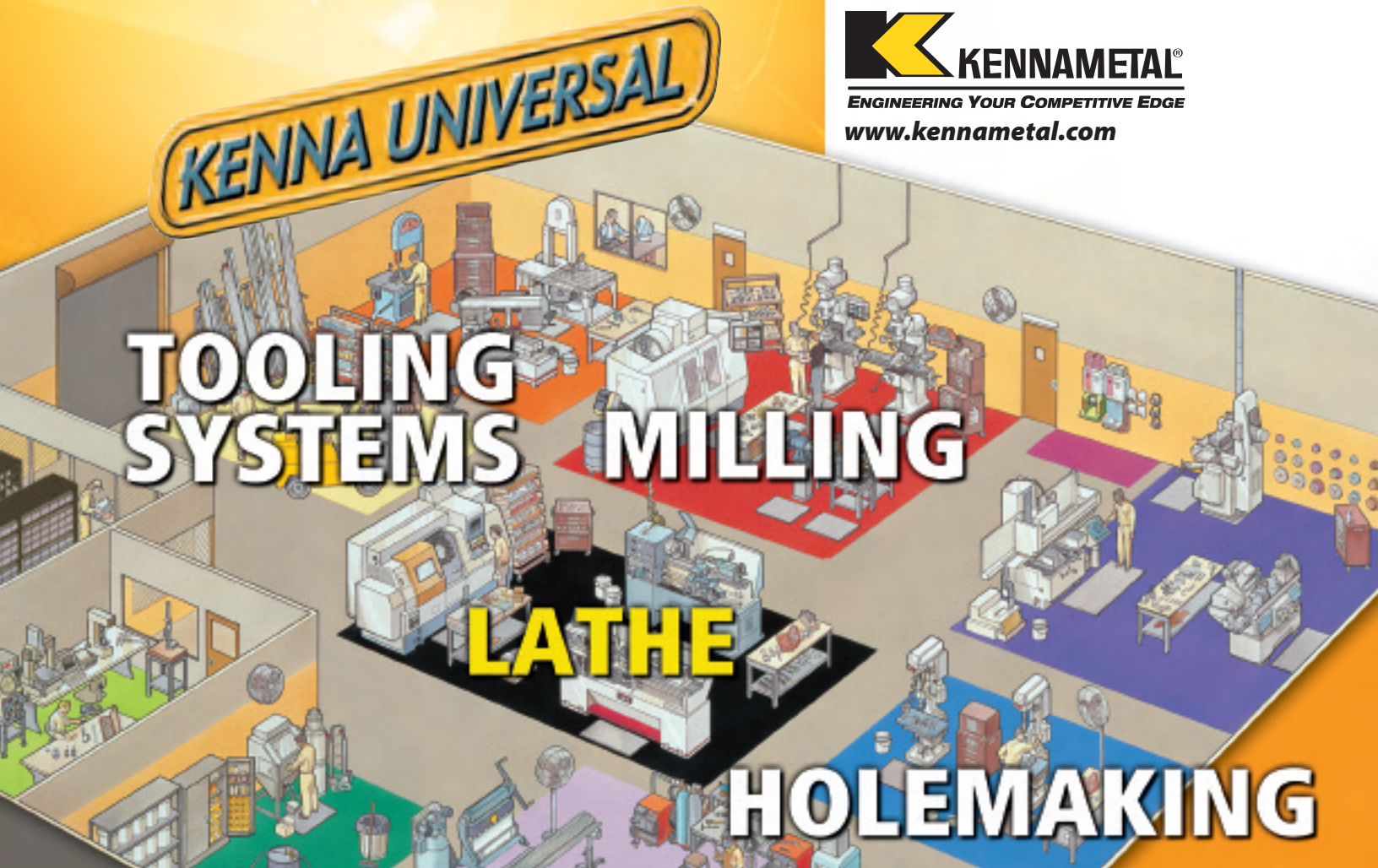


The only universal products engineered to meet the specific needs of job shops!

KENNAMETAL®

KENNA UNIVERSAL

Program Content

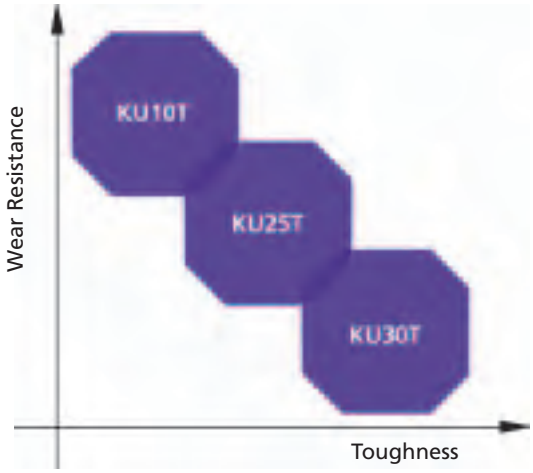
- **KENLOC** Inserts
- **SCREW-ON** Inserts
- **TOP NOTCH** Grooving with Chip Control
- **TOP NOTCH** Threading with Chip Control
- **LT** Threading Inserts with Chip Control
- **A4** Groove & Turn Inserts
- **A2** Cut-Off Inserts

Three New Universal Turning Grades!

NEW! **KU10T** – PVD-coated grade for finishing and medium machining operations

NEW! **KU25T** – Tough PVD-coated grade for finishing and medium machining in threading and cut-off operations

NEW! **KU30T** – CVD-coated grade for roughing and medium machining operations



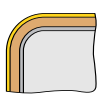
Apply on:

UNIVERSAL

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

KENNA UNIVERSAL – Turning Grades

Grade Selection Table

Type	Grade	Coating	Composition and Application	Area of use
		C-Class		Standard designation / Wear resistance / Toughness: 05 10 15 20 25 30 35 40 45
PVD-Coated Carbide Grades	**KU10T** NEW!	 TiN TiAlN C3, C4	**composition:** An advanced PVD coating over a highly deformation-resistant carbide substrate. **application:** KU10T is an ideal general machining grade designed for medium to finishing operations. KU10T is excellent when machining most steels, stainless steels, cast irons, non-ferrous materials, and superalloys under stable conditions. KU10T is also effective when machining hardened and short-chipping materials.	P M K N S H
	KU25T NEW!	 TiN TiAlN C2, C6	**composition:** An advanced PVD coating over a tough and highly wear resistant carbide substrate. **application:** KU25T is ideal for finishing to general machining of most workpiece materials. With a higher cobalt content than KU10T, this grade provides the toughness needed to handle the demands of grooving, threading and cut-off operations. KU25T performs extremely well when machining most steels, stainless steels, cast irons, non-ferrous materials, and superalloys under stable conditions. KU25T can also be effectively applied when machining hardened and short-chipping materials.	P M K N S H
CVD-Coated Carbide Grades	**KU30T** NEW!	 TiN TiCN TiC C5, C6	**composition:** A tough cobalt-enriched substrate with a multilayered CVD coating. **application:** KU30T is a new grade designed specifically for the job shop industry where a wide range of workpiece materials is employed. With its tough cobalt-enriched substrate, KU30T performs very effectively in roughing and medium machining operations. The post-coat grinding of the insert permits stable insert seating while the post-coat treatment resists workpiece build-up and microchipping. For roughing steels, cast irons, and stainless steels, your first choices are the –RN, -MN, and the –RP geometries. For medium machining (and finishing), the –MP geometry with a positive rake is suggested.	P M K N S H

Geometries for Steel, Stainless Steel, Cast Iron, Non-Ferrous, High-Temp Alloys, and Hardened Materials

1st Step – Select the Insert Geometry

Negative Inserts

▼ Roughing

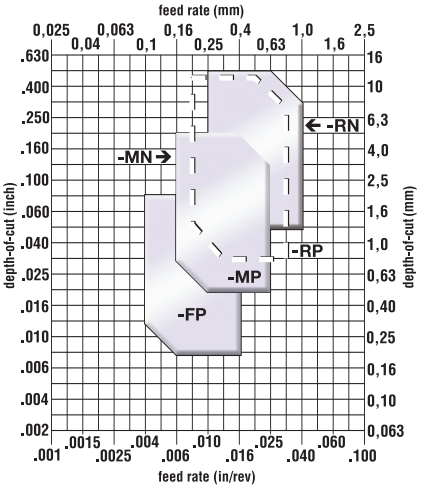
-RN -RP

▼▼ Medium Machining

-MN -MP

▼▼▼ Finishing

-FP



Positive Inserts

▼▼ Medium Machining

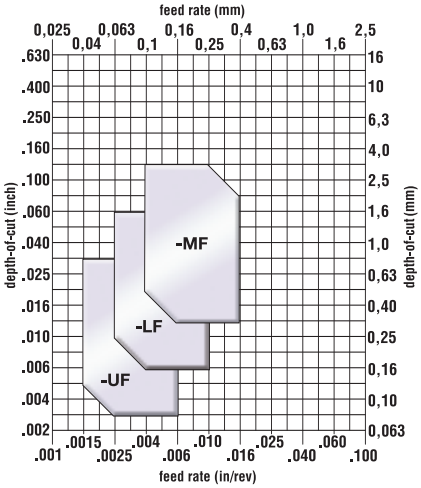
-MF

▼▼▼ Finishing

-LF

▼▼▼▼ Fine Finishing

-UF



2nd Step – Select the Grade

Cutting Condition	Negative Insert Geometry					Positive Insert Geometry		
	-FP ▼▼▼	-MP ▼▼	-MN ▼▼	-RN ▼	-RP ▼	-UF ▼▼▼▼	-LF ▼▼▼	-MF ▼▼
heavily interrupted cut	–	KU30T	KU30T	KU30T	KU30T	–	KU30T	KU30T
lightly interrupted cut	KU10T	KU30T	KU30T	KU30T	KU30T	KU10T	KU30T	KU30T
varying depth of cut, casting or forging skin	KU10T	KU10T	KU30T	KU30T	KU30T	KU10T	KU10T	KU30T
smooth cut, pre-turned surface	KU10T	KU10T	KU30T	KU30T	KU30T	KU10T	KU10T	KU30T

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

3rd Step – Select the Cutting Speed

Plain Carbon and Alloy Steels, Ferritic and Martensitic and PH Stainless Steels

Material Group	grade	Speed - sfm (m/min) 170 (50)	330 (100)	490 (150)	655 (200)	820 (250)	980 (300)	1150 (350)	Starting Conditions ◁▷ sfm	m/min
P	KU10T				◁▷				650	200
	KU30T			◁▷					500	150

Austenitic and Stainless Steels

Material Group	grade	Speed - sfm (m/min) 170 (50)	330 (100)	490 (150)	655 (200)	820 (250)	980 (300)	1150 (350)	Starting Conditions ◁▷ sfm	m/min
M	KU10T				◁▷				600	180
	KU30T			◁▷					450	140

Gray and Ductile Cast Irons

Material Group	grade	Speed - sfm (m/min) 170 (50)	330 (100)	490 (150)	655 (200)	820 (250)	980 (300)	1150 (350)	Starting Conditions ◁▷ sfm	m/min
K	KU10T					◁▷			800	240
	KU30T				◁▷				650	200

Non-Ferrous Metals: Low-silicon aluminum alloys (<12%) and magnesium alloys

Material Group	grade	Speed - sfm (m/min) 800 (240)	1200 (360)	1600 (490)	2000 (610)	2400 (730)	2800 (855)	3200 (975)	Starting Conditions ◁▷ sfm	m/min
N	KU10T			◁▷					1500	460

High-Temp Alloys

Material Group	grade	Speed - sfm (m/min) 170 (50)	330 (100)	490 (150)	655 (200)	820 (250)	980 (300)	1150 (350)	Starting Conditions ◁▷ sfm	m/min
S	KU10T		◁▷						220	65
	KU30T	◁▷							150	45

Hardened Materials (>48 HRC)

Material Group	grade	Speed - sfm (m/min) 170 (50)	330 (100)	490 (150)	655 (200)	820 (250)	980 (300)	1150 (350)	Starting Conditions ◁▷ sfm	m/min
H	KU10T		◁▷						200	60

◁▷ Represents the recommended starting conditions. Optimize for your specific application.

UNIVERSAL

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

KENNA UNIVERSAL Chip Control Geometries

Kennametal Clamping System

Chip Control Geometry Designation
example: MG-MP = CN**MG**-432**MP**

Feed Rate Range
(for best results, use the center 60% of the range)

	operation	insert style application	insert geometry	profile	feed rate – inches .0015 .0025 .004 .006 .010 .016 .025 .040 .060 .100 .200 .004 .006 .010 .016 .025 .040 .060 .100 .160 .250 .500 depth of cut – inches
Kenloc Inserts	medium machining ▼▼	MG-MP			.006 - .020 (0,2 - 0,5) .030 - .200 (0,8 - 5,1)

feed rate – (mm)
0,04 0,063 0,01 0,16 0,25 0,4 0,63 1,0 1,6 2,5 5,0
0,1 0,16 0,25 0,4 0,63 1,0 1,6 2,5 4,0 6,3 10,0
depth of cut – (mm)

Depth of Cut Range
(for all inserts in the program, select smaller inserts for lighter cuts and larger inserts for heavy cuts)

Chipbreaker Geometry
(section is through nose radius of insert)

Pictorial View of Insert

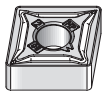
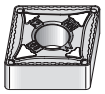
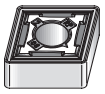
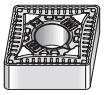
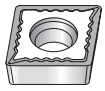
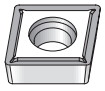
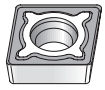
Primary Workpiece Material Group

- steel
- stainless steel
- cast iron
- non-ferrous
- high-temp alloys
- hardened materials

Machining Operation
(what the insert geometry is designed for)

- ▼▼▼▼ – fine finishing
- ▼▼▼ – finishing
- ▼▼ – medium machining
- ▼ – roughing

KENNA UNIVERSAL Chip Control Geometries

	operation	insert style application	insert geometry	profile	feed rate – inches / depth of cut – inches
Kenloc Inserts	finishing ▼▼▼	**MG-FP**			.004 - .012 (0,1 - 0,3) / .010 - .100 (0,3 - 2,5)
	medium machining ▼▼	**MG-MP**			.006 - .020 (0,2 - 0,5) / .030 - .200 (0,8 - 5,1)
	medium machining ▼▼	**MG-MN**			.006 - .020 (0,2 - 0,5) / .020 - .200 (0,5 - 5,1)
	roughing ▼	**MG-RP**			.008 - .025 (0,2 - 0,6) / .045 - .250 (1,1 - 6,4)
	roughing ▼	**MG-RN**			.010 - .025 (0,3 - 0,6) / .045 - .250 (1,1 - 6,4)
Screw-On Inserts	fine finishing ▼▼▼▼	**MT-UF**			.002 - .010 (0,1 - 0,3) / .005 - .050 (0,1 - 1,3)
	finishing ▼▼▼	**MT-LF**			.007 - .015 (0,2 - 0,4) / .030 - .090 (0,8 - 2,3)
	medium machining ▼▼	**MT-MF**			.009 - .017 (0,2 - 0,4) / .045 - .090 (1,1 - 2,3)

feed rate – inches: .0015 .0025 .004 .006 .010 .016 .025 .040 .060 .100 .200

depth of cut – inches: .004 .006 .010 .016 .025 .040 .060 .100 .160 .250 .500

feed rate – (mm): 0,04 0,063 0,01 0,16 0,25 0,4 0,63 1,0 1,6 2,5 5,0

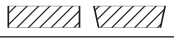
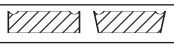
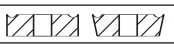
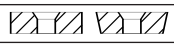
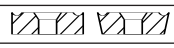
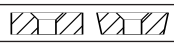
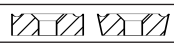
depth of cut – (mm): 0,1 0,16 0,25 0,4 0,63 1,0 1,6 2,5 4,0 6,3 10,0

Insert Identification System

1. Shape

symbol shape	insert	shape	nose angle (degree)
S		square	90
T		triangular	60
C		rhombic (diamond)	80
D			55
E			75
F			50
M			86
V			35
W		trigon	80
H		hexagonal	120
O		octagonal	135
P		pentagonal	108
L		rectangular	90
A		parallelo-gram-shaped	85
B			82
N/K			55
R		round	–

4. Insert Type

symbol	hole	shape of hole	chipbreaker	shape of insert's section	alternate symbols: ordinary system	alternate symbols: "D" less than 1/4"*
N	without		without		N	
R			single sided		R	E
F			double sided		F	
A	with	cylindrical hole	without		A	
M,P,S			single sided		M	
G,P,Z			double sided		G	
W		partly cylindrical hole, 40-60° countersink	without		A	
T			single sided		M	
Q		partly cylindrical hole, 40-60° double countersink	without		A	D
U			double sided		G	
B		partly cylindrical hole, 70-90° countersink	without		A	
H			single sided		M	
C		partly cylindrical hole, 70-90° double countersink	without		A	
J			double sided		G	
X	special				X	X

*Inch system only.

Example:

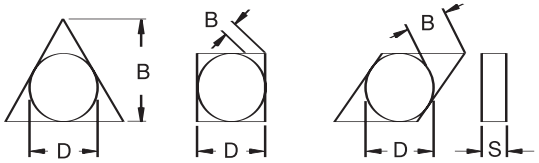
INCH	C	N	M	G	4
METRIC	C	N	M	G	12

2. Relief Angle

N – 0°
A – 3°
B – 5°
C – 7°
P – 11°
D – 15°
E – 20°
F – 25°
G – 30°

3. Tolerance

tolerances: apply prior to edge prep and coating
D: theoretical diameter of the insert inscribed circle
S: thickness
B: See figures below.



tolerance class	tolerance on "D"		tolerance on "B"		tolerance on "S"	
	inch	mm	inch	mm	inch	mm
C	±.0010	±0,025	±.0005	±0,013	±.001	±0,025
H	±.0005	±0,013	±.0005	±0,013	±.001	±0,025
E	±.0010	±0,025	±.0010	±0,025	±.001	±0,025
G	±.0010	±0,025	±.0010	±0,025	±.005	±0,13
M	See tables at right.				±.005	±0,13
U	See tables at right.				±.005	±0,13

5. Size

inch	"D"		Code for metric cutting edge length "L10"						
	inch	mm	C	D	R	S	T	V	W
1.2 (5)	5/32	3,97	S4	04	03	03	06	–	–
1.5 (6)	3/16	4,76	04	05	04	04	08	08	S3
1.8 (7)	7/32	5,56	05	06	05	05	09	09	03
–	.236	6,00	–	–	06	–	–	–	–
2	1/4	6,35	06	07	06	06	11	11	04
2.5	5/16	7,94	08	09	07	07	13	13	05
–	.315	8,00	–	–	08	–	–	–	–
3	3/8	9,52	09	11	09	09	16	16	06
–	.394	10,00	–	–	10	–	–	–	–
3.5	7/16	11,11	11	13	11	11	19	19	07
–	.472	12,00	–	–	12	–	–	–	–
4	1/2	12,70	12	15	12	12	22	22	08
4.5	9/16	14,29	14	17	14	14	24	24	09
5	5/8	15,88	16	19	15	15	27	27	10
–	.630	16,00	–	–	16	–	–	–	–
5.5	11/16	17,46	17	21	17	17	30	30	11
6	3/4	19,05	19	23	19	19	33	33	13
–	.787	20,00	–	–	20	–	–	–	–
7	7/8	22,22	22	27	22	22	38	38	15
–	.984	25,00	–	–	25	–	–	–	–
8	1	25,40	25	31	25	25	44	44	17
10	1 1/4	31,75	32	38	31	31	54	54	21
–	1.260	32,00	–	–	32	–	–	–	–

NOTE: Inch sizes in parenthesis for "alternate symbols" D or E (under 1/4 inch "D").

symbol		thickness	
inch	mm	inch	mm
.5 (1)	–	1/32	0,79
.6	T0	.040	1,00
1 (2)	01	1/16	1,59
1.2	T1	5.64	1,98
1.5 (3)	02	3/32	2,38
2	03	1/8	3,18
2.5	T3	5/32	3,97
3	04	3/16	4,76
3.5	05	7/32	5,56
4	06	1/4	6,35
5	07	5/16	7,94
6	09	3/8	9,52
7	11	7/16	11,11
8	12	1/2	12,70

NOTE:
Inch sizes in parentheses
for "alternate symbols"
D or E (under 1/4 inch "D").

3. Tolerance Explanation

"D"		± Tolerance on "D"							
		Class M-tolerance				Class U-tolerance			
		Shapes S, T, C, R & W		Shape D		Shape V		Shapes S, T & C	
inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
5/32	3,97	.002	0,05	–	–	–	–	–	–
3/16	4,76			–	–	–	–	.003	0,06
7/32	5,56			.002	0,05	.002	0,05		
1/4	6,35								
5/16	7,94								
3/8	9,52								
7/16	11,11	.003	0,06	.003	0,06	.003	0,06	.005	0,13
1/2	12,70								
9/16	14,29								
5/8	15,88	.004	0,10	.004	0,10	.004	0,10	.007	0,18
11/16	17,46								
3/4	19,05								
7/8	22,22	.005	0,13	–	–	–	–	.010	0,25
1	25,40			–	–	–	–		
1 1/4	31,75	.006	0,15	–	–	–	–		

"D"		± Tolerance on "B"							
		Class M-tolerance				Class U-tolerance			
		Shapes S, T, C, R & W		Shape D		Shape V		Shapes S, T & C	
inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
5/32	3,97	.003	0,06	–	–	–	–	–	–
3/16	4,76			–	–	–	–	.005	0,13
7/32	5,56			.004	0,11	–	–		
1/4	6,35					–	–		
5/16	7,94					–	–		
3/8	9,52					.007	0,18		
7/16	11,11	.005	0,13	.006	0,15	–	–	–	–
1/2	12,70					.010	0,25	.008	0,20
9/16	14,29					–	–	–	–
5/8	15,88	.006	0,15	.007	0,18	–	–	.011	0,27
11/16	17,46					–	–		
3/4	19,05					–	–		
7/8	22,22			–	–	–	–	.015	0,38
1	25,40	.007	0,18	–	–	–	–		
1 1/4	31,75	.008	0,20	–	–	–	–		

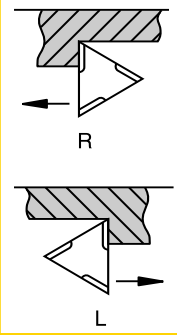
6. Thickness "S"

3	2
04	08

7. Corner Radius "RE"

symbol		corner radius	
inch	mm	inch	mm
X0	X0	.0015	.04
0	01	.004	0,1
.5	02	.008	0,2
1	04	1/64	0,4
2	08	1/32	0,8
3	12	3/64	1,2
4	16	1/16	1,6
5	20	5/64	2,0
6	24	3/32	2,4
7	28	7/64	2,8
8	32	1/8	3,2
–	00	round insert (inch)	
–	M0	round insert (mm)	

8. Hand of Insert (optional)



9./10. Cutting Edge Condition or Chip Control Features (optional)

F	sharp
FF	fine finishing
FN	finishing
MN	medium negative
RN	roughing negative
UN	universal negative
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
-11	fine finishing
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
MG-P	medium positive

14./15. T-land Angle (optional)

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

16. Tip Style (optional)

symbol	usage
D	two-sided mini tip
M	mini tip
MT	multi tip

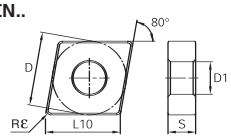
11./12./13. T-land Width (optional)

symbol		size	
ANSI	ISO	inch	mm
04	010	.004	0,01
08	020	.008	0,02

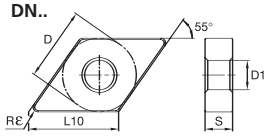
Kenloc Inserts

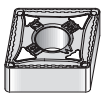
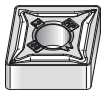
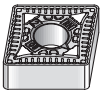
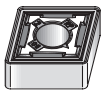
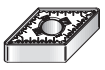
Dimensions and Grade Selection

CN..



DN..

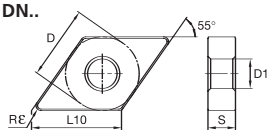


	ANSI catalog number	ISO catalog number	Dimensions D inch	D mm	L10 inch	L10 mm	S inch	S mm	Rε inch	Rε mm	D1 inch	D1 mm	KENNA UNIVERSAL KU10T	KU30T
CNMG-FP 	**CNMG431FP**	**CNMG120404FP**	1/2	12,70	.51	12,90	3/16	4,76	1/64	0,4	.203	5,16	●	
	CNMG432FP	**CNMG120408FP**	1/2	12,70	.51	12,90	3/16	4,76	1/32	0,8	.203	5,16	●	
CNMG-MN 	**CNMG431MN**	**CNMG120404MN**	1/2	12,70	.51	12,90	3/16	4,76	1/64	0,4	.203	5,16		●
	CNMG432MN	**CNMG120408MN**	1/2	12,70	.51	12,90	3/16	4,76	1/32	0,8	.203	5,16		●
	CNMG433MN	**CNMG120412MN**	1/2	12,70	.51	12,90	3/16	4,76	3/64	1,2	.203	5,16		●
CNMG-MP 	**CNMG431MP**	**CNMG120404MP**	1/2	12,70	.51	12,90	3/16	4,76	1/64	0,4	.203	5,16	●	●
	CNMG432MP	**CNMG120408MP**	1/2	12,70	.51	12,90	3/16	4,76	1/32	0,8	.203	5,16	●	●
	CNMG433MP	**CNMG120412MP**	1/2	12,70	.51	12,90	3/16	4,76	3/64	1,2	.203	5,16	●	●
CNMG-RN 	**CNMG432RN**	**CNMG120408RN**	1/2	12,70	.51	12,90	3/16	4,76	1/32	0,8	.203	5,16		●
	CNMG433RN	**CNMG120412RN**	1/2	12,70	.51	12,90	3/16	4,76	3/64	1,2	.203	5,16		●
	CNMG434RN	**CNMG120416RN**	1/2	12,70	.51	12,90	3/16	4,76	1/16	1,6	.203	5,16		●
	CNMG543RN	**CNMG160612RN**	5/8	15,88	.63	16,12	1/4	6,35	3/64	1,2	.250	6,35		●
	CNMG544RN	**CNMG160616RN**	5/8	15,88	.63	16,12	1/4	6,35	1/16	1,6	.250	6,35		●
	CNMG643RN	**CNMG190612RN**	3/4	19,05	.76	19,34	1/4	6,35	3/64	1,2	.313	7,93		●
	CNMG644RN	**CNMG190616RN**	3/4	19,05	.76	19,34	1/4	6,35	1/16	1,6	.313	7,93		●
CNMG-RP 	**CNMG432RP**	**CNMG120408RP**	1/2	12,70	.51	12,90	3/16	4,76	1/32	0,8	.203	5,16		●
	CNMG433RP	**CNMG120412RP**	1/2	12,70	.51	12,90	3/16	4,76	3/64	1,2	.203	5,16		●
	CNMG434RP	**CNMG120416RP**	1/2	12,70	.51	12,90	3/16	4,76	1/16	1,6	.203	5,16		●
	CNMG543RP	**CNMG160612RP**	5/8	15,88	.63	16,12	1/4	6,35	3/64	1,2	.250	6,35		●
	CNMG544RP	**CNMG160616RP**	5/8	15,88	.63	16,12	1/4	6,35	1/16	1,6	.250	6,35		●
	CNMG643RP	**CNMG190612RP**	3/4	19,05	.76	19,34	1/4	6,35	3/64	1,2	.313	7,93		●
	CNMG644RP	**CNMG190616RP**	3/4	19,05	.76	19,34	1/4	6,35	1/16	1,6	.313	7,93		●
DNMG-FP 	**DNMG331FP**	**DNMG110404FP**	3/8	9,53	.46	11,63	3/16	4,76	1/64	0,4	.150	3,81	●	
	DNMG332FP	**DNMG110408FP**	3/8	9,53	.46	11,63	3/16	4,76	1/32	0,8	.150	3,81	●	
	DNMG431FP	**DNMG150404FP**	1/2	12,70	.61	15,50	3/16	4,76	1/64	0,4	.203	5,16	●	
	DNMG432FP	**DNMG150408FP**	1/2	12,70	.61	15,50	3/16	4,76	1/32	0,8	.203	5,16	●	
	DNMG441FP	**DNMG150604FP**	1/2	12,70	.61	15,50	1/4	6,35	1/64	0,4	.203	5,16	●	
	DNMG442FP	**DNMG150608FP**	1/2	12,70	.61	15,50	1/4	6,35	1/32	0,8	.203	5,16	●	

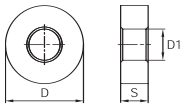
Order example:
ANSI catalog number: **CNMG431FP** ISO catalog number: **CNMG120404FP**
Insert grade: **KU10T** Insert grade: **KU10T**

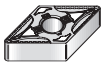
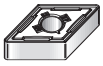
To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

DN..



RN..



	ANSI catalog number	ISO catalog number	Dimensions D inch	D mm	L10 inch	L10 mm	S inch	S mm	Rε inch	Rε mm	D1 inch	D1 mm	KENNA UNIVERSAL KU10T	KU30T
DNMG-MN 	**DNMG331MN**	**DNMG110404MN**	3/8	9,53	.46	11,63	3/16	4,76	1/64	0,4	.150	3,81		●
	DNMG332MN	**DNMG110408MN**	3/8	9,53	.46	11,63	3/16	4,76	1/32	0,8	.150	3,81		●
	DNMG333MN	**DNMG110412MN**	3/8	9,53	.46	11,63	3/16	4,76	3/64	1,2	.150	3,81		●
	DNMG431MN	**DNMG150404MN**	1/2	12,70	.61	15,50	3/16	4,76	1/64	0,4	.203	5,16		●
	DNMG432MN	**DNMG150408MN**	1/2	12,70	.61	15,50	3/16	4,76	1/32	0,8	.203	5,16		●
	DNMG433MN	**DNMG150412MN**	1/2	12,70	.61	15,50	3/16	4,76	3/64	1,2	.203	5,16		●
	DNMG441MN	**DNMG150604MN**	1/2	12,70	.61	15,50	1/4	6,35	1/64	0,4	.203	5,16		●
	DNMG442MN	**DNMG150608MN**	1/2	12,70	.61	15,50	1/4	6,35	1/32	0,8	.203	5,16		●
	DNMG443MN	**DNMG150612MN**	1/2	12,70	.61	15,50	1/4	6,35	3/64	1,2	.203	5,16		●
DNMG-MP 	**DNMG332MP**	**DNMG110408MP**	3/8	9,53	.46	11,63	3/16	4,76	1/32	0,8	.150	3,81	●	●
	DNMG333MP	**DNMG110412MP**	3/8	9,53	.46	11,63	3/16	4,76	3/64	1,2	.150	3,81	●	●
	DNMG431MP	**DNMG150404MP**	1/2	12,70	.61	15,50	3/16	4,76	1/64	0,4	.203	5,16	●	●
	DNMG432MP	**DNMG150408MP**	1/2	12,70	.61	15,50	3/16	4,76	1/32	0,8	.203	5,16	●	●
	DNMG433MP	**DNMG150412MP**	1/2	12,70	.61	15,50	3/16	4,76	3/64	1,2	.203	5,16	●	●
	DNMG441MP	**DNMG150604MP**	1/2	12,70	.61	15,50	1/4	6,35	1/64	0,4	.203	5,16	●	●
	DNMG442MP	**DNMG150608MP**	1/2	12,70	.61	15,50	1/4	6,35	1/32	0,8	.203	5,16	●	●
	DNMG443MP	**DNMG150612MP**	1/2	12,70	.61	15,50	1/4	6,35	3/64	1,2	.203	5,16	●	●
DNMG-RN 	**DNMG432RN**	**DNMG150408RN**	1/2	12,70	.61	15,50	3/16	4,76	1/32	0,8	.203	5,16		●
	DNMG442RN	**DNMG150608RN**	1/2	12,70	.61	15,50	1/4	6,35	1/32	0,8	.203	5,16		●
	DNMG543RN	**DNMG190612RN**	5/8	15,88	.76	19,38	1/4	6,35	3/64	1,2	.250	6,35		●
DNMG-RP 	**DNMG332RP**	**DNMG110408RP**	3/8	9,53	.46	11,63	3/16	4,76	1/32	0,8	.150	3,81		●
	DNMG333RP	**DNMG110412RP**	3/8	9,53	.46	11,63	3/16	4,76	3/64	1,2	.150	3,81		●
	DNMG432RP	**DNMG150408RP**	1/2	12,70	.61	15,50	3/16	4,76	1/32	0,8	.203	5,16		●
	DNMG433RP	**DNMG150412RP**	1/2	12,70	.61	15,50	3/16	4,76	3/64	1,2	.203	5,16		●
	DNMG434RP	**DNMG150416RP**	1/2	12,70	.61	15,50	3/16	4,76	1/16	1,6	.203	5,16		●
	DNMG442RP	**DNMG150608RP**	1/2	12,70	.61	15,50	1/4	6,35	1/32	0,8	.203	5,16		●
	DNMG443RP	**DNMG150612RP**	1/2	12,70	.61	15,50	1/4	6,35	3/64	1,2	.203	5,16		●
	DNMG444RP	**DNMG150616RP**	1/2	12,70	.61	15,50	1/4	6,35	1/16	1,6	.203	5,16		●
RNMG-RN 	**RNMG32RN**	**RNMG090300RN**	3/8	9,53	-	-	1/8	3,18	-	-	.150	3,81		●
	RNMG43RN	**RNMG120400RN**	1/2	12,70	-	-	3/16	4,76	-	-	.203	5,16		●

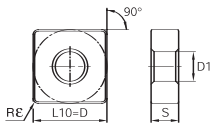
Order example:
ANSI catalog number: **DNMG331MN** ISO catalog number: **DNMG110404MN**
Insert grade: **KU30T** Insert grade: **KU30T**

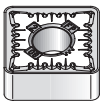
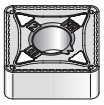
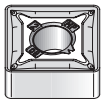
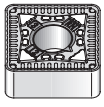
To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

Kenloc Inserts

Dimensions and Grade Selection

SN..

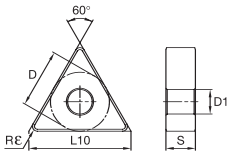


	ANSI catalog number	ISO catalog number	Dimensions D inch	D mm	L10 inch	L10 mm	S inch	S mm	Rε inch	Rε mm	D1 inch	D1 mm	KENNA UNIVERSAL KU10T	KENNA UNIVERSAL KU30T
SNMG-FP 	SNMG431FP	SNMG120404FP	1/2	12,70	.50	12,70	3/16	4,76	1/64	0,4	.203	5,16	●	
	SNMG432FP	SNMG120408FP	1/2	12,70	.50	12,70	3/16	4,76	1/32	0,8	.203	5,16	●	
SNMG-MN 	SNMG431MN	SNMG120404MN	1/2	12,70	.50	12,70	3/16	4,76	1/64	0,4	.203	5,16		●
	SNMG432MN	SNMG120408MN	1/2	12,70	.50	12,70	3/16	4,76	1/32	0,8	.203	5,16		●
	SNMG433MN	SNMG120412MN	1/2	12,70	.50	12,70	3/16	4,76	3/64	1,2	.203	5,16		●
	SNMG434MN	SNMG120416MN	1/2	12,70	.50	12,70	3/16	4,76	1/16	1,6	.203	5,16		●
SNMG-MP 	SNMG432MP	SNMG120408MP	1/2	12,70	.50	12,70	3/16	4,76	1/32	0,8	.203	5,16	●	●
	SNMG433MP	SNMG120412MP	1/2	12,70	.50	12,70	3/16	4,76	3/64	1,2	.203	5,16	●	●
	SNMG434MP	SNMG120416MP	1/2	12,70	.50	12,70	3/16	4,76	1/16	1,6	.203	5,16	●	●
SNMG-RN 	SNMG432RN	SNMG120408RN	1/2	12,70	.50	12,70	3/16	4,76	1/32	0,8	.203	5,16		●
	SNMG433RN	SNMG120412RN	1/2	12,70	.50	12,70	3/16	4,76	3/64	1,2	.203	5,16		●
	SNMG434RN	SNMG120416RN	1/2	12,70	.50	12,70	3/16	4,76	1/16	1,6	.203	5,16		●
	SNMG544RN	SNMG150616RN	5/8	15,88	.63	15,88	1/4	6,35	1/16	1,6	.250	6,35		●
	SNMG642RN	SNMG190608RN	3/4	19,05	.75	19,05	1/4	6,35	1/32	0,8	.313	7,93		●
	SNMG643RN	SNMG190612RN	3/4	19,05	.75	19,05	1/4	6,35	3/64	1,2	.313	7,93		●
	SNMG644RN	SNMG190616RN	3/4	19,05	.75	19,05	1/4	6,35	1/16	1,6	.313	7,93		●
SNMG-RP 	SNMG432RP	SNMG120408RP	1/2	12,70	.50	12,70	3/16	4,76	1/32	0,8	.203	5,16		●
	SNMG433RP	SNMG120412RP	1/2	12,70	.50	12,70	3/16	4,76	3/64	1,2	.203	5,16		●
	SNMG543RP	SNMG150612RP	5/8	15,88	.63	15,88	1/4	6,35	3/64	1,2	.250	6,35		●
	SNMG544RP	SNMG150616RP	5/8	15,88	.63	15,88	1/4	6,35	1/16	1,6	.250	6,35		●
	SNMG643RP	SNMG190612RP	3/4	19,05	.75	19,05	1/4	6,35	3/64	1,2	.313	7,93		●
	SNMG644RP	SNMG190616RP	3/4	19,05	.75	19,05	1/4	6,35	1/16	1,6	.313	7,93		●

Order example:
ANSI catalog number: **SNMG431FP** ISO catalog number: **SNMG120404FP**
Insert grade: **KU10T** Insert grade: **KU10T**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

TN..



	ANSI catalog number	ISO catalog number	Dimensions D inch	D mm	L10 inch	L10 mm	S inch	S mm	Rε inch	Rε mm	D1 inch	D1 mm	KENNA UNIVERSAL KU10T	KU30T
TNMG-FP 	**TNMG331FP**	**TNMG160404FP**	3/8	9,53	.65	16,50	3/16	4,76	1/64	0,4	.150	3,81	●	
	TNMG332FP	**TNMG160408FP**	3/8	9,53	.65	16,50	3/16	4,76	1/32	0,8	.150	3,81	●	
	TNMG431FP	**TNMG220404FP**	1/2	12,70	.87	22,00	3/16	4,76	1/64	0,4	.203	5,16	●	
	TNMG432FP	**TNMG220408FP**	1/2	12,70	.87	22,00	3/16	4,76	1/32	0,8	.203	5,16	●	
TNMG-MN 	**TNMG331MN**	**TNMG160404MN**	3/8	9,53	.65	16,50	3/16	4,76	1/64	0,4	.150	3,81		●
	TNMG332MN	**TNMG160408MN**	3/8	9,53	.65	16,50	3/16	4,76	1/32	0,8	.150	3,81		●
	TNMG333MN	**TNMG160412MN**	3/8	9,53	.65	16,50	3/16	4,76	3/64	1,2	.150	3,81		●
	TNMG431MN	**TNMG220404MN**	1/2	12,70	.87	22,00	3/16	4,76	1/64	0,4	.203	5,16		●
	TNMG432MN	**TNMG220408MN**	1/2	12,70	.87	22,00	3/16	4,76	1/32	0,8	.203	5,16		●
	TNMG433MN	**TNMG220412MN**	1/2	12,70	.87	22,00	3/16	4,76	3/64	1,2	.203	5,16		●
TNMG-MP 	**TNMG331MP**	**TNMG160404MP**	3/8	9,53	.65	16,50	3/16	4,76	1/64	0,4	.150	3,81	●	●
	TNMG332MP	**TNMG160408MP**	3/8	9,53	.65	16,50	3/16	4,76	1/32	0,8	.150	3,81	●	●
	TNMG333MP	**TNMG160412MP**	3/8	9,53	.65	16,50	3/16	4,76	3/64	1,2	.150	3,81	●	●
	TNMG432MP	**TNMG220408MP**	1/2	12,70	.87	22,00	3/16	4,76	1/32	0,8	.203	5,16	●	●
	TNMG433MP	**TNMG220412MP**	1/2	12,70	.87	22,00	3/16	4,76	3/64	1,2	.203	5,16	●	●
TNMG-RN 	**TNMG332RN**	**TNMG160408RN**	3/8	9,53	.65	16,50	3/16	4,76	1/32	0,8	.150	3,81		●
	TNMG432RN	**TNMG220408RN**	1/2	12,70	.87	22,00	3/16	4,76	1/32	0,8	.203	5,16		●
	TNMG433RN	**TNMG220412RN**	1/2	12,70	.87	22,00	3/16	4,76	3/64	1,2	.203	5,16		●
	TNMG542RN	**TNMG270608RN**	5/8	15,88	1.08	27,50	1/4	6,35	1/32	0,8	.250	6,35		●
	TNMG544RN	**TNMG270616RN**	5/8	15,88	1.08	27,50	1/4	6,35	1/16	1,6	.250	6,35		●
	TNMG666RN	**TNMG330924RN**	3/4	19,05	1.30	33,00	3/8	9,53	3/32	2,4	.313	7,93		●
TNMG-RP 	**TNMG332RP**	**TNMG160408RP**	3/8	9,53	.65	16,50	3/16	4,76	1/32	0,8	.150	3,81		●
	TNMG333RP	**TNMG160412RP**	3/8	9,53	.65	16,50	3/16	4,76	3/64	1,2	.150	3,81		●
	TNMG334RP	**TNMG160416RP**	3/8	9,53	.65	16,50	3/16	4,76	1/16	1,6	.150	3,81		●
	TNMG432RP	**TNMG220408RP**	1/2	12,70	.87	22,00	3/16	4,76	1/32	0,8	.203	5,16		●
	TNMG433RP	**TNMG220412RP**	1/2	12,70	.87	22,00	3/16	4,76	3/64	1,2	.203	5,16		●
	TNMG434RP	**TNMG220416RP**	1/2	12,70	.87	22,00	3/16	4,76	1/16	1,6	.203	5,16		●

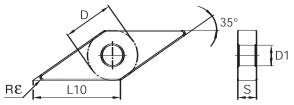
Order example:
ANSI catalog number: **TNMG331FP** ISO catalog number: **TNMG160404FP**
Insert grade: **KU10T** Insert grade: **KU10T**

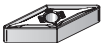
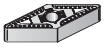
To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

Kenloc Inserts

Dimensions and Grade Selection

VN..



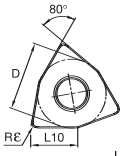
	ANSI catalog number	ISO catalog number	Dimensions D inch	D mm	L10 inch	L10 mm	S inch	S mm	Rε inch	Rε mm	D1 inch	D1 mm	KENNA UNIVERSAL KU10T	KENNA UNIVERSAL KU30T
VNMG-FP 	VNMG331FP	VNMG160404FP	3/8	9,53	.65	16,61	3/16	4,76	1/64	0,4	.150	3,81	●	
	VNMG332FP	VNMG160408FP	3/8	9,53	.65	16,61	3/16	4,76	1/32	0,8	.150	3,81	●	
VNMG-MN 	VNMG331MN	VNMG160404MN	3/8	9,53	.65	16,61	3/16	4,76	1/64	0,4	.150	3,81		●
	VNMG332MN	VNMG160408MN	3/8	9,53	.65	16,61	3/16	4,76	1/32	0,8	.150	3,81		●
	VNMG333MN	VNMG160412MN	3/8	9,53	.65	16,61	3/16	4,76	3/64	1,2	.150	3,81		●
VNMG-MP 	VNMG331MP	VNMG160404MP	3/8	9,53	.65	16,61	3/16	4,76	1/64	0,4	.150	3,81	●	●
	VNMG332MP	VNMG160408MP	3/8	9,53	.65	16,61	3/16	4,76	1/32	0,8	.150	3,81	●	●
	VNMG333MP	VNMG160412MP	3/8	9,53	.65	16,61	3/16	4,76	3/64	1,2	.150	3,81	●	●
VNMG-RN 	VNMG332RN	VNMG160408RN	3/8	9,53	.65	16,61	3/16	4,76	1/32	0,8	.150	3,81		●
	VNMG432RN	VNMG220408RN	1/2	12,70	.87	22,14	3/16	4,76	1/32	0,8	.203	5,16		●
VNMG-RP 	VNMG332RP	VNMG160408RP	3/8	9,53	.65	16,61	3/16	4,76	1/32	0,8	.150	3,81		●
	VNMG333RP	VNMG160412RP	3/8	9,53	.65	16,61	3/16	4,76	3/64	1,2	.150	3,81		●

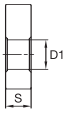
Order example:
ANSI catalog number: **VNMG331FP**
Insert grade: **KU10T**

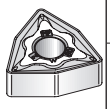
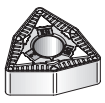
ISO catalog number: **VNMG160404FP**
Insert grade: **KU10T**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

WN..





	ANSI catalog number	ISO catalog number	Dimensions D inch	D mm	L10 inch	L10 mm	S inch	S mm	Rε inch	Rε mm	D1 inch	D1 mm	KENNA UNIVERSAL KU10T	KENNA UNIVERSAL KU30T
WNMG-FP 	WNMG331FP	WNMG060404FP	3/8	9,53	.26	6,52	3/16	4,76	1/64	0,4	.150	3,81	●	
	WNMG332FP	WNMG060408FP	3/8	9,53	.26	6,52	3/16	4,76	1/32	0,8	.150	3,81	●	
	WNMG431FP	WNMG080404FP	1/2	12,70	.34	8,69	3/16	4,76	1/64	0,4	.203	5,16	●	
	WNMG432FP	WNMG080408FP	1/2	12,70	.34	8,69	3/16	4,76	1/32	0,8	.203	5,16	●	
WNMG-MN 	WNMG331MN	WNMG060404MN	3/8	9,53	.26	6,52	3/16	4,76	1/64	0,4	.150	3,81		●
	WNMG332MN	WNMG060408MN	3/8	9,53	.26	6,52	3/16	4,76	1/32	0,8	.150	3,81		●
	WNMG333MN	WNMG060412MN	3/8	9,53	.26	6,52	3/16	4,76	3/64	1,2	.150	3,81		●
	WNMG432MN	WNMG080408MN	1/2	12,70	.34	8,69	3/16	4,76	1/32	0,8	.203	5,16		●
	WNMG433MN	WNMG080412MN	1/2	12,70	.34	8,69	3/16	4,76	3/64	1,2	.203	5,16		●
WNMG-MP 	WNMG331MP	WNMG060404MP	3/8	9,53	.26	6,52	3/16	4,76	1/64	0,4	.150	3,81	●	●
	WNMG332MP	WNMG060408MP	3/8	9,53	.26	6,52	3/16	4,76	1/32	0,8	.150	3,81	●	●
	WNMG333MP	WNMG060412MP	3/8	9,53	.26	6,52	3/16	4,76	3/64	1,2	.150	3,81	●	●
	WNMG432MP	WNMG080408MP	1/2	12,70	.34	8,69	3/16	4,76	1/32	0,8	.203	5,16	●	●
	WNMG433MP	WNMG080412MP	1/2	12,70	.34	8,69	3/16	4,76	3/64	1,2	.203	5,16	●	●
WNMG-RN 	WNMG332RN	WNMG060408RN	3/8	9,53	.26	6,52	3/16	4,76	1/32	0,8	.150	3,81		●
	WNMG333RN	WNMG060412RN	3/8	9,53	.26	6,52	3/16	4,76	3/64	1,2	.150	3,81		●
	WNMG432RN	WNMG080408RN	1/2	12,70	.34	8,69	3/16	4,76	1/32	0,8	.203	5,16		●
	WNMG433RN	WNMG080412RN	1/2	12,70	.34	8,69	3/16	4,76	3/64	1,2	.203	5,16		●
WNMG-RP 	WNMG332RP	WNMG060408RP	3/8	9,53	.26	6,52	3/16	4,76	1/32	0,8	.150	3,81		●
	WNMG333RP	WNMG060412RP	3/8	9,53	.26	6,52	3/16	4,76	3/64	1,2	.150	3,81		●
	WNMG432RP	WNMG080408RP	1/2	12,70	.34	8,69	3/16	4,76	1/32	0,8	.203	5,16		●
	WNMG433RP	WNMG080412RP	1/2	12,70	.34	8,69	3/16	4,76	3/64	1,2	.203	5,16		●
	WNMG434RP	WNMG080416RP	1/2	12,70	.34	8,69	3/16	4,76	1/16	1,6	.203	5,16		●

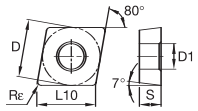
Order example:
ANSI catalog number: **WNMG331FP** ISO catalog number: **WNMG060404FP**
Insert grade: **KU10T** Insert grade: **KU10T**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

Screw-On Inserts

Dimensions and Grade Selection

CC..



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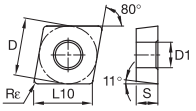
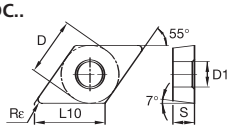


	ANSI catalog number	ISO catalog number	Dimensions D inch	D mm	L10 inch	L10 mm	S inch	S mm	Rε inch	Rε mm	D1 inch	D1 mm	KENNA UNIVERSAL KU10T	KU30T
CCMT-LF	CCMT21505LF	CCMT060202LF	1/4	6,35	.254	6,45	3/32	2,38	.008	0,2	.110	2,80	●	
	CCMT2151LF	CCMT060204LF	1/4	6,35	.254	6,45	3/32	2,38	1/64	0,4	.110	2,80	●	●
	CCMT2152LF	CCMT060208LF	1/4	6,35	.254	6,45	3/32	2,38	1/32	0,8	.110	2,80	●	●
	CCMT3251LF	CCMT09T304LF	3/8	9,53	.381	9,67	5/32	3,97	1/64	0,4	.173	4,40	●	●
	CCMT3252LF	CCMT09T308LF	3/8	9,53	.381	9,67	5/32	3,97	1/32	0,8	.173	4,40	●	●
	CCMT431LF	CCMT120404LF	1/2	12,70	.508	12,90	3/16	4,76	1/64	0,4	.217	5,50	●	●
	CCMT432LF	CCMT120408LF	1/2	12,70	.508	12,90	3/16	4,76	1/32	0,8	.217	5,50	●	●
	CCMT433LF	CCMT120412LF	1/2	12,70	.508	12,90	3/16	4,76	3/64	1,2	.217	5,50		●
CCMT-MF	CCMT2151MF	CCMT060204MF	1/4	6,35	.254	6,45	3/32	2,38	1/64	0,4	.110	2,80		●
	CCMT3251MF	CCMT09T304MF	3/8	9,53	.381	9,67	5/32	3,97	1/64	0,4	.173	4,40		●
	CCMT3252MF	CCMT09T308MF	3/8	9,53	.381	9,67	5/32	3,97	1/32	0,8	.173	4,40		●
	CCMT432MF	CCMT120408MF	1/2	12,70	.508	12,90	3/16	4,76	1/32	0,8	.217	5,50		●
CCMT-UF	CCMT2151UF	CCMT060204UF	1/4	6,35	.254	6,45	3/32	2,38	1/64	0,4	.110	2,80	●	
	CCMT3251UF	CCMT09T304UF	3/8	9,53	.381	9,67	5/32	3,97	1/64	0,4	.173	4,40	●	
	CCMT3252UF	CCMT09T308UF	3/8	9,53	.381	9,67	5/32	3,97	1/32	0,8	.173	4,40	●	
CPMT-LF	CPMT2151LF	CPMT060204LF	1/4	6,35	.254	6,45	3/32	2,38	1/64	0,4	.110	2,80	●	●
	CPMT2152LF	CPMT060208LF	1/4	6,35	.254	6,45	3/32	2,38	1/32	0,8	.110	2,80	●	●
	CPMT3251LF	CPMT09T304LF	3/8	9,53	.381	9,67	5/32	3,97	1/64	0,4	.173	4,40	●	
	CPMT3252LF	CPMT09T308LF	3/8	9,53	.381	9,67	5/32	3,97	1/32	0,8	.173	4,40	●	●
CPMT-MF	CPMT2152MF	CPMT060208MF	1/4	6,35	.254	6,45	3/32	2,38	1/32	0,8	.110	2,80		●
	CPMT3252MF	CPMT09T308MF	3/8	9,53	.381	9,67	5/32	3,97	1/32	0,8	.173	4,40		●
CPMT-UF	CPMT2151UF	CPMT060204UF	1/4	6,35	.254	6,45	3/32	2,38	1/64	0,4	.110	2,80	●	
	CPMT3251UF	CPMT09T304UF	3/8	9,53	.381	9,67	5/32	3,97	1/64	0,4	.173	4,40	●	

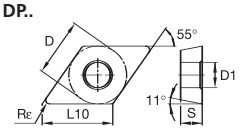
Order example:
ANSI catalog number: **CCMT21505LF** ISO catalog number: **CCMT060202LF**
Insert grade: **KU10T** Insert grade: **KU10T**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

DC..



DP..



	ANSI catalog number	ISO catalog number	Dimensions D inch	D mm	L10 inch	L10 mm	S inch	S mm	Rε inch	Rε mm	D1 inch	D1 mm	KENNA UNIVERSAL KU10T	KU30T
DCMT-LF	**DCMT2151LF**	**DCMT070204LF**	1/4	6,35	.305	7,75	3/32	2,38	1/64	0,4	.110	2,80	●	●
	DCMT3251LF	**DCMT11T304LF**	3/8	9,53	.458	11,63	5/32	3,97	1/64	0,4	.173	4,40	●	●
	DCMT3252LF	**DCMT11T308LF**	3/8	9,53	.458	11,63	5/32	3,97	1/32	0,8	.173	4,40	●	●
	DCMT3253LF	**DCMT11T312LF**	3/8	9,53	.458	11,63	5/32	3,97	3/64	1,2	.173	4,40	●	●
	DCMT432LF	**DCMT150408LF**	1/2	12,70	.610	15,50	3/16	4,76	1/32	0,8	.217	5,50	●	●
DCMT-MF	**DCMT3251MF**	**DCMT11T304MF**	3/8	9,53	.458	11,63	5/32	3,97	1/64	0,4	.173	4,40		●
	DCMT3252MF	**DCMT11T308MF**	3/8	9,53	.458	11,63	5/32	3,97	1/32	0,8	.173	4,40		●
	DCMT3253MF	**DCMT11T312MF**	3/8	9,53	.458	11,63	5/32	3,97	3/64	1,2	.173	4,40		●
DCMT-UF	**DCMT2151UF**	**DCMT070204UF**	1/4	6,35	.305	7,75	3/32	2,38	1/64	0,4	.110	2,80	●	
	DCMT32505UF	**DCMT11T302UF**	3/8	9,53	.458	11,63	5/32	3,97	.008	0,2	.173	4,40	●	
	DCMT3251UF	**DCMT11T304UF**	3/8	9,53	.458	11,63	5/32	3,97	1/64	0,4	.173	4,40	●	
	DCMT3252UF	**DCMT11T308UF**	3/8	9,53	.458	11,63	5/32	3,97	1/32	0,8	.173	4,40	●	
DPMT-LF	**DPMT3251LF**	**DPMT11T304LF**	3/8	9,53	.458	11,63	5/32	3,97	1/64	0,4	.173	4,40	●	
	DPMT3252LF	**DPMT11T308LF**	3/8	9,53	.458	11,63	5/32	3,97	1/32	0,8	.173	4,40	●	●
DPMT-MF	**DPMT3252MF**	**DPMT11T308MF**	3/8	9,53	.458	11,63	5/32	3,97	1/32	0,8	.173	4,40		●
DPMT-UF	**DPMT2151UF**	**DPMT070204UF**	1/4	6,35	.305	7,75	3/32	2,38	1/64	0,4	.110	2,80	●	
	DPMT3251UF	**DPMT11T304UF**	3/8	9,53	.458	11,63	5/32	3,97	1/64	0,4	.173	4,40	●	
	DPMT3252UF	**DPMT11T308UF**	3/8	9,53	.458	11,63	5/32	3,97	1/32	0,8	.173	4,40	●	

Order example:
ANSI catalog number: **DCMT2151LF**
Insert grade: **KU10T**

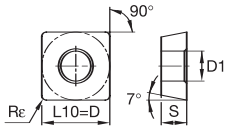
ISO catalog number: **DCMT070204LF**
Insert grade: **KU10T**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

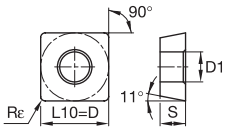
Screw-On Inserts

Dimensions and Grade Selection

SC..



SP..

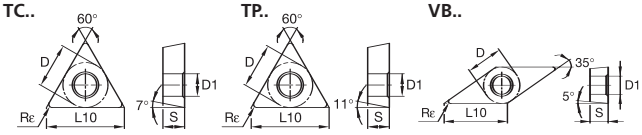


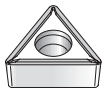
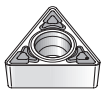
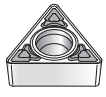
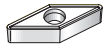
	ANSI catalog number	ISO catalog number	Dimensions D inch	D mm	L10 inch	L10 mm	S inch	S mm	Rε inch	Rε mm	D1 inch	D1 mm	KENNA UNIVERSAL KU10T	KU30T
SCMT-LF	SCMT3251LF	SCMT09T304LF	3/8	9,53	.375	9,53	5/32	3,97	1/64	0,4	.173	4,40	●	
	SCMT3252LF	SCMT09T308LF	3/8	9,53	.375	9,53	5/32	3,97	1/32	0,8	.173	4,40	●	●
	SCMT431LF	SCMT120404LF	1/2	12,70	.500	12,70	3/16	4,76	1/64	0,4	.217	5,50	●	●
	SCMT432LF	SCMT120408LF	1/2	12,70	.500	12,70	3/16	4,76	1/32	0,8	.217	5,50	●	●
	SCMT433LF	SCMT120412LF	1/2	12,70	.500	12,70	3/16	4,76	3/64	1,2	.217	5,50		●
SCMT-MF	SCMT3252MF	SCMT09T308MF	3/8	9,53	.375	9,53	5/32	3,97	1/32	0,8	.173	4,40		●
	SCMT432MF	SCMT120408MF	1/2	12,70	.500	12,70	3/16	4,76	1/32	0,8	.217	5,50		●
	SCMT433MF	SCMT120412MF	1/2	12,70	.500	12,70	3/16	4,76	3/64	1,2	.217	5,50		●
SCMT-UF	SCMT3252UF	SCMT09T308UF	3/8	9,53	.375	9,53	5/32	3,97	1/32	0,8	.173	4,40	●	
SPMT-LF	SPMT3252LF	SPMT09T308LF	3/8	9,53	.375	9,53	5/32	3,97	1/32	0,8	.173	4,40		●
SPMT-MF	SPMT3252MF	SPMT09T308MF	3/8	9,53	.375	9,53	5/32	3,97	1/32	0,8	.173	4,40		●
	SPMT432MF	SPMT120408MF	1/2	12,70	.500	12,70	3/16	4,76	1/32	0,8	.217	5,50		●
SPMT-UF	SPMT3251UF	SPMT09T304UF	3/8	9,53	.375	9,53	5/32	3,97	1/64	0,4	.173	4,40	●	

Order example:
ANSI catalog number: **SCMT3251LF** ISO catalog number: **SCMT09T304LF**
Insert grade: **KU10T** Insert grade: **KU10T**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

TC.. TP.. VB..



	ANSI catalog number	ISO catalog number	Dimensions D inch	D mm	L10 inch	L10 mm	S inch	S mm	Rε inch	Rε mm	D1 inch	D1 mm	KENNA UNIVERSAL KU10T	KU30T
TCMT-LF	**TCMT2151LF**	**TCMT110204LF**	1/4	6,35	.433	11,00	3/32	2,38	1/64	0,4	.110	2,80	●	●
	**TCMT2152LF**	**TCMT110208LF**	1/4	6,35	.433	11,00	3/32	2,38	1/32	0,8	.110	2,80	●	
	TCMT3251LF	**TCMT16T304LF**	3/8	9,53	.650	16,50	5/32	3,97	1/64	0,4	.173	4,40	●	●
	TCMT3252LF	**TCMT16T308LF**	3/8	9,53	.650	16,50	5/32	3,97	1/32	0,8	.173	4,40		●
	TCMT3253LF	**TCMT16T312LF**	3/8	9,53	.650	16,50	5/32	3,97	3/64	1,2	.173	4,40		●
TCMT-MF	**TCMT2152MF**	**TCMT110208MF**	1/4	6,35	.433	11,00	3/32	2,38	1/32	0,8	.110	2,80		●
	**TCMT3252MF**	**TCMT16T308MF**	3/8	9,53	.650	16,50	5/32	3,97	1/32	0,8	.173	4,40		●
	TCMT3253MF	**TCMT16T312MF**	3/8	9,53	.650	16,50	5/32	3,97	3/64	1,2	.173	4,40		●
TCMT-UF	**TCMT2151UF**	**TCMT110204UF**	1/4	6,35	.433	11,00	3/32	2,38	1/64	0,4	.110	2,80	●	
	**TCMT2152UF**	**TCMT110208UF**	1/4	6,35	.433	11,00	3/32	2,38	1/32	0,8	.110	2,80	●	
	TCMT3252UF	**TCMT16T308UF**	3/8	9,53	.650	16,50	5/32	3,97	1/32	0,8	.173	4,40	●	
TPMT-LF	**TPMT2151LF**	**TPMT110204LF**	1/4	6,35	.433	11,00	3/32	2,38	1/64	0,4	.110	2,80	●	●
	**TPMT2152LF**	**TPMT110208LF**	1/4	6,35	.433	11,00	3/32	2,38	1/32	0,8	.110	2,80	●	●
	TPMT3251LF	**TPMT16T304LF**	3/8	9,53	.650	16,50	5/32	3,97	1/64	0,4	.173	4,40		●
	TPMT3252LF	**TPMT16T308LF**	3/8	9,53	.650	16,50	5/32	3,97	1/32	0,8	.173	4,40	●	
TPMT-MF	**TPMT3252MF**	**TPMT16T308MF**	3/8	9,53	.650	16,50	5/32	3,97	1/32	0,8	.173	4,40		●
														
TPMT-UF	**TPMT2151UF**	**TPMT110204UF**	1/4	6,35	.433	11,00	3/32	2,38	1/64	0,4	.110	2,80	●	
														
VBMT-LF	**VBMT221LF**	**VBMT110304LF**	1/4	6,35	.436	11,07	1/8	3,18	1/64	0,4	.110	2,80	●	●
	**VBMT222LF**	**VBMT110308LF**	1/4	6,35	.436	11,07	1/8	3,18	1/32	0,8	.110	2,80	●	
	VBMT331LF	**VBMT160404LF**	3/8	9,53	.654	16,61	3/16	4,76	1/64	0,4	.173	4,40	●	
	VBMT332LF	**VBMT160408LF**	3/8	9,53	.654	16,61	3/16	4,76	1/32	0,8	.173	4,40	●	

Order example:
ANSI catalog number: **TCMT2151LF** Insert grade: **KU10T**
ISO catalog number: **TCMT110204LF** Insert grade: **KU10T**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

Toolholder Identification System

1. Insert Holding Method

D* KENCLAMP

S SCREW-ON

*Kennametal only

2. Insert Shape

C 80°	D 55°	K/N 55°
L 90°	R	S 90°
T 60°	V 35°	W 80°

5. Hand of Tool

R

L

N

6. Additional Information

P
polycrystalline insert

C
deep pocket for ceramic insert

S
single pocket locating wall

F
straight shank, no offset

Example:

D	C	L	N	R	

3. Tool Style or Lead Angle

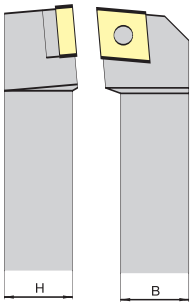
A 0°	B 15°	C 0°	D 45°	E 30°
F 0°	G 0°	H 50°	J 3°	K 15°
L 5° 5°	M 40°	P 27,5°	Q 17,5°	R 15°
S 45°	U 3°	V 17.5°	Y 5°	

4. Insert Clearance Angle

N 0°	D 15°	
B 5°	E 20°	
C 7°	F 25°	
P 11°		

Inch
The seventh and eighth positions shall be a significant two-digit number that indicates the holder cross section. For shanks 5/8" square and over, the number will represent the number of sixteenths of width and height. For shanks under 5/8" square, the number of sixteenths of cross section will be preceded by a zero.
For rectangular holders, the first digit represents the number of eighths of width "B" and the second digit the number of quarters of height "H", except for a toolholder 1 1/4" x 1 1/2" which is given the number 91.

Metric
The seventh and eighth position shall be a significant two-digit number which 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 mm = 08

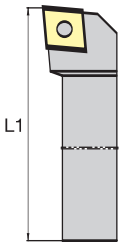


Inch Insert IC
Number of 1/8ths of "D"

Inch
A – qualified back and end, 4" long
B – qualified back and end, 4.5" long
C – qualified back and end, 5" long
D – qualified back and end, 6" long
E – qualified back and end, 7" long
F – qualified back and end, 8" long
G* – qualified back and end, 5.5" long
H* – qualified back and end, 5.625" long
I* – qualified back and end, 3" long
J* – qualified back and end, 5.3" long
K* – qualified back and end, 14" long
L* – qualified back and end, 6.8" long
M – qualified front and end, 4" long
N – qualified front and end, 4.5" long
P – qualified front and end, 5" long
R – qualified front and end, 6" long
S – qualified front and end, 7" long
T – qualified front and end, 8" long
U* – qualified front and end, 5.5" long
V* – qualified back and end, 3.5" long
W*– qualified front and end, 3.5" long
Y* – qualified back and end, 3.75" long
Z* – qualified back and end, 3.250" long
*Kennametal standard only.

	7./8. Shank Dimensions		9. Insert Size	10. Qualified Surface and Length	11. Additional Information	12. Insert Thickness (optional)
INCH	1	6	4	D	KC	3
METRIC	25	25	M	09	KC	04

9. Tool Length



Metric

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 length	X

10. Insert Size

Metric
Cutting Edge Length L10

H
O
P
S
T
C D E M V
W
L
A B K
R

11. Additional Information

KC – Kenclamp

12. Insert Thickness (optional)

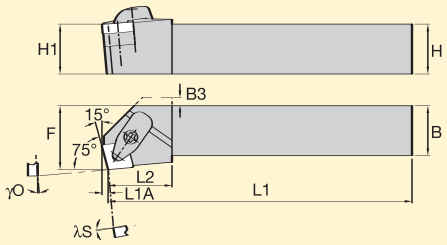
Inch
3 – .188"
4 – .250"

Metric
04 – 4,76 mm
06 – 6,35 mm

KENCLAMP Toolholders

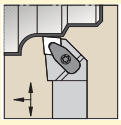
KENLOC Inserts

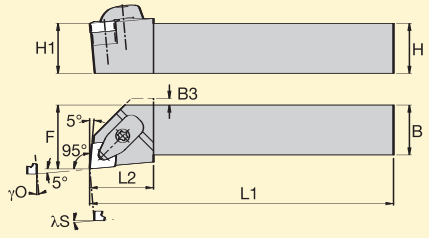
DCKN-KC



Catalog number Right hand/Left hand	H = H1	B	F	L1	L2	FA	L1A	B3	λS°	γO°	Gage Insert	Shim	Shim Screw	Torx plus	Clamp	Slotted Pin	Clamp Screw	Torx plus
Inch																		
DCKN R/L 124BKC3	.75	.75	1.000	4.50	1.25	-	.122	.22	-5.0	-5.0	**CN..432**	**ICSN433**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DCKN R/L 164CKC3	1.00	1.00	1.250	5.00	1.25	-	.122	-	-5.0	-5.0	**CN..432**	**ICSN443**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DCKN R/L 164DKC3	1.00	1.00	1.250	6.00	1.25	-	.122	-	-5.0	-5.0	**CN..432**	**ICSN443**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DCKN R/L 204DKC3	1.25	1.25	1.500	6.00	1.25	-	.122	-	-5.0	-5.0	**CN..432**	**ICSN443**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DCKN R/L 205DKC4	1.25	1.25	1.500	6.00	1.25	-	.150	-	-5.0	-5.0	**CN..543**	**ICSN543**	**KMSP515IP**	15 IP	**CM209**	**SSP025016M**	**STCM1115IP**	15 IP
DCKN R/L 206DKC4	1.25	1.25	1.500	6.00	1.50	-	.183	-	-5.0	-5.0	**CN..643**	**ICSN643**	**KMSP625IP**	25 IP	**CM210**	**SSP025016M**	**STCM425IP**	25 IP
Metric																		
DCKN R/L 2020K12KC04	20	20	25,0	125	32,0	-	3,1	6,0	-5,0	-5,0	**CN..120408**	**ICSN433**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DCKN R/L 2525M12KC04	25	25	32,0	150	32,0	-	3,1	-	-5,0	-5,0	**CN..120408**	**ICSN443**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DCKN R/L 3225P12KC04	32	25	32,0	170	32,0	-	3,1	-	-5,0	-5,0	**CN..120408**	**ICSN443**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DCKN R/L 3232P16KC06	32	32	40,0	170	32,0	-	3,8	-	-5,0	-5,0	**CN..160612**	**ICSN543**	**KMSP515IP**	15 IP	**CM209**	**SSP025016M**	**STCM1115IP**	15 IP
DCKN R/L 3232P19KC06	32	32	40,0	170	38,0	-	4,6	-	-5,0	-5,0	**CN..190612**	**ICSN643**	**KMSP625IP**	25 IP	**CM210**	**SSP025016M**	**STCM425IP**	25 IP

DCLN-KC





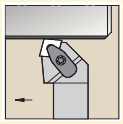
Catalog number Right hand/Left hand	H = H1	B	F	L1	L2	FA	L1A	B3	λS°	γO°	Gage Insert	Shim	Shim Screw	Torx plus	Clamp	Slotted Pin	Clamp Screw	Torx plus
Inch																		
DCLN R/L 124BKC3	.75	.75	1.000	4.50	1.25	-	-	.15	-5.0	-5.0	**CN..432**	**ICSN433**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DCLN R/L 164DKC3	1.00	1.00	1.250	6.00	1.25	-	-	-	-5.0	-5.0	**CN..432**	**ICSN443**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DCLN R/L 204DKC3	1.25	1.25	1.500	6.00	1.25	-	-	-	-5.0	-5.0	**CN..432**	**ICSN443**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DCLN R/L 165DKC4	1.00	1.00	1.250	6.00	1.38	-	-	-	-5.0	-5.0	**CN..543**	**ICSN543**	**KMSP515IP**	15 IP	**CM209**	**SSP025016M**	**STCM1115IP**	15 IP
DCLN R/L 205DKC4	1.25	1.25	1.500	6.00	1.38	-	-	-	-5.0	-5.0	**CN..543**	**ICSN543**	**KMSP515IP**	15 IP	**CM209**	**SSP025016M**	**STCM1115IP**	15 IP
DCLN R/L 206DKC4	1.25	1.25	1.500	6.00	1.62	-	-	-	-5.0	-5.0	**CN..643**	**ICSN643**	**KMSP625IP**	25 IP	**CM210**	**SSP025016M**	**STCM425IP**	25 IP
DCLN R/L 246DKC4	1.50	1.50	2.000	6.00	1.62	-	-	-	-5.0	-5.0	**CN..643**	**ICSN643**	**KMSP625IP**	25 IP	**CM210**	**SSP025016M**	**STCM425IP**	25 IP
Metric																		
DCLN R/L 2020K12KC04	20	20	25,0	125	32,0	-	-	4,0	-5,0	-5,0	**CN..120408**	**ICSN433**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DCLN R/L 2525M12KC04	25	25	32,0	150	32,0	-	-	-	-5,0	-5,0	**CN..120408**	**ICSN443**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DCLN R/L 2525M16KC06	25	25	32,0	150	33,0	-	-	-	-5,0	-5,0	**CN..160612**	**ICSN543**	**KMSP515IP**	15 IP	**CM209**	**SSP025016M**	**STCM1115IP**	15 IP
DCLN R/L 3225P16KC06	32	25	32,0	170	33,0	-	-	-	-5,0	-5,0	**CN..160612**	**ICSN543**	**KMSP515IP**	15 IP	**CM209**	**SSP025016M**	**STCM1115IP**	15 IP
DCLN R/L 3232P16KC06	32	32	40,0	170	33,0	-	-	-	-5,0	-5,0	**CN..160612**	**ICSN543**	**KMSP515IP**	15 IP	**CM209**	**SSP025016M**	**STCM1115IP**	15 IP
DCLN R/L 3232P19KC06	32	32	40,0	170	40,0	-	-	-	-5,0	-5,0	**CN..190612**	**ICSN643**	**KMSP625IP**	25 IP	**CM210**	**SSP025016M**	**STCM425IP**	25 IP
DCLN R/L 4040S19KC06	40	40	50,0	250	40,0	-	-	-	-5,0	-5,0	**CN..190612**	**ICSN643**	**KMSP625IP**	25 IP	**CM210**	**SSP025016M**	**STCM425IP**	25 IP

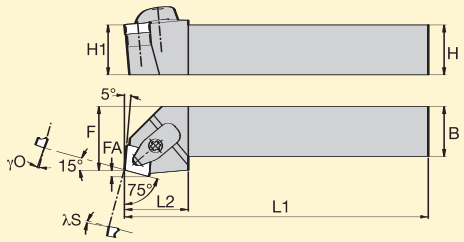
Order example:
ANSI Right hand: **DCKNR124BKC3**
ISO Right hand: **DCKNR2020K12KC04**

ANSI Left hand: **DCKNL124BKC3**
ISO Left hand: **DCKNL2020K12KC04**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

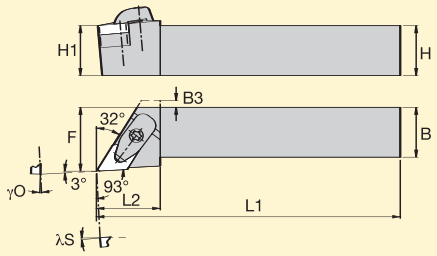
DCRN-KC





Catalog number Right hand/Left hand	H = H1	B	F	L1	L2	FA	L1A	B3	λS°	γO°	Gage Insert	Shim	Shim Screw	Torx plus	Clamp	Slotted Pin	Clamp Screw	Torx plus
Inch																		
DCRN R/L 164DKC3	1.00	1.00	1.128	6.00	1.25	.12	-	-	-5.0	-5.0	**CN..432**	**ICSN443**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DCRN R/L 204DKC3	1.25	1.25	1.378	6.00	1.25	.12	-	-	-5.0	-5.0	**CN..432**	**ICSN443**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DCRN R/L 245DKC4	1.50	1.50	1.851	6.00	1.38	.15	-	-	-5.0	-5.0	**CN..543**	**ICSN543**	**KMSP515IP**	15 IP	**CM209**	**SSP025016M**	**STCM1115IP**	15 IP
DCRN R/L 206DKC4	1.25	1.25	1.501	6.00	1.38	.18	-	-	-5.0	-5.0	**CN..643**	**ICSN643**	**KMSP625IP**	25 IP	**CM210**	**SSP025016M**	**STCM425IP**	25 IP
Metric																		
DCRN R/L 2020K12KC04	20	20	25,0	125	32,0	3,1	-	-	-5.0	-5.0	**CN..120406**	**ICSN433**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DCRN R/L 2525M12KC04	25	25	32,0	150	32,0	3,1	-	-	-5.0	-5.0	**CN..120406**	**ICSN443**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DCRN R/L 3232P16KC06	32	32	40,0	170	38,0	3,8	-	-	-5.0	-5.0	**CN..160612**	**ICSN543**	**KMSP515IP**	15 IP	**CM209**	**SSP025016M**	**STCM1115IP**	15 IP
DCRN R/L 3232P19KC06	32	32	40,0	170	38,0	4,6	-	-	-5.0	-5.0	**CN..190612**	**ICSN643**	**KMSP625IP**	25 IP	**CM210**	**SSP025016M**	**STCM425IP**	25 IP

DDJN-KC



Catalog number Right hand/Left hand	H = H1	B	F	L1	L2	FA	L1A	B3	λS°	γO°	Gage Insert	Shim	Shim Screw	Torx plus	Clamp	Slotted Pin	Clamp Screw	Torx plus
Inch																		
DDJN R/L 123BKC3	.75	.75	1.000	4.50	1.25	-	-	.06	-5.0	-5.0	**DN..332**	**IDSN322**	**KMSP315IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DDJN R/L 163DKC3	1.00	1.00	1.250	6.00	1.25	-	-	-	-5.0	-5.0	**DN..332**	**IDSN322**	**KMSP315IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DDJN R/L 164DKC3	1.00	1.00	1.250	6.00	1.25	-	-	-	-5.0	-5.0	**DN..432**	**IDSN443**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DDJN R/L 204DKC3	1.25	1.25	1.250	6.00	1.25	-	-	-	-5.0	-5.0	**DN..432**	**IDSN443**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DDJN R/L 205DKC4	1.25	1.25	1.500	6.00	1.38	-	-	-	-5.0	-5.0	**DN..543**	**IDSN543**	**KMSP515IP**	15 IP	**CM209**	**SSP025016M**	**STCM1115IP**	15 IP
DDJN R/L 245DKC4	1.50	1.50	2.000	6.00	1.38	-	-	-	-5.0	-5.0	**DN..543**	**IDSN543**	**KMSP515IP**	15 IP	**CM209**	**SSP025016M**	**STCM1115IP**	15 IP
Metric																		
DDJN R/L 2020K11KC04	20	20	25,0	125	30,0	-	-	2,0	-5,0	-5,0	**DN..110408**	**IDSN322**	**KMSP315IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DDJN R/L 2525M11KC04	25	25	32,0	150	30,0	-	-	-	-5,0	-5,0	**DN..110408**	**IDSN322**	**KMSP315IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DDJN R/L 2020K15KC06	20	20	25,0	125	32,0	-	-	4,0	-5,0	-5,0	**DN..150608**	**IDSN433**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DDJN R/L 2525M15KC06	25	25	32,0	150	32,0	-	-	-	-5,0	-5,0	**DN..150608**	**IDSN433**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DDJN R/L 3225P15KC06	32	25	32,0	170	32,0	-	-	-	-5,0	-5,0	**DN..150608**	**IDSN433**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DDJN R/L 3232P15KC06	32	32	40,0	170	32,0	-	-	-	-5,0	-5,0	**DN..150608**	**IDSN433**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP

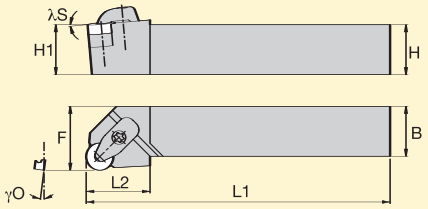
Order example:
ANSI Right hand: **DCRNR164DKC3**
ISO Right hand: **DCRNR2020K12KC04**

ANSI Left hand: **DCRNL164DKC3**
ISO Left hand: **DCRNL2020K12KC04**

KENCLAMP Toolholders

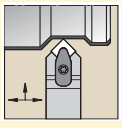
KENLOC Inserts

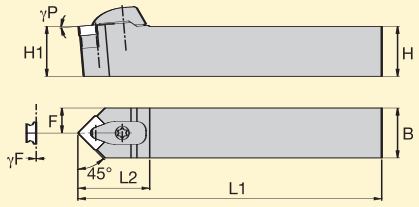
DRGN-KC



Catalog number Right hand/Left hand	H = H1	B	F	L1	L2	FA	L1A	B3	λS°	γO°	Gage Insert	Shim	Shim Screw	Torx plus	Clamp	Slotted Pin	Clamp Screw	Torx plus
Inch																		
DRGN R/L 124BKC3	.75	.75	1.000	4.50	1.25	-	-	-	-5.0	-5.0	**RN..43**	**IRSN43**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DRGN R/L 164DKC3	1.00	1.00	1.250	6.00	1.25	-	-	-	-5.0	-5.0	**RN..43**	**IRSN44**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DRGN R/L 204DKC3	1.25	1.25	1.500	6.00	1.25	-	-	-	-5.0	-5.0	**RN..43**	**IRSN44**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
Metric																		
DRGN R/L 2525M12KC04	25	25	32,0	150	32,0	-	-	-	-5,0	-5,0	**RN..120400**	**IRSN44**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DRGN R/L 3225P12KC04	32	25	32,0	170	32,0	-	-	-	-5,0	-5,0	**RN..120400**	**IRSN44**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP

DSDN-KC





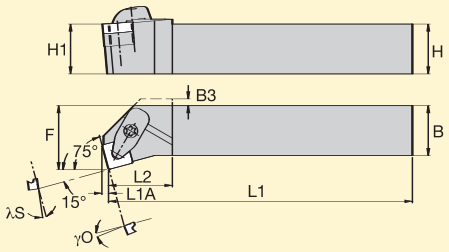
Catalog number Right hand/Left hand	H = H1	B	F	L1	L2	FA	L1A	B3	γF°	γP°	Gage Insert	Shim	Shim Screw	Torx plus	Clamp	Slotted Pin	Clamp Screw	Torx plus
Inch																		
DSDNN124KC3	.75	.75	.365	4.50	1.44	-	-	-	0.0	-7.0	**SN..432**	**ISSN433**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DSDNN164KC3	1.00	1.00	.500	6.00	1.44	-	-	-	0.0	-7.0	**SN..432**	**ICSN443**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DSDNN204KC3	1.25	1.25	.625	6.00	1.44	-	-	-	0.0	-7.0	**SN..432**	**ICSN443**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DSDNN206KC4	1.25	1.25	.615	6.00	1.75	-	-	-	0.0	-7.0	**SN..643**	**ISSN643**	**KMSP625IP**	25 IP	**CM210**	**SSP025016M**	**STCM425IP**	25 IP
DSDNN246KC4	1.50	1.50	.615	6.00	1.75	-	-	-	0.0	-7.0	**SN..643**	**ISSN643**	**KMSP625IP**	25 IP	**CM210**	**SSP025016M**	**STCM425IP**	25 IP
Metric																		
DSDNN2020K12KC04	20	20	10,0	125	36,0	-	-	-	0,0	-7,0	**SN..120408**	**ISSN433**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DSDNN2525M12KC04	25	25	12,5	150	36,0	-	-	-	0,0	-7,0	**SN..120408**	**ISSN443**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DSDNN3225P12KC04	32	25	12,0	170	36,0	-	-	-	0,0	-7,0	**SN..120408**	**ISSN443**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DSDNN2525M15KC06	25	25	12,5	150	42,0	-	-	-	0,0	-7,0	**SN..150612**	**ISSN543**	**KMSP515IP**	15 IP	**CM209**	**SSP025016M**	**STCM1115IP**	15 IP
DSDNN3232P15KC06	32	32	15,5	170	42,0	-	-	-	0,0	-7,0	**SN..150612**	**ISSN543**	**KMSP515IP**	15 IP	**CM209**	**SSP025016M**	**STCM1115IP**	15 IP
DSDNN3232P19KC06	32	32	15,5	170	44,0	-	-	-	0,0	-7,0	**SN..190612**	**ISSN643**	**KMSP625IP**	25 IP	**CM210**	**SSP025016M**	**STCM425IP**	25 IP

Order example:
ANSI Right hand: **DRGNR124BKC3**
ISO Right hand: **DRGNR2525M12KC04**

ANSI Left hand: **DRGNL124BKC3**
ISO Left hand: **DRGNL2525M12KC04**

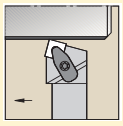
To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

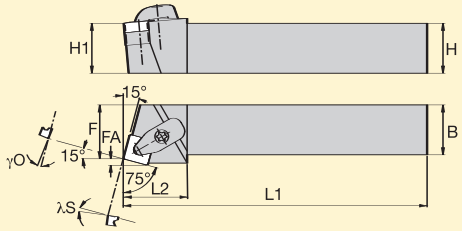
DSKN-KC



Catalog number Right hand/Left hand	H = H1	B	F	L1	L2	FA	L1A	B3	λS°	γO°	Gage Insert	Shim	Shim Screw	Torx plus	Clamp	Slotted Pin	Clamp Screw	Torx plus
Inch																		
DSKN R/L 124BKC3	.75	.75	1.000	4.50	1.25	-	.12	.30	-5.0	-5.0	**SN..432**	**ISSN433**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DSKN R/L 164DKC3	1.00	1.00	1.250	6.00	1.25	-	.12	.12	-5.0	-5.0	**SN..432**	**ISSN443**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DSKN R/L 204DKC3	1.25	1.25	1.500	6.00	1.25	-	.12	.12	-5.0	-5.0	**SN..432**	**ISSN443**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DSKN R/L 206DKC4	1.25	1.25	1.500	6.00	1.50	-	.18	.12	-5.0	-5.0	**SN..643**	**ISSN643**	**KMSP625IP**	25 IP	**CM210**	**SSP025016M**	**STCM425IP**	25 IP
Metric																		
DSKN R/L 2020K12KC04	20	20	25,0	125	32,0	-	3,1	8,0	-5,0	-5,0	**SN..120408**	**ISSN433**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DSKN R/L 2525M12KC04	25	25	32,0	150	32,0	-	3,1	4,0	-5,0	-5,0	**SN..120408**	**ISSN443**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DSKN R/L 3225P12KC04	32	25	32,0	170	32,0	-	3,1	-	-5,0	-5,0	**SN..120408**	**ISSN443**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DSKN R/L 3232P15KC06	32	32	40,0	170	32,0	-	3,8	-	-5,0	-5,0	**SN..150612**	**ISSN543**	**KMSP515IP**	15 IP	**CM209**	**SSP025016M**	**STCM1115IP**	15 IP
DSKN R/L 3232P19KC06	32	32	40,0	170	38,0	-	4,6	-	-5,0	-5,0	**SN..190612**	**ISSN643**	**KMSP625IP**	25 IP	**CM210**	**SSP025016M**	**STCM425IP**	25 IP

DSRN-KC





Catalog number Right hand/Left hand	H = H1	B	F	L1	L2	FA	L1A	B3	λS°	γO°	Gage Insert	Shim	Shim Screw	Torx plus	Clamp	Slotted Pin	Clamp Screw	Torx plus
Inch																		
DSRN R/L 124BKC3	.75	.75	.880	4.50	1.25	.12	-	-	-5.0	-5.0	**SN..432**	**ISSN433**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DSRN R/L 164DKC3	1.00	1.00	1.130	6.00	1.25	.12	-	-	-5.0	-5.0	**SN..432**	**ISSN443**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DSRN R/L 204DKC3	1.25	1.25	1.380	6.00	1.25	.12	-	-	-5.0	-5.0	**SN..432**	**ISSN443**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DSRN R/L 165DKC4	1.00	1.00	1.103	6.00	1.50	.15	-	-	-5.0	-5.0	**SN..543**	**ISSN543**	**KMSP515IP**	15 IP	**CM209**	**SSP025016M**	**STCM1115IP**	15 IP
DSRN R/L 205DKC4	1.25	1.25	1.353	6.00	1.50	.15	-	-	-5.0	-5.0	**SN..543**	**ISSN543**	**KMSP515IP**	15 IP	**CM209**	**SSP025016M**	**STCM1115IP**	15 IP
DSRN R/L 206DKC4	1.25	1.25	1.321	6.00	1.50	.18	-	-	-5.0	-5.0	**SN..643**	**ISSN643**	**KMSP625IP**	25 IP	**CM210**	**SSP025016M**	**STCM425IP**	25 IP
DSRN R/L 246DKC4	1.50	1.50	1.821	6.00	1.50	.18	-	-	-5.0	-5.0	**SN..643**	**ISSN643**	**KMSP625IP**	25 IP	**CM210**	**SSP025016M**	**STCM425IP**	25 IP
Metric																		
DSRN R/L 2020K12KC04	20	20	22,0	125	32,0	3,1	-	-	-5,0	-5,0	**SN..120408**	**ISSN433**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DSRN R/L 2525M12KC04	25	25	27,0	150	32,0	3,1	-	-	-5,0	-5,0	**SN..120408**	**ISSN443**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DSRN R/L 3225P12KC04	25	32	27,0	170	32,0	3,1	-	-	-5,0	-5,0	**SN..120408**	**ISSN443**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DSRN R/L 3232P15KC06	32	32	35,0	170	38,0	3,8	-	-	-5,0	-5,0	**SN..150612**	**ISSN543**	**KMSP515IP**	15 IP	**CM209**	**SSP025016M**	**STCM1115IP**	15 IP
DSRN R/L 3232P19KC06	32	32	35,0	170	42,0	4,6	-	-	-5,0	-5,0	**SN..190612**	**ISSN643**	**KMSP625IP**	25 IP	**CM210**	**SSP025016M**	**STCM425IP**	25 IP

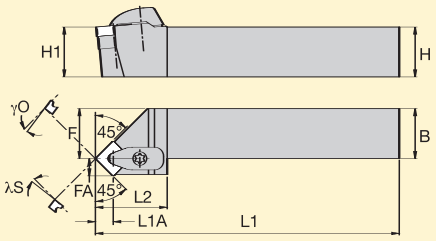
Order example:
ANSI Right hand: **DSKNR124BKC3**
ISO Right hand: **DSKNR2020K12KC04**

ANSI Left hand: **DSKNL124BKC3**
ISO Left hand: **DSKNL2020K12KC04**

KENCLAMP Toolholders

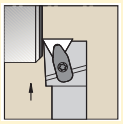
KENLOC Inserts

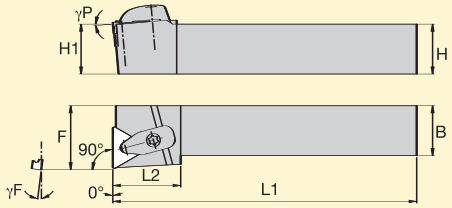
DSSN-KC



Catalog number Right hand/Left hand	H = H1	B	F	L1	L2	FA	L1A	B3	λS°	γO°	Gage Insert	Shim	Shim Screw	Torx plus	Clamp	Slotted Pin	Clamp Screw	Torx plus
Inch																		
DSSN R/L 164DKC3	1.00	1.00	.912	6.00	1.50	.34	.33	-	-5.5	-8.4	**SN..432**	**ISSN443**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
Metric																		
DSSN R/L 2020K12KC04	20	20	25,0	125	36,0	8,7	8,7	-	0,0	-8,0	**SN..120408**	**ISSN433**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DSSN R/L 2525M12KC04	25	25	32,0	150	36,0	8,7	8,7	-	0,0	-8,0	**SN..120408**	**ISSN443**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DSSN R/L 3225P12KC04	32	25	32,0	170	35,4	8,7	8,7	-	0,0	-8,0	**SN..120408**	**ISSN443**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DSSN R/L 2525M15KC06	25	25	32,0	150	42,0	10,7	10,7	-	0,0	-8,0	**SN..150612**	**ISSN543**	**KMSP515IP**	15 IP	**CM209**	**SSP025016M**	**STCM1115IP**	15 IP
DSSN R/L 3232P15KC06	32	32	40,0	170	40,3	10,7	10,7	-	0,0	-8,0	**SN..150612**	**ISSN543**	**KMSP515IP**	15 IP	**CM209**	**SSP025016M**	**STCM1115IP**	15 IP
DSSN R/L 3232P19KC06	32	32	40,0	170	44,0	10,7	10,7	-	0,0	-8,0	**SN..190612**	**ISSN643**	**KMSP625IP**	25 IP	**CM210**	**SSP025016M**	**STCM425IP**	25 IP

DTFN-KC





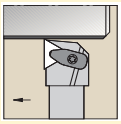
Catalog number Right hand/Left hand	H = H1	B	F	L1	L2	FA	L1A	B3	γF°	γP°	Gage Insert	Shim	Shim Screw	Torx plus	Clamp	Slotted Pin	Clamp Screw	Torx plus
Inch																		
DTFN R/L 123BKC3	.75	.75	1.000	4.50	1.25	-	-	-	-5.0	-5.0	**TN..332**	**ITSN323**	**KMSP315IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DTFN R/L 163DKC3	1.00	1.00	1.250	6.00	1.25	-	-	-	-5.0	-5.0	**TN..332**	**ITSN323**	**KMSP315IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DTFN R/L 164DKC3	1.00	1.00	1.250	6.00	1.38	-	-	-	-5.0	-5.0	**TN..432**	**ITSN443**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DTFN R/L 165CKC4	1.00	1.00	1.250	5.00	1.50	-	-	-	-5.0	-5.0	**TN..543**	**ITSN534**	**KMSP515IP**	15 IP	**CM209**	**SSP025016M**	**STCM1115IP**	15 IP
DTFN R/L 205DKC4	1.25	1.25	1.500	6.00	1.50	-	-	-	-5.0	-5.0	**TN..543**	**ITSN534**	**KMSP515IP**	15 IP	**CM209**	**SSP025016M**	**STCM1115IP**	15 IP
Metric																		
DTFN R/L 2020K16KC04	20	20	25,0	125	32,0	-	-	-	-5,0	-5,0	**TN..160408**	**ITSN323**	**KMSP315IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DTFN R/L 2525M16KC04	25	25	32,0	150	32,0	-	-	-	-5,0	-5,0	**TN..160408**	**ITSN323**	**KMSP315IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DTFN R/L 3225P16KC04	32	25	32,0	170	32,0	-	-	-	-5,0	-5,0	**TN..160408**	**ITSN323**	**KMSP315IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DTFN R/L 2525M22KC04	25	25	32,0	150	34,0	-	-	-	-5,0	-5,0	**TN..220408**	**ITSN443**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DTFN R/L 3225P22KC04	32	25	32,0	170	34,0	-	-	-	-5,0	-5,0	**TN..220408**	**ITSN443**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DTFN R/L 3232P27KC06	32	32	40,0	170	38,0	-	-	-	-5,0	-5,0	**TN..270612**	**ITSN534**	**KMSP515IP**	15 IP	**CM209**	**SSP025016M**	**STCM1115IP**	15 IP

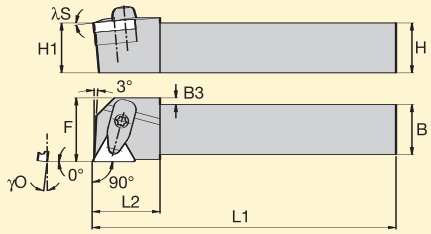
Order example:
ANSI Right hand: **DSSNR164DKC3**
ISO Right hand: **DSSNR2020K12KC04**

ANSI Left hand: **DSSNL164DKC3**
ISO Left hand: **DSSNL2020K12KC04**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

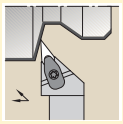
DTGN-KC

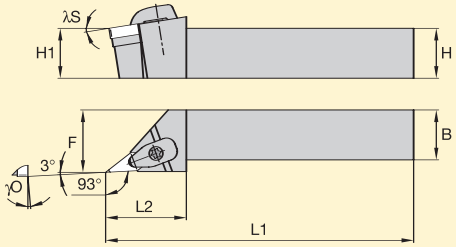




Catalog number Right hand/Left hand	H = H1	B	F	L1	L2	FA	L1A	B3	λS°	γO°	Gage Insert	Shim	Shim Screw	Torx plus	Clamp	Slotted Pin	Clamp Screw	Torx plus
Inch																		
DTGN R/L 123BKC3	.75	.75	1.000	4.50	1.12	-	-	.25	-5.0	-5.0	**TN..332**	**ITSN323**	**KMSP315IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DTGN R/L 163DKC3	1.00	1.00	1.250	6.00	1.12	-	-	-	-5.0	-5.0	**TN..332**	**ITSN323**	**KMSP315IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DTGN R/L 164DKC3	1.00	1.00	1.250	6.00	1.25	-	-	.09	-5.0	-5.0	**TN..432**	**ITSN443**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DTGN R/L 165CKC4	1.00	1.00	1.250	5.00	1.50	-	-	.25	-5.0	-5.0	**TN..543**	**ITSN534**	**KMSP515IP**	15 IP	**CM209**	**SSP025016M**	**STCM1115IP**	15 IP
DTGN R/L 205DKC4	1.25	1.25	1.500	6.00	1.50	-	-	-	-5.0	-5.0	**TN..543**	**ITSN534**	**KMSP515IP**	15 IP	**CM209**	**SSP025016M**	**STCM1115IP**	15 IP
Metric																		
DTGN R/L 2020K16KC04	20	20	25,0	125	25,0	-	-	6,5	-5,0	-5,0	**TN..160408**	**ITSN323**	**KMSP315IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DTGN R/L 2525M16KC04	25	25	32,0	150	25,0	-	-	-	-5,0	-5,0	**TN..160408**	**ITSN323**	**KMSP315IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DTGN R/L 3225P16KC04	32	25	32,0	170	25,0	-	-	-	-5,0	-5,0	**TN..160408**	**ITSN323**	**KMSP315IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DTGN R/L 2525M22KC04	25	25	32,0	150	32,0	-	-	3,0	-5,0	-5,0	**TN..220408**	**ITSN443**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DTGN R/L 3225P22KC04	32	25	32,0	170	32,0	-	-	3,0	-5,0	-5,0	**TN..220408**	**ITSN443**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DTGN R/L 3232P27KC06	32	32	40,0	170	32,0	-	-	-	-5,0	-5,0	**TN..270612**	**ITSN534**	**KMSP515IP**	15 IP	**CM209**	**SSP025016M**	**STCM1115IP**	15 IP

DVJN-KC





Catalog number Right hand/Left hand	H = H1	B	F	L1	L2	FA	L1A	B3	λS°	γO°	Gage Insert	Shim	Shim Screw	Torx plus	Clamp	Slotted Pin	Clamp Screw	Torx plus
Inch																		
DVJN R/L 123CKC3	.75	.75	1.000	5.00	1.44	-	-	-	-9.0	-5.0	**VN..332**	**IVSN322**	**KMSP315IP**	15 IP	**CM215**	**SSP025016M**	**STCM1115IP**	15 IP
DVJN R/L 163DKC3	1.00	1.00	1.250	6.00	1.44	-	-	-	-9.0	-5.0	**VN..332**	**IVSN322**	**KMSP315IP**	15 IP	**CM215**	**SSP025016M**	**STCM1115IP**	15 IP
DVJN R/L 853DKC3	1.25	1.00	1.250	6.00	1.44	-	-	-	-9.0	-5.0	**VN..332**	**IVSN322**	**KMSP315IP**	15 IP	**CM215**	**SSP025016M**	**STCM1115IP**	15 IP
DVJN R/L 164DKC3	1.00	1.00	1.250	6.00	2.00	-	-	-	-9.0	-5.0	**VN..432**	**IVSN432**	**KMSP415IP**	15 IP	**CM235**	**SSP025016M**	**STCM1115IP**	15 IP
DVJN R/L 854DKC3	1.25	1.00	1.250	6.00	2.00	-	-	-	-9.0	-5.0	**VN..432**	**IVSN432**	**KMSP415IP**	15 IP	**CM235**	**SSP025016M**	**STCM1115IP**	15 IP
Metric																		
DVJN R/L 2020K16KC04	20	20	25,0	125	46,0	-	-	-	-9,0	-5,0	**VN..160408**	**IVSN322**	**KMSP315IP**	15IP	**CM215**	**SSP025016M**	**STCM1115IP**	15IP
DVJN R/L 2525M16KC04	25	25	32,0	150	46,0	-	-	-	-9,0	-5,0	**VN..160408**	**IVSN322**	**KMSP315IP**	15IP	**CM215**	**SSP025016M**	**STCM1115IP**	15IP
DVJN R/L 3225P16KC04	32	25	32,0	170	46,0	-	-	-	-9,0	-5,0	**VN..160408**	**IVSN322**	**KMSP315IP**	15IP	**CM215**	**SSP025016M**	**STCM1115IP**	15IP
DVJN R/L 2525M22KC04	25	25	32,0	150	55,0	-	-	-	-9,0	-5,0	**VN..220408**	**IVSN432**	**KMSP415IP**	15IP	**CM235**	**SSP025016M**	**STCM1115IP**	15IP
DVJN R/L 3225P22KC04	32	25	32,0	170	55,0	-	-	-	-9,0	-5,0	**VN..220408**	**IVSN432**	**KMSP415IP**	15IP	**CM235**	**SSP025016M**	**STCM1115IP**	15IP

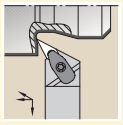
Order example:
ANSI Right hand: **DTGNR123BKC3**
ISO Right hand: **DTGNR2020K16KC04**

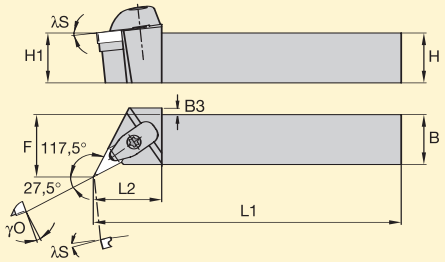
ANSI Left hand: **DTGNL123BKC3**
ISO Left hand: **DTGNL2020K16KC04**

KENCLAMP Toolholders

KENLOC Inserts

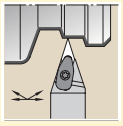
DVON-KC

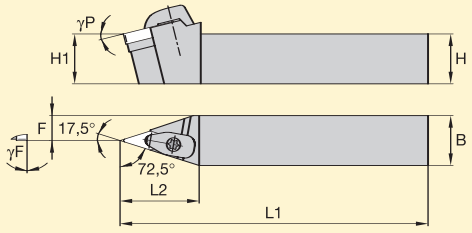




Catalog number Right hand/Left hand	H = H1	B	F	L1	L2	FA	L1A	B3	λS°	γO°	Gage Insert	Shim	Shim Screw	Torx plus	Clamp	Slotted Pin	Clamp Screw	Torx plus
Inch																		
DVON R/L 123CKC3	.75	.75	1.000	5.00	1.50	-	-	.25	-6.38	-6.38	**VN..332**	**IVSN322**	**KMSP315IP**	15IP	**CM215**	**SSP025016M**	**STCM1115IP**	15IP
DVON R/L 163DKC3	1.00	1.00	1.250	6.00	1.47	-	-	-	-6.38	-6.38	**VN..332**	**IVSN322**	**KMSP315IP**	15IP	**CM215**	**SSP025016M**	**STCM1115IP**	15IP
DVON R/L 853DKC3	1.25	1.00	1.250	6.00	1.47	-	-	-	-6.38	-6.38	**VN..332**	**IVSN322**	**KMSP315IP**	15IP	**CM215**	**SSP025016M**	**STCM1115IP**	15IP
Metric																		
DVON R/L 2020K16KC04	20	20	27,0	125	38,0	-	-	5,0	-6,4	-6,4	**VN..160408**	**IVSN322**	**KMSP315IP**	15IP	**CM215**	**SSP025016M**	**STCM1115IP**	15IP
DVON R/L 2525M16KC04	25	25	32,0	150	38,0	-	-	-	-6,4	-6,4	**VN..160408**	**IVSN322**	**KMSP315IP**	15IP	**CM215**	**SSP025016M**	**STCM1115IP**	15IP
DVON R/L 3225P16KC04	32	25	32,0	170	38,0	-	-	-	-6,4	-6,4	**VN..160408**	**IVSN322**	**KMSP315IP**	15IP	**CM215**	**SSP025016M**	**STCM1115IP**	15IP

DVVN-KC





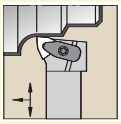
Catalog number Right hand/Left hand	H = H1	B	F	L1	L2	FA	L1A	B3	γF°	γP°	Gage Insert	Shim	Shim Screw	Torx plus	Clamp	Slotted Pin	Clamp Screw	Torx plus
Inch																		
DVVNN123CKC3	.75	.75	.371	5.00	1.94	-	-	-	0.0	-14.0	**VN..332**	**IVSN322**	**KMSP315IP**	15IP	**CM215**	**SSP025016M**	**STCM1115IP**	15IP
DVVNN163DKC3	1.00	1.00	.496	6.00	1.97	-	-	-	0.0	-14.0	**VN..332**	**IVSN322**	**KMSP315IP**	15IP	**CM215**	**SSP025016M**	**STCM1115IP**	15IP
DVVNN853DKC3	1.25	1.00	.496	6.00	1.88	-	-	-	0.0	-14.0	**VN..332**	**IVSN322**	**KMSP315IP**	15IP	**CM215**	**SSP025016M**	**STCM1115IP**	15IP
DVVNN164DKC3	1.00	1.00	.496	6.00	2.28	-	-	-	0.0	-14.0	**VN..432**	**IVSN432**	**KMSP415IP**	15IP	**CM235**	**SSP025016M**	**STCM1115IP**	15IP
DVVNN854DKC3	1.25	1.00	.496	6.00	2.28	-	-	-	0.0	-14.0	**VN..432**	**IVSN432**	**KMSP415IP**	15IP	**CM235**	**SSP025016M**	**STCM1115IP**	15IP
Metric																		
DVVNN2020K16KC04	20	20	9,5	125	48,0	-	-	-	0,0	-14,0	**VN..160408**	**IVSN322**	**KMSP315IP**	15IP	**CM215**	**SSP025016M**	**STCM1115IP**	15IP
DVVNN2525M16KC04	25	25	12,0	150	48,0	-	-	-	0,0	-14,0	**VN..160408**	**IVSN322**	**KMSP315IP**	15IP	**CM215**	**SSP025016M**	**STCM1115IP**	15IP
DVVNN3225P16KC04	32	25	12,0	170	48,0	-	-	-	0,0	-14,0	**VN..160408**	**IVSN322**	**KMSP315IP**	15IP	**CM215**	**SSP025016M**	**STCM1115IP**	15IP
DVVNN2525M22KC04	25	25	12,0	150	57,0	-	-	-	0,0	-14,0	**VN..220408**	**IVSN432**	**KMSP415IP**	15IP	**CM235**	**SSP025016M**	**STCM1115IP**	15IP
DVVNN3225P22KC04	32	25	12,0	170	57,0	-	-	-	0,0	-14,0	**VN..220408**	**IVSN432**	**KMSP415IP**	15IP	**CM235**	**SSP025016M**	**STCM1115IP**	15IP

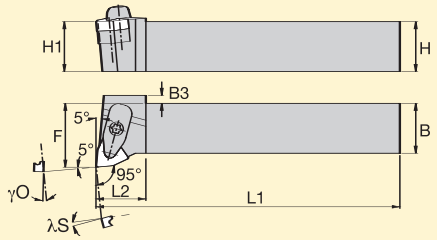
Order example:
ANSI Right hand: **DVONR123CKC3**
ISO Right hand: **DVONR2020K16KC04**

ANSI Left hand: **DVONL123CKC3**
ISO Left hand: **DVONL2020K16KC04**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

DWLN-KC





Catalog number Right hand/Left hand	H = H1	B	F	L1	L2	FA	L1A	B3	λS°	γO°	Gage Insert	Shim	Shim Screw	Torx plus	Clamp	Slotted Pin	Clamp Screw	Torx plus
Inch																		
DWLN R/L 123BKC3	.75	.75	1.000	4.50	1.00	-	-	.28	-5.0	-5.0	**WN..332**	**IWSN322**	**KMSP315IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DWLN R/L 163CKC3	1.00	1.00	1.250	5.00	1.00	-	-	.06	-5.0	-5.0	**WN..332**	**IWSN322**	**KMSP315IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DWLN R/L 163DKC3	1.00	1.00	1.250	6.00	1.00	-	-	.06	-5.0	-5.0	**WN..332**	**IWSN322**	**KMSP315IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DWLN R/L 164CKC3	1.00	1.00	1.250	5.00	1.00	-	-	-	-5.0	-5.0	**WN..432**	**IWSN433**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DWLN R/L 164DKC3	1.00	1.00	1.250	6.00	1.00	-	-	-	-5.0	-5.0	**WN..432**	**IWSN433**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DWLN R/L 204DKC3	1.25	1.25	1.500	6.00	1.00	-	-	-	-5.0	-5.0	**WN..432**	**IWSN433**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
Metric																		
DWLN R/L 2020K06KC04	20	20	25,0	125	25,0	-	-	7,5	-5,0	-5,0	**WN..060408**	**IWSN322**	**KMSP315IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DWLN R/L 2525M06KC04	25	25	32,0	150	25,0	-	-	-	-5,0	-5,0	**WN..060408**	**IWSN322**	**KMSP315IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DWLN R/L 3225P06KC04	32	25	32,0	170	25,0	-	-	-	-5,0	-5,0	**WN..060408**	**IWSN322**	**KMSP315IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DWLN R/L 2020K08KC04	20	20	25,0	125	25,0	-	-	9,5	-5,0	-5,0	**WN..080408**	**IWSN433**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DWLN R/L 2525M08KC04	25	25	32,0	150	25,0	-	-	4,0	-5,0	-5,0	**WN..080408**	**IWSN433**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DWLN R/L 3225P08KC04	32	25	32,0	170	25,0	-	-	4,0	-5,0	-5,0	**WN..080408**	**IWSN433**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP
DWLN R/L 3232P08KC04	32	32	40,0	170	25,0	-	-	-	-5,0	-5,0	**WN..080408**	**IWSN433**	**KMSP415IP**	15 IP	**CM234**	**SSP025016M**	**STCM1115IP**	15 IP

To place an order, contact your authorized
Kennametal distributor or visit www.kennametal.com.

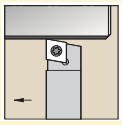
Order example:
ANSI Right hand: **DWLNR123BKC3**
ISO Right hand: **DWLNR2020K06KC04**

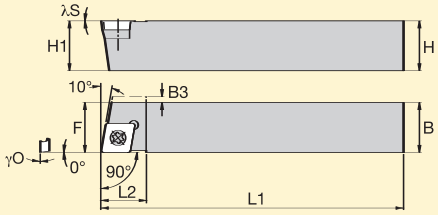
ANSI Left hand: **DWLNL123BKC3**
ISO Left hand: **DWLNL2020K06KC04**

SCREW-ON Toolholders

SCREW-ON Inserts

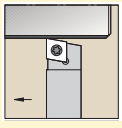
SCAC

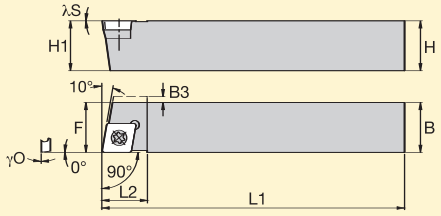




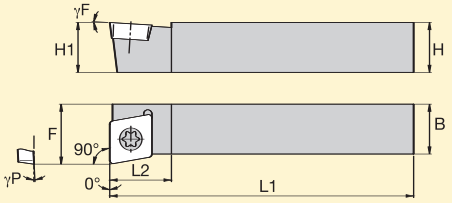
Catalog number Right hand/Left hand	H = H1	B	F	L1	L2	CD	FA	L1A	B3	λS°	γO°	Gage Insert	Shim	Shim Screw	Hex (mm)	Insert Screw	Torx
Inch																	
SCAC R/L 062D	.375	.375	.375	6.00	.44	-	-	-	-	0.0	0.0	**CC..2151**	**-**	**-**	**-**	**MS1153**	T7
SCAC R/L 083D	.500	.500	.500	6.00	.62	-	-	-	-	0.0	0.0	**CC..3252**	**-**	**-**	**-**	**MS1155**	T15
SCAC R/L 523Z	.500	.625	.625	3.25	.62	-	-	-	-	0.0	0.0	**CC..3252**	**-**	**-**	**-**	**MS1155**	T15
SCAC R/L 103B	.625	.625	.625	4.50	.62	-	-	-	-	0.0	0.0	**CC..3252**	**SKCP343**	**SRS3**	3,5	**MS1156**	T15
Metric																	
SCAC R/L 1010M06Q	10	10	10,0	150	11,0	-	-	-	-	0,0	0,0	**CC..060204**	**-**	**-**	**-**	**MS1153**	T7
SCAC R/L 1212M06Q	12	12	12,0	150	11,0	-	-	-	-	0,0	0,0	**CC..060204**	**-**	**-**	**-**	**MS1153**	T7
SCAC R/L 1216F09Q	12	16	16,0	82	16,0	-	-	-	-	0,0	0,0	**CC..09T308**	**-**	**-**	**-**	**MS1155**	T15
SCAC R/L 1616K09Q	16	16	16,0	125	16,0	-	-	-	-	0,0	0,0	**CC..09T308**	**SKCP343**	**SRS3**	3,5	**MS1156**	T15

SCAP





SCFP

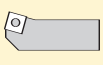


Catalog number Right hand/Left hand	H = H1	B	F	L1	L2	CD	FA	L1A	B3	λS°	γO°	Gage Insert	Shim	Shim Screw	Hex (mm)	Insert Screw	Torx
Inch																	
SCAP R/L 0452D	.281	.281	.281	6.00	.44	-	-	-	.09	3.5	3.5	**CP..2151**	**-**	**-**	**-**	**MS1153**	T7
SCAP R/L 052D	.313	.313	.312	6.00	.44	-	-	-	.06	3.5	3.5	**CP..2151**	**-**	**-**	**-**	**MS1153**	T7
SCAP R/L 062D	.375	.375	.375	6.00	.44	-	-	-	-	3.5	3.5	**CP..2151**	**-**	**-**	**-**	**MS1153**	T7
SCAP R/L 083D	.500	.500	.500	6.00	.62	-	-	-	-	4.0	3.0	**CP..3252**	**-**	**-**	**-**	**MS1027**	T9
										γF°	γP°						
Inch																	
SCFP R/L 062*	.375	.375	.500	2.50	.44	-	-	-	-	3.5	3.5	**CP..2151***	**-**	**-**	**-**	**MS1153**	T7

*NOTE: ANSI/ISO compatible 60° countersunk hole insert. This tool will also accept CPMT/CPGM/CPGT/CPGW-21.5_ inserts.

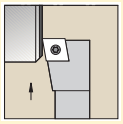
Order example:
ANSI Right hand: **SCACR062D**
ISO Right hand: **SCACR1010M06Q**

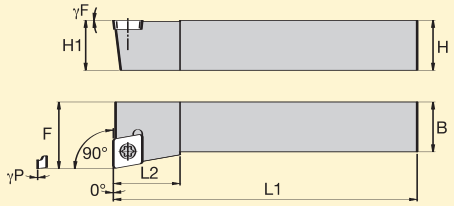
ANSI Left hand: **SCACL062D**
ISO Left hand: **SCACL1010M06Q**



To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

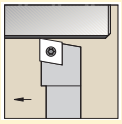
SCFC

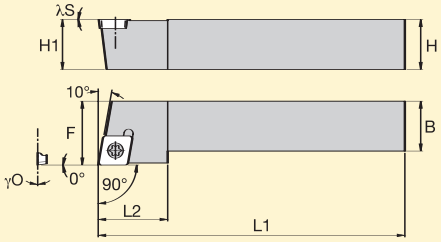




Catalog number Right hand/Left hand	H = H1	B	F	L1	L2	CD	FA	L1A	B3	γF°	γP°	Gage Insert	Shim	Shim Screw	Hex (mm)	Insert Screw	Torx
Inch																	
SCFC R/L 062	.375	.375	.500	2.50	.50	-	-	-	-	0.0	0.0	**CC..2151**	**-**	**-**	-	**MS1153**	T7
SCFC R/L 082	.500	.500	.625	3.50	.50	-	-	-	-	0.0	0.0	**CC..2151**	**-**	**-**	-	**MS1153**	T7
SCFC R/L 102	.625	.625	.750	4.00	.50	-	-	-	-	0.0	0.0	**CC..2151**	**-**	**-**	-	**MS1153**	T7
SCFC R/L 103	.625	.625	.750	4.00	.62	-	-	-	-	0.0	0.0	**CC..3252**	**SKCP343**	**SRS3**	3,5	**MS1156**	T15
SCFC R/L 123	.750	.750	1.000	4.50	.62	-	-	-	-	0.0	0.0	**CC..3252**	**SKCP343**	**SRS3**	3,5	**MS1156**	T15
SCFC R/L 163	1.000	1.000	1.250	6.00	.62	-	-	-	-	0.0	0.0	**CC..3252**	**SKCP343**	**SRS3**	3,5	**MS1156**	T15
Metric																	
SCFC R/L 1010M06	10	10	12,0	150	11,0	-	-	-	-	0,0	0,0	**CC..060204**	**-**	**-**	-	**MS1153**	T7
SCFC R/L 1212N09	12	12	16,0	160	16,0	-	-	-	-	0,0	0,0	**CC..09T308**	**-**	**-**	-	**MS1155**	T15

SCGC





Catalog number Right hand/Left hand	H = H1	B	F	L1	L2	CD	FA	L1A	B3	λS°	γO°	Gage Insert	Shim	Shim Screw	Hex (mm)	Insert Screw	Torx
Inch																	
SCGC R/L 062	.375	.375	.500	2.50	.50	-	-	-	-	0.0	0.0	**CC..2151**	**-**	**-**	-	**MS1153**	T7
SCGC R/L 082	.500	.500	.625	3.50	.50	-	-	-	-	0.0	0.0	**CC..2151**	**-**	**-**	-	**MS1153**	T7
SCGC R/L 102	.625	.625	.750	4.00	.50	-	-	-	-	0.0	0.0	**CC..2151**	**-**	**-**	-	**MS1153**	T7
SCGC R/L 103	.625	.625	.750	4.00	.62	-	-	-	-	0.0	0.0	**CC..3252**	**SKCP343**	**SRS3**	3,5	**MS1156**	T15
SCGC R/L 123	.750	.750	1.000	4.50	.62	-	-	-	-	0.0	0.0	**CC..3252**	**SKCP343**	**SRS3**	3,5	**MS1156**	T15
SCGC R/L 163	1.000	1.000	1.250	6.00	.62	-	-	-	-	0.0	0.0	**CC..3252**	**SKCP343**	**SRS3**	3,5	**MS1156**	T15
Metric																	
SCGC R/L 0808L06	8	8	10,0	140	11,0	-	-	-	-	0,0	0,0	**CC..060204**	**-**	**-**	-	**MS1153**	T7
SCGC R/L 1010M06	10	10	12,0	150	11,0	-	-	-	-	0,0	0,0	**CC..060204**	**-**	**-**	-	**MS1153**	T7
SCGC R/L 1212N09	12	12	16,0	160	16,0	-	-	-	-	0,0	0,0	**CC..09T308**	**-**	**-**	-	**MS1155**	T15

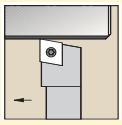
Order example:
ANSI Right hand: **SCFCR062**
ISO Right hand: **SCFCR1010M06**

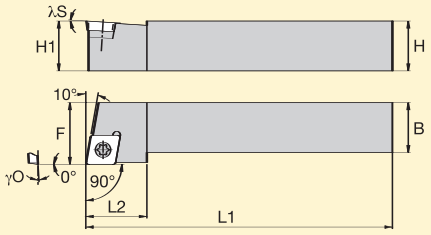
ANSI Left hand: **SCFCL062**
ISO Left hand: **SCFCL1010M06**

SCREW-ON Toolholders

SCREW-ON Inserts

SCGP

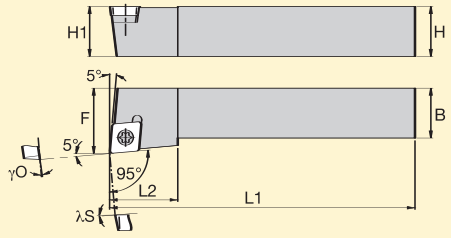




Catalog number Right hand/Left hand	H = H1	B	F	L1	L2	CD	FA	L1A	B3	λS°	γO°	Gage Insert	Shim	Shim Screw	Hex (mm)	Insert Screw	Torx
Inch																	
SCGP R/L 062*	.375	.375	.500	2.50	.44	-	-	-	-	3.5	3.5	**CP..2151***	**-**	**-**	-	**MS1153**	T7

*NOTE: ANSI/ISO compatible 60° countersunk hole insert. This tool will also accept CPMT/CPGM/CPGT/CPGW-21.5_ inserts.

SCLC



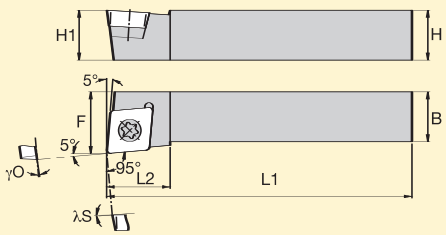
Catalog number Right hand/Left hand	H = H1	B	F	L1	L2	CD	FA	L1A	B3	λS°	γO°	Gage Insert	Shim	Shim Screw	Hex (mm)	Insert Screw	Torx
Inch																	
SCLC R/L 062	.375	.375	.500	2.50	.50	-	-	-	-	0.0	0.0	**CC..2151**	**-**	**-**	-	**MS1153**	T7
SCLC R/L 082	.500	.500	.625	3.50	.50	-	-	-	-	0.0	0.0	**CC..2151**	**-**	**-**	-	**MS1153**	T7
SCLC R/L 103	.625	.625	.750	4.00	.62	-	-	-	-	0.0	0.0	**CC..3252**	**SKCP343**	**SRS3**	3,5	**MS1156**	T15
SCLC R/L 123	.750	.750	1.000	4.50	.62	-	-	-	-	0.0	0.0	**CC..3252**	**SKCP343**	**SRS3**	3,5	**MS1156**	T15
SCLC R/L 163	1.000	1.000	1.250	6.00	.62	-	-	-	-	0.0	0.0	**CC..3252**	**SKCP343**	**SRS3**	3,5	**MS1156**	T15
SCLC R/L 164D	1.000	1.000	1.250	6.00	.75	-	-	-	-	0.0	0.0	**CC..432**	**SKCP453**	**SRS4**	4,0	**MS1158**	T15
SCLC R/L 204D	1.250	1.250	1.500	6.00	.75	-	-	-	-	0.0	0.0	**CC..432**	**SKCP453**	**SRS4**	4,0	**MS1158**	T15
Metric																	
SCLC R/L 1010M06	10	10	12,0	150	12,0	-	-	-	-	0,0	0,0	**CC..060204**	**-**	**-**	-	**MS1153**	T7
SCLC R/L 1212N09	12	12	16,0	160	16,0	-	-	-	-	0,0	0,0	**CC..09T308**	**-**	**-**	-	**MS1155**	T15
SCLC R/L 1616H09	16	16	20,0	100	16,0	-	-	-	-	0,0	0,0	**CC..09T308**	**SKCP343**	**SRS3**	3,5	**MS1156**	T15
SCLC R/L 2020K09	20	20	25,0	125	16,0	-	-	-	-	0,0	0,0	**CC..09T308**	**SKCP343**	**SRS3**	3,5	**MS1156**	T15
SCLC R/L 2525M09	25	25	32,0	150	16,0	-	-	-	-	0,0	0,0	**CC..09T308**	**SKCP343**	**SRS3**	3,5	**MS1156**	T15
SCLC R/L 2020K12	20	20	25,0	125	20,0	-	-	-	-	0,0	0,0	**CC..120408**	**SKCP453**	**SRS4**	4,0	**MS1158**	T15
SCLC R/L 2525M12	25	25	32,0	150	19,8	-	-	-	-	0,0	0,0	**CC..120408**	**SKCP453**	**SRS4**	4,0	**MS1158**	T15

Order example:
ANSI Right hand: **SCLCR062**
ISO Right hand: **SCLCR1010M06**

ANSI Left hand: **SCLCL062**
ISO Left hand: **SCLCL1010M06**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

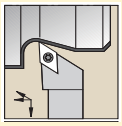
SCLP

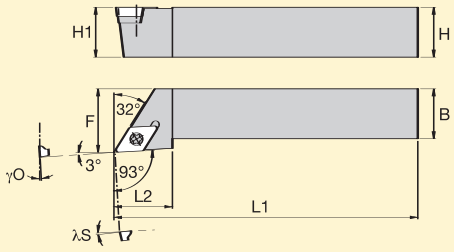


Catalog number Right hand/Left hand	H = H1	B	F	L1	L2	CD	FA	L1A	B3	λS°	γO°	Gage Insert	Shim	Shim Screw	Hex (mm)	Insert Screw	Torx
Inch																	
SCLP R/L 062*	.375	.375	.500	2.50	.44	-	-	-	-	3.5	3.5	**CP..2151***	-	-	-	**MS1153**	T7
Metric																	
SCLP R/L 0808M06	8	8	9,0	150	11,4	-	-	-	-	0,0	0,0	**CP..060203**	-	-	-	**MS1153**	T7
SCLP R/L 1010M06	10	10	11,0	150	11,4	-	-	-	-	0,0	0,0	**CP..060203**	-	-	-	**MS1153**	T7
SCLP R/L 1212M06	12	12	13,0	150	11,4	-	-	-	-	0,0	0,0	**CP..060203**	-	-	-	**MS1153**	T7

*NOTE: ANSI/ISO compatible 60° countersunk hole insert. This tool will also accept CPMT/CPGM/CPGT/CPGW-21.5_ inserts.

SDJC





Catalog number Right hand/Left hand	H = H1	B	F	L1	L2	CD	FA	L1A	B3	λS°	γO°	Gage Insert	Shim	Shim Screw	Hex (mm)	Insert Screw	Torx
Inch																	
SDJC R/L 062	.375	.375	.500	2.50	.62	-	-	-	-	0.0	0.0	**DC..2151**	-	-	-	**MS1153**	T7
SDJC R/L 082	.500	.500	.625	3.50	.62	-	-	-	-	0.0	0.0	**DC..2151**	-	-	-	**MS1153**	T7
SDJC R/L 102	.625	.625	.750	4.00	.62	-	-	-	-	0.0	0.0	**DC..2151**	-	-	-	**MS1153**	T7
SDJC R/L 083	.500	.500	.625	3.50	.88	-	-	-	-	0.0	0.0	**DC..3252**	-	-	-	**MS1155**	T15
SDJC R/L 103	.625	.625	.750	4.00	.88	-	-	-	-	0.0	0.0	**DC..3252**	**SKDP343**	**SRS3**	3,5	**MS1156**	T15
SDJC R/L 123	.750	.750	1.000	4.50	.88	-	-	-	-	0.0	0.0	**DC..3252**	**SKDP343**	**SRS3**	3,5	**MS1156**	T15
SDJC R/L 163	1.000	1.000	1.250	6.00	.88	-	-	-	-	0.0	0.0	**DC..3252**	**SKDP343**	**SRS3**	3,5	**MS1156**	T15
Metric																	
SDJC R/L 1010M07	10	10	12,0	150	16,0	-	-	-	-	0,0	0,0	**DC..070204**	-	-	-	**MS1153**	T7
SDJC R/L 1212N07	12	12	16,0	160	16,0	-	-	-	-	0,0	0,0	**DC..070204**	-	-	-	**MS1153**	T7
SDJC R/L 1616H07	16	16	20,0	100	16,0	-	-	-	-	0,0	0,0	**DC..070204**	-	-	-	**MS1153**	T7
SDJC R/L 2020K07	20	20	25,0	125	16,0	-	-	-	-	0,0	0,0	**DC..070204**	-	-	-	**MS1153**	T7
SDJC R/L 1212N11	12	12	16,0	160	22,0	-	-	-	-	0,0	0,0	**DC..11T308**	-	-	-	**MS1155**	T15
SDJC R/L 1616H11	16	16	20,0	100	22,0	-	-	-	-	0,0	0,0	**DC..11T308**	**SKDP343**	**SRS3**	3,5	**MS1156**	T15
SDJC R/L 2020K11	20	20	25,0	125	22,0	-	-	-	-	0,0	0,0	**DC..11T308**	**SKDP343**	**SRS3**	3,5	**MS1156**	T15
SDJC R/L 2525M11	25	25	32,0	150	22,0	-	-	-	-	0,0	0,0	**DC..11T308**	**SKDP343**	**SRS3**	3,5	**MS1156**	T15
SDJC R/L 2020K15	20	20	25,0	125	32,0	-	-	-	-	0,0	0,0	**DC..150408**	**SKDP453**	**SRS4**	4,0	**MS1158**	T15
SDJC R/L 2525M15	25	25	32,0	150	32,0	-	-	-	-	0,0	0,0	**DC..150408**	**SKDP453**	**SRS4**	4,0	**MS1158**	T15

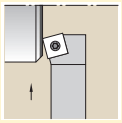
Order example:
ANSI Right hand: **SCLPR062**
ISO Right hand: **SCLPR0808M06**

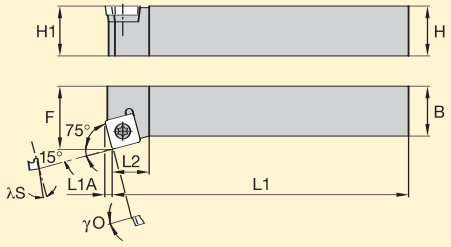
ANSI Left hand: **SCLPL062**
ISO Left hand: **SCLPL0808M06**

SCREW-ON Toolholders

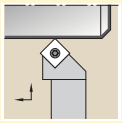
SCREW-ON Inserts

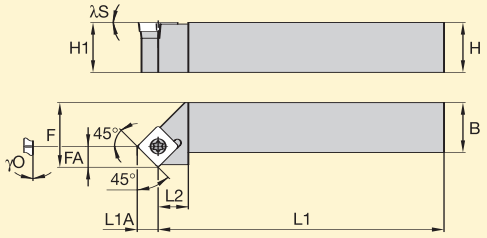
SSKC





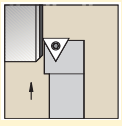
SSSC

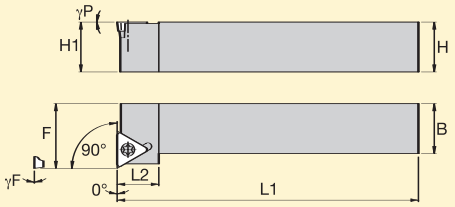




Catalog number Right hand/Left hand	H = H1	B	F	L1	L2	FA	L1A	B3	CD	λS°	γO°	Gage Insert	Shim	Shim Screw	Hex (mm)	Insert Screw	Torx
Metric																	
SSKC R/L 1212N09	12	12	16,0	160	16,0	-	2,2	-	-	0,0	0,0	**SC..09T308**	-	-	-	**MS1155**	T15
SSKCR1616H09	16	16	20,0	100	16,0	-	2,2	-	-	0,0	0,0	**SC..09T308**	**SKSP343**	**SRS3**	3,5	**MS1156**	T15
SSKC R/L 2020K12	20	20	25,0	125	22,0	-	3,1	-	-	0,0	0,0	**SC..120408**	**SKSP453**	**SRS4**	4,0	**MS1158**	T15
SSKC R/L 2525M12	25	25	32,0	150	22,0	-	3,1	-	-	0,0	0,0	**SC..120408**	**SKSP453**	**SRS4**	4,0	**MS1158**	T15
Metric																	
SSSC R/L 1212N09	12	12	16,0	160	18,0	6,1	6,1	-	-	0,0	0,0	**SC..09T308**	-	-	-	**MS1155**	T15
SSSC R/L 1616H09	16	16	20,0	100	18,0	6,1	6,1	-	-	0,0	0,0	**SC..09T308**	**SKSP343**	**SRS3**	3,5	**MS1156**	T15
SSSC R/L 1616H12	16	16	20,0	100	25,0	8,3	8,3	-	-	0,0	0,0	**SC..120408**	**SKSP453**	**SRS4**	4,0	**MS1158**	T15
SSSC R/L 2020K12	20	20	25,0	125	25,0	8,3	8,3	-	-	0,0	0,0	**SC..120408**	**SKSP453**	**SRS4**	4,0	**MS1158**	T15
SSSC R/L 2525M12	25	25	32,0	150	25,0	8,3	8,3	-	-	0,0	0,0	**SC..120408**	**SKSP453**	**SRS4**	4,0	**MS1158**	T15

STFC





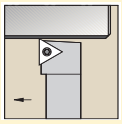
Catalog number Right hand/Left hand	H = H1	B	F	L1	L2	CD	FA	L1A	B3	γF°	γP°	Gage Insert	Shim	Shim Screw	Hex (mm)	Insert Screw	Torx
Inch																	
STFC R/L 062	.375	.375	.500	2.50	.62	-	-	-	-	0.0	0.0	**TC..2151**	-	-	-	**MS1153**	T7
STFC R/L 082	.500	.500	.625	3.50	.62	-	-	-	-	0.0	0.0	**TC..2151**	-	-	-	**MS1153**	T7
STFC R/L 102	.625	.625	.750	4.00	.62		-	-	-	0.0	0.0	**TC..2151**	-	-	-	**MS1153**	T7
STFC R/L 103	.625	.625	.750	4.00	.75	-	-	-	-	0.0	0.0	**TC..3252**	**SKTP343**	**SRS3**	3,5	**MS1156**	T15
STFC R/L 123	.750	.750	1.000	4.50	.75	-	-	-	-	0.0	0.0	**TC..3252**	**SKTP343**	**SRS3**	3,5	**MS1156**	T15
STFC R/L 163	1.000	1.000	1.250	6.00	.75	-	-	-	-	0.0	0.0	**TC..3252**	**SKTP343**	**SRS3**	3,5	**MS1156**	T15
Metric																	
STFC R/L 1010M11	10	10	12,0	150	13,0	-	-	-	-	0,0	0,0	**TC..110204**	-	-	-	**MS1153**	T7
STFC R/L 1212N11	12	12	16,0	160	13,0	-	-	-	-	0,0	0,0	**TC..110204**	-	-	-	**MS1153**	T7
STFC R/L 1616H11	16	16	20,0	100	16,0	-	-	-	-	0,0	0,0	**TC..110204**	-	-	-	**MS1153**	T7
STFC R/L 1616H16	16	16	20,0	100	20,0	-	-	-	-	0,0	0,0	**TC..16T308**	**SKTP343**	**SRS3**	3,5	**MS1156**	T15
STFC R/L 2020K16	20	20	25,0	125	20,0	-	-	-	-	0,0	0,0	**TC..16T308**	**SKTP343**	**SRS3**	3,5	**MS1156**	T15
STFC R/L 2525M16	25	25	32,0	150	20,0	-	-	-	-	0,0	0,0	**TC..16T308**	**SKTP343**	**SRS3**	3,5	**MS1156**	T15

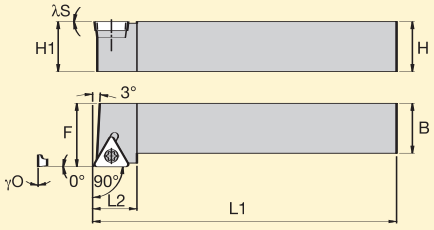
Order example:
ANSI Right hand: **STFCR062**
ISO Right hand: **STFCR1010M11**

ANSI Left hand: **STFCL062**
ISO Left hand: **STFCL1010M11**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

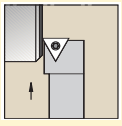
STGC

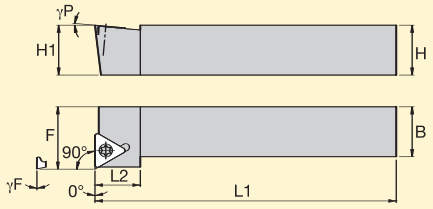




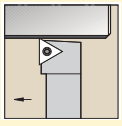
Catalog number Right hand/Left hand	H = H1	B	F	L1	L2	CD	FA	L1A	B3	λS°	γO°	Gage Insert	Shim	Shim Screw	Hex (mm)	Insert Screw	Torx
Inch																	
STGC R/L 062	.375	.375	.500	2.50	.62	-	-	-	-	0.0	0.0	**TC..2151**	-	-	-	**MS1153**	T7
STGC R/L 082	.500	.500	.625	3.50	.62	-	-	-	-	0.0	0.0	**TC..2151**	-	-	-	**MS1153**	T7
STGC R/L 102	.625	.625	.750	4.00	.62	-	-	-	-	0.0	0.0	**TC..2151**	-	-	-	**MS1153**	T7
STGC R/L 103	.625	.625	.750	4.00	.75	-	-	-	-	0.0	0.0	**TC..3252**	**SKTP343**	**SRS3**	3,5	**MS1156**	T15
STGC R/L 123	.750	.750	1.000	4.50	.75	-	-	-	-	0.0	0.0	**TC..3252**	**SKTP343**	**SRS3**	3,5	**MS1156**	T15
STGC R/L 163	1.000	1.000	1.250	6.00	.75	-	-	-	-	0.0	0.0	**TC..3252**	**SKTP343**	**SRS3**	3,5	**MS1156**	T15
Metric																	
STGC R/L 1010M11	10	10	12,0	150	16,0	-	-	-	-	0,0	0,0	**TC..110204**	-	-	-	**MS1153**	T7
STGC R/L 1212N11	12	12	16,0	160	16,0	-	-	-	-	0,0	0,0	**TC..110204**	-	-	-	**MS1153**	T7
STGC R/L 1616H11	16	16	20,0	100	20,0	-	-	-	-	0,0	0,0	**TC..110204**	-	-	-	**MS1153**	T7
STGC R/L 1616H16	16	16	20,0	100	20,0	-	-	-	-	0,0	0,0	**TC..16T308**	**SKTP343**	**SRS3**	3,5	**MS1156**	T15
STGC R/L 2020K16	20	20	25,0	125	20,0	-	-	-	-	0,0	0,0	**TC..16T308**	**SKTP343**	**SRS3**	3,5	**MS1156**	T15
STGC R/L 2525M16	25	25	32,0	150	20,0	-	-	-	-	0,0	0,0	**TC..16T308**	**SKTP343**	**SRS3**	3,5	**MS1156**	T15

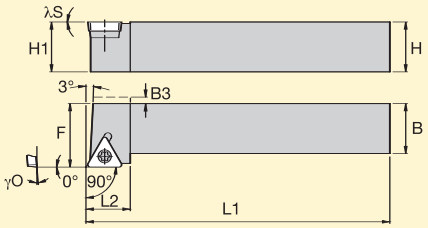
STFP





STGP





Catalog number Right hand/Left hand	H = H1	B	F	L1	L2	CD	FA	L1A	B3	γF°	γP°	Gage Insert	Shim	Shim Screw	Hex (mm)	Insert Screw	Torx
Inch																	
STFP R/L 062*	.375	.375	.500	2.50	.44	-	-	-	-	0.0	5.0	**TP..2151***	-	-	-	**MS1153**	T7
STFP R/L 082V*	.500	.500	.625	3.50	.44	-	-	-	-	0.0	5.0	**TP..2151***	-	-	-	**MS1153**	T7
										λS°	γO°						
Inch																	
STGP R/L 0518*	.313	.313	.375	2.50	.50	-	-	-	.09	0.0	5.0	**TP..18151***	-	-	-	**MS1152**	T7
STGP R/L 062*	.375	.375	.500	2.50	.56	-	-	-	-	0.0	5.0	**TP..2151***	-	-	-	**MS1153**	T7
STGP R/L 082V*	.500	.500	.625	3.50	.56	-	-	-	-	0.0	5.0	**TP..2151***	-	-	-	**MS1153**	T7

*NOTE: ANSI/ISO compatible 60° countersunk hole insert. This tool will also accept TPMT/TPGM/TPGT/TPGW-21.5_ inserts.

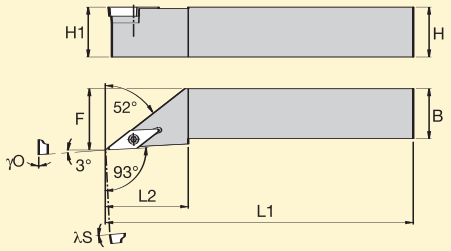
Order example:
ANSI Right hand: **STGCR062**
ISO Right hand: **STGCR1010M11**

ANSI Left hand: **STGCL062**
ISO Left hand: **STGCL1010M11**

SCREW-ON Toolholders

SCREW-ON Inserts

SVJB



Catalog number Right hand/Left hand	H = H1	B	F	L1	L2	CD	FA	L1A	B3	λS°	γO°	Gage Insert	Shim	Shim Screw	Hex (mm)	Insert Screw	Torx
Inch																	
SVJB R/L 062	.375	.375	.500	2.50	.88	-	-	-	-	0.0	0.0	**VB..221**	**-**	**-**	-	**MS1153**	T7
SVJB R/L 082	.500	.500	.625	3.50	.88	-	-	-	-	0.0	0.0	**VB..221**	**-**	**-**	-	**MS1153**	T7
SVJB R/L 102	.625	.625	.750	4.00	.88	-	-	-	-	0.0	0.0	**VB..221**	**-**	**-**	-	**MS1153**	T7
SVJB R/L 123	.750	.750	1.000	4.50	1.38	-	-	-	-	0.0	0.0	**VB..332**	**SKVN343**	**SRS3**	3,5	**MS1156**	T15
SVJB R/L 163	1.000	1.000	1.250	6.00	1.38	-	-	-	-	0.0	0.0	**VB..332**	**SKVN343**	**SRS3**	3,5	**MS1156**	T15
Metric																	
SVJB R/L 1212N11	12	12	16,0	160	22,0	-	-	-	-	0,0	0,0	**VB..110304**	**-**	**-**	-	**MS1153**	T7
SVJB R/L 1616H11	16	16	20,0	100	22,0	-	-	-	-	0,0	0,0	**VB..110304**	**-**	**-**	-	**MS1153**	T7
SVJB R/L 2020K11	20	20	25,0	125	26,0	-	-	-	-	0,0	0,0	**VB..110304**	**-**	**-**	-	**MS1153**	T7
SVJB R/L 1616H16	16	16	20,0	100	35,0	-	-	-	-	0,0	0,0	**VB..160408**	**SKVN343**	**SRS3**	3,5	**MS1156**	T15
SVJB R/L 2020K16	20	20	25,0	125	35,0	-	-	-	-	0,0	0,0	**VB..160408**	**SKVN343**	**SRS3**	3,5	**MS1156**	T15
SVJB R/L 2525M16	25	25	32,0	150	35,0	-	-	-	-	0,0	0,0	**VB..160408**	**SKVN343**	**SRS3**	3,5	**MS1156**	T15
SVJB R/L 3225P16	32	25	32,0	170	35,0	-	-	-	-	0,0	0,0	**VB..160408**	**SKVN343**	**SRS3**	3,5	**MS1156**	T15

Order example:
ANSI Right hand: **SVJBR062**
ISO Right hand: **SVJBR1212N11**

ANSI Left hand: **SVJBL062**
ISO Left hand: **SVJBL1212N11**

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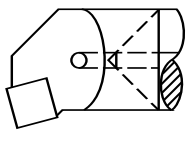
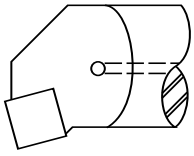
Boring Bar Identification System

E



carbide bar with coolant

A

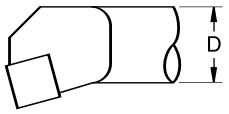


steel bar with coolant

1. Bar Type

Inch:
A two-digit number that indicates the bar diameter in 1/16-inch increments.

Metric:
A two-digit number which indicates the bar diameter in mm. If the dimension for the diameter is represented by a one-digit number, a 0 (zero) will be used in front of it.
Example: 8 mm = 08



2. Bar Diameter

Example:

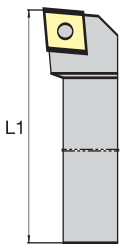
A	32

3. Bar Length**

Inch

3 – F
3.5 – G
4 – H
4.5 – J
5 – K
5.5 – L
6 – M
6.5 – N
6.75 – P
7 – Q
8 – R
10 – S
12 – T
14 – U
16 – V
18 – W
20 – Y

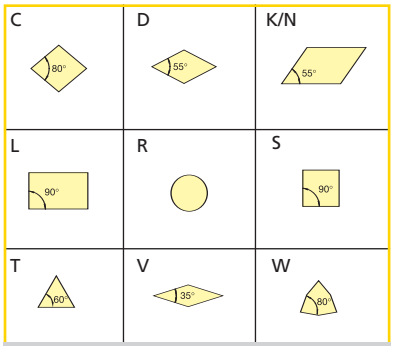
** Used only when more than one length is available or a special length is required.



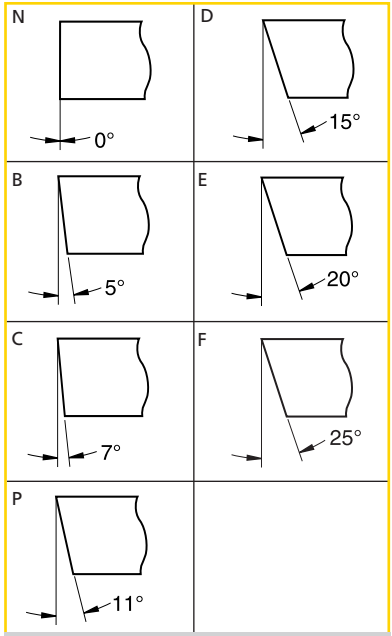
Metric

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 length	X

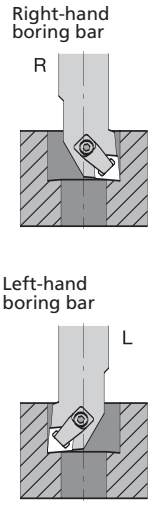
To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.



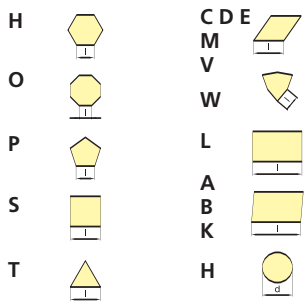
5. Insert Shape



7. Insert Clearance Angle



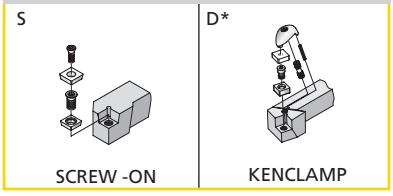
8. Hand of Tool



9. Insert Size

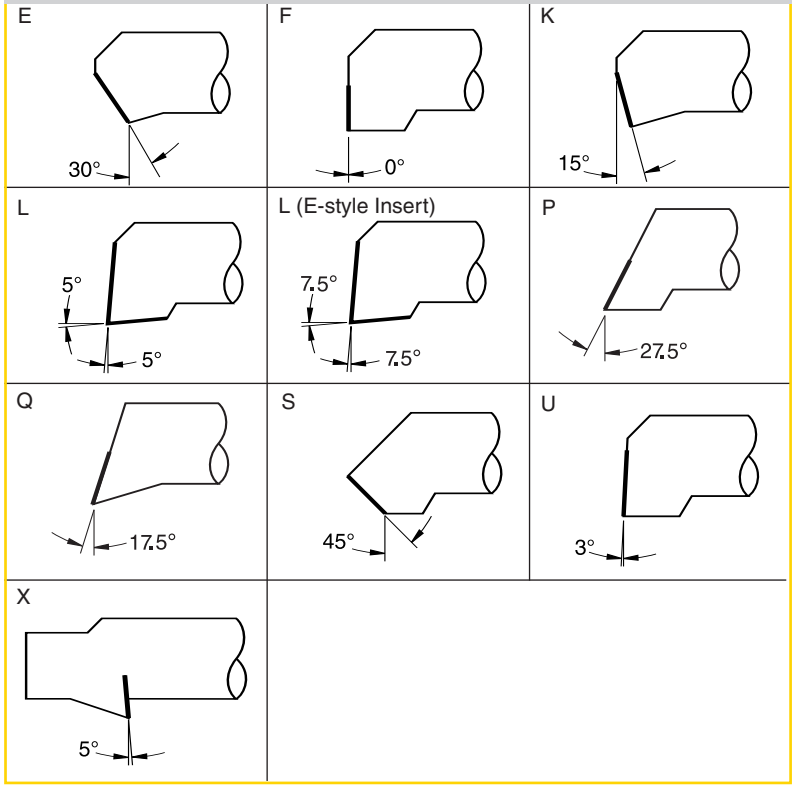
D	S	K	N	R	4	KC

4. Insert Holding Method



*Kennametal standard only

6. Bar Style or Lead Angle



10. Additional Information

KC -
KENCLAMP
+
insert thickness

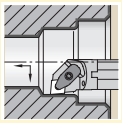
Inch:
3 - .188
4 - .250

Metric:
04 - 4,76 mm
06 - 6,35 mm

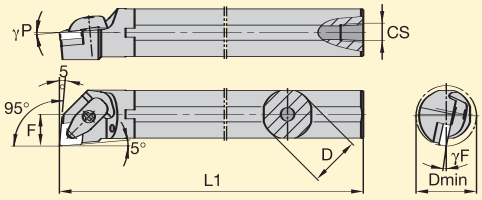
KENCLAMP Boring Bars

KENLOC Inserts

A-DCLN-KC

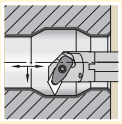


Steel shank with through coolant

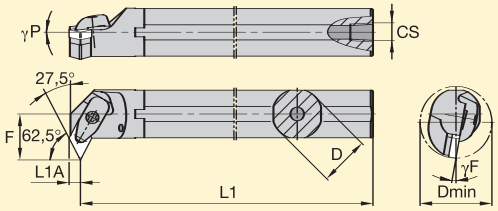


Catalog number Right hand/Left hand	D	Dmin	F	L1	L2	L1A	CS	γF°	γP°	Gage Insert	Shim	Shim Screw	Torx Plus	Clamp	Slotted Pin	Clamp Screw	Torx Plus
Inch																	
A16TDCLN R/L 4KC3	1.000	1.200	.640	12.00	-	-	1/4-18 NPT	-12.0	-5.0	**CN..432**	**-**	**-**	**-**	**CM234**	**SSP025016M**	**STCM1115IP**	15IP
A20UDCLN R/L 4KC3	1.250	1.470	.765	14.00	-	-	1/4-18 NPT	-12.0	-5.0	**CN..432**	**ICSN433**	**KMSP4S15IP**	15IP	**CM234**	**SSP025016M**	**STCM1115IP**	15IP
A24UDCLN R/L 4KC3	1.500	1.760	.890	14.00	-	-	1/4-18 NPT	-12.0	-5.0	**CN..432**	**ICSN433**	**KMSP415IP**	15IP	**CM234**	**SSP025016M**	**STCM1115IP**	15IP
A24UDCLN R/L 5KC4	1.500	1.760	.890	14.00	-	-	1/4-18 NPT	-14.0	-5.0	**CN..543**	**ICSN533**	**KMSP5S15IP**	15IP	**CM209**	**SSP025018M**	**STCM1115IP**	15IP
A28UDCLN R/L 4KC3	1.750	2.010	1.015	14.00	-	-	1/4-18 NPT	-12.0	-5.0	**CN..432**	**ICSN433**	**KMSP415IP**	15IP	**CM234**	**SSP025016M**	**STCM1115IP**	15IP
A32VDCLN R/L 4KC3	2.000	2.400	1.281	16.00	-	-	1/4-18 NPT	-12.0	-5.0	**CN..432**	**ICSN433**	**KMSP415IP**	15IP	**CM234**	**SSP025016M**	**STCM1115IP**	15IP
A32VDCLN R/L 5KC4	2.000	2.400	1.281	16.00	-	-	1/4-18 NPT	-12.0	-5.0	**CN..543**	**ICSN533**	**KMSP515IP**	15IP	**CM209**	**SSP025018M**	**STCM1115IP**	15IP
A32VDCLN R/L 6KC4	2.000	2.400	1.281	16.00	-	-	1/4-18 NPT	-12.0	-5.0	**CN..643**	**ICSN633**	**KMSP625IP**	25IP	**CM210**	**SSP025018M**	**STCM425IP**	25IP
A40VDCLN R/L 4KC3	2.500	3.030	1.531	16.00	-	-	1/4-18 NPT	-8.0	-5.0	**CN..432**	**ICSN433**	**KMSP415IP**	15IP	**CM234**	**SSP025016M**	**STCM1115IP**	15IP
A40VDCLN R/L 6KC4	2.500	3.030	1.531	16.00	-	-	1/4-18 NPT	-10.0	-5.0	**CN..643**	**ICSN633**	**KMSP625IP**	25IP	**CM210**	**SSP025018M**	**STCM425IP**	25IP
Metric																	
A25RDCLN R/L 12KC04	25	32	17,0	200	-	-	1/4-18 NPT	-12,0	-5,0	**CN..120408**	**-**	**-**	**-**	**CM234**	**SSP025016M**	**STCM1115IP**	15IP
A32SDCLN R/L 12KC04	32	40	22,0	250	-	-	1/4-18 NPT	-12,0	-5,0	**CN..120408**	**ICSN433**	**KMSP415IP**	15IP	**CM234**	**SSP025016M**	**STCM1115IP**	15IP
A40TDCLN R/L 12KC04	40	50	27,0	300	-	-	1/4-18 NPT	-9,0	-5,0	**CN..120408**	**ICSN433**	**KMSP415IP**	15IP	**CM234**	**SSP025016M**	**STCM1115IP**	15IP
A40TDCLN R/L 16KC06	40	50	27,0	300	-	-	1/4-18 NPT	-12,0	-5,0	**CN..160612**	**ICSN533**	**KMSP515IP**	15IP	**CM209**	**SSP025016M**	**STCM1115IP**	15IP

A-DDPN-KC



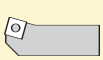
Steel shank with through coolant



Catalog number Right hand/Left hand	D	Dmin	F	L1	L2	L1A	CS	γF°	γP°	Gage Insert	Shim	Shim Screw	Torx Plus	Clamp	Slotted Pin	Clamp Screw	Torx Plus
Inch																	
A20UDDPN R/L 4KC3	1.250	1.705	1.000	14.00	-	.256	1/4-18 NPT	-13.0	0.0	**DN.432**	**IDSN443**	**KMSP415IP**	15IP	**CM234**	**SSP025016M**	**STCM1115IP**	15IP
A24UDDPN R/L 4KC3	1.500	2.000	1.125	14.00	-	.259	1/4-18 NPT	-10.0	0.0	**DN.432**	**IDSN443**	**KMSP415IP**	15IP	**CM234**	**SSP025016M**	**STCM1115IP**	15IP
Metric																	
A25RDDPN R/L 11KC04	25	37	22,0	200	-	4,8	1/4-18 NPT	-10,0	0,0	**DN..110408**	**IDSN322**	**KMSP315IP**	15IP	**CM234**	**SSP025016M**	**STCM119IP**	15IP
A32SDDPN R/L 15KC06	32	45	27,0	250	-	6,5	1/4-18 NPT	-12,0	0,0	**DN..150608**	**IDSN433**	**KMSP415IP**	15IP	**CM234**	**SSP025016M**	**STCM1115IP**	15IP
A40TDDPN R/L 15KC06	40	52	30,0	300	-	6,5	1/4-18 NPT	-10,0	0,0	**DN..150608**	**IDSN433**	**KMSP415IP**	15IP	**CM234**	**SSP025016M**	**STCM1115IP**	15IP

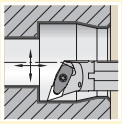
Order example:
ANSI Right hand: **A16TDCLNR4KC3**
ISO Right hand: **A25RDCLNR12KC04**

ANSI Left hand: **A16TDCLNL4KC3**
ISO Left hand: **A25RDCLNL12KC04**

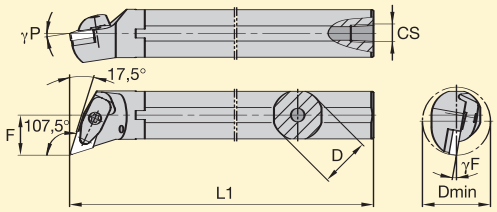


To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

A-DDQN-KC

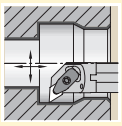


Steel shank with
through coolant

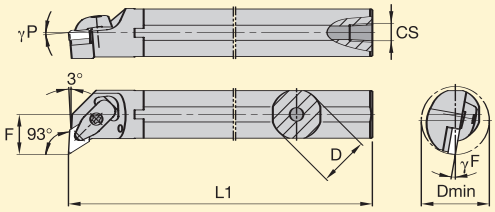


Catalog number Right hand/Left hand	D	Dmin	F	L1	L2	L1A	CS	γF°	γP°	Gage Insert	Shim	Shim Screw	Torx Plus	Clamp	Slotted Pin	Clamp Screw	Torx Plus
Inch																	
A20UDDQN R/L 4KC3	1.250	1.705	1.000	14.00	-	-	1/4-18 NPT	-10.0	-12.0	**DN.432**	**IDSN443**	**KMSP415IP**	15IP	**CM234**	**SSP025016M**	**STCM1115IP**	15IP
A24UDDQN R/L 4KC3	1.500	2.000	1.125	14.00	-	-	1/4-18 NPT	-8.5	-8.5	**DN.432**	**IDSN443**	**KMSP415IP**	15IP	**CM234**	**SSP025016M**	**STCM1115IP**	15IP
Metric																	
A25RDDQN R/L 11KC04	25	32	17,0	200	-	-	1/4-18 NPT	-11,0	-7,0	**DN..110408**	**-**	**-**	-	**CM234**	**SSP025016M**	**STCM1115IP**	15IP
A32SDDQN R/L 15KC06	32	40	22,0	250	-	-	1/4-18 NPT	-12,0	-10,0	**DN..150608**	**IDSN433**	**KMSP415IP**	15IP	**CM234**	**SSP025016M**	**STCM1115IP**	15IP
A40TDDQN R/L 15KC06	40	50	27,0	300	-	-	1/4-18 NPT	-10,0	-10,0	**DN..150608**	**IDSN433**	**KMSP415IP**	15IP	**CM234**	**SSP025016M**	**STCM1115IP**	15IP

A-DDUN-KC



Steel shank with
through coolant



Catalog number Right hand/Left hand	D	Dmin	F	L1	L2	L1A	CS	γF°	γP°	Gage Insert	Shim	Shim Screw	Torx Plus	Clamp	Slotted Pin	Clamp Screw	Torx Plus
Inch																	
A16TDDUN R/L 3KC3	1.000	1.300	.750	12.00	-	-	1/4-18 NPT	-12.0	-5.0	**DN..332**	**-**	**-**	-	**CM234**	**SSP025016M**	**STCM1115IP**	15IP
A20UDDUN R/L 3KC3	1.250	1.705	1.000	14.00	-	-	1/4-18 NPT	-10.0	-5.0	**DN..332**	**IDSN322**	**KMSP315IP**	15IP	**CM234**	**SSP025016M**	**STCM1115IP**	15IP
A20UDDUN R/L 4KC3	1.250	1.705	1.000	14.00	-	-	1/4-18 NPT	-12.0	-5.0	**DN..432**	**IDSN443**	**KMSP415IP**	15IP	**CM234**	**SSP025016M**	**STCM1115IP**	15IP
A24UDDUN R/L 4KC3	1.500	2.000	1.125	14.00	-	-	1/4-18 NPT	-10.0	-5.0	**DN..432**	**IDSN443**	**KMSP415IP**	15IP	**CM234**	**SSP025016M**	**STCM1115IP**	15IP
A28UDDUN R/L 4KC3	1.750	2.250	1.250	14.00	-	-	1/4-18 NPT	-10.0	-5.0	**DN..432**	**IDSN443**	**KMSP415IP**	15IP	**CM234**	**SSP025016M**	**STCM1115IP**	15IP
A32VDDUN R/L 4KC3	2.000	2.500	1.375	16.00	-	-	1/4-18 NPT	-8.0	-5.0	**DN..432**	**IDSN443**	**KMSP415IP**	15IP	**CM234**	**SSP025016M**	**STCM1115IP**	15IP
Metric																	
A25RDDUN R/L 11KC04	25	32	17,0	200	-	-	1/4-18 NPT	-12,0	-5,0	**DN..110408**	**-**	**-**	-	**CM234**	**SSP025016M**	**STCM1115IP**	15IP
A32SDDUN R/L 11KC04	32	40	22,0	250	-	-	1/4-18 NPT	-12,0	-5,0	**DN..110408**	**IDSN322**	**KMSP315IP**	15IP	**CM234**	**SSP025016M**	**STCM1115IP**	15IP
A32SDDUN R/L 15KC06	32	40	22,0	250	-	-	1/4-18 NPT	-12,0	-6,0	**DN..150608**	**IDSN433**	**KMSP415IP**	15IP	**CM234**	**SSP025016M**	**STCM1115IP**	15IP
A40TDDUN R/L 15KC06	40	50	27,0	300	-	-	1/4-18 NPT	-9,0	-5,0	**DN..150608**	**IDSN433**	**KMSP415IP**	15IP	**CM234**	**SSP025016M**	**STCM1115IP**	15IP
A50UDDUN R/L 15KC06	50	63	35,0	350	-	-	1/4-18 NPT	-7,0	-5,0	**DN..150608**	**IDSN433**	**KMSP415IP**	15IP	**CM234**	**SSP025016M**	**STCM1115IP**	15IP

Order example:
ANSI Right hand: **A20UDDQNR4KC3**
ISO Right hand: **A25RDDQNR11KC04**

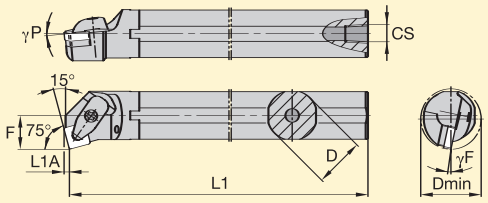
ANSI Left hand: **A20UDDQNL4KC3**
ISO Left hand: **A25RDDQNL11KC04**

KENCLAMP Boring Bars

KENLOC Inserts

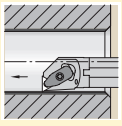
A-DSKN-KC

Steel shank with
through coolant

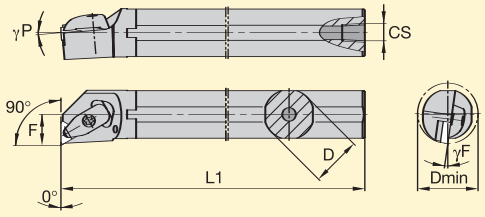


Catalog number Right hand/Left hand	D	Dmin	F	L1	L2	L1A	CS	γF°	γP°	Gage Insert	Shim	Shim Screw	Torx Plus	Clamp	Slotted Pin	Clamp Screw	Torx Plus
Inch																	
A16TDSKN R/L 3KC2	1.000	1.200	.640	12.00	-	.087	1/4-18 NPT	-10.0	-5.0	**SN..322**	-	-	-	**CM234**	**SSP025016M**	**STCM1115IP**	15IP
A20UDSKN R/L 3KC2	1.250	1.470	.765	14.00	-	.087	1/4-18 NPT	-10.0	-5.0	**SN..322**	**ISSN332**	**KMSP315IP**	15IP	**CM234**	**SSP025016M**	**STCM1115IP**	15IP
A16TDSKN R/L 4KC3	1.000	1.200	.640	12.00	-	.119	1/4-18 NPT	-12.0	-5.0	**SN..432**	-	-	-	**CM234**	**SSP025016M**	**STCM1115IP**	15IP
A20UDSKN R/L 4KC3	1.250	1.470	.765	14.00	-	.118	1/4-18 NPT	-14.0	-5.0	**SN..432**	**ISSN433**	**KMSP415IP**	15IP	**CM234**	**SSP025016M**	**STCM1115IP**	15IP
A24UDSKN R/L 4KC3	1.500	1.470	.890	14.00	-	.119	1/4-18 NPT	-10.0	-5.0	**SN..432**	**ISSN433**	**KMSP415IP**	15IP	**CM234**	**SSP025016M**	**STCM1115IP**	15IP
A28UDSKN R/L 4KC3	1.750	2.010	1.015	14.00	-	.119	1/4-18 NPT	-10.0	-5.0	**SN..432**	**ISSN433**	**KMSP415IP**	15IP	**CM234**	**SSP025016M**	**STCM1115IP**	15IP
A32VDSKN R/L 6KC4	2.000	2.400	1.281	16.00	-	.178	1/4-18 NPT	-12.0	-5.0	**SN..643**	**ISSN633**	**KMSP625IP**	25IP	**CM210**	**SSP025018M**	**STCM425IP**	25IP
A40VDSKN R/L 6KC4	2.500	3.030	1.531	16.00	-	.179	1/4-18 NPT	-10.0	-5.0	**SN..643**	**ISSN633**	**KMSP625IP**	25IP	**CM210**	**SSP025018M**	**STCM425IP**	25IP
Metric																	
A25RDSKN R/L 12KC04	25	32	17,0	200	-	3,0	1/4-18 NPT	-13,0	-15,0	**SN..120408**	-	-	-	**CM234**	**SSP025016M**	**STCM1115IP**	15IP
A32SDSKN R/L 12KC04	32	40	22,0	250	-	3,0	1/4-18 NPT	-14,0	-5,0	**SN..120408**	**ISSN433**	**KMSP415IP**	15IP	**CM234**	**SSP025016M**	**STCM1115IP**	15IP
A40TDSKN R/L 12KC04	40	50	27,0	300	-	3,0	1/4-18 NPT	-9,0	-5,0	**SN..120408**	**ISSN433**	**KMSP415IP**	15IP	**CM234**	**SSP025016M**	**STCM1115IP**	15IP
A40TDSKN R/L 15KC06	40	50	27,0	300	-	3,7	1/4-18 NPT	-12,0	-5,0	**SN..150612**	**ISSN533**	**KMSP515IP**	15IP	**CM209**	**SSP025018M**	**STCM1115IP**	15IP
A50UDSKN R/L 19KC06	50	63	35,0	350	-	4,5	1/4-18 NPT	-8,0	-5,0	**SN..190612**	**ISSN633**	**KMSP625IP**	25IP	**CM210**	**SSP025018M**	**STCM425IP**	25IP

A-DTFN-KC



Steel shank with
through coolant



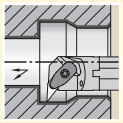
Catalog number Right hand/Left hand	D	Dmin	F	L1	L2	L1A	CS	γF°	γP°	Gage Insert	Shim	Shim Screw	Torx Plus	Clamp	Slotted Pin	Clamp Screw	Torx Plus
Inch																	
A16TDTFN R/L 3KC3	1.000	1.300	.750	12.00	-	-	1/4-18 NPT	-12.0	-5.0	**TN..332**	-	-	-	**CM234**	**SSP025016M**	**STCM1115IP**	15IP
A20UDTFN R/L 3KC3	1.250	1.705	1.000	14.00	-	-	1/4-18 NPT	-12.0	-5.0	**TN..332**	-	-	-	**CM234**	**SSP025016M**	**STCM1115IP**	15IP
A24UDTFN R/L 3KC3	1.500	2.000	1.125	14.00	-	-	1/4-18 NPT	-10.0	-5.0	**TN..332**	**ITSN323**	**KMSP315IP**	15IP	**CM234**	**SSP025016M**	**STCM1115IP**	15IP
A28UDTFN R/L 3KC3	1.750	2.250	1.250	14.00	-	-	1/4-18 NPT	-10.0	-5.0	**TN..332**	**ITSN323**	**KMSP315IP**	15IP	**CM234**	**SSP025016M**	**STCM1115IP**	15IP
A24UDTFN R/L 4KC3	1.500	2.000	1.125	14.00	-	-	1/4-18 NPT	-10.0	-5.0	**TN..432**	**ITSN433**	**KMSP415IP**	15IP	**CM234**	**SSP025016M**	**STCM1115IP**	15IP
A28UDTFN R/L 4KC3	1.750	2.250	1.250	14.00	-	-	1/4-18 NPT	-10.0	-5.0	**TN..432**	**ITSN433**	**KMSP415IP**	15IP	**CM234**	**SSP025016M**	**STCM1115IP**	15IP
A32VDTFN R/L 4KC3	2.000	2.500	1.375	16.00	-	-	1/4-18 NPT	-8.0	-5.0	**TN..432**	**ITSN433**	**KMSP415IP**	15IP	**CM234**	**SSP025016M**	**STCM1115IP**	15IP
A40VDTFN R/L 4KC3	2.500	3.030	1.531	16.00	-	-	1/4-18 NPT	-6.0	-5.0	**TN..432**	**ITSN433**	**KMSP415IP**	15IP	**CM234**	**SSP025016M**	**STCM1115IP**	15IP
Metric																	
A25RDTFN R/L 16KC04	25	32	17,0	200	-	-	1/4-18 NPT	-14,0	-5,0	**TN..160408**	**ITSN323**	**KMSP315IP**	15IP	**CM234**	**SSP025016M**	**STCM1115IP**	15IP
A32SDTFN R/L 16KC04	32	40	22,0	250	-	-	1/4-18 NPT	-12,0	-5,0	**TN..160408**	**ITSN323**	**KMSP315IP**	15IP	**CM234**	**SSP025016M**	**STCM1115IP**	15IP
A40TDTFN R/L 22KC04	40	50	27,0	300	-	-	1/4-18 NPT	-10,0	-5,0	**TN..220408**	**ITSN433**	**KMSP415IP**	15IP	**CM234**	**SSP025016M**	**STCM1115IP**	15IP

Order example:
ANSI Right hand: **A16TDSKNR3KC2**
ISO Right hand: **A25RDSKNR12KC04**

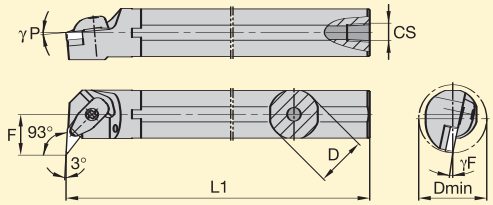
ANSI Left hand: **A16TDSKNL3KC2**
ISO Left hand: **A25RDSKNL12KC04**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

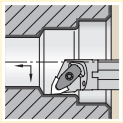
A-DVUN-KC



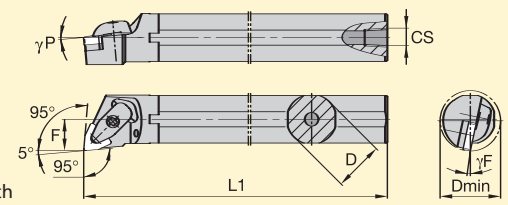
Steel shank with through coolant



A-DWLN-KC



Steel shank with through coolant



Catalog number Right hand/Left hand	D	Dmin	F	L1	L1A	CS	γF°	γP°	Gage Insert	Shim	Shim Screw	Torx plus	Clamp	Slotted Pin	Clamp Screw	Torx plus
Metric																
A32SDVUN R/L 16KC04	32	42	22,0	250	-	1/4-18 NPT	-9,0	-5,0	**VN..160408**	**IVSN322**	**KMSP39IP**	9IP	**CM215**	**SSP025016M**	**STCM1115IP**	15IP
A40TDVUN R/L 16KC04	40	50	27,0	300	-	1/4-18 NPT	-8,0	-5,0	**VN..160408**	**IVSN322**	**KMSP39IP**	9IP	**CM215**	**SSP025016M**	**STCM1115IP**	15IP
Metric																
A25RDWLN R/L 06KC04	25	32	17,0	200	-	1/4-18 NPT	-12,0	-5,0	**WN..060408**	-	-	-	**CM234**	**SSP025016M**	**STCM1115IP**	15IP
A25RDWLN R/L 08KC04	25	32	17,0	200	-	1/4-18 NPT	-12,0	-5,0	**WN..080408**	-	-	-	**CM234**	**SSP025016M**	**STCM1115IP**	15IP
A32SDWLN R/L 08KC04	32	40	22,0	250	-	1/4-18 NPT	-12,0	-5,0	**WN..080408**	**IWSN433**	**KMSP415IP**	15IP	**CM234**	**SSP025016M**	**STCM1115IP**	15IP
A40TDWLN R/L 08KC04	40	50	27,0	300	-	1/4-18 NPT	-12,0	-5,0	**WN..080408**	**IWSN433**	**KMSP415IP**	15IP	**CM234**	**SSP025016M**	**STCM1115IP**	15IP

KM25™ Turning System...

...engineered specifically to optimize your machining operations — no matter how challenging your particular application!

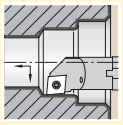
- The world's most economical, rigid, and accurate modular quick-change tooling!
- Dramatically reduce your machine downtime... can be fully and easily employed on your lathe or mill-turn machine — with no modifications necessary!
- Ideal for 30HP or less equipment!

Order example:
ISO Right hand: **A32SDVUNR16KC04** 
ISO Left hand: **A32SDVUNL16KC04** 

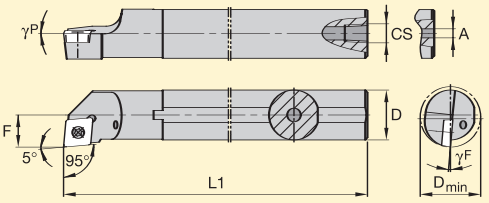
SCREW-ON Boring Bars

KENLOC Inserts

A-SCLC

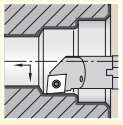


Steel shank with
through coolant

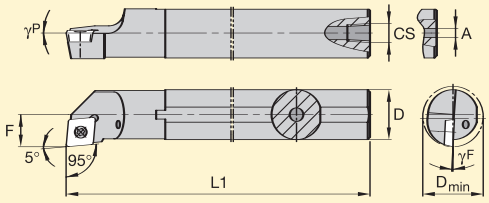


Catalog number Right hand/Left hand	D	Dmin	D2	F	L1	L	L2	CD	L1A	A	A1	CS	γF°	γP°	Gage Insert	Insert Screw	Torx
Inch																	
A06SCLC R/L 2	.375	.480	-	.250	6.00	-	-	-	-	.130	-	-	-8.0	0.0	**CC..2151**	**MS1153**	T7
A08SCLC R/L 2	.500	.600	-	.312	8.00	-	-	-	-	-	-	1/16-27 NPT	-7.0	0.0	**CC..2151**	**MS1153**	T7
A10SCLC R/L 2	.625	.770	-	.406	10.00	-	-	-	-	-	-	1/8-27 NPT	-5.0	0.0	**CC..2151**	**MS1153**	T7
A10SCLC R/L 3	.625	.770	-	.406	10.00	-	-	-	-	-	-	1/8-27 NPT	-8.0	0.0	**CC..3252**	**MS1155**	T15
A12SCLC R/L 3	.750	.930	-	.500	10.00	-	-	-	-	-	-	1/8-27 NPT	-5.0	0.0	**CC..3252**	**MS1155**	T15
A16SCLC R/L 3	1.000	1.200	-	.640	12.00	-	-	-	-	-	-	1/4-18 NPT	-4.0	0.0	**CC..3252**	**MS1155**	T15
Metric																	
A08JSCLC R/L 06	8	11,0	-	6,0	110	-	-	-	-	2,4	-	-	8,0	0,0	**CC..060204**	**MS1939**	T7
A10KSCLC R/L 06	10	13,0	-	7,0	125	-	-	-	-	3,2	-	-	7,0	0,0	**CC..060204**	**MS1153**	T7
A12MSCLC R/L 06	12	16,0	-	9,0	150	-	-	-	-	-	-	1/16-27 NPT	-6,0	0,0	**CC..060 204**	**MS1153**	T7
A16RSCLC R/L 09	16	20,0	-	11,0	200	-	-	-	-	-	-	1/8-27 NPT	-7,0	0,0	**CC..09T308**	**MS1155**	T15
A20SSCLC R/L 09	20	25,0	-	13,0	250	-	-	-	-	-	-	1/8-27 NPT	-5,0	0,0	**CC..09T308**	**MS1155**	T15
A25TSCLC R/L 12	25	32,0	-	17,0	300	-	-	-	-	-	-	1/4-18 NPT	-7,0	0,0	**CC..120408**	**MS1157**	T15

A-SCLP



Steel shank with
through coolant

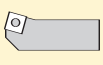


Catalog number Right hand/Left hand	D	Dmin	D2	F	L1	L	L2	CD	L1A	A	A1	CS	γF°	γP°	Gage Insert	Insert Screw	Torx
Inch																	
A06SCLP R/L 2	.375	.480	-	.250	6.00	-	-	-	-	.125	-	-	-6.0	0.0	**CP..2151***	**MS1153**	T7
A08SCLP R/L 2	.500	.600	-	.312	8.00	-	-	-	-	-	-	1/16-27 NPT	-3.0	0.0	**CP..2151***	**MS1153**	T7
A10SCLP R/L 2	.625	.770	-	.406	10.00	-	-	-	-	-	-	1/8-27 NPT	-2.0	0.0	**CP..2151***	**MS1153**	T7
Metric																	
A08JSCLP R/L 06	8	11,0	-	6,0	110	-	-	-	-	2,4	-	-	-6,0	0,0	**CP.060204**	**MS1939**	T7
A10KSCLP R/L 06	10	13,0	-	7,0	125	-	-	-	-	3,2	-	-	-4,0	0,0	**CP.060204**	**MS1153**	T7
A12MSCLP R/L 06	12	16,0	-	9,0	150	-	-	-	-	-	-	1/16-27 NPT	-3,0	0,0	**CP.060204**	**MS1153**	T7
A16RSCLP R/L 06	16	20,0	-	11,0	200	-	-	-	-	-	-	1/8-27 NPT	-5,0	0,0	**CP.060203**	**MS1153**	T7
A20SSCLP R/L 06	20	25,0	-	13,0	250	-	-	-	-	-	-	1/8-27 NPT	-3,0	0,0	**CP.060203**	**MS1153**	T7
A16RSCLP R/L 09	16	20,0	-	11,0	200	-	-	-	-	-	-	1/8-27 NPT	-4,0	0,0	**CP.09T308**	**MS1155**	T15
A20SSCLP R/L 09	20	25,0	-	13,0	250	-	-	-	-	-	-	1/8-27 NPT	-2,0	0,0	**CP.09T308**	**MS1155**	T15

*NOTE: ANSI/ISO compatible 60° countersunk hole insert. This tool will also accept CPGM/CPGT/CPGW-21.5_ inserts.

Order example:
ANSI Right hand: **A06SCLCR2**
ISO Right hand: **A08JSCLCR06**

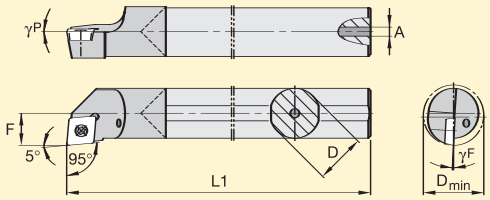
ANSI Left hand: **A06SCLCL2**
ISO Left hand: **A08JSCLCL06**



To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

E-SCLP

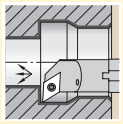
Carbide shank with
through coolant



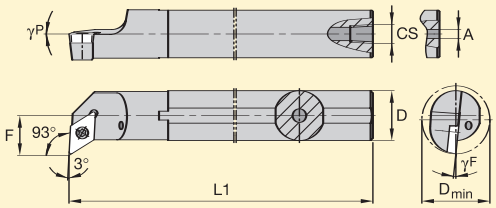
Catalog number Right hand/Left hand	D	Dmin	D2	F	L1	L	L2	CD	L1A	A	A1	CS	γF°	γP°	Gage Insert	Insert Screw	Torx
Inch																	
E06SCLP R/L 2	.375	.480	-	.250	6.00	-	-	-	-	.13	-	-	-6.0	0.0	**CP..2151***	**MS1153**	T7
E08SCLP R/L 2	.500	.600	-	.312	8.00	-	-	-	-	.19	-	-	-2.0	0.0	**CP..2151***	**MS1153**	T7
E10SCLP R/L 2	.625	.770	-	.406	10.00	-	-	-	-	.22	-	-	-2.0	0.0	**CP..2151***	**MS1153**	T7
E12SCLP R/L 2	.750	.930	-	.500	10.00	-	-	-	-	.28	-	-	-2.0	0.0	**CP..2151***	**MS1153**	T7
Metric																	
E08KSCLP R/L 06A	8	11,0	-	6,0	122	-	-	-	-	2,4	-	-	-6,0	0,0	**CP..060204**	**MS1939**	T7
E10MSCLP R/L 06A	10	13,0	-	7,0	150	-	-	-	-	3,2	-	-	-4,0	0,0	**CP..060204**	**MS1939**	T7
E12QSCLP R/L 06	12	16,0	-	9,0	180	-	-	-	-	4,8	-	-	-3,0	0,0	**CP..060204**	**MS1155**	T7
E16RSCLP R/L 09	16	20,0	-	11,0	200	-	-	-	-	5,5	-	-	-4,0	0,0	**CP..09T308**	**MS1155**	T15
E20SSCLP R/L 09	20	25,0	-	13,0	250	-	-	-	-	7,1	-	-	-2,0	0,0	**CP..09T308**	**MS1155**	T15

*NOTE: ANSI/ISO compatible 60° countersunk hole insert.
This tool will also accept CPGM/CPGT/CPGW-21.5_ inserts.

A-SDUC



Steel shank with
through coolant



Catalog number Right hand/Left hand	D	Dmin	D2	F	L1	L	L2	CD	L1A	A	A1	CS	γF°	γP°	Gage Insert	Insert Screw	Torx
Inch																	
A06SDUC R/L 2	.375	.600	-	.375	6.00	-	-	-	-	.130	-	-	-7.0	0.0	**DC..2151**	**MS1153**	T7
A08SDUC R/L 2	.500	.730	-	.437	8.00	-	-	-	-	-	-	1/16-27 NPT	-5.0	0.0	**DC..2151**	**MS1153**	T7
A10SDUC R/L 2	.625	.850	-	.500	10.00	-	-	-	-	-	-	1/8-27 NPT	-4.0	0.0	**DC..2151**	**MS1153**	T7
A12SDUC R/L 3	.750	.980	-	.562	10.00	-	-	-	-	-	-	1/8-27 NPT	-5.0	0.0	**DC..3252**	**MS1155**	T15
A16SDUC R/L 3	1.000	1.300	-	.750	12.00	-	-	-	-	-	-	1/4-18 NPT	-3.0	0.0	**DC..3252**	**MS1155**	T15
Metric																	
A10KSDUC R/L 07	10	13,0	-	7,0	125	-	-	-	-	3,2	-	-	-7,0	0,0	**DC..070204**	**MS1153**	T7
A12MSDUC R/L 07	12	16,0	-	9,0	150	-	-	-	-	-	-	1/16-27 NPT	-4,0	0,0	**DC..070204**	**MS1153**	T7
A16RSDUC R/L 07	16	20,0	-	11,0	200	-	-	-	-	-	-	1/8-27 NPT	-4,0	0,0	**DC..070204**	**MS1153**	T7
A16RSDUC R/L 11	16	20,0	-	11,0	200		-	-	-	-	-	1/8-27 NPT	-6,0	0,0	**DC..11T308**	**MS1155**	T15
A20SSDUC R/L 11	20	25,0	-	13,0	250	-	-	-	-	-	-	1/8-27 NPT	-5,0	0,0	**DC..11T308**	**MS1155**	T15
A25TSDUC R/L 11	25	32,0	-	17,0	300	-	-	-	-	-	-	1/4-18 NPT	-4,0	0,0	**DC..11T308**	**MS1155**	T15

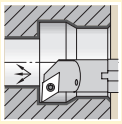
Order example:
ANSI Right hand: **E06SCLPR2**
ISO Right hand: **E08KSCLPR06A**

ANSI Left hand: **E06SCLPL2**
ISO Left hand: **E08KSCLPL06A**

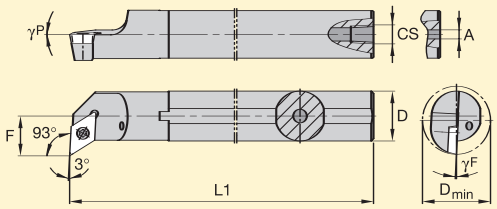
SCREW-ON Boring Bars

SCREW-ON Inserts

A-SDUP

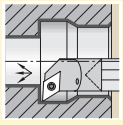


Steel shank with through coolant

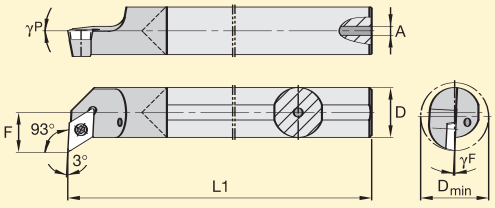


Catalog number Right hand/Left hand	D	Dmin	D2	F	L1	L	L2	CD	L1A	A	A1	CS	γF°	γP°	Gage Insert	Insert Screw	Torx
Inch																	
A06SDUP R/L 2	.375	.600	-	.375	6.00	-	-	-	-	.125	-	-	-3.0	0.0	**DP..2151**	**MS1153**	T7
A08SDUP R/L 2	.500	.730	-	.437	8.00	-	-	-	-	-	-	1/16-27 NPT	0.0	0.0	**DP..2151**	**MS1153**	T7
A10SDUP R/L 2	.625	.850	-	.500	10.00	-	-	-	-	-	-	1/8-27 NPT	0.0	0.0	**DP..2151**	**MS1153**	T7
A12SDUP R/L 3	.750	.980	-	.562	10.00	-	-	-	-	-	-	1/8-27 NPT	0.0	0.0	**DP..3252**	**MS1155**	T15
A16SDUP R/L 3	1.000	1.300	-	.750	12.00	-	-	-	-	-	-	1/4-18 NPT	0.0	0.0	**DP..3252**	**MS1155**	T15
Metric																	
A12MSDUP R/L 07	12	16,0	-	9,0	150	-	-	-	-	-	-	1/16-27 NPT	-2,0	0,0	**DP..070204**	**MS1153**	T7
A16RSDUP R/L 07	16	20,0	-	11,0	200	-	-	-	-	-	-	1/8-27 NPT	0,0	0,0	**DP..070204**	**MS1153**	T7
A20SSDUP R/L 11	20	25,0	-	13,0	250	-	-	-	-	-	-	1/8-27 NPT	-2,0	0,0	**DP..11T308**	**MS1155**	T15
A25TSDUP R/L 11	25	32,0	-	17,0	300	-	-	-	-	-	-	1/4-18 NPT	0,0	0,0	**DP..11T308**	**MS1155**	T15

E-SDUP



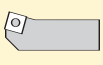
Carbide shank with through coolant



Catalog number Right hand/Left hand	D	Dmin	D2	F	L1	L	L2	CD	L1A	A	A1	CS	γF°	γP°	Gage Insert	Insert Screw	Torx
Inch																	
E06SDUP R/L 2	.375	.600	-	.375	6.00	-	-	-	-	.13	-	-	-2.0	0.0	**DP..2151**	**MS1153**	T7
E08SDUP R/L 2	.500	.730	-	.437	8.00	-	-	-	-	.19	-	-	0.0	0.0	**DP..2151**	**MS1153**	T7
E10SDUP R/L 2	.625	.850	-	.500	10.00	-	-	-	-	.22	-	-	0.0	0.0	**DP..2151**	**MS1153**	T7
E12SDUP R/L 2	.750	.980	-	.562	10.00	-	-	-	-	.28	-	-	0.0	0.0	**DP..2151**	**MS1153**	T7
E12SDUP R/L 3	.750	.980	-	.562	10.00	-	-	-	-	.28	-	-	0.0	0.0	**DP..3252**	**MS1155**	T15
E16SDUP R/L 3	1.000	1.300	-	.750	12.00	-	-	-	-	.31	-	-	0.0	0.0	**DP..3252**	**MS1155**	T15
Metric																	
E12QSDUP R/L 07	12	16,0	-	9,0	180	-	-	-	-	4,8	-	-	-2,0	0,0	**DP..070204**	**MS1153**	T7
E16RSDUP R/L 07	16	20,0	-	11,0	200	-	-	-	-	5,5	-	-	0,0	0,0	**DP..070204**	**MS1153**	T7
E20SSDUP R/L 11	20	25,0	-	13,0	250	-	-	-	-	7,1	-	-	-2,0	0,0	**DP..11T308**	**MS1155**	T15

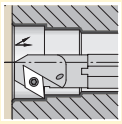
Order example:
ANSI Right hand: **A06SDUPR2**
ISO Right hand: **A12MSDUPR07**

ANSI Left hand: **A06SDUPL2**
ISO Left hand: **A12MSDUPL07**

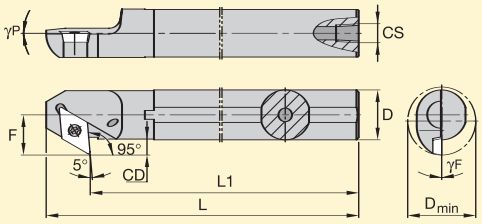


To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

A-SDXP

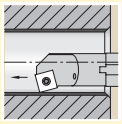


Steel shank with through coolant

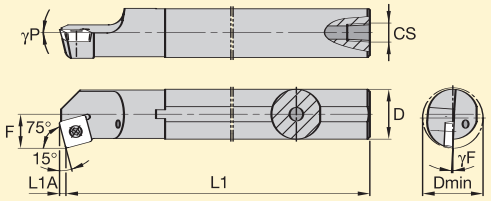


Catalog number Right hand/Left hand	D	Dmin	D2	F	L1	L	L2	CD	L1A	A	A1	CS	γF°	γP°	Gage Insert	Insert Screw	Torx
Inch																	
A08SDXP R/L 2	.500	.730	-	.437	8.00	8.50	-	.187	-	-	-	1/16-27 NP-	0.0	0.0	**DP..2151**	**MS1153**	T7
A10SDXP R/L 2	.625	.850	-	.500	10.00	10.50	-	.187	-	-	-	1/8-27 NP-	0.0	0.0	**DP..2151**	**MS1153**	T7
A12SDXP R/L 3	.750	.980	-	.562	10.00	10.75	-	.187	-	-	-	1/8-27 NP-	0.0	0.0	**DP..3252**	**MS1155**	T15
A16SDXP R/L 3	1.000	1.300	-	.750	12.00	12.75	-	.250	-	-	-	1/4-18 NP-	0.0	0.0	**DP..3252**	**MS1155**	T15
Metric																	
A12MSDXP R/L 07	12	16,0	-	9,0	150	162,0	-	3,09	-	-	-	1/16-27 NPT	0,0	0,0	**DP..070204**	**MS1153**	T7
A16RSDXP R/L 07	16	20,0	-	11,0	200	212,0	-	3,2	-	-	-	1/8-27 NPT	0,0	0,0	**DP..070204**	**MS1153**	T7
A20SSDXP R/L 11	20	25,0	-	13,0	250	270,0	-	4,31	-	-	-	1/8-27 NPT	0,0	0,0	**DP..11T308**	**MS1155**	T15

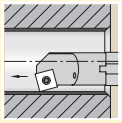
A-SSKC



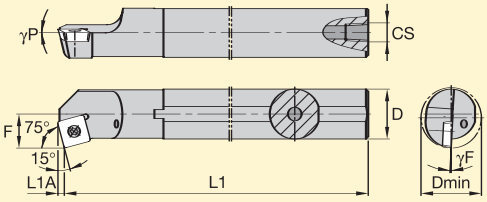
Steel shank with through coolant



A-SSKP



Steel shank with through coolant



Catalog number Right hand/Left hand	D	Dmin	D2	F	L1	L	L2	CD	L1A	A	A1	CS	γF°	γP°	Gage Insert	Insert Screw	Torx
Metric																	
A16RSSKC R/L 09	16	20,0	-	11,0	200	-	-	-	2,2	-	-	1/8-27 NPT	-7,0	0,0	**SC..09T308**	**MS1157**	T15
A25TSSKC R/L 12	25	32,0	-	17,0	300	-	-	-	3,2	-	-	1/4-18 NPT	-7,0	0,0	**SC..120408**	**MS1157**	T15
Metric																	
A16RSSKP R/L 09	16	20,0	-	11,0	200	-	-	-	2,2	-	-	1/8-27 NPT	-4,0	0,0	**SP..09T308**	**MS1155**	T15
A20SSSKP R/L 09	20	25,0	-	13,0	250	-	-	-	2,2	-	-	1/8-27 NPT	-4,0	0,0	**SP..09T308**	**MS1155**	T15

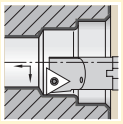
Order example:
ANSI Right hand: **A08SDXPR2**
ISO Right hand: **A12MSDXPR07**

ANSI Left hand: **A08SDXPL2**
ISO Left hand: **A12MSDXPL07**

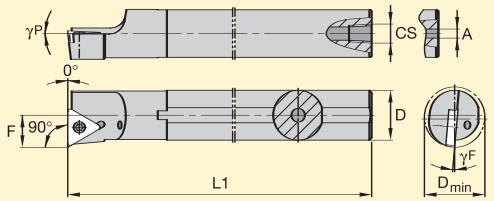
SCREW-ON Boring Bars

SCREW-ON Inserts

A-STFC

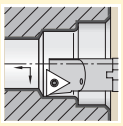


Steel shank with
through coolant

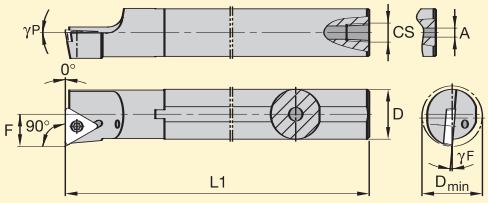


Catalog number Right hand/Left hand	D	Dmin	D2	F	L1	L	L2	CD	L1A	A	A1	CS	γF°	γP°	Gage Insert	Insert Screw	Torx
Inch																	
A06STFC R/L 2	.375	.480	-	.250	6.00	-	-	-	-	.130	-	-	-8.0	0.0	**TC..2151**	**MS1153**	T7
A08STFC R/L 2	.500	.600	-	.312	8.00	-	-	-	-	-	-	1/16-27 NPT	-7.0	0.0	**TC..2151**	**MS1153**	T7
A10STFC R/L 2	.625	.770	-	.406	10.00	-	-	-	-	-	-	1/8-27 NPT	-5.0	0.0	**TC..2151**	**MS1153**	T7
A12STFC R/L 3	.750	.930	-	.500	10.00	-	-	-	-	-	-	1/8-27 NPT	-5.0	0.0	**TC..3252**	**MS1155**	T15
A16STFC R/L 3	1.000	1.200	-	.640	12.00	-	-	-	-	-	-	1/4-18 NPT	-4.0	0.0	**TC..3252**	**MS1155**	T15
Metric																	
A10KSTFC R/L 11	10	13,0	-	7,0	125	-	-	-	-	3,2	-	-	-7,0	0,0	**TC..110204**	**MS1153**	T7
A12MSTFC R/L 11	12	16,0	-	9,0	150	-	-	-	-	-	-	1/16-27 NPT	-6,0	0,0	**TC..110204**	**MS1153**	T7

A-STFP



Steel shank with
through coolant



Catalog number Right hand/Left hand	D	Dmin	D2	F	L1	L	L2	CD	L1A	A	A1	CS	γF°	γP°	Gage Insert	Insert Screw	Torx
Inch																	
A06STFP R/L 2	.375	.480	-	.250	6.00	-	-	-	-	.125	-	-	-4.0	0.0	**TP..2151***	**MS1153**	T7
A08STFP R/L 2	.500	.600	-	.312	8.00	-	-	-	-	-	-	1/16-27 NPT	-2.0	0.0	**TP..2151**	**MS1153**	T7
A10STFP R/L 2	.625	.770	-	.406	10.00	-	-	-	-	-	-	1/8-27 NPT	0.0	0.0	**TP..2151**	**MS1153**	T7
A12STFP R/L 3	.750	.930	-	.500	10.00	-	-	-	-	-	-	1/8-27 NPT	-2.0	0.0	**TP..3252**	**MS1155**	T15
A16STFP R/L 3	1.000	1.200	-	.640	12.00	-	-	-	-	-	-	1/4-18 NPT	0.0	0.0	**TP..3252**	**MS1155**	T15
Metric																	
A10KSTFP R/L 11	10	13,0	-	7,0	125	-	-	-	-	3,2	-	-	-4,0	0,0	**TP.110204**	**MS1153**	T7
A12MSTFP R/L 11	12	16,0	-	9,0	150	-	-	-	-	-	-	1/16-27 NPT	-2,0	0,0	**TP.110204**	**MS1153**	T7
A16RSTFP R/L 11	16	20,0	-	11,0	200	-	-	-	-	-	-	1/16-27 NPT	0,0	0,0	**TP.110204**	**MS1153**	T7
A20SSTFP R/L 16	20	25,0	-	13,0	250	-	-	-	-	-	-	1/8-27 NPT	-2,0	0,0	**TP.16T308**	**MS1155**	T15
A25TSTFP R/L 16	25	32,0	-	17,0	300	-	-	-	-	-	-	1/4-18 NPT	0,0	0,0	**TP.16T308**	**MS1155**	T15

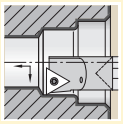
*NOTE: ANSI/ISO compatible 60° countersunk hole insert.
This tool will also accept TPGM/TPGT/TPGW-21.5_ inserts.

Order example:
ANSI Right hand: **A06STFCR2**
ISO Right hand: **A10KSTFCR11**

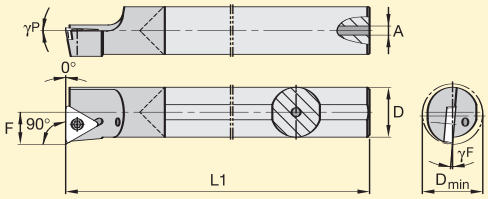
ANSI Left hand: **A06STFCL2**
ISO Left hand: **A10KSTFCL11**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

E-STFP



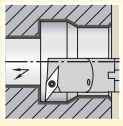
Carbide shank with through coolant



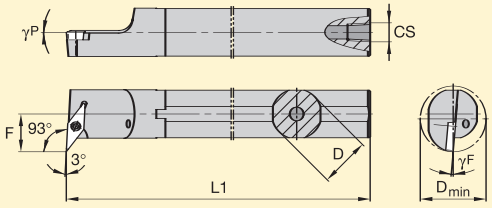
Catalog number Right hand/Left hand	D	Dmin	D2	F	L1	L	L2	CD	L1A	A	A1	CS	γF°	γP°	Gage Insert	Insert Screw	Torx
Inch																	
E06STFP R/L 2	.375	.480	-	.250	6.00	-	-	-	-	.13	-	-	-4.0	0.0	**TP..2151***	**MS1153**	T7
E08STFP R/L 2	.500	.600	-	.312	8.00	-	-	-	-	.19	-	-	-2.0	0.0	**TP..2151***	**MS1153**	T7
E10STFP R/L 2	.625	.770	-	.406	10.00	-	-	-	-	.22	-	-	0.0	0.0	**TP..2151***	**MS1153**	T7
E12STFP R/L 3	.750	.930	-	.500	10.00	-	-	-	-	.28	-	-	-2.0	0.0	**TP..3252****	**MS1155**	T15
E16STFP R/L 3	1.000	1.200	-	.640	12.00	-	-	-	-	.31	-	-	0.0	0.0	**TP..3252****	**MS1155**	T15
Metric																	
E10MSTFP R/L 11A	10	13,0	-	7,0	150	-	-	-	-	3,2	-	-	-4,0	0,0	**TP..110202**	**MS1153**	T7
E12QSTFP R/L 11	12	16,0	-	9,0	180	-	-	-	-	4,8	-	-	-2,0	0,0	**TP..110202**	**MS1153**	T7
E16RSTFP R/L 11	16	20,0	-	11,0	200	-	-	-	-	5,5	-	-	0,0	0,0	**TP..110202**	**MS1153**	T7
E20SSTFP R/L 16	20	25,0	-	13,0	250	-	-	-	-	7,1	-	-	-2,0	0,0	**TP..16T308**	**MS1155**	T15

*NOTE: ANSI/ISO compatible 60° countersunk hole insert. This tool will also accept TPGM/TPGT/TPGW-21.5_ inserts.
**NOTE: ANSI/ISO compatible 60° countersunk hole insert (i.e. TPMT/TPGT/TPGW-32.5_). 90° countersunk hole inserts (i.e. TPGM/TPGB-32.5_) do not fit this tool.

A-SVUB



Steel shank with through coolant



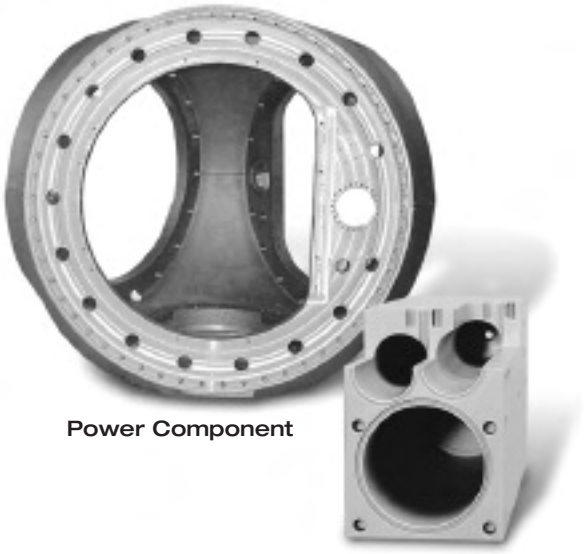
Catalog number Right hand/Left hand	D	Dmin	D2	F	L1	L	L2	CD	L1A	A	A1	CS	γF°	γP°	Gage Insert	Insert Screw	Torx or Hex (inch)
Inch																	
A12SVUB R/L 2	.750	.980	-	.562	10.00	-	-	-	-	-	-	1/8-27 NPT	-6.0	0.0	**VB..221**	**MS1153**	T7
A16SVUB R/L 3	1.000	1.300	-	.750	12.00	-	-	-	-	-	-	1/4-18 NPT	-6.0	0.0	**VB..332**	**MS1155**	T15
Metric																	
A20SSVUB R/L 11	20	25,0	-	13,0	250	-	-	--	-	-	-	1/8-27 NPT	-6,0	0,0	**VB..110304**	**MS1153**	T7
A25TSVUB R/L 16	25	32,0	-	17,0	300	-	-	--	-	-	-	1/4-18 NPT	-6,0	0,0	**VB..160408**	**MS1155**	T15

Order example:
ANSI Right hand: **E06STFPR2**
ISO Right hand: **E10MSTFPR11A**

ANSI Left hand: **E06STFPL2**
ISO Left hand: **E10MSTFPL11A**

Engineering Your Competitive Edge FOR GENERAL ENGINEERING

Kennametal enables leading general engineering manufacturers to **compete globally**. Every day, in 60 countries worldwide — we deliver the latest **advanced tooling technologies** that drive **total cost savings** to meet tough productivity targets.



Power Component

Medical Component

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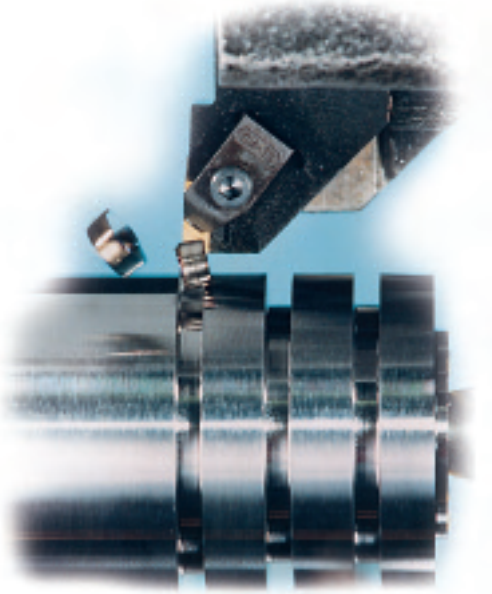
KENNAMETAL®

ENGINEERING YOUR COMPETITIVE EDGE

TOP NOTCH Grooving



Versatile Design

- Design versatility means this one system handles operations such as:

  O.D. and I.D. grooving

  face grooving

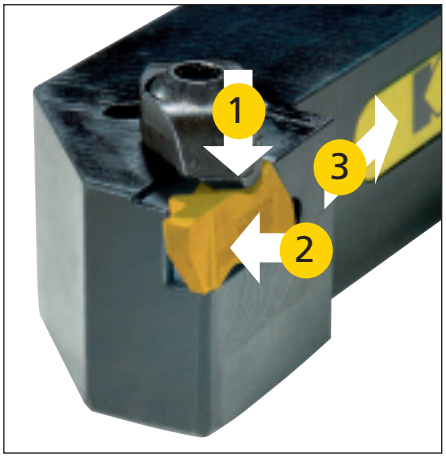
  back turning

  undercutting

  ...and threading

Chip-Control Inserts

- Enable excellent chip evacuation in grooving operations.
- Provide better control in multi-directional turning.



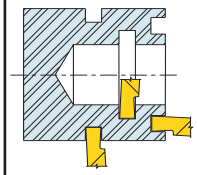
Rigid Clamping Design

- Locks insert securely in place for zero movement in high-feed-rate applications.
- Achieves outstanding cutting precision through even the toughest cuts.
- Enables excellent surface finish, improved productivity, and superior tool life.
- Promotes perfect concentricity in the application.

The rugged bridge clamp generates locking forces in three directions to provide superior resistance to side thrust and tangential forces!

KENNA UNIVERSAL – TOP NOTCH Grooving

Chipbreaker and Feed Rates – in/rev (mm/rev)

Workpiece Material and Application			Steel	Stainless Steel	Cast Iron	Non-Ferrous Metals	High-Temp Alloys	Hardened Materials
	First Choice	Style	NG-K	NG-K	NG	NG-K	NG-K	NG
		Range	.003 - .011 (0,08 - 0,28)	.0025 - .008 (0,07 - 0,20)	.004 - .012 (0,01 - 0,30)	.003 - .012 (0,08 - 0,30)	.0025 - .008 (0,07 - 0,20)	.002 - .004 (0,05 - 0,10)
		Starting Conditions	.006 (0,15)	.005 (0,13)	.008 (0,20)	.008 (0,20)	.005 (0,13)	.003 (0,08)
	Alternative Choice	Style	NG	NG	NG-K	NG	NG	—
		Range	.004 - .012 (0,10 - 0,30)	.004 - .009 (0,10 - 0,23)	.003 - .011 (0,08 - 0,28)	.004 - .012 (0,01 - 0,30)	.004 - .008 (0,10 - 0,20)	
		Starting Conditions	.007 (0,18)	.006 (0,15)	.007 (0,18)	.008 (0,20)	.006 (0,15)	

Recommendations for Grade and Speed Selection – sfm (m/min)

Machining Condition		Workpiece Material: Steel	Stainless Steel	Cast Iron	Non-Ferrous Metals	High-Temp Alloys	Hardened Materials
KENNA UNIVERSAL	Grade	KU30T	KU10T	KU30T	KU10T	KU10T	KU10T
	Range	200 - 650 (60 - 200)	150 - 550 (50 - 170)	200 - 650 (60 - 200)	500 - 2400 (150 - 730)	50 - 360 (20 - 110)	50 - 100 (20 - 40)
	Starting Conditions	500 (150)	400 (120)	500 (150)	1500 (450)	200 (60)	70 (20)

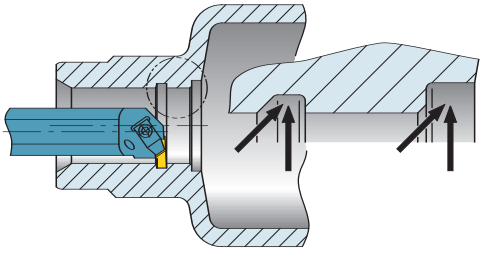
Example for TOP NOTCH – Grooving:

material: low-alloyed steel
groove depth: .079 in. (2 mm)
groove width: .118 in. (3 mm)
operation: I.D. cut, limited speed capability, plunge groove and chamfer

Recommendation:

insert: NG2M300RK
grade: KU30T
insert width: .118 in. (3 mm)
insert size: 2

toolholder: A12NEL2 (inch)
A20QNNTOL2 (metric)
gage insert: N.2R



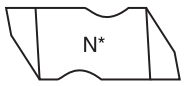
speed: 500 sfm (150 m/min)
feed: .006 ipr (0,15 mm)

Note: The insert size must match the gage insert size of your toolholder selection.

See page A4 for KU10T, KU25T, and KU30T grade descriptions.

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

N -Top Notch



1. Type of Insert

N

2. Insert Style

G

G – grooving
R – full radius

D – deep grooving
☐ – (blank) indicates standard grooving

3. Additional Information

D

4. Insert Size

3

insert size	W1 (in.)	W1 (mm)
2	.150	3,81
3	.195	4,95
4	.255	6,48

M – metric insert groove width
☐ – (blank) indicates inch width insert

5. Size Identification

125

6. Groove Size

Position pertains to groove width for G-style inserts; radii for R-style grooving inserts. Dimension in .001 inch or 0,01 mm.
Metric example: 3,50 mm width groove or radius equals "350" catalog position number
Inch example: 1/32" width groove or radius equals "031" catalog position number
Width Tolerance: ± .001 inch (± 0,025 mm) unless otherwise specified

L – left
R – right

7. Hand of Insert

R

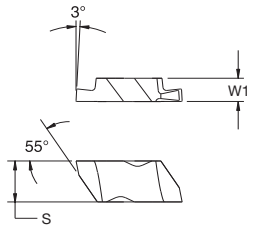
8. Chipbreaker Design

K

K – standard chip control

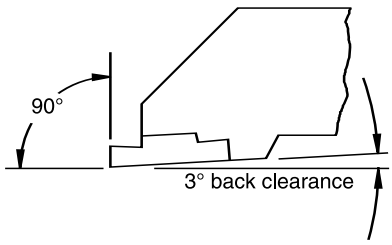
*Kennametal proprietary identification system

TOP NOTCH Threading and Grooving Insert Dimensions



insert size	S		W1	
	inch	mm	inch	mm
2	.219	5,56	.150	3,81
3	.344	8,74	.195	4,95
4	.453	11,51	.255	6,48

TOP NOTCH Holder Design



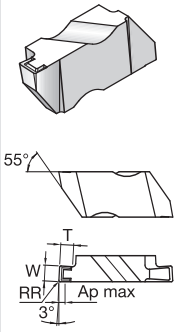
NOTE: Holders are designed to locate insert inclined to 3° to provide back clearance down open side.

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

TOP NOTCH Grooving Inserts

Dimensions and Grade Selection

NG-K



Insert size	W inch	W mm	Catalog number	Dimensions Ap max. inch	Ap max. mm	RR inch	RR mm	T inch	T mm	KENNA UNIVERSAL KU10T	KU30T
			Right hand								
2	.031	0,79	**NG2031RK**	.030	0,76	.0035	0,09	.050	1,27	●	●
2	.039	1,00	**NG2M100RK**	.030	0,76	.0035	0,09	.050	1,27	●	●
2	.047	1,19	**NG2047RK**	.030	0,76	.0035	0,09	.050	1,27	●	●
2	.047	1,20	**NG2M120RK**	.030	0,76	.0035	0,09	.050	1,27	●	●
2	.059	1,50	**NG2M150RK**	.043	1,09	.0075	0,19	.110	2,79	●	●
2	.062	1,58	**NG2062RK**	.043	1,09	.0075	0,19	.110	2,79	●	●
2	.079	2,00	**NG2M200RK**	.043	1,09	.0075	0,19	.110	2,79	●	●
2	.094	2,39	**NG2094RK**	.043	1,09	.0075	0,19	.110	2,79	●	●
2	.118	3,00	**NG2M300RK**	.043	1,09	.0075	0,19	.110	2,79	●	●
2	.125	3,18	**NG2125RK**	.043	1,09	.0075	0,19	.110	2,79	●	●
3	.039	1,00	**NG3M100RK**	.030	0,76	.0075	0,19	.075	1,91	●	●
3	.047	1,19	**NG3047RK**	.030	0,76	.0075	0,19	.075	1,91	●	●
3	.059	1,50	**NG3M150RK**	.040	1,02	.0075	0,19	.094	2,39	●	●
3	.062	1,58	**NG3062RK**	.040	1,02	.0075	0,19	.094	2,39	●	●
3	.072	1,83	**NG3072RK**	.040	1,02	.0075	0,19	.094	2,39	●	●
3	.078	1,98	**NG3078RK**	.040	1,02	.0075	0,19	.094	2,39	●	●
3	.079	2,00	**NG3M200RK**	.040	1,02	.0075	0,19	.094	2,39	●	●
3	.088	2,25	**NG3M225RK**	.040	1,02	.0075	0,19	.094	2,39	●	●
3	.094	2,39	**NG3094RK**	.040	1,02	.0075	0,19	.150	3,81	●	●
3	.098	2,50	**NG3M250RK**	.040	1,02	.0075	0,19	.150	3,81	●	●
3	.108	2,75	**NG3M275RK**	.040	1,02	.0075	0,19	.150	3,81	●	●
3	.118	3,00	**NG3M300RK**	.040	1,02	.0075	0,19	.150	3,81	●	●
3	.125	3,18	**NG3125RK**	.040	1,02	.0075	0,19	.150	3,81	●	●
3	.138	3,50	**NG3M350RK**	.115	2,92	.0125	0,32	.150	3,81	●	●
3	.156	3,96	**NG3156RK**	.115	2,92	.0075	0,19	.150	3,81	●	●
3	.158	4,00	**NG3M400RK**	.115	2,92	.0125	0,32	.150	3,81	●	●
3	.189	4,80	**NG3189RK**	.115	2,92	.0225	0,57	.150	3,81	●	●
4	.125	3,18	**NG4125RK**	.040	1,02	.0075	0,19	.150	3,81	●	●
4	.189	4,80	**NG4189RK**	.115	2,92	.0225	0,57	.250	6,35	●	●
4	.250	6,35	**NG4250RK**	.150	3,81	.0225	0,57	.250	6,35	●	●
			Left hand								
2	.031	0,79	**NG2031LK**	.030	0,76	.0035	0,09	.050	1,27	●	●
2	.039	1,00	**NG2M100LK**	.030	0,76	.0035	0,09	.050	1,27	●	●
2	.047	1,19	**NG2047LK**	.030	0,76	.0035	0,09	.050	1,27	●	●
2	.059	1,50	**NG2M150LK**	.043	1,09	.0075	0,19	.110	2,79	●	●
2	.062	1,58	**NG2062LK**	.043	1,09	.0075	0,19	.110	2,79	●	●
2	.079	2,00	**NG2M200LK**	.043	1,09	.0075	0,19	.110	2,79	●	●
2	.094	2,39	**NG2094LK**	.043	1,09	.0075	0,19	.110	2,79	●	●
2	.118	3,00	**NG2M300LK**	.043	1,09	.0075	0,19	.110	2,79	●	●
2	.125	3,18	**NG2125LK**	.043	1,09	.0075	0,19	.110	2,79	●	●
3	.039	1,00	**NG3M100LK**	.030	0,76	.0075	0,19	.075	1,91	●	●
3	.047	1,19	**NG3047LK**	.030	0,76	.0075	0,19	.075	1,91	●	●
3	.059	1,50	**NG3M150LK**	.040	1,02	.0075	0,19	.094	2,39	●	●
3	.062	1,58	**NG3062LK**	.040	1,02	.0075	0,19	.094	2,39	●	●
3	.072	1,83	**NG3072LK**	.040	1,02	.0075	0,19	.094	2,39	●	●
3	.078	1,98	**NG3078LK**	.040	1,02	.0075	0,19	.094	2,39	●	●
3	.079	2,00	**NG3M200LK**	.040	1,02	.0075	0,19	.094	2,39	●	●
3	.088	2,25	**NG3M225LK**	.040	1,02	.0075	0,19	.094	2,39	●	●
3	.094	2,39	**NG3094LK**	.040	1,02	.0075	0,19	.150	3,81	●	●
3	.098	2,50	**NG3M250LK**	.040	1,02	.0075	0,19	.150	3,81	●	●
3	.108	2,75	**NG3M275LK**	.040	1,02	.0075	0,19	.150	3,81	●	●
3	.118	3,00	**NG3M300LK**	.040	1,02	.0075	0,19	.150	3,81	●	●
3	.125	3,18	**NG3125LK**	.040	1,02	.0075	0,19	.150	3,81	●	●
3	.138	3,50	**NG3M350LK**	.115	2,92	.0125	0,32	.150	3,81	●	●
3	.156	3,96	**NG3156LK**	.115	2,92	.0075	0,19	.150	3,81	●	●
3	.158	4,00	**NG3M400LK**	.115	2,92	.0125	0,32	.150	3,81	●	●
3	.189	4,80	**NG3189LK**	.115	2,92	.0225	0,57	.150	3,81	●	●
4	.125	3,18	**NG4125LK**	.040	1,02	.0075	0,19	.150	3,81	●	●
4	.189	4,80	**NG4189LK**	.115	2,92	.0225	0,57	.250	6,35	●	●
4	.250	6,35	**NG4250LK**	.150	3,81	.0225	0,57	.250	6,35	●	●

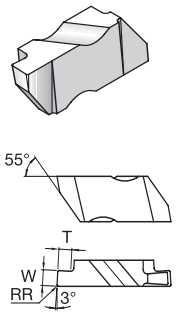
NOTE: Right-hand insert shown; left-hand insert is mirror image.

Order example:
Right Hand: **NG2031RK**
Insert grade: **KU10T**

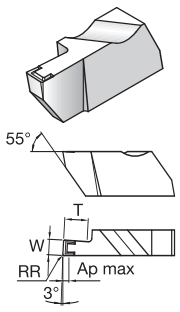
Left Hand: **NG2031LK**
Insert grade: **KU10T**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

NG



NGD-K



* these inserts have one cutting edge

Insert size	W inch	W mm	Catalog number	Ap max. inch	Ap max. mm	RR inch	RR mm	T inch	T mm	KENNA UNIVERSAL KU10T	KENNA UNIVERSAL KU30T
			Right hand								
2	.031	0,79	**NG2031R**	-	-	.0035	0,09	.050	1,27	●	
2	.047	1,19	**NG2047R**	-	-	.0035	0,09	.050	1,27	●	
2	.062	1,58	**NG2062R**	-	-	.0075	0,19	.110	2,79	●	●
2	.094	2,39	**NG2094R**	-	-	.0075	0,19	.110	2,79	●	
3	.047	1,19	**NG3047R**	-	-	.0075	0,19	.075	1,91	●	●
3	.062	1,58	**NG3062R**	-	-	.0075	0,19	.094	2,39	●	●
3	.094	2,39	**NG3094R**	-	-	.0075	0,19	.150	3,81	●	●
3	.125	3,18	**NG3125R**	-	-	.0075	0,19	.150	3,81	●	●
3	.189	4,80	**NG3189R**	-	-	.0225	0,57	.150	3,81	●	●
4	.125	3,18	**NG4125R**	-	-	.0075	0,19	.150	3,81	●	●
4	.189	4,80	**NG4189R**	-	-	.0225	0,57	.250	6,35	●	
4	.250	6,35	**NG4250R**	-	-	.0225	0,57	.250	6,35	●	
			Left hand								
2	.031	0,79	**NG2031L**	-	-	.0035	0,09	.050	1,27	●	
2	.047	1,19	**NG2047L**	-	-	.0035	0,09	.050	1,27	●	
2	.062	1,58	**NG2062L**	-	-	.0075	0,19	.110	2,79	●	●
2	.094	2,39	**NG2094L**	-	-	.0075	0,19	.110	2,79	●	
3	.047	1,19	**NG3047L**	-	-	.0075	0,19	.075	1,91	●	●
3	.062	1,58	**NG3062L**	-	-	.0075	0,19	.094	2,39	●	●
3	.094	2,39	**NG3094L**	-	-	.0075	0,19	.150	3,81	●	●
3	.125	3,18	**NG3125L**	-	-	.0075	0,19	.150	3,81	●	●
3	.189	4,80	**NG3189L**	-	-	.0225	0,57	.150	3,81	●	●
4	.125	3,18	**NG4125L**	-	-	.0075	0,19	.150	3,81	●	●
4	.189	4,80	**NG4189L**	-	-	.0225	0,57	.250	6,35	●	
4	.250	6,35	**NG4250L**	-	-	.0225	0,57	.250	6,35	●	
			Right hand								
3	.062	1,58	**NGD3062RK**	.040	1,02	.0075	0,19	.125	3,18	●	●
3	.094	2,39	**NGD3094RK***	.040	1,02	.0075	0,19	.250	6,35	●	●
3	.125	3,18	**NGD3125RK***	.040	1,02	.0075	0,19	.250	6,35	●	●
3	.189	4,80	**NGD3189RK***	.115	2,92	.0225	0,57	.250	6,35	●	●
			Left hand								
3	.062	1,58	**NGD3062LK**	.040	1,02	.0075	0,19	.125	3,18	●	●
3	.094	2,39	**NGD3094LK***	.040	1,02	.0075	0,19	.250	6,35	●	●
3	.125	3,18	**NGD3125LK***	.040	1,02	.0075	0,19	.250	6,35	●	●
3	.189	4,80	**NGD3189LK***	.115	2,92	.0225	0,57	.250	6,35	●	●

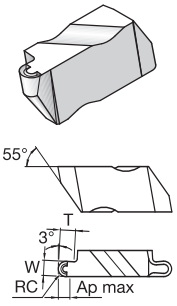
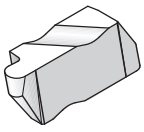
NOTE: Right-hand insert shown; left-hand insert is mirror image.

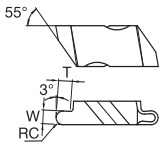
Order example:
Right Hand: **NG2031R** Left Hand: **NG2031L**
Insert grade: **KU10T** Insert grade: **KU10T**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

TOP NOTCH Grooving Inserts

Dimensions and Grade Selection

	Insert size	W inch	W mm	Catalog number	Dimensions: Ap max. inch	Ap max. mm	RC inch	RC mm	T inch	T mm	KENNA UNIVERSAL KU10T	KENNA UNIVERSAL KU30T
NR-K				**Right hand**								
	3	.062	1,58	**NR3031RK**	.078	1,98	.031	0,79	.094	2,39	●	●
	3	.094	2,39	**NR3047RK**	.075	1,91	.047	1,19	.150	3,81	●	●
	3	.125	3,18	**NR3062RK**	.115	2,92	.063	1,59	.150	3,81	●	●
				Left hand								
	3	.062	1,58	**NR3031LK**	.078	1,98	.031	0,79	.094	2,39	●	●
	3	.094	2,39	**NR3047LK**	.075	1,91	.047	1,19	.150	3,81	●	●
	3	.125	3,18	**NR3062LK**	.115	2,92	.063	1,59	.150	3,81	●	●
NR				**Right hand**								
	3	.062	1,58	**NR3031R**	-	-	.031	0,79	.094	2,39	●	●
	3	.094	2,39	**NR3047R**	-	-	.047	1,19	.150	3,81	●	●
	3	.125	3,18	**NR3062R**	-	-	.063	1,59	.150	3,81	●	●
				Left hand								
	3	.062	1,58	**NR3031L**	-	-	.031	0,79	.094	2,39	●	●
	3	.094	2,39	**NR3047L**	-	-	.047	1,19	.150	3,81	●	●
	3	.125	3,18	**NR3062L**	-	-	.063	1,59	.150	3,81	●	●



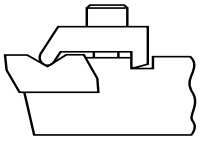
NOTE: Right-hand insert shown; left-hand insert is mirror image.

Order example:
Right Hand: **NGD3062RK** Left Hand: **NGD3062LK**
Insert grade: **KU10T** Insert grade: **KU10T**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

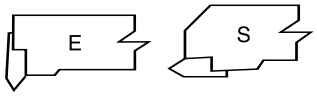
1. Insert Holding Method	2. Insert Mounting Location	3. Hand of Tool	4. Drop Head	5. Shank Size	6. Insert Size	7. Qualified Surface and Length
N	S	R		2525M (metric) / 16 (inch)	4	D

1. Insert Holding Method

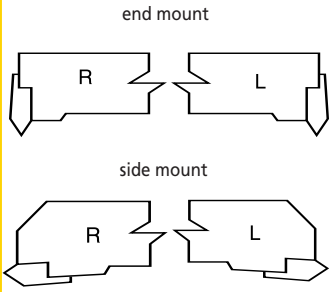


N – TOP NOTCH*

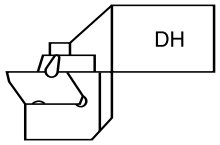
2. Insert Mounting Location



3. Hand of Tool



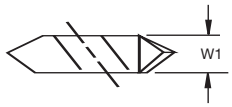
4. Drop Head



5. Shank Size

metric:
Shank height and width in mm and holder length according to ISO standard.
inch:
This position will show a significant two-digit number that indicates the holder cross section. For shanks 5/8" square and larger, the number will represent the number of sixteenths of width and height. For shanks under 5/8" square, the number of sixteenths of cross section will be preceded by a zero. For rectangular holders, the first digit represents the number of eighths of width and the second digit the number of quarters of height, except for a toolholder 1 1/4" x 1 1/2", which is given the number 91.

6. Insert Size



insert size	W1 inch	W1 mm
2	.150	3,81
3	.195	4,95
4	.255	6,98

7. Qualified Surface and Length

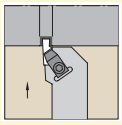
- A – qualified back and end, 4" long
- B – qualified back and end, 4.5" long
- C – qualified back and end, 5" long
- D – qualified back and end, 6" long
- E – qualified back and end, 7" long
- V – qualified back and end, 3.5" long*
- Q – qualified metric holder

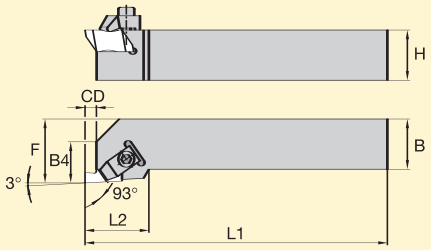
* Kennametal proprietary standard only.

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

TOP NOTCH Threading & Grooving Toolholders

NS



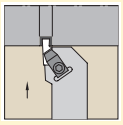


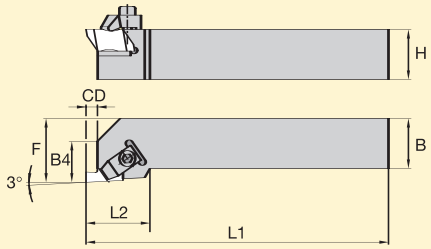
Gage Insert	Catalog number	H	B	F	L1	L2	B4	CD	B3	L3	Shim Shim	Screw	Hex (inch)	Clamp	Clamp Screw	Hex (inch)/ Torx/ Torx Plus	Jack Screw	Hex (inch)
Inch																		
	Right hand																	
N.2R	**NSR122B**	.750	.750	1.000	4.50	.75	.35	.138	-	-	-	-	-	**CM74**	**S310**	7/64	-	-
N.2R	**NSR162C**	1.000	1.000	1.250	5.00	.75	.35	.138	-	-	-	-	-	**CM74**	**S310**	7/64	-	-
N.3R	**NSR123A**	.750	.750	1.000	4.00	1.25	.50	.210	-	-	-	-	-	**CM72LP**	**S2112**	25IP	-	-
N.3R	**NSR123B**	.750	.750	1.000	4.50	1.25	.50	.210	-	-	-	-	-	**CM72LP**	**S2112**	25IP	-	-
N.3R	**NSR163C**	1.000	1.000	1.250	5.00	1.25	.50	.210	-	-	-	-	-	**CM72LP**	**S2112**	25IP	-	-
N.3R	**NSR163D**	1.000	1.000	1.250	6.00	1.25	.50	.210	-	-	-	-	-	**CM72LP**	**S2112**	25IP	-	-
N.3R	**NSR853D**	1.250	1.000	1.250	6.00	1.25	.50	.210	-	-	-	-	-	**CM72LP**	**S2112**	25IP	-	-
N.3R	**NSR203D**	1.250	1.250	1.500	6.00	1.25	.50	.210	-	-	-	-	-	**CM72LP**	**S2112**	25IP	-	-
N.3R	**NSR243D**	1.500	1.500	2.000	6.00	1.38	.50	.210	-	-	-	-	-	**CM72LP**	**S2112**	25IP	-	-
N.3R	**NSR243E**	1.500	1.500	2.000	7.00	1.38	.50	.210	-	-	-	-	-	**CM72LP**	**S2112**	25IP	-	-
	Left hand																	
N.2L	**NSL122B**	.750	.750	1.000	4.50	.75	.35	.138	-	-	-	-	-	**CM75**	**S310**	7/64	-	-
N.2L	**NSL162C**	1.000	1.000	1.250	5.00	.75	.35	.138	-	-	-	-	-	**CM75**	**S310**	7/64	-	-
N.3L	**NSL123A**	.750	.750	1.000	4.00	1.25	.50	.210	-	-	-	-	-	**CM73LP**	**S2112**	25IP	-	-
N.3L	**NSL123B**	.750	.750	1.000	4.50	1.25	.50	.210	-	-	-	-	-	**CM73LP**	**S2112**	25IP	-	-
N.3L	**NSL163C**	1.000	1.000	1.250	5.00	1.25	.50	.210	-	-	-	-	-	**CM73LP**	**S2112**	25IP	-	-
N.3L	**NSL163D**	1.000	1.000	1.250	6.00	1.25	.50	.210	-	-	-	-	-	**CM73LP**	**S2112**	25IP	-	-
N.3L	**NSL853D**	1.250	1.000	1.250	6.00	1.25	.50	.210	-	-	-	-	-	**CM73LP**	**S2112**	25IP	-	-
N.3L	**NSL203D**	1.250	1.250	1.500	6.00	1.25	.50	.210	-	-	-	-	-	**CM73LP**	**S2112**	25IP	-	-
N.3L	**NSL243D**	1.500	1.500	2.000	6.00	1.38	.50	.210	-	-	-	-	-	**CM73LP**	**S2112**	25IP	-	-
N.3L	**NSL243E**	1.500	1.500	2.000	7.00	1.38	.50	.210	-	-	-	-	-	**CM73LP**	**S2112**	25IP	-	-
Metric																		
	Right hand																	
N.2R	**NSR2020K2**	20	20	25	125	19	9	3,5	-	-	-	-	-	**CM74**	**MS1200**	T10	-	-
N.2R	**NSR2525M2**	25	25	32	150	19	9	3,5	-	-	-	-	-	**CM74**	**MS1200**	T10	-	-
N.3R	**NSR2020K3**	20	20	25	125	32	13	5,3	-	-	-	-	-	**CM72LP**	**MS2111**	25 IP	-	-
N.3R	**NSR2525M3**	25	25	32	150	32	13	5,3	-	-	-	-	-	**CM72LP**	**MS2111**	25 IP	-	-
N.3R	**NSR3225P3**	32	25	32	170	32	13	5,3	-	-	-	-	-	**CM72LP**	**MS2111**	25 IP	-	-
N.3R	**NSR3232P3**	32	32	40	170	32	13	5,3	-	-	-	-	-	**CM72LP**	**MS2111**	25 IP	-	-
N.4R	**NSR2525M4**	25	25	32	150	35	14	7,5	-	-	-	-	-	**CM72LP**	**MS2111**	25 IP	-	-
N.4R	**NSR3225P4**	32	25	32	170	35	14	7,5	-	-	-	-	-	**CM72LP**	**MS2111**	25 IP	-	-
N.4R	**NSR3232P4**	32	32	40	170	35	14	7,5	-	-	-	-	-	**CM72LP**	**MS2111**	25 IP	-	-
	Left hand																	
N.2L	**NSL2020K2**	20	20	25	125	19	9	3,5	-	-	-	-	-	**CM75**	**MS1200**	T10	-	-
N.2L	**NSL2525M2**	25	25	32	150	19	9	3,5	-	-	-	-	-	**CM75**	**MS1200**	T10	-	-
N.3L	**NSL2020K3**	20	20	32	125	32	13	5,3	-	-	-	-	-	**CM73LP**	**MS2111**	25 IP	-	-
N.3L	**NSL2525M3**	25	25	32	150	32	13	5,3	-	-	-	-	-	**CM73LP**	**MS2111**	25 IP	-	-
N.3L	**NSL3225P3**	32	25	32	170	32	13	5,3	-	-	-	-	-	**CM73LP**	**MS2111**	25 IP	-	-
N.3L	**NSL3232P3**	32	32	40	170	32	13	5,3	-	-	-	-	-	**CM73LP**	**MS2111**	25 IP	-	-
N.4L	**NSL2525M4**	25	25	32	150	35	14	7,5	-	-	-	-	-	**CM73LP**	**MS2111**	25 IP	-	-
N.4L	**NSL3225P4**	32	25	32	170	35	14	7,5	-	-	-	-	-	**CM73LP**	**MS2111**	25 IP	-	-
N.4L	**NSL3232P4**	32	32	40	170	35	14	7,5	-	-	-	-	-	**CM73LP**	**MS2111**	25 IP	-	-

Order example:
ANSI Catalog number: **NSR122B** ISO Catalog number: **NSR2020K2**

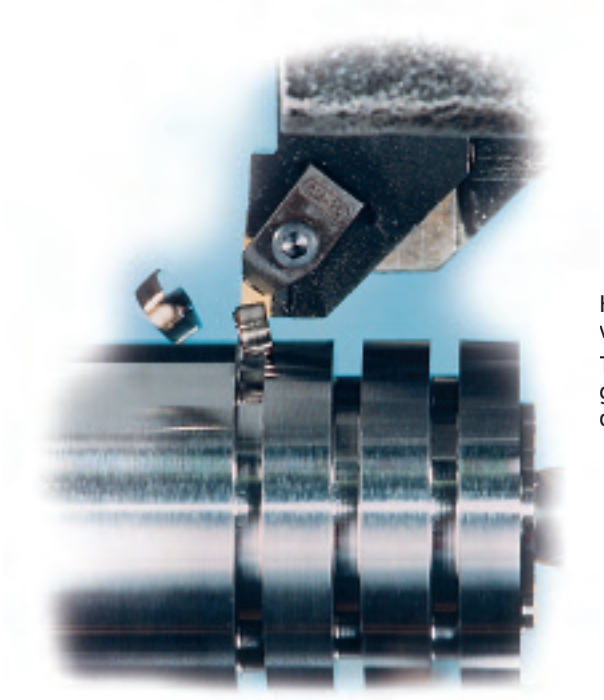
To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

NS (with shim)





Gage Insert	Catalog number	H	B	F	L1	L2	B4	CD	B3	L3	Shim	Shim Screw	Hex (inch)	Clamp	Clamp Screw	Torx Plus	Jack Screw	Hex (inch)
Inch	**Right hand**																	
N.4R	**NSR164C**	1.000	1.000	1.250	5.00	1.38	.54	.294	-	-	**SM420**	**SL344**	-	**CM72LP**	**S2112**	25 IP	-	-
N.4R	**NSR164D**	1.000	1.000	1.250	6.00	1.38	.54	.294	-	-	**SM420**	**SL344**	-	**CM72LP**	**S2112**	25 IP	-	-
N.4R	**NSR854D**	1.250	1.000	1.250	6.00	1.38	.54	.294	-	-	**SM420**	**SL344**	-	**CM72LP**	**S2112**	25 IP	-	-
N.4R	**NSR864E**	1.500	1.000	1.250	7.00	1.38	.54	.294	-	-	**SM420**	**SL344**	-	**CM72LP**	**S2112**	25 IP	-	-
N.4R	**NSR204C**	1.250	1.250	1.500	5.00	1.38	.54	.294	-	-	**SM420**	**SL344**	-	**CM72LP**	**S2112**	25 IP	-	-
N.4R	**NSR204D**	1.250	1.250	1.500	6.00	1.38	.54	.294	-	-	**SM420**	**SL344**	-	**CM72LP**	**S2112**	25 IP	-	-
N.4R	**NSR244D**	1.500	1.500	2.000	6.00	1.50	.54	.294	-	-	**SM420**	**SL344**	-	**CM72LP**	**S2112**	25 IP	-	-
N.4R	**NSR244E**	1.500	1.500	2.000	7.00	1.50	.54	.294	-	-	**SM420**	**SL344**	-	**CM72LP**	**S2112**	25 IP	-	-
	Left hand																	
N.4L	**NSL164C**	1.000	1.000	1.250	5.00	1.38	.54	.294	-	-	**SM420**	**SL344**	-	**CM73LP**	**S2112**	25 IP	-	-
N.4L	**NSL164D**	1.000	1.000	1.250	6.00	1.38	.54	.294	-	-	**SM420**	**SL344**	-	**CM73LP**	**S2112**	25 IP	-	-
N.4L	**NSL854D**	1.250	1.000	1.250	6.00	1.38	.54	.294	-	-	**SM420**	**SL344**	-	**CM73LP**	**S2112**	25 IP	-	-
N.4L	**NSL864E**	1.500	1.000	1.250	7.00	1.38	.54	.294	-	-	**SM420**	**SL344**	-	**CM73LP**	**S2112**	25 IP	-	-
N.4L	**NSL204C**	1.250	1.250	1.500	5.00	1.38	.54	.294	-	-	**SM420**	**SL344**	-	**CM73LP**	**S2112**	25 IP	-	-
N.4L	**NSL204D**	1.250	1.250	1.500	6.00	1.38	.54	.294	-	-	**SM420**	**SL344**	-	**CM73LP**	**S2112**	25 IP	-	-
N.4L	**NSL244D**	1.500	1.500	2.000	6.00	1.50	.54	.294	-	-	**SM420**	**SL344**	-	**CM73LP**	**S2112**	25 IP	-	-
N.4L	**NSL244E**	1.500	1.500	2.000	7.00	1.50	.54	.294	-	-	**SM420**	**SL344**	-	**CM73LP**	**S2112**	25 IP	-	-



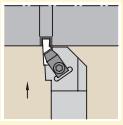
Kennametal's Top Notch clamping system provides the versatility to do both threading and grooving.

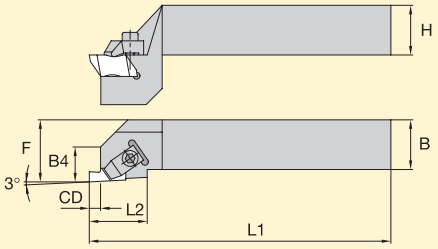
Top Notch inserts employ a unique top rake chip control geometry that efficiently evacuates chips and produces better quality parts faster.

Order example:
ANSI Catalog number: **NSR164C**

TOP NOTCH Threading & Grooving Toolholders

NS-DH



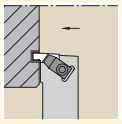


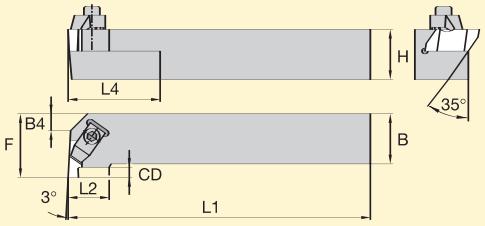
Gage Insert	Catalog number	H	B	F	L1	L2	B4	CD	B3	L3	Shim	Shim Screw	Hex (inch)	Clamp	Clamp Screw	Hex (inch)/ Torx/ Torx Plus	Jack Screw	Hex (inch)
Inch																		
	Right hand																	
N.2R	**NSRDH122B**	.750	.750	1.000	4.50	.75	.40	.138	-	-	-	-	-	**CM74**	**S310**	7/64	**S1020**	1/8
N.2R	**NSRDH162C**	1.000	1.000	1.250	5.00	.75	.40	.138	-	-	-	-	-	**CM74**	**S310**	7/64	**S1020**	1/8
N.3R	**NSRDH123A**	.750	.750	1.250	4.00	1.25	.58	.210	-	-	-	-	-	**CM72LP**	**S2112**	25 IP	-	-
N.3R	**NSRDH163C**	1.000	1.000	1.250	5.00	1.25	.58	.210	-	-	-	-	-	**CM72LP**	**S2112**	25 IP	-	-
N.3R	**NSRDH163D**	1.000	1.000	1.250	6.00	1.25	.58	.210	-	-	-	-	-	**CM72LP**	**S2112**	25 IP	-	-
N.3R	**NSRDH203D**	1.250	1.250	1.500	6.00	1.25	.62	.210	-	-	-	-	-	**CM72LP**	**S2112**	25 IP	**S965**	3/16
N.4R	**NSRDH204D**	1.250	1.250	1.500	6.00	1.38	.62	.294	-	-	-	-	-	**CM72LP**	**S2112**	25 IP	**S965**	3/16
	Left hand																	
N.3L	**NSLDH203D**	1.250	1.250	1.500	6.00	1.25	.62	.210	-	-	-	-	-	**CM73LP**	**S2112**	25 IP	**S965**	3/16
Metric																		
	Right hand																	
N.2R	**NSRDH2020K2**	20	20	25	125	19	9	3,5	-	-	-	-	-	**CM74**	**MS1200**	T10	-	-
N.2R	**NSRDH2525M2**	25	25	32	150	19	9	3,5	-	-	-	-	-	**CM74**	**MS1200**	T10	-	-
N.3R	**NSRDH2525M3**	25	25	32	150	32	13	5,3	-	-	-	-	-	**CM72LP**	**MS2111**	25 IP	-	-
N.3R	**NSRDH3232P3**	32	32	40	170	32	13	5,3	-	-	-	-	-	**CM72LP**	**MS2111**	25 IP	-	-

To place an order, contact your authorized
Kennametal distributor or visit www.kennametal.com.

Order example:
ANSI Catalog number: **NSRDH122B** ISO Catalog number: **NSRDH2020K2**

NE





Gage Insert	Catalog number	H	B	F	L1	L2	B4	CD	B3	L4	Shim	Shim Screw	Hex (inch)	Clamp	Clamp Screw	Hex (inch)/ Torx/ Torx Plus	Jack Screw	Hex (inch)
Inch																		
	Right hand																	
N.2L	**NER122B**	.750	.750	1.000	4.50	.50	.29	.138	-	1.0	-	-	-	**CM75**	**S310**	7/64	-	-
N.2L	**NER162C**	1.000	1.000	1.250	5.00	.50	.41	.138	-	1.0	-	-	-	**CM75**	**S310**	7/64	-	-
N.3L	**NER123B**	.750	.750	1.125	4.50	.75	-	.210	-	2.0	-	-	-	**CM73LP**	**S2112**	25 IP	-	-
N.3L	**NER163C**	1.000	1.000	1.250	5.00	.75	-	.210	-	2.0	-	-	-	**CM73LP**	**S2112**	25 IP	-	-
N.3L	**NER163D**	1.000	1.000	1.250	6.00	.75	-	.210	-	2.0	-	-	-	**CM73LP**	**S2112**	25 IP	-	-
N.3L	**NER853D**	1.250	1.000	1.250	6.00	.75	-	.210	-	2.0	-	-	-	**CM73LP**	**S2112**	25 IP	-	-
N.3L	**NER203D**	1.250	1.250	1.500	6.00	.75	.26	.210	-	2.0	-	-	-	**CM73LP**	**S2112**	25 IP	-	-
N.3L	**NER243D**	1.500	1.500	2.000	6.00	.75	.76	.210	-	2.0	-	-	-	**CM73LP**	**S2112**	25 IP	-	-
N.4L	**NER164C**	1.000	1.000	1.375	5.00	.75	-	.294	-	2.0	-	-	-	**CM73LP**	**S2112**	25 IP	-	-
N.4L	**NER164D**	1.000	1.000	1.375	6.00	.75	-	.294	-	2.0	-	-	-	**CM73LP**	**S2112**	25 IP	-	-
N.4L	**NER204D**	1.250	1.250	1.625	6.00	.75	.27	.294	-	2.0	-	-	-	**CM73LP**	**S2112**	25 IP	-	-
N.4L	**NER244D**	1.500	1.500	2.000	6.00	.75	.65	.294	-	2.0	-	-	-	**CM73LP**	**S2112**	25 IP	-	-
	Left hand																	
N.2R	**NEL122B**	.750	.750	1.000	4.50	.50	.29	.138	-	1.0	-	-	-	**CM74**	**S310**	7/64	-	-
N.2R	**NEL162C**	1.000	1.000	1.250	5.00	.50	.41	.138	-	1.0	-	-	-	**CM74**	**S310**	7/64	-	-
N.3R	**NEL123B**	.750	.750	1.125	4.50	.75	-	.210	-	2.0	-	-	-	**CM72LP**	**S2112**	25 IP	-	-
N.3R	**NEL163C**	1.000	1.000	1.250	5.00	.75	-	.210	-	2.0	-	-	-	**CM72LP**	**S2112**	25 IP	-	-
N.3R	**NEL163D**	1.000	1.000	1.250	6.00	.75	-	.210	-	2.0	-	-	-	**CM72LP**	**S2112**	25 IP	-	-
N.3R	**NEL853D**	1.250	1.000	1.250	6.00	.75	-	.210	-	2.0	-	-	-	**CM72LP**	**S2112**	25 IP	-	-
N.3R	**NEL203D**	1.250	1.250	1.500	6.00	.75	.26	.210	-	2.0	-	-	-	**CM72LP**	**S2112**	25 IP	-	-
N.3R	**NEL243D**	1.500	1.500	2.000	6.00	.75	.76	.210	-	2.0	-	-	-	**CM72LP**	**S2112**	25 IP	-	-
N.4R	**NEL164C**	1.000	1.000	1.375	5.00	.75	-	.294	-	2.0	-	-	-	**CM72LP**	**S2112**	25 IP	-	-
N.4R	**NEL164D**	1.000	1.000	1.375	6.00	.75	-	.294	-	2.0	-	-	-	**CM72LP**	**S2112**	25 IP	-	-
N.4R	**NEL204D**	1.250	1.250	1.625	6.00	.75	.27	.294	-	2.0	-	-	-	**CM72LP**	**S2112**	25 IP	-	-
N.4R	**NEL244D**	1.500	1.500	2.000	6.00	.75	.65	.294	-	2.0	-	-	-	**CM72LP**	**S2112**	25 IP	-	-
Metric																		
	Right hand																	
N.2L	**NER2020K2**	20	20	25	125	15	-	3,5	-	25,4	-	-	-	**CM75**	**MS1200**	T10	-	-
N.2L	**NER2525M2**	25	25	32	150	15	-	3,5	-	25,4	-	-	-	**CM75**	**MS1200**	T10	-	-
N.3L	**NER2525M3**	25	25	32	150	22	-	5,3	-	50,8	-	-	-	**CM73LP**	**MS2111**	25 IP	-	-
N.3L	**NER3225P3**	32	25	32	170	22	-	5,3	-	50,8	-	-	-	**CM73LP**	**MS2111**	25 IP	-	-
N.4L	**NER2525M4**	25	25	35	150	24	-	7,5	-	50,8	-	-	-	**CM73LP**	**MS2111**	25 IP	-	-
N.4L	**NER3225P4**	32	25	35	170	24	-	7,5	-	50,8	-	-	-	**CM73LP**	**MS2111**	25 IP	-	-
N.4L	**NER3232P4**	32	32	40	170	24	-	7,5	-	50,8	-	-	-	**CM73LP**	**MS2111**	25 IP	-	-
	Left hand																	
N.2R	**NEL2020K2**	20	20	25	125	15	-	3,5	-	25,4	-	-	-	**CM74**	**MS1200**	T10	-	-
N.2R	**NEL2525M2**	25	25	32	150	15	-	3,5	-	25,4	-	-	-	**CM74**	**MS1200**	T10	-	-
N.3R	**NEL2525M3**	25	25	32	150	22	-	5,3	-	50,8	-	-	-	**CM72LP**	**MS2111**	25 IP	-	-
N.3R	**NEL3225P3**	32	25	32	170	22	-	5,3	-	50,8	-	-	-	**CM72LP**	**MS2111**	25 IP	-	-
N.4R	**NEL2525M4**	25	25	35	150	24	-	7,5	-	50,8	-	-	-	**CM72LP**	**MS2111**	25 IP	-	-
N.4R	**NEL3225P4**	32	25	35	170	24	-	7,5	-	50,8	-	-	-	**CM72LP**	**MS2111**	25 IP	-	-
N.4R	**NEL3232P4**	32	32	40	170	24	-	7,5	-	50,8	-	-	-	**CM72LP**	**MS2111**	25 IP	-	-

Order example:
ANSI Catalog number: **NER122B** ISO Catalog number: **NER2020K2**

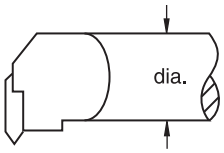
TOP NOTCH Threading & Grooving Boring Bar Identification System

Inch

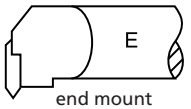
2. Bar Diameter	4. Insert Location		6. Insert Size		
A	32	N	E	R	3	W

2. Bar Diameter

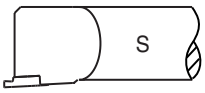
A two-digit number that indicates the bar diameter in 1/16-inch increments.



4. Insert Location

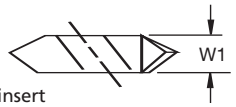


end mount



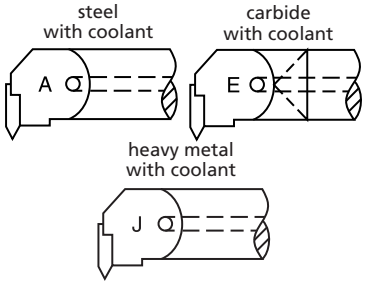
straight mount

6. Insert Size

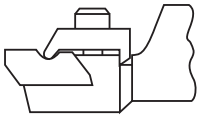


insert number	W1
1	.100
2	.150
3	.195
4	.255
5	.380
6	.383
8	.438

1. Bar Type

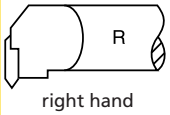


3. Insert Holding Method

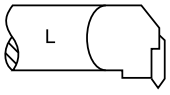


N* – TOP NOTCH

5. Hand of Bar



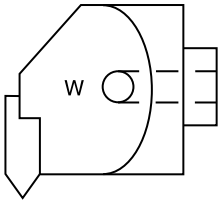
right hand



left hand

7. Additional Information

through-coolant
interchangeable head



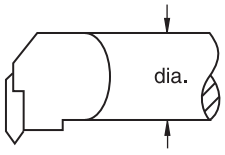
*Kennametal standard only.

Metric

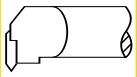
2. Bar Diameter	3. Bar Length	5. Insert Shape		7. Rake Angle		9. Insert Size	
A	25	R	N	N	T	O	R	2

2. Bar Diameter

bar diameter in millimeters.

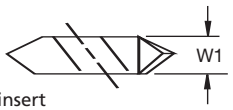


3. Bar Length



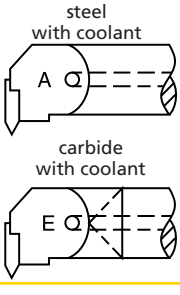
metric bars:
M = 150 mm
Q = 180 mm
R = 200 mm
S = 250 mm
T = 300 mm
U = 350 mm

9. Insert Size

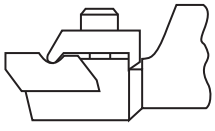


insert number	(mm)	W1
1	3,54	.100
2	3,81	.150
3	5,35	.195
4	6,40	.255
5	9,65	.380
6	9,73	.383
8	11,13	.438

1. Bar Type

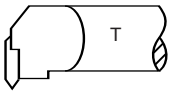


4. Insert Holding Method



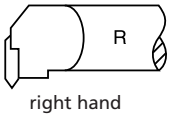
N* – TOP NOTCH

6. Insert Location

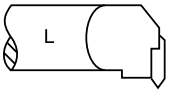


end mount

8. Hand of Bar



right hand

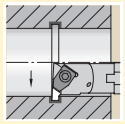


left hand

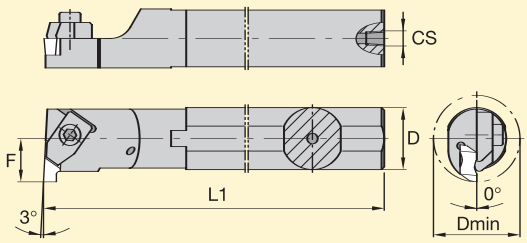
*Kennametal standard only.

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

A-NE



Steel shank with through coolant



Gage Insert	Catalog number	Dmin*	D	L1	F	A	CS	Clamp	Clamp Screw	Hex (inch)/ Torx Plus
Inch	**Right hand**									
N.2L	**A08NER2**	.730	.500	8	.437	-	1/16-27 NPT	**CM147**	**S39**	7/64
N.2L	**A10NER2**	1.000	.625	10	.500	-	1/8-27 NPT	**CM75**	**S310**	7/64
N.2L	**A12NER2**	1.125	.750	10	.562	-	1/8-27 NPT	**CM75**	**S310**	7/64
N.2L	**A16NER2**	1.375	1.000	12	.688	-	1/4-18 NPT	**CM75**	**S310**	7/64
N.3L	**A16NER3**	1.375	1.000	12	.688	-	1/4-18 NPT	**CM73LP**	**S2112**	25 IP
N.3L	**A20NER3**	1.750	1.250	14	.875	-	1/4-18 NPT	**CM73LP**	**S2112**	25 IP
N.3L	**A24NER3**	2.000	1.500	14	1.000	-	1/4-18 NPT	**CM73LP**	**S2112**	25 IP
N.3L	**A28NER3**	2.250	1.750	14	1.125	-	1/4-18 NPT	**CM73LP**	**S2112**	25 IP
N.3L	**A32NER3**	2.500	2.000	16	1.250	-	1/4-18 NPT	**CM73LP**	**S2112**	25 IP
N.3L	**A40NER3**	3.000	2.500	16	1.500	-	1/4-18 NPT	**CM73LP**	**S2112**	25 IP
N.4L	**A28NER4**	2.500	1.750	14	1.250	-	1/4-18 NPT	**CM73LP**	**S2112**	25 IP
N.4L	**A32NER4**	2.750	2.000	16	1.375	-	1/4-18 NPT	**CM73LP**	**S2112**	25 IP
N.4L	**A36NER4**	3.000	2.250	16	1.500	-	1/4-18 NPT	**CM73LP**	**S2112**	25 IP
N.4L	**A40NER4**	3.250	2.500	16	1.625	-	1/4-18 NPT	**CM73LP**	**S2112**	25 IP
	Left hand									
N.2R	**A08NEL2**	.730	.500	8	.437	-	1/16-27 NPT	**CM146**	**S39**	7/64
N.2R	**A10NEL2**	1.000	.625	10	.500	-	1/8-27 NPT	**CM74**	**S310**	7/64
N.2R	**A12NEL2**	1.125	.750	10	.562	-	1/8-27 NPT	**CM74**	**S310**	7/64
N.2R	**A16NEL2**	1.375	1.000	12	.688	-	1/4-18 NPT	**CM74**	**S310**	7/64
N.3R	**A16NEL3**	1.375	1.000	12	.688	-	1/4-18 NPT	**CM72LP**	**S2112**	25 IP
N.3R	**A20NEL3**	1.750	1.250	14	.875	-	1/4-18 NPT	**CM72LP**	**S2112**	25 IP
N.3R	**A24NEL3**	2.000	1.500	14	1.000	-	1/4-18 NPT	**CM72LP**	**S2112**	25 IP
N.3R	**A28NEL3**	2.250	1.750	14	1.125	-	1/4-18 NPT	**CM72LP**	**S2112**	25 IP
N.3R	**A32NEL3**	2.500	2.000	16	1.250	-	1/4-18 NPT	**CM72LP**	**S2112**	25 IP
N.3R	**A40NEL3**	3.000	2.500	16	1.500	-	1/4-18 NPT	**CM72LP**	**S2112**	25 IP
N.4R	**A28NEL4**	2.500	1.750	14	1.250	-	1/4-18 NPT	**CM72LP**	**S2112**	25 IP
N.4R	**A32NEL4**	2.750	2.000	16	1.375	-	1/4-18 NPT	**CM72LP**	**S2112**	25 IP
N.4R	**A36NEL4**	3.000	2.250	16	1.500	-	1/4-18 NPT	**CM72LP**	**S2112**	25 IP
N.4R	**A40NEL4**	3.250	2.500	16	1.625	-	1/4-18 NPT	**CM72LP**	**S2112**	25 IP

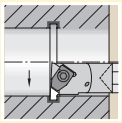
*NOTE: Minimum bore diameter (Dmin) capability varies with thread type and groove depth. See pages A67-A68 for details.

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

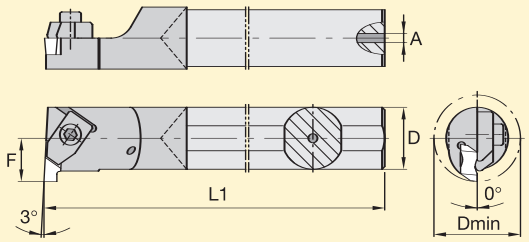
Order example:
ANSI Catalog number: **A08NER2**

TOP NOTCH Threading & Grooving Boring Bars

E-NE

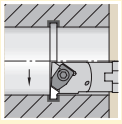


Carbide shank with through coolant

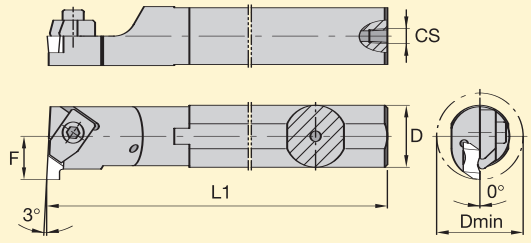


Gage Insert	Catalog number	Dmin*	D	L1	F	A	CS	Clamp	Clamp Screw	Hex (inch)/ Torx Plus
Inch	**Right hand**									
N.2L	**E08NER2**	.730	.500	8	.437	0.19	-	**CM147**	**S39**	7/64
N.2L	**E10NER2**	1.000	.625	10	.500	0.22	-	**CM75**	**S310**	7/64
N.2L	**E12NER2**	1.125	.750	10	.562	0.28	-	**CM75**	**S310**	7/64
N.3L	**E16NER3**	1.375	1.000	12	.688	0.31	-	**CM73LP**	**S2112**	25 IP
	Left hand									
N.2R	**E08NEL2**	.730	.500	8	.437	0.19	-	**CM146**	**S39**	7/64
N.2R	**E10NEL2**	1.000	.625	10	.500	0.22	-	**CM74**	**S310**	7/64
N.2R	**E12NEL2**	1.125	.750	10	.562	0.28	-	**CM74**	**S310**	7/64
N.3R	**E16NEL3**	1.375	1.000	12	.688	0.31	-	**CM72LP**	**S2112**	25 IP

A-NNT



Steel shank with through coolant



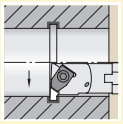
Gage Insert	Catalog number	Dmin*	D	L1	F	A	CS	Clamp	Clamp Screw	Hex (mm) /Torx Plus
Metric	**Right hand**									
N.2L	**A12MNNTOR2**	18,5	12	150	11	-	1/16-27 NPT	**CM147**	**MS1025**	2,5
N.2L	**A16MNNTOR2**	22	16	150	11	-	1/8-27 NPT	**CM75**	**MS1025**	2,5
N.2L	**A20QNNTOR2**	26	20	180	13	-	1/8-27 NPT	**CM75**	**MS1025**	2,5
N.2L	**A25RNNTOR2**	34	25	200	17	-	1/4-18 NPT	**CM75**	**MS1025**	2,5
N.3L	**A25RNNTOR3**	34	25	200	17	-	1/4-18 NPT	**CM73LP**	**MS2111**	25 IP
N.3L	**A32SNNTOR3**	44	32	250	22	-	1/4-18 NPT	**CM73LP**	**MS2111**	25 IP
N.3L	**A40TNNTOR3**	54	40	300	27	-	1/4-18 NPT	**CM73LP**	**MS2111**	25 IP
N.4L	**A40TNNTOR4**	54	40	300	27	-	1/4-18 NPT	**CM73LP**	**MS2111**	25 IP
N.4L	**A50UNNTOR4**	70	50	350	35	-	1/4-18 NPT	**CM73LP**	**MS2111**	25 IP
	Left hand									
N.2R	**A12MNNTOL2**	18,5	12	150	11	-	1/16-27 NPT	**CM146**	**MS1025**	2,5
N.2R	**A16MNNTOL2**	22	16	150	11	-	1/8-27 NPT	**CM74**	**MS1025**	2,5
N.2R	**A20QNNTOL2**	26	20	180	13	-	1/8-27 NPT	**CM74**	**MS1025**	2,5
N.2R	**A25RNNTOL2**	34	25	200	17	-	1/4-18 NPT	**CM74**	**MS1025**	2,5
N.3R	**A25RNNTOL3**	34	25	200	17	-	1/4-18 NPT	**CM72LP**	**MS2111**	25 IP
N.3R	**A32SNNTOL3**	44	32	250	22	-	1/4-18 NPT	**CM72LP**	**MS2111**	25 IP
N.3R	**A40TNNTOL3**	54	40	300	27	-	1/4-18 NPT	**CM72LP**	**MS2111**	25 IP
N.4R	**A40TNNTOL4**	54	40	300	27	-	1/4-18 NPT	**CM72LP**	**MS2111**	25 IP
N.4R	**A50UNNTOL4**	70	50	350	35	-	1/4-18 NPT	**CM72LP**	**MS2111**	25 IP

*NOTE: Minimum bore diameter (Dmin) capability varies with thread type and groove depth. See pages A67-A68 for details.

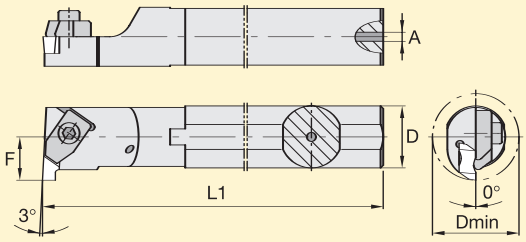
Order example:
ANSI Catalog number: **E08NER2** ISO Catalog number: **A12MNNTOR2**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

J-NE

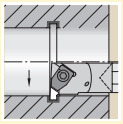


Heavy metal shank
with through coolant

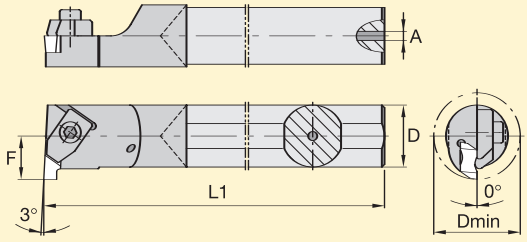


Gage Insert	Catalog number	Dmin*	D	L1	F	A	CS	Clamp	Clamp Screw	Hex (inch)/ Torx Plus
Inch										
	Right hand									
N.2L	**J08NER2**	.730	.500	8	.437	.16	-	**CM147**	**S39**	7/64
N.2L	**J10NER2**	1.000	.625	8	.500	.16	-	**CM75**	**S310**	7/64
N.2L	**J12NER2**	1.125	.750	8	.562	.16	-	**CM75**	**S310**	7/64
N.2L	**J16NER2**	1.375	1.000	10	.688	.25	-	**CM75**	**S310**	7/64
N.3L	**J16NER3**	1.375	1.000	10	.688	.25	-	**CM73LP**	**S2112**	25 IP
	Left hand									
N.2R	**J08NEL2**	.730	.500	8	.437	.16	-	**CM146**	**S39**	7/64
N.2R	**J10NEL2**	1.000	.625	8	.500	.16	-	**CM74**	**S310**	7/64
N.2R	**J12NEL2**	1.125	.750	8	.562	.16	-	**CM74**	**S310**	7/64
N.2R	**J16NEL2**	1.375	1.000	10	.688	.25	-	**CM74**	**S310**	7/64
N.3R	**J16NEL3**	1.375	1.000	10	.688	.25	-	**CM72LP**	**S2112**	25 IP

E-NNT



Carbide shank with
through coolant



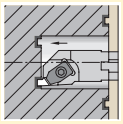
Gage Insert	Catalog number	Dmin*	D	L1	F	A	CS	Clamp	Clamp Screw	Torx/ Torx Plus
Metric										
	Right hand									
N.2L	**E16RNNTOR2**	22	16	200	11	5,5	-	**CM75**	**MS1200**	T10
N.2L	**E20SNNTOR2**	26	20	250	13	7,1	-	**CM75**	**MS1200**	T10
N.3L	**E25TNNTOR3**	34	25	300	17	7,9	-	**CM73LP**	**MS2111**	25 IP
	Left hand									
N.2R	**E16RNNTOL2**	22	16	200	11	5,5	-	**CM74**	**MS1200**	T10
N.2R	**E20SNNTOL2**	26	20	250	13	7,1	-	**CM74**	**MS1200**	T10
N.3R	**E25TNNTOL3**	34	25	300	17	7,9	-	**CM72LP**	**MS2111**	25 IP

*NOTE: Minimum bore diameter (Dmin) capability varies with thread type and groove depth. See pages A67-A68 for details.

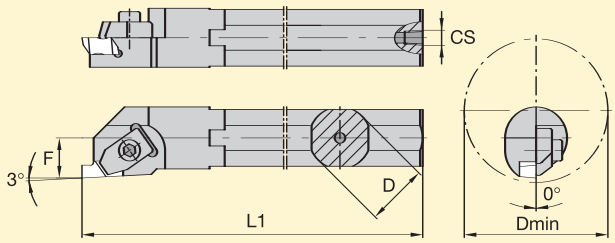
Order example:
ANSI Catalog number: **J08NER2** ISO Catalog number: **E16RNNTOR2**

TOP NOTCH Threading & Grooving Boring Bars

A-NS



Steel shank with
through coolant



Gage Insert	Catalog number	Dmin*	D	L1	F	A	CS	Clamp	Clamp Screw	Torx Plus
Inch	**Right hand**									
N.3R	**A16NSR3**	2.250	1.000	12	.640	-	1/4-18 NPT	**CM72LP**	**S2112**	25 IP
N.3R	**A20NSR3**	2.250	1.250	14	.765	-	1/4-18 NPT	**CM72LP**	**S2112**	25 IP
N.3R	**A24NSR3**	2.250	1.500	14	.890	-	1/4-18 NPT	**CM72LP**	**S2112**	25 IP
N.3R	**A28NSR3**	2.250	1.750	14	1.015	-	1/4-18 NPT	**CM72LP**	**S2112**	25 IP
N.3R	**A32NSR3**	2.375	2.000	16	1.281	-	1/4-18 NPT	**CM72LP**	**S2112**	25 IP
N.3R	**A40NSR3**	2.875	2.500	16	1.531	-	1/4-18 NPT	**CM72LP**	**S2112**	25 IP
	Left hand									
N.3L	**A16NSL3**	2.250	1.000	12	.640	-	1/4-18 NPT	**CM73LP**	**S2112**	25 IP
N.3L	**A20NSL3**	2.250	1.250	14	.765	-	1/4-18 NPT	**CM73LP**	**S2112**	25 IP
N.3L	**A24NSL3**	2.250	1.750	14	1.015	-	1/4-18 NPT	**CM73LP**	**S2112**	25 IP
N.3L	**A28NSL3**	2.250	1.500	14	.890	-	1/4-18 NPT	**CM73LP**	**S2112**	25 IP
N.3L	**A32NSL3**	2.375	2.000	16	1.281	-	1/4-18 NPT	**CM73LP**	**S2112**	25 IP
N.3L	**A40NSL3**	2.875	2.500	16	1.531	-	1/4-18 NPT	**CM73LP**	**S2112**	25 IP

*Minimum bore applicable only when used with NFD-KI inserts on internal face grooves (see Lathe Catalog 4010 for inserts). See page A68 for machining guidelines when face grooving with NG and NGD inserts.

To place an order, contact your authorized
Kennametal distributor or visit www.kennametal.com.

Order example:
ANSI Catalog number: **A16NSR3**

Machining Guidelines for Chip Control – Grooving

- Center height of insert should be positioned at the center of the workpiece, or up to .005 inch (0,13 mm) above.
- Dwell time in the bottom of the groove, more than three revolutions, is not recommended.
- Chip control is feed rate related, and should be adjusted to fit the particular situation. Recommended feed range is .003-0.012 ipr (0,08-0,3 mm/rev).

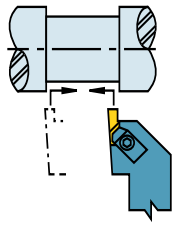
Machining Guidelines for Chip Control – Turning/Profiling

- Maximum depth of cut for side cutting (turning/profiling) depends upon material being cut and width of the tool. However, some general guidelines are:

1) .031 - .062 inch (0,79-1,6 mm) wide insert can cut up to .025 inch (0,6 mm) deep.
2) .067 - .128 inch (1,7-3,3 mm) wide insert can cut up to .040 inch (1,0 mm) deep.
3) .138 - .189 inch (3,5-4,8 mm) wide insert can cut up to .080 inch (2,0 mm) deep.
4) .197-.375 inch (5,0-9,5 mm) wide insert can cut up to .120 inch (3,0 mm) deep.

Finish turning the groove

1. Plunge both sides of groove width.
2. Plunge center area to remove web of material remaining.
3. To avoid insert chipping and to achieve groove wall perpendicularity, follow the tool path outlined here.
4. Use the lightest depth of cut that still allows good chip breaking, tool life, and surface finish.

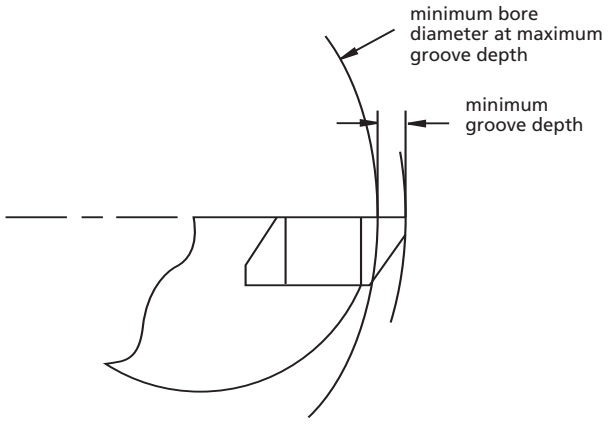


Groove Limits (Maximum Internal Groove Depth Versus Minimum Bore Diameter)

insert	maximum groove depth		minimum bore diameter	
	inch	mm	inch	mm
NG-2031R/L NG-2041R/L NG-2047R/L NG-2058R/L	.050	1,27	.730	18,54
	.110	2,79	2.500	63,5
NG-2062R/L	.102	2,59	1.750	44,45
NG-2094R/L	.098	2,49	1.500	38,10
NG-2125R/L	.080	2,03	1.000	25,40
	.055	1,40	.730	18,54
NG-3047R/L				
NG-3062R/L	.094	2,39	1.750	44,45
NG-3072R/L	.090	2,29	1.625	41,28
NG-3078R/L	.075	1,91	1.375	34,93
NG-3088R/L				
NG-3094R/L				
NG-3097R/L	.150	3,81	2.375	60,33
NG-3105R/L				
NG-3110R/L	.145	3,68	2.125	53,98
NG-3122R/L				
NG-3125R/L	.138	3,51	1.875	47,63
NG-3142R/L				
NG-3156R/L	.125	3,18	1.625	41,28
NG-3178R/L				
NG-3185R/L	.110	2,79	1.375	34,93
NG-3189R/L				
NG-4125R/L	.150	3,81	2.750	69,85
	.250	6,35	5.750	146,05
NG-4189R/L	.245	6,22	5.000	127,00
NG-4213R/L	.240	6,10	4.500	114,30
NG-4219R/L	.218	5,54	3.250	82,55
NG-4250R/L	.200	5,08	2.500	63,50

*The same maximum groove depth and minimum bore diameter values also apply to metric, NG-K (chip control), and NR (full radius) inserts of similar size.

Internal Groove Depth Versus Bar Interference



NOTE: Internal grooving depth limits are a function of bar clearance versus bore diameters.

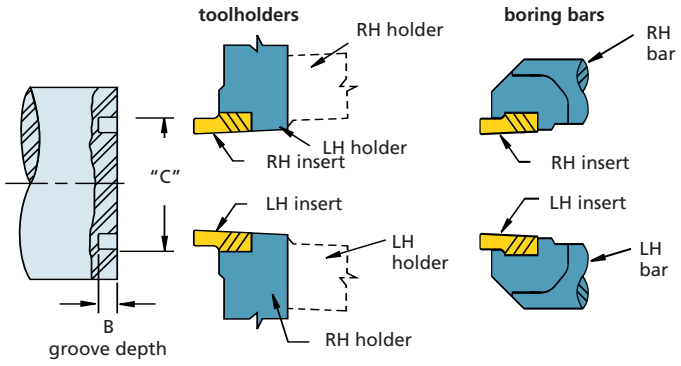
Technical Data

Top Notch Grooving

Machining Guidelines for Face Grooving Operations – External

Standard NG/NGD Inserts

insert family	maximum groove depth "B"		minimum groove diameter "C"	
	inch	mm	inch	mm
NG-2	.050	1,27	2.13	54,0
NG-2	.110	2,79	3.50	88,9
NG-3	.094	2,39	4.00	101,6
NG-3	.125	3,18	5.00	127,0
NG-3	.150	3,81	5.50	139,7
NGD-3	.250	6,35	6.88	174,6
NG-4	.150	3,81	6.00	152,4
NG-4	.250	6,35	8.25	209,6
NGD-4	.375	9,53	8.75	222,3
NGD-4	.500	12,70	8.75	222,3



Top Notch Threading

Inch-sized 60° V-Threading Limits

Internal threading limitations NT-1, NT-2 V-threading inserts

threads per inch	nominal thread size	minimum minor diameter (inch)
	NT-2	NT-2
6	1 7/8	1.695
7	1 3/4	1.595
8	1 5/8	1.490
9	1 9/16	1.442
10	1 1/2	1.392
11	1 7/16	1.339
11 1/2	1 3/8	1.281
12	1 3/8	1.285
13	1 5/16	1.229
14	1 1/4	1.173
16	1 1/4	1.182
18	1 1/8	1.065
20	1 1/8	1.071
24*	1 1/16	1.017

*Twenty-four threads per inch and finer can be cut with an NT-2 insert provided the minor diameter is 1.000 inch or larger.

Internal threading limitations NT-3 and 4 V-threading inserts

threads per inch	nominal thread size	minimum minor diameter (inch)
4**	3	2.729
4 1/2**	2 7/8	2.634
5	2 3/4	2.534
6	2 1/2	2.320
7	2 1/4	2.095
8	2	1.865
9	1 15/16	1.817
10	1 7/8	1.767
11	1 13/16	1.714
11 1/2	1 3/4	1.656
12	1 3/4	1.660
13	1 5/8	1.542
14	1 9/16	1.485
16*	1 7/16	1.370

*Sixteen threads per inch and finer can be cut provided minor diameter is 1.370 inch or larger.
**NT-4 insert only.

Metric 60° V-Threading Limits

Internal threading limitations NT-1 and NT-2 60° V-threading

thread pitch (mm)	nominal thread size	minimum minor thread diameter (mm)
	NT-2	NT-2
4,00	M48 x 4.00	43,67
3,00	M42 x 3.00	38,75
2,50	M39 x 2.50	36,29
2,00	M33 x 2.00	30,84
1,75	M32 x 1.75	30,11
1,50	M32 x 1.50	30,38
1,25	M29 x 1.29	27,65
1,00*	M27 x 1.00	25,92
0,75	M22 x 0.75	21,19

*Thread pitch of 1 mm and less can be cut with an NT-2 insert provided the core thread diameter is 25 mm or larger.

Internal threading limitations NT-3 and NT-4 60° V-threading

thread pitch (mm)	nominal thread size	minimum minor thread diameter (mm)
6,00**	M76 x 6.00	69,50
5,50**	M73 x 5.50	67,05
5,00	M70 x 5.00	64,59
4,00	M64 x 4.00	59,67
3,00	M52 x 3.00	48,75
2,50	M48 x 2.50	45,29
2,00	M42 x 2.00	39,84
1,75	M40 x 1.75	38,11
1,50*	M38 x 1.50	36,38

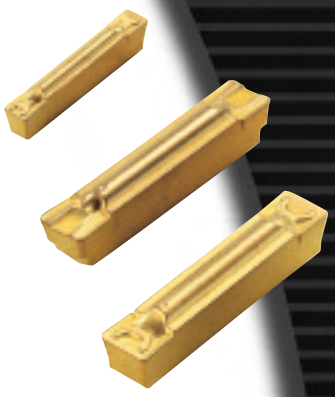
*Thread pitch of 1,5 mm and less can be cut provided core thread diameter is 35 mm or larger.
**NT-4-insert only.

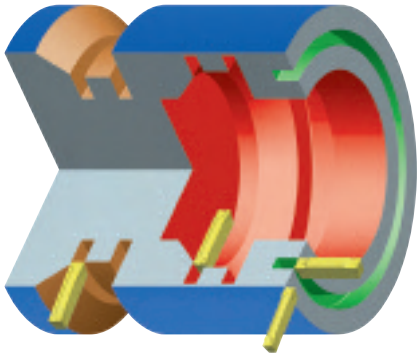
For additional threading technical information, visit
www.kennametal.com.

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

A4 Groove & Turn

- One tool for turning, facing, grooving, face-grooving, and cut-off… in OD and ID applications – that means exceptionally fast cycle times, no turret indexes!
- Extra-long clamping area, ground 120° bottom prism seating surface, and an exclusive top guide rail combine to deliver unsurpassed grooving and side-turning stability!
- Precise insert positioning is ensured – for accurate cuts!





The A4 system increases your productivity:

- Covers multiple applications.
- Reduces tool cost.
- Minimizes machining time.

KENNA UNIVERSAL – A4 Groove & Turn

3 Easy Steps to Greater Productivity in Grooving and Turning

1st Step – Select Chipbreaker Style and Feed Rate

Choose Chipbreaker Based on Material Type.

Steel	Stainless Steel	Cast Iron	High-Temp Alloys
GMN	GMP	GMN	GMP

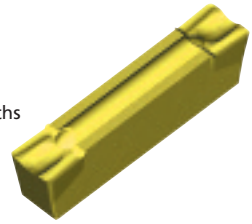
Depth of Cut and Feed Guidelines for Square Inserts (A4G...):

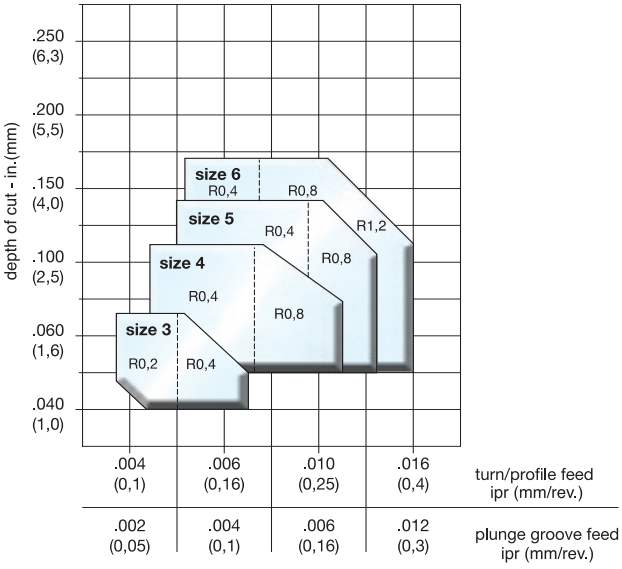
GMN Chipbreaker

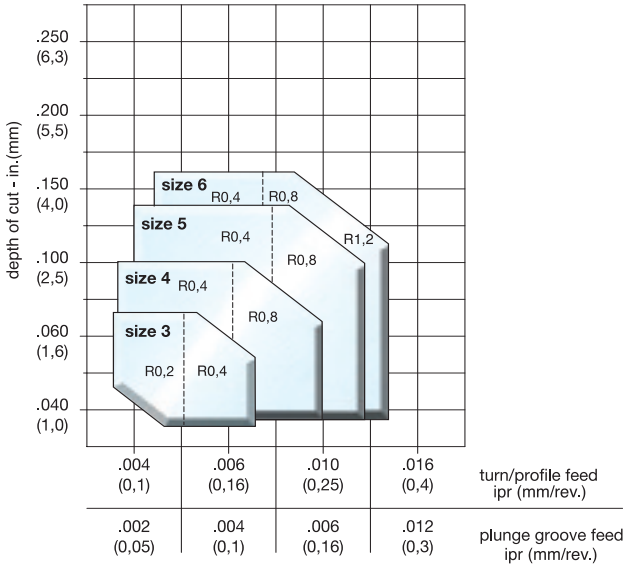
- Groove & turn molded inserts
- Stable cutting edge
- Available in metric widths only

GMP Chipbreaker

- Groove & turn molded inserts
- Positive rake angle
- Available in inch and metric widths



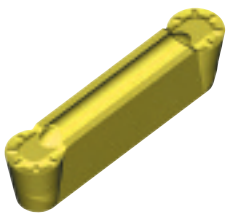




NOTE: Select feed based on nose radius. Diagram explanation: R0,2 - R = corner radius; 0,2 = 0,2 mm radius; see page A72 for further references.

Depth of Cut and Feed Guidelines for Full Radius Inserts (A4R...):

GMN Chipbreaker



Maximum turning and profiling depth of cut equals half the insert width.

The maximum turn and profile feed rate depends on the material to be machined and the depth of cut. For easy-to-machine materials, feed can be increased up to 1.5 times.

2nd Step – Select Speed

Recommended KENNA UNIVERSAL Grade

Cutting Conditions	Grades
heavily interrupted cut	KU30T
lightly interrupted cut	KU30T
varying depth of cut, casting or forging skin	KU30T
smooth cut, pre-turned surface	KU30T

Recommended KENNA UNIVERSAL Cutting Speeds

Material Group	Grade	Speed - sfm (m/min) 150 (45) / 300 (90) / 450 (140) / 600 (185) / 750 (230)	Starting Conditions sfm	Starting Conditions m/min
P	KU30T		400	120
M	KU30T		350	105
K	KU30T		650	200
S	KU30T		200	60

3rd Step – Select Insert and Holder from Catalog Page

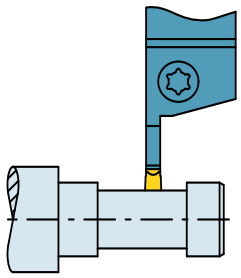
Example for A4 – Groove and Turn

material: low-alloyed steel
workpiece OD: 1.5 in. (38 mm)
groove depth: .5 in. (12 mm)
groove width: .850 in. (22 mm)
operation: lightly interrupted cut

Recommendation:

insert: A4G0405M04U08GMN
grade: KU30T
insert width: .159 in. (4,05 mm)
insert seat size: 4

toolholder: A4SMR160417
grooving depth: .670 in. (17 mm)
seat size: 4



speed: 400 sfm (120 m/min)
turn feed: .010 ipr (0,25 mm)
plunge feed: .006 ipr (0,14 mm)

NOTE: The insert seat size must match the seat size of your toolholder selection.

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

A4 Insert Identification System

Groove & Turn Inserts

1. Tooling System	2. Insert Type	3. Groove Width	4. Unit of Measurement for Grooving Width	5. Seat Size: Pocket Seat Size	5. Seat Size: Cutting Width (mm)	6. Insert Tolerance	7. Corner Radius: Metric	7. Corner Radius: Inch	8. Chipbreaker Type/ Edge Prep
A4	G	0405	M	04	U	02	GMN		

1. Tooling System
A4 – Groove & Turn

2. Insert Type
G – square
R – full radius

3. Groove Width
Expressed in 1/100 mm or .001 in.

4. Unit of Measurement for Grooving Width
M – metric

5. Seat Size

Pocket Seat Size	Cutting Width (mm)
03	3,0 – 3,05
04	4,0 – 4,05
05	5,0 – 5,05
06	6,0 – 6,05

6. Insert Tolerance
U = utility molded
grooving width tolerance:

3,05-6,05: $\frac{+.006 \text{ in.}}{-0}$ $\frac{(+0,15 \text{ mm})}{-0}$

7. Corner Radius

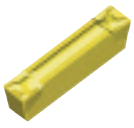
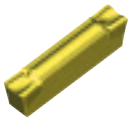
Metric	Inch
02 = 0,2	05 = .008
04 = 0,4	1 = .016
08 = 0,8	2 = .032

full radius = 00

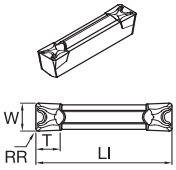
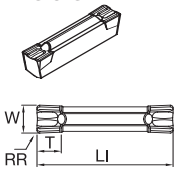
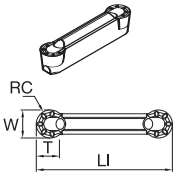
8. Chipbreaker Type/ Edge Prep
GMN =
groove & turn medium machining
stable cutting edge

GMP =
groove & turn medium machining
positive rake angle

Insert Overview Table

Insert Type & Chipbreaker Designation		Application Range	Metric Widths (mm)	Inch Widths (in.)	Steel	Stainless Steel	Cast Iron	High-Temp Alloys
molded: **A4G-U-GMN**		**Groove & Turn:** • stable cutting edge for higher feed rates • utility molded	3,05-10,05	–	●		●	
molded: **A4G-U-GMP**		**Groove & Turn:** • positive rake angle • reduced cutting force • small to medium feed rates • utility molded	3,05-10,05	–	○	●		●
molded: **A4R-U-GMN**		**Groove & Turn:** • stable cutting edge for higher feed rates • utility molded	3,05-10,05	–	●		●	○

● - primary application ○ - secondary application

	Seat size	W inch	W mm	Catalog number	Dimensions RR inch	RR mm	RC inch	RC mm	LI inch	LI mm	T inch	T mm	KENNA UNIVERSAL KU30T
A4G-U-GMN 	3	.120	3,05	**A4G0305M03U02GMN**	.008	0,2	—	—	.79	20	.138	3,5	●
	3	.120	3,05	**A4G0305M03U04GMN**	.016	0,4	—	—	.79	20	.138	3,5	●
	4	.159	4,05	**A4G0405M04U04GMN**	.016	0,4	—	—	.79	20	.138	3,5	●
	5	.199	5,05	**A4G0505M05U04GMN**	.016	0,4	—	—	.98	25	.165	4,2	●
	5	.199	5,05	**A4G0505M05U08GMN**	.031	0,8	—	—	.98	25	.165	4,2	●
	6	.238	6,05	**A4G0605M06U08GMN**	.031	0,8	—	—	1.18	30	.193	4,9	●
A4G-U-GMP 	3	.120	3,05	**A4G0305M03U02GMP**	.008	0,2	—	—	.79	20	.138	3,5	●
	4	.159	4,05	**A4G0405M04U04GMP**	.016	0,4	—	—	.79	20	.138	3,5	●
	4	.159	4,05	**A4G0405M04U08GMP**	.031	0,8	—	—	.79	20	.138	3,5	●
	5	.199	5,05	**A4G0505M05U08GMP**	.031	0,8	—	—	.99	25	.165	4,2	●
	6	.238	6,05	**A4G0605M06U08GMP**	.031	0,8	—	—	1.19	30	.193	4,9	●
A4R-U-GMN 	3	.120	3,05	**A4R0305M03U00GMN**	—	—	.060	1,5	.79	20	.101	2,6	●
	4	.159	4,05	**A4R0405M04U00GMN**	—	—	.080	2,0	.79	20	.134	3,4	●
	5	.199	5,05	**A4R0505M05U00GMN**	—	—	.099	2,5	.99	25	.161	4,1	●
	6	.238	6,05	**A4R0605M06U00GMN**	—	—	.119	3,	1.19	30	.192	4,9	●

Order example:
Catalog number: **A4G0305M03U02GMN**
Insert grade: **KU30T**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

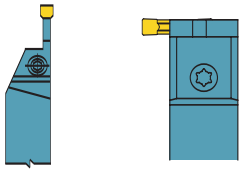
A4 Holder Identification System

Toolholders

1. Tooling System	2. Tool Style	3. Support Type	4. Hand of Tool	5. Shank Size	6. Seat Size	7. Max. Grooving Depth
A4	S	M	R	2525M (metric) 16 (inch)	03	17

1. Tooling System
A4 – Groove & Turn

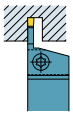
2. Tool Style
S – straight
E – end mounted 90°



3. Support Type
M = maximum support for specific groove widths and straight clearance for unlimited workpiece diameters

E = no steel support for face grooving

4. Hand of Tool



R = right hand
L = left hand
N = neutral

5. Shank Size
inch sizes: for square shanks, the number indicates the height and width in 1/16-inch increments (rectangular: 1st digit = width in 1/8-inch increments, 2nd digit = height in 1/4-inch increments)

metric: height x width in mm, letter indicates tool length according to ISO

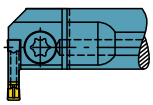
metric tool length (mm)
K = 125
M = 150
P = 170

6. Seat Size
03, 04, 05, 06, 08, 10

7. Max. Grooving Depth
in Millimeters

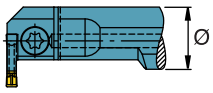
Boring Bars

1. Steel Bar with Coolant	2. Bar Diameter	3. Bar Length	4. A4 Groove & Turn System	5. Tool Style	6. Support Type	7. Hand of Tool	8. Insert Seat Size	9. Grooving Depth in mm	10. Tool Units
A	16	R	A4	E	M	R	03	10	N



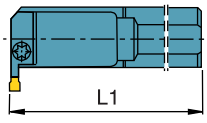
1. Steel Bar with Coolant

2. Bar Diameter



inch bars:
A two-digit number which indicates the bar diameter in1/16-inch increments.
metric bars:
bar diameter in millimeters

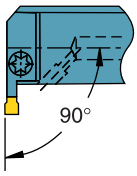
3. Bar Length



inch bars:
R = 8 inch
S = 10 inch
T = 12 inch
metric bars:
R = 200 mm
S = 250 mm
T = 300 mm

4. A4 Groove & Turn System

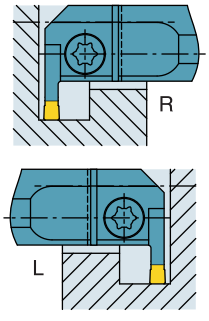
5. Tool Style



E = end mounted (90°)

6. Support Type
M = maximum support

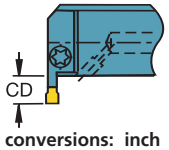
7. Hand of Tool



8. Insert Seat Size

Pocket Seat Size	Cutting Width (mm)
03	3,0 – 3,05
04	4,0 – 4,05
05	5,0 – 5,05
06	6,0 – 6,05

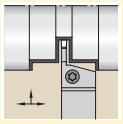
9. Grooving Depth in mm

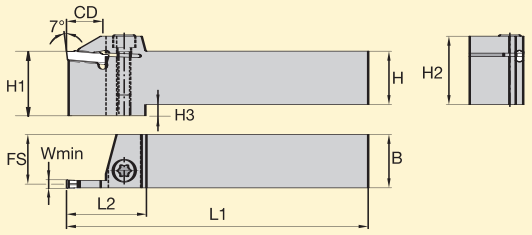


conversions: inch
7 mm = .28
10 mm = .39
12 mm = .47
16 mm = .63

10. Tool Units
M – metric
N – inch

A4SM





Seat Size	CD	Catalog number Right hand/Left hand	Wmin	H= H1	B	H2	H3	L1	FS	L2	Torx Clamp Screw	Torx
Inch												
3	.55	**A4SM R/L 120314**	.118	.75	.75	1.06	-	5.00	.69	1.38	**MS1595**	T30
3	.67	**A4SM R/L 160317**	.118	1.00	1.00	1.26	-	6.00	.94	1.46	**MS1970**	T30
4	.55	**A4SM R/L 120414**	.157	.75	.75	1.06	-	5.00	.67	1.38	**MS1595**	T30
4	.67	**A4SM R/L 160417**	.157	1.00	1.00	1.26	-	6.00	.92	1.46	**MS1970**	T30
4	.67	**A4SM R/L 200417**	.157	1.25	1.25	1.54	-	6.00	1.17	1.46	**MS1970**	T30
5	.75	**A4SM R/L 120519**	.197	.75	.75	1.10	-	5.00	.65	1.57	**MS1595**	T30
5	.79	**A4SM R/L 160520**	.197	1.00	1.00	1.30	-	6.00	.90	1.57	**MS1970**	T30
5	.87	**A4SM R/L 200522**	.197	1.25	1.25	1.54	-	6.00	1.15	1.65	**MS1970**	T30
6	.79	**A4SM R/L 120620**	.236	.75	.75	1.06	-	5.00	.65	1.57	**MS1595**	T30
6	.79	**A4SM R/L 160620**	.236	1.00	1.00	1.30	-	6.00	.89	1.57	**MS1970**	T30
6	.94	**A4SM R/L 160624**	.236	1.00	1.00	1.30	-	6.00	.89	1.69	**MS1970**	T30
6	1.02	**A4SM R/L 200626**	.236	1.25	1.25	1.57	-	6.00	1.15	1.77	**MS1970**	T30
6	1.02	**A4SM R/L 240626**	.236	1.50	1.50	1.81	-	7.00	1.39	1.77	**MS1970**	T30
Metric												
3	17	**A4SM R/L 2016K0317**	3,00	20	16	32	5	125	14,70	37	**MS1970**	T30
3	14	**A4SM R/L 2020K0314**	3,00	20	20	27	-	125	18,72	35	**MS1595**	T30
3	17	**A4SM R/L 2020K0317**	3,00	20	20	32	5	125	18,70	37	**MS1970**	T30
3	17	**A4SM R/L 2525M0317**	3,00	25	25	32	-	150	23,72	37	**MS1970**	T30
4	17	**A4SM R/L 2016K0417**	4,00	20	16	32	5	125	14,20	37	**MS1970**	T30
4	14	**A4SM R/L 2020K0414**	4,00	20	20	27	-	125	18,22	35	**MS1595**	T30
4	17	**A4SM R/L 2525M0417**	4,00	25	25	32	-	150	23,22	37	**MS1970**	T30
4	17	**A4SM R/L 3225P0417**	4,00	32	25	40	-	170	23,22	37	**MS1970**	T30
5	19	**A4SM R/L 2020K0519**	5,00	20	20	28	-	125	17,72	40	**MS1595**	T30
5	20	**A4SM R/L 2525M0520**	5,00	25	25	33	-	150	22,72	40	**MS1970**	T30
5	22	**A4SM R/L 3225P0522**	5,00	32	25	40	-	170	22,72	42	**MS1970**	T30
6	20	**A4SM R/L 2020K0620**	6,00	20	20	33	5	125	17,30	40	**MS1970**	T30
6	20	**A4SM R/L 2525M0620**	6,00	25	25	33	-	150	22,30	40	**MS1970**	T30
6	26	**A4SM R/L 3225P0626**	6,00	32	25	40	-	170	22,30	45	**MS1970**	T30

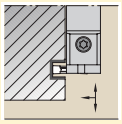
To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

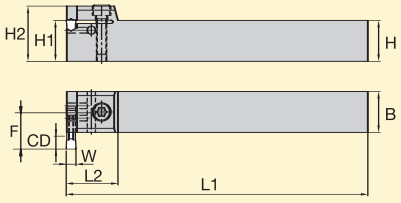
Order example:
ANSI Right hand: **A4SMR120314**
ISO Right hand: **A4SMR2016K0317**

ANSI Left hand: **A4SML120314**
ISO Left hand: **A4SML2016K0317**

A4 Groove & Turn Toolholders

A4EN





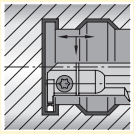
Seat Size	CD	Catalog number	Wmin	Dmin	H= H1	B	H2	L1	F	L2	Torx Clamp Screw	Torx	Hex Seating Screw	Hex (mm)
Inch														
3	.20	**A4ENN120305**	.118	2.756	.75	.75	1.06	4.95	.965	.98	**MS2091**	T25	**MS2090**	1,5
3	.20	**A4ENN160305**	.118	2.756	1.00	1.00	1.26	5.95	1.213	.98	**MS2091**	T25	**MS2090**	1,5
4	.28	**A4ENN120407**	.157	3.543	.75	.75	1.06	4.93	1.061	.98	**MS2091**	T25	**MS2090**	1,5
4	.28	**A4ENN160407**	.157	3.543	1.00	1.00	1.26	5.93	1.309	.98	**MS2091**	T25	**MS2090**	1,5
5	.35	**A4ENN120509**	.197	4.724	.75	.75	1.06	4.91	1.148	.98	**MS2091**	T25	**MS2090**	1,5
5	.35	**A4ENN160509**	.197	4.724	1.00	1.00	1.26	5.91	1.398	.98	**MS2091**	T25	**MS2090**	1,5
6	.43	**A4ENN120611**	.236	4.724	.75	.75	1.10	4.89	1.374	1.34	**MS1595**	T30	**193.297**	2,0
6	.43	**A4ENN160611**	.236	4.724	1.00	1.00	1.30	5.89	1.538	1.34	**MS1970**	T30	**193.297**	2,0
6	.43	**A4ENN200611**	.236	4.724	1.25	1.25	1.58	5.89	1.697	1.34	**MS1970**	T30	**193.297**	2,0
Metric														
3	5	**A4ENN2020K0305**	3,00	70	20	20	27	123,8	25,4	25	**MS2091**	T25	**MS2090**	1,5
3	5	**A4ENN2525M0305**	3,00	70	25	25	32	148,8	30,4	25	**MS2091**	T25	**MS2090**	1,5
4	7	**A4ENN2020K0407**	4,00	90	20	20	27	123,3	27,9	25	**MS2091**	T25	**MS2090**	1,5
4	7	**A4ENN2525M0407**	4,00	90	25	25	32	148,3	33,1	25	**MS2091**	T25	**MS2090**	1,5
5	9	**A4ENN2020K0509**	5,00	120	20	20	27	122,8	30,1	25	**MS2091**	T25	**MS2090**	1,5
5	9	**A4ENN2525M0509**	5,00	120	25	25	32	147,8	35,1	25	**MS2091**	T25	**MS2090**	1,5
6	11	**A4ENN2020K0611**	6,00	120	20	20	28	122,3	35,4	34	**MS1595**	T30	**193.297**	2,0
6	11	**A4ENN2525M0611**	6,00	120	25	25	33	147,3	38,9	34	**MS1970**	T30	**193,297**	2,0
6	11	**A4ENN3232P0611**	6,00	120	32	32	40	167,3	43,4	34	**MS1970**	T30	**193.297**	2,0

*Dmin for face grooving applications.

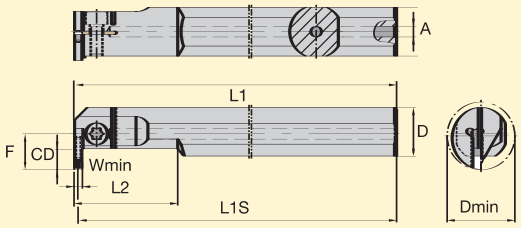
Order example:
ANSI:**A4ENN120305** ISO: **A4ENN2020K0305**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

A-A4E



Steel shank with
through coolant

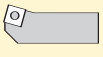


Seat Size	CD	Catalog number Right hand/Left hand	Wmin	D	Dmin	L1	F	L1S	L2	A	Torx Clamp Screw	Torx
Inch												
3	.276	**A12RA4EM R/L 0307N**	.118	.750	.984	8.00	.512	7.94	1.57	.16	**MS2089**	T25
3	.394	**A16RA4EM R/L 0310N**	.118	1.000	1.260	8.00	.669	7.94	1.97	.20	**MS1595**	T30
3	.472	**A20SA4EM R/L 0312N**	.118	1.250	1.575	10.00	.866	9.94	2.52	.24	**MS1595**	T30
4	.276	**A12RA4EM R/L 0407N**	.157	.750	.984	8.00	.512	7.92	1.57	.16	**MS2089**	T25
4	.394	**A16RA4EM R/L 0410N**	.157	1.000	1.260	8.00	.669	7.92	1.97	.20	**MS1595**	T30
4	.472	**A20SA4EM R/L 0412N**	.157	1.250	1.575	10.00	.866	9.92	2.52	.24	**MS1595**	T30
4	.630	**A24TA4EM R/L 0416N**	.157	1.500	2.047	12.00	1.181	11.92	3.15	.24	**MS1970**	T30
5	.630	**A20SA4EM R/L 0516N**	.197	1.250	1.732	10.00	1.024	9.90	2.52	.24	**MS1595**	T30
5	.630	**A24TA4EM R/L 0516N**	.197	1.500	2.047	12.00	1.181	11.90	3.15	.24	**MS1970**	T30
6	.630	**A20SA4EM R/L 0616N**	.236	1.250	1.732	10.00	1.024	9.92	2.52	.24	**MS1595**	T30
6	.630	**A24TA4EM R/L 0616N**	.236	1.500	2.047	12.00	1.181	11.92	3.15	.24	**MS1970**	T30
6	.630	**A32TA4EM R/L 0616N**	.236	2.000	2.559	12.00	1.378	11.92	3.94	.24	**MS1970**	T30
Metric												
3	7	**A20RA4EM R/L 0307M**	3,00	20	25	200	13	198,5	40	4	**MS2089**	T25
3	10	**A25RA4EM R/L 0310M**	3,00	25	32	200	17	198,5	50	5	**MS1595**	T30
3	12	**A32SA4EM R/L 0312M**	3,00	32	40	250	22	248,5	64	6	**MS1595**	T30
4	7	**A20RA4EM R/L 0407M**	4,00	20	25	200	13	198,0	40	4	**MS2089**	T25
4	10	**A25RA4EM R/L 0410M**	4,00	25	32	200	17	198,0	50	5	**MS1595**	T30
4	12	**A32SA4EM R/L 0412M**	4,00	32	40	250	22	248,0	64	6	**MS1595**	T30
4	16	**A40TA4EM R/L 0416M**	4,00	40	52	300	30	298,0	80	6	**MS1970**	T30
5	16	**A32SA4EM R/L 0516M**	5,00	32	44	250	26	247,5	64	6	**MS1595**	T30
5	16	**A40TA4EM R/L 0516M**	5,00	40	52	300	30	297,5	80	6	**MS1970**	T30
6	16	**A40TA4EM R/L 0616M**	6,00	40	52	300	30	297,0	80	6	**MS1970**	T30

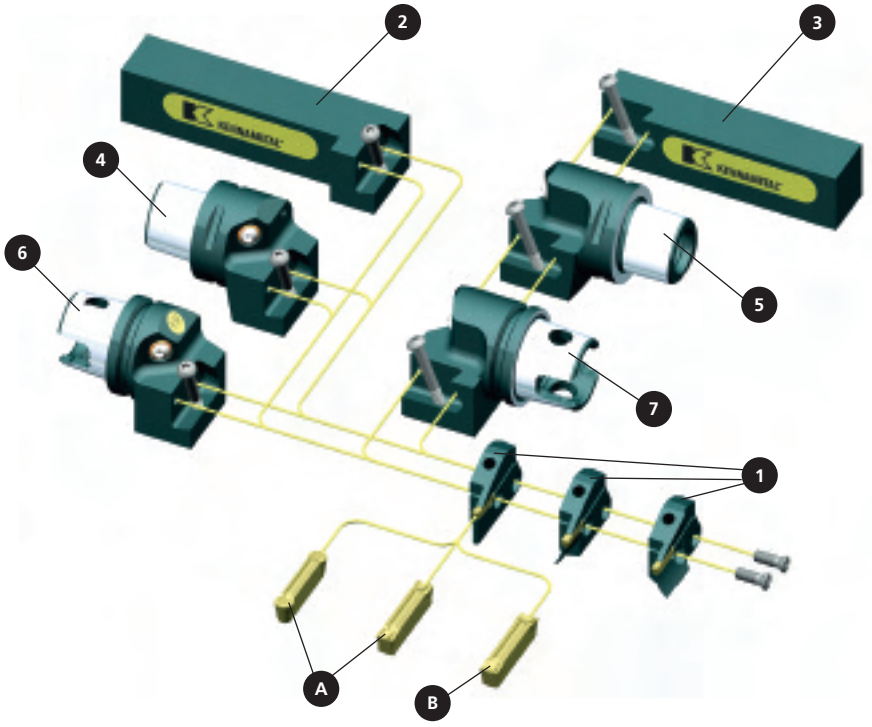
To place an order, contact your authorized
Kennametal distributor or visit www.kennametal.com.

Order example:
ANSI Right hand: **A12RA4EMR0307N**
ISO Right hand: **A20RA4EMR0307M**

ANSI Left hand: **A12RA4EML0307N**
ISO Left hand: **A20RA4EML0307M**



A4 Groove & Turn Toolholders



Legend		page
A	A4 Groove & Turn Inserts	A72
B	A4 Cut-off Inserts	Lathe 4010*
1	OD and Face Grooving Blades	A80
2	KGME Toolholder	A82
3	KGMS Toolholder	A82
4	Capto KGME Cutting Unit	Lathe 4010*
5	Capto KGMS Cutting Unit	Lathe 4010*
6	KM KGME Cutting Unit	Lathe 4010*
7	KM KGMS Cutting Unit	Lathe 4010*

By customer demand, Kennametal Inc. and Sandvik® Coromant have entered into an agreement that allows both companies to manufacture, market, and sell KM and Coromant Capto products worldwide. Using the trademark Kennametal Capto, we make available a variety of leading and innovative Kennametal tooling designs utilizing the Coromant Capto coupling.

The manufacture and marketing of Kennametal Capto products and the use of the "Capto" trademark are in accordance with a license granted from Sandvik.

*Please refer to the Lathe 4010 catalog.

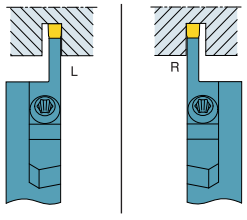
Modular blade assembly for A4 inserts

1. A4 Tooling System

A4M

2. Modular System Size

50



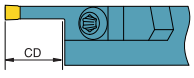
3. Hand of Tool

R

4. Seat Size

Pocket Seat Size	Cutting Width (mm)
03	3,0 – 3,05
04	4,0 – 4,05
05	5,0 – 5,05

04

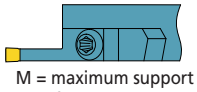


14 mm = .55 in.
19 mm = .75 in.

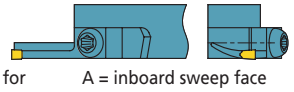
5. Maximum Groove Depth

14

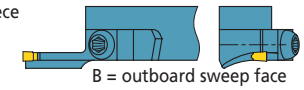
6. Tool Style



M = maximum support for specific groove widths and straight clearance for unlimited workpiece diameters

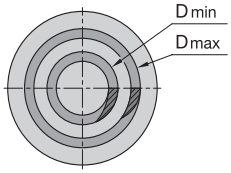


A = inboard sweep face grooving support



B = outboard sweep face grooving support

B



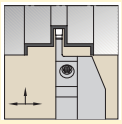
diameters are min and max for outer face groove dia. 999 = unlimited D_{max}

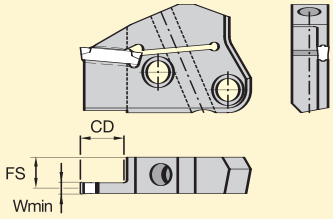
7. Face Grooving Diameter Dmin-Dmax (mm)

048-072

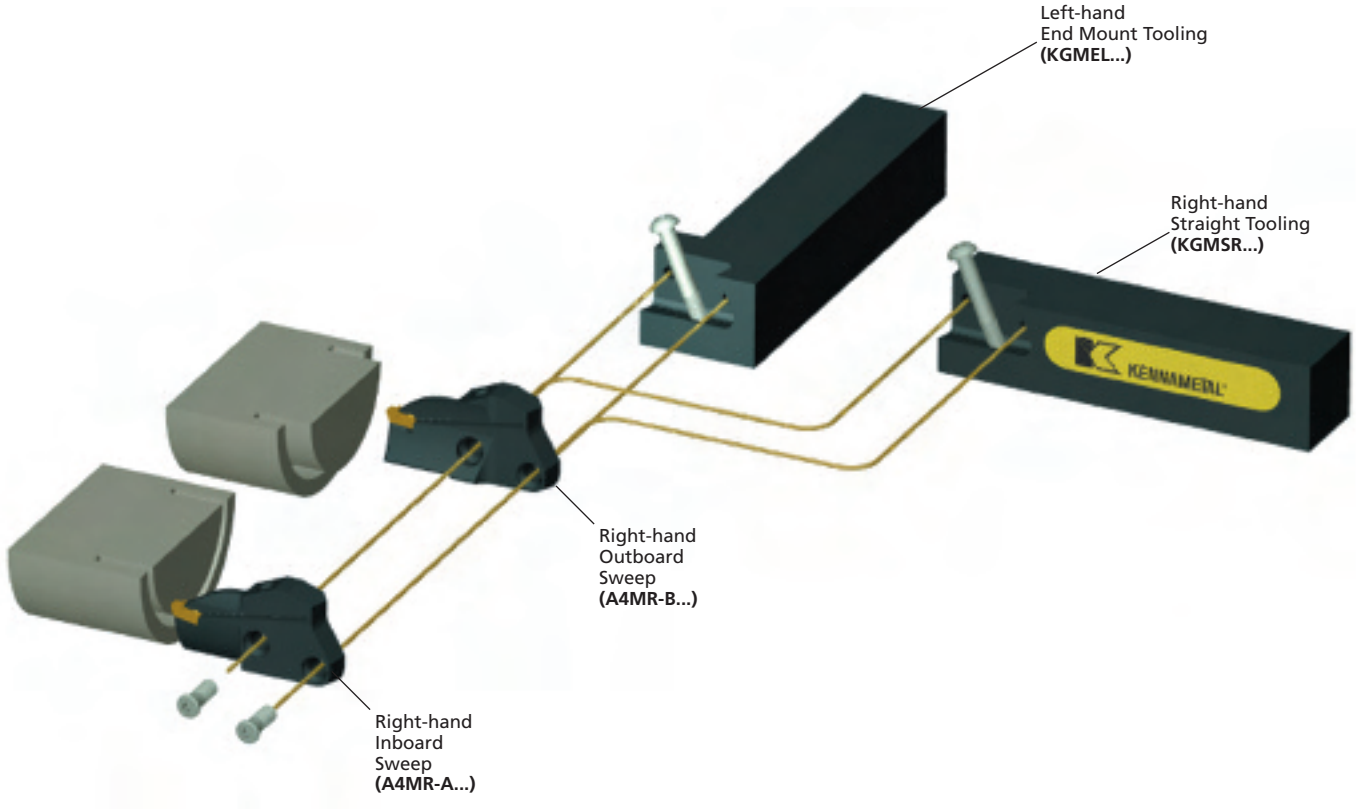
To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

A4M-M

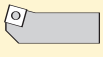




Seat Size	CD	Catalog number Right hand/Left hand	Wmin	FS	Blade Size
Inch					
3	.55	**A4M50 R/L 0314M**	.118	.413	50
4	.55	**A4M50 R/L 0414M**	.157	.394	50
5	.75	**A4M50 R/L 0519M**	.197	.374	50



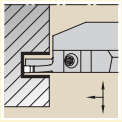
Order example:
Right hand: **A4M50R0314M** 

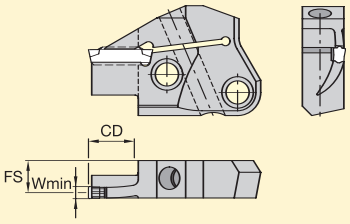
Left hand: **A4M50L0314M** 

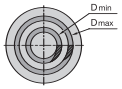
A4 Groove & Turn Modular Blades

Face Grooving

A4M-A INBOARD SWEEP

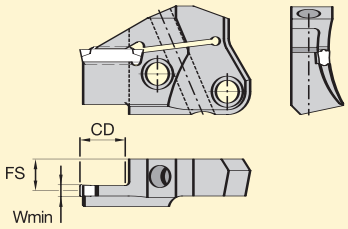


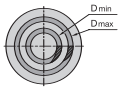




Seat Size	Dmin	Dmax	Catalog number Right hand/Left hand	Wmin	CD	FS	Blade Size
Inch							
3	1.417	1.890	**A4M50 R/L 0314A036048**	.118	.55	.413	50
3	1.654	2.284	**A4M50 R/L 0314A042058**	.118	.55	.413	50
3	2.047	2.913	**A4M50 R/L 0314A052074**	.118	.55	.413	50
3	2.677	3.937	**A4M50 R/L 0314A068100**	.118	.55	.413	50
3	3.543	6.299	**A4M50 R/L 0314A090160**	.118	.55	.413	50
3	5.118	11.811	**A4M50 R/L 0314A130300**	.118	.55	.413	50
3	11.417	-	**A4M50 R/L 0314A290999**	.118	.55	.413	50
4	1.890	2.835	**A4M50 R/L 0414A048072**	.157	.55	.394	50
4	2.520	3.937	**A4M50 R/L 0414A064100**	.157	.55	.394	50
4	3.622	5.906	**A4M50 R/L 0414A092150**	.157	.55	.394	50
4	5.197	11.811	**A4M50 R/L 0414A132300**	.157	.55	.394	50
4	11.417	-	**A4M50 R/L 0414A290999**	.157	.55	.394	50
5	2.284	3.701	**A4M50 R/L 0519A058094**	.197	.75	.374	50
5	3.150	5.354	**A4M50 R/L 0519A080136**	.197	.75	.374	50
5	4.724	11.811	**A4M50 R/L 0519A120300**	.197	.75	.374	50
5	9.843	-	**A4M50 R/L 0519A250999**	.197	.75	.374	50

A4M-B OUTBOARD SWEEP

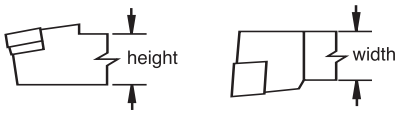




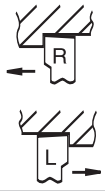
Seat Size	Dmin	Dmax	Catalog number Right hand/Left hand	Wmin	CD	FS	Blade Size
Inch							
3	1.417	1.890	**A4M50 R/L 0314B036048**	.118	.55	.413	50
3	1.654	2.284	**A4M50 R/L 0314B042058**	.118	.55	.413	50
3	2.047	2.913	**A4M50 R/L 0314B052074**	.118	.55	.413	50
3	2.677	3.937	**A4M50 R/L 0314B068100**	.118	.55	.413	50
3	3.543	6.299	**A4M50 R/L 0314B090160**	.118	.55	.413	50
3	5.118	11.811	**A4M50 R/L 0314B130300**	.118	.55	.413	50
3	11.417	-	**A4M50 R/L 0314B290999**	.118	.55	.413	50
4	1.890	2.835	**A4M50 R/L 0414B048072**	.157	.55	.394	50
4	2.520	3.937	**A4M50 R/L 0414B064100**	.157	.55	.394	50
4	3.622	5.906	**A4M50 R/L 0414B092150**	.157	.55	.394	50
4	5.197	11.811	**A4M50 R/L 0414B132300**	.157	.55	.394	50
4	11.417	-	**A4M50 R/L 0414B290999**	.157	.55	.394	50
5	2.284	3.701	**A4M50 R/L 0519B058094**	.197	.75	.374	50
5	3.150	5.354	**A4M50 R/L 0519B080136**	.197	.75	.374	50
5	4.724	11.811	**A4M50 R/L 0519B120300**	.197	.75	.374	50
5	9.843	-	**A4M50 R/L 0519B250999**	.197	.75	.374	50

Order example:
ANSI Right hand: **A4M50R0314A036048**  ANSI Left hand: **A4M50L0314A036048** 

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

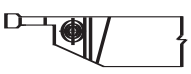


Square Shanks: The number indicates the toolholder cross section in 1/16-inch increments.
Rectangular Shanks: The first digit indicates the number of eighth-inch increments of width and the second digit indicates the number of quarter-inch increments of height.

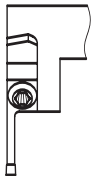


1. Kennametal Grooving Modular	2. Tool Style	3. Hand of Tool	4. Shank Dimensions	4. Shank Height	5. Blade Size	5. Shank Width	N = inch 6. Tool Units	6. Tool Length	7. Blade Size
KGM	S	R	16 (inch)	height — shank height in millimeters	50	width — shank width in millimeters	N	M	50
			25 (metric)		25		M		

S



E



over insert in a support blade with a 12,5 mm D dimension
M = 150 mm
P = 170 mm

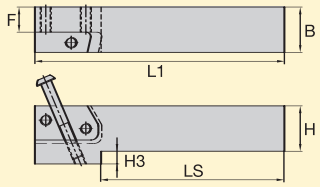
(KGMSR...)

(KGMER...)

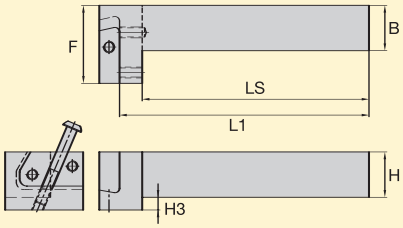
To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

A4 Groove & Turn Toolholders

KGMS..



KGME..



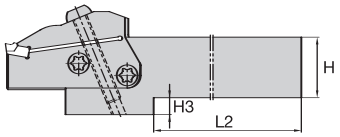
Catalog number Right hand/Left hand	Blade Size	H	B	L1	LS	F	H3	Blade Screw (2 req'd)	Clamp Screw	Torx
Inch										
KGMS R/L 1650	-	1.00	1.00	5.5	4.26	.56	.25	**MS1162**	**MS2002**	T25
KGMS R/L 2050	-	1.25	1.25	5.5	-	.81	-	**MS1162**	**MS2002**	T25
KGMS R/L 2450		1.50	1.50	5.5	-	1.06	-	**MS1162**	**MS2002**	T25
Metric										
KGMS R/L 2525M50	50	25	25	138,75	101,25	13,84	7,00	**MS1162**	**MS2002**	T25
KGMS R/L 3232P50	50	32	32	158,75	-	20,81	-	**MS1162**	**MS2002**	T25
Inch										
KGME R/L 1650	-	1.00	1.00	5.5	4.96	1.7	.25	**MS1162**	**MS2002**	T25
KGME R/L 2050	-	1.25	1.25	5.5	4.96	1.7	-	**MS1162**	**MS2002**	T25
KGME R/L 2450	-	1.50	1.50	5.5	4.96	1.7	-	**MS1162**	**MS2002**	T25
Metric										
KGME R/L 2525M50	50	25	25	139,25	125,25	42,75	6,84	**MS1162**	**MS2002**	T25
KGME R/L 3232P50	50	32	32	159,25	145,25	42,75	-	**MS1162**	**MS2002**	T25

Note: KGMS..: Right-hand holder uses right-hand blades.
KGME..: Right-hand holder uses left-hand blades.
Blade and clamp screw torque equals 71-88 in.-lbs. (8-10 Nm)

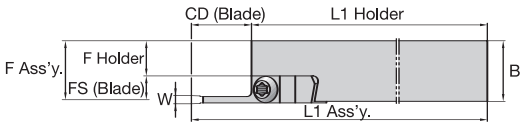
A4 Modular Blade Assemblies

KGMS Toolholder with Modular Blade Assembly

❷



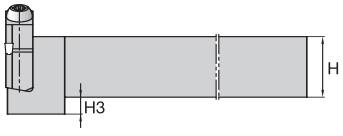
❷



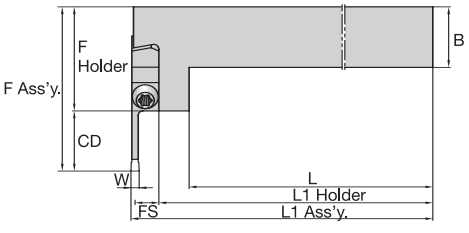
❷ F Ass'y. = F (Holder) + FS (Blade) + W/2
L1 Ass'y. = L1 (Holder) + CD (Blade) + .22" (or 5,5 mm)

KGME Toolholder with Modular Blade Assembly

❶



❶



❶ F Ass'y. = F (Holder) + CD (Blade) + = .22" (or 5,5 mm)
L1 (Ass'y.) = L1 (Holder) + FS (Blade) + W/2

Order example:
ANSI Right hand: **KGMSR1650**
ISO Right hand: **KGMSR2525M50**

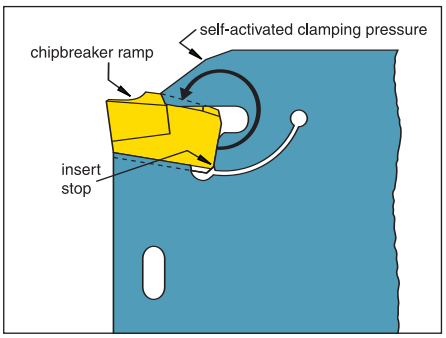
ANSI Left hand: **KGMSL1650**
ISO Left hand: **KGMSL2525M50**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

A2 Cut-Off

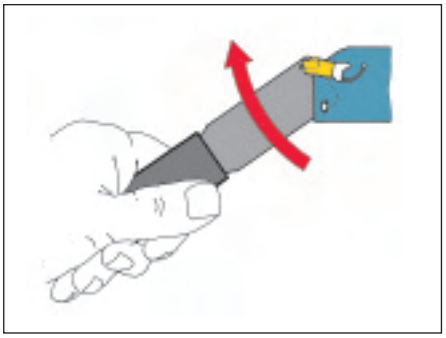
Innovative A2 Insert Design

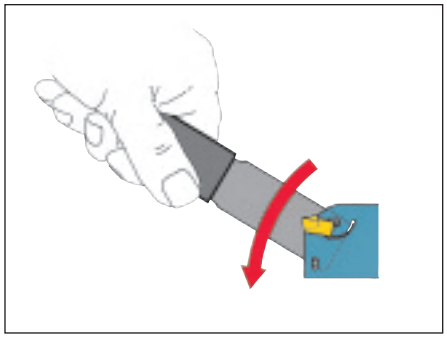
- V-prisms on both top and bottom enable higher clamping force to prevent insert movement, even when cutting at high feed rates.
- The cutting edge has a molded-in chipbreaker ramp to direct chips away from the blade, extending blade life.
- Positive rake cutting action combined with Kennametal's high-performance PVD coatings result in superior tool life and chip control.



Patented A2 Insert Stop Design

- As cutting forces increase, clamping forces also increase for secure holding power.
- Fixed insert stop ensures solid seating with every index and delivers up to 30% longer life.
- Cutting height is accurately controlled for maximum reliability and performance on even small-diameter parts.





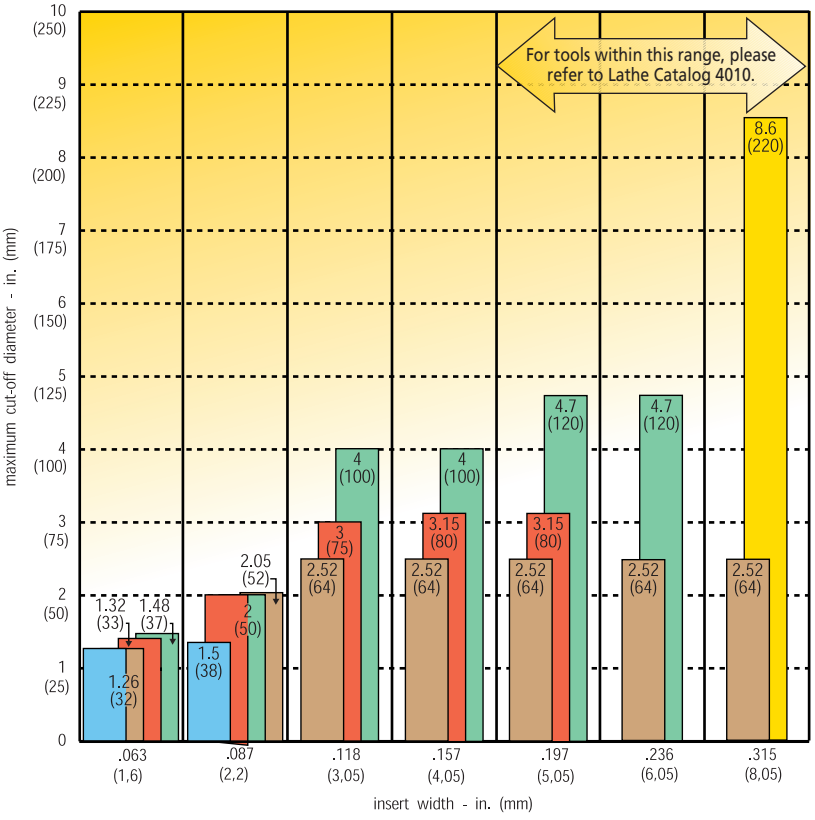
Quick and Easy Insert Indexing

- A convenient indexing wrench is available to minimize downtime by enabling fast removal and insertion without damage to the cutting edge.

KENNA UNIVERSAL – A2 Cut-Off

5 Easy Steps to Maximize Cut-Off Productivity

1st Step – Select Insert Width and Holder Type



What you need to know:

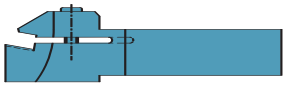
- cut-off diameter
- part/machine requirements

For required cut-off diameter, select insert width and holder type based on the part and machine requirement:

- To maximize rigidity, select the largest possible blade height or an integral shank toolholder.
- Diameters shown are for cut-off to center. Maximum cut-off depth to a through-hole is one-half of the diameter.
- To determine capability for cut-off to a through-hole on integral shank or reinforced blades, please refer to listing for that tool in this catalog.

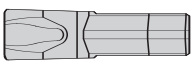
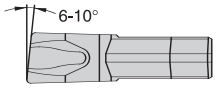
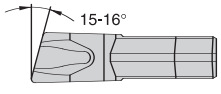
blade height
19 mm
26 mm
32 mm
52 mm
Integral Shank Toolholders

Toolholder Type

Blade: (self-clamping)	**Toolholder: (with clamping screw)**
	
• frequently used tool • two insert seats • deepest depth-of-cut capability	• shank tool with the highest stability • limited depth of cut • single insert seat

2nd Step – Select Insert Lead Angle

- part type
- burr and center stub considerations
- Cut-off to center or through-hole

	Neutral (0°)	**Right/Left 6° - 10°**	**Right/Left 15° - 16°**
Insert Type			
Recommended Application	• for cutting off solid workpieces • center stub will form on cut-off part • eliminates lateral deflection • best for deep cut-off depths	• for cutting off solid workpieces with reduced formation of center stub • for cut-off to a through-hole with reduced burr	• for thin-walled workpieces • for cutting off small diameter workpieces with minimal burr or center stub
Tool Life	best tool life	better tool life	good tool life

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

3rd Step – Select Chipbreaker Style and Feed Rate

- lead angle or neutral insert
- workpiece material

- cut-off insert with precision ground cutting edge for low feeds
- curved cutting edge

- cut-off insert with precision molded cutting edge for medium feeds
- stabilized straight cutting edge

- cut-off insert with precision molded cutting edge for higher feed rates
- curved cutting edge

Chipbreaker Style and Feed Rates - in/rev (mm/rev)

Insert Type	Steel	Stainless Steel	Cast Iron	Non-Ferrous Metals	High-Temp Alloys
	**N-CR** .003 – .012 (0,08 – 0,3)	**N-CF** .002 – .005 (0,05 – 0,12)	**N-CM** .002 – .008 (0,05 – 0,2)	**N-CF** .002 – .007 (0,05 – 0,18)	**N-CF** .002 – .004 (0,04 – 0,10)
	N-CF .002 – .006 (0,05 – 0,15)				
	**R/L-CR** .002 – .005 (0,05 – 0,12)	**R/L-CF** .002 – .003 (0,04 – 0,08)	**R/L-CM** .002 – .005 (0,05 – 0,12)	**R/L-CF** .002 – .004 (0,04 – 0,10)	**R/L-CF** .002 – .003 (0,04 – 0,08)
	R/L-CF .002 – .003 (0,04 – 0,08)				

4th Step – Select Grade and Speed

Recommendations for Grade and Speed Selection – sfm (m/min)

	Workpiece Material				
	Steel	**Stainless Steel**	**Cast Iron**	**Non-Ferrous Metals**	**High-Temp Alloys**
KENNA UNIVERSAL	**KU25T** 210 - 450 (65 - 135)	**KU25T** 210 - 400 (65 - 120)	**KU25T** 180 - 400 (55 - 120)	**KU25T** 400 - 785 (120 - 240)	**KU25T** 65 - 200 (20 - 60)

5th Step – Select Insert and Holder from Catalog Page

Example for A2 Cut-off:

material: low carbon steel
workpiece dia.: 1.02 in. (27 mm)
depth of cut: .157 in. (4 mm)
requirements: need to minimize burr on through-hole

See page A4 for grade descriptions.

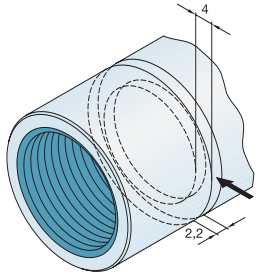
Recommendation:

insert: A2022R06CF02
grade: KU25T
cutting width: .087 in. (2,2 mm)
insert seat size: 2

toolholder: A2BNSN3202
seat size: 2

speed: 350 sfm (110 m/min)
feed: .002 ipr (0,05 mm)

Note: The insert seat size must match the seat size of your holder selection.



A2 Insert Identification System

Cut-Off

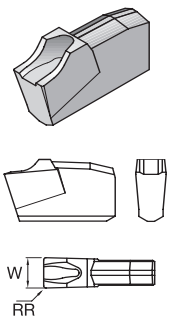
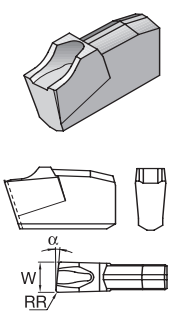
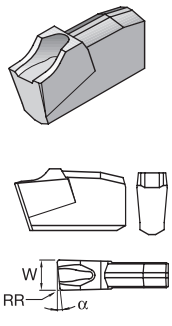
A2 Cut-off		N = neutral R = right hand L = left hand		-CF (**Cut-off F**ine) -CM (**Cut-off M**edium) -CR (**Cut-off R**ough)	
1. Insert Type		**3. Hand of Insert**		**5. Chipbreaker**	
A2	**040**	**N**	**00**	**CF**	**02**
2. Cutting Width		**4. Approach Angle of Main Cutting Edge**		**6. Corner Radius**	

(in 1/10 mm)

Cutting Width (mm)	Pocket Seat Size
1,60	01
2,20	02
3,05	03
4,05	04

00 = neutral
06 = 6°
10 = 10°
15 = 15°
16 = 16°

	mm	inch
00	0,0	.000
01	0,1	.004
02	0,2	.008
03	0,3	.012

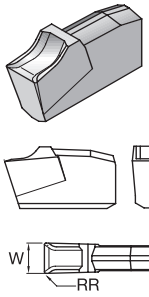
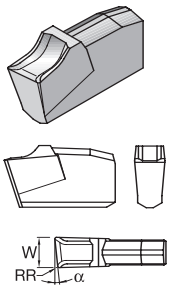
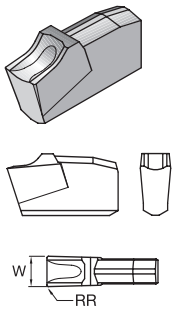
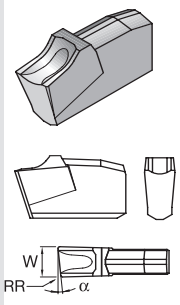
	Seat Size	W inch	W mm	Catalog number	Dimensions α°	RR inch	RR mm	KENNA UNIVERSAL KU25T
A2-N-CF				**Neutral**				
	1	.063	1,60	**A2016N00CF01**	-	.004	0,15	●
	2	.087	2,20	**A2022N00CF02**	-	.008	0,20	●
	3	.118	3,05	**A2030N00CF02**	-	.008	0,20	●
	4	.159	4,05	**A2040N00CF02**	-	.008	0,20	●
A2-L-CF				**Left hand**				
	3	.120	3,05	**A2030L06CF02**	6	.008	0,20	●
	3	.120	3,05	**A2030L10CF00**	10	.000	0,00	●
	3	.120	3,05	**A2030L15CF00**	15	.000	0,00	●
	4	.159	4,05	**A2040L06CF02**	6	.008	0,20	●
A2-R-CF				**Right hand**				
	1	.063	1,60	**A2016R16CF00**	16	.000	0,00	●
	2	.087	2,20	**A2022R06CF02**	6	.008	0,20	●
	2	.087	2,20	**A2022R16CF00**	16	.000	0,00	●
	3	.120	3,05	**A2030R06CF02**	6	.008	0,20	●
	3	.120	3,05	**A2030R10CF00**	10	.000	0,00	●
	3	.120	3,05	**A2030R15CF00**	15	.000	0,00	●
	4	.159	4,05	**A2040R06CF02**	6	.008	0,20	●

Order example:
Catalog number: **A2016N00CF01**
Insert grade: **KU25T**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

A2 Cut-Off Inserts

Dimensions and Grade Selection

	Seat Size	W inch	W mm	Catalog number	Dimensions α°	Dimensions RR inch	Dimensions RR mm	KENNA UNIVERSAL KU25T
A2-N-CM				**Neutral**				
	1	.063	1,60	**A2016N00CM01**	-	.004	0,10	●
	2	.087	2,20	**A2022N00CM02**	-	.008	0,20	●
	3	.120	3,05	**A2030N00CM02**	-	.008	0,20	●
	4	.159	4,05	**A2040N00CM02**	-	.008	0,20	●
A2-R-CM				**Right hand**				
	1	.063	1,60	**A2016R06CM00**	6	.000	0,00	●
A2-N-CR				**Neutral**				
	2	.087	2,20	**A2022N00CR02**	-	.008	0,20	●
	3	.120	3,05	**A2030N00CR02**	-	.008	0,20	●
	4	.159	4,05	**A2040N00CR02**	-	.008	0,20	●
A2-R-CR				**Right hand**				
	3	.118	3,05	**A2030R06CR03**	6	.012	0,30	●

Order example:
Catalog number: **A2016N00CM01**
Insert grade: **KU25T**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

Cut-Off – Toolholders

Pocket Seat Size	Cutting Width (mm)
01	1,60
02	2,20
03	3,05
04	4,05
05	5,05
06	6,05
08	8,05

1. A3 Screw-Clamp Holder*	2. Tool Style	3. Support Type	4. Hand of Tool	5. Shank Size	6. Seat Size	7. Max. Cutting Depth
A3	S	C	R	16 (inch) / 2525M (metric)	03	26
	S = Straight	S = standard (straight clearance) M = max. support (straight clearance) C = reinforced max. support (circular clearance)	R = right L = left	**Inch sizes**: for square shanks, the number indicates the height and width in 1/16-inch increments (rectangular: 2nd digit = height in 1/4-inch increments) **metric:** height x width in mm, letter indicates tool length according to ISO (see table in tool block identification system)		in millimeters

*NOTE: A3 screw-clamp OD holders are also designed to hold A2 inserts

Cut-Off – Blades

1. A2 Cut-Off Blade	2. Tool Style	3. Support Style	4. Hand of Tool	5. Blade Size	6. Overall Length	7. Seat Size	8. Max. Cutting Depth
A2	BN	C	R	32	J	02	21
	BN = 2 pocket blade BH = 1 pocket blade	S = standard C = reinforced	R = right L = left N = neutral	in (mm) 19 / 26 / 32 / 52	letter designation according to ISO (see table in tool block identification system) J = 110 mm M = 150 mm X = Special	01 = 1,60 mm; 04 = 4,05 mm; 02 = 2,20 mm; 05 = 5,05 mm; 03 = 3,05 mm; 06 = 6,05 mm; 08 = 8,05 mm	in (mm) (reinforced blade only)

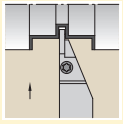
Cut-Off – Tool Blocks

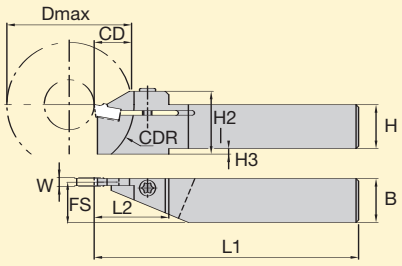
1. A2 Cut-Off	2. Tool Block	3. Clamping Style	4. Hand of Tool	5. Shank Dimensions	6. Blade Size	7. Tool Length in (mm)	8. Blade Size
A2	T	E	N	16 (inch) / 25 (metric)	32 / 23	J	32
		E = integral clamp Z = removable clamp	R = right L = left N = neutral	**square shank:** This number indicates the toolholder cross section in 1/16-inch increments. **rectangular shank:** The first digit indicates the number of eighth-inch increments of width and the second digit indicates the number of quarter inches of height.	in millimeters	J = 110 X = other length	in millimeters
				5. Shank Height: in millimeters	6. Shank Width: in millimeters		

A3 Reinforced Toolholders for Cut-Off

Cut-Off

A3SC





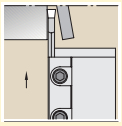
Seat Size	CD	Catalog number Right hand/Left hand	W	Dmax	H	B	FS	L1	L2	H2	H3	CDR	Clamp Screw	Torx
Inch														
1	.630	**A3SC R/L 120116**	.063	1.65	.750	.750	.722	4.500	1.180	1.040	-	.870	**MS1944**	T25
2	.630	**A3SC R/L 120216**	.087	1.65	.750	.750	.715	4.500	1.180	1.040	-	.870	**MS1944**	T25
3	.630	**A3SC R/L 120316**	.120	2.05	.750	.750	.705	4.500	1.180	1.040	-	1.060	**MS1944**	T25
3	1.020	**A3SC R/L 120326**	.120	2.44	.750	.750	.705	4.500	1.670	1.040	-	1.260	**MS1595**	T30
3	.630	**A3SC R/L 160316**	.120	2.44	1.000	1.000	.955	6.000	1.180	1.240	-	1.260	**MS1944**	T25
3	1.020	**A3SC R/L 160326**	.120	2.44	1.000	1.000	.955	6.000	1.670	1.260	-	1.260	**MS1595**	T30
3	1.260	**A3SC R/L 200332**	.120	2.44	1.250	1.250	1.205	6.000	1.970	1.670	.160	1.260	**MS1595**	T30
4	.630	**A3SC R/L 120416**	.159	2.05	.750	.750	.685	4.500	1.180	1.040	-	1.060	**MS1944**	T25
4	1.020	**A3SC R/L 120426**	.159	2.44	.750	.750	.685	4.500	1.670	1.040	-	1.260	**MS1595**	T30
4	.630	**A3SC R/L 160416**	.159	2.44	1.000	1.000	.933	6.000	1.180	1.240	-	1.260	**MS1944**	T25
4	1.020	**A3SC R/L 160426**	.159	2.44	1.000	1.000	.933	6.000	1.670	1.260	-	1.260	**MS1595**	T30
4	1.260	**A3SC R/L 200432**	.159	2.44	1.250	1.250	1.285	6.000	1.970	1.670	.160	1.260	**MS1595**	T30
Metric														
1	16	**A3SC R/L 2020K0116**	1,60	42	20	20	19,2	125	30	26,5	-	22	**MS1944**	T25
2	16	**A3SC R/L 2020K0216**	2,20	42	20	20	19,1	125	30	26,5	-	22	**MS1944**	T25
2	26	**A3SC R/L 2525M0226**	2,20	62	25	25	24,1	150	42	31,5	-	32	**MS1595**	T30
3	16	**A3SC R/L 2020K0316**	3,05	52	20	20	18,8	125	30	26,5	-	27	**MS1944**	T25
3	26	**A3SC R/L 2020K0326**	3,05	62	20	20	18,8	125	42	26,5	-	32	**MS1595**	T30
3	16	**A3SC R/L 2525M0316**	3,05	62	25	25	23,8	150	30	31,5	-	32	**MS1944**	T25
3	26	**A3SC R/L 2525M0326**	3,05	62	25	25	23,8	150	42	31,5	-	32	**MS1595**	T30
3	32	**A3SC R/L 3225P0332**	3,05	62	32	25	23,8	170	52	42,5	4	32	**MS1595**	T30
4	16	**A3SC R/L 2020K0416**	4,05	52	20	20	18,3	125	30	26,5	-	27	**MS1944**	T25
4	26	**A3SC R/L 2020K0426**	4,05	62	20	20	18,3	125	42	26,5	-	32	**MS1595**	T30
4	16	**A3SC R/L 2525M0416**	4,05	62	25	25	23,3	150	30	31,5	-	32	**MS1944**	T25
4	26	**A3SC R/L 2525M0426**	4,05	62	25	25	23,3	150	42	31,5	-	32	**MS1595**	T30
4	32	**A3SC R/L 3225P0432**	4,05	62	32	25	23,3	170	52	42,5	4	32	**MS1595**	T30

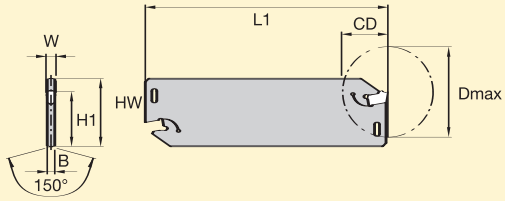
Order example:
ANSI Right hand: **A3SCR120116**
ISO Right hand: **A3SCR2020K0116**

ANSI Left hand: **A3SCL120116**
ISO Left hand: **A3SCL2020K0116**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

A2BNSN





*Seat size 1 blades only

HW inch	HW mm	Seat Size	Catalog number	W	W1†	H1	L1	B	Dmax*	CD	Assembly** Wrench
Inch											
.748	19	1	**A2BNSN19X0116**	.063	.051	.606	3.39	.071	1.181	.63	**170.137**
1.024	26	1	**A2BNSN26J0117**	.063	.051	.843	4.33	.071	1.339	.66	**170.137**
1.260	32	1	**A2BNSN32M0119**	.063	.051	.984	5.91	.095	1.496	.74	**170.137**
.748	19	2	**A2BNSN19X02**	.087	-	.606	3.39	.071	-	.80	**170.137**
1.024	26	2	**A2BNSN26G02**	.087	-	.843	3.54	.071	-	1.00	**170.137**
1.024	26	2	**A2BNSN26J02**	.087	-	.843	4.33	.071	-	1.00	**170.137**
1.024	26	2	**A2BNSN26M02**	.087	-	.843	5.91	.071	-	1.00	**170.137**
1.260	32	2	**A2BNSN32M02**	.087	-	.984	5.91	.071	-	2.40	**170.137**
1.024	26	3	**A2BNSN26G03**	.120	-	.843	3.54	.095	-	1.60	**170.137**
1.024	26	3	**A2BNSN26J03**	.120	-	.843	4.33	.095	-	1.60	**170.137**
1.024	26	3	**A2BNSN26M03**	.120	-	.843	5.91	.095	-	1.60	**170.137**
1.260	32	3	**A2BNSN32H03**	.120	-	.984	3.94	.095	-	2.00	**170.137**
1.260	32	3	**A2BNSN32M03**	.120	-	.984	5.91	.095	-	2.00	**170.137**
1.024	26	4	**A2BNSN26J04**	.159	-	.843	4.33	.134	-	1.60	**170.137**
1.260	32	4	**A2BNSN32M04**	.159	-	.984	5.91	.134	-	2.00	**170.137**
Metric											
-	19	1	**A2BNSN19X0116**	1,6	1,3	15,4	86	1,8	32	16	**170.137**
-	26	1	**A2BNSN26J0117**	1,6	1,3	21,4	110	1,8	34	17	**170.137**
-	32	1	**A2BNSN32M0119**	1,6	1,3	25,0	150	2,4	38	19	**170.137**
-	19	2	**A2BNSN19X02**	2,2	-	15,4	86	1,8	-	20	**170.137**
-	26	2	**A2BNSN26G02**	2,2		21,4	90	1,8		25	**170.137**
-	26	2	**A2BNSN26J02**	2,2	-	21,4	110	1,8	-	25	**170.137**
-	26	2	**A2BNSN26M02**	2,2		21,4	150	1,8		25	**170.137**
-	32	2	**A2BNSN32M02**	2,2	-	25,0	150	1,8	-	60	**170.137**
-	26	3	**A2BNSN26G03**	3,0		21,4	90	2,4		40	**170.137**
-	26	3	**A2BNSN26J03**	3,0	-	21,4	110	2,4	-	40	**170.137**
-	26	3	**A2BNSN26M03**	3,0		21,4	150	2,4		40	**170.137**
-	32	3	**A2BNSN32H03**	3,0		25,0	100	2,4		50	**170.137**
-	32	3	**A2BNSN32M03**	3,0	-	25,0	150	2,4	-	50	**170.137**
-	26	4	**A2BNSN26J04**	4,0	-	21,4	110	3,4	-	40	**170.137**
-	32	4	**A2BNSN32M04**	4,0	-	25,0	150	3,4	-	50	**170.137**

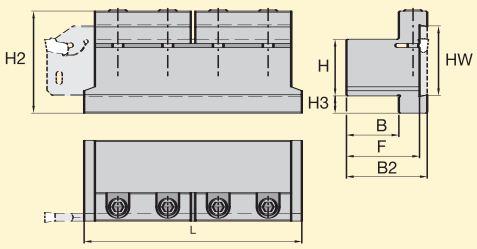
** Assembly wrench 170.137 must be ordered separately.
† Reduced blade tip width for seat size 1 blades.

To place an order, contact your authorized
Kennametal distributor or visit www.kennametal.com.

Order example:
ANSI Catalog number: **A2BNSN19X0116** ISO Catalog number: **A2BNSN19X0116**

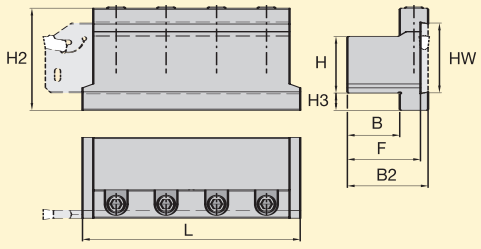
A2 Cut-Off Tool Blocks

A2TE – Integral Clamp



HW inch	HW mm	H	Catalog number	B	F	H2	B2	H3	L	Clamp	Clamp Screw	Hex (mm)
Inch												
.748	19	.625	**A2TEN1019**	.625	.945	1.18	1.02	.16	2.95	-	**125.525**	4
1.024	26	.750	**A2TEN1226**	.750	1.161	1.57	1.34	.32	3.39	-	**125.625**	5
1.260	32	1.000	**A2TEN1632**	1.000	1.417	1.89	1.63	.30	4.33	-	**125.630**	5
1.260	32	1.250	**A2TEN2032**	1.250	1.673	1.97	1.89	.13	4.33	-	**125.630**	5
Metric												
-	19	16	**A2TEN1616X19**	16	24,0	30	26,0	4,0	75	-	**125.520**	4
-	26	20	**A2TEN2020X26**	20	29,5	40	34,0	8,0	86	-	**125.625**	5
-	32	25	**A2TEN2520J32**	20	30,5	49	36,0	8,0	110	-	**125.630**	5
-	26	25	**A2TEN2523X26**	23	33,5	41	38,0	3,0	86	-	**125.625**	5
-	32	32	**A2TEN3228J32**	28	38,5	50	44,0	3,0	110	-	**125.630**	5
-	52	40	**A2TEN4035X52**	35	50,0	80	58,0	20,0	135	-	**125.835**	6
-	52	50	**A2TEN5038X52**	38	50,0	80	59,0	9,0	135	-	**125.835**	6

A2TZ – Removable Clamp



HW inch	HW mm	H	Catalog number	B	F	H2	B2	H3	L	Clamp	Clamp Screw	Hex (mm)
Inch												
.748	19	.750	**A2TZN1219**	.750	1.220	1.46	1.30	.16	3.39	**168.935**	**125.516**	4
1.024	26	.750	**A2TZN1226**	.750	1.201	1.65	1.38	.31	3.39	**168.682**	**125.616**	5
1.024	26	1.000	**A2TZN1626**	1.000	1.457	1.89	1.63	.31	3.39	**168.682**	**125.616**	5
1.260	32	1.000	**A2TZN1632**	1.000	1.417	1.89	1.63	.30	4.33	**168.936**	**125.616**	5
1.024	26	1.250	**A2TZN2026**	1.250	1.713	1.97	1.89	.12	3.39	**168.682**	**125.616**	5
1.260	32	1.250	**A2TZN2032**	1.250	1.673	1.97	1.89	.13	4.33	**168.936**	**125.616**	5
Metric												
-	26	20	**A2TZN2019X26**	19	33,5	44	38,0	9,0	86	**168.682**	**125.616**	5
-	32	25	**A2TZN2523J32**	23	34,5	48	40,0	8,0	110	**168.936**	**125.616**	5
-	32	32	**A2TZN3225J32**	25	36,5	48	42,0	3,0	110	**168.936**	**125.616**	5

Order example:
ANSI Catalog number: **A2TEN1019** ISO Catalog number: **A2TEN1616X19**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

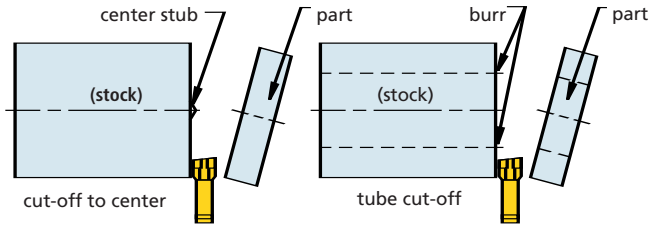
Definitions and Guidelines

1. width of cut (W) = width of the insert
2. lead angle = 0° (neutral) 6°, 10°, 15°, 16° (RH or LH)

To reduce the burr of cut-off faces:

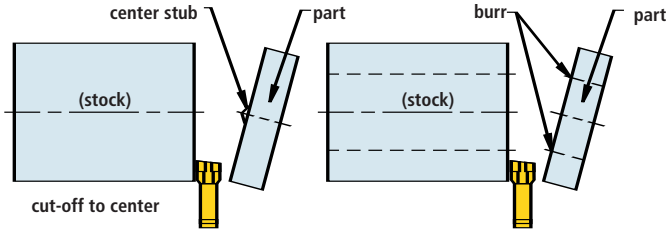
- To reduce burr formation on the part, use lead angle type insert (figure 1 & 2). Lead angle on a cut-off insert reduces the burr that remains on the part, but decreases tool life and increases tool side deflection and possibly cycle time.

fig. 1
insert selection **right-hand lead**



Right-hand lead insert leaves center stub or burr on stock and produces clean part.

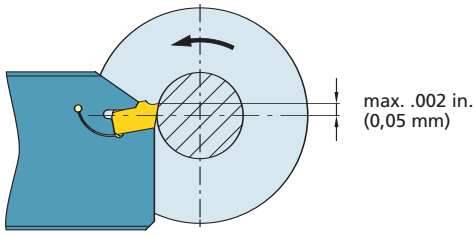
fig. 2
insert selection **left-hand lead**



Left-hand lead insert leaves center stub or burr on part and produces clean stock surface.

- Check tool height and maintain on center with part diameter.
- The cutting edge height should be within ±.004 in. (0,1 mm) to the center; recommended cutting position is .002 in. (0,05 mm) above center.

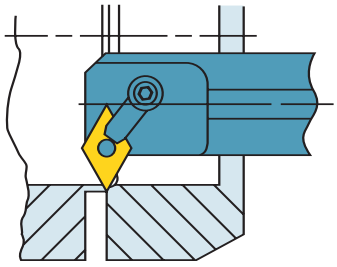
fig. 3
Above center:



- If 0° lead angle is mandatory, use the narrowest possible cut-off insert and blade. This will minimize the center stub or cut-off burr length. Decrease the feed rate to .002 in. (0,05 mm) or less at the point where diameter equals insert width.

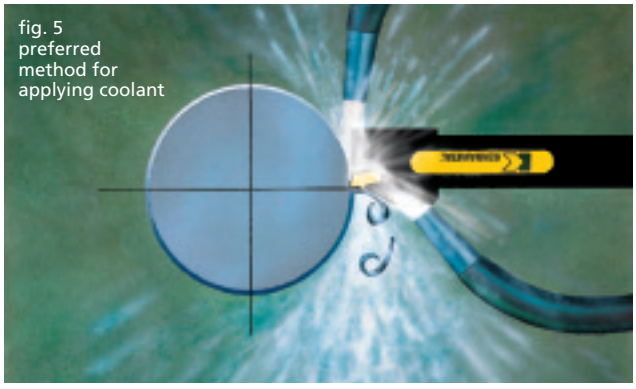
- On tubing-type parts that require a chamfer on the ID, align ID chamfer tool with cut-off surface. This will enable the chamfering operation to actually separate the part from the bar (see figure 4). Note the part may drop onto the chamfering bar which, in this case, will act like a part's catcher.

fig. 4
internal chamfer line up



To improve surface finish of cut-off faces:

- Use insert with 0° lead angle.
- Increase coolant flow or improve application technique, as shown in figure 5.
- Decrease the feed rate near the break-through point of the cut.
- Check that the grooving tool is set at a right angle.
- Use blades with the greatest possible face height and smallest possible cutting width.
- Increase the speed.



- Mount cut-off tool upside down. This allows gravity to remove chips and avoids cutting the chips twice. Another benefit from mounting the tool upside down is preventing chips from wedging between the tool insert and the groove side walls, which galls the side wall surfaces.

A2 and A3 compatibility:

A2 and A3 inserts can be interchangeably used on all screw-clamping holders within the following guidelines:

- A2 inserts can be used in A3 holders with equal seat sizes.
- A3 inserts CANNOT be used in self-clamping cut-off blades.
- A2 inserts are NOT recommended for face grooving toolholders.
- A2 inserts can be used in A3 modular blades if the guidelines noted above are followed.

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cncGcoder™ technical details
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The Kennametal Mobile also includes all the standard Palm software and features.

Kennametal Mobile
Order number: 2253135

Software upgrade for Mazak® controls
This upgrade works in combination with the standard Kennametal Mobile (2253135) and adds the ability to communicate with Mazak® controls.
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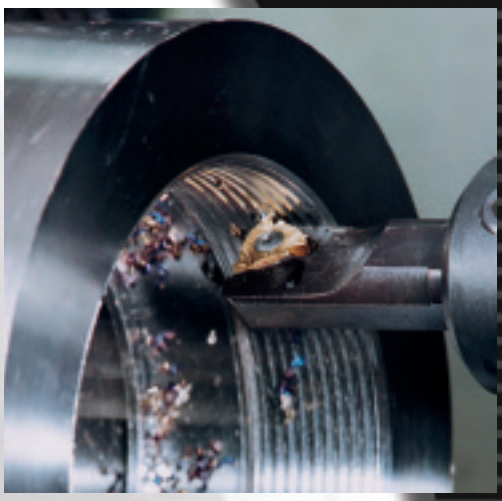
KENNAMETAL®
ENGINEERING YOUR COMPETITIVE EDGE

LT – Laydown Triangle Threading



- LT is the system of choice for:
  - fine-pitch threads
  - high-helix/multi-start threads
  - single-point threading
- Achieve unrestricted chip flow with the low-profile system design – ideal for ID threads.
- Maximize tool life and improve thread quality with variable shim angles that enable proper cutting geometry for high helix angle and reverse helix angle threading.
- Get more parts per insert with the economy of the LT insert's three cutting edges.

New KENNA UNIVERSAL Inserts

- Provide outstanding utility and value with precision molded LT-K thread form.
- Achieve excellent chip control
- Trouble-free threading with new KU25T grade
- Ideal for a variety of workpiece materials

KENNA UNIVERSAL – LT Threading

5 Easy Steps to Improve Productivity

What you need to know:

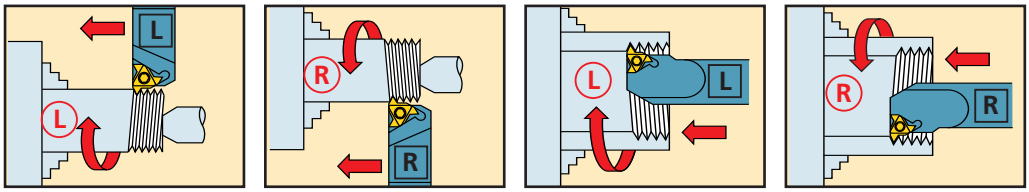
- external/internal operation
- spindle rotation/hand of thread
- feed direction

1st Step – Select Threading Method and Hand of Tooling

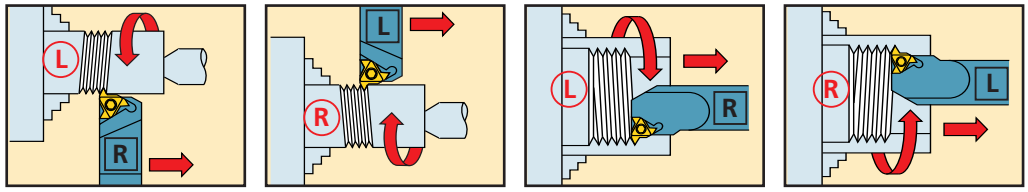
(L) or (R) – hand of thread

[L] or [R] – hand of holder/insert

• Feed direction toward the chuck – standard helix



• Feed direction away from the chuck – reverse helix



2nd Step – Choose Insert for Application

- See threading insert overview on page A98.
- Select cresting inserts for fully controlled thread form including diameter. Cresting inserts eliminate the need for deburring and are optimized for the best tool life at that pitch.
- Non-cresting partial profile inserts offer the flexibility to cut a variety of thread pitches with one insert.
- Note insert size for toolholder selection.

Insert Size	catalog number	KU25T
11	LT11NRA60K	●
16	LT16NRAG60K	●

3rd Step – Select Grade and Speed

Recommendations for Grade and Speed Selection – sfm (m/min)

Workpiece Material		Steel	Stainless Steel	Cast Iron	Non-Ferrous Metals	High-Temp Alloys
KENNA UNIVERSAL	Insert Style	-K Chipbreaker 				
	Selection	KU25T 80 - 450 (25 - 140)	KU25T 80 - 350 (25 - 100)	KU25T 100 - 360 (30 - 110)	KU25T 100 - 1000 (30 - 300)	KU25T 35 - 280 (10 - 85)

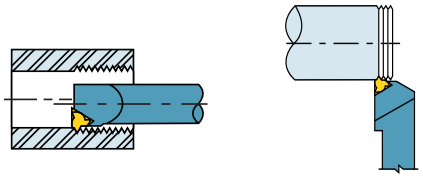
4th Step – Select Holder from Catalog Page

Note: The insert size must match the gage insert size of your toolholder selection:

Required information:

- external/internal operation
- minimum bore diameter (for internal operations)
- hand of tool
- insert size (gage insert)

Select the appropriate holder for the insert size and hand



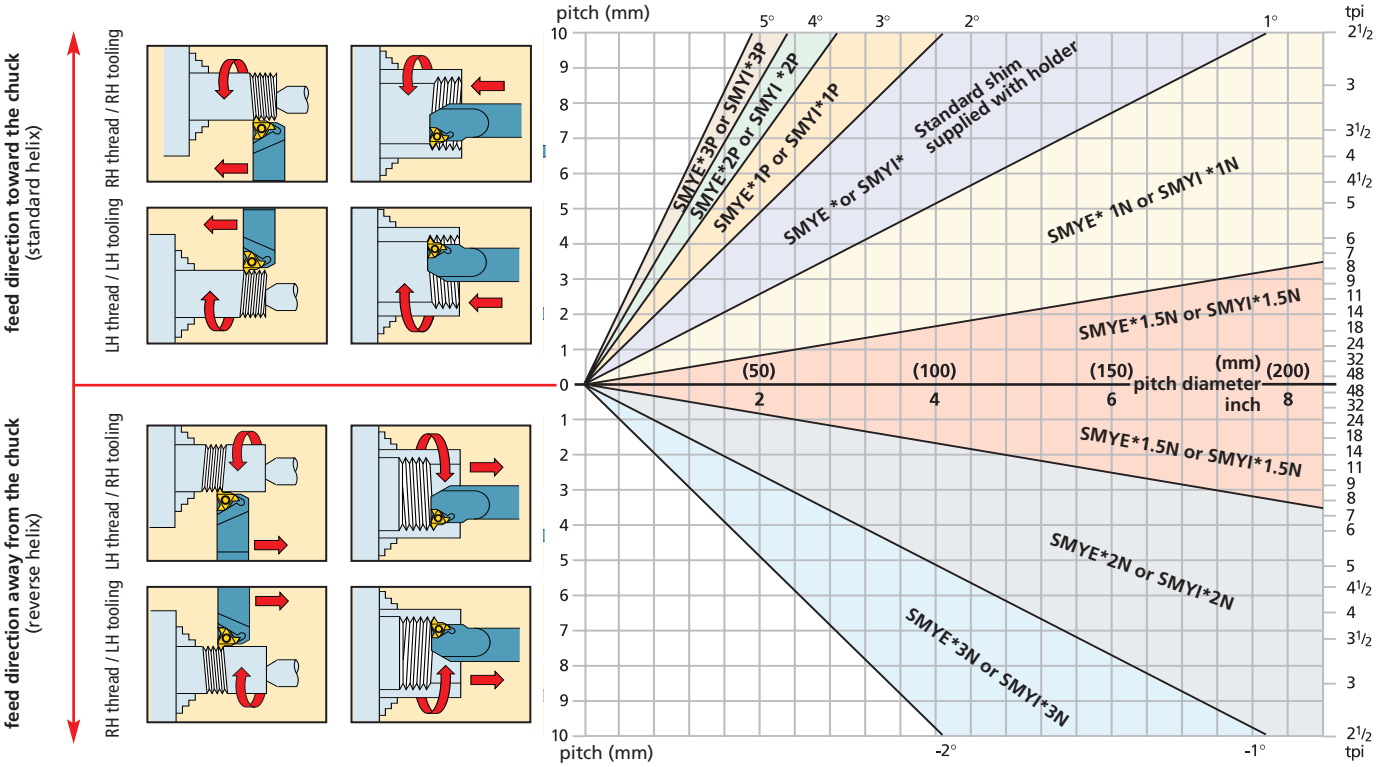
catalog number	gage insert	min. bore diameter	shim
S1212LSER3	LT16NR	.90 in	SMYI3
A2020LSER16	LT16NR	16 mm	SMYI3

5th Step – Select Appropriate Shim

Required information:

- thread form (tpi or pitch)
- pitch diameter
- helix method (hand of tool, feed direction, hand of thread)

Select the proper shim SMYE... for external RH or internal LH
SMYI... for internal RH or external LH



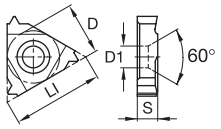
*denotes shim size: 3 = insert size 16 (3/8 in. D)
4 = insert size 22 (1/2 in. D)

If recommended shim is different from shim supplied with toolholder, order shim separately.

For additional technical support, visit www.kennametal.com or contact your Kennametal representative.

LT Threading – Insert Identification System

insert size	LI (mm)	D (inch)	D (mm)	S (inch)	S (mm)	D1 (inch)	D1 (mm)
11	11,0	.250	6,35	.126	3,20	.128	3,25
16	16,5	.375	9,52	.143	3,63	.155	3,94



ER – external right hand
EL – external left hand
NR – internal right hand
NL – internal left hand

K – KENNA UNIVERSAL chipbreaker

2. Cutting Edge Length (Size)
3. Hand of Insert
6. Chip Control

LT **16** **ER** **20** **UN** **K**

1. Type of Insert

LT-laydown triangle threading

4. Thread Pitch

designation	thread pitch (mm)	TPI
	partial profile	
A	0,50 - 1,5	48 - 16
AG	0,50 - 3,0	48 - 8
G	1,75 - 3,0	14 - 8
N	3,50 - 5,0	7 - 5
	full profile	
actual TPI or pitch in mm is designated	0,5 - 4,0	48 - 8

5. Thread Profile

ISO – ISO metric 60°
UN – American UN 60°
60 – Partial Profile non-cresting 60°

LT Threading – Insert Overview Table

Style -K		Thread Profile	Standard	Tolerance Class	Cresting	Application
LT-60K		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
LT-ISOK		Metric ISO	ISO R262, DIN 13	6g / 6H	Y	widely used metric 60° V-form for all industries
LT-UNK		American UN	ANSI B1.1:74	2A / 2B	Y	widely used inch-based 60° V-form for all industries

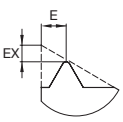
		Insert size	Catalog number Right hand	Catalog number Left hand	P pitch (mm)	TPI	TPF	RC inch	RC mm	EX inch	EX mm	E inch	E mm	KENNA UNIVERSAL KU25T
LT-ER-60K	**Partial Profile 60° External**	16	**LT16ERAG60K**		0,50-3,00	48-8	-	.003	0,08	.047	1,2	.067	1,7	●
non-cresting		16	**LT16ERG60K**		1,75-3,00	14-8	-	.007	0,18	.047	1,2	.067	1,7	●
LT-NR-60K	**Partial Profile 60° Internal**	11	**LT11NRA60K**		0,50-1,50	48-16	-	.001	0,03	.031	0,8	.035	0,9	●
non-cresting		16	**LT16NRAG60K**		0,50-3,00	48-8	-	.002	0,04	.047	1,2	.067	1,7	●
		16	**LT16NRG60K**		1,75-3,00	14-8	-	.003	0,08	.047	1,2	.067	1,7	●
LT-ER-ISOK	**ISO Metric External**	16	**LT16ER10ISOK**		1,00	-	-	-	-	.028	0,7	.028	0,7	●
		16	**LT16ER125ISOK**		1,25	-	-	-	-	.043	1,1	.031	0,8	●
		16	**LT16ER15ISOK**		1,50	-	-	-	-	.031	0,8	.039	1,0	●
		16	**LT16ER175ISOK**		1,75	-	-	-	-	.047	1,2	.059	1,2	●
		16	**LT16ER20ISOK**		2,00	-	-	-	-	.039	1,0	.051	1,3	●
		16	**LT16ER25ISOK**		2,50	-	-	-	-	.047	1,2	.059	1,5	●
		16	**LT16ER30ISOK**		3,00	-	-	-	-	.051	1,3	.059	1,5	●

Order example:
ANSI catalog number: **LT16ERAG60K**
Insert grade: **KU25T**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

LT Threading Inserts

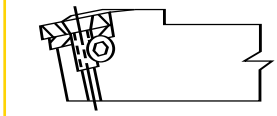
Dimensions and Grade Selection



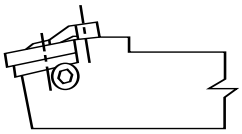
		Insert size	Catalog number Right hand	Catalog number Left hand	P pitch (mm)	TPI	TPF	RC inch	RC mm	EX inch	EX mm	E inch	E mm	KENNA UNIVERSAL KU25T
LT-NR-ISOK	**ISO Metric Internal**	11	**LT11NR10ISOK**		1,00	-	-	-	-	.028	0,7	.031	0,8	●
		11	**LT11NR125ISOK**		1,25	-	-	-	-	.028	0,7	.031	0,8	●
		16	**LT16NR10ISOK**		1,00	-	-	-	-	.028	0,7	.028	0,7	●
		16	**LT16NR15ISOK**		1,50	-	-	-	-	.031	0,8	.039	1,0	●
		16	**LT16NR175ISOK**		1,75	-	-	-	-	.047	1,2	.059	1,2	●
		16	**LT16NR20ISOK**		2,00	-	-	-	-	.039	1,0	.051	1,3	●
		16	**LT16NR25ISOK**		2,50	-	-	-	-	.047	1,2	.059	1,5	●
		16	**LT16NR30ISOK**		3,00	-	-	-	-	.051	1,3	.059	1,5	●
LT-ER-UNK	**American UN-External**	16	**LT16ER24UNK**		-	24	-	-	-	.028	0,7	.031	0,8	●
		16	**LT16ER20UNK**		-	20	-	-	-	.028	0,7	.031	0,8	●
		16	**LT16ER18UNK**		-	18	-	-	-	.028	0,7	.031	0,8	●
		16	**LT16ER16UNK**		-	16	-	-	-	.035	0,9	.043	1,1	●
		16	**LT16ER14UNK**		-	14	-	-	-	.047	1,2	.059	1,5	●
		16	**LT16ER12UNK**		-	12	-	-	-	.043	1,1	.055	1,4	●
		16	**LT16ER8UNK**		-	8	-	-	-	.047	1,2	.063	1,6	●
LT-NR-UNK	**American UN-Internal**	11	**LT11NR24UNK**		-	24	-	-	-	.028	0,7	.031	0,8	●
		11	**LT11NR20UNK**		-	20	-	-	-	.028	0,7	.031	0,8	●
		11	**LT11NR18UNK**		-	18	-	-	-	.028	0,7	.031	0,8	●
		16	**LT16NR16UNK**		-	16	-	-	-	.035	0,9	.043	1,1	●
		16	**LT16NR14UNK**		-	14	-	-	-	.047	1,2	.059	1,5	●
		16	**LT16NR12UNK**		-	12	-	-	-	.043	1,1	.055	1,4	●
		16	**LT16NR8UNK**		-	8	-	-	-	.051	1,3	.059	1,5	●

Order example:
Catalog number: **LT11NR10ISOK**
Insert grade: **KU25T**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.



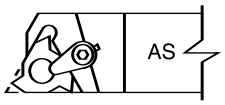
S = insert screw or clamp only



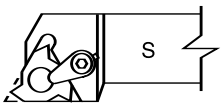
2. Insert Holding Method

L S

straight shank

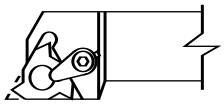


offset shank



3. Tool Style

AS R

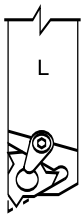


L = laydown triangle

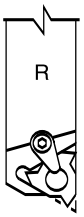
1. Insert Style

L

left hand

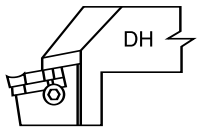


right hand



4. Hand of Tool

R



5. Drop Head

2525K (metric)

16 (inch)

Metric:
Shank height and width in mm and holder length according to ISO standard

Inch:
This position will show a significant two-digit number that indicates the holder cross section. For shanks 5/8" square and over, the number will represent the number of sixteenths of width and height. For shanks under 5/8" square, the number of sixteenths of cross section will be preceded by a zero. For rectangular holders, the first digit represents the number of eighths of width, and the second digit the number of quarters of height, except for a toolholder 1 1/4" x 1 1/2", which is given the number 91.

6. Shank Size

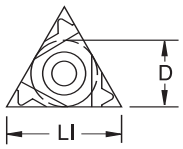
C – qualified back and end, 5" long
D – qualified back and end, 6" long
E – qualified back and end, 7" long
T – qualified back and end, 3.250" long
Q – qualified metric holder

8. Qualified Surface and Length

16 D

3

Size equals number of 1/8-inch increments of IC.



inch insert size	metric insert size	D (inch)	LI (mm)
2	11	1/4	11,0
3	16	3/8	16,5
4	22	1/2	22,0

7. Insert Size

*NOTE: Toolholders with primary shank sizes larger than 1/2-inch or 12 mm are supplied with clamp and insert screw. Secure the insert with either the clamp **or** insert screw. **Do not use both.**

LT Threading – Shim Identification System

1. Shim

SM

3. E – External I – Internal

Y E

2. Y – Shim for LT Standard Inserts

4. Insert Size

3

D value in 1/8ths inch

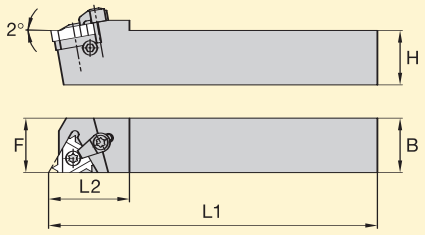
2P– 2° positive
1P– 1° positive
__– 0° neutral
1N– 1° negative
2N– 2° negative
3N– 3° negative

5. Shim Angle

2P

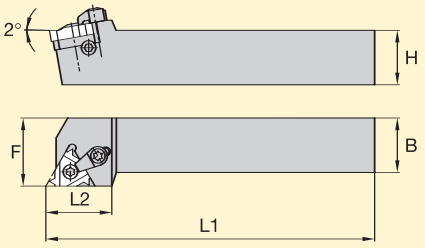
LT Threading Toolholders

LSA



Gage Insert	Catalog number	H	B	F	L1	L2	Shim	Shim Screw	Torx	Clamp Assembly	Torx	Insert Screw	Torx
Inch													
	Right hand												
LT16ER	**LSASR123**	.750	.750	.750	5.00	1.20	**SMYE3**	**SSY3T**	T10	**CKC3**	T15	**SSA3T**	T10
LT16ER	**LSASR163**	1.000	1.000	1.000	6.00	1.20	**SMYE3**	**SSY3T**	T10	**CKC3**	T15	**SSA3T**	T10
LT16ER	**LSASR203**	1.250	1.250	1.250	7.00	1.18	**SMYE3**	**SSY3T**	T10	**CKC3**	T15	**SSA3T**	T10
Metric													
	Right hand												
LT16ER	**LSASR2020K16**	20	20	20	125	30	**SMYE3**	**SSY3T**	T10	**CKC3**	T15	**SSA3T**	T10
LT16ER	**LSASR2525M16**	25	25	25	150	30	**SMYE3**	**SSY3T**	T10	**CKC3**	T15	**SSA3T**	T10
LT16ER	**LSASR3232P16**	32	32	32	170	30	**SMYE3**	**SSY3T**	T10	**CKC3**	T15	**SSA3T**	T10

LSS

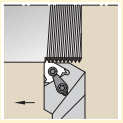


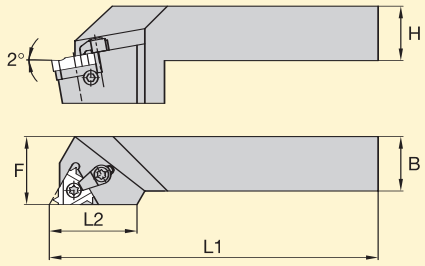
Gage Insert	Catalog number	H	B	F	L1	L2	Shim	Shim Screw	Torx	Clamp Assembly	Torx	Insert Screw	Torx
Inch													
	Right hand												
LT16ER	**LSSR123D**	.750	.750	1.000	6.00	1.00	**SMYE3**	**SSY3T**	T10	**CKC3**	T15	**SSA3T**	T10
LT16ER	**LSSR163D**	1.000	1.000	1.250	6.00	1.00	**SMYE3**	**SSY3T**	T10	**CKC3**	T15	**SSA3T**	T10
LT16ER	**LSSR203D**	1.250	1.250	1.500	6.00	1.00	**SMYE3**	**SSY3T**	T10	**CKC3**	T15	**SSA3T**	T10
Metric													
	Right hand												
LT16ER	**LSSR2020K16Q**	20	20	25	125	25	**SMYE3**	**SSY3T**	T10	**CKC3**	T15	**SSA3T**	T10
LT16ER	**LSSR2525M16Q**	25	25	32	150	25	**SMYI3**	**SSY3T**	T10	**CKC3**	T15	**SSA3T**	T10
LT16ER	**LSSR3232P16Q**	32	32	40	170	32	**SMYE3**	**SSY3T**	T10	**CKC3**	T15	**SSA3T**	T10

Order example:
ANSI Catalog number: **LSASR123** ISO Catalog number: **LSASR2020K16**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

LSS-DH





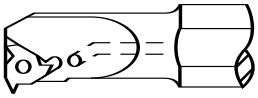
Gage Insert	Catalog number	H	B	F	L1	L2	Shim	Shim Screw	Torx	Clamp Assembly	Torx	Insert Screw	Torx
Inch													
	Right hand												
LT16ER	**LSSRDH123C**	.750	.750	1.000	5.00	1.50	**SMYE3**	**SSY3T**	T10	**CKC3**	T15	**SSA3T**	T10
Metric													
	Right hand												
LT16ER	**LSSRDH2020K16Q**	20	20	25	125	38	**SMYE3**	**SSY3T**	T10	**CKC3**	T15	**SSA3T**	T10
LT16ER	**LSSRDH2525M16**	25	25	32	150	38	**SMYE3**	**SSY3T**	T10	**CKC3**	T15	**SSA3T**	T10
LT16ER	**LSSRDH3232P16**	32	32	40	170	38	**SMYE3**	**SSY3T**	T10	**CKC3**	T15	**SSA3T**	T10

Visit
www.kennametal.com
for expert technical support and troubleshooting assistance

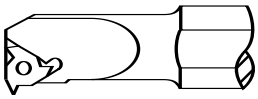
Order example:
ANSI Catalog number: **LSSRDH123C** ISO Catalog number: **LSSRDH2020K16Q**

LT Threading – Boring Bar Identification System

A – steel with coolant



S – steel without coolant



E – carbide with coolant

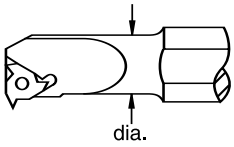
H – interchangeable head with coolant

1. Bar Type

S

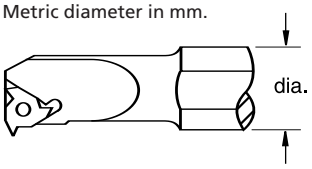
2. Primary Necked-Shank Bar Diameter

08



A two-digit number that indicates the primary bar diameter in 1/16-inch increments.
Metric diameter in mm.

A two-digit number that indicates the secondary bar diameter in 1/16-inch increments.
Metric diameter in mm.

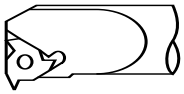


3. Secondary (Mounting) Bar Diameter

12

4. Insert Style

L



L – laydown triangle

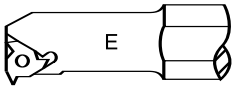
S = insert screw or clamp

5. Insert Holding Method

S

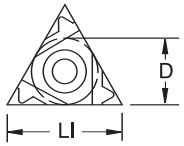
6. Bar Style

E



end cutting edge mount

Size equals number of 1/8-inch increments of IC.



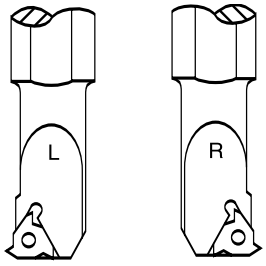
inch insert size	metric insert size	D (inch)	LI (mm)
2	11	1/4	11,0
3	16	3/8	16,5
4	22	1/2	22,0

8. Insert Size

R

2

7. Hand of Bar



left hand

right hand

*NOTE: Boring bars with primary bar diameters larger than 5/8-inch or 16 mm are supplied with clamp and insert screw. Secure the insert with either the clamp **or** insert screw. **Do not use both.**

LT Threading – Shim Identification System

1. Shim

SM

2. Y – Shim for LT Standard Inserts

Y

3. E – External I – Internal

E

4. Insert Size

3

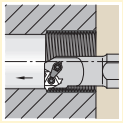
D value in 1/8ths inch

5. Shim Angle

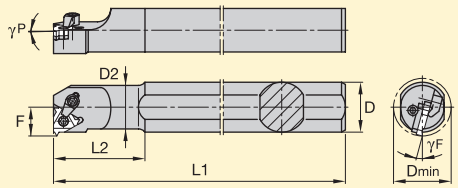
2P

2P– 2° positive
1P– 1° positive
__– 0° neutral
1N– 1° negative
2N– 2° negative
3N– 3° negative

S-LSE



Steel shank without
through coolant

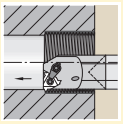


Gage Insert	Catalog number	D	Dmin	D2	F	L1	L2	A	γF°	γP°	Shim	Shim Screw	Torx	Clamp Assembly	Torx	Insert Screw	Torx
Inch																	
	Right hand																
LT11NR	**S0612LSER2**	.750	.500	.375	.280	7,00	1,00	-	-15.0	-1.5	-	-	-	**-**	-	**SSN2T**	T8
LT11NR	**S0812LSER2**	.750	.650	.500	.340	7,00	1,25	-	-15.0	-1.5	-	-	-	**-**	-	**SSN2T**	T8
LT16NR	**S1012LSER3**	.750	.800	.625	.460	7,00	1,50	-	-15.0	-1.5	-	-	-	**-**	-	**SSA3T**	T10
LT16NR	**S1212LSER3**	.750	.900	-	.510	7,00	-	-	-15.0	-1.5	**SMYI3**	**SSY3T**	T10	**CKC3**	T15	**SSA3T**	T10
LT16NR	**S1620LSER3**	1.250	1.200	1.000	.650	10,00	2,50	-	-15.0	-1.5	**SMYI3**	**SSY3T**	T10	**CKC3**	T15	**SSA3T**	T10
LT16NR	**S2020LSER3**	1.250	1.450	-	.770	10,00	-	-	-15.0	-1.5	**SMYI3**	**SSY3T**	T10	**CKC3**	T15	**SSA3T**	T10
Metric																	
	Right hand																
LT11NR	**A1010LSER11**	10	13	10,0	7,3	100	100	4,5	-15,0	-1,5	**-**	**-**	-	**-**	-	**SSN2T**	T8
LT11NR	**A1020LSER11**	20	13	10,0	7,3	180	25	4,5	-15,0	-1,5	**-**	**-**	-	**-**	-	**SSN2T**	T8
LT11NR	**A1320LSER11**	20	16	13,0	8,9	180	32	4,5	-15,0	-1,5	**-**	**-**	-	**-**	-	**SSN2T**	T8
LT16NR	**A1616LSER16**	16	20	16,0	11,3	150	32	4,5	-15,0	-1,5	**-**	**-**	-	**-**	-	**SSA3T**	T10
LT16NR	**A1320LSER16**	20	17	13,0	10,3	180	32	4,5	-15,0	-1,5	**-**	**-**	-	**-**	-	**SSA3T**	T10
LT16NR	**A1620LSER16**	20	20	16,0	11,5	180	40	4,5	-15,0	-1,5	**-**	**-**	-	**-**	-	**SSA3T**	T10
LT16NR	**A2020LSER16**	20	24	20,0	13,4	180	40	4,5	-15,0	-1,5	**SMYI3**	**SSY3T**	T10	**CKC3**	T15	**SSA3T**	T10
LT16NR	**A2525LSER16**	25	29	24,6	15,8	200	45	8,0	-15,0	-1,5	**SMYI3**	**SSY3T**	T10	**CKC3**	T15	**SSA3T**	T10
LT16NR	**A2532LSER16**	32	29	25,0	16,0	250	60	8,0	-15,0	-1,5	**SMYI3**	**SSY3T**	T10	**CKC3**	T15	**SSA3T**	T10

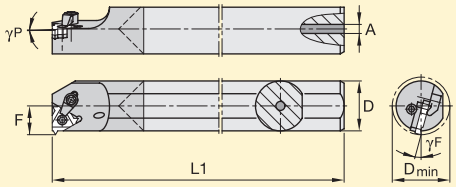
Order example:
ANSI Catalog number: **S0612LSER2** ISO Catalog number: **A1010LSER11**

LT Threading Boring Bars

E-LSE



Carbide shank with
through coolant



Gage Insert	Catalog number	D	Dmin	D2	F	L1	L2	A	γF°	γP°	Shim	Shim Screw	Torx	Clamp Assembly	Torx	Insert Screw	Torx
Inch																	
	Right hand																
LT11NR	**E06LSER2**	.375	.500	-	.280	6,00	-	.125	-15.0	-1.5	-	-	-	-	-	**SSN2T**	T8
LT11NR	**E08LSER2**	.500	.650	-	.340	8,00	-	.187	-15.0	-1.5	-	-	-	-	-	**SSN2T**	T8
LT16NR	**E10LSER3**	.625	.800	-	.460	10,00	-	.218	-15.0	-1.5	-	-	-	-	-	**SSA3T**	T10
LT16NR	**E12LSER3**	.750	.900	-	.510	10,00	-	.281	-15.0	-1.5	**SMYI3**	**SSY3T**	T10	**CKC3**	T15	**SSA3T**	T10
LT16NR	**E16LSER3**	1.000	1.200	-	.650	12,00	-	.312	-15.0	-1.5	**SMYI3**	**SSY3T**	T10	**CKC3**	T15	**SSA3T**	T10
Metric																	
	Right hand																
LT16NR	**E16RLSER16**	16	20	-	11,5	200	-	5,537	-15,0	-1,5	-	-	-	-	-	**SSA3T**	T10
LT16NR	**E20SLSER16**	20	24	-	13,4	250	-	7,137	-15,0	-1,5	**SMYI3**	**SSY3T**	T10	**CKC3**	T15	**SSA3T**	T10
LT16NR	**E25TLSER16**	25	29	-	15,8	300	-	7,925	-15,0	-1,5	**SMYI3**	**SSY3T**	T10	**CKC3**	T15	**SSA3T**	T10

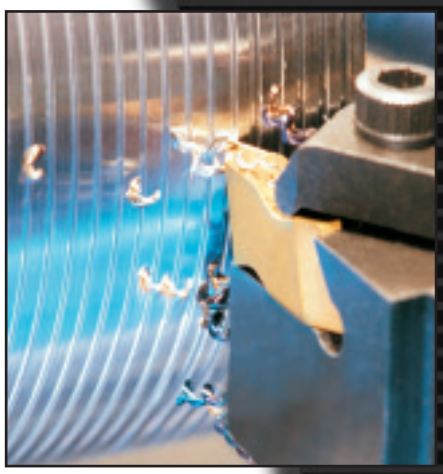
Order example:
ANSI Catalog number: **E06LSER2** ISO Catalog number: **E16RLSER16**

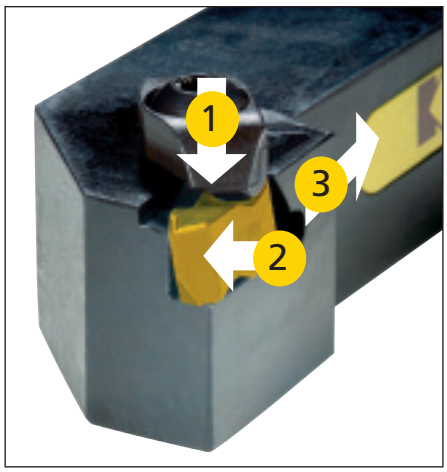
To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

TOP NOTCH Threading

Choosing the TOP NOTCH Threading System

- A superior choice for coarse pitch applications.
- A very rigid insert clamping design assures best tool life, surface finish, and workpiece quality.
- Simplicity of the Top Notch design does not require shim selection for thread helix angles. This helps to avoid mistakes on the shop floor.
- Reduces inventory by using the same Top Notch toolholders and boring bars with either threading or grooving inserts.
- Top Notch chipbreaker inserts eliminate long troublesome coils.
- Rigid clamping design prevents insert movement during high infeed threading applications.





Precision-Ground Thread Form

- minimizes built-up edge
- precisely cuts most common materials
- reduces cutting forces
- ensures accurate high-quality threads

Superior Chip Control

- eliminates long, troublesome coils
- excellent for internal threading operations
- available in partial profile inserts for 60° thread forms

New KENNA UNIVERSAL Inserts

- PVD-coated grade KU25T provides outstanding utility and value
- available in partial profile 60° thread forms both with and without chip control

KENNA UNIVERSAL – TOP NOTCH Threading

4 Easy Steps to Improve Productivity

What you need to know:

- external/internal operation
- spindle rotation/hand of thread
- feed direction

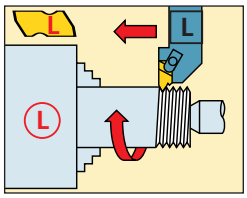
1st Step – Select Threading Method and Hand of Tooling

(L) or (R) – hand of thread

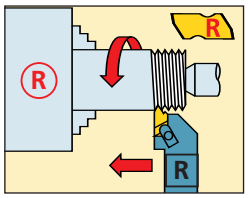
[L] or [R] – hand of toolholder

L or R – hand of insert

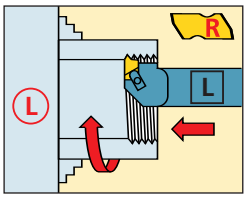
• Feed direction toward the chuck – standard helix



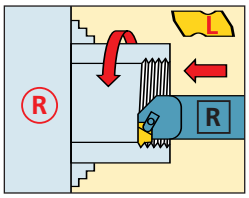
external left-hand thread



external right-hand thread

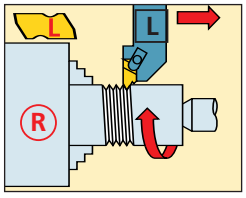


internal left-hand thread

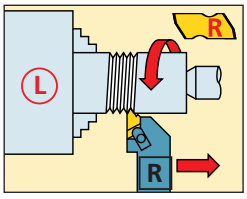


internal right-hand thread

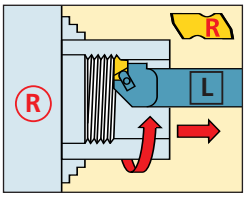
• Feed direction away from the chuck – reverse helix



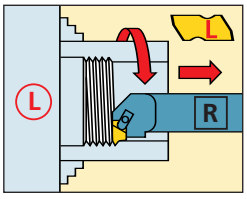
external right-hand thread



external left-hand thread



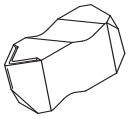
internal right-hand thread



internal left-hand thread

2nd Step – Choose Insert for Application

- Non-cresting partial profile inserts can cut a variety of thread pitches. Chip control is only available with partial profile inserts.
- Note insert size for toolholder selection.



Insert Size	Catalog Number
2	NT-2RK
3	NT-3RK
4	NT-4RK

3rd Step – Select Grade and Speed

Recommendations for Grade and Speed Selection – sfm (m/min)

Workpiece Material		Steel	Stainless Steel	Cast Iron	Non-Ferrous Metals	High-Temp Alloys
KENNA UNIVERSAL	Insert Style	chip control or neutral				
	Selection	KU25T 80 - 450 (25 - 140)	KU25T 80 - 350 (25 - 100)	KU25T 100 - 360 (30 - 110)	KU25T 100 - 1000 (30 - 300)	KU25T 35 - 280 (10 - 85)

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

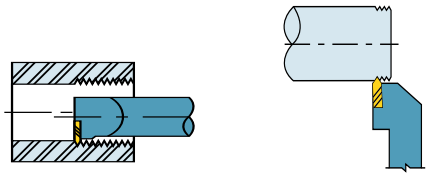
4th Step – Select Holder from Catalog Page

Note: The insert size must match the gage insert size of your toolholder selection:

Required information:

- external/internal operation
- minimum bore diameter (for internal operations)
- hand of tool
- insert size (gage insert)

Select the appropriate holder for the insert size and hand

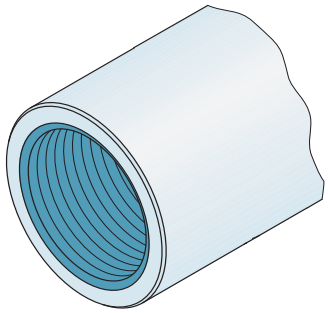


catalog number	gage insert
NSR-163D	N.3R
NSR-164D	N.4R

NOTE: TOP NOTCH toolholders and boring bars are listed with a gage insert to indicate the size and hand required. They are compatible with both grooving and threading inserts of the

TOP NOTCH Threading Example:

application: 8 TPI UN internal
right-hand thread
material: alloy steel
workpiece dia.: 4.5 inch (114,3 mm)
good cutting conditions
feed toward the chuck



Recommendation:

insert: NT3LK
grade: KU25T
insert size:: 3

boring bar: A40NER3 (metric: A50UNNTOR4)
gage insert: N.3L

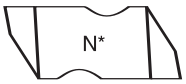
speed: 250 sfm (75 m/min)
infeed passes: 12 passes

See pages A68 for internal threading diameter limit chart.

For TOP NOTCH Threading Toolholders and Boring Bars, see pages A57-A66.

TOP NOTCH Threading – Insert Identification System

*TOP NOTCH



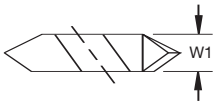
1. Type of Insert

N T 3 R K

2. Insert Style

T – 60° V thread

3. Insert Size



insert size	W1 (inch)	W1 (mm)
2	.150	3,81
3	.195	4,95
4	.255	6,48

See full dimension chart at left.

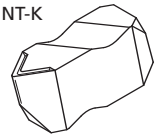
4. Hand of Insert

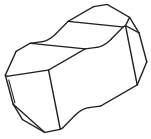
R – right
L – left

5. Additional Information

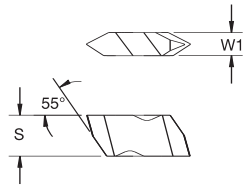
K – standard chip control
☐ – (blank) flat top

NT-K





*Kennametal proprietary standard only.



Top Notch Threading and Grooving Insert Dimensions

insert size	S		W1	
	inch	mm	inch	mm
2	.219	5,56	.150	3,81
3	.344	8,74	.195	4,95
4	.453	11,51	.255	6,48

Top Notch Threading – Insert Overview Table

Style		Thread Profile	Cresting	Application
Chip Control - K	Neutral			
NT-K 	NT 	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

		Insert size	Catalog number Right hand	Catalog number Left hand	Pitch (mm) external	Pitch (mm) internal	TPI external	TPI internal	RC inch	RC mm	E inch	E mm	KENNA UNIVERSAL KU25T
NT-K	**Partial Profile 60°**	2	**NT2RK**		0,70-3,00	1,25-3,50	8-36	7-20	.004	0,10	.075	1,91	●
		2		**NT2LK**	0,70-3,00	1,25-3,50	8-36	7-20	.004	0,10	.075	1,91	●
		3	**NT3RK**		1,25-4,00	2,00-5,00	6-20	5-12	.0065	0,17	.098	2,49	●
		3		**NT3LK**	1,25-4,00	2,00-5,00	6-20	5-12	.0065	0,17	.098	2,49	●
		4	**NT4RK**		1,25-6,25	2,00-6,25	4-20	4-12	.0065	0,17	.128	3,25	●
		4		**NT4LK**	1,25-6,25	2,00-6,25	4-20	4-12	.0065	0,17	.128	3,25	●
NT	**Partial Profile 60°**	2	**NT2R**		0,70-3,00	1,25-3,50	8-36	7-20	.004	0,10	.075	1,91	●
		2		**NT2L**	0,70-3,00	1,25-3,50	8-36	7-20	.004	0,10	.075	1,91	●
		3	**NT3R**		1,25-4,00	2,00-5,00	6-20	5-12	.0065	0,17	.098	2,49	●
		3		**NT3L**	1,25-4,00	2,00-5,00	6-20	5-12	.0065	0,17	.098	2,49	●
		4	**NT4R**		1,25-6,25	2,00-6,25	4-20	4-20	.0065	0,17	.128	3,25	●
		4		**NT4L**	1,25-6,25	2,00-6,25	4-20	4-20	.0065	0,17	.128	3,25	●

NOTE: For toolholders and boring bars, see pages A57-A66.
For technical data, see page A68.

Order example:
Catalog number: **NT2RK**
Insert grade: **KU25T**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

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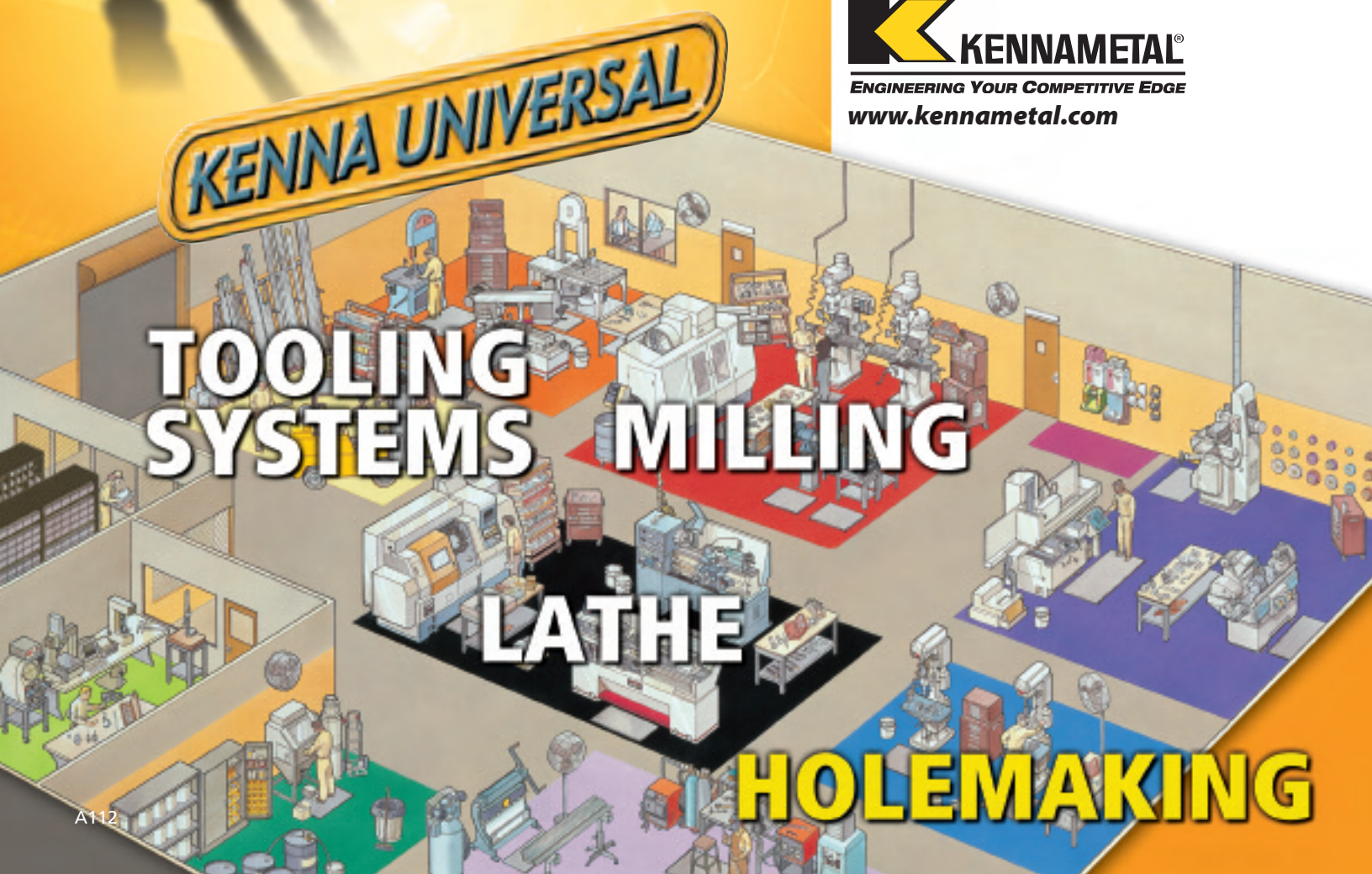


A112

Holemaking Products

Table of Contents

KENNA UNIVERSAL – Solid Carbide Drills

Cutting Data Recommendations for B966 KENNA UNIVERSAL Drills

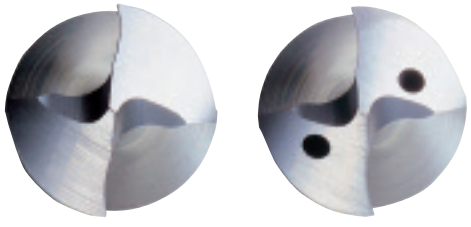
Without Coolant Holes

Cutting Groups	Material Group	Composition/Structure		Tensile Strength RM (MPa)	Hardness HB	Cutting Speed (m/min) (sfm)	Starting Recommendations for Feed (mm/r and ipr) by Drill Diameter D = 3mm .1181	D = 5mm .1969	D = 8mm .3150	D = 12mm .4724	D = 16mm .6299
1	Unalloyed steel, cast steel, machining steel	C= 0,10-0,25	Annealed, long-chipping	420	125	100 - 130 330 - 430	0,07 - 0,13 .003 - .005	0,11 - 0,19 .004 - .007	0,15 - 0,27 .006 - .011	0,21 - 0,36 .008 - .014	0,26 - 0,44 .010 - .017
2		C= 0,25-0,55	Annealed, long-chipping	640	190	100 - 300 330 - 980	0,08 - 0,13 .003 - .005	0,12 - 0,19 .005 - .007	0,17 - 0,27 .007 - .011	0,22 - 0,36 .009 - .014	0,27 - 0,44 .011 - .017
3		C= 0,25-0,55	Tempered	850	250	80 - 100 260 - 330	0,09 - 0,15 .004 - .006	0,13 - 0,22 .005 - .009	0,19 - 0,32 .007 - .013	0,26 - 0,44 .010 - .017	0,32 - 0,54 .013 - .021
4		C= 0,25-0,80	Annealed	915	270	60 - 110 200 - 360	0,09 - 0,15 .004 - .006	0,13 - 0,22 .005 - .009	0,19 - 0,32 .007 - .013	0,26 - 0,44 .010 - .017	0,32 - 0,54 .013 - .021
5		C= 0,25-0,80	Tempered	1020	300	60 - 110 200 - 360	0,09 - 0,15 .004 - .006	0,13 - 0,22 .005 - .009	0,19 - 0,32 .007 - .013	0,26 - 0,44 .010 - .017	0,32 - 0,54 .013 - .021
6	Low-alloy steel, cast steel, machining steel		Annealed	610	180	100 - 120 330 - 390	0,09 - 0,14 .004 - .006	0,13 - 0,21 .005 - .008	0,18 - 0,30 .007 - .012	0,25 - 0,41 .010 - .016	0,30 - 0,50 .012 - .020
7			Tempered	930	275	80 - 100 260 - 330	0,08 - 0,14 .003 - .006	0,12 - 0,20 .005 - .008	0,16 - 0,28 .006 - .011	0,22 - 0,37 .009 - .015	0,27 - 0,45 .011 - .018
8			Tempered	1020	300	70 - 90 230 - 300	0,08 - 0,14 .003 - .006	0,11 - 0,20 .004 - .008	0,16 - 0,27 .006 - .011	0,21 - 0,35 .008 - .014	0,25 - 0,43 .010 - .017
9			Tempered	1190	350	60 - 80 200 - 260	0,08 - 0,14 .003 - .006	0,12 - 0,20 .005 - .008	0,16 - 0,28 .006 - .011	0,22 - 0,37 .009 - .015	0,27 - 0,45 .011 - .018
10	High-alloy steel, cast steel, high-alloy tool steel		Annealed	680	200	50 - 70 160 - 230	0,06 - 0,10 .002 - .004	0,09 - 0,15 .004 - .006	0,13 - 0,23 .005 - .009	0,18 - 0,31 .007 - .012	0,23 - 0,40 .009 - .016
11			Hardened and Tempered	1100	325	40 - 60 130 - 200	0,06 - 0,10 .002 - .004	0,09 - 0,14 .004 - .006	0,13 - 0,21 .005 - .008	0,18 - 0,28 .007 - .011	0,22 - 0,36 .009 - .014
15	Gray cast iron	Pearlitic / Ferritic			180	170 - 210 560 - 690	0,11 - 0,19 .004 - .007	0,16 - 0,26 .006 - .010	0,22 - 0,36 .009 - .014	0,28 - 0,47 .011 - .019	0,34 - 0,57 .013 - .022
16		Pearlitic (Martensitic)			260	120 - 160 390 - 520	0,09 - 0,14 .004 - .006	0,13 - 0,21 .005 - .008	0,18 - 0,30 .007 - .012	0,25 - 0,40 .010 - .016	0,30 - 0,49 .012 - .019
17	Cast iron with nodular cast iron	Ferritic			160	130 - 160 430 - 520	0,09 - 0,16 .004 - .006	0,13 - 0,22 .005 - .009	0,17 - 0,30 .007 - .012	0,23 - 0,38 .009 - .015	0,27 - 0,46 .011 - .018
18		Pearlitic			250	100 - 120 330 - 390	0,09 - 0,14 .004 - .006	0,12 - 0,19 .005 - .007	0,15 - 0,24 .006 - .009	0,19 - 0,31 .007 - .012	0,23 - 0,36 .009 - .014
19	Malleable cast iron	Ferritic			130	140 - 170 460 - 560	0,09 - 0,15 .004 - .006	0,12 - 0,21 .005 - .008	0,17 - 0,29 .007 - .011	0,23 - 0,39 .009 - .015	0,28 - 0,47 .011 - .019
20		Pearlitic			230	120 - 170 390 - 560	0,08 - 0,15 .003 - .006	0,11 - 0,20 .004 - .008	0,15 - 0,27 .006 - .011	0,20 - 0,35 .008 - .014	0,24 - 0,42 .009 - .017

Notes: These are starting condition guidelines only. The machine tool, fixturing, toolholding, part configuration, and coolant capability may significantly influence specific applications. Use proper and safe machining practices. Make the set-up as rigid as possible. Decrease speed as material hardness increases.

Grade Description

Grade	
KC7315	**composition:** A PVD TiAlN coated straight 9.5% cobalt submicron grade. **application:** For most steels, gray cast iron, nodular iron, malleable iron, and compacted graphite iron. **geometry:** Heavily honed cutting edges with corner chamfer. Double margin design. Low thrust point.



With Coolant Holes

Cutting Groups	Material Group	Composition/Structure		Tensile Strength RM (MPa)	Hardness HB	Cutting Speed (m/min) (sfm)	Starting Recommendations for Feed (mm/r and ipr) by Drill Diameter					
							D = 4mm .1575	D = 6mm .2362	D = 8mm .3150	D = 12mm .4724	D = 16mm .6299	D = 20mm .7843
1.1	Unalloyed steel, cast steel, machining steel	C= 0,10-0,25	Annealed, long-chipping	420	125	130 - 170 430 - 560	0,09 - 0,14 .004 - .006	0,12 - 0,19 .005 - .007	0,14 - 0,24 .006 - .009	0,20 - 0,32 .008 - .013	0,24 - 0,40 .009 - .016	0,31 - 0,50 .012 - .020
1.2		C= 0,10-0,25	Annealed, short-chipping	420	125	140 - 180 460 - 590	0,09 - 0,15 .004 - .006	0,13 - 0,20 .005 - .008	0,16 - 0,25 .006 - .010	0,22 - 0,34 .009 - .013	0,27 - 0,43 .011 - .017	0,34 - 0,54 .013 - .021
2.1		C= 0,25-0,55	Annealed, long-chipping	640	190	110 - 150 360 - 490	0,09 - 0,15 .004 - .006	0,13 - 0,20 .005 - .008	0,16 - 0,25 .006 - .010	0,22 - 0,34 .009 - .013	0,27 - 0,43 .011 - .017	0,34 - 0,54 .013 - .021
2.2		C= 0,25-0,55	Annealed, short-chipping	640	190	120 - 170 390 - 560	0,11 - 0,18 .004 - .007	0,15 - 0,24 .006 - .009	0,18 - 0,29 .007 - .011	0,24 - 0,39 .009 - .015	0,29 - 0,47 .011 - .019	0,36 - 0,59 .014 - .023
3		C= 0,25-0,55	Tempered	850	250	90 - 130 300 - 430	0,10 - 0,16 .004 - .006	0,14 - 0,22 .006 - .009	0,17 - 0,27 .007 - .011	0,24 - 0,37 .009 - .015	0,29 - 0,47 .011 - .019	0,38 - 0,60 .015 - .024
4		C= 0,25-0,80	Annealed	915	270	80 - 120 260 - 390	0,10 - 0,16 .004 - .006	0,14 - 0,22 .006 - .009	0,17 - 0,27 .007 - .011	0,24 - 0,37 .009 - .015	0,29 - 0,47 .011 - .019	0,38 - 0,60 .015 - .024
5		C= 0,25-0,80	Tempered	1020	300	80 - 120 260 - 390	0,10 - 0,16 .004 - .006	0,14 - 0,22 .006 - .009	0,17 - 0,27 .007 - .011	0,24 - 0,37 .009 - .015	0,29 - 0,47 .011 - .019	0,38 - 0,60 .015 - .024
6	Low-alloy steel, cast steel, machining steel		Annealed	610	180	80 - 120 260 - 390	0,11 - 0,19 .004 - .007	0,15 - 0,25 .006 - .010	0,18 - 0,31 .007 - .012	0,24 - 0,42 .009 - .017	0,30 - 0,52 .012 - .020	0,38 - 0,65 .015 - .026
7			Tempered	930	275	80 - 120 260 - 390	0,10 - 0,17 .004 - .007	0,14 - 0,23 .006 - .009	0,17 - 0,29 .007 - .011	0,23 - 0,38 .009 - .015	0,28 - 0,47 .011 - .019	0,35 - 0,59 .014 - .023
8			Tempered	1020	300	80 - 120 260 - 390	0,09 - 0,15 .004 - .006	0,13 - 0,21 .005 - .008	0,16 - 0,25 .006 - .010	0,21 - 0,34 .008 - .013	0,26 - 0,42 .010 - .017	0,32 - 0,53 .013 - .021
9			Tempered	1190	350	70 - 90 230 - 300	0,10 - 0,17 .004 - .007	0,14 - 0,23 .006 - .009	0,17 - 0,28 .007 - .011	0,22 - 0,37 .009 - .015	0,27 - 0,45 .011 - .018	0,34 - 0,57 .013 - .022
10	High-alloy steel, cast steel, high-alloy tool steel		Annealed	680	200	60 - 80 200 - 260	0,07 - 0,11 .003 - .004	0,09 - 0,16 .004 - .006	0,12 - 0,20 .005 - .008	0,16 - 0,27 .006 - .011	0,20 - 0,35 .008 - .014	0,26 - 0,45 .010 - .018
11			Hardened and Tempered	1100	325	50 - 70 160 - 230	0,06 - 0,10 .002 - .004	0,09 - 0,15 .004 - .006	0,11 - 0,19 .004 - .007	0,15 - 0,26 .006 - .010	0,20 - 0,33 .008 - .013	0,26 - 0,43 .010 - .017
15	Gray cast iron	Pearlitic / Ferritic			180	150 - 210 490 - 690	0,14 - 0,24 .006 - .009	0,19 - 0,31 .007 - .012	0,23 - 0,38 .009 - .015	0,30 - 0,49 .012 - .019	0,36 - 0,60 .014 - .024	0,45 - 0,74 .018 - .029
16		Pearlitic (Martensitic)			260	100 - 160 330 - 520	0,12 - 0,19 .005 - .007	0,16 - 0,26 .006 - .010	0,20 - 0,32 .008 - .013	0,26 - 0,43 .010 - .017	0,33 - 0,53 .013 - .021	0,41 - 0,67 .016 - .026
17	Cast iron with nodular cast iron	Ferritic			160	100 - 160 330 - 520	0,12 - 0,19 .005 - .007	0,16 - 0,25 .006 - .010	0,20 - 0,31 .008 - .012	0,25 - 0,40 .010 - .016	0,31 - 0,48 .012 - .019	0,38 - 0,60 .015 - .024
18		Pearlitic			250	100 - 160 330 - 520	0,09 - 0,14 .004 - .006	0,12 - 0,19 .005 - .007	0,14 - 0,23 .006 - .009	0,19 - 0,31 .007 - .012	0,24 - 0,39 .009 - .015	0,30 - 0,49 .012 - .019
19	Malleable cast iron	Ferritic			130	120 - 180 390 - 590	0,12 - 0,19 .005 - .007	0,15 - 0,25 .006 - .010	0,19 - 0,30 .007 - .012	0,24 - 0,40 .009 - .016	0,30 - 0,48 .012 - .019	0,37 - 0,60 .015 - .024
20		Pearlitic			230	120 - 180 390 - 590	0,10 - 0,17 .004 - .007	0,13 - 0,22 .005 - .009	0,16 - 0,27 .006 - .011	0,21 - 0,35 .008 - .014	0,25 - 0,43 .010 - .017	0,31 - 0,53 .012 - .021

Notes: These are starting condition guidelines only. The machine tool, fixturing, toolholding, part configuration, and coolant capability may significantly influence specific applications. Use proper and safe machining practices. Make the set-up as rigid as possible. Decrease speed as material hardness increases.

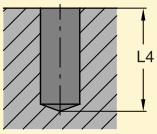
To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

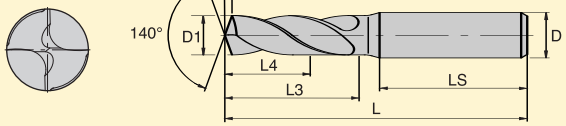
KENNA UNIVERSAL – Solid Carbide Drills

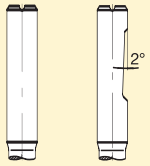
Type B966 without Coolant Holes

DIN 6537K - Short

For Steel and Cast Iron







D1 Inch	D1 Metric	Catalog number A shank/F shank	Grade KC7315 A	Grade KC7315 F	D	L	L3	L4 max.	LS	L5
.1181	3,00	**B966 A/F 03000**	●	●	6	62	20	14	36	0,5
.1378	3,50	**B966 A/F 03500**	●	●	6	62	20	14	36	0,6
.1457	3,70	**B966 A/F 03700**	●	●	6	62	20	14	36	0,6
.1496	3,80	**B966 A/F 03800**	●	●	6	66	24	17	36	0,6
.1575	4,00	**B966 A/F 04000**	●	●	6	66	24	17	36	0,7
.1654	4,20	**B966 A/F 04200**	●	●	6	66	24	17	36	0,7
.1772	4,50	**B966 A/F 04500**	●	●	6	66	24	17	36	0,7
.1811	4,60	**B966 A/F 04600**	●	●	6	66	24	17	36	0,8
.1890	4,80	**B966 A/F 04800**	●	●	6	66	28	20	36	0,8
.1969	5,00	**B966 A/F 05000**	●	●	6	66	28	20	36	0,8
.2165	5,50	**B966 A/F 05500**	●	●	6	66	28	20	36	0,9
.2244	5,70	**B966 A/F 05700**	●	●	6	66	28	20	36	1,0
.2283	5,80	**B966 A/F 05800**	●	●	6	66	28	20	36	1,0
.2362	6,00	**B966 A/F 06000**	●	●	6	66	28	20	36	1,0
.2559	6,50	**B966 A/F 06500**	●	●	8	79	34	24	36	1,1
.2677	6,80	**B966 A/F 06800**	●	●	8	79	34	24	36	1,1
.2756	7,00	**B966 A/F 07000**	●	●	8	79	34	24	36	1,2
.2913	7,40	**B966 A/F 07400**	●	●	8	79	41	29	36	1,3
.2953	7,50	**B966 A/F 07500**	●	●	8	79	41	29	36	1,3
.3071	7,80	**B966 A/F 07800**	●	●	8	79	41	29	36	1,3
.3150	8,00	**B966 A/F 08000**	●	●	8	79	41	29	36	1,4
.3346	8,50	**B966 A/F 08500**	●	●	10	89	47	35	40	1,4
.3465	8,80	**B966 A/F 08800**	●	●	10	89	47	35	40	1,5
.3543	9,00	**B966 A/F 09000**	●	●	10	89	47	35	40	1,5
.3661	9,30	**B966 A/F 09300**	●	●	10	89	47	35	40	1,6
.3740	9,50	**B966 A/F 09500**	●	●	10	89	47	35	40	1,6
.3858	9,80	**B966 A/F 09800**	●	●	10	89	47	35	40	1,7
.3937	10,00	**B966 A/F 10000**	●	●	10	89	47	35	40	1,7
.4016	10,20	**B966 A/F 10200**	●	●	12	102	55	40	45	1,7
.4134	10,50	**B966 A/F 10500**	●	●	12	102	55	40	45	1,8
.4213	10,70	**B966 A/F 10700**	●	●	12	102	55	40	45	1,8
.4331	11,00	**B966 A/F 11000**	●	●	12	102	55	40	45	1,9
.4409	11,20	**B966 A/F 11200**	●	●	12	102	55	40	45	1,9
.4528	11,50	**B966 A/F 11500**	●	●	12	102	55	40	45	2,0
.4606	11,70	**B966 A/F 11700**	●	●	12	102	55	40	45	2,0
.4724	12,00	**B966 A/F 12000**	●	●	12	102	55	40	45	2,1
.4921	12,50	**B966 A/F 12500**	●	●	14	107	60	43	45	2,2
.5000	12,70	**B966 A/F 12700**	●	●	14	107	60	43	45	2,2
.5118	13,00	**B966 A/F 13000**	●	●	14	107	60	43	45	2,2
.5315	13,50	**B966 A/F 13500**	●	●	14	107	60	43	45	2,3
.5394	13,70	**B966 A/F 13700**	●	●	14	107	60	43	45	2,4
.5512	14,00	**B966 A/F 14000**	●	●	14	107	60	43	45	2,4
.5709	14,50	**B966 A/F 14500**	●	●	16	115	65	45	48	2,5
.5787	14,70	**B966 A/F 14700**	●	●	16	115	65	45	48	2,5
.5906	15,00	**B966 A/F 15000**	●	●	16	115	65	45	48	2,6
.6102	15,50	**B966 A/F 15500**	●	●	16	115	65	45	48	2,7
.6181	15,70	**B966 A/F 15700**	●	●	16	115	65	45	48	2,7
.6299	16,00	**B966 A/F 16000**	●	●	16	115	65	45	48	2,8

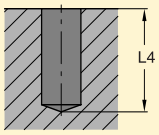
Order example:
A shank: **B966A03000**
Grade: **KC7315**

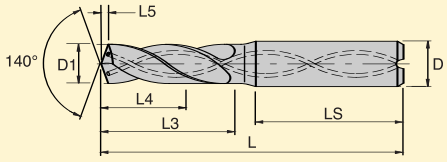
F shank: **B966F03000**
Grade: **KC7315**

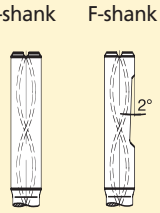
To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

DIN 6537K - Short

For Steel and Cast Iron







Inch	D1 Fraction	Metric	Catalog number A shank/F shank	Grade KC7315 A	Grade KC7315 F	D	L	L3	L4 max.	LS	L5
.1563	5/32	3,970	**B976A03970**	●		6	66	24	17	36	0,7
.1575		4,000	**B976 A/F 04000**	●	●	6	66	24	17	36	0,7
.1654		4,200	**B976 A/F 04200**	●	●	6	66	24	17	36	0,7
.1772		4,500	**B976 A/F 04500**	●	●	6	66	24	17	36	0,7
.1811		4,600	**B976 A/F 04600**	●	●	6	66	24	17	36	0,8
.1875	3/16	4,763	**B976A04763**	●		6	66	28	20	36	0,8
.1890		4,800	**B976 A/F 04800**	●	●	6	66	28	20	36	0,8
.1969		5,000	**B976 A/F 05000**	●	●	6	66	28	20	36	0,8
.2165		5,500	**B976 A/F 05500**	●	●	6	66	28	20	36	0,9
.2195		5,575	**B976A05575**	●		6	66	28	20	36	0,9
.2244		5,700	**B976 A/F 05700**	●	●	6	66	28	20	36	1,0
.2283		5,800	**B976 A/F 05800**	●	●	6	66	28	20	36	1,0
.2362		6,000	**B976 A/F 06000**	●	●	6	66	28	20	36	1,0
.2500	1/4	6,350	**B976A06350**	●		8	79	34	24	36	1,1
.2559		6,500	**B976 A/F 06500**	●	●	8	79	34	24	36	1,1
.2656	17/64	6,746	**B976A06746**	●		8	79	34	24	36	1,1
.2677		6,800	**B976 A/F 06800**	●	●	8	79	34	24	36	1,1
.2756		7,000	**B976 A/F 07000**	●	●	8	79	34	24	36	1,2
.2813	9/32	7,145	**B976A07145**	●		8	79	41	29	36	1,2
.2913		7,400	**B976 A/F 07400**	●	●	8	79	41	29	36	1,3
.2953		7,500	**B976 A/F 07500**	●	●	8	79	41	29	36	1,3
.2969	19/64	7,541	**B976A07541**	●		8	79	41	29	36	1,3
.3071		7,800	**B976 A/F 07800**	●	●	8	79	41	29	36	1,3
.3125	5/16	7,938	**B976A07938**	●		8	79	41	29	36	1,3
.3150		8,000	**B976 A/F 08000**	●	●	8	79	41	29	36	1,4
.3281	21/64	8,334	**B976A08334**	●		10	89	47	35	40	1,4
.3346		8,500	**B976 A/F 08500**	●	●	10	89	47	35	40	1,4
.3438	11/32	8,733	**B976A08733**	●		10	89	47	35	40	1,5
.3465		8,800	**B976 A/F 08800**	●	●	10	89	47	35	40	1,5
.3543		9,000	**B976 A/F 09000**	●	●	10	89	47	35	40	1,5
.3594	23/64	9,129	**B976A09129**	●		10	89	47	35	40	1,6
.3661		9,300	**B976 A/F 09300**	●	●	10	89	47	35	40	1,6
.3740		9,500	**B976 A/F 09500**	●	●	10	89	47	35	40	1,6
.3750	3/8	9,525	**B976A09525**	●		10	89	47	35	40	1,6
.3858		9,800	**B976 A/F 09800**	●	●	10	89	47	35	40	1,7
.3906	25/64	9,921	**B976A09921**	●		10	89	47	35	40	1,7
.3937		10,000	**B976 A/F 10000**	●	●	10	89	47	35	40	1,7

Continued on next page.

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

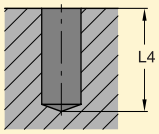
Order example:
A shank: **B976A03970**
Grade: **KC7315**

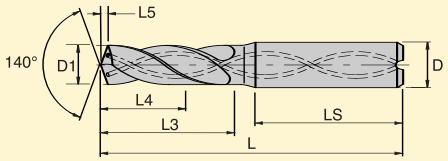
F shank: **B976F04000**
Grade: **KC7315**

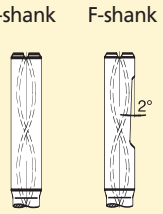
KENNA UNIVERSAL – Solid Carbide Drills

Type B976 with Coolant Holes (continued)

Continued from page B5.







Inch	D1 Fraction	Metric	Catalog number A shank/F shank	Grade KC7315 A	Grade KC7315 F	D	L	L3	L4 max.	LS	L5
.4016		10,200	**B976 A/F 10200**	●	●	12	102	55	40	45	1,7
.4063	13/32	10,320	**B976A10320**	●		12	102	55	40	45	1,8
.4134		10,500	**B976 A/F 10500**	●	●	12	102	55	40	45	1,8
.4213		10,700	**B976 A/F 10700**	●	●	12	102	55	40	45	1,8
.4219	27/64	10,716	**B976A10716**	●		12	102	55	40	45	1,8
.4331		11,000	**B976 A/F 11000**	●	●	12	102	55	40	45	1,9
.4375	7/16	11,113	**B976A11113**	●		12	102	55	40	45	1,9
.4409		11,200	**B976 A/F 11200**	●	●	12	102	55	40	45	1,9
.4528		11,500	**B976 A/F 11500**	●	●	12	102	55	40	45	2,0
.4531	29/64	11,509	**B976A11509**	●		12	102	55	40	45	2,0
.4606		11,700	**B976 A/F 11700**	●	●	12	102	55	40	45	2,0
.4688	15/32	11,908	**B976A11908**	●		12	102	55	40	45	2,0
.4724		12,000	**B976 A/F 12000**	●	●	12	102	55	40	45	2,1
.4844	31/64	12,304	**B976A12304**	●		14	107	60	43	45	2,1
.4921		12,500	**B976 A/F 12500**	●	●	14	107	60	43	45	2,2
.5000	1/2	12,700	**B976 A/F 12700**	●	●	14	107	60	43	45	2,2
.5118		13,000	**B976 A/F 13000**	●	●	14	107	60	43	45	2,2
.5315		13,500	**B976 A/F 13500**	●	●	14	107	60	43	45	2,3
.5394		13,700	**B976 A/F 13700**	●	●	14	107	60	43	45	2,4
.5512		14,000	**B976 A/F 14000**	●	●	14	107	60	43	45	2,4
.5625	9/16	14,288	**B976A14288**	●		16	115	65	45	48	2,5
.5709		14,500	**B976 A/F 14500**	●	●	16	115	65	45	48	2,5
.5787		14,700	**B976 A/F 14700**	●	●	16	115	65	45	48	2,5
.5906		15,000	**B976 A/F 15000**	●	●	16	115	65	45	48	2,6
.6102		15,500	**B976 A/F 15500**	●	●	16	115	65	45	48	2,7
.6181		15,700	**B976 A/F 15700**	●	●	16	115	65	45	48	2,7
.6250	5/8	15,875	**B976A15875**	●		16	115	65	45	48	2,7
.6299		16,000	**B976 A/F 16000**	●	●	16	115	65	45	48	2,8
.6496		16,500	**B976 A/F 16500**	●	●	18	123	73	51	48	2,9
.6693		17,000	**B976 A/F 17000**	●	●	18	123	73	51	48	3,0
.6875	11/16	17,463	**B976A17463**	●		18	123	73	51	48	3,0
.6890		17,500	**B976 A/F 17500**	●	●	18	123	73	51	48	3,0
.7087		18,000	**B976 A/F 18000**	●	●	18	123	73	51	48	3,1
.7283		18,500	**B976 A/F 18500**	●	●	20	131	79	55	50	3,2
.7480		19,000	**B976 A/F 19000**	●	●	20	131	79	55	50	3,3
.7500	3/4	19,050	**B976A19050**	●		20	131	79	55	50	3,3
.7677		19,500	**B976 A/F 19500**	●	●	20	131	79	55	50	3,4
.7874		20,000	**B976 A/F 20000**	●	●	20	131	79	55	50	3,5

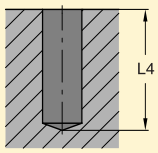
Order example:
A shank: **B976A10200**
Grade: **KC7315**

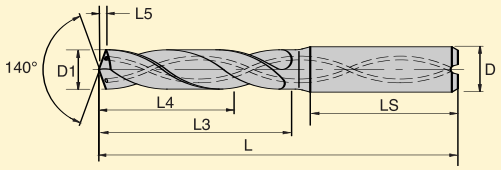
F shank: **B976F10200**
Grade: **KC7315**

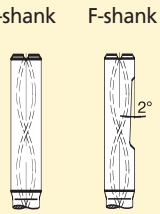
To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

DIN 6537L - Long

For Steel and Cast Iron







Inch	D1 Fraction	Metric	Catalog number A shank/F shank	Grade KC7315 A	Grade KC7315 F	D	L	L3	L4 max.	LS	L5
.1563	5/32	3,970	**B977A03970**	●		6	74	36	29	36	0,7
.1575		4,000	**B977 A/F 04000**	●	●	6	74	36	29	36	0,7
.1654		4,200	**B977 A/F 04200**	●	●	6	74	36	29	36	0,7
.1772		4,500	**B977 A/F 04500**	●	●	6	74	36	29	36	0,7
.1803		4,580	**B977A04580**	●		6	74	36	29	36	0,8
.1811		4,600	**B977 A/F 04600**	●	●	6	74	36	29	36	0,8
.1820		4,623	**B977A04623**	●		6	74	36	29	36	0,8
.1875	3/16	4,763	**B977A04763**	●		6	82	44	35	36	0,8
.1890		4,800	**B977 A/F 04800**	●	●	6	82	44	35	36	0,8
.1969		5,000	**B977 A/F 05000**	●	●	6	82	44	35	36	0,8
.2130		5,410	**B977A05410**	●		6	82	44	35	36	0,9
.2165		5,500	**B977 A/F 05500**	●	●	6	82	44	35	36	0,9
.2188	7/32	5,558	**B977A05558**	●		6	82	44	35	36	0,9
.2283		5,800	**B977 A/F 05800**	●	●	6	82	44	35	36	1,0
.2362		6,000	**B977 A/F 06000**	●	●	6	82	44	35	36	1,0
.2500	1/4	6,350	**B977A06350**	●		8	91	53	43	36	1,1
.2559		6,500	**B977 A/F 06500**	●	●	8	91	53	43	36	1,1
.2570		6,528	**B977A06528**	●		8	91	53	43	36	1,1
.2677		6,800	**B977 A/F 06800**	●	●	8	91	53	43	36	1,1
.2720		6,909	**B977A06909**	●		8	91	53	43	36	1,2
.2756		7,000	**B977 A/F 07000**	●	●	8	91	53	43	36	1,2
.2813	9/32	7,145	**B977A07145**	●		8	91	53	43	36	1,2
.2913		7,400	**B977 A/F 07400**	●	●	8	91	53	43	36	1,3
.2953		7,500	**B977 A/F 07500**	●	●	8	91	53	43	36	1,3
.2969	19/64	7,541	**B977A07541**	●		8	91	53	43	36	1,3
.3071		7,800	**B977 A/F 07800**	●	●	8	91	53	43	36	1,3
.3125	5/16	7,938	**B977A07938**	●		8	91	53	43	36	1,3
.3150		8,000	**B977 A/F 08000**	●	●	8	91	53	43	36	1,4
.3281	21/64	8,334	**B977A08334**	●		10	103	61	49	40	1,4
.3320		8,433	**B977A08433**	●		10	103	61	49	40	1,4
.3346		8,500	**B977 A/F 08500**	●	●	10	103	61	49	40	1,4
.3465		8,800	**B977 A/F 08800**	●	●	10	103	61	49	40	1,5
.3543		9,000	**B977 A/F 09000**	●	●	10	103	61	49	40	1,5
.3594	23/64	9,129	**B977A09129**	●		10	103	61	49	40	1,6
.3661		9,300	**B977 A/F 09300**	●	●	10	103	61	49	40	1,6
.3680		9,347	**B977A09347**	●		10	103	61	49	40	1,6
.3740		9,500	**B977 A/F 09500**	●	●	10	103	61	49	40	1,6
.3750	3/8	9,525	**B977A09525**	●		10	103	61	49	40	1,6
.3820		9,703	**B977A09703**	●		10	103	61	49	40	1,7
.3837		9,746	**B977A09746**	●		10	103	61	49	40	1,7
.3858		9,800	**B977 A/F 09800**	●	●	10	103	61	49	40	1,7
.3906		9,921	**B977A09921**	●		10	103	61	49	40	1,7
.3937		10,000	**B977 A/F 10000**	●	●	10	103	61	49	40	1,7

Continued on next page.

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

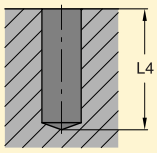
Order example:
A shank: **B977A03970**
Grade: **KC7315**

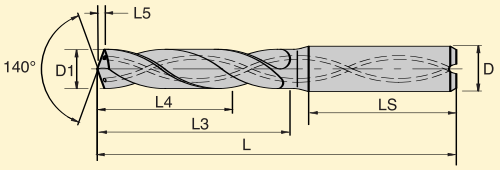
F shank: **B977F04000**
Grade: **KC7315**

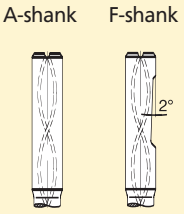
KENNA UNIVERSAL – Solid Carbide Drills

Type B977 with Coolant Holes (continued)

Continued from page B7.







Inch	D1 Fraction	Metric	Catalog number A shank/F shank	Grade KC7315 A	Grade KC7315 F	D	L	L3	L4 max.	LS	L5
.4016		10,200	**B977 A/F 10200**	●	●	12	118	71	56	45	1,7
.4063	13/32	10,320	**B977A10320**	●		12	118	71	56	45	1,8
.4134		10,500	**B977 A/F 10500**	●	●	12	118	71	56	45	1,8
.4213		10,700	**B977 A/F 10700**	●	●	12	118	71	56	45	1,8
.4219	27/64	10,716	**B977A10716**	●		12	118	71	56	45	1,8
.4331		11,000	**B977 A/F 11000**	●	●	12	118	71	56	45	1,9
.4375	7/16	11,113	**B977A11113**	●		12	118	71	56	45	1,9
.4409		11,200	**B977 A/F 11200**	●	●	12	118	71	56	45	1,9
.4528		11,500	**B977 A/F 11500**	●	●	12	118	71	56	45	2,0
.4531	29/64	11,509	**B977A11509**	●		12	118	71	56	45	2,0
.4606		11,700	**B977 A/F 11700**	●	●	12	118	71	56	45	2,0
.4688	15/32	11,908	**B977A11908**	●		12	118	71	56	45	2,0
.4724		12,000	**B977 A/F 12000**	●	●	12	118	71	56	45	2,1
.4844	31/64	12,304	**B977A12304**	●		14	124	77	60	45	2,1
.4921		12,500	**B977 A/F 12500**	●	●	14	124	77	60	45	2,2
.5000	1/2	12,700	**B977 A/F 12700**	●	●	14	124	77	60	45	2,2
.5080		12,903	**B977A12903**	●		14	124	77	60	45	2,2
.5118		13,000	**B977 A/F 13000**	●	●	14	124	77	60	45	2,2
.5156	33/64	13,096	**B977A13096**	●		14	124	77	60	45	2,3
.5315		13,500	**B977 A/F 13500**	●	●	14	124	77	60	45	2,3
.5394		13,700	**B977 A/F 13700**	●	●	14	124	77	60	45	2,4
.5512		14,000	**B977 A/F 14000**	●	●	14	124	77	60	45	2,4
.5625	9/16	14,288	**B977A14288**	●		16	133	83	63	48	2,5
.5709		14,500	**B977 A/F 14500**	●	●	16	133	83	63	48	2,5
.5787		14,700	**B977 A/F 14700**	●	●	16	133	83	63	48	2,5
.5906		15,000	**B977 A/F 15000**	●	●	16	133	83	63	48	2,6
.6102		15,500	**B977 A/F 15500**	●	●	16	133	83	63	48	2,7
.6181		15,700	**B977 A/F 15700**	●	●	16	133	83	63	48	2,7
.6250	5/8	15,875	**B977A15875**	●		16	133	83	63	48	2,7
.6299		16,000	**B977 A/F 16000**	●	●	16	133	83	63	48	2,8
.6330		16,078	**B977A16078**	●		18	143	93	71	48	2,8
.6496		16,500	**B977 A/F 16500**	●	●	18	143	93	71	48	2,9
.6562	21/32	16,667	**B977A16667**	●		18	143	93	71	48	2,9
.6693		17,000	**B977 A/F 17000**	●	●	18	143	93	71	48	3,0
.6875	11/16	17,463	**B977A17463**	●		18	143	93	71	48	3,0
.6890		17,500	**B977 A/F 17500**	●	●	18	143	93	71	48	3,0
.7087		18,000	**B977 A/F 18000**	●	●	18	143	93	71	48	3,1
.7283		18,500	**B977 A/F 18500**	●	●	20	153	101	77	50	3,2
.7480		19,000	**B977 A/F 19000**	●	●	20	153	101	77	50	3,3
.7500	3/4	19,050	**B977A19050**	●		20	153	101	77	50	3,3
.7580		19,253	**B977A19253**	●		20	153	101	77	50	3,3
.7656	49/64	19,446	**B977A19446**	●		20	153	101	77	50	3,4
.7677		19,500	**B977 A/F 19500**	●	●	20	153	101	77	50	3,4
.7874		20,000	**B977 A/F 20000**	●	●	20	153	101	77	50	3,5

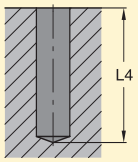
Order example:
A shank: **B977A10200**
Grade: **KC7315**

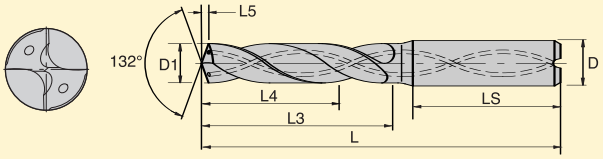
F shank: **B977F10200**
Grade: **KC7315**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

Internal Standard - Extra Long

For Steel and Cast Iron





A-shank

Inch	D1 Fraction	Metric	Catalog number A shank	Grade KC7315 A	D	L	L3	L4 max.	LS	L5
.1563	5/32	3,970	**B978A03970**	●	6	87	49	41	36	0,8
.1875	3/16	4,763	**B978A04763**	●	6	94	56	48	36	1,0
.1969		5,000	**B978A05000**	●	6	94	56	48	36	1,0
.2165		5,500	**B978A05500**	●	6	94	56	48	36	1,1
.2188	7/32	5,558	**B978A05558**	●	6	94	56	48	36	1,2
.2362		6,000	**B978A06000**	●	6	94	56	48	36	1,3
.2500	1/4	6,350	**B978A06350**	●	8	105	67	57	36	1,3
.2559		6,500	**B978A06500**	●	8	105	67	57	36	1,4
.2656	17/64	6,746	**B978A06746**	●	8	105	67	57	36	1,4
.2677		6,800	**B978A06800**	●	8	105	67	57	36	1,4
.2756		7,000	**B978A07000**	●	8	105	67	57	36	1,5
.2813	9/32	7,145	**B978A07145**	●	8	110	72	61	36	1,5
.2953		7,500	**B978A07500**	●	8	110	72	61	36	1,6
.2969	19/64	7,541	**B978A07541**	●	8	110	72	61	36	1,6
.3071		7,800	**B978A07800**	●	8	110	72	61	36	1,6
.3125	5/16	7,938	**B978A07938**	●	8	110	72	61	36	1,7
.3150		8,000	**B978A08000**	●	8	110	72	61	36	1,7
.3281	21/64	8,334	**B978A08334**	●	10	122	80	68	40	1,8
.3346		8,500	**B978A08500**	●	10	122	80	68	40	1,8
.3438	11/32	8,733	**B978A08733**	●	10	122	80	68	40	1,8
.3543		9,000	**B978A09000**	●	10	122	80	68	40	1,9
.3594	23/64	9,129	**B978A09129**	●	10	122	80	68	40	1,9
.3740		9,500	**B978A09500**	●	10	122	80	68	40	2,0
.3750	3/8	9,525	**B978A09525**	●	10	122	80	68	40	2,0
.3906	25/64	9,921	**B978A09921**	●	10	122	80	68	40	2,1
.3937		10,000	**B978A10000**	●	10	122	80	68	40	2,1
.4016		10,200	**B978A10200**	●	12	141	94	79	45	2,2
.4063	13/32	10,320	**B978A10320**	●	12	141	94	79	45	2,2
.4134		10,500	**B978A10500**	●	12	141	94	79	45	2,2
.4219	27/64	10,716	**B978A10716**	●	12	141	94	79	45	2,3
.4331		11,000	**B978A11000**	●	12	141	94	79	45	2,3
.4375	7/16	11,113	**B978A11113**	●	12	141	94	79	45	2,4
.4528		11,500	**B978A11500**	●	12	141	94	79	45	2,4
.4531	29/64	11,509	**B978A11509**	●	12	141	94	79	45	2,4
.4688		11,908	**B978A11908**	●	12	141	94	79	45	2,5
.4724		12,000	**B978A12000**	●	12	141	94	79	45	2,6

Continued on next page.

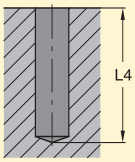
To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

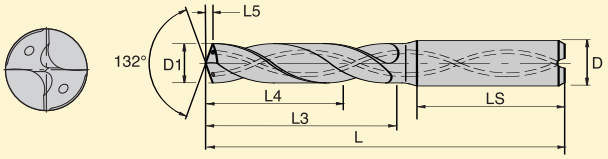
Order example:
A shank: **B978A03970**
Grade: **KC7315**

KENNA UNIVERSAL – Solid Carbide Drills

Type B978 with Coolant Holes (continued)

Continued from page B9.





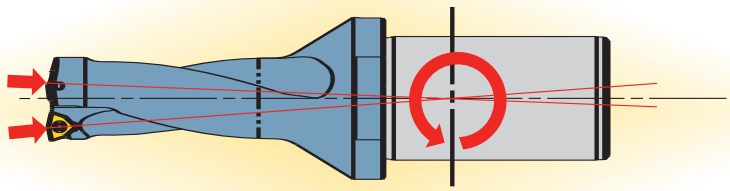
A-shank

inch	D1 fraction	mm	Catalog number A shank	Grade KC7315 A	D	L	L3	L4 max.	LS	L5
.4844	31/64	12,304	**B978A12304**	●	14	155	108	91	45	2,6
.4921		12,500	**B978A12500**	●	14	155	108	91	45	2,7
.5000	1/2	12,700	**B978A12700**	●	14	155	108	91	45	2,7
.5118		12,000	**B978A13000**	●	14	155	108	91	45	2,8
.5315		13,500	**B978A13500**	●	14	155	108	91	45	2,9
.5512		14,000	**B978A14000**	●	14	155	108	91	45	3,0
.5625	9/16	14,288	**B978A14288**	●	16	171	121	101	48	3,0
.5709		14,500	**B978A14500**	●	16	171	121	101	48	3,1
.5906		15,000	**B978A15000**	●	16	171	121	101	48	3,2
.6102		15,500	**B978A15500**	●	16	171	121	101	48	3,3
.6250	5/8	15,875	**B978A15875**	●	16	171	121	101	48	3,4
.6299		16,000	**B978A16000**	●	16	171	121	101	48	3,4
.6330		16,078	**B978A16078**	●	18	185	135	113	48	3,4
.6496		16,500	**B978A16500**	●	18	185	135	113	48	3,5
.6693		17,000	**B978A17000**	●	18	185	135	113	48	3,6
.6875	11/16	17,463	**B978A17463**	●	18	185	135	113	48	3,7
.6890		17,500	**B978A17500**	●	18	185	135	113	48	3,8
.7087		18,000	**B978A18000**	●	18	185	135	113	48	3,9
.7283		18,500	**B978A18500**	●	20	200	148	124	50	4,0
.7480		19,000	**B978A19000**	●	20	200	148	124	50	4,1
.7500	3/4	19,050	**B978A19050**	●	20	200	148	124	50	4,1
.7580		19,253	**B978A19253**	●	20	200	148	124	50	4,1
.7677		19,500	**B978A19500**	●	20	200	148	124	50	4,2
.7874		20.000	**B978A20000**	●	20	200	148	124	50	4,3

To place an order,
contact your authorized
Kennametal distributor or
visit www.kennametal.com.

Order example:
A shank: **B978A12304**
Grade: **KC7315**

DRILL-FIX Indexable Drills



Our DRILL-FIX product line is one of the most comprehensive in the industry. We'll help you achieve productivity gains with these proven features:

- DRILL-FIX drills are **engineered to optimize insert position**. Feed forces meet at the center of the shank to minimize tool deflection and chatter, and maximize hole accuracy.
- Inch and metric cutting diameters **are standard.**
- New flute profile ensures **excellent chip evacuation**.
- **"X" offset capability** provides added versatility.
- "X" offset is marked on the body **for easy set up**.
- **User-friendly shanks** fit the most popular holding devices.
- **Through-coolant** access is located on both the shank end and side of the drill body for inch applications.
- **New KENNA UNIVERSAL insert grade KU40D** handles demanding metalcutting applications with precision.

Grade Description

Grade	
NEW! **KU40D**	**composition:** A CVD TiN/TiCN/TiN-coated tough alloyed carbide grade with 11.0% cobalt. **application:** KU40D is a universal drilling grade capable of providing consistent performance over a wide variety of drilling applications, such as high-carbon steels; alloy and tool steels; stainless steels; ductile and cast irons; non-ferrous materials; and high-temperature alloys. **geometry:** -GD geometry offers excellent edge strength for general applications, and –MD geometry offers a more positive cutting action.

Kennametal DRILL-FIX DFT Technical Information

DFT Applications – Cutting Data Recommendations for DRILL-FIX DFT

Cutting Groups	Material Group	Composition/Structure		Tensile Strength RM (MPa)	Hardness HB	Cutting Speed vc: (m/min) (sfm) Stable	Normal	Unstable	Interrupted Cut	Feed Rate Per Revolution by Insert Size: (mm/r) (ipr) DFT 03...	DFT 05...	DFT 06...	DFT 07...	DFT 09...
1.1	Unalloyed steel, cast steel, machining steel	C= 0,10-0,25	Annealed, long-chipping	420	125	340 1120	280 920	220 720	140 460	0,06 - 0,10 .002 - .004	0,09 - 0,15 .003 - .006	0,11 - 0,18 .004 - .007	0,15 - 0,25 .006 - .010	0,19 - 0,31 .007 - .012
1.2		C= 0,10-0,25	Annealed, short-chipping	420	125	340 1120	280 920	220 720	140 460	0,06 - 0,10 .002 - .004	0,09 - 0,15 .003 - .006	0,11 - 0,18 .004 - .007	0,15 - 0,25 .006 - .010	0,19 - 0,31 .007 - .012
2.1		C= 0,25-0,55	Annealed, long-chipping	640	190	310 1020	260 850	210 720	130 430	0,06 - 0,10 .002 - .004	0,09 - 0,15 .003 - .006	0,11 - 0,18 .004 - .007	0,15 - 0,25 .006 - .010	0,19 - 0,31 .007 - .012
2.2		C= 0,25-0,55	Annealed, short-chipping	640	190	340 1020	280 920	220 720	140 460	0,06 - 0,10 .002 - .004	0,09 - 0,15 .003 - .006	0,11 - 0,18 .004 - .007	0,15 - 0,25 .006 - .010	0,19 - 0,31 .007 - .012
3		C= 0,25-0,55	Tempered	850	250	310 1020	260 850	210 690	130 430	0,06 - 0,10 .002 - .004	0,09 - 0,15 .003 - .006	0,11 - 0,18 .004 - .007	0,15 - 0,25 .006 - .010	0,19 - 0,31 .007 - .012
4		C= 0,25-0,80	Annealed	915	270	300 980	250 820	200 660	130 430	0,06 - 0,10 .002 - .004	0,09 - 0,15 .003 - .006	0,11 - 0,18 .004 - .007	0,15 - 0,25 .006 - .010	0,19 - 0,31 .007 - .012
5		C= 0,25-0,80	Tempered	1020	300	260 850	220 720	180 590	110 360	0,06 - 0,10 .002 - .004	0,09 - 0,15 .003 - .006	0,11 - 0,18 .004 - .007	0,15 - 0,25 .006 - .010	0,19 - 0,31 .007 - .012
6	Low-alloy steel, cast steel, machining steel		Annealed	610	180	310 1020	260 850	210 690	130 430	0,06 - 0,10 .002 - .004	0,09 - 0,15 .003 - .006	0,11 - 0,18 .004 - .007	0,15 - 0,25 .006 - .010	0,19 - 0,31 .007 - .012
7			Tempered	930	275	280 920	230 760	180 590	120 390	0,06 - 0,10 .002 - .004	0,09 - 0,15 .003 - .006	0,11 - 0,18 .004 - .007	0,15 - 0,25 .006 - .010	0,19 - 0,31 .007 - .012
8			Tempered	1020	300	240 790	200 660	160 530	100 330	0,06 - 0,10 .002 - .004	0,09 - 0,15 .003 - .006	0,11 - 0,18 .004 - .007	0,15 - 0,25 .006 - .010	0,19 - 0,31 .007 - .012
9			Tempered	1190	350	220 720	180 590	140 460	90 300	0,06 - 0,10 .002 - .004	0,09 - 0,15 .003 - .006	0,11 - 0,18 .004 - .007	0,15 - 0,25 .006 - .010	0,19 - 0,31 .007 - .012
10	High-alloy steel, cast steel, high-alloy tool steel		Annealed	680	200	240 790	200 660	160 530	100 330	0,06 - 0,10 .002 - .004	0,09 - 0,15 .003 - .006	0,11 - 0,18 .004 - .007	0,15 - 0,25 .006 - .010	0,19 - 0,31 .007 - .012
11			Hardened and Tempered	1100	325	190 620	160 530	130 430	80 260	0,06 - 0,10 .002 - .004	0,09 - 0,15 .003 - .006	0,11 - 0,18 .004 - .007	0,15 - 0,25 .006 - .010	0,19 - 0,31 .007 - .012
12	Stainless steel, cast steel	Ferritic/Martensitic	Annealed	680	200	220 720	180 590	140 460	90 300	0,06 - 0,10 .002 - .004	0,08 - 0,13 .003 - .006	0,09 - 0,15 .004 - .006	0,11 - 0,18 .004 - .007	0,14 - 0,23 .006 - .009
13		Martensitic	Tempered	810	240	190 620	160 530	130 430	80 260	0,05 - 0,09 .002 - .004	0,07 - 0,11 .003 - .004	0,09 - 0,15 .004 - .006	0,11 - 0,18 .004 - .007	0,12 - 0,20 .005 - .008
14.1	Stainless steel	Austenitic		610	180	190 620	160 530	130 430	80 260	0,05 - 0,09 .002 - .004	0,07 - 0,13 .003 - .005	0,08 - 0,16 .003 - .006	0,10 - 0,18 .004 - .007	0,11 - 0,21 .004 - .008
14.2		Austenitic/Ferritic (duplex)		880	260	190 620	160 530	130 430	80 260	0,05 - 0,09 .002 - .004	0,07 - 0,13 .003 - .005	0,08 - 0,16 .003 - .006	0,10 - 0,18 .004 - .007	0,11 - 0,21 .004 - .008
15	Gray cast iron	Pearlitic/Ferritic			180	260 850	220 720	180 590	110 360	0,07 - 0,13 .003 - .005	0,10 - 0,18 .004 - .007	0,14 - 0,26 .006 - .010	0,18 - 0,33 .007 - .013	0,21 - 0,39 .008 - .015
16		Pearlitic (Martensitic)			260	220 720	180 590	140 460	90 300	0,07 - 0,13 .003 - .005	0,10 - 0,18 .004 - .007	0,14 - 0,26 .006 - .010	0,18 - 0,33 .007 - .013	0,21 - 0,39 .008 - .015
17	Cast iron with nodular cast iron	Ferritic			160	220 720	180 590	140 460	90 300	0,07 - 0,13 .003 - .005	0,10 - 0,18 .004 - .007	0,14 - 0,26 .006 - .010	0,18 - 0,33 .007 - .013	0,21 - 0,39 .008 - .015
18		Pearlitic			250	180 590	150 490	120 400	80 260	0,06 - 0,10 .002 - .004	0,08 - 0,16 .003 - .006	0,14 - 0,26 .006 - .010	0,18 - 0,33 .007 - .013	0,21 - 0,39 .008 - .015
19	Malleable cast iron	Ferritic			130	240 790	200 660	160 530	100 330	0,07 - 0,13 .003 - .005	0,10 - 0,18 .004 - .007	0,14 - 0,26 .006 - .010	0,18 - 0,33 .007 - .013	0,21 - 0,39 .008 - .015
20		Pearlitic			230	220 720	180 590	140 460	90 300	0,07 - 0,13 .003 - .005	0,10 - 0,18 .004 - .007	0,14 - 0,26 .006 - .010	0,18 - 0,33 .007 - .013	0,21 - 0,39 .008 - .015
21	Aluminum forging alloys		Not heat treatable		60	720 2360	600 1970	480 1580	300 980	0,05 - 0,07 .002 - .003	0,07 - 0,09 .003 - .004	0,10 - 0,14 .006 - .010	0,12 - 0,16 .005 - .006	0,14 - 0,18 .006 - .007
22			Heat treatable/Heat treated		100	720 2360	600 1970	480 1580	300 980	0,05 - 0,07 .002 - .003	0,07 - 0,09 .003 - .004	0,10 - 0,14 .006 - .010	0,12 - 0,16 .005 - .006	0,14 - 0,18 .006 - .007
23	Aluminum casting alloys	<12% Si	Not heat treatable		75	720 2360	600 1970	480 1580	300 980	0,05 - 0,07 .002 - .003	0,07 - 0,09 .003 - .004	0,10 - 0,14 .006 - .010	0,12 - 0,16 .005 - .006	0,14 - 0,18 .006 - .007
24		<12% Si	Heat treatable/Heat treated		90	600 1970	500 1640	400 1310	250 820	0,05 - 0,07 .002 - .003	0,07 - 0,09 .003 - .004	0,10 - 0,14 .006 - .010	0,12 - 0,16 .005 - .006	0,14 - 0,18 .006 - .007
25		>12% Si	Not heat treatable		130	480 1580	400 1310	320 1050	200 660	0,05 - 0,07 .002 - .003	0,07 - 0,09 .003 - .004	0,10 - 0,14 .006 - .010	0,12 - 0,16 .005 - .006	0,14 - 0,18 .006 - .007
26	Copper and copper alloys (bronze, brass)	Machining Alloys, Pb > 1%			110	600 1970	500 1640	400 1310	250 820	0,05 - 0,07 .002 - .003	0,07 - 0,09 .003 - .004	0,10 - 0,14 .006 - .010	0,12 - 0,16 .005 - .006	0,14 - 0,18 .006 - .007
27		CuZn, CuSnZn			90	600 1970	500 1640	400 1310	250 820	0,05 - 0,07 .002 - .003	0,07 - 0,09 .003 - .004	0,10 - 0,14 .006 - .010	0,12 - 0,16 .005 - .006	0,14 - 0,18 .006 - .007
28		Cu, lead-free copper/electrolytic copper			100	480 1580	400 1310	320 1050	200 660	0,05 - 0,07 .002 - .003	0,07 - 0,09 .003 - .004	0,10 - 0,14 .006 - .010	0,12 - 0,16 .005 - .006	0,14 - 0,18 .006 - .007
31	Heat resistant alloys	Fe-based	Annealed		200	70 230	60 200	50 160	30 100	0,03 - 0,05 .001 - .002	0,04 - 0,06 .001 - .002	0,05 - 0,08 .002 - .003	0,06 - 0,10 .002 - .004	0,08 - 0,13 .003 - .005
32			Heat treated		230	70 230	60 200	50 160	30 100	0,03 - 0,05 .001 - .002	0,04 - 0,06 .001 - .002	0,05 - 0,08 .002 - .003	0,06 - 0,10 .002 - .004	0,08 - 0,13 .003 - .005
33		Ni or Co-based	Annealed		250	60 200	50 160	40 130	30 100	0,03 - 0,05 .001 - .002	0,04 - 0,06 .001 - .002	0,05 - 0,08 .002 - .003	0,06 - 0,10 .002 - .004	0,08 - 0,13 .003 - .005
34			Heat treated		350	60 200	50 160	40 130	30 100	0,03 - 0,05 .001 - .002	0,04 - 0,06 .001 - .002	0,05 - 0,08 .002 - .003	0,06 - 0,10 .002 - .004	0,08 - 0,13 .003 - .005
35		Cast			320	60 200	50 160	40 130	30 100	0,03 - 0,05 .001 - .002	0,04 - 0,06 .001 - .002	0,05 - 0,08 .002 - .003	0,06 - 0,10 .002 - .004	0,08 - 0,13 .003 - .005
36	Titanium alloys	Pure titanium		400	55 HRC	100 330	80 260	60 200	40 130	0,04 - 0,06 .001 - .002	0,05 - 0,08 .002 - .003	0,06 - 0,10 .002 - .004	0,06 - 0,10 .002 - .004	0,09 - 0,15 .004 - .006
37		Alpha-beta alloys		1050	55 HRC	70 230	60 200	50 160	30 100	0,04 - 0,06 .001 - .002	0,05 - 0,08 .002 - .003	0,06 - 0,10 .002 - .004	0,06 - 0,10 .002 - .004	0,06 - 0,10 .002 - .004

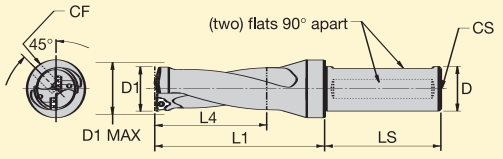
Notes: These are starting condition guidelines only. The machine tool, fixturing, toolholding, part configuration, and coolant capability may significantly influence specific applications. Use proper and safe machining practices. Make the set-up as rigid as possible. Decrease speed as material hardness increases.

Ordering Information:

- Drill shipped with insert screws, side pipe plug, and Torx wrench.
- Use with SSF adapters for rotating applications.

Flanged Shank

Shank	D	LS	CS	Side Pipe Plug CF
SSF075	.750	2.00	1/8 - 27 NPT	193.259
SSF100	1.000	3.00	1/4 - 18 NPT	193.259
SSF125	1.250	3.25	1/4 - 18 NPT	193.259
SSF150	1.500	3.75	1/4 - 18 NPT	193.259
SSF200	2.000	4.00	1/4 - 18 NPT	193.259



D1 ± .008

Inch

D1	D1 max.	Order number	Catalog number	D	Gage Insert	L1	L4	Insert Screw	Torx Wrench	Torx Size
.625	.780	**1527597**	**DFT0625R2SSF075**	.750	**DFT030204**	2.88	1.60	**191.164**	**170.027**	T6
.625	.780	**1527664**	**DFT0625R2SSF100**	1.000	**DFT030204**	2.88	1.60	**191.164**	**170.027**	T6
.656	.806	**1530245**	**DFT0656R2SSF075**	.750	**DFT030204**	3.00	1.64	**191.164**	**170.027**	T6
.656	.806	**1527666**	**DFT0656R2SSF100**	1.000	**DFT030204**	3.00	1.64	**191.164**	**170.027**	T6
.688	.838	**1527625**	**DFT0688R2SSF075**	.750	**DFT030204**	3.00	1.75	**191.164**	**170.027**	T6
.688	.838	**1527667**	**DFT0688R2SSF100**	1.000	**DFT030204**	3.00	1.75	**191.164**	**170.027**	T6
.703	.853	**1527626**	**DFT0703R2SSF075**	.750	**DFT030204**	3.00	1.76	**191.164**	**170.027**	T6
.703	.853	**1527669**	**DFT0703R2SSF100**	1.000	**DFT030204**	3.00	1.76	**191.164**	**170.027**	T6
.734	.884	**1527627**	**DFT0734R2SSF075**	.750	**DFT030204**	3.00	1.84	**191.164**	**170.027**	T6
.734	.884	**1527681**	**DFT0734R2SSF100**	1.000	**DFT030204**	3.00	1.84	**191.164**	**170.027**	T6
.750	.850	**1527628**	**DFT0750R2SSF075**	.750	**DFT030304**	3.25	1.88	**MS1152**	**170.023**	T7
.750	.850	**1527682**	**DFT0750R2SSF100**	1.000	**DFT030304**	3.25	1.88	**MS1152**	**170.023**	T7
.781	.881	**1527629**	**DFT0781R2SSF075**	.750	**DFT030304**	3.25	1.96	**MS1152**	**170.023**	T7
.781	.881	**1527691**	**DFT0781R2SSF100**	1.000	**DFT030304**	3.25	1.96	**MS1152**	**170.023**	T7
.813	.913	**1527630**	**DFT0813R2SSF075**	.750	**DFT030304**	3.38	2.03	**MS1152**	**170.023**	T7
.813	.913	**1527698**	**DFT0813R2SSF100**	1.000	**DFT030304**	3.38	2.03	**MS1152**	**170.023**	T7
.844	.919	**1527661**	**DFT0844R2SSF075**	.750	**DFT030304**	3.38	2.11	**MS1152**	**170.023**	T7
.844	.919	**1527699**	**DFT0844R2SSF100**	1.000	**DFT030304**	3.38	2.11	**MS1152**	**170.023**	T7
.875	.950	**1527663**	**DFT0875R2SSF075**	.750	**DFT030304**	3.63	2.19	**MS1152**	**170.023**	T7
.875	.950	**1527700**	**DFT0875R2SSF100**	1.000	**DFT030304**	3.63	2.19	**MS1152**	**170.023**	T7
.875	.950	**1600515**	**DFT0875R2SSF125**	1.250	**DFT030304**	3.63	2.19	**MS1152**	**170.023**	T7
.906	.981	**1527731**	**DFT0906R2SSF100**	1.000	**DFT030304**	3.63	2.27	**MS1152**	**170.023**	T7
.906	.981	**1527689**	**DFT0906R2SSF125**	1.250	**DFT030304**	3.63	2.27	**MS1152**	**170.023**	T7
.938	1.000	**1527732**	**DFT0938R2SSF100**	1.000	**DFT030304**	3.75	2.35	**MS1152**	**170.023**	T7
.938	1.000	**1528316**	**DFT0938R2SSF125**	1.250	**DFT030304**	3.75	2.35	**MS1152**	**170.023**	T7
.969	1.019	**1527733**	**DFT0969R2SSF100**	1.000	**DFT030304**	3.75	2.40	**MS1152**	**170.023**	T7
.969	1.019	**1528317**	**DFT0969R2SSF125**	1.250	**DFT030304**	3.75	2.40	**MS1152**	**170.023**	T7
.984	1.109	**1527687**	**DFT0984R2SSF100**	1.000	**DFT05T308**	3.88	2.50	**191.924**	**170.024**	T9
.984	1.109	**1528318**	**DFT0984R2SSF125**	1.250	**DFT05T308**	3.88	2.50	**191.924**	**170.024**	T9
1.000	1.125	**1527688**	**DFT1000R2SSF100**	1.000	**DFT05T308**	4.00	2.50	**191.924**	**170.024**	T9
1.000	1.125	**1528319**	**DFT1000R2SSF125**	1.250	**DFT05T308**	4.00	2.50	**191.924**	**170.024**	T9
1.000	1.125	**1528369**	**DFT1000R2SSF150**	1.500	**DFT05T308**	4.00	2.50	**191.924**	**170.024**	T9
1.031	1.156	**1528320**	**DFT1031R2SSF125**	1.250	**DFT05T308**	4.00	2.60	**191.924**	**170.024**	T9
1.063	1.188	**1528341**	**DFT1063R2SSF125**	1.250	**DFT05T308**	4.13	2.65	**191.924**	**170.024**	T9
1.094	1.219	**1528342**	**DFT1094R2SSF125**	1.250	**DFT05T308**	4.13	2.70	**191.924**	**170.024**	T9
1.125	1.250	**1528343**	**DFT1125R2SSF125**	1.250	**DFT05T308**	4.38	2.85	**191.924**	**170.024**	T9
1.156	1.281	**1528344**	**DFT1156R2SSF125**	1.250	**DFT05T308**	4.38	2.89	**191.924**	**170.024**	T9
1.188	1.288	**1528345**	**DFT1188R2SSF125**	1.250	**DFT05T308**	4.50	3.00	**191.924**	**170.024**	T9

Continued on next page.

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

Order example:
Catalog number: **DFT0625R2SSF075**
Order number: **1527597**

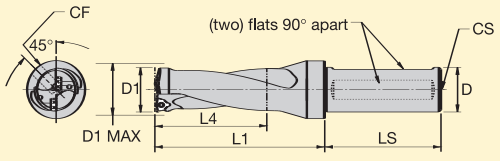
DRILL-FIX DFT Drill Bodies

Inch – 2.5X Diameter Cutting Depth (continued)

Flanged Shank

Continued from page B13.

Shank	D	LS	CS	Side Pipe Plug CF
SSF075	.750	2.00	1/8 - 27 NPT	193.259
SSF100	1.000	3.00	1/4 - 18 NPT	193.259
SSF125	1.250	3.25	1/4 - 18 NPT	193.259
SSF150	1.500	3.75	1/4 - 18 NPT	193.259
SSF200	2.000	4.00	1/4 - 18 NPT	193.259



D1 ± .008

Inch

D1	D1 max.	Order number	Catalog number	D	Gage Insert	L1	L4	Insert Screw	Torx Wrench	Torx Size
1.219	1.319	**1528346**	**DFT1219R2SSF125**	1.250	**DFT05T308**	4.63	3.05	**191.924**	**170.024**	T9
1.219	1.319	**1528370**	**DFT1219R2SSF150**	1.500	**DFT05T308**	4.63	3.05	**191.924**	**170.024**	T9
1.250	1.325	**1528347**	**DFT1250R2SSF125**	1.250	**DFT05T308**	4.75	3.13	**191.924**	**170.024**	T9
1.250	1.325	**1528391**	**DFT1250R2SSF150**	1.500	**DFT05T308**	4.75	3.13	**191.924**	**170.024**	T9
1.281	1.345	**1528348**	**DFT1281R2SSF125**	1.250	**DFT05T308**	4.75	3.20	**191.924**	**170.024**	T9
1.281	1.345	**1528392**	**DFT1281R2SSF150**	1.500	**DFT05T308**	4.75	3.20	**191.924**	**170.024**	T9
1.313	1.438	**1528349**	**DFT1313R2SSF125**	1.250	**DFT05T308**	4.88	3.30	**191.848**	**170.025**	T15
1.313	1.438	**1528393**	**DFT1313R2SSF150**	1.500	**DFT06T308**	4.88	3.30	**191.848**	**170.025**	T15
1.375	1.500	**1528350**	**DFT1375R2SSF125**	1.250	**DFT06T308**	5.13	3.45	**191.848**	**170.025**	T15
1.375	1.500	**1528394**	**DFT1375R2SSF150**	1.500	**DFT06T308**	5.13	3.45	**191.848**	**170.025**	T15
1.406	1.531	**1528361**	**DFT1406R2SSF125**	1.250	**DFT06T308**	5.13	3.50	**191.848**	**170.025**	T15
1.406	1.531	**1528395**	**DFT1406R2SSF150**	1.500	**DFT06T308**	5.13	3.50	**191.848**	**170.025**	T15
1.438	1.563	**1528362**	**DFT1438R2SSF125**	1.250	**DFT06T308**	5.25	3.60	**191.848**	**170.025**	T15
1.438	1.563	**1528396**	**DFT1438R2SSF150**	1.500	**DFT06T308**	5.25	3.60	**191.848**	**170.025**	T15
1.469	1.594	**1528363**	**DFT1469R2SSF125**	1.250	**DFT06T308**	5.38	3.70	**191.848**	**170.025**	T15
1.469	1.594	**1528397**	**DFT1469R2SSF150**	1.500	**DFT06T308**	5.38	3.70	**191.848**	**170.025**	T15
1.500	1.625	**1528364**	**DFT1500R2SSF125**	1.250	**DFT06T308**	5.50	3.75	**191.848**	**170.025**	T15
1.500	1.625	**1528398**	**DFT1500R2SSF150**	1.500	**DFT06T308**	5.50	3.75	**191.848**	**170.025**	T15
1.531	1.656	**1528365**	**DFT1531R2SSF125**	1.250	**DFT06T308**	5.50	3.85	**191.848**	**170.025**	T15
1.531	1.656	**1528399**	**DFT1531R2SSF150**	1.500	**DFT06T308**	5.50	3.85	**191.848**	**170.025**	T15
1.563	1.688	**1528366**	**DFT1563R2SSF125**	1.250	**DFT06T308**	5.63	3.90	**191.848**	**170.025**	T15
1.563	1.688	**1528400**	**DFT1563R2SSF150**	1.500	**DFT06T308**	5.63	3.90	**191.848**	**170.025**	T15
1.625	1.750	**1528367**	**DFT1625R2SSF125**	1.250	**DFT070408**	5.88	4.10	**191.698**	**170.025**	T15
1.625	1.750	**1528401**	**DFT1625R2SSF150**	1.500	**DFT070408**	5.88	4.10	**191.698**	**170.025**	T15
1.688	1.813	**1528368**	**DFT1688R2SSF125**	1.250	**DFT070408**	6.00	4.25	**191.698**	**170.025**	T15
1.688	1.813	**1528402**	**DFT1688R2SSF150**	1.500	**DFT070408**	6.00	4.25	**191.698**	**170.025**	T15
1.750	1.875	**1528403**	**DFT1750R2SSF150**	1.500	**DFT070408**	6.25	4.38	**191.698**	**170.025**	T15
1.813	1.938	**1528404**	**DFT1813R2SSF150**	1.500	**DFT070408**	6.38	4.55	**191.698**	**170.025**	T15
1.875	2.000	**1528405**	**DFT1875R2SSF150**	1.500	**DFT070408**	6.63	4.70	**191.698**	**170.025**	T15
1.938	2.188	**1528406**	**DFT1938R2SSF150**	1.500	**DFT090508**	6.75	4.85	**191.726**	**170.026**	T20
2.000	2.250	**1528407**	**DFT2000R2SSF150**	1.500	**DFT090508**	7.00	5.00	**191.726**	**170.026**	T20
2.000	2.250	**1528409**	**DFT2000R2SSF200**	2.000	**DFT090508**	7.00	5.00	**191.726**	**170.026**	T20
2.125	2.375	**1528408**	**DFT2125R2SSF150**	1.500	**DFT090508**	7.38	5.35	**191.726**	**170.026**	T20
2.125	2.375	**1528410**	**DFT2125R2SSF200**	2.000	**DFT090508**	7.38	5.35	**191.726**	**170.026**	T20
2.250	2.500	**1528421**	**DFT2250R2SSF200**	2.000	**DFT090508**	7.75	5.63	**191.726**	**170.026**	T20
2.375	2.590	**1528422**	**DFT2375R2SSF200**	2.000	**DFT090508**	8.13	5.95	**191.726**	**170.026**	T20
2.500	2.650	**1528423**	**DFT2500R2SSF200**	2.000	**DFT090508**	8.50	6.25	**191.726**	**170.026**	T20

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

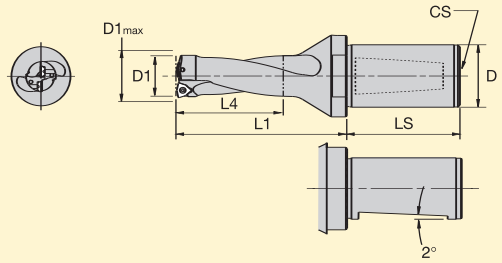
Order example:
Catalog number: **DFT1219R2SSF125**
Order number: **1528346**

Ordering Information:

- Drill shipped with insert screws and Torx wrench.
- Use with WD-style adapters.

Flanged 2° Whistle Notch Shank (WD)

Shank	D	LS	CS
WD20M	20	45	R1/8 BSP
WD32M	32	58	R1/4 BSP
WD40M	40	68	R1/4 BSP
WD50M	50	68	R1/4 BSP



D1 ± 0,2 mm

Metric

D1	D1 max.	Order number	Catalog number	D	Gage Insert	L1	L4	Insert Screw	Torx Wrench	Torx Size
16,0	17,0	1541287	DFT160R2WD20M	20	DFT030204	65,0	38,0	191.164	170.027	T6
16,0	17,0	1541320	DFT160R2WD32M	32	DFT030204	65,0	38,0	191.164	170.027	T6
17,0	18,0	1541288	DFT170R2WD20M	20	DFT030204	65,0	38,0	191.164	170.027	T6
17,0	18,0	1541371	DFT170R2WD32M	32	DFT030204	65,0	38,0	191.164	170.027	T6
18,0	19,0	1541289	DFT180R2WD20M	20	DFT030204	65,0	38,0	191.164	170.027	T6
18,0	19,0	1541372	DFT180R2WD32M	32	DFT030204	65,0	38,0	191.164	170.027	T6
19,0	21,0	1541290	DFT190R2WD20M	20	DFT030304	75,0	48,0	192.432	170.028	T8
19,0	21,0	1541734	DFT190R2WD32M	32	DFT030304	75,0	48,0	192.432	170.028	T8
19,0	21,0	1541841	DFT190R2WD40M	40	DFT030304	75,0	48,0	192.432	170.028	T8
20,0	21,0	1541361	DFT200R2WD20M	20	DFT030304	75,0	48,0	192.432	170.028	T8
20,0	21,0	1541362	DFT200R2WD32M	32	DFT030304	75,0	48,0	192.432	170.028	T8
20,0	21,0	1541842	DFT200R2WD40M	40	DFT030304	75,0	48,0	192.432	170.028	T8
21,0	23,0	1541317	DFT210R2WD20M	20	DFT030304	75,0	48,0	192.432	170.028	T8
21,0	23,0	1541363	DFT210R2WD32M	32	DFT030304	75,0	48,0	192.432	170.028	T8
21,0	23,0	1541843	DFT210R2WD40M	40	DFT030304	75,0	48,0	192.432	170.028	T8
22,0	23,0	1541318	DFT220R2WD20M	20	DFT030304	75,0	49,0	192.432	170.028	T8
22,0	23,0	1541364	DFT220R2WD32M	32	DFT030304	75,0	49,0	192.432	170.028	T8
22,0	23,0	1541844	DFT220R2WD40M	40	DFT030304	75,0	49,0	192.432	170.028	T8
23,0	25,0	1541319	DFT230R2WD20M	20	DFT030304	75,0	48,0	192.432	170.028	T8
23,0	25,0	1541365	DFT230R2WD32M	32	DFT030304	75,0	48,0	192.432	170.028	T8
23,0	25,0	1541845	DFT230R2WD40M	40	DFT030304	75,0	48,0	192.432	170.028	T8
24,0	25,0	1541366	DFT240R2WD32M	32	DFT030304	90,0	59,0	192.432	170.028	T8
24,0	25,0	1541846	DFT240R2WD40M	40	DFT030304	90,0	59,0	192.432	170.028	T8
25,0	27,0	1541367	DFT250R2WD32M	32	DFT05T308	90,0	58,0	191.924	170.024	T9
25,0	27,0	1541847	DFT250R2WD40M	40	DFT05T308	90,0	58,0	191.924	170.024	T9
26,0	27,0	1541368	DFT260R2WD32M	32	DFT05T308	90,0	59,0	191.924	170.024	T9
26,0	27,0	1541848	DFT260R2WD40M	40	DFT05T308	90,0	59,0	191.924	170.024	T9
27,0	29,0	1541369	DFT270R2WD32M	32	DFT05T308	100,0	66,0	191.924	170.024	T9
27,0	29,0	1541849	DFT270R2WD40M	40	DFT05T308	100,0	66,0	191.924	170.024	T9
28,0	29,0	1541370	DFT280R2WD32M	32	DFT05T308	100,0	66,0	191.924	170.024	T9
28,0	29,0	1541850	DFT280R2WD40M	40	DFT05T308	100,0	66,0	191.924	170.024	T9
29,0	31,0	1541381	DFT290R2WD32M	32	DFT05T308	100,0	66,0	191.924	170.024	T9
29,0	31,0	1541851	DFT290R2WD40M	40	DFT05T308	100,0	66,0	191.924	170.024	T9
30,0	31,0	1541382	DFT300R2WD32M	32	DFT05T308	115,0	76,0	191.924	170.024	T9
30,0	31,0	1541852	DFT300R2WD40M	40	DFT05T308	115,0	76,0	191.924	170.024	T9
31,0	33,0	1541383	DFT310R2WD32M	32	DFT05T308	115,0	76,0	191.924	170.024	T9
31,0	33,0	1541853	DFT310R2WD40M	40	DFT05T308	115,0	76,0	191.924	170.024	T9
32,0	33,0	1541384	DFT320R2WD32M	32	DFT05T308	115,0	76,0	191.924	170.024	T9
32,0	33,0	1541854	DFT320R2WD40M	40	DFT05T308	115,0	76,0	191.924	170.024	T9
33,0	35,0	1541385	DFT330R2WD32M	32	DFT06T308	115,0	76,0	191.848	170.025	T15
33,0	35,0	1541855	DFT330R2WD40M	40	DFT06T308	115,0	76,0	191.848	170.025	T15
34,0	35,0	1541386	DFT340R2WD32M	32	DFT06T308	115,0	76,0	191.848	170.025	T15
34,0	35,0	1541856	DFT340R2WD40M	40	DFT06T308	115,0	76,0	191.848	170.025	T15
35,0	38,0	1541387	DFT350R2WD32M	32	DFT06T308	115,0	76,0	191.848	170.025	T15
35,0	38,0	1541857	DFT350R2WD40M	40	DFT06T308	115,0	76,0	191.848	170.025	T15
36,0	37,0	1541388	DFT360R2WD32M	32	DFT06T308	115,0	76,0	191.848	170.025	T15
36,0	37,0	1541858	DFT360R2WD40M	40	DFT06T308	115,0	76,0	191.848	170.025	T15

Continued on next page.

Order example:
Catalog number: **DFT160R2WD20M**
Order number: **1541287**

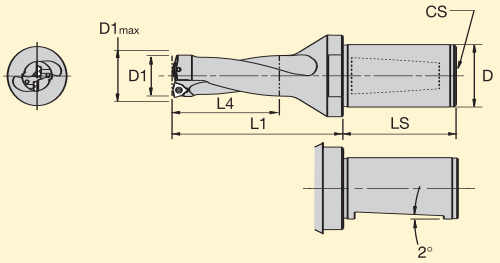
DRILL-FIX DFT Drill Bodies

Metric – 2.5X Diameter Cutting Depth (continued)

Flanged 2° Whistle Notch Shank (WD)

Continued from page B15.

Shank	D	LS	CS
WD20M	20	45	R1/8 BSP
WD32M	32	58	R1/4 BSP
WD40M	40	68	R1/4 BSP
WD50M	50	68	R1/4 BSP

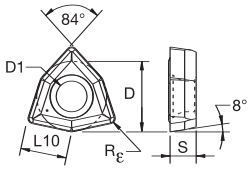
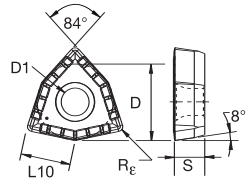


D1 ± 0,2 mm

Metric

D1	D1 max.	Order number	Catalog number	D	Gage Insert	L1	L4	Insert Screw	Torx Wrench	Torx Size
37,0	38,0	**1541389**	**DFT370R2WD32M**	32	**DFT06T308**	135,0	96,0	**191.848**	**170.025**	T15
37,0	38,0	**1541859**	**DFT370R2WD40M**	40	**DFT06T308**	135,0	96,0	**191.848**	**170.025**	T15
38,0	41,0	**1541390**	**DFT380R2WD32M**	32	**DFT06T308**	135,0	96,0	**191.848**	**170.025**	T15
38,0	41,0	**1541871**	**DFT380R2WD40M**	40	**DFT06T308**	135,0	96,0	**191.848**	**170.025**	T15
39,0	40,0	**1541391**	**DFT390R2WD32M**	32	**DFT06T308**	135,0	96,0	**191.848**	**170.025**	T15
39,0	40,0	**1541872**	**DFT390R2WD40M**	40	**DFT06T308**	135,0	96,0	**191.848**	**170.025**	T15
40,0	41,0	**1541392**	**DFT400R2WD32M**	32	**DFT06T308**	135,0	97,0	**191.848**	**170.025**	T15
40,0	41,0	**1541873**	**DFT400R2WD40M**	40	**DFT06T308**	135,0	97,0	**191.848**	**170.025**	T15
41,0	44,0	**1541393**	**DFT410R2WD32M**	32	**DFT070408**	135,0	96,0	**191.698**	**170.025**	T15
41,0	44,0	**1541874**	**DFT410R2WD40M**	40	**DFT070408**	135,0	96,0	**191.698**	**170.025**	T15
42,0	43,0	**1541394**	**DFT420R2WD32M**	32	**DFT070408**	135,0	96,0	**191.698**	**170.025**	T15
42,0	43,0	**1541875**	**DFT420R2WD40M**	40	**DFT070408**	135,0	96,0	**191.698**	**170.025**	T15
43,0	44,0	**1541395**	**DFT430R2WD32M**	32	**DFT070408**	150,0	112,0	**191.698**	**170.025**	T15
43,0	44,0	**1541876**	**DFT430R2WD40M**	40	**DFT070408**	150,0	112,0	**191.698**	**170.025**	T15
44,0	47,0	**1541396**	**DFT440R2WD32M**	32	**DFT070408**	150,0	112,0	**191.698**	**170.025**	T15
44,0	47,0	**1541877**	**DFT440R2WD40M**	40	**DFT070408**	150,0	112,0	**191.698**	**170.025**	T15
45,0	46,0	**1541878**	**DFT450R2WD40M**	40	**DFT070408**	150,0	112,0	**191.698**	**170.025**	T15
45,0	46,0	**1541931**	**DFT450R2WD50M**	50	**DFT070408**	150,0	112,0	**191.698**	**170.025**	T15
46,0	47,0	**1541879**	**DFT460R2WD40M**	40	**DFT070408**	150,0	112,0	**191.698**	**170.025**	T15
46,0	47,0	**1541932**	**DFT460R2WD50M**	50	**DFT070408**	150,0	112,0	**191.698**	**170.025**	T15
47,0	50,0	**1541880**	**DFT470R2WD40M**	40	**DFT070408**	150,0	111,0	**191.698**	**170.025**	T15
47,0	50,0	**1541933**	**DFT470R2WD50M**	50	**DFT070408**	150,0	111,0	**191.698**	**170.025**	T15
48,0	49,0	**1541860**	**DFT480R2WD40M**	40	**DFT070408**	150,0	111,0	**191.698**	**170.025**	T15
48,0	49,0	**1541934**	**DFT480R2WD50M**	50	**DFT070408**	150,0	111,0	**191.698**	**170.025**	T15
49,0	50,0	**1541901**	**DFT490R2WD40M**	40	**DFT090508**	165,0	117,0	**191.726**	**170.026**	T20
49,0	50,0	**1541935**	**DFT490R2WD50M**	50	**DFT090508**	165,0	117,0	**191.726**	**170.026**	T20
50,0	54,0	**1541902**	**DFT500R2WD40M**	40	**DFT090508**	165,0	117,0	**191.726**	**170.026**	T20
50,0	54,0	**1541936**	**DFT500R2WD50M**	50	**DFT090508**	165,0	117,0	**191.726**	**170.026**	T20
51,0	52,0	**1541903**	**DFT510R2WD40M**	40	**DFT090508**	165,0	117,0	**191.726**	**170.026**	T20
51,0	52,0	**1541951**	**DFT510R2WD50M**	50	**DFT090508**	165,0	117,0	**191.726**	**170.026**	T20
52,0	53,0	**1541904**	**DFT520R2WD40M**	40	**DFT090508**	165,0	117,0	**191.726**	**170.026**	T20
52,0	53,0	**1541952**	**DFT520R2WD50M**	50	**DFT090508**	165,0	117,0	**191.726**	**170.026**	T20l
53,0	54,0	**1541905**	**DFT530R2WD40M**	40	**DFT090508**	165,0	117,0	**191.726**	**170.026**	T20
53,0	54,0	**1541953**	**DFT530R2WD50M**	50	**DFT090508**	165,0	117,0	**191.726**	**170.026**	T20
54,0	58,0	**1541906**	**DFT540R2WD40M**	40	**DFT090508**	165,0	117,0	**191.726**	**170.026**	T20
54,0	58,0	**1542043**	**DFT540R2WD50M**	50	**DFT090508**	165,0	117,0	**191.726**	**170.026**	T20
55,0	56,0	**1542071**	**DFT550R2WD50M**	50	**DFT090508**	180,0	110,0	**191.726**	**170.026**	T20
56,0	57,0	**1542072**	**DFT560R2WD50M**	50	**DFT090508**	180,0	112,0	**191.726**	**170.026**	T20
57,0	58,0	**1542074**	**DFT570R2WD50M**	50	**DFT090508**	180,0	114,0	**191.726**	**170.026**	T20
58,0	62,0	**1542076**	**DFT580R2WD50M**	50	**DFT090508**	180,0	116,0	**191.726**	**170.026**	T20
59,0	60,0	**1544364**	**DFT590R2WD50M**	50	**DFT090508**	180,0	118,0	**191.726**	**170.026**	T20
60,0	61,0	**1542081**	**DFT600R2WD50M**	50	**DFT090508**	180,0	120,0	**191.726**	**170.026**	T20
61,0	62,0	**1542083**	**DFT610R2WD50M**	50	**DFT090508**	180,0	122,0	**191.726**	**170.026**	T20
62,0	65,0	**1542090**	**DFT620R2WD50M**	50	**DFT090508**	180,0	124,0	**191.726**	**170.026**	T20
63,0	64,0	**1542092**	**DFT630R2WD50M**	50	**DFT090508**	180,0	126,0	**191.726**	**170.026**	T20
64,0	65,0	**1542093**	**DFT640R2WD50M**	50	**DFT090508**	180,0	128,0	**191.726**	**170.026**	T20
65,0	66,0	**1542096**	**DFT650R2WD50M**	50	**DFT090508**	180,0	127,0	**191.726**	**170.026**	T20
66,0	69,0	**1542097**	**DFT660R2WD50M**	50	**DFT090508**	180,0	127,0	**191.726**	**170.026**	T20
67,0	69,0	**1541954**	**DFT670R2WD50M**	50	**DFT090508**	180,0	126,0	**191.726**	**170.026**	T20
68,0	69,0	**1542099**	**DFT680R2WD50M**	50	**DFT090508**	180,0	126,0	**191.726**	**170.026**	T20

Order example:
Catalog number: **DFT370R2WD32M**
Order number: **1541389**

	Insert catalog number	D1		L10		S		D		Rε		KENNA UNIVERSAL
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	KU40D
	**DFT030304GD**	.156	3,97	.104	2,65	.116	2,95	.236	6,00	.0157	0,40	●
	DFT05T308GD	.208	5,29	.134	3,40	.148	3,75	.315	8,00	.0310	0,80	●
	DFT06T308GD	.260	6,62	.173	4,40	.148	3,75	.394	10,00	.0315	0,80	●
	DFT070408GD	.313	7,94	.173	4,40	.187	4,75	.472	12,00	.0315	0,80	●
	DFT090508GD	.391	9,92	.217	5,50	.207	5,25	.591	15,00	.0315	0,80	●
	**DFT030204MD**	.156	3,97	.089	2,25	.096	2,45	.236	6,00	.0157	0,40	●
	DFT030304MD	.156	3,97	.104	2,65	.116	2,95	.236	6,00	.0157	0,40	●
	DFT05T308MD	.208	5,29	.134	3,40	.148	3,75	.315	8,00	.0315	0,80	●
	DFT06T308MD	.260	6,62	.173	4,40	.148	3,75	.394	10,00	.0315	0,80	●
	DFT070408MD	.313	7,94	.173	4,40	.187	4,75	.472	12,00	.0315	0,80	●
	DFT090508MD	.391	9,92	.217	5,50	.207	5,25	.591	15,00	.0315	0,80	●

DRILL-FIX Offset Capability

Both our inch and metric DRILL-FIX product lines offer the capability of being offset in the “X” direction. That means you can produce hole sizes larger than the nominal size, which will reduce cycle times and eliminate the need for special tools.

DRILL-FIX can be applied in the offset condition, to cut into the solid without any pre-drilling. This can eliminate a boring operation.

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

Order example:
Catalog number: **DFT030304GD**
Grade: **KU40D**

Kennametal QPV Drills

Quality

- HSS cobalt grades KC100 and KC300 provide longer tool life, better economy.
- Through-coolant capability cools the workpiece and helps evacuate chips.
- Steel bodies are hardened to 40 - 45 HRC for excellent resistance to chip wash and wear.

Performance

- Increased spindle speeds and feed rates mean reduced cycle times compared to conventional HSS drills.
- Good chip control and surface finish ensure quality parts.
- HSS cobalt blades are ideal for difficult deep-hole applications, less rigid machine tools, and slower speeds.
- Two-flat shank design enables easy mounting on the machine tool.

Value

- Low-cost, efficient solution for any metalcutting application.
- Interchangeable with other spade-type drills so upgrading to our QPV drills is easy.
- No need to regrind! Simply replace the worn blades.
- Large selection of blade diameters available to reduce your drill body inventory.
- Straight shank and Morse taper steel body designs available.

Grade Description

QPV Drills HSS Grades and Geometry

Grade	
KC100	**composition:** A PVD TiN coating over a T15 powdered metal cobalt substrate. **application:** A general-purpose drilling grade that provides strength, toughness, and tool security. The PVD TiN coating is relatively tough compared to other coatings and has good resistance to build-up on the cutting edge. PVD TiN coating has better wear resistance compared to uncoated tools. This grade is the primary choice for machining soft, low-carbon steels, free machining steels, copper, and aluminum. **geometry:** The cutting edge is lightly honed.
KC300	**composition:** A PVD TiAlN coating over a T15 powdered metal cobalt substrate. Harder than KC100. **application:** This is a higher productivity grade compared to KC100. The TiAlN coating offers better hot hardness, which often enables higher cutting speeds with equal or better tool life compared to TiN coated tools. This grade is the primary choice for machining harder low-carbon steel, alloy steel, ferritic and martensitic stainless steel, cast iron and high-temp alloys. **geometry:** The cutting edge is lightly honed.

Cutting Groups	Material Group	Composition/Structure		Tensile Strength RM (MPa)	Hardness HB	Starting Speed (m/min) (sfm)	Starting Recommendation for Feed (mm/r and ipr) by Insert Blade Seat Size							
							Y & Z	0	1	2	3	4	5	6-7-8
							9,5 - 12,7	13,0 - 17,5	17,8 - 24,0	24,6 - 35,0	35,7 - 47,6	48,0 - 65,1	63,5 - 76,2	77,0 -114,3
							.3740-.5000	.5118 - .6890	.7031-.9449	.9688 - 1.3780	1.4063 - 1.8750	1.8898 - 2.5625	2.5000 - 3.000	3.0313 - 4.5000
1	Unalloyed steel, cast steel, machining steel	C= 0,10-0,25	Annealed, long-chipping	420	125	55 180	0,178 .007	0,254 .010	0,330 .013	0,406 .016	0,508 .020	0,610 .024	0,635 .025	0,686 .027
2		C= 0,25-0,55	Annealed, long-chipping	640	190	52 170	0,152 .006	0,229 .009	0,305 .012	0,381 .015	0,508 .020	0,584 .023	0,610 .024	0,660 .026
3		C= 0,25-0,55	Tempered	850	250	47 155	0,127 .005	0,203 .008	0,254 .010	0,356 .014	0,457 .018	0,533 .021	0,584 .023	0,635 .025
4		C= 0,25-0,80	Annealed	915	270	49 160	0,152 .006	0,254 .010	0,330 .013	0,406 .016	0,508 .020	0,584 .023	0,610 .024	0,660 .026
5		C= 0,25-0,80	Tempered	1020	300	44 145	0,127 .005	0,203 .008	0,254 .010	0,356 .014	0,457 .018	0,533 .021	0,584 .023	0,635 .025
6	Low-alloy steel, cast steel, machining steel		Annealed	610	180	46 150	0,152 .006	0,203 .008	0,254 .010	0,356 .014	0,432 .017	0,483 .019	0,533 .021	0,584 .023
7			Tempered	930	275	41 135	0,127 .005	0,178 .007	0,254 .010	0,330 .013	0,432 .017	0,508 .020	0,533 .021	0,584 .023
8			Tempered	1020	300	38 125	0,102 .004	0,152 .006	0,229 .009	0,305 .012	0,381 .015	0,457 .018	0,483 .019	0,533 .021
9			Tempered	1190	350	33 110	0,076 .003	0,152 .006	0,229 .009	0,305 .012	0,381 .015	0,432 .017	0,457 .018	0,483 .019
10	High-alloy steel, cast steel, high-alloy tool steel		Annealed	680	200	38 125	0,127 .005	0,229 .009	0,279 .011	0,330 .013	0,432 .017	0,508 .020	0,533 .021	0,584 .023
11			Hardened and Tempered	1100	325	20 65	0,076 .003	0,127 .005	0,178 .007	0,203 .008	0,254 .010	0,330 .013	0,381 .015	0,406 .016
12	Stainless steel, cast steel	Ferritic / Martensitic	Annealed	680	200	20 65	0,102 .004	0,127 .005	0,178 .007	0,229 .009	0,279 .011	0,356 .014	0,381 .015	0,406 .016
13		Martensitic	Tempered	810	240	30 100	0,127 .005	0,178 .007	0,203 .008	0,254 .010	0,305 .012	0,356 .014	0,406 .016	0,457 .018
14.1	Stainless steel	Austenitic		610		27 90	0,152 .006	0,203 .008	0,229 .009	0,279 .011	0,279 .011	0,406 .016	0,279 .011	0,508 .020
14.2		Austenitic / Ferritic (duplex)		880		23 75	0,127 .005	0,178 .007	0,203 .008	0,254 .010	0,305 .012	0,356 .014	0,406 .016	0,457 .018
15	Gray cast iron	Pearlitic / Ferritic			180	53 175	0,152 .006	0,229 .009	0,305 .012	0,406 .016	0,457 .018	0,533 .021	0,584 .023	0,635 .025
16		Pearlitic (martensitic)			260	38 125	0,102 .004	0,152 .006	0,178 .007	0,229 .009	0,305 .012	0,356 .014	0,406 .016	0,457 .018
17		Ferritic			160	61 200	0,178 .007	0,279 .011	0,356 .014	0,457 .018	0,559 .022	0,635 .025	0,686 .027	0,737 .029
18		Pearlitic			250	38 125	0,102 .004	0,152 .006	0,178 .007	0,229 .009	0,305 .012	0,356 .014	0,406 .016	0,457 .018
19		Ferritic			130	68 225	0,203 .008	0,305 .012	0,406 .016	0,508 .020	0,610 .024	0,686 .027	0,737 .029	0,787 .031
20		Pearlitic			230	46 150	0,127 .005	0,178 .007	0,229 .009	0,305 .012	0,356 .014	0,432 .017	0,483 .019	0,533 .021
21	Aluminum forging alloys		Not heat treatable		60	182 600	0,178 .007	0,305 .012	0,381 .015	0,483 .019	0,533 .021	0,610 .024	0,635 .025	0,660 .026
22			Heat treatable / heat-treated		100	75 600	0,178 .007	0,305 .012	0,381 .015	0,483 .019	0,533 .021	0,610 .024	0,635 .025	0,660 .026
23	Aluminum casting alloys	<12% SI	Not heat treatable		75	91 300	0,203 .008	0,330 .013	0,406 .016	0,508 .020	0,559 .022	0,635 .025	0,660 .026	0,686 .027
24		<12% SI	Heat treatable/heat-treated		90	91 300	0,203 .008	0,330 .013	0,406 .016	0,508 .020	0,559 .022	0,635 .025	0,660 .026	0,686 .027
25		>12% SI	Not heat treatable		130	91 300	0,203 .008	0,330 .013	0,406 .016	0,508 .020	0,559 .022	0,635 .025	0,660 .026	0,686 .027
31	Heat resistant alloys	Fe-Based	Annealed		200	14 45	0,127 .005	0,178 .007	0,203 .008	0,254 .010	0,305 .012	0,381 .015	0,406 .016	0,432 .017
32			Heat treated		230	12 40	0,102 .004	0,152 .006	0,178 .007	0,229 .009	0,279 .011	0,305 .012	0,330 .013	0,356 .014
33		Ni or Co-based	Annealed		250	12 40	0,102 .004	0,152 .006	0,178 .007	0,229 .009	0,279 .011	0,305 .012	0,330 .013	0,356 .014
34			Heat treated		350	11 35	0,102 .004	0,127 .005	0,152 .006	0,178 .007	0,229 .009	0,279 .011	0,305 .012	0,330 .013
35			Cast		320	11 35	0,102 .004	0,127 .005	0,152 .006	0,178 .007	0,229 .009	0,279 .011	0,305 .012	0,330 .013

Notes: These are starting condition guidelines only. The machine tool, fixturing, toolholding, part configuration, and coolant capability may significantly influence specific applications. Use proper and safe machining practices. Make the set-up as rigid as possible. Decrease speed as material hardness increases.

Kennametal QPV Drills Technical Information

Minimum Recommended Coolant Volume Flow Rate (GPM/LPM) and Coolant Pressure

Cutting Groups	Material Group		Series/Diameters							
			Y & Z	0	1	2	3	4	5	6-7-8
			9,5 - 12,7	13,0 - 17,5	17,8 - 24,0	24,6 - 35,0	35,7 - 47,6	48,0 - 65,1	63,5 - 76,2	77,0 - 114,3
			.3740-.5000	.5118 - .6890	.7031-.9449	.9688 - 1.3780	1.4063 - 1.8750	1.8898 - 2.5625	2.5000 - 3.000	3.0313 - 4.5000
1-5	Unalloyed steel, cast steel, machining steel	flow - GPM	2.4 - 2.6	2.4 - 2.6	3.7 - 4.2	6 - 7	11 - 12	26 - 30	26 - 30	36 - 40
		flow - LPM	9,0 - 9,8	9,0 - 9,8	14,0 - 15,9	22,7 - 26,5	41,6 - 45,4	98,4 - 113,6	98,4 - 113,6	136,3 - 151,4
		pressure - PSI	160 - 170	75 - 90	75 - 95	60 - 80	55 - 75	30 - 40	30 - 40	>50
		pressure - BAR	11 - 11,7	5,1 - 6,2	5,1 - 6,5	4,1 - 5,5	3,8 - 5,1	2,0 - 2,7	2,0 - 2,7	>3,4
6 - 9	Low-alloy steel, cast steel, machining steel	flow - GPM	2.5 - 2.7	2.8 - 3.0	4.4 - 5.2	7 - 8	12 - 14	30 - 33	30 - 33	37 - 41
		flow - LPM	9,5 - 10,2	10,6 - 11,4	16,7 - 19,7	26,5 - 30,3	45,4 - 53,0	113,6 - 124,9	113,6 - 124,9	140,0 - 155,2
		pressure - PSI	175 - 185	100 - 120	105 - 140	80 - 115	75 - 100	40 - 50	40 - 50	>60
		pressure - BAR	12,0 - 12,8	6,9 - 8,3	7,2 - 9,7	5,5 - 7,9	5,1 - 6,9	2,7 - 3,4	2,7 - 3,4	>4,1
10 - 11	High-alloy steel, cast steel, high-alloy tool steel	flow - GPM	2.3 - 2.5	2.3 - 2.6	3.6 - 4.1	5 - 6	10 - 12	26 - 30	26 - 30	36 - 40
		flow - LPM	8,7 - 9,5	8,7 - 9,8	13,6 - 15,5	18,9 - 22,7	37,9 - 45,4	98,4 - 113,6	98,4 - 113,6	136,3 - 151,4
		pressure - PSI	155 - 165	70 - 85	70 - 90	55 - 75	50 - 70	30 - 40	30 - 40	>50
		pressure - BAR	10,7 - 11,4	4,8 - 5,8	4,8 - 6,2	3,8 - 5,2	3,4 - 4,8	2,0 - 2,7	2,0 - 2,7	>3,4
12 - 13	Stainless steel, cast steel	flow - GPM	2.3 - 2.5	2.3 - 2.5	2.9 - 3.1	4 - 5	7 - 8	21 - 23	21 - 23	27 - 30
		flow - LPM	8,7 - 9,5	8,7 - 9,5	11,0 - 11,7	15,1 - 18,9	26,5 - 30,3	79,5 - 87,1	79,5 - 87,1	102,2 - 113,6
		pressure - PSI	145 - 155	55 - 60	45 - 50	25 - 30	25 - 30	20 - 25	20 - 25	>30
		pressure - BAR	10,0 - 10,7	3,8 - 4,1	3,1 - 3,4	1,7 - 2,1	1,7 - 2,1	1,4 - 1,7	1,4 - 1,7	>2,1
14.1-14.2	Stainless steel	flow - GPM	2.3 - 2.5	2.3 - 2.6	3.5 - 3.7	5 - 6	9 - 10	23 - 26	23 - 26	33 - 37
		flow - LPM	8,7 - 9,5	8,7 - 9,8	13,2 - 14,0	18,9 - 22,7	34,0 - 37,9	87,1 - 98,4	87,1 - 98,4	124,9 - 140,0
		pressure - PSI	160 - 170	70 - 85	65 - 75	40 - 55	40 - 50	25 - 30	25 - 30	>35
		pressure - BAR	11 - 11,7	4,8 - 5,8	4,5 - 5,2	2,8 - 3,8	2,8 - 3,5	1,7 - 2,1	1,7 - 2,1	>2,4
15 - 20	Cast iron gray, nodular, malleable	flow - GPM	2.3 - 2.5	2.2 - 2.4	3.1 - 3.3	4 - 5	8 - 9	23 - 26	23 - 26	27 - 30
		flow - LPM	8,7 - 9,5	8,3 - 9,1	11,7 - 12,5	15,1 - 18,9	30,3 - 34,1	87,1 - 98,4	87,1 - 98,4	102,2 - 113,6
		pressure - PSI	155 - 165	60 - 65	50 - 60	30 - 40	30 - 35	25 - 30	25 - 30	>30
		pressure - BAR	10,7 - 11,4	4,1 - 4,6	3,4 - 4,1	2,0 - 2,7	2,0 - 2,4	1,7 - 2,1	1,7 - 2,1	>2,1
21 - 25	Aluminum	flow - GPM	2.6 - 2.8	3.3 - 3.7	5.3 - 6.1	8 - 9	14 - 16	30 - 33	30 - 33	37 - 41
		flow - LPM	9,8 - 10,6	12,5 - 14,0	20,1 - 23,1	30,3 - 34,1	53,0 - 60,6	113,6 - 124,9	113,6 - 124,9	140,0 - 155,2
		pressure - PSI	185 - 200	140 - 180	150 - 200	115 - 160	90 - 125	40 - 50	40 - 50	>60
		pressure - BAR	12,8 - 13,8	9,7 - 12,4	10,3 - 13,8	7,9 - 11,0	6,2 - 8,6	2,8 - 3,5	2,8 - 3,5	>4,1
31 - 35	Heat-resistant alloys	flow - GPM	2.2 - 2.4	2.2 - 2.4	3.1 - 3.2	4 - 5	7 - 8	23 - 26	23 - 26	27 - 30
		flow - LPM	8,3 - 9,1	8,3 - 9,1	11,7 - 12,1	15,1 - 18,9	26,5 - 30,3	87,1 - 98,4	87,1 - 98,4	102,2 - 113,6
		pressure - PSI	150 - 160	60 - 65	50 - 55	30 - 35	25 - 30	25 - 30	25 - 30	>30
		pressure - BAR	10,3 - 11,0	4,1 - 4,6	3,4 - 3,8	2,0 - 2,4	1,7 - 2,1	1,7 - 2,1	1,7 - 2,1	>2,1

Useful Formulas:

kW	=	hp	÷ 1.341022
kN	=	lbs.	÷ 225
Nm	=	ft.-lbs.	÷ .7375621

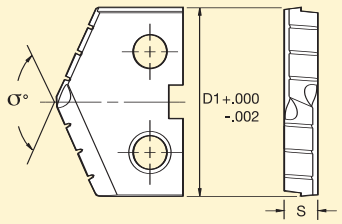
GPM = gallons per minute
LPM = liters per minute

NOTE: Coolant should be filtered prior to use to approximately 30-50 microns.
Chipping of the insert might occur in applications such as machines with fixed speed lower than recommended, old machines with loose spindles, or interrupted cuts. For these applications, grade KC100 is the recommended choice.

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

Ordering Information:

- Order the blade required for hole diameter.
- Match the blade series number with body series number. See pages B26-B27.
- For application information, see pages B19-B20.



D1 Inch	D1 Metric	Seat Size/Series	Catalog number	S	Point Angle σ°	Grades KC100	Grades KC300
.3740	9,50	Y	**QPV0950HDM**	.094	132°	●	●
.3750	9,53	Y	**QPV0375HD**	.094	132°	●	●
.3858	9,80	Y	**QPV0386HD**	.094	132°	●	●
.3906	9,92	Y	**QPV0391HD**	.094	132°	●	●
.3937	10,00	Y	**QPV1000HDM**	.094	132°	●	●
.4016	10,20	Y	**QPV1020HDM**	.094	132°	●	●
.4063	10,32	Y	**QPV0406HD**	.094	132°	●	●
.4134	10,50	Y	**QPV1050HDM**	.094	132°	●	●
.4219	10,72	Y	**QPV0422HD**	.094	132°	●	●
.4252	10,80	Y	**QPV1080HDM**	.094	132°	●	●
.4331	11,00	Y	**QPV1100HDM**	.094	132°	●	●
.4375	11,11	Z	**QPV0438HD**	.094	132°	●	●
.4409	11,20	Z	**QPV1120HDM**	.094	132°	●	●
.4528	11,50	Z	**QPV1150HDM**	.094	132°	●	●
.4606	11,70	Z	**QPV1170HDM**	.094	132°	●	●
.4646	11,80	Z	**QPV1180HDM**	.094	132°	●	●
.4531	11,51	Z	**QPV0453HD**	.094	132°	●	●
.4688	11,91	Z	**QPV0469HD**	.094	132°	●	●
.4724	12,00	Z	**QPV1200HDM**	.094	132°	●	●
.4823	12,25	Z	**QPV1225HDM**	.094	132°	●	●
.4844	12,30	Z	**QPV0484HD**	.094	132°	●	●
.4921	12,50	Z	**QPV1250HDM**	.094	132°	●	●
.5000	12,70	Z	**QPV0500HD**	.094	132°	●	●
.5118	13,00	0	**QPV1300HDM**	.125	132°	●	●
.5156	13,10	0	**QPV0516HD**	.125	132°	●	●
.5313	13,50	0	**QPV0531HD**	.125	132°	●	●
.5469	13,89	0	**QPV0547HD**	.125	132°	●	●
.5512	14,00	0	**QPV1400HDM**	.125	132°	●	●
.5625	14,29	0	**QPV0563HD**	.125	132°	●	●
.5709	14,50	0	**QPV1450HDM**	.125	132°	●	●
.5781	14,68	0	**QPV0578HD**	.125	132°	●	●
.5807	14,75	0	**QPV1475HDM**	.125	132°	●	●
.5906	15,00	0	**QPV1500HDM**	.125	132°	●	●
.5938	15,08	0	**QPV0594HD**	.125	132°	●	●
.6004	15,25	0	**QPV1525HDM**	.125	132°	●	●
.6102	15,50	0	**QPV1550HDM**	.125	132°	●	●
.6250	15,88	0	**QPV0625HD**	.125	132°	●	●
.6299	16,00	0	**QPV1600HDM**	.125	132°	●	●
.6406	16,27	0	**QPV0641HD**	.125	132°	●	●
.6496	16,50	0	**QPV1650HDM**	.125	132°	●	●
.6563	16,67	0	**QPV0656HD**	.125	132°	●	●
.6614	16,80	0	**QPV1680HDM**	.125	132°	●	●
.6693	17,00	0	**QPV1700HDM**	.125	132°	●	●
.6719	17,06	0	**QPV0672HD**	.125	132°	●	●
.6791	17,25	0	**QPV1725HDM**	.125	132°	●	●
.6875	17,46	0	**QPV0688HD**	.125	132°	●	●
.6890	17,50	0	**QPV1750HDM**	.125	132°	●	●
.7031	17,86	1	**QPV0703HD**	.156	132°	●	●
.7087	18,00	1	**QPV1800HDM**	.156	132°	●	●
.7188	18,26	1	**QPV0719HD**	.156	132°	●	●

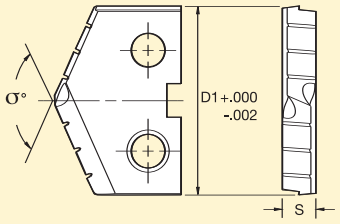
Continued on next page.

Order example:
Catalog number: **QPV0950HDM**
Grade: **KC100**

QPV Drill Blades

QPV-HD Geometry (continued)

Continued from page B21.



D1 Inch	D1 Metric	Seat Size/Series	Catalog number	S	Point Angle σ°	Grades KC100	Grades KC300
.7283	18,50	1	QPV1850HDM	.156	132°	●	●
.7344	18,65	1	QPV0734HD	.156	132°	●	●
.7480	19,00	1	QPV1900HDM	.156	132°	●	●
.7500	19,05	1	QPV0750HD	.156	132°	●	●
.7559	19,20	1	QPV1920HDM	.156	132°	●	●
.7656	19,45	1	QPV0766HD	.156	132°	●	●
.7677	19,50	1	QPV1950HDM	.156	132°	●	●
.7813	19,84	1	QPV0781HD	.156	132°	●	●
.7874	20,00	1	QPV2000HDM	.156	132°	●	●
.7969	20,24	1	QPV0797HD	.156	132°	●	●
.8071	20,50	1	QPV2050HDM	.156	132°	●	●
.8125	20,64	1	QPV0813HD	.156	132°	●	●
.8268	21,00	1	QPV2100HDM	.156	132°	●	●
.8281	21,03	1	QPV0828HD	.156	132°	●	●
.8438	21,43	1	QPV0844HD	.156	132°	●	●
.8594	21,83	1	QPV0859HD	.156	132°	●	●
.8661	22,00	1	QPV2200HDM	.156	132°	●	●
.8750	22,23	1	QPV0875HD	.156	132°	●	●
.8906	22,62	1	QPV0891HD	.156	132°	●	●
.9055	23,00	1	QPV2300HDM	.156	132°	●	●
.9063	23,02	1	QPV0906HD	.156	132°	●	●
.9219	23,42	1	QPV0922HD	.156	132°	●	●
.9375	23,81	1	QPV0938HD	.156	132°	●	●
.9449	24,00	1	QPV2400HDM	.156	132°	●	●
.9598	24,38	1	QPV2438HDM	.156	132°	●	●
.9688	24,61	2	QPV0969HD	.188	132°	●	●
.9844	25,00	2	QPV0984HD	.188	132°	●	●
1.0000	25,40	2	QPV1000HD	.188	132°	●	●
1.0156	25,80	2	QPV1016HD	.188	132°	●	●
1.0236	26,00	2	QPV2600HDM	.188	132°	●	●
1.0313	26,19	2	QPV1031HD	.188	132°	●	●
1.0433	26,50	2	QPV2650HDM	.188	132°	●	●
1.0625	26,99	2	QPV1063HD	.188	132°	●	●
1.0938	27,78	2	QPV1094HD	.188	132°	●	●
1.1024	28,00	2	QPV2800HDM	.188	132°	●	●
1.1250	28,58	2	QPV1125HD	.188	132°	●	●
1.1417	29,00	2	QPV2900HDM	.188	132°	●	●
1.1563	29,37	2	QPV1156HD	.188	132°	●	●
1.1614	29,50	2	QPV2950HDM	.188	132°	●	●
1.1811	30,00	2	QPV3000HDM	.188	132°	●	●
1.1875	30,16	2	QPV1188HD	.188	132°	●	●
1.1929	30,30	2	QPV3030HDM	.188	132°	●	●
1.2188	30,96	2	QPV1219HD	.188	132°	●	●
1.2008	30,50	2	QPV3050HDM	.188	132°	●	●
1.2205	31,00	2	QPV3100HDM	.188	132°	●	●
1.2500	31,75	2	QPV1250HD	.188	132°	●	●
1.2598	32,00	2	QPV3200HDM	.188	132°	●	●
1.2813	32,54	2	QPV1281HD	.188	132°	●	●
1.2992	33,00	2	QPV3300HDM	.188	132°	●	●
1.3125	33,34	2	QPV1313HD	.188	132°	●	●
1.3386	34,00	2	QPV3400HDM	.188	132°	●	●

Continued on next page.

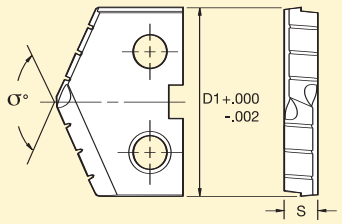
Order example:
Catalog number: **QPV1850HDM**
Grade: **KC100**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

Ordering Information:

- Order the blade required for hole diameter.
- Match the blade series number with body series number. See pages B26-B27.
- For application information, see pages B19-B20.

Continued from page B22.



D1 Inch	D1 Metric	Seat Size/Series	Catalog number	S	Point Angle σ°	Grades KC100	Grades KC300
1.3438	34,13	2	**QPV1344HD**	.188	132°	●	●
1.3750	34,93	2	**QPV1375HD**	.188	132°	●	●
1.3780	35,00	2	**QPV3500HDM**	.188	132°	●	●
1.4063	35,72	3	**QPV1406HD**	.250	132°	●	●
1.4173	36,00	3	**QPV3600HDM**	.250	132°	●	●
1.4375	36,51	3	**QPV1438HD**	.250	132°	●	●
1.4567	37,00	3	**QPV3700HDM**	.250	132°	●	●
1.4688	37,31	3	**QPV1469HD**	.250	132°	●	●
1.4961	38,00	3	**QPV3800HDM**	.250	132°	●	●
1.5000	38,10	3	**QPV1500HD**	.250	132°	●	●
1.5313	38,89	3	**QPV1531HD**	.250	132°	●	●
1.5354	39,00	3	**QPV3900HDM**	.250	132°	●	●
1.5625	39,69	3	**QPV1563HD**	.250	132°	●	●
1.5748	40,00	3	**QPV4000HDM**	.250	132°	●	●
1.5938	40,48	3	**QPV1594HD**	.250	132°	●	●
1.6142	41,00	3	**QPV4100HDM**	.250	132°	●	●
1.6250	41,28	3	**QPV1625HD**	.250	132°	●	●
1.6535	42,00	3	**QPV4200HDM**	.250	132°	●	●
1.6563	42,07	3	**QPV1656HD**	.250	132°	●	●
1.6875	42,86	3	**QPV1688HD**	.250	132°	●	●
1.6929	43,00	3	**QPV4300HDM**	.250	132°	●	●
1.7188	43,66	3	**QPV1719HD**	.250	132°	●	●
1.7323	44,00	3	**QPV4400HDM**	.250	132°	●	●
1.7500	44,45	3	**QPV1750HD**	.250	132°	●	●
1.7717	45,00	3	**QPV4500HDM**	.250	132°	●	●
1.7813	45,24	3	**QPV1781HD**	.250	132°	●	●
1.8110	46,00	3	**QPV4600HDM**	.250	132°	●	●
1.8125	46,04	3	**QPV1813HD**	.250	132°	●	●
1.8438	46,83	3	**QPV1844HD**	.250	132°	●	●
1.8504	47,00	3	**QPV4700HDM**	.250	132°	●	●
1.8750	47,63	3	**QPV1875HD**	.250	132°	●	●
1.8898	48,00	4	**QPV4800HDM**	.313	132°	●	●
1.9063	48,42	4	**QPV1906HD**	.313	132°	●	●
1.9291	49,00	4	**QPV4900HDM**	.313	132°	●	●
1.9375	49,21	4	**QPV1938HD**	.313	132°	●	●
1.9688	50,00	4	**QPV1969HD**	.313	132°	●	●
2.0000	50,80	4	**QPV2000HD**	.313	132°	●	●
2.0079	51,00	4	**QPV5100HDM**	.313	132°	●	●
2.0313	51,59	4	**QPV2031HD**	.313	132°	●	●
2.0469	52,00	4	**QPV2047HD**	.313	132°	●	●
2.0625	52,39	4	**QPV2063HD**	.313	132°	●	●
2.0866	53,00	4	**QPV5300HDM**	.313	132°	●	●
2.0938	53,18	4	**QPV2094HD**	.313	132°	●	●
2.1250	53,98	4	**QPV2125HD**	.313	132°	●	●
2.1260	54,00	4	**QPV5400HDM**	.313	132°	●	●
2.1563	54,77	4	**QPV2156HD**	.313	132°	●	●
2.1654	55,00	4	**QPV5500HDM**	.313	132°	●	●
2.1875	55,56	4	**QPV2188HD**	.313	132°	●	●
2.2047	56,00	4	**QPV5600HDM**	.313	132°	●	●
2.2188	56,36	4	**QPV2219HD**	.313	132°	●	●

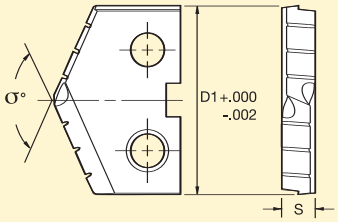
Continued on next page.

Order example:
Catalog number: **QPV1344HD**
Grade: **KC100**

QPV Drill Blades

QPV-HD Geometry (continued)

Continued from page B23.



D1 Inch	D1 Metric	Seat Size/Series	Catalog number	S	Point Angle σ°	Grades KC100	Grades KC300
2.2441	57,00	4	QPV5700HDM	.313	132°	●	●
2.2500	57,15	4	QPV2250HD	.313	132°	●	●
2.2559	57,30	4	QPV5730HDM	.313	132°	●	●
2.2813	57,94	4	QPV2281HD	.313	132°	●	●
2.2835	58,00	4	QPV5800HDM	.313	132°	●	●
2.3125	58,74	4	QPV2313HD	.313	132°	●	●
2.3228	59,00	4	QPV5900HDM	.313	132°	●	●
2.3438	59,53	4	QPV2344HD	.313	132°	●	●
2.3622	60,00	4	QPV6000HDM	.313	132°	●	●
2.3750	60,33	4	QPV2375HD	.313	132°	●	●
2.4016	61,00	4	QPV6100HDM	.313	132°	●	●
2.4063	61,12	4	QPV2406HD	.313	132°	●	●
2.4375	61,91	4	QPV2438HD	.313	132°	●	●
2.4409	62,00	4	QPV6200HDM	.313	132°	●	●
2.4688	62,71	4	QPV2469HD	.313	132°	●	●
2.4803	63,00	4	QPV6300HDM	.313	132°	●	●
2.5000	63,50	4	QPV2500HD4	.313	144°	●	●
2.5313	64,29	4	QPV2531HD4	.313	144°	●	●
2.5591	65,00	4	QPV6500HDM	.313	144°	●	●
2.5625	65,09	4	QPV2563HD4	.313	144°	●	●
2.5000	63,50	5	QPV2500HD5	.438	144°	●	●
2.5313	64,29	5	QPV2531HD5	.438	144°	●	●
2.5625	65,09	5	QPV2563HD5	.438	144°	●	●
2.5938	65,88	5	QPV2594HD	.438	144°	●	●
2.5984	66,00	5	QPV6600HDM	.438	144°	●	●
2.6250	66,68	5	QPV2625HD	.438	144°	●	●
2.6563	67,47	5	QPV2656HD	.438	144°	●	●
2.6772	68,00	5	QPV6800HDM	.438	144°	●	●
2.6875	68,26	5	QPV2688HD	.438	144°	●	●
2.7188	69,05	5	QPV2719HD	.438	144°	●	●
2.7500	69,85	5	QPV2750HD	.438	144°	●	●
2.7559	70,00	5	QPV7000HDM	.438	144°	●	●
2.7813	70,64	5	QPV2781HD	.438	144°	●	●
2.8125	71,44	5	QPV2813HD	.438	144°	●	●
2.8346	72,00	5	QPV7200HDM	.438	144°	●	●
2.8438	72,23	5	QPV2844HD	.438	144°	●	●
2.8750	73,03	5	QPV2875HD	.438	144°	●	●
2.9063	73,82	5	QPV2906HD	.438	144°	●	●
2.9134	74,00	5	QPV7400HDM	.438	144°	●	●
2.9375	74,61	5	QPV2938HD	.438	144°	●	●
2.9688	75,41	5	QPV2969HD	.438	144°	●	●
2.9921	76,00	5	QPV7600HDM	.438	144°	●	●
3.0000	76,20	5	QPV3000HD	.438	144°	●	●
3.0313	76,99	6	QPV3031HD	.438	144°	●	●
3.0625	77,79	6	QPV3063HD	.438	144°	●	●
3.0709	78,00	6	QPV7800HDM	.438	144°	●	●
3.0938	78,58	6	QPV3094HD	.438	144°	●	●
3.1250	79,38	6	QPV3125HD	.438	144°	●	●
3.1496	80,00	6	QPV8000HDM	.438	144°	●	●
3.1563	80,17	6	QPV3156HD	.438	144°	●	●

Continued on next page.

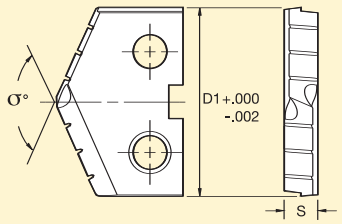
Order example:
Catalog number: **QPV5700HDM**
Grade: **KC100**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

Ordering Information:

- Order the blade required for hole diameter.
- Match the blade series number with body series number. See pages B26-B27.
- For application information, see pages B19-B20.

Continued from page B24.



D1 Inch	D1 Metric	Seat Size/Series	Catalog number	S	Point Angle σ°	Grades KC100	Grades KC300
3.1875	80,96	6	QPV3188HD	.438	144°	●	●
3.2188	81,76	6	QPV3219HD	.438	144°	●	●
3.2283	82,00	6	QPV8200HDM	.438	144°	●	●
3.2500	82,55	6	QPV3250HD	.438	144°	●	●
3.2813	83,34	6	QPV3281HD	.438	144°	●	●
3.3071	84,00	6	QPV8400HDM	.438	144°	●	●
3.3125	84,14	6	QPV3313HD	.438	144°	●	●
3.3438	84,93	6	QPV3344HD	.438	144°	●	●
3.3750	85,73	6	QPV3375HD	.438	144°	●	●
3.3858	86,00	6	QPV8600HDM	.438	144°	●	●
3.4063	86,52	6	QPV3406HD	.438	144°	●	●
3.4375	87,31	6	QPV3438HD	.438	144°	●	●
3.4646	88,00	6	QPV8800HDM	.438	144°	●	●
3.4688	88,11	6	QPV3469HD	.438	144°	●	●
3.5000	88,90	6	QPV3500HD	.438	144°	●	●
3.5313	89,69	7	QPV3531HD	.438	144°	●	●
3.5433	90,00	7	QPV9000HDM	.438	144°	●	●
3.5625	90,49	7	QPV3563HD	.438	144°	●	●
3.5938	91,28	7	QPV3594HD	.438	144°	●	●
3.6220	92,00	7	QPV9200HDM	.438	144°	●	●
3.6250	92,08	7	QPV3625HD	.438	144°	●	●
3.6563	92,87	7	QPV3656HD	.438	144°	●	●
3.6875	93,66	7	QPV3688HD	.438	144°	●	●
3.7008	94,00	7	QPV9400HDM	.438	144°	●	●
3.7188	94,46	7	QPV3719HD	.438	144°	●	●
3.7500	95,25	7	QPV3750HD	.438	144°	●	●
3.7795	96,00	7	QPV9600HDM	.438	144°	●	●
3.7813	96,04	7	QPV3781HD	.438	144°	●	●
3.8125	96,84	7	QPV3813HD	.438	144°	●	●
3.8438	97,63	7	QPV3844HD	.438	144°	●	●
3.8583	98,00	7	QPV9800HDM	.438	144°	●	●
3.8750	98,43	7	QPV3875HD	.438	144°	●	●
3.9063	99,22	7	QPV3906HD	.438	144°	●	●
3.9375	100,01	7	QPV3938HD	.438	144°	●	●
3.9688	100,81	7	QPV3969HD	.438	144°	●	●
4.0000	101,60	7	QPV4000HD	.438	144°	●	●
4.0156	102,00	8	QPV4016HD	.438	144°	●	●
4.0625	103,19	8	QPV4063HD	.438	144°	●	●
4.0945	104,00	8	QPV10400HDM	.438	144°	●	●
4.1250	104,78	8	QPV4125HD	.438	144°	●	●
4.1732	106,00	8	QPV10600HDM	.438	144°	●	●
4.1875	106,36	8	QPV4188HD	.438	144°	●	●
4.2500	107,95	8	QPV4250HD	.438	144°	●	●
4.2520	108,00	8	QPV10800HDM	.438	144°	●	●
4.3125	109,54	8	QPV4313HD	.438	144°	●	●
4.3307	110,00	8	QPV11000HDM	.438	144°	●	●
4.3750	111,13	8	QPV4375HD	.438	144°	●	●
4.4094	112,00	8	QPV11200HDM	.438	144°	●	●
4.4375	112,71	8	QPV4438HD	.438	144°	●	●
4.4882	114,00	8	QPV11400HDM	.438	144°	●	●
4.5000	114,30	8	QPV4500HD	.438	144°	●	●

Order example:
Catalog number: **QPV3188HD**
Grade: **KC100**

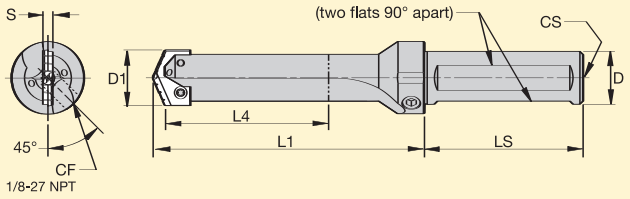
QPV Drill Bodies

Inch – Multiple Cutting Depths

Ordering Information:

- Four drill body length options: short, standard, long, and extra-long.
- Match the body series number with blade series number. See pages B21-B25.
- Insert screw, Torx wrench, and side pipe plug are shipped with body. We recommend ordering extra screws.

Flanged Shank – SSF



D1 min.	D1 max.	Order number	Catalog number	Insert Blade Seat Size	D	L1	L4 max.	LS	S	Insert Screw	Torx Wrench	End Pipe Thread CS
Short Length												
.374	.435	**1731874**	**QPV0435RSSSF075**	Y	.750	2.73	1.25	2.00	.094	**MS2103PKG**	FT7	**1/8-27 NPT**
.437	.511	**1731875**	**QPV0511RSSSF075**	Z	.750	2.73	1.25	2.00	.094	**MS2104PKG**	FT6	**1/8-27 NPT**
.512	.610	**1731876**	**QPV0610RSSSF075**	0	.750	2.88	1.38	2.00	.125	**MS2105PKG**	FT7	**1/8-27 NPT**
.610	.702	**1731877**	**QPV0702RSSSF075**	0	.750	2.88	1.38	2.00	.125	**MS2105PKG**	FT7	**1/8-27 NPT**
.703	.859	**1731878**	**QPV0859RSSSF075**	1	.750	4.33	2.63	2.00	.156	**MS2106PKG**	FT8	**1/8-27 NPT**
.859	.960	**1731879**	**QPV0960RSSSF100**	1	1.000	4.33	2.63	3.00	.156	**MS2106PKG**	FT8	**1/4-18 NPT**
.961	1.188	**1731880**	**QPV1188RSSSF100**	2	1.000	5.13	3.38	3.00	.188	**MS2107PKG**	FT15	**1/4-18 NPT**
1.187	1.380	**1731951**	**QPV1380RSSSF125**	2	1.250	5.20	3.38	3.25	.188	**MS2107PKG**	FT15	**1/4-18 NPT**
1.359	1.875	**1731952**	**QPV1875RSSSF150**	3	1.500	6.81	4.75	3.75	.250	**MS2108PKG**	FT20	**1/4-18 NPT**
1.859	2.563	**1731953**	**QPV2563RSSSF150**	4	1.500	7.28	5.13	3.75	.313	**MS2108PKG**	FT20	**1/4-18 NPT**
2.480	3.500	**1731954**	**QPV3500RSSSF200**	5-6	2.000	8.94	6.75	4.00	.438	**MS2109PKG**	KT25	**1/4-18 NPT**
3.484	4.500	**1731955**	**QPV4500RSSSF250**	6-7-8	2.500	9.38	6.75	4.25	.438	**MS2109PKG**	KT25	**1/4-18 NPT**
Standard Length												
.374	.435	**1731956**	**QPV0435RRSSF075**	Y	.750	3.86	2.38	2.00	.094	**MS2103PKG**	FT7	**1/8-27 NPT**
.437	.511	**1731957**	**QPV0511RRSSF075**	Z	.750	3.86	2.38	2.00	.094	**MS2104PKG**	FT6	**1/8-27 NPT**
.512	.610	**1731958**	**QPV0610RRSSF075**	0	.750	4.00	2.50	2.00	.125	**MS2105PKG**	FT7	**1/8-27 NPT**
.610	.702	**1731959**	**QPV0702RRSSF075**	0	.750	4.00	2.50	2.00	.125	**MS2105PKG**	FT7	**1/8-27 NPT**
.703	.859	**1731960**	**QPV0859RRSSF075**	1	.750	6.33	4.63	2.00	.156	**MS2106PKG**	FT8	**1/8-27 NPT**
.859	.960	**1731981**	**QPV0960RRSSF100**	1	1.000	6.33	4.63	3.00	.156	**MS2106PKG**	FT8	**1/4-18 NPT**
.961	1.188	**1731982**	**QPV1188RRSSF100**	2	1.000	7.13	5.38	3.00	.188	**MS2107PKG**	FT15	**1/4-18 NPT**
1.187	1.380	**1731983**	**QPV1380RRSSF125**	2	1.250	7.22	5.38	3.25	.188	**MS2107PKG**	FT15	**1/4-18 NPT**
1.359	1.875	**1731984**	**QPV1875RRSSF150**	3	1.500	8.31	6.25	3.75	.250	**MS2108PKG**	FT20	**1/4-18 NPT**
1.859	2.563	**1731985**	**QPV2563RRSSF150**	4	1.500	9.28	7.13	3.75	.313	**MS2108PKG**	FT20	**1/4-18 NPT**
2.480	3.500	**1731988**	**QPV3500RRSSF200**	5-6	2.000	10.94	8.75	4.00	.438	**MS2109PKG**	KT25	**1/4-18 NPT**
3.484	4.500	**1731989**	**QPV4500RRSSF250**	6-7-8	2.500	11.38	8.75	4.25	.438	**MS2109PKG**	KT25	**1/4-18 NPT**
Long Length												
.374	.435	**1731990**	**QPV0435RLSSF075**	Y	.750	5.86	4.38	2.00	.094	**MS2103PKG**	FT7	**1/8-27 NPT**
.437	.511	**1732041**	**QPV0511RLSSF075**	Z	.750	5.86	4.38	2.00	.094	**MS2104PKG**	FT6	**1/8-27 NPT**
.512	.610	**1732042**	**QPV0610RLSSF075**	0	.750	6.00	4.50	2.00	.125	**MS2105PKG**	FT7	**1/8-27 NPT**
.610	.702	**1732043**	**QPV0702RLSSF075**	0	.750	6.00	4.50	2.00	.125	**MS2105PKG**	FT7	**1/8-27 NPT**
.703	.859	**1732044**	**QPV0859RLSSF075**	1	.750	8.33	6.63	2.00	.156	**MS2106PKG**	FT8	**1/8-27 NPT**
.859	.960	**1732045**	**QPV0960RLSSF100**	1	1.000	8.33	6.63	3.00	.156	**MS2106PKG**	FT8	**1/4-18 NPT**
.961	1.188	**1732046**	**QPV1188RLSSF100**	2	1.000	9.13	7.38	3.00	.188	**MS2107PKG**	FT15	**1/4-18 NPT**
1.187	1.380	**1732047**	**QPV1380RLSSF125**	2	1.250	9.22	7.38	3.25	.188	**MS2107PKG**	FT15	**1/4-18 NPT**
1.359	1.875	**1732048**	**QPV1875RLSSF150**	3	1.500	10.31	8.25	3.75	.250	**MS2108PKG**	FT20	**1/4-18 NPT**
1.859	2.563	**1732049**	**QPV2563RLSSF150**	4	1.500	11.28	9.13	3.75	.313	**MS2108PKG**	FT20	**1/4-18 NPT**
2.480	3.500	**1732050**	**QPV3500RLSSF200**	5-6	2.000	12.94	10.75	4.00	.438	**MS2109PKG**	KT25	**1/4-18 NPT**
3.484	4.500	**1732071**	**QPV4500RLSSF250**	6-7-8	2.500	13.38	10.75	4.25	.438	**MS2109PKG**	KT25	**1/4-18 NPT**
Extra-Long Length												
.703	.859	**1732072**	**QPV0859RESSF075**	1	.750	12.33	10.63	2.00	.156	**MS2106PKG**	FT8	**1/8-27 NPT**
.859	.960	**1732074**	**QPV0960RESSF100**	1	1.000	12.33	10.63	3.00	.156	**MS2106PKG**	FT8	**1/4-18 NPT**
.961	1.188	**1732075**	**QPV1188RESSF100**	2	1.000	13.13	11.38	3.00	.188	**MS2107PKG**	FT15	**1/4-18 NPT**
1.187	1.380	**1732076**	**QPV1380RESSF125**	2	1.250	13.22	11.38	3.25	.188	**MS2107PKG**	FT15	**1/4-18 NPT**

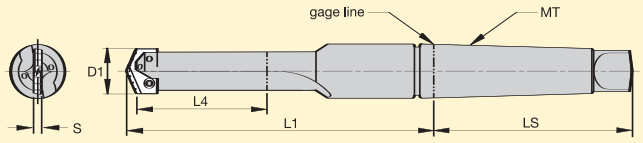
Order example:
Catalog number: **QPV0435RSSSF075**
Order number: **1731874**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

Ordering Information:

- Four drill body length options: short, standard, long, and extra-long.
- Match the body series number with blade series number. See pages B21-B25.
- Insert screw, Torx wrench, and side plug are shipped with body. We recommend ordering extra screws.

Morse Taper Shank – MT



D1 min.	D1 max.	Order number	Catalog number	Insert Blade Seat Size	L1	L4 max.	LS	MT	S	Insert Screw	Torx Wrench
Short Length											
.374	.435	**1732078**	**QPV0435RSMT2**	Y	4.16	1.25	2.94	#2	.094	**MS2103PKG**	FT7
.437	.511	**1732079**	**QPV0511RSMT2**	Z	4.20	1.25	2.94	#2	.094	**MS2104PKG**	FT6
.512	.610	**1732091**	**QPV0610RSMT2**	0	4.36	1.38	2.94	#2	.125	**MS2105PKG**	FT7
.610	.702	**1732092**	**QPV0702RSMT2**	0	4.42	1.38	2.94	#2	.125	**MS2105PKG**	FT7
.703	.859	**1732094**	**QPV0859RSMT3**	1	6.06	2.63	3.69	#3	.156	**MS2106PKG**	FT8
.859	.960	**1732095**	**QPV0960RSMT3**	1	6.03	2.63	3.69	#3	.156	**MS2106PKG**	FT8
.961	1.188	**1732096**	**QPV1188RSMT3**	2	6.56	3.38	3.69	#3	.188	**MS2107PKG**	FT15
1.187	1.380	**1732098**	**QPV1380RSMT3**	2	6.80	3.38	3.69	#3	.188	**MS2107PKG**	FT15
1.359	1.875	**1732099**	**QPV1875RSMT4**	3	8.38	4.75	4.63	#4	.250	**MS2108PKG**	FT20
1.859	2.563	**1732100**	**QPV2563RSMT4**	4	9.11	5.13	4.63	#4	.313	**MS2108PKG**	FT20
2.480	3.500	**1732121**	**QPV3500RSMT5**	5-6	12.06	6.75	5.88	#5	.438	**MS2109PKG**	KT25
3.484	4.500	**1732122**	**QPV4500RSMT5**	6-7-8	12.50	6.75	5.88	#5	.438	**MS2109PKG**	KT25
Standard Length											
.374	.435	**1732124**	**QPV0435RRMT2**	Y	5.28	2.38	2.94	#2	.094	**MS2103PKG**	FT7
.437	.511	**1732125**	**QPV0511RRMT2**	Z	5.33	2.38	2.94	#2	.094	**MS2104PKG**	FT6
.512	.610	**1732126**	**QPV0610RRMT2**	0	5.48	2.50	2.94	#2	.125	**MS2105PKG**	FT7
.610	.702	**1732127**	**QPV0702RRMT2**	0	5.56	2.50	2.94	#2	.125	**MS2105PKG**	FT7
.703	.859	**1732128**	**QPV0859RRMT3**	1	8.06	4.63	3.69	#3	.156	**MS2106PKG**	FT8
.859	.960	**1732129**	**QPV0960RRMT3**	1	8.03	4.63	3.69	#3	.156	**MS2106PKG**	FT8
.961	1.188	**1732130**	**QPV1188RRMT3**	2	8.56	5.38	3.69	#3	.188	**MS2107PKG**	FT15
1.187	1.380	**1732151**	**QPV1380RRMT3**	2	8.80	5.38	3.69	#3	.188	**MS2107PKG**	FT15
1.359	1.875	**1732153**	**QPV1875RRMT4**	3	9.88	6.25	4.63	#4	.250	**MS2108PKG**	FT20
1.859	2.563	**1732155**	**QPV2563RRMT4**	4	11.11	7.13	4.63	#4	.313	**MS2108PKG**	FT20
2.480	3.500	**1732156**	**QPV3500RRMT5**	5-6	14.06	8.75	5.88	#5	.438	**MS2109PKG**	KT25
3.484	4.500	**1732157**	**QPV4500RRMT5**	6-7-8	14.50	8.75	5.88	#5	.438	**MS2109PKG**	KT25
Long Length											
.374	.435	**1732158**	**QPV0435RLMT2**	Y	7.28	4.38	2.94	#2	.094	**MS2103PKG**	FT7
.437	.511	**1732159**	**QPV0511RLMT2**	Z	7.33	4.38	2.94	#2	.094	**MS2104PKG**	FT6
.512	.610	**1732160**	**QPV0610RLMT2**	0	7.48	4.50	2.94	#2	.125	**MS2105PKG**	FT7
.610	.702	**1732171**	**QPV0702RLMT2**	0	7.56	4.50	2.94	#2	.125	**MS2105PKG**	FT7
.703	.859	**1732172**	**QPV0859RLMT3**	1	10.06	6.63	3.69	#3	.156	**MS2106PKG**	FT8
.859	.960	**1732173**	**QPV0960RLMT3**	1	10.03	6.63	3.69	#3	.156	**MS2106PKG**	FT8
.961	1.188	**1732174**	**QPV1188RLMT3**	2	10.56	7.38	3.69	#3	.188	**MS2107PKG**	FT15
1.187	1.380	**1732175**	**QPV1380RLMT3**	2	10.80	7.38	3.69	#3	.188	**MS2107PKG**	FT15
1.359	1.875	**1732176**	**QPV1875RLMT4**	3	11.88	8.25	4.63	#4	.250	**MS2108PKG**	FT20
1.859	2.563	**1732177**	**QPV2563RLMT4**	4	13.11	9.13	4.63	#4	.313	**MS2108PKG**	FT20
2.480	3.500	**1732178**	**QPV3500RLMT5**	5-6	16.06	10.75	5.88	#5	.438	**MS2109PKG**	KT25
3.484	4.500	**1732179**	**QPV4500RLMT5**	6-7-8	16.50	10.75	5.88	#5	.438	**MS2109PKG**	KT25
Extra-Long Length											
.703	.859	**1732180**	**QPV0859REMT3**	1	14.06	10.63	3.69	#3	.156	**MS2106PKG**	FT8
.859	.960	**1732201**	**QPV0960REMT3**	1	14.06	10.63	3.69	#3	.156	**MS2106PKG**	FT8
.961	1.188	**1732202**	**QPV1188REMT3**	2	14.56	11.38	3.69	#3	.188	**MS2107PKG**	FT15
1.187	1.380	**1732203**	**QPV1380REMT3**	2	14.80	11.38	3.69	#3	.188	**MS2107PKG**	FT15

Order example:
Catalog number: **QPV0435RSMT2**
Order number: **1732078**

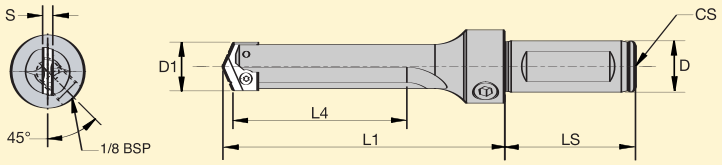
QPV Drill Bodies

Metric – Multiple Cutting Depths

Ordering Information:

- Four drill body length options: short, standard, long, and extra-long.
- Match the body series number with blade series number. See pages B21-B25.
- Insert screw, Torx wrench, and side pipe plug are shipped with body. We recommend ordering extra screws.

Flanged Shank – SF



D1 Inch min.	D1 Inch max.	D1 Metric min.	D1 Metric max.	Order number	Catalog number	Insert Blade Seat Size	D	L1	L4 max.	LS	S	Insert Screw	Torx Wrench	CS	Side Pipe Plug
Short Length															
.3740	.4331	9,50	11,00	**2648898**	**QPV0950RSSF20M**	Y	20	69,35	31,75	51	2,41	**MS2103PKG**	FT7	**1/8 BSP**	**191.982**
.4374	.5000	11,11	12,70	**2648899**	**QPV1111RSSF20M**	Z	20	69,35	31,75	51	2,41	**MS2104PKG**	FT6	**1/8 BSP**	**191.982**
.5118	.6102	13,00	15,50	**2648900**	**QPV1300RSSF20M**	0	20	73,15	34,93	51	3,21	**MS2105PKG**	FT7	**1/8 BSP**	**191.982**
.6102	.6890	15,50	17,50	**2648901**	**QPV1550RSSF20M**	0	20	73,15	34,93	51	3,21	**MS2105PKG**	FT7	**1/8 BSP**	**191.982**
.7031	.8591	17,86	21,82	**2648902**	**QPV1786RSSF20M**	1	20	109,98	66,80	51	4,01	**MS2106PKG**	FT8	**1/8 BSP**	**191.982**
.8591	.9449	21,82	24,00	**2648923**	**QPV2182RSSF32M**	1	32	109,98	66,80	61	4,01	**MS2106PKG**	FT8	**1/8 BSP**	**191.982**
.9689	1.1882	24,61	30,18	**2648924**	**QPV2461RSSF32M**	2	32	130,30	85,85	61	4,78	**MS2107PKG**	FT15	**1/8 BSP**	**191.982**
1.1811	1.3780	30,00	35,00	**2648925**	**QPV3000RSSF32M**	2	32	132,08	85,85	61	4,78	**MS2107PKG**	FT15	**1/8 BSP**	**191.982**
1.4059	1.8752	35,71	47,63	**2648926**	**QPV3571RSSF40M**	3	40	172,97	120,65	71	6,36	**MS2108PKG**	FT20	**1/8 BSP**	**191.982**
1.8898	2.5630	48,00	65,10	**2648927**	**QPV4800RSSF40M**	4	40	184,76	130,30	71	7,95	**MS2108PKG**	FT20	**1/8 BSP**	**191.982**
2.5000	3.5000	63,50	88,90	**2648928**	**QPV6350RSSF50M**	5-6	50	227,08	171,45	81	11,13	**MS2109PKG**	KT25	**1/8 BSP**	**191.982**
3.5000	4.5000	88,90	114,30	**2648929**	**QPV8890RSSF50M**	6-7-8	50	238,25	171,45	81	11,13	**MS2109PKG**	KT25	**1/8 BSP**	**191.982**
Standard Length															
.3740	.4331	9,50	11,00	**2648930**	**QPV0950RRSF20M**	Y	20	98,04	60,45	51	2,41	**MS2103PKG**	FT7	**1/8 BSP**	**191.982**
.4374	.5000	11,11	12,70	**2648931**	**QPV1111RRSF20M**	Z	20	98,04	60,45	51	2,41	**MS2104PKG**	FT6	**1/8 BSP**	**191.982**
.5118	.6102	13,00	15,50	**2648932**	**QPV1300RRSF20M**	0	20	101,60	63,50	51	3,21	**MS2105PKG**	FT7	**1/8 BSP**	**191.982**
.6102	.6890	15,50	17,50	**2648933**	**QPV1550RRSF20M**	0	20	101,60	63,50	51	3,21	**MS2105PKG**	FT7	**1/8 BSP**	**191.982**
.7031	.8591	17,86	21,82	**2648934**	**QPV1786RRSF20M**	1	20	160,78	117,60	51	4,01	**MS2106PKG**	FT8	**1/8 BSP**	**191.982**
.8591	.9449	21,82	24,00	**2648935**	**QPV2182RRSF32M**	1	32	160,78	117,60	61	4,01	**MS2106PKG**	FT8	**1/8 BSP**	**191.982**
.9689	1.1882	24,61	30,18	**2648936**	**QPV2461RRSF32M**	2	32	181,10	136,65	61	4,78	**MS2107PKG**	FT15	**1/8 BSP**	**191.982**
1.1811	1.3780	30,00	35,00	**2648937**	**QPV3000RRSF32M**	2	32	183,39	136,65	61	4,78	**MS2107PKG**	FT15	**1/8 BSP**	**191.982**
1.4059	1.8752	35,71	47,63	**2648938**	**QPV3571RRSF40M**	3	40	211,07	158,75	71	6,36	**MS2108PKG**	FT20	**1/8 BSP**	**191.982**
1.8898	2.5630	48,00	65,10	**2648939**	**QPV4800RRSF40M**	4	40	235,56	181,10	71	7,95	**MS2108PKG**	FT20	**1/8 BSP**	**191.982**
2.5000	3.5000	63,50	88,90	**2648940**	**QPV6350RRSF50M**	5-6	50	277,88	222,25	81	11,13	**MS2109PKG**	KT25	**1/8 BSP**	**191.982**
3.5000	4.5000	88,90	114,30	**2648941**	**QPV8890RRSF50M**	6-7-8	50	289,05	222,25	81	11,13	**MS2109PKG**	KT25	**1/8 BSP**	**191.982**
Long Length															
.3740	.4331	9,50	11,00	**2648942**	**QPV0950RLSF20M**	Y	20	148,84	111,25	51	2,41	**MS2103PKG**	FT7	**1/8 BSP**	**191.982**
.4374	.5000	11,11	12,70	**2648943**	**QPV1111RLSF20M**	Z	20	148,84	111,25	51	2,41	**MS2104PKG**	FT6	**1/8 BSP**	**191.982**
.5118	.6102	13,00	15,50	**2648944**	**QPV1300RLSF20M**	0	20	152,40	114,30	51	3,21	**MS2105PKG**	FT7	**1/8 BSP**	**191.982**
.6102	.6890	15,50	17,50	**2648945**	**QPV1550RLSF20M**	0	20	152,40	114,30	51	3,21	**MS2105PKG**	FT7	**1/8 BSP**	**191.982**
.7031	.8591	17,86	21,82	**2648946**	**QPV1786RLSF20M**	1	20	211,58	168,40	51	4,01	**MS2106PKG**	FT8	**1/8 BSP**	**191.982**
.8591	.9449	21,82	24,00	**2648947**	**QPV2182RLSF32M**	1	32	211,58	168,40	61	4,01	**MS2106PKG**	FT8	**1/8 BSP**	**191.982**
.9689	1.1882	24,61	30,18	**2648948**	**QPV2461RLSF32M**	2	32	231,90	187,45	61	4,78	**MS2107PKG**	FT15	**1/8 BSP**	**191.982**
1.1811	1.3780	30,00	35,00	**2648949**	**QPV3000RLSF32M**	2	32	234,19	187,45	61	4,78	**MS2107PKG**	FT15	**1/8 BSP**	**191.982**
1.4059	1.8752	35,71	47,63	**2648950**	**QPV3571RLSF40M**	3	40	261,87	209,55	71	6,36	**MS2108PKG**	FT20	**1/8 BSP**	**191.982**
1.8898	2.5630	48,00	65,10	**2648951**	**QPV4800RLSF40M**	4	40	286,36	231,90	71	7,95	**MS2108PKG**	FT20	**1/8 BSP**	**191.982**
2.5000	3.5000	63,50	88,90	**2648952**	**QPV6350RLSF50M**	5-6	50	328,68	273,05	81	11,13	**MS2109PKG**	KT25	**1/8 BSP**	**191.982**
3.5000	4.5000	88,90	114,30	**2648953**	**QPV8890RLSF50M**	6-7-8	50	339,85	273,05	81	11,13	**MS2109PKG**	KT25	**1/8 BSP**	**191.982**
Extra-Long Length															
.7031	.8591	17,86	21,82	**2648954**	**QPV1786RESF20M**	1	20	313,18	270,00	51	4,01	**MS2106PKG**	FT8	**1/8 BSP**	**191.982**
.8591	.9449	21,82	24,00	**2648955**	**QPV2182RESF32M**	1	32	313,18	270,00	61	4,01	**MS2106PKG**	FT8	**1/8 BSP**	**191.982**
.9689	1.1882	24,61	30,18	**2648956**	**QPV2461RESF32M**	2	32	333,50	289,05	61	4,78	**MS2107PKG**	FT15	**1/8 BSP**	**191.982**
1.1811	1.3780	30,00	35,00	**2648957**	**QPV3000RESF32M**	2	32	335,79	289,05	61	4,78	**MS2107PKG**	FT15	**1/8 BSP**	**191.982**

Order example:
Catalog number: **QPV0950RSSF20M**
Order number: **2648898**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

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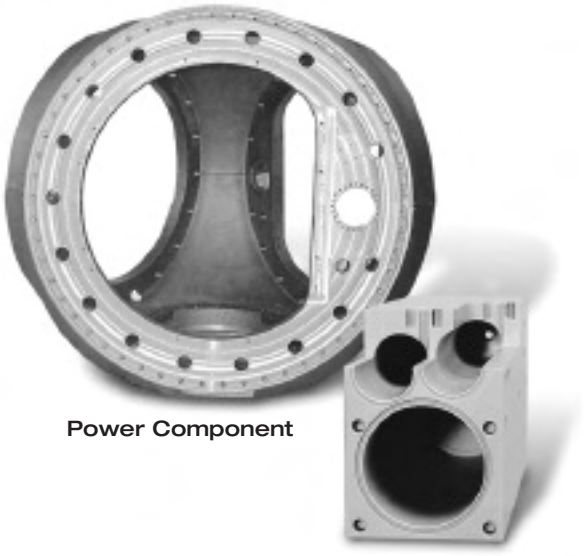

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KENNA UNIVERSAL

Milling Products

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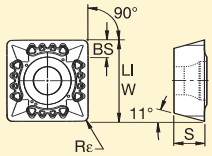
Face Mills 0°/90° — KSSM

10 mm IC Inserts



..GB (ground) 5° rake face

Catalog number	LI	BS	S	Rε	P	M	K	N	S	KENNA UNIVERSAL KUC30M	KENNA UNIVERSAL KUC20M
Inch											
SPET3125PPER8GB	.394	.132	.156	.031	■	■	■		■	●	●
SPET3125PPSR8GB	.394	.132	.156	.031	■		■			●	●
Metric											
SPET10T3PPERGB	10,0	3,35	3,96	0,8	■	■	■		■	●	●
SPET10T3PPSRGB	10,0	3,35	3,96	0,8	■		■			●	●

■ Suitable for these material groups.

0°/90° KSSM Inch

Insert Catalog number	Material Group	Surface speed (ft./min.) Grades KUC30M	KUC20M	IPT
SPET..E.GB	Steel (P)	300 - 650	400 - 900	.004 - .010
SPET..S.GB		300 - 650	400 - 900	.006 - .012
SPET..E.GB	Stainless Steel (M)	200 - 500	300 - 700	.004 - .012
SPET..E.GB	Cast Iron (K)	—	300 - 500	.003 - .010
SPET..S.GB		—	300 - 500	.004 - .010
SPET..E.GB	High-Temp Alloys (S)	80 - 120	80 - 150	.004 - .007

0°/90° KSSM Metric

Insert Catalog number	Material Group	Surface speed (m/min.) Grades KUC30M	KUC20M	f_z
SPET..E.GB	Steel (P)	90 - 200	130 - 300	0,10 - 0,25
SPET..S.GB		90 - 200	130 - 300	0,15 - 0,30
SPET..E.GB	Stainless Steel (M)	60 - 155	100 - 230	0,10 - 0,30
SPET..E.GB	Cast Iron (K)	—	100 - 160	0,07 - 0,25
SPET..S.GB		—	100 - 160	0,10 - 0,25
SPET..E.GB	High-Temp Alloys (S)	25 - 35	25 - 45	0,10 - 0,18

NEW!
KUC20M

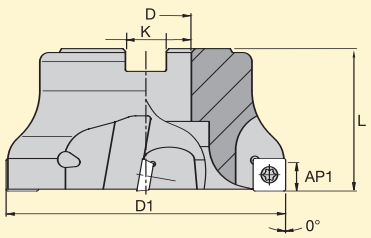
Coated carbide with a TiN/TiAlN (PVD) coating. KUC20M is engineered to provide better performance in general machining of high-temperature alloys. KUC20M resists breakage, offers improved wear resistance, and increased strength.

NEW!
KUC30M

Coated carbide grade with a PVD multi-layer coating (TiN/TiCN/TiN). New universal carbide grade for milling steel, stainless steel, and high-temperature alloys. KUC30M can be used with or without coolant. Primarily for use in light and general machining.

Order example:
Catalog number: **SPET3125PPER8GB**
Grade: **KUC30M**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

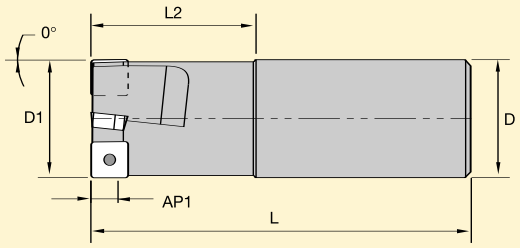


Face Mills – Inch

D1	Order number	Catalog number	Number of inserts	D	L	K	AP1	Max. RPM	lbs.	Insert Screw	Torx Wrench	Torque (in./lbs.)	Mounting Screw
Inch													
1.50	**1229047**	**KSSR150SP10T30F2**	4	.50	1.25	.25	.26	30300	0.30	**MS2148**	TTP9	10	**S422**
2.00	**1229078**	**KSSR200SP10T30F3**	5	.75	1.75	.31	.26	26300	0.60	**MS2148**	TTP9	10	**S445**
2.50	**1229079**	**KSSR250SP10T30F4**	6	1.00	1.75	.38	.26	23500	0.90	**MS2148**	TTP9	10	—
3.00	**1229080**	**KSSR300SP10T30F4**	8	1.00	1.75	.38	.26	21450	1.30	**MS2148**	TTP9	10	—
4.00	**1229081**	**KSSR400SP10T30F5**	10	1.25	2.00	.50	.26	18600	2.50	**MS2148**	TTP9	10	—
4.00	**1229082**	**KSSR400SP10T30F6**	10	1.50	2.00	.63	.26	18600	3.10	**MS2148**	TTP9	10	—
5.00	**1229083**	**KSSR500SP10T30F6**	12	1.50	2.38	.63	.26	16600	4.50	**MS2148**	TTP9	10	

Face Mills – Metric

D1	Order number	Catalog number	Number of inserts	D	L	K	AP1	Max. RPM	kg	Insert Screw	Torx Wrench	Torque (Nm)	Mounting Screw
Metric													
50	**1981677**	**50A05RS90SP10DG**	5	22	40	10,5	6,5	26300	0.4	**MS2148**	TTP9	1.5	**MS1234**
63	**1981678**	**63A06RS90SP10DG**	6	22	40	10,5	6,5	23500	0.4	**MS2148**	TTP9	1.5	**MS1234**
80	**1981853**	**80A08RS90SP10DG**	8	27	50	10,5	6,5	21450	0.9	**MS2148**	TTP9	1.5	**MS1556**
100	**1981854**	**100B10RS90SP10DG**	10	32	50	10,5	6,5	18600	1.6	**MS2148**	TTP9	1.5	—
125	**1981856**	**125B12RS90SP10DG**	12	40	63	10,5	6,5	15700	2.5	**MS2148**	TTP9	1.5	—



Smooth End Mills – Inch

D1	Order number	Catalog number	Number of inserts	D	L	L2	AP1	Max. RPM	lbs.	Insert Screw	Torx Wrench	Torque (in./lbs.)
Inch												
.75	**1229101**	**KISR075SP10T30FS3**	1	.75	3.50	1.47	.26	42900	0.35	**MS2148**	TTP9	10
1.00	**1229102**	**KISR100SP10T30FS4**	2	1.00	3.50	1.22	.26	37100	0.63	**MS2148**	TTP9	10
1.25	**1229103**	**KISR125SP10T30FS5**	3	1.25	4.03	1.75	.26	33200	1.11	**MS2148**	TTP9	10
1.50	**1229104**	**KISR150SP10T30FS6**	4	1.50	4.03	1.34	.26	30300	1.66	**MS2148**	TTP9	10

Weldon End Mills – Inch

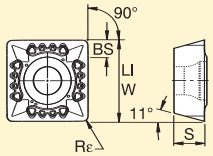
D1	Order number	Catalog number	Number of inserts	D	L	L2	AP1	Max. RPM	lbs.	Insert Screw	Torx Wrench	Torque (in./lbs.)
Inch												
.75	**1229091**	**KISR075SP10T30F**	1	.75	3.50	1.47	.26	42900	0.35	**MS2148**	TTP9	10
1.00	**1229092**	**KISR100SP10T30F**	2	1.00	3.50	1.22	.26	37100	0.62	**MS2148**	TTP9	10
1.25	**1229095**	**KISR125SP10T30F**	3	1.25	4.03	1.75	.26	33200	1.10	**MS2148**	TTP9	10
1.50	**1229096**	**KISR150SP10T30F**	4	1.50	4.03	1.34	.26	30300	1.63	**MS2148**	TTP9	10

Weldon End Mills – Metric

D1	Order number	Catalog number	Number of inserts	D	L	L2	AP1	Max. RPM	kg	Insert Screw	Torx Wrench	Torque (Nm)
Metric												
25	**1981679**	**25A02R039B25SSP10G**	2	25	95	39	6,6	37100	0.63	**MS2148**	TTP9	1-5
32	**1981788**	**32A03R039B32SSP10G**	3	32	100	39	6,6	33200	1.11	**MS2148**	TTP9	1-5
40	**1981790**	**40A04R049B32SSP10G**	4	40	110	49	6,6	30300	1.66	**MS2148**	TTP9	1-5

Face Mills 0°/90° — KSSM

1/2" IC Inserts



Catalog number	LI	BS	S	Rε	P	M	K	N	S	KENNA UNIVERSAL KUC30M	KENNA UNIVERSAL KUC20M
Inch											
..GB (ground) 5° rake face											
SDET43PDER8GB	.500	.132	.187	.031	■	■	■		■	●	●
SDET43PDSR8GB	.500	.132	.187	.031	■		■			●	●
..GB (precision sintered) 5° rake face											
SDPT43PDER8GB	.500	.132	.187	.031	■	■	■			●	●
SDPT43PDSR8GB	.500	.132	.187	.031	■					●	●
Metric											
..GB (ground) 5° rake face											
SDET1204PDERGB	12,7	3,4	4,7	0,8	■	■	■		■	●	●
SDET1204PDSRGB	12,7	3,4	4,7	0,8	■		■			●	●
..GB (precision sintered) 5° rake face											
SDPT1204PDERGB	12,7	3,4	4,7	0,8	■	■	■			●	●
SDPT1204PDSRGB	12,7	3,4	4,7	0,8	■					●	●

■ Suitable for these material groups.

0°/90° KSSM Inch

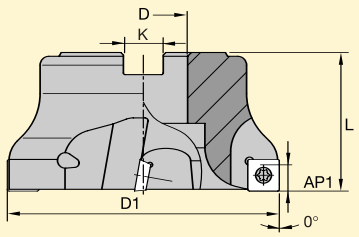
Insert Catalog number	Material Group	Surface speed (ft./min.) Grades KUC30M	KUC20M	IPT
SDPT..E.GB	Steel (P)	300 - 650	400 - 900	.003 - .010
SDET..E.GB		300 - 650	400 - 900	.004 - .010
SDET..S.GB		300 - 650	400 - 900	.007 - .015
SDPT..GB	Stainless Steel (M)	200 - 500	300 - 700	.003 - .012
SDET..GB		200 - 500	300 - 700	.004 - .012
SDPT..E.GB	Cast Iron (K)	–	300 - 500	.004 - .012
SDET..E.GB		–	300 - 500	.004 - .010
SDET..S.GB		–	300 - 500	.004 - .015
SDET..E.GB	High-Temp Alloys (S)	30-120	80 - 150	.004 - .007

0°/90° KSSM Metric

Insert Catalog number	Material Group	Surface speed (m/min.) Grades KUC30M	KUC20M	f_z
SDPT..E.GB	Steel (P)	90 - 200	130 - 300	0,08 - 0,25
SDET..E.GB		90 - 200	130 - 300	0,10 - 0,25
SDET..S.GB		90 - 200	130 - 300	0,17 - 0,32
SDPT..GB	Stainless Steel (M)	60 - 155	100 - 230	0,08 - 0,28
SDET..GB		60 - 155	100 - 230	0,10 - 0,28
SDPT..E.GB	Cast Iron (K)	–	100 - 160	0,10 - 0,28
SDET..E.GB		–	100 - 160	0,10 - 0,25
SDET..S.GB		–	100 - 160	0,10 - 0,32
SDET..E.GB	High-Temp Alloys (S)	25 - 35	25 - 45	0,10 - 0,18

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

Order example:
Catalog number: **SDET43PDER8GB**
Grade: **KUC30M**



D1	Order number	Catalog number	Number of inserts	D	L	K	AP1	Max. RPM	lbs.
Inch									
		Coarse Pitch							
2.00	**1024970**	**KSSISR200SD430C3**	3	.75	1.75	.31	.36	20450	0.79
2.50	**1024996**	**KSSISR250SD430C4**	4	1.00	1.75	.38	.36	18290	1.21
3.00	**1024930**	**KSSISR300SD430C4**	4	1.00	1.75	.38	.36	16700	1.42
4.00	**1025025**	**KSSISR400SD430C5**	5	1.25	2.00	.50	.36	14460	3.05
4.00	**1025027**	**KSSISR400SD430C6**	5	1.50	2.00	.63	.36	14460	3.58
5.00	**1024933**	**KSSISR500SD430C6**	6	1.50	2.38	.63	.36	12940	5.82
6.00	**1024966**	**KSSISR600SD430C6**	8	1.50	2.38	.63	.36	11800	8.52
6.00	**1025071**	**KSSISR600SD430C8**	8	2.00	2.38	.75	.36	11800	7.37
8.00	**1025102**	**KSSISR800SD430C10**	10	2.50	2.38	1.00	.36	10230	15.40
10.00	**1025138**	**KSSISR1000SD430C10**	12	2.50	2.38	1.00	.36	9150	24.20
		Medium Pitch							
Inch									
2.00	**1024972**	**KSSISR200SD430M3**	4	.75	1.75	.31	.36	20450	0.75
2.50	**1024998**	**KSSISR250SD430M4**	5	1.00	1.75	.38	.36	18290	1.20
3.00	**1024931**	**KSSISR300SD430M4**	6	1.00	1.75	.38	.36	16700	1.38
4.00	**1025029**	**KSSISR400SD430M5**	7	1.25	2.00	.50	.36	14460	3.03
4.00	**1025031**	**KSSISR400SD430M6**	7	1.50	2.00	.63	.36	14460	3.57
5.00	**1024964**	**KSSISR500SD430M6**	8	1.50	2.38	.63	.36	12940	5.91
6.00	**1024967**	**KSSISR600SD430M6**	10	1.50	2.38	.63	.36	11800	8.58
6.00	**1025094**	**KSSISR600SD430M8**	10	2.00	2.38	.75	.36	11800	7.44
8.00	**1025134**	**KSSISR800SD430M10**	12	2.50	2.38	1.00	.36	10230	15.40
10.00	**1025140**	**KSSISR1000SD430M10**	16	2.50	2.38	1.00	.36	9150	25.90
		Fine Pitch							
Inch									
2.00	**1024994**	**KSSISR200SD430F3**	5	.75	1.75	.31	.36	20450	0.77
2.50	**1025000**	**KSSISR250SD430F4***	6	1.00	1.75	.38	.36	18290	1.23
3.00	**1024932**	**KSSISR300SD430F4***	7	1.00	1.75	.38	.36	16700	1.38
4.00	**1025033**	**KSSISR400SD430F5**	8	1.25	2.00	.50	.36	14460	3.01
4.00	**1025065**	**KSSISR400SD430F6**	8	1.50	2.00	.63	.36	14460	3.62
5.00	**1024965**	**KSSISR500SD430F6**	10	1.50	2.38	.63	.36	12940	5.96
6.00	**1024968**	**KSSISR600SD430F6**	12	1.50	2.38	.63	.36	11800	8.60
6.00	**1025097**	**KSSISR600SD430F8**	12	2.00	2.38	.75	.36	11800	7.47
8.00	**1025136**	**KSSISR800SD430F10**	14	2.50	2.38	1.00	.36	10230	15.30
10.00	**1025142**	**KSSISR1000SD430F10**	18	2.50	2.38	1.00	.36	9150	24.40

*NOTE: 2.5" and 3.0" fine pitch cutters do not have shims.

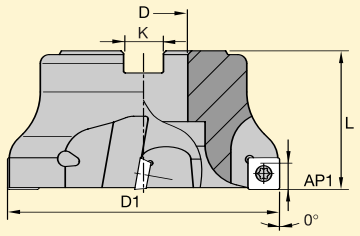
Spares – Inch

D1	Insert Screw	Torx Wrench	Torque (in./lbs.)	Shim	Shim Screw	Hex Wrench	Torque (in./lbs.)	Mounting Screw
2.00	**MS2078**	TTP15	35	—	—	—	—	**S445**
2.50	**MS2078**	TTP15	35	**SM449**	**SRS3**	**THW35M**	40	**S458**
3.00 - 10.00	**MS2078**	TTP15	35	**SM449**	**SRS3**	**THW35M**	40	—

Order example:
Catalog number: **KSSISR200SD430C3**
Order number: **1024970**

Face Mills 0°/90° — KSSM – Metric

Screw-On Inserts — 1/2" IC



D1	Order number	Catalog number	Number of inserts	D	L	K	AP1	Max. RPM	kg
Coarse Pitch									
Metric									
50	**1926939**	**50A03RS90SD12DG**	3	22	40	10,5	9	20600	0.3
63	**1926936**	**63A04RS90SD12DG**	4	22	40	10,5	9	18300	0.5
80	**1926901**	**80A05RS90SD12DG**	5	27	50	12,5	9	16300	1.0
100	**1926841**	**100B06RS90SD12DG**	6	32	50	14,5	9	14600	1.6
125	**1926839**	**125B07RS90SD12DG**	7	40	63	16,5	9	13000	2.8
160	**1926836**	**160C08RS90SD12DG**	8	40	63	16,5	9	11500	4.3
200	**1926942**	**200C11RS90SD12DG**	11	60	63	25,8	9	10300	6.8
Fine Pitch									
Metric									
50	**1926938**	**50A04RS90SD12DG**	4	22	40	10,5	9	20600	0.3
63	**1926933**	**63A05RS90SD12DG**	5	22	40	10,5	9	18300	0.5
80	**1926898**	**80A06RS90SD12DG**	6	27	50	12,5	9	16300	1.0
100	**1926840**	**100B08RS90SD12DG**	8	32	50	14,5	9	14600	1.7
125	**1926837**	**125B10RS90SD12DG**	10	40	63	16,5	9	13000	2.9
160	**1926983**	**160C12RS90SD12DG**	12	40	63	16,5	9	11500	4.4
200	**1926941**	**200C14RS90SD12DG**	14	60	63	25,8	9	10300	6.8

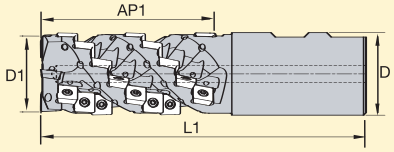
Spares – Metric

D1	Insert Screw	Torx Wrench	Torque (Nm)	Shim	Shim Screw	Hex Wrench	Torque (Nm)	Mounting Screw
50	**MS2078**	TTP15	4	—	—	—	—	**MS1234**
63	**MS2078**	TTP15	4	—	—	—	—	**MS1234**
80 - 200	**MS2078**	TTP15	4	**SM449**	**SRS3**	**THW35M**	415	**MS2038**

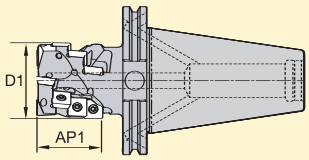
Order example:
Catalog number: **50A03RS90SD12DG**
Order number: **1926939**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

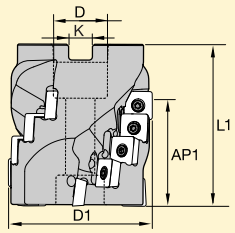
End Mill



CV50 End Mill



Shell Mill



Maximum nose radius of lead insert is .094" for 2.00" and 50 mm cutters, and .125" for 2.5", 63 mm, and above.
All subsequent inserts up the flute should have a maximum nose radius of .031" to avoid lap lines.

End Mills – Inch

D1	Order number	Catalog number	Number of inserts	Effective flutes	D	L1	K	Insert	AP1	Max. RPM	lbs.
Inch											
2.00	**2528269**	**KSSP200R3SD43W150L169**	12	3	1.25	4.53	–	**SD.T1204**	1.69	16300	1.70
2.00	**2528270**	**KSSP200R3SD43CV50L169**	12	3	CV50	–	–	**SD.T1204**	1.69	16300	6.73

Shell Mills – Inch

Inch											
2.00	**2601012**	**KSSP200R3SD43L125**	9	3	.75	1.875	.312	**SD.T1204**	1.25	16300	1.0
2.00	**2400680**	**KSSP200R3SD43L168**	12	3	.75	2.250	.312	**SD.T1204**	1.65	16300	1.0
2.50	**2400681**	**KSSP250R3SD43L200**	15	3	1.00	2.750	.375	**SD.T1204**	2.00	14550	2.0
3.00	**2400682**	**KSSP300R4SD43L240**	24	4	1.25	3.250	.500	**SD.T1204**	2.40	13300	3.8

Shell Mills – Metric

											kg
Metric											
50	**2400693**	**50A3RS90SD12L32**	9	3	22	55	10	**SD.T1204**	32	16400	0.88
63	**2400694**	**63A3RS90SD43L50**	15	3	27	70	13	**SD.T1204**	50	14600	2.00
80	**2400695**	**80A4RS90SD43L61**	24	4	32	80	14	**SD.T1204**	61	12950	4.20

Spares

Catalog number	Torx Screw	Mounting Screw	Torx Wrench	Torque (in./lbs.)
Inch				
KSSP200R3SD43L125	**MS1273**	**S446CG**	TT15	35
KSSP200R3SD43L168	**MS1273**	**S447CG**	TT15	35
KSSP250R3SD43L200	**MS1273**	**S462CG**	TT15	35
KSSP300R4SD43L240	**MS1273**	**S2149CG**	TT15	35
				(Nm)
Metric				
50A3RS90SD12L32	**MS1273**	**MS1235CG**	TT15	4
63A3RS90SD43L50	**MS1273**	**MS1238C**	TT15	4
80A4RS90SD43L61	**MS1273**	**MS1241C**	TT15	4

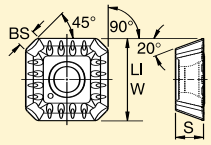
To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

Order example:
Catalog number: **KSSP200R3SD43W150L169**
Order number: **2528269**

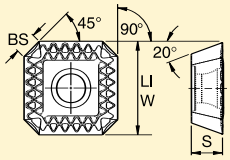
Face Mills 45° — KSSM

14 mm IC Inserts

..GP (ground) 11° rake face



..GB (precision sintered) 5° rake face



Catalog number	LI	BS	S	P	M	K	N	S	KENNA UNIVERSAL KUC30M	KENNA UNIVERSAL KUC20M
Inch										
..GP (ground) 11° rake face										
SEKT443AEEN7GP	.551	.104	.187	■	■	■		■	●	●
SEKT443AESN7GP	.551	.104	.187	■	■	■			●	●
..GB (precision sintered) 5° rake face										
SEPT443AEEN7GB	.551	.104	.187	■	■	■		■	●	●
SEPT443AESN7GB	.551	.104	.187	■		■			●	●
Metric										
..GP (ground) 11° rake face										
SEKT1404AEENGP	14	2,64	4,75	■	■	■		■	●	●
SEKT1404AESNGP	14	2,64	4,75	■	■	■			●	●
..GP (precision sintered) 5° rake face										
SEPT1404AEENGB	14	2,64	4,75	■	■	■		■	●	●
SEPT1404AESNGB	14	2,64	4,75	■		■			●	●

■ Suitable for these material groups.

0°/90° KSSM Inch

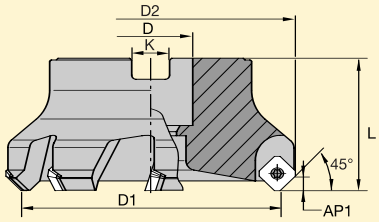
Insert Catalog number	Material Group	Surface speed (ft./min.) Grades KUC30M	KUC20M	IPT
SEKT..E.GP	Steel (P)	300 - 650	400 - 900	.005 - .014
SEPT..E.GB		300 - 650	400 - 900	.005 - .014
SEKT..S.GP		300 - 650	400 - 900	.010 - .016
SEPT..S.GB		300 - 650	400 - 900	.012 - .020
SEKT..E.GP	Stainless Steel (M)	180 - 475	300 - 700	.005 - .014
SEPT..E.GB		180 - 475	300 - 700	.005 - .014
SEKT..S.GP		180 - 475	300 - 700	.010 - .016
SEKT..E.GP	Cast Iron (K)	–	300 - 500	.005 - .014
SEPT..E.GB		–	300 - 500	.005 - .014
SEKT..S.GP		–	300 - 500	.010 - .016
SEKT..E.GP	High-Temp Alloys (S)	80 - 120	80 - 150	.005 - .010
SEPT..E.GB		80 - 120	80 - 150	.005 - .010

0°/90° KSSM Metric

Insert Catalog number	Material Group	Surface speed (m/min.) Grades KUC30M	KUC20M	f_z
SEKT..E.GP	Steel (P)	90 - 200	130 - 300	0,13 - 0,35
SEPT..E.GB		90 - 200	130 - 300	0,13 - 0,35
SEKT..S.GP		90 - 200	130 - 300	0,25 - 0,40
SEPT..S.GB		90 - 200	130 - 300	0,30 - 0,50
SEKT..E.GP	Stainless Steel (M)	60 - 155	100 - 230	0,13 - 0,35
SEPT..E.GB		60 - 155	100 - 230	0,13 - 0,35
SEKT..S.GP		60 - 155	100 - 230	0,25 - 0,40
SEKT..E.GP	Cast Iron (K)	–	100 - 160	0,13 - 0,35
SEPT..E.GB		–	100 - 160	0,13 - 0,35
SEKT..S.GP		–	100 - 160	0,25 - 0,40
SEKT..E.GP	High-Temp Alloys (S)	25 - 35	25 - 45	0,13 - 0,25
SEPT..E.GB		25 - 35	25 - 45	0,13 - 0,25

Order example:
Catalog number **SEKT443AEEN7GP**
Grade: **KUC30M**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.



Coarse Pitch

D1	Order number	Catalog number	Number of inserts	D	D2 max.	L	K	AP1	Max. RPM	lbs.
Inch										
1.97	**1817866**	**KSSISR197SE44345C3**	3	.75	2.52	1.58	.31	.26	22500	0.87
2.48	**1817868**	**KSSISR248SE44345C4**	4	1.00	3.02	1.58	.38	.26	20200	1.31
3.15	**1817870**	**KSSISR315SE44345C4**	4	1.00	3.69	1.97	.38	.26	18000	2.16
3.94	**1817872**	**KSSISR394SE44345C5**	5	1.25	4.48	1.97	.50	.26	16000	3.58
4.92	**1817934**	**KSSISR492SE44345C6**	6	1.50	5.46	2.48	.63	.26	14400	6.50
6.30	**1817936**	**KSSISR630SE44345C6**	7	1.50	6.84	2.48	.63	.26	12500	9.91
7.87	**1817938**	**KSSISR787SE44345C10**	8	2.50	8.41	2.48	1.00	.26	11300	13.24
										kg
Metric										
40	**1926850**	**40A03RS45SE14EG**	3	16	54	40	8,5	6,6	26000	0.3
50	**1926812**	**50A03RS45SE14EG**	3	22	64	40	10,5	6,6	22500	0.4
63	**1926899**	**63A04RS45SE14EG**	4	22	77	40	10,5	6,6	20200	0.5
80	**1926894**	**80A05RS45SE14EG**	5	27	94	50	12,5	6,6	18000	1.1
100	**1926926**	**100B05RS45SE14EG**	5	32	114	50	14,5	6,6	16000	1.7
125	**1926924**	**125B06RS45SE14EG**	6	40	139	63	16,5	6,6	14400	2.9
160	**1926909**	**160C07RS45SE14EG**	7	40	174	63	16,5	6,6	12500	4.1

Medium Pitch

D1	Order number	Catalog number	Number of inserts	D	D2 max.	L	K	AP1	Max. RPM	lbs.
Inch										
1.97	**1817867**	**KSSISR197SE44345M3**	4	.75	2.52	1.58	.31	.26	22500	0.88
2.48	**1817869**	**KSSISR248SE44345M4**	5	1.00	3.02	1.58	.38	.26	20200	1.30
3.15	**1817871**	**KSSISR315SE44345M4**	6	1.00	3.69	1.97	.38	.26	18000	2.19
3.94	**1817933**	**KSSISR394SE44345M5**	7	1.25	4.48	1.97	.50	.26	16000	3.60
4.92	**1817935**	**KSSISR492SE44345M6**	8	1.50	5.46	2.48	.63	.26	14400	6.56
6.30	**1817937**	**KSSISR630SE44345M6**	10	1.50	6.84	2.48	.63	.26	12500	10.03
7.87	**1817939**	**KSSISR787SE44345M10**	12	2.50	8.41	2.48	1.00	.26	11300	13.37
										kg
Metric										
50	**1926900**	**50A04RS45SE14EG**	4	22	64	40	10,5	6,6	22500	0.4
63	**1926897**	**63A05RS45SE14EG**	5	22	77	40	10,5	6,6	20200	0.6
80	**1926893**	**80A06RS45SE14EG**	6	27	94	50	12,5	6,6	18000	1.2
100	**1926925**	**100B07RS45SE14EG**	7	32	114	50	14,5	6,6	16000	1.8
125	**1926911**	**125B08RS45SE14EG**	8	40	139	63	16,5	6,6	14400	3.0
160	**1926908**	**160C10RS45SE14EG**	10	40	174	63	16,5	6,6	12500	4.3

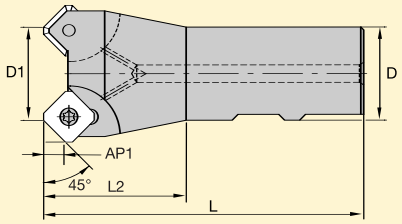
See page CXXX for spare parts.

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

Order example:
Catalog number **KSSISR197SE44345C3**
Order number: **1817866**

Indexable End Mills 45° — KSSM

Screw-On Inserts – 14 mm



End Mills – Inch

D1	Order number	Catalog number	Number of inserts	D	L	L2	Max. RPM	AP1	lbs.	Insert Screw	Torx Wrench	Torque (in./lbs.)
Inch												
1.26	**1817940**	**KISR126SE44345M**	2	1.25	3.86	1.57	28000	.26	1.30	**MS2078**	TTP15	35
1.58	**1817941**	**KISR157SE44345M**	3	1.25	3.86	1.57	26000	.26	1.40	**MS2078**	TTP15	35
1.97	**1817942**	**KISR197SE44345M**	4	1.25	3.86	1.57	22500	.26	1.66	**MS2078**	TTP15	35
2.48	**1817953**	**KISR248SE44345M**	5	1.25	3.86	1.57	20200	.26	2.07	**MS2078**	TTP15	35

End Mills – Metric

D1	Order number	Catalog number	Number of inserts	D	L	L2	Max. RPM	AP1	kg	Insert Screw	Torx Wrench	Torque (Nm)
Metric												
32	**1926907**	**32D2R049B32SSE14G**	2	32	110	49	28000	6,6	1.40	**MS2078**	TTP15	4
40	**1926943**	**40D3R049B32SSE14G**	3	32	110	49	26000	6,6	1.50	**MS2078**	TTP15	4

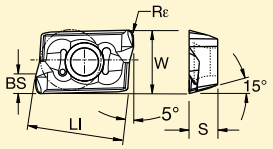
Spares – for Shell Mills

D1	Insert Screw	Torx Wrench	Torque (in./lbs.)	Shim	Shim Screw	Hex Wrench	Torque (in./lbs.)	Mounting Screw
Inch								
1.97	**MS2078**	TTP15	35	—	—	—	—	**S2043**
2.48	**MS2078**	TTP15	35	—	—	—	—	**S2044**
3.15	**MS2078**	TTP15	35	**SM455**	**SRS3**	**THW35M**	40	—
3.94	**MS2078**	TTP15	35	**SM455**	**SRS3**	**THW35M**	40	—
4.92	**MS2078**	TTP15	35	**SM455**	**SRS3**	**THW35M**	40	—
6.30	**MS2078**	TTP15	35	**SM455**	**SRS3**	**THW35M**	40	—
7.87	**MS2078**	TTP15	35	**SM455**	**SRS3**	**THW35M**	40	—
			(Nm)				(Nm)	
Metric								
40	**MS2078**	TTP15	4	—	—	—	—	**MS2040**
50	**MS2078**	TTP15	4	—	—	—	—	—
63	**MS2078**	TTP15	4	—	—	—	—	—
80	**MS2078**	TTP15	4	**SM455**	**SRS3**	**THW35M**	415	—
100	**MS2078**	TTP15	4	**SM455**	**SRS3**	**THW35M**	415	—
125	**MS2078**	TTP15	4	**SM455**	**SRS3**	**THW35M**	415	—
160	**MS2078**	TTP15	4	**SM455**	**SRS3**	**THW35M**	415	—

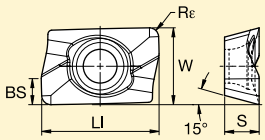
Order example:
Catalog number: **KISR126SE44345M**
Order number: **1817940**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

–GB



–LD



Order number	ANSI Insert Catalog number	ISO Insert Catalog number	W inch	W mm	LI inch	LI mm	S inch	S mm	BS inch	BS mm	Rε inch	Rε mm	KENNA UNIVERSAL KUC30M
-GB													
2619612	**ADKT2328PDER5GB**	**ADKT1545PDERGB**	.394	10,00	.591	15,00	.177	4,50	.073	1,85	1/32	0,80	●
2619613	**ADKT2328PDSR5GB**	**ADKT1545PDSRGB**	.394	10,00	.591	15,00	.177	4,50	.073	1,85	1/32	0,80	●
-LD													
2619614	**ADCT2328PDER5LD**	**ADCT1545PDERLC**	.394	10,00	.591	15,00	.177	4,50	.072	1,84	1/16	1,60	●

NGE-B – Inch		Surface speed (ft./min.) Grade		NGE-B – Metric		Surface speed (m/min.) Grade	
Insert Catalog number	Material Group	KUC30M	IPT	**Insert Catalog number**	Material Group	KUC30M	f_z
ADKT..E.GB	Steel (P)	300 - 750	.005 - .010	**ADKT..E.GB**	Steel (P)	100 - 250	0,12 - 0,25
ADKT..S.GB		300 - 750	.005 - .012	**ADKT..S.GB**		100 - 250	0,12 - 0,30
ADCT..E.LD		300 - 750	.003 - .006	**ADCT..E.LD**		100 - 250	0,07 - 0,15
ADKT..E.GB	Stainless Steel (M)	225 - 650	.005 - .010	**ADKT..E.GB**	Stainless Steel (M)	80 - 200	0,12 - 0,25
ADKT..S.GB		225 - 650	.005 - .012	**ADKT..S.GB**		80 - 200	0,12 - 0,30
ADCT..E.LD		225 - 650	.003 - .006	**ADCT..E.LD**		80 - 200	0,07 - 0,15
ADKT..E.GB	High-Temp Alloys (S)	80 - 140	.005 - .010	**ADKT..E.GB**	High-Temp Alloys (S)	25 - 45	0,12 - 0,25
ADCT..E.LD		80 - 140	.003 - .006	**ADCT..E.LD**		25 - 45	0,07 - 0,15

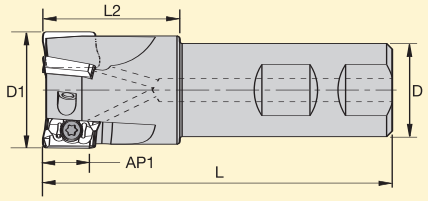
To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

Order example:
Catalog number: **ADKT2328PDER5GB**
Grade: **KUC30M**

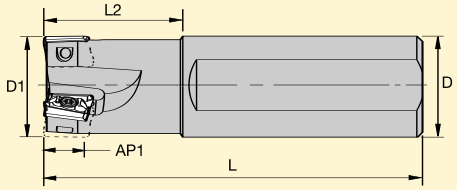
NGE-B 0° Lead Angle End Mills

Insert Size ADKT 1545

End Mills with Coolant – Weldon Shank



End Mills – Extended Length

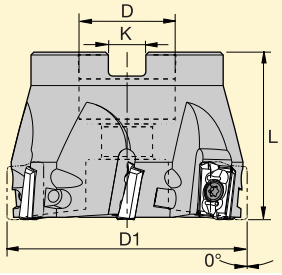


D1	Order number	Catalog number	Number of inserts	D	L	L2	Max. RPM	AP1	lbs.	Insert Screw	Torx Wrench	Torque (in./lbs.)
End Mills with Coolant – Weldon Shank – Inch												
Inch												
.750	**1894634**	**KISR075AD23203**	1	.750	3.380	1.340	31500	.500	.30	**MS1168**	KT15	35
1.000	**1894635**	**KISR100AD23204**	2	1.000	3.500	1.220	27250	.500	.60	**MS1184**	KT15	35
1.250	**1894636**	**KISR125AD23204**	3	1.000	3.750	1.470	24400	.500	.80	**MS1184**	KT15	35
1.500	**1894637**	**KISR150AD23205**	4	1.250	4.030	1.750	22250	.500	1.00	**MS1184**	KT15	35
End Mills with Coolant – Weldon Shank – Metric									kg			(Nm)
Metric												
25	**1758316**	**25A2R043B25SAD15**	2	25	100	43	27500	12,7	0.29	**MS1168**	KT15	4
32	**1758317**	**32A3R049B32SAD15**	3	32	110	49	24300	12,7	0.57	**MS1184**	KT15	4
40	**1758318**	**40A4R049B32SAD15**	4	32	110	49	21800	12,7	0.63	**MS1184**	KT15	4
End Mills – Extended Length									lbs.			(in./lbs.)
Inch												
.750	**1592598**	**KIEX6R075AD23203**	1	.750	6.000	1.570	31500	.500	.68	**MS1168**	DT15	35
1.000	**1592604**	**KIEX78R100AD23204**	2	1.000	7.850	1.720	27250	.500	1.61	**MS1184**	DT15	35
1.250	**1592605**	**KIEX10R125AD23205**	3	1.250	10.000	1.720	24400	.500	3.30	**MS1184**	DT15	35
1.500	**1592606**	**KIEX10R150AD23206**	4	1.500	10.000	1.720	22250	.500	4.60	**MS1184**	DT15	35

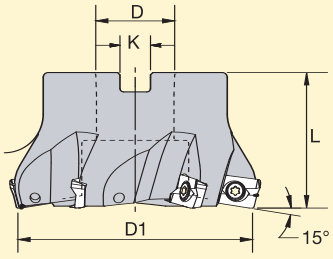
NGE-B 0°/90° and 15°/75° Face Mills

Insert Size ADKT 1545

0°/90°



15°/75°



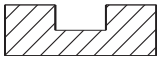
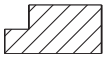
D1	Order number	Catalog number	Number of inserts	D	L	K	Max. RPM	lbs.	Insert Screw
Shell Mills – 90° – Inch									
Inch									
2.00	**1592607**	**KSSR200AD23203**	5	.75	1.75	5/16	19300	.70	**MS1184**
2.50	**1592608**	**KSSR250AD23204**	6	1.00	1.75	3/8	17250	1.23	**MS1184**
3.00	**1592609**	**KSSR300AD23204**	7	1.00	1.75	3/8	15750	1.80	**MS1184**
4.00	**1592611**	**KSSR400AD23206**	8	1.50	2.00	5/8	13650	3.40	**MS1184**
Shell Mills – 90° – Metric								kg	
Metric									
100	**1758354**	**100B08RS90AD15D**	8	32	32	12,7	13800	1.20	**MS1273**
Shell Mills – 15° – Inch								lbs.	
Inch									
3.00	**1592616**	**KSSR300AD232154**	6	1.00	1.75	.39	15750	1.70	**MS1184**
4.00	**1592617**	**KSSR400AD232156**	7	1.50	1.75	.64	13650	2.90	**MS1184**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

Grade Descriptions

Cutting Material	Coating	Composition and Application
K600		Carbide grade made from high quality, micrograin materials for cutting all types of material. Extreme toughness guarantees a controlled wear rate. The micrograin structure permits extremely sharp cutting edges.
KC610M		Coated carbide grade with PVD multilayer coating (TiN/TiCN/TiN). An excellent grade for milling steel, stainless steel, and nodular graphite iron. Because of the resistance to thermal shocks of its substrate, this grade is an excellent choice for wet as well as dry machining.
KC625M		Coated carbide grade with a PVD multilayer coat [TiN/TiCN/TiC(N)]. KC625M is a high performance grade for milling all types of material. Good hardness and wear resistance characterizes this grade. It provides outstanding protection for solid carbide tools against cratering and abrasion. This grade is ideally used with cooling or minimal lubrication.
KC633M		Coated carbide grade with a PVD multilayer coating (TiAlN, TiN, TiAlN). KC633M is a high performance grade for dry milling of all material types. This grade is extremely hard and wear resistant. It provides outstanding protection for solid carbide tools against cratering and abrasion.
KC635M		PVD TiAlN coated carbide on a deformation resistant substrate. Exceptional heat and wear resistance qualities make this grade an excellent choice for milling aluminum, cast iron, heat resistant alloys, steels, and stainless steels in finishing applications.
KC637M		PVD TiAlN coated carbide on a "new" sub-micron carbide substrate. It's a very thin and hard coating that provides outstanding performance in milling hardened materials (50-65 HRC).

Application Icons

	Slotting
	Peripheral / Profile Milling
	Contour Milling
▼▼▼	Fine Finishing (a_e / woc < .2X diameter)
▼▼	Finishing (.2X diameter < a_e / woc < .5X diameter)
▼	Roughing (a_e / woc > .5X diameter)

KENNA UNIVERSAL – Solid Carbide End Mills

Selection Guide

	General-Purpose Carbide					
End Mill Style — Inch	**HEC**	**CRHEC**	**HHEC**	**DHEC**	**BNEC**	**DBNEC**
catalog page	C18-C19	C28	C27	C29	C32	C34
diameter range	1/64" -1"	1/8" - 1"	1/8" - 1"	1/32" - 1/2"	1/64" -1"	1/32" - 1/2"
center cutting	Y	Y	Y	Y	Y	Y
grade designation…see page C13	K600 KC610M KC635M	KC610M KC635M	K605 KC615 KC635M	K600 KC610M KC635M	K600 KC610M KC635M	KC610M
no. of flutes	2 ,3, & 4	4	3	2 & 4	2, 3, & 4	4
length of cut	stub standard extended	standard	standard	stub	standard extended	stub
helix angle	30°	30°	60°	30°	30°	30°
special features		corner radius				
End Mill Style — Metric	**F..DK45 F..DK30 F..DL45 F..DL30 F..DN30**				**F…DL30 F…DN30**	
catalog page	C16-C17 C20-C23				C33	
diameter range	2.5-20 mm				2-25 mm	
center cutting	Y				Y	
grade designation…see page C13	KC633M				KC633M	
no. of flutes	2, 3 & 4				2 & 4	
length of cut	DIN 6527 short and long DIN 6528				DIN 6527 long DIN 6528	
helix angle	30° & 45°				30°	
special features						
P Steels (<286 HB) <35 HRC	●	●		●	●	●
P Steels (>286 HB) 35 to 45 HRC	●	●		●	◐	◐
M Stainless Steel	◐	◐	◐	◐	◐	◐
K Cast Iron	●	●		●	●	●
N Non-Ferrous and Non-Metals	◐	◐		◐	◐	◐
S High-Temp Alloys	◐	◐	◐	◐	◐	◐
H Hardened Materials						

● First Choice ◐ Alternate Choice Blank = Not Recommended

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

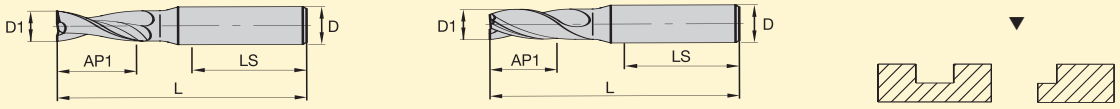
	General-Purpose Carbide						
End Mill Style — Inch	**MDRHEC**	**SFRHEC**					
catalog page	C24	C24					
diameter range	1/4" - 1"	1/4" - 1"					
center cutting	Y	Y					
grade designation…see page C13	KC610M KC625M	KC625M					
no. of flutes	3, 4, & 5	3					
length of cut	standard	standard					
helix angle	40° & 30°	40°					
special features	coarse pitch rougher	coarse pitch rougher					
				Special Applications			
End Mill Style — Metric	**F…BW..20 F…BW..20C**	**F3BA..BW.30 F3BA..BW.30C**	**F.B..BDL30.. F.B..BDL45…**	**F2AA.DL45**	**F.AV..DL45**	**F3AS..BDK35**	**F3BS..BDK35 F3BS..BDL35**
catalog page	C25	C25	C26	C31	C30	C31	C31
diameter range	6-25 mm	6-25 mm	6-25 mm	3-20 mm	6-25 mm	3-20 mm	3-20 mm
center cutting	Y	Y	Y	Y	Y	Y	Y
grade designation…see page C13	KC633M	K600	KC633M	K600	KC637M	KC633M	KC633M
no. of flutes	3, 4 & 5	3	3, 4 & 6	2	6 & 8	3	3
length of cut	factory standard	factory standard	DIN 6527 long	DIN 6527 long	DIN 6527 long	DIN 6527 short	DIN 6527 short and long
helix angle	20°	30° & 45°	30° & 45°	45°	45°	35°	35°
special features	with or without coolant	with or without coolant	Semi-Finishing	Aluminum	Hard Milling	Stainless Steel	Semi-Finishing Stainless Steel
							
P Steels (<286 HB) <35 HRC	●		●			◐	◐
P Steels (>286 HB) 35 to 45 HRC	◐		◐			◐	◐
M Stainless Steel	◐	◐	●			●	●
K Cast Iron	●		●				
N Non-Ferrous and Non-Metals		●		●		◐	◐
S High-Temp Alloys	◐ (inch only)	◐	◐	◐		●	●
H Hardened Materials					●		

● First Choice ◐ Alternate Choice Blank = Not Recommended

KENNA UNIVERSAL Solid Carbide End Mills – Metric

Single End, Short Length — 2 and 3 Flutes (30° & 45° Helix)

DIN 6527 Short



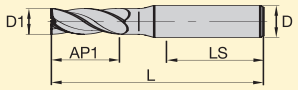
A = cylindrical shank, no flats
B = Weldon shank

D1 Inch	D1 Metric	2 Flutes, 30° Helix Catalog number A Shank/B Shank	Grade KC633M A	B	3 Flutes, 30° Helix Catalog number A Shank/B Shank	Grade KC633M A	B	3 Flutes, 45° Helix Catalog number A Shank/B Shank	Grade KC633M A	B	AP1	D	L	LS
.079	2,00	F2AH0200 A/B DK30	●	●				F3AH0200 A/B DK45	●	●	3	6	50	36
.098	2,50	F2AH0250 A/B DK30	●	●	F3AH0250 A/B DK30	●	●	F3AH0250 A/B DK45	●	●	3	6	50	36
.110	2,80				F3AH0280 A/B DK30	●	●				3	6	50	36
.118	3,00	F2AH0300 A/B DK30	●	●	F3AH0300 A/B DK30	●	●	F3AH0300 A/B DK45	●	●	4	6	50	36
.138	3,50	F2AH0350 A/B DK30	●	●	F3AH0350 A/B DK30	●	●	F3AH0350 A/B DK45	●	●	4	6	50	36
.150	3,80				F3AH0380 A/B DK30	●	●				4	6	50	36
.158	4,00	F2AH0400 A/B DK30	●	●	F3AH0400 A/B DK30	●	●	F3AH0400 A/B DK45	●	●	5	6	54	36
.177	4,50	F2AH0450 A/B DK30	●	●	F3AH0450 A/B DK30	●	●	F3AH0450 A/B DK45	●	●	5	6	54	36
.189	4,80		●	●	F3AH0480 A/B DK30	●	●				5	6	54	36
.197	5,00	F2AH0500 A/B DK30	●	●	F3AH0500 A/B DK30	●	●	F3AH0500 A/B DK45	●	●	6	6	54	36
.217	5,50	F2AH0550 A/B DK30	●	●	F3AH0550 A/B DK30	●	●				7	6	54	36
.226	5,75				F3AH0575 A/B DK30	●	●				7	6	54	36
.236	6,00	F2AH0600 A/B DK30	●	●	F3AH0600 A/B DK30	●	●	F3AH0600 A/B DK45	●	●	7	6	54	36
.256	6,50	F2AH0650 A/B DK30	●	●	F3AH0650 A/B DK30	●	●				8	8	58	36
.266	6,75				F3AH0675 A/B DK30	●	●				8	8	58	36
.276	7,00	F2AH0700 A/B DK30	●	●	F3AH0700 A/B DK30	●	●	F3AH0700 A/B DK45	●	●	8	8	58	36
.295	7,50	F2AH0750 A/B DK30	●	●	F3AH0750 A/B DK30	●	●				9	8	58	36
.305	7,75				F3AH0775 A/B DK30	●	●				9	8	58	36
.315	8,00	F2AH0800 A/B DK30	●	●	F3AH0800 A/B DK30	●	●	F3AH0800 A/B DK45	●	●	9	8	58	40
.335	8,50	F2AH0850 A/B DK30	●	●	F3AH0850 A/B DK30	●	●				10	10	66	40
.343	8,70				F3AH0870 A/B DK30	●	●				10	10	66	40
.354	9,00	F2AH0900 A/B DK30	●	●	F3AH0900 A/B DK30	●	●	F3AH0900 A/B DK45	●	●	10	10	66	40
.374	9,50	F2AH0950 A/B DK30	●	●	F3AH0950 A/B DK30	●	●				11	10	66	40
.382	9,70				F3AH0970 A/B DK30	●	●				11	10	66	40
.394	10,00	F2AH1000 A/B DK30	●	●	F3AH1000 A/B DK30	●	●	F3AH1000 A/B DK45	●	●	11	10	66	45
.433	11,00	F2AH1100 A/B DK30	●	●	F3AH1100 A/B DK30	●	●				12	12	73	45
.461	11,70				F3AH1170 A/B DK30	●	●				12	12	73	45
.472	12,00	F2AH1200 A/B DK30	●	●	F3AH1200 A/B DK30	●	●	F3AH1200 A/B DK45	●	●	12	12	73	45
.512	13,00	F2AH1300 A/B DK30	●	●	F3AH1300 A/B DK30	●	●				14	14	75	45
.539	13,70				F3AH1370 A/B DK30	●	●				14	14	75	45
.551	14,00	F2AH1400 A/B DK30	●	●	F3AH1400 A/B DK30	●	●	F3AH1400 A/B DK45	●	●	14	14	75	48
.591	15,00	F2AH1500 A/B DK30	●	●	F3AH1500 A/B DK30	●	●				16	16	82	48
.618	15,70				F3AH1570 A/B DK30	●	●				16	16	82	48
.630	16,00	F2AH1600 A/B DK30	●	●	F3AH1600 A/B DK30	●	●	F3AH1600 A/B DK45	●	●	16	16	82	48
.709	18,00	F2AH1800 A/B DK30	●	●	F3AH1800 A/B DK30	●	●	F3AH1800 A/B DK45	●	●	18	18	84	50
.787	20,00	F2AH2000 A/B DK30	●	●	F3AH2000 A/B DK30	●	●	F3AH2000 A/B DK45	●	●	20	20	92	50

Order example:
A Shank: **F2AH0200ADK30**
Grade: **KC633M**
B Shank: **F2AH0200BDK30**
Grade: **KC633M**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

DIN 6527 Short



A = cylindrical shank, no flats
B = Weldon shank

D1 Inch	D1 Metric	4 Flutes, 30° Helix Catalog number A Shank/B Shank	Grade KC633M A	Grade KC633M B	AP1	D	L	LS
.079	2,00	**F4AJ0200 A/B DK30**	●	●	4	6	50	36
.098	2,50	**F4AJ0250 A/B DK30**	●	●	4	6	50	36
.118	3,00	**F4AJ0300 A/B DK30**	●	●	5	6	50	36
.138	3,50	**F4AJ0350 A/B DK30**	●	●	6	6	50	36
.158	4,00	**F4AJ0400 A/B DK30**	●	●	8	6	54	36
.177	4,50	**F4AJ0450 A/B DK30**	●	●	8	6	54	36
.197	5,00	**F4AJ0500 A/B DK30**	●	●	9	6	54	36
.217	5,50	**F4AJ0550 A/B DK30**	●	●	10	6	54	36
.236	6,00	**F4AJ0600 A/B DK30**	●	●	10	6	54	36
.256	6,50	**F4AJ0650 A/B DK30**	●	●	11	8	58	36
.276	7,00	**F4AJ0700 A/B DK30**	●	●	11	8	58	36
.295	7,50	**F4AJ0750 A/B DK30**	●	●	12	8	58	36
.315	8,00	**F4AJ0800 A/B DK30**	●	●	12	8	58	36
.335	8,50	**F4AJ0850 A/B DK30**	●	●	13	10	66	40
.354	9,00	**F4AJ0900 A/B DK30**	●	●	13	10	66	40
.374	9,50	**F4AJ0950 A/B DK30**	●	●	14	10	66	40
.394	10,00	**F4AJ1000 A/B DK30**	●	●	14	10	66	40
.433	11,00	**F4AJ1100 A/B DK30**	●	●	16	12	73	45
.472	12,00	**F4AJ1200 A/B DK30**	●	●	16	12	73	45
.512	13,00	**F4AJ1300 A/B DK30**	●	●	18	14	75	45
.551	14,00	**F4AJ1400 A/B DK30**	●	●	18	14	75	45
.591	15,00	**F4AJ1500 A/B DK30**	●	●	22	16	82	48
.630	16,00	**F4AJ1600 A/B DK30**	●	●	22	16	82	48
.709	18,00	**F4AJ1800 A/B DK30**	●	●	24	18	84	48
.787	20,00	**F4AJ2000 A/B DK30**	●	●	26	20	92	50

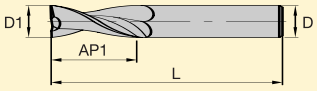
To place an order, contact your authorized
Kennametal distributor or visit www.kennametal.com.

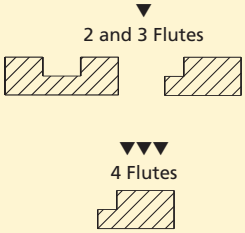
Order example:
A Shank: **F4AJ0200ADK30**
Grade: **KC633M**
B Shank: **F4AJ0200BDK30**
Grade: **KC633M**

KENNA UNIVERSAL Solid Carbide End Mills – Inch

Single End — 2, 3, and 4 Flutes (30° Helix)

Square End/30° Right-Hand Spiral/Right-Hand Cutting/Center Cutting
HEC





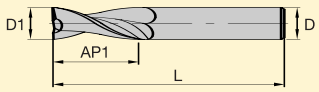
D1			2 Flutes, 30° Helix	Grades			3 Flutes, 30° Helix	Grades		4 Flutes, 30° Helix	Grades					
Inch	Fraction	Metric	Catalog number	K600	KC610M	KC635M	Catalog number	K600	KC610M	Catalog number	K600	KC610M	KC635M	AP1	D	L
.016	1/64	0,396	**HEC016S2**	●	●					**HEC016S4**	●	●		1/32	1/8	1 1/2
.031	1/32	0,795	**HEC031S2**	●	●	●				**HEC031S4**	●	●	●	5/64	1/8	1 1/2
.047	3/64	1,191	**HEC047S2**	●	●					**HEC047S4**	●	●		1/8	1/8	1 1/2
.063	1/16	1,588	**HEC062S2013**	●	●	●				**HEC062S4013**	●	●	●	1/8	1/8	1 1/2
.063	1/16	1,588	**HEC062S2**	●	●	●	**HEC062S3**	●	●	**HEC062S4**	●	●	●	3/16	1/8	1 1/2
.078	5/64	1,984	**HEC078S2**	●	●					**HEC078S4**	●	●		3/16	1/8	1 1/2
.094	3/32	2,383	**HEC094S2018**	●	●	●				**HEC094S4018**	●	●	●	3/16	1/8	1 1/2
.094	3/32	2,383	**HEC094S2**	●	●	●	**HEC094S3**	●	●	**HEC094S4**	●	●	●	3/8	1/8	1 1/2
.094	3/32	2,383	**HEC094S2063**	●	●	●				**HEC094S4063**	●	●	●	5/8	1/8	2
.109	7/64	2,779	**HEC109S2**	●	●					**HEC109S4**	●	●		3/8	1/8	1 1/2
.125	1/8	3,175	**HEC125S2025**	●	●	●				**HEC125S4025**	●	●	●	1/4	1/8	1 1/2
.125	1/8	3,175	**HEC125S2**	●	●	●	**HEC125S3**	●	●	**HEC125S4**	●	●	●	1/2	1/8	1 1/2
.125	1/8	3,175	**HEC125S2075**	●	●	●				**HEC125S4075**	●	●	●	3/4	1/8	2 1/4
.125	1/8	3,175	**HEC125S2100**	●	●	●				**HEC125S4100**	●	●	●	1	1/8	3
.141	9/64	3,571	**HEC141S2**	●	●					**HEC141S4**	●	●		9/16	3/16	2
.156	5/32	3,970	**HEC156S2031**	●	●	●				**HEC156S4031**	●	●	●	5/16	3/16	2
.156	5/32	3,970	**HEC156S2**	●	●	●	**HEC156S3**	●	●	**HEC156S4**	●	●	●	9/16	3/16	2
.172	11/64	4,366	**HEC172S2**	●	●					**HEC172S4**	●	●		5/8	3/16	2
.188	3/16	4,763	**HEC188S2031**	●	●	●				**HEC188S4031**	●	●	●	5/16	3/16	1 1/2
.188	3/16	4,763	**HEC188S2**	●	●	●	**HEC188S3**	●	●	**HEC188S4**	●	●	●	5/8	3/16	2
.188	3/16	4,763	**HEC188S2075**	●	●	●				**HEC188S4075**	●	●	●	3/4	3/16	2 1/2
.188	3/16	4,763	**HEC188S2113**	●	●	●				**HEC188S4113**	●	●	●	1 1/8	3/16	3
.203	13/64	5,159	**HEC203S2**	●	●					**HEC203S4**	●	●		5/8	1/4	2 1/2
.219	7/32	5,558	**HEC219S2044**	●	●	●				**HEC219S4044**	●	●	●	7/16	1/4	2
.219	7/32	5,558	**HEC219S2**	●	●	●	**HEC219S3**	●	●	**HEC219S4**	●	●	●	5/8	1/4	2 1/2
.234	15/64	5,954	**HEC234S2**	●	●					**HEC234S4**	●	●		3/4	1/4	2 1/2
.250	1/4	6,350	**HEC250S2050**	●	●	●				**HEC250S4050**	●	●	●	1/2	1/4	2
.250	1/4	6,350	**HEC250S2**	●	●	●	**HEC250S3**	●	●	**HEC250S4**	●	●	●	3/4	1/4	2 1/2
.250	1/4	6,350	**HEC250S2113**	●	●	●				**HEC250S4113**	●	●	●	1 1/8	1/4	3
.250	1/4	6,350	**HEC250S2150**	●	●	●				**HEC250S4150**	●	●	●	1 1/2	1/4	4
.250	1/4	6.350								**HEC250S4150L**	●	●	●	1 1/2	1/4	6
.266	17/64	6,746	**HEC266S2**	●	●					**HEC266S4**	●	●		3/4	5/16	2 1/2
.281	9/32	7,145	**HEC281S2**	●	●		**HEC281S3**	●	●	**HEC281S4**	●	●		3/4	5/16	2 1/2
.297	19/64	7,541	**HEC297S2**	●	●					**HEC297S4**	●	●		13/16	5/16	2 1/2
.313	5/16	7,938	**HEC312S2050**	●	●	●				**HEC312S4050**	●	●	●	1/2	5/16	2
.313	5/16	7,938	**HEC312S2**	●	●	●	**HEC312S3**	●	●	**HEC312S4**	●	●	●	13/16	5/16	2 1/2
.313	5/16	7,938	**HEC312S2113**	●	●	●				**HEC312S4113**	●	●	●	1 1/8	5/16	3
.313	5/16	7,938	**HEC312S2163**	●	●	●				**HEC312S4163**	●	●	●	1 5/8	5/16	4
.328	21/64	8,334	**HEC328S2**	●	●					**HEC328S4**	●	●		1	3/8	2 1/2
.344	11/32	8,733	**HEC344S2**	●	●		**HEC344S3**	●	●	**HEC344S4**	●	●		1	3/8	2 1/2
.359	23/64	9,129	**HEC360S2**	●	●					**HEC360S4**	●	●		1	3/8	2 1/2
.375	3/8	9,525	**HEC375S2063**	●	●	●				**HEC375S4063**	●	●	●	5/8	3/8	2
.375	3/8	9,525	**HEC375S2088**	●	●	●	**HEC375S3088**	●	●	**HEC375S4088**	●	●	●	7/8	3/8	2 1/2
.375	3/8	9,525	**HEC375S2113**	●	●	●	**HEC375S3113**	●	●	**HEC375S4113**	●	●	●	1 1/8	3/8	3
.375	3/8	9,525	**HEC375S2175**	●	●	●				**HEC375S4175**	●	●	●	1 3/4	3/8	4
.375	3/8	9,525								**HEC375S4150L**	●	●	●	1 1/2	3/8	6
.391	25/64	9,921	**HEC391S2100**	●	●					**HEC391S4100**	●	●		1	7/16	2 3/4
.406	13/32	10,320	**HEC406S2100**	●	●					**HEC406S4100**	●	●		1	7/16	2 3/4
.422	27/64	10,716	**HEC422S2100**	●	●					**HEC422S4100**	●	●		1	7/16	2 3/4
.438	7/16	11,113	**HEC438S2063**	●	●	●				**HEC438S4063**	●	●	●	5/8	7/16	2 1/2
.438	7/16	11,113	**HEC438S2**	●	●	●	**HEC438S3**	●	●					1	7/16	2 1/2

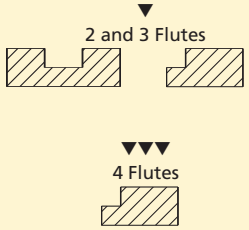
Continued on next page.

Order example:
Catalog number: **HEC016S2**
Grade: **K600**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

Square End/30° Right-Hand Spiral/Right-Hand Cutting/Center Cutting HEC





Continued from page C18.

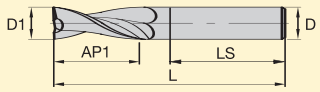
D1				Grades				Grades			Grades					
Inch	Fraction	Metric	2 Flutes, 30° Helix Catalog number	K600	KC610M	KC635M	3 Flutes, 30° Helix Catalog number	K600	KC610M	4 Flutes, 30° Helix Catalog number	K600	KC610M	KC635M	AP1	D	L
.438	7/16	11,113								HEC438S4100	●	●	●	1	7/16	2 3/4
.438	7/16	11,113	HEC438S2200	●	●	●				HEC438S4200	●	●	●	2	7/16	4
.469	15/32	11,908	HEC469S2	●	●		HEC469S3	●	●	HEC469S4	●	●		1	1/2	3
.484	31/64	12,304	HEC484S2		●					HEC484S4		●		1	1/2	3
.500	1/2	12,700	HEC500S2063	●	●	●				HEC500S4063	●	●	●	5/8	1/2	2 1/2
.500	1/2	12,700	HEC500S2	●	●	●	HEC500S3	●	●	HEC500S4	●	●	●	1	1/2	3
.500	1/2	12,700	HEC500S2200	●	●	●	HEC500S3200	●	●	HEC500S4200	●	●	●	2	1/2	4
.500	1/2	12,700	HEC500S2300	●	●	●				HEC500S4300	●	●	●	3	1/2	6
.563	9/16	14,288	HEC562S2075	●	●					HEC562S4075	●	●		3/4	9/16	3
.563	9/16	14,288	HEC562S2125	●	●	●				HEC562S4125	●	●	●	1 1/4	9/16	3 1/2
.563	9/16	14,288	HEC562S2225	●	●	●				HEC562S4225	●	●	●	2 1/4	9/16	5
.625	5/8	15,875	HEC625S2075	●	●	●				HEC625S4075	●	●	●	3/4	5/8	3
.625	5/8	15,875	HEC625S2	●	●	●	HEC625S3	●	●	HEC625S4	●	●	●	1 1/4	5/8	3 1/2
.625	5/8	15,875	HEC625S2225	●	●	●				HEC625S4225	●	●	●	2 1/4	5/8	5
.625	5/8	15,875	HEC625S2400	●		●				HEC625S4400	●		●	4	5/8	7
.688	11/16	17,463	HEC688S2	●	●					HEC688S4	●	●		1 3/8	3/4	4
.750	3/4	19,050	HEC750S2100	●	●	●				HEC750S4100	●	●	●	1	3/4	3
.750	3/4	19,050	HEC750S2	●	●	●	HEC750S3	●	●	HEC750S4	●	●	●	1 1/2	3/4	4
.750	3/4	19,050	HEC750S2225	●	●	●	HEC750S3225	●	●	HEC750S4225	●	●	●	2 1/4	3/4	5
.750	3/4	19,050	HEC750S2300	●	●	●				HEC750S4300	●	●	●	3	3/4	6
.750	3/4	19,050	HEC750S2400	●		●				HEC750S4400	●		●	4	3/4	7
.875	7/8	22,225	HEC875S2	●	●					HEC875S4	●	●		1 1/2	7/8	4
.875	7/8	22,225	HEC875S2225	●		●				HEC875S4225	●		●	2 1/4	7/8	5
1.000	1	25,400	HEC100S2	●	●	●	HEC100S3	●	●	HEC100S4	●	●	●	1 1/2	1	4
1.000	1	25,400	HEC100S2225	●	●	●	HEC100S3225	●	●	HEC100S4225	●	●	●	2 1/4	1	5
1.000	1	25,400	HEC100S2300	●	●	●				HEC100S4300	●	●	●	3	1	6
1.000	1	25,400	HEC100S2400	●		●				HEC100S4400	●		●	4	1	7
1.125	1 1/8	28,575	HEC1125S2200	●		●				HEC1125S4200	●		●	2	1	4 1/2
1.250	1 1/4	31,750	HEC1250S2200	●		●				HEC1250S4200	●		●	2	1 1/4	4 1/2

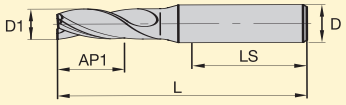
Order example:
Catalog number: **HEC500S2063**
Grade: **K600**

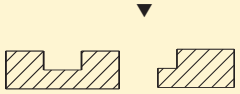
KENNA UNIVERSAL Solid Carbide End Mills – Metric

Single End — 2 and 3 Flutes (30° & 45° Helix)

DIN 6527 Long







A = cylindrical shank, no flats
B = Weldon shank

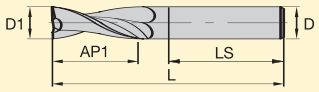
D1 Inch	D1 Metric	2 Flutes, 30° Helix Catalog number A Shank/B Shank	Grade KC633M A	Grade KC633M B	3 Flutes, 30° Helix Catalog number A Shank/B Shank	Grade KC633M A	Grade KC633M B	3 Flutes, 45° Helix Catalog number A Shank/B Shank	Grade KC633M A	Grade KC633M B	AP1	D	L	LS
.098	2,50	**F2AH0250 A/B DL30**	●	●							7	6	57	36
.118	3,00	**F2AH0300 A/B DL30**	●	●				**F3AH0300 A/B DL45**	●	●	7	6	57	36
.138	3,50							**F3AH0350 A/B DL45**	●	●	7	6	57	36
.158	4,00	**F2AH0400 A/B DL30**	●	●	**F3AH0400 A/B DL30**	●	●	**F3AH0400 A/B DL45**	●	●	8	6	57	36
.177	4,50	**F2AH0450 A/B DL30**	●	●	**F3AH0450 A/B DL30**	●	●	**F3AH0450 A/B DL45**	●	●	8	6	57	36
.189	4,80				**F3AH0480 A/B DL30**	●	●				10	6	57	36
.197	5,00	**F2AH0500 A/B DL30**	●	●	**F3AH0500 A/B DL30**	●	●	**F3AH0500 A/B DL45**	●	●	10	6	57	36
.217	5,50	**F2AH0550 A/B DL30**	●	●	**F3AH0550 A/B DL30**	●	●				10	6	57	36
.226	5,75				**F3AH0575 A/B DL30**	●	●				10	6	57	36
.236	6,00	**F2AH0600 A/B DL30**	●	●	**F3AH0600 A/B DL30**	●	●	**F3AH0600 A/B DL45**	●	●	10	6	57	36
.256	6,50				**F3AH0650 A/B DL30**	●	●				10	6	57	36
.266	6,75				**F3AH0675 A/B DL30**	●	●				10	6	57	36
.276	7,00	**F2AH0700 A/BD L30**	●	●	**F3AH0700 A/B DL30**	●	●	**F3AH0700 A/B DL45**	●	●	13	8	63	36
.305	7,75				**F3AH0775 A/B DL30**	●	●				16	8	63	36
.315	8,00	**F2AH0800 A/BD L30**	●	●	**F3AH0800 A/B DL30**	●	●	**F3AH0800 A/B DL45**	●	●	16	8	63	36
.335	8,50				**F3AH0850 A/B DL30**	●	●				16	10	72	40
.343	8,70				**F3AH0870 A/B DL30**	●	●				16	10	72	40
.354	9,00	**F2AH0900 A/BD L30**	●	●	**F3AH0900 A/B DL30**	●	●	**F3AH0900 A/B DL45**	●	●	16	10	72	40
.382	9,70				**F3AH0970 A/B DL30**	●	●				19	10	72	40
.394	10,00	**F2AH1000 A/BD L30**	●	●	**F3AH1000 A/B DL30**	●	●	**F3AH1000 A/B DL45**	●	●	19	10	72	40
.433	11,00	**F2AH1100 A/BD L30**	●	●	**F3AH1100 A/B DL30**	●	●				22	12	83	45
.461	11,70				**F3AH1170 A/B DL30**	●	●				22	12	83	45
.472	12,00	**F2AH1200 A/BD L30**	●	●	**F3AH1200 A/B DL30**	●	●	**F3AH1200 A/B DL45**	●	●	22	12	83	45
.512	13,00				**F3AH1300 A/B DL30**	●	●				22	14	83	45
.539	13,70				**F3AH1370 A/B DL30**	●	●				22	14	83	45
.551	14,00	**F2AH1400 A/BD L30**	●	●	**F3AH1400 A/B DL30**	●	●	**F3AH1400 A/B DL45**	●	●	22	14	83	45
.591	15,00	**F2AH1500 A/BD L30**	●	●	**F3AH1500 A/B DL30**	●	●				26	16	92	48
.618	15,70				**F3AH1570 A/B DL30**	●	●				26	16	92	48
.630	16,00	**F2AH1600 A/BD L30**	●	●	**F3AH1600 A/B DL30**	●	●	**F3AH1600 A/B DL45**	●	●	26	16	92	48
.709	18,00	**F2AH1800 A/BD L30**	●	●	**F3AH1800 A/B DL30**	●	●	**F3AH1800 A/B DL45**	●	●	26	18	92	48
.787	20,00	**F2AH2000 A/BD L30**	●	●	**F3AH2000 A/B DL30**	●	●	**F3AH2000 A/B DL45**	●	●	32	20	104	50

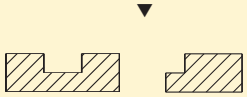
To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

Order example:
A Shank: **F2AH0250ADL30**
Grade: **KC633M**
B Shank: **F2AH0250BDL30**
Grade: **KC633M**

DIN 6528

Shank diameter = Cutting diameter





A = cylindrical shank, no flats
B = Weldon shank

D1 Inch	D1 Metric	2 Flutes, 30° Helix Catalog number A Shank	Grade KC633M A	Grade KC633M B	3 Flutes, 30° Helix Catalog number A Shank	Grade KC633M A	Grade KC633M B	AP1	D	L	LS
.158	4,00	**F2AH0400ADN30**	●		**F3AH0400ADN30**	●		8	4	50	28
.177	4,50	**F2AH0450ADN30**	●		**F3AH0450ADN30**	●		8	4,5	50	28
.197	5,00	**F2AH0500ADN30**	●		**F3AH0500ADN30**	●		10	5	50	28
.217	5,50	**F2AH0550ADN30**	●		**F3AH0550ADN30**	●		10	5,5	57	36
.236	6,00	**F2AH0600ADN30**	●		**F3AH0600ADN30**	●		10	6	57	36
.256	6,50	**F2AH0650ADN30**	●		**F3AH0650ADN30**	●		13	6,5	60	36
.276	7,00	**F2AH0700ADN30**	●		**F3AH0700ADN30**	●		13	7	60	36
.295	7,50	**F2AH0750ADN30**	●		**F3AH0750ADN30**	●		16	7,5	63	36
.315	8,00	**F2AH0800ADN30**	●		**F3AH0800ADN30**	●		16	8	63	36
.335	8,50	**F2AH0850ADN30**	●		**F3AH0850ADN30**	●		16	8,5	67	36
.354	9,00	**F2AH0900ADN30**	●		**F3AH0900ADN30**	●		16	9	67	36
.374	9,50	**F2AH0950ADN30**	●		**F3AH0950ADN30**	●		19	9,5	72	40
.394	10,00	**F2AH1000ADN30**	●		**F3AH1000ADN30**	●		19	10	72	40
.433	11,00	**F2AH1100ADN30**	●		**F3AH1100ADN30**	●		22	11	83	40
.472	12,00	**F2AH1200ADN30**	●		**F3AH1200ADN30**	●		22	12	83	45
.512	13,00	**F2AH1300ADN30**	●		**F3AH1300ADN30**	●		22	13	83	45
.551	14,00	**F2AH1400ADN30**	●		**F3AH1400ADN30**	●		22	14	83	45
.591	15,00	**F2AH1500ADN30**	●		**F3AH1500ADN30**	●		26	15	92	45
.630	16,00	**F2AH1600ADN30**	●		**F3AH1600ADN30**	●		26	16	92	48
.709	18,00	**F2AH1800ADN30**	●		**F3AH1800ADN30**	●		26	18	92	48
.787	20,00	**F2AH2000ADN30**	●		**F3AH2000ADN30**	●		32	20	104	50

Kennametal offers a wide variety of
Inch and **Metric**
solid carbide end mills to meet your application needs!

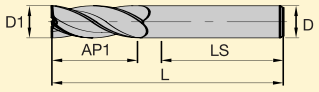
Order example:
A Shank: **F2AH0400ADN30**
Grade: **KC633M**

KENNA UNIVERSAL Solid Carbide End Mills – Metric

Single End — 2 and 4 Flutes (30° Helix)

DIN 6528

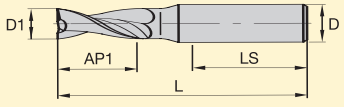
Shank diameter = Cutting diameter

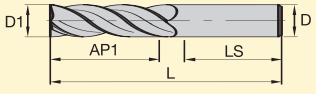


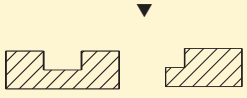
A = cylindrical shank, no flats
B = Weldon shank

D1 Inch	D1 Metric	4 Flutes, 30° Helix Catalog number A Shank	Grade KC633M A	Grade KC633M B	AP1	D	L	LS
.079	2,00	F4AJ0200ADN30	●		8	2	32	20
.098	2,50	F4AJ0250ADN30	●		8	2,5	32	20
.118	3,00	F4AJ0300ADN30	●		12	3	32	15
.138	3,50	F4AJ0350ADN30	●		12	3,5	32	15
.158	4,00	F4AJ0400ADN30	●		11	4	50	28
.177	4,50	F4AJ0450ADN30	●		11	4,5	50	28
.197	5,00	F4AJ0500ADN30	●		13	5	50	28
.217	5,50	F4AJ0550ADN30	●		13	5,5	57	36
.236	6,00	F4AJ0600ADN30	●		13	6	57	36
.256	6,50	F4AJ0650ADN30	●		16	6,5	60	36
.276	7,00	F4AJ0700ADN30	●		16	7	60	36
.295	7,50	F4AJ0750ADN30	●		19	7,5	63	36
.315	8,00	F4AJ0800ADN30	●		19	8	63	36
.335	8,50	F4AJ0850ADN30	●		19	8,5	67	36
.354	9,00	F4AJ0900ADN30	●		19	9	67	36
.374	9,50	F4AJ0950ADN30	●		22	9,5	72	40
.394	10,00	F4AJ1000ADN30	●		22	10	72	40
.433	11,00	F4AJ1100ADN30	●		26	11	83	40
.472	12,00	F4AJ1200ADN30	●		26	12	83	45
.512	13,00	F4AJ1300ADN30	●		26	13	83	45
.551	14,00	F4AJ1400ADN30	●		26	14	83	45
.591	15,00	F4AJ1500ADN30	●		32	15	92	45
.630	16,00	F4AJ1600ADN30	●		32	16	92	48
.709	18,00	F4AJ1800ADN30	●		32	18	92	48
.787	20,00	F4AJ2000ADN30	●		38	20	104	50

Extra-Long, Factory Standard





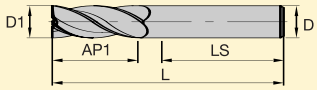


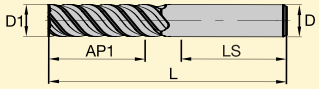
A = cylindrical shank, no flats
B = Weldon shank

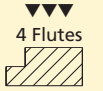
D1 Inch	D1 Metric	2 Flutes, 30° Helix Catalog number A Shank	Grade KC625M A	Grade KC625M B	4 Flutes, 30° Helix Catalog number A Shank	Grade KC625M A	Grade KC625M B	AP1	D	L	LS
.118	3,00	F2AH0300AWM30	●		F4AJ0300AWM30	●		20	3	75	28
.158	4,00	F2AH0400AWM30	●		F4AJ0400AWM30	●		25	4	75	28
.197	5,00	F2AH0500AWM30	●		F4AJ0500AWM30	●		30	5	75	28
.236	6,00	F2AH0600AWM30	●		F4AJ0600AWM30	●		30	6	75	36
.315	8,00	F2AH0800AWL30	●		F4AJ0800AWL30	●		40	8	100	36
.394	10,00	F2AH1000AWL30	●		F4AJ1000AWL30	●		40	10	100	40
.472	12,00	F2AH1200AWX30	●		F4AJ1200AWX30	●		45	12	150	45
.551	14,00	F2AH1400AWX30	●		F4AJ1400AWX30	●		45	14	150	45
.630	16,00	F2AH1600AWX30	●		F4AJ1600AWX30	●		65	16	150	48
.709	18,00	F2AH1800AWX30	●		F4AJ1800AWX30	●		65	18	150	48
.787	20,00	F2AH2000AWX30	●		F4AJ2000AWX30	●		65	20	150	50

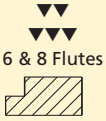
To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

DIN 6527 Long









A = cylindrical shank, no flats
B = Weldon shank

D1		4 Flutes, 30° Helix	Grade KC633M		6 Flutes, 30° Helix	Grade KC633M		8 Flutes, 30° Helix	Grade KC633M					
Inch	Metric	Catalog number A shank	A	B	Catalog number A shank	A	B	Catalog number A shank	A	B	AP1	D	L	LS
.158	4,00	**F4AJ0400ADL30**	●								11	6	57	36
.177	4,50	**F4AJ0450ADL30**	●								11	6	57	36
.197	5,00	**F4AJ0500ADL30**	●								13	6	57	36
.236	6,00	**F4AJ0600ADL30**	●		**F6AJ0600ADL30**	●					13	6	57	36
.276	7,00	**F4AJ0700ADL30**	●			●					16	8	63	36
.315	8,00	**F4AJ0800ADL30**	●		**F6AJ0800ADL30**	●					19	8	63	36
.354	9,00	**F4AJ0900ADL30**	●			●					19	10	72	40
.394	10,00	**F4AJ1000ADL30**	●		**F6AJ1000ADL30**	●					22	10	72	40
.433	11,00	**F4AJ1100ADL30**	●			●					26	12	83	45
.472	12,00	**F4AJ1200ADL30**	●		**F6AJ1200ADL30**	●					26	12	83	45
.512	13,00	**F4AJ1300ADL30**	●			●					26	14	83	45
.551	14,00	**F4AJ1400ADL30**	●		**F6AJ1400ADL30**	●					26	14	83	45
.591	15,00	**F4AJ1500ADL30**	●			●					32	16	92	48
.630	16,00	**F4AJ1600ADL30**	●		**F6AJ1600ADL30**	●					32	16	92	48
.709	18,00	**F4AJ1800ADL30**	●					**F8AJ1800ADL30**	●		32	18	92	48
.787	20,00	**F4AJ2000ADL30**	●					**F8AJ2000ADL30**	●		38	20	104	50

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

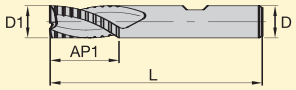
Order example:
A Shank: **F4AJ0400ADL30**
Grade: **KC633M**

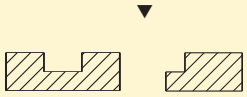
KENNA UNIVERSAL Solid Carbide End Mills – Inch

Single End, Roughing — 3, 4, and 5 Flutes

Roughing/Right-Hand Spiral/Right-Hand Cutting/Sinusoidal Grind/Weldon Flat

For Steel, Stainless Steel, Cast Iron, High-Temp Alloys



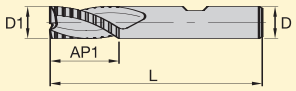


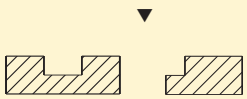
D1			4 Flutes		5 Flutes				
Inch	Fraction	Metric	Catalog number	Grade KC633M	Catalog number	Grade KC633M	AP1	D	L
.250	1/4	6,350	**MDRHEC250S4025**	●			1/4	1/4	2
.250	1/4	6,350	**MDRHEC250S4075**	●			3/4	1/4	2 1/2
.313	5/16	7,938	**MDRHEC312S4081**	●			13/16	5/16	2 1/2
.375	3/8	9,525	**MDRHEC375S4038**	●			3/8	3/8	2
.375	3/8	9,525	**MDRHEC375S4088**	●			7/8	3/8	2 1/2
.500	1/2	14,288	**MDRHEC500S4050**	●			1/2	1/2	2 1/2
.500	1/2	14,288	**MDRHEC500S4100**	●			1	1/2	3
.625	5/8	15,875	**MDRHEC625S4063**	●			5/8	5/8	3
.625	5/8	15,875	**MDRHEC625S4125**	●			1 1/4	5/8	3 1/2
.750	3/4	19,050	**MDRHEC750S4075**	●			3/4	3/4	3 1/2
.750	3/4	19,050	**MDRHEC750S4150**	●			1 1/2	3/4	4
1.000	1	25,400			**MDRHEC100S5113**	●	1 1/8	1	3 1/2
1.000	1	25,400			**MDRHEC100S5150**	●	1 1/2	1	4

Roughing/Right-Hand Spiral/Right-Hand Cutting/Sinusoidal Grind/Weldon Flat

SFRHEC

For Aluminum





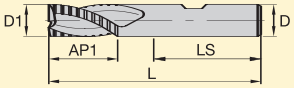
D1				Grades				
Inch	Fraction	Metric	3 Flutes Catalog number	K600	KC625M	AP1	D	L
.250	1/4	6,350	**SFRHEC250S3075**	●	●	3/4	1/4	2 1/2
.313	5/16	7,938	**SFRHEC312S3075**	●	●	3/4	5/16	2 1/2
.375	3/8	9,525	**SFRHEC375S3088**	●	●	7/8	3/8	2 1/2
.500	1/2	14,288	**SFRHEC500S3100**	●	●	1	1/2	3
.500	1/2	14,288	**SFRHEC500S3200**	●	●	2	1/2	4 1/2
.625	5/8	15,875	**SFRHEC625S3125**	●	●	1 1/4	5/8	3 1/2
.625	5/8	15,875	**SFRHEC625S3225**	●	●	2 1/4	5/8	5
.750	3/4	19,050	**SFRHEC750S3150**	●	●	1 1/2	3/4	4
.750	3/4	19,050	**SFRHEC750S3225**	●	●	2 1/4	3/4	5
1.000	1	25,400	**SFRHEC100S3150**	●	●	1 1/2	1	4
1.000	1	25,400	**SFRHEC100S3225**	●	●	2 1/4	1	5

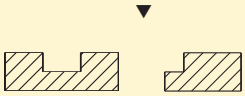
Order example:
Catalog number: **MDRHEC250S4025**
Grade: **KC633M**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

Factory Standard (20° Helix)

For Steel



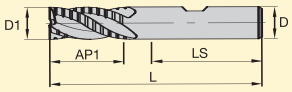


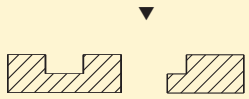
A = cylindrical shank, no flats
B = Weldon shank

D1 Inch	D1 Metric	With Through Coolant Catalog number B Shank	Grade KC633M A	Grade KC633M B	Number of Flutes	Without Through Coolant Catalog number B Shank	Grade KC633M A	Grade KC633M B	Number of Flutes	AP1	D	L	LS
.236	4,00					**F3BH0400BWS20L110**		●	3	11	6	55	36
.315	5,00					**F3BH0500BWS20L130**		●	3	13	6	57	33
.236	6,00					**F3BH0600BWS20L080**		●	3	8	6	54	41
.236	6,00					**F3BH0600BWS20L130**		●	3	13	6	57	39
.315	8,00	**F3BH0800BWS20C110**		●	3	**F3BH0800BWS20L110**		●	3	11	8	58	40
.315	8,00	**F3BH0800BWM20C160**		●	3	**F3BH0800BWM20L160**		●	3	16	8	63	39
.394	10,00	**F4BJ1000BWM20C130**		●	4	**F4BJ1000BWM20L130**		●	4	13	10	66	47
.394	10,00	**F4BJ1000BWM20C220**		●	4	**F4BJ1000BWM20L220**		●	4	22	10	72	45
.472	12,00	**F4BJ1200BWM20C160**		●	4	**F4BJ1200BWM20L160**		●	4	16	12	73	52
.472	12,00	**F4BJ1200BWL20C260**		●	4	**F4BJ1200BWL20L260**		●	4	26	12	83	51
.551	14,00					**F4BJ1400BWL20L260**		●	4	26	14	83	50
.630	16,00	**F4BJ1600BWL20C190**		●	4	**F4BJ1600BWL20L190**		●	4	19	16	82	56
.630	16,00	**F4BJ1600BWL20C320**		●	4	**F4BJ1600BWL20L320**		●	4	32	16	92	51
.787	20,00	**F4BJ2000BWL20C220**		●	4	**F4BJ2000BWL20L220**		●	4	22	20	92	59
.787	20,00	**F4BJ2000BWX20C380**		●	4	**F4BJ2000BWX20L380**		●	4	38	20	104	59
.984	25,00					**F5BJ2500BWX20L450**		●	5	45	25	121	69

3 Flutes, Factory Standard (30° Helix)

For Aluminum





A = cylindrical shank, no flats
B = Weldon shank

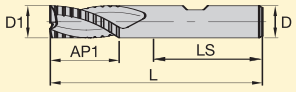
D1 Inch	D1 Metric	3 Flutes, With Through Coolant Catalog number B Shank	Grade K600 A	Grade K600 B	3 Flutes, With Through Coolant Catalog number B Shank	Grade K600 A	Grade K600 B	AP1	D	L	LS
.236	6,00	**F3BA0600BWS30C130**		●	**F3BA0600BWS30**		●	13	6	57	39
.315	8,00	**F3BA0800BWM30C160**		●	**F3BA0800BWM30**		●	16	8	63	41
.394	10,00	**F3BA1000BWM30C220**		●	**F3BA1000BWM30**		●	22	10	72	42
.472	12,00	**F3BA1200BWL30C260**		●	**F3BA1200BWL30**		●	26	12	83	47
.630	16,00	**F3BA1600BWL30C320**		●	**F3BA1600BWL30**		●	32	16	92	55
.787	20,00	**F3BA2000BWX30C380**		●	**F3BA2000BWX30**		●	38	20	104	53
.984	25,00	**F3BA2500BWX30C450**		●	**F3BA2500BWX30**		●	45	25	121	60

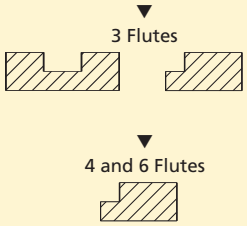
Order example:
B Shank: **F3BH0800BWS20C110**
Grade: **KC633M**

KENNA UNIVERSAL Solid Carbide End Mills – Metric

Single End, Semi-Finishing — 3, 4, and 6 Flutes

DIN 6527 Long (30° and 45° Helix)





A = cylindrical shank, no flats
B = Weldon shank

D1 Inch	D1 Metric	3 Flutes, 30° Helix Catalog number B Shank	Grade KC633M A	Grade KC633M B	AP1	D	L	LS
.236	6,00	**F3BH0600BDL30**		●	10	6	57	36
.315	8,00	**F3BH0800BDL30**		●	16	8	63	36
.394	10,00	**F3BH1000BDL30**		●	19	10	72	40
.472	12,00	**F3BH1200BDL30**		●	22	12	83	45
.630	16,00	**F3BH1600BDL30**		●	26	16	92	48
.787	20,00	**F3BH2000BDL30**		●	32	20	104	50
.984	25,00	**F3BH2500BDL30**		●	45	25	121	56

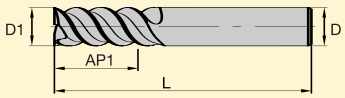
D1 Inch	D1 Metric	4 Flutes, 30° Helix Catalog number B Shank	Grade KC633M A	Grade KC633M B	6 Flutes, 45° Helix Catalog number B Shank	Grade KC633M A	Grade KC633M B	6 Flutes, 45° Helix Catalog number B Shank	Grade KC633M A	Grade KC633M B	AP1	D	L	LS
.236	6,00	**F4BJ0600BDL30**		●	**F4BJ0600BDL45**		●				13	6	57	36
.315	8,00	**F4BJ0800BDL30**		●	**F4BJ0800BDL45**		●				19	8	63	36
.394	10,00	**F4BJ1000BDL30**		●	**F4BJ1000BDL45**		●				22	10	72	40
.472	12,00	**F4BJ1200BDL30**		●	**F4BJ1200BDL45**		●				26	12	83	45
.630	16,00	**F4BJ1600BDL30**		●				**F6BJ1600BDL45**		●	32	16	92	48
.787	20,00	**F4BJ2000BDL30**		●				**F6BJ2000BDL45**		●	38	20	104	50
.984	25,00							**F6BJ2500BDL45**		●	45	25	121	56

D1 Inch	D1 Metric	4 Flutes, 45° Helix Catalog number B Shank	Grade KC633M A	Grade KC633M B	6 Flutes, 45° Helix Catalog number B Shank	Grade KC633M A	Grade KC633M B	AP1	D	L	LS
.236	6,00	**F4BJ0600BDL45L060**		●				6	6	57	36
.315	8,00	**F4BJ0800BDL45L080**		●				8	8	63	36
.394	10,00	**F4BJ1000BDL45L100**		●				10	10	72	40
.472	12,00	**F4BJ1200BDL45L120**		●				12	12	83	45
.630	16,00				**F6BJ1600BDL45L160**		●	16	16	92	48
.787	20,00				**F6BJ2000BDL45L200**		●	20	20	104	50
.984	25,00				**F6BJ2500BDL45L250**		●	25	25	121	56

Order example:
B Shank: **F3BH0600BDL30**
Grade: **KC633M**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

Right-Hand Spiral/Right-Hand Cutting/Center Cutting
HHEC – 60° Helix

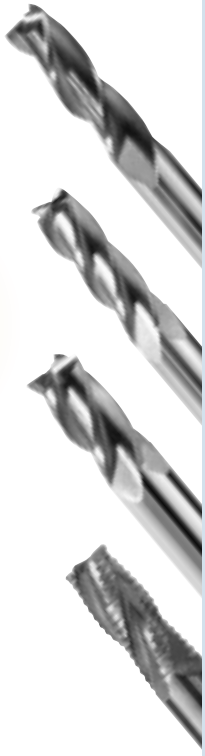


D1			3 Flutes, 60° High Helix Catalog number	Grade	AP1	D	L
Inch	Fraction	Metric		KC635M			
.125	1/8	3,175	**HHEC125S3**	●	1/2	1/4	2 1/2
.188	3/16	4,763	**HHEC188S3**	●	5/8	1/4	2 1/2
.250	1/4	6,350	**HHEC250S3**	●	3/4	1/4	2 1/2
.313	5/16	7,938	**HHEC312S3**	●	13/16	5/16	2 1/2
.375	3/8	9,525	**HHEC375S3**	●	7/8	3/8	2 1/2
.438	7/16	11,113	**HHEC438S3100**	●	1	7/16	2 3/4
.500	1/2	12,700	**HHEC500S3**	●	1	1/2	3
.625	5/8	15,875	**HHEC625S3**	●	1 1/4	5/8	3 1/2
.750	3/4	19,050	**HHEC750S3**	●	1 1/2	3/4	4
1.000	1	25,400	**HHEC100S3**	●	1 1/2	1	4

Kennametal Solid Carbide End Mills

No matter what type of workpiece you're milling, Kennametal Solid Carbide End Mills will boost your productivity and profitability – and your overall manufacturing competitiveness!

- Available in grades **KC635M** (for aluminum, cast irons, high-temp alloys, steels, and stainless steels), **KC610M** (for steels, stainless steels, and nodular graphite iron), and **KC633M** (for dry milling of all types of materials)!
- New fine micro grade substrate increases tool life, minimizes deflection!
- General-purpose, single-end, and double-end styles offered!

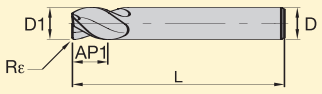


Order example:
Catalog number: **HHEC125S3**
Grade: **KC635M**

KENNA UNIVERSAL Solid Carbide End Mills – Inch

Corner Radius — 4 Flutes (30° Helix)

Right-Hand Spiral/Right-Hand Cutting/Center Cutting



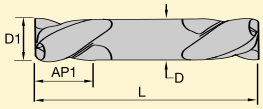
D1 Inch	D1 Fraction	D1 Metric	4 Flutes, 30° Helix Catalog number	Grades KC610M	Grades KC635M	AP1	D	L	Rε
.125	1/8	3,175	**CRHEC125S4R15**	●	●	1/2	1/8	1 1/2	.015
.125	1/8	3,175	**CRHEC125S4R20**	●	●	1/2	1/8	1 1/2	.020
.188	3/16	4,763	**CRHEC188S4R15**	●	●	5/8	3/16	2	.015
.188	3/16	4,763	**CRHEC188S4R20**	●	●	5/8	3/16	2	.020
.188	3/16	4,763	**CRHEC188S4R30**	●	●	5/8	3/16	2	.030
.250	1/4	6,350	**CRHEC250S4R15**	●	●	3/4	1/4	2 1/2	.015
.250	1/4	6,350	**CRHEC250S4R20**	●	●	3/4	1/4	2 1/2	.020
.250	1/4	6,350	**CRHEC250S4R30**	●	●	3/4	1/4	2 1/2	.030
.250	1/4	6,350	**CRHEC250S4R45**	●	●	3/4	1/4	2 1/2	.045
.313	5/16	7,938	**CRHEC312S4R15**	●	●	13/16	5/16	2 1/2	.015
.313	5/16	7,938	**CRHEC312S4R20**	●	●	13/16	5/16	2 1/2	.020
.313	5/16	7,938	**CRHEC312S4R30**	●	●	13/16	5/16	2 1/2	.030
.313	5/16	7,938	**CRHEC312S4R45**	●	●	13/16	5/16	2 1/2	.045
.375	3/8	9,525	***CRHEC375S4R15**	●	●	1	3/8	2 1/2	.015
.375	3/8	9,525	***CRHEC375S4R20**	●	●	1	3/8	2 1/2	.020
.375	3/8	9,525	***CRHEC375S4R30**	●	●	1	3/8	2 1/2	.030
.375	3/8	9,525	***CRHEC375S4R45**	●	●	1	3/8	2 1/2	.045
.500	1/2	12,700	***CRHEC500S4R15**	●	●	1	1/2	3	.015
.500	1/2	12,700	***CRHEC500S4R20**	●	●	1	1/2	3	.020
.500	1/2	12,700	***CRHEC500S4R30**	●	●	1	1/2	3	.030
.500	1/2	12,700	***CRHEC500S4R45**	●	●	1	1/2	3	.045
.500	1/2	12,700	***CRHEC500S4R60**	●	●	1	1/2	3	.060
.625	5/8	15,875	***CRHEC625S4R15**	●	●	1 1/4	5/8	3 1/2	.015
.625	5/8	15,875	***CRHEC625S4R30**	●	●	1 1/4	5/8	3 1/2	.030
.625	5/8	15,875	***CRHEC625S4R60**	●	●	1 1/4	5/8	3 1/2	.060
.625	5/8	15,875	***CRHEC625S4R90**	●	●	1 1/4	5/8	3 1/2	.090
.750	3/4	19,050	***CRHEC750S4R15**	●	●	1 1/2	3/4	4	.015
.750	3/4	19,050	***CRHEC750S4R20**	●	●	1 1/2	3/4	4	.020
.750	3/4	19,050	***CRHEC750S4R30**	●	●	1 1/2	3/4	4	.030
.750	3/4	19,050	***CRHEC750S4R45**	●	●	1 1/2	3/4	4	.045
.750	3/4	19,050	***CRHEC750S4R60**	●	●	1 1/2	3/4	4	.060
.750	3/4	19,050	***CRHEC750S4R90**	●	●	1 1/2	3/4	4	.090
.750	3/4	19,050	***CRHEC750S4R125**	●	●	1 1/2	3/4	4	.125
1.000	1	25,400	***CRHEC100S4R15**	●	●	1 1/2	1	4	.015
1.000	1	25,400	***CRHEC100S4R20**	●	●	1 1/2	1	4	.020
1.000	1	25,400	***CRHEC100S4R30**	●	●	1 1/2	1	4	.030
1.000	1	25,400	***CRHEC100S4R45**	●	●	1 1/2	1	4	.045
1.000	1	25,400	***CRHEC100S4R60**	●	●	1 1/2	1	4	.060
1.000	1	25,400	***CRHEC100S4R90**	●	●	1 1/2	1	4	.090
1.000	1	25,400	***CRHEC100S4R125**	●	●	1 1/2	1	4	.125

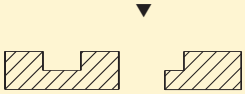
*Weldon flat on shank

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

Order example:
Catalog number: **CRHEC125S4R15**
Grade: **KC610M**

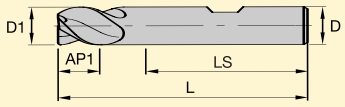
Right-Hand Spiral/Right-Hand Cutting/Center Cutting
DHEC

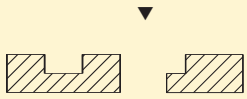




D1 Inch	D1 Fraction	D1 Metric	2 Flutes Catalog number	Grades K600	Grades KC610M	Grades KC635M	4 Flutes Catalog number	Grades K600	Grades KC610M	Grades KC635M	AP1	D	L
.031	1/32	0,795	**DHEC031S2**	●	●		**DHEC031S4**	●	●	●	1/16	1/8	1 1/2
.047	3/64	1,191	**DHEC047S2**		●		**DHEC047S4**	●	●		3/32	1/8	1 1/2
.063	1/16	1,588	**DHEC062S2**	●	●		**DHEC062S4**	●	●	●	1/8	1/8	1 1/2
.078	5/64	1,984	**DHEC078S2**		●		**DHEC078S4**	●	●		1/8	1/8	1 1/2
.094	3/32	2,383	**DHEC094S2**	●	●		**DHEC094S4**	●	●	●	3/16	1/8	1 1/2
.109	7/64	2,779	**DHEC109S2**	●	●		**DHEC109S4**	●	●		3/16	1/8	1 1/2
.125	1/8	3,175	**DHEC125S2025**	●	●	●	**DHEC125S4025**	●	●	●	1/4	1/8	1 1/2
.125	1/8	3,175	**DHEC125S2038**	●	●	●	**DHEC125S4038**	●	●	●	3/8	1/8	2
.141	9/64	3,571	**DHEC141S2**		●		**DHEC141S4**		●		5/16	3/16	2
.156	5/32	3,970	**DHEC156S2**	●	●	●	**DHEC156S4**	●	●	●	5/16	3/16	2
.172	11/64	4,366	**DHEC172S2**		●		**DHEC172S4**		●		5/16	3/16	2
.188	3/16	4,763	**DHEC188S2**	●	●	●	**DHEC188S4**	●	●	●	3/8	3/16	2
.203	13/64	5,159					**DHEC203S4**		●		1/2	1/4	2 1/2
.219	7/32	5,558	**DHEC219S2**		●		**DHEC219S4**		●	●	1/2	1/4	2 1/2
.234	15/64	5,954					**DHEC234S4**		●		1/2	1/4	2 1/2
.250	1/4	6,350	**DHEC250S2**	●	●	●	**DHEC250S4**	●	●	●	1/2	1/4	2 1/2
.281	9/32	7,145	**DHEC281S2**		●		**DHEC281S4**		●		1/2	5/16	2 1/2
.313	5/16	7,938	**DHEC312S2**	●	●	●	**DHEC312S4**	●	●	●	1/2	5/16	2 1/2
.375	3/8	9,525	**DHEC375S2056**	●	●	●	**DHEC375S4056**	●	●	●	9/16	3/8	2 1/2
.438	7/16	11,113					**DHEC438S4**	●	●	●	9/16	7/16	3
.500	1/2	12,700	**DHEC500S2**	●	●	●	**DHEC500S4**	●	●	●	5/8	1/2	3

Factory Standard (30° Helix)
Throw-Away End Mills





A = cylindrical shank, no flats
B = Weldon shank

D1 Inch	D1 Metric	3 Flutes, 30° Helix Catalog number B Shank	Grade KC625M A	Grade KC625M B	AP1	D	L	LS
.079	2,00	**F3AR0200BWS30**		●	4	6	38	32
.118	3,00	**F3AR0300BWS30**		●	5	6	38	32
.158	4,00	**F3AR0400BWS30**		●	7	6	38	32
.197	5,00	**F3AR0500BWS30**		●	8	6	38	32
.236	6,00	**F3AR0600BWS30**		●	8	6	38	32
.315	8,00	**F3AR0800BWS30**		●	11	8	43	36
.394	10,00	**F3AR1000BWS30**		●	13	10	50	40

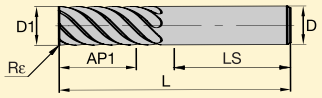
Order example:
Catalog number: **DHEC031S2**
Grade: **K600**

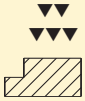
KENNA UNIVERSAL Solid Carbide End Mills – Metric

Single End — Special Applications

DIN 6527 Long (45° Helix)

Hard Machining





A = cylindrical shank, no flats
B = Weldon shank

D1 Inch	D1 Metric	6 Flutes, 45° Helix Catalog number A Shank	Grade KC637M A	Grade KC637M B	8 Flutes, 45° Helix Catalog number A Shank	Grade KC637M A	Grade KC637M B	AP1	D	L	LS	Rε
.236	6,00	**F6AV0600ADL45**	●					13	6	57	36	0,5
.315	8,00	**F6AV0800ADL45**	●					19	8	63	36	0,5
.394	10,00	**F6AV1000ADL45**	●					22	10	72	40	0,5
.472	12,00	**F6AV1200ADL45**	●					26	12	83	45	1,0
.630	16,00	**F6AV1600ADL45**	●					32	16	92	48	1,0
.787	20,00				**F8AV2000ADL45**	●		38	20	104	50	1,0
.984	25,00				**F8AV2500ADL45**	●		45	25	121	56	1,5

Also Available

High-Performance Solid Carbide End Mills

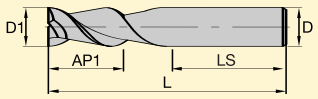
- **Non-polished shank for better gripping power!**
- **Material-specific solutions!**
- **Fine-grain carbide!**
- **“M” Grades!**
- **Optimized end mill designs for maximum productivity!**

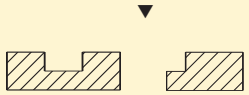
Order example:
A Shank: **F6AV0600ADL45**
Grade: **KC637M**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

DIN 6527 Long (45° Helix)

For Aluminum Machining



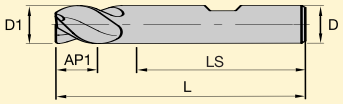


A = cylindrical shank, no flats
B = Weldon shank

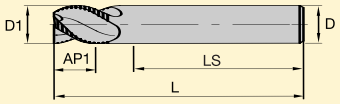
D1 Inch	D1 Metric	2 Flutes, 45° Helix Catalog number A Shank/B Shank	Grade K600 A	Grade K600 B	AP1	D	L	LS
.158	4,00	F2AA0400 A/B DL45	●	●	8	6	57	36
.197	5,00	F2AA0500 A/B DL45	●	●	10	6	57	36
.236	6,00	F2AA0600 A/B DL45	●	●	10	6	57	36
.315	8,00	F2AA0800 A/B DL45	●	●	16	8	63	36
.394	10,00	F2AA1000 A/B DL45	●	●	19	10	72	40
.472	12,00	F2AA1200 A/B DL45	●	●	22	12	83	45
.551	14,00	F2AA1400 A/B DL45	●	●	22	14	83	45
.630	16,00	F2AA1600 A/B DL45	●	●	26	16	92	48
.709	18,00	F2AA1800 A/B DL45	●	●	26	18	92	48
.787	20,00	F2AA2000 A/B DL45	●	●	32	20	104	50

DIN 6527 Short and Long (35° Helix)

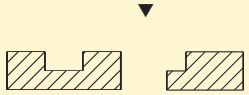
For Stainless Steel Machining



Finisher



Semi-Finisher



D1 Inch	D1 Metric	Finisher, 3 Flutes, 35° Helix Catalog number B Shank	Grade KC633M A	Grade KC633M B	Semi-Finisher, 3 Flutes, 35° Helix Catalog number B Shank	Grade KC633M A	Grade KC633M B	AP1	D	L	LS
.118	3,00	F3AS0300BDK35		●				4	6	50	43
.158	4,00	F3AS0400BDK35		●				5	6	54	45
.197	5,00	F3AS0500BDK35		●				6	6	54	44
.236	6,00	F3AS0600BDK35		●	F3BS0600BDK35		●	7	6	54	41
.315	8,00	F3AS0800BDK35		●	F3BS0800BDK35		●	9	8	58	42
.394	10,00	F3AS1000BDK35		●	F3BS1000BDK35		●	11	10	66	45
.472	12,00	F3AS1200BDK35		●	F3BS1200BDK35		●	12	12	73	51
.551	14,00	F3AS1400BDK35		●	F3BS1400BDK35		●	14	14	75	51
.630	16,00	F3AS1600BDK35		●	F3BS1600BDK35		●	16	16	82	55
.709	18,00	F3AS1800BDK35		●				18	18	84	55
.787	20,00	F3AS2000BDK35		●	F3BS2000BDK35		●	20	20	92	60

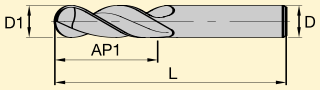
D1 Inch	D1 Metric	Semi-Finisher, 3 Flutes, 35° Helix Catalog number B Shank	Grade KC633M A	Grade KC633M B	AP1	D	L	LS
.236	6,00	F3BS0600BDL35		●	10	6	57	36
.315	8,00	F3BS0800BDL35		●	16	8	63	36
.394	10,00	F3BS1000BDL35		●	19	10	72	40
.472	12,00	F3BS1200BDL35		●	22	12	83	45
.551	14,00	F3BS1400BDL35		●	22	14	83	45
.630	16,00	F3BS1600BDL35		●	26	16	92	48
.787	20,00	F3BS2000BDL35		●	32	20	104	50

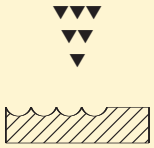
KENNA UNIVERSAL Solid Carbide End Mills – Inch

Ball Nose and Regular Length — 2, 3, and 4 Flutes (30° Helix)

30° Right-Hand Spiral/Right-Hand Cutting/Center Cutting

BNEC

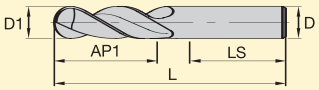


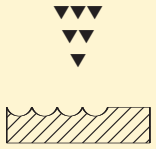


D1			2 Flutes, 30° Helix	Grades			3 Flutes, 30° Helix	Grades		4 Flutes, 30° Helix	Grades					
Inch	Fraction	Metric	Catalog number	K600	KC610M	KC635M	Catalog number	K600	KC610M	Catalog number	K600	KC610M	KC635M	AP1	D	L
.031	1/32	0,795	BNEC031S2	●	●	●	BNEC031S3	●	●	BNEC031S4	●	●	●	5/64	1/8	1 1/2
.047	3/64	1,191	BNEC047S2	●	●					BNEC047S4	●	●		1/8	1/8	1 1/2
.063	1/16	1,588	BNEC062S2	●	●	●	BNEC062S3	●	●	BNEC062S4	●	●	●	3/16	1/8	1 1/2
.078	5/64	1,984	BNEC078S2	●	●					BNEC078S4	●	●		3/16	1/8	1 1/2
.094	3/32	2,383	BNEC094S2018	●	●	●				BNEC094S4018	●	●	●	3/16	1/8	1 1/2
.094	3/32	2,383	BNEC094S2	●	●	●	BNEC094S3	●	●	BNEC094S4	●	●	●	3/8	1/8	1 1/2
.109	7/64	2,779	BNEC109S2	●	●					BNEC109S4	●	●		3/8	1/8	1 1/2
.125	1/8	3,175	BNEC125S2025	●	●	●				BNEC125S4025	●	●	●	1/4	1/8	1 1/2
.125	1/8	3,175	BNEC125S2	●	●	●	BNEC125S3	●	●	BNEC125S4	●	●	●	1/2	1/8	1 1/2
.125	1/8	3,175	BNEC125S2075	●	●	●				BNEC125S4075	●	●	●	3/4	1/8	2 1/4
.125	1/8	3,175	BNEC125S2075L	●	●	●				BNEC125S4075L	●	●	●	3/4	1/8	3
.141	9/64	3,571	BNEC141S2	●	●					BNEC141S4	●	●		9/16	3/16	2
.156	5/32	3,970	BNEC156S2031	●	●	●				BNEC156S4031	●	●	●	5/16	3/16	2
.156	5/32	3,970	BNEC156S2	●	●	●				BNEC156S4	●	●	●	9/16	3/16	2
.172	11/64	4,366	BNEC172S2	●	●					BNEC172S4	●	●		5/8	3/16	2
.188	3/16	4,763	BNEC188S2031	●	●	●				BNEC188S4031	●	●	●	5/16	3/16	1 1/2
.188	3/16	4,763	BNEC188S2	●	●	●	BNEC188S3	●	●	BNEC188S4	●	●	●	5/8	3/16	2
.188	3/16	4,763	BNEC188S2075	●	●	●				BNEC188S4075	●	●	●	3/4	3/16	2 1/2
.188	3/16	4,763	BNEC188S2100	●	●	●				BNEC188S4100	●	●	●	1	3/16	4
.203	13/64	5,159	BNEC203S2		●					BNEC203S4	●	●		5/8	1/4	2 1/2
.219	7/32	5,558	BNEC219S2	●	●					BNEC219S4	●	●	●	5/8	1/4	2 1/2
.234	15/64	5,954	BNEC234S2		●					BNEC234S4	●	●		3/4	1/4	2 1/2
.250	1/4	6,350	BNEC250S2050	●	●	●				BNEC250S4050	●	●	●	1/2	1/4	2
.250	1/4	6,350	BNEC250S2	●	●	●	BNEC250S3	●	●	BNEC250S4	●	●	●	3/4	1/4	2 1/2
.250	1/4	6,350	BNEC250S2113	●	●	●				BNEC250S4113	●	●	●	1 1/8	1/4	3
.250	1/4	6,350	BNEC250S2150	●	●	●				BNEC250S4150	●	●	●	1 1/2	1/4	4
.250	1/4	6,350	BNEC250S2150L	●	●	●				BNEC250S4150L	●	●	●	1 1/2	1/4	6
.281	9/32	7,145	BNEC281S2	●	●					BNEC281S4	●	●		3/4	5/16	2 1/2
.313	5/16	7,938	BNEC312S2050	●	●	●				BNEC312S4050	●	●	●	1/2	5/16	2
.313	5/16	7,938	BNEC312S2	●	●	●				BNEC312S4	●	●	●	13/16	5/16	2 1/2
.313	5/16	7,938	BNEC312S2113	●	●	●				BNEC312S4113	●	●	●	1 1/8	5/16	3
.313	5/16	7,938	BNEC312S2150	●	●	●				BNEC312S4150	●	●	●	1 1/2	5/16	6
.344	11/32	8,733	BNEC344S2	●	●					BNEC344S4	●	●		1	3/8	2 1/2
.375	3/8	9,525	BNEC375S2063	●	●	●				BNEC375S4063	●	●	●	5/8	3/8	2
.375	3/8	9,525	BNEC375S2088	●	●	●	BNEC375S3088	●	●	BNEC375S4088	●	●	●	7/8	3/8	2 1/2
.375	3/8	9,525	BNEC375S2113	●	●	●				BNEC375S4113	●	●	●	1 1/8	3/8	3
.375	3/8	9,525	BNEC375S2175	●	●	●				BNEC375S4175	●	●	●	1 3/4	3/8	4
.375	3/8	9,525	BNEC375S2300	●	●	●				BNEC375S4300	●	●	●	3	3/8	6
.406	13/32	10,320	BNEC406S2100	●	●					BNEC406S4100	●	●		1	7/16	2 1/2
.438	7/16	11,113	BNEC438S2100	●	●	●				BNEC438S4100	●	●	●	1	7/16	2 1/2
.469	15/32	11,908	BNEC469S2		●					BNEC469S4		●		1	1/2	3
.500	1/2	12,700	BNEC500S2063	●	●	●				BNEC500S4063	●	●	●	5/8	1/2	2 1/2
.500	1/2	12,700	BNEC500S2	●	●	●	BNEC500S3	●	●	BNEC500S4	●	●	●	1	1/2	3
.500	1/2	12,700	BNEC500S2150	●	●	●				BNEC500S4150	●	●	●	1 1/2	1/2	6
.500	1/2	12,700	BNEC500S2200	●	●	●				BNEC500S4200	●	●	●	2	1/2	4
.500	1/2	14,288	BNEC500S2300	●	●	●				BNEC500S4300	●	●	●	3	1/2	6
.563	9/16	14,288	BNEC562S2		●	●				BNEC562S4	●	●	●	1 1/4	9/16	3 1/2
.625	5/8	15,875	BNEC625S2	●	●	●				BNEC625S4	●	●	●	1 1/4	5/8	3 1/2
.625	5/8	15,875	BNEC625S2300	●	●	●				BNEC625S4300	●	●	●	3	5/8	6
.750	3/4	19,050	BNEC750S2100	●	●	●				BNEC750S4100	●	●	●	1	3/4	3
.750	3/4	19,050	BNEC750S2	●	●	●				BNEC750S4	●	●	●	1 1/2	3/4	4
.750	3/4	19,050	BNEC750S2200	●	●	●				BNEC750S4200	●	●	●	2	3/4	6
.875	7/8	22,225	BNEC875S2		●	●				BNEC875S4	●	●	●	1 1/2	7/8	4
1.000	1	25,400	BNEC100S2	●	●	●				BNEC100S4	●	●	●	1 1/2	1	4
1.000	1	25,400	BNEC100S2300	●	●	●				BNEC100S4300	●	●	●	3	1	6

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

DIN 6527 Long



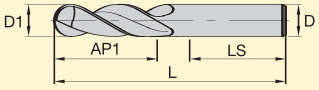


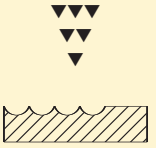
A = cylindrical shank, no flats
B = Weldon shank

D1 Inch	D1 Metric	2 Flutes, 30° Helix Catalog number A Shank/B Shank	Grade KC633M A	Grade KC633M B	AP1	4 Flutes, 30° Helix Catalog number A Shank/B Shank	Grade KC633M A	Grade KC633M B	AP1	D	L	LS
.079	2,00	**F2AL0200 A/B DL30**	●	●	6					6	57	36
.118	3,00	**F2AL0300 A/B DL30**	●	●	7	**F4AL0300 A/B DL30**	●	●	7	6	57	36
.158	4,00	**F2AL0400 A/B DL30**	●	●	8	**F4AL0400 A/B DL30**	●	●	8	6	57	36
.197	5,00	**F2AL0500 A/B DL30**	●	●	10	**F4AL0500 A/B DL30**	●	●	11	6	57	36
.236	6,00	**F2AL0600 A/B DL30**	●	●	10	**F4AL0600 A/B DL30**	●	●	13	6	57	36
.315	8,00	**F2AL0800 A/B DL30**	●	●	16	**F4AL0800 A/B DL30**	●	●	19	8	63	36
.394	10,00	**F2AL1000 A/B DL30**	●	●	19	**F4AL1000 A/B DL30**	●	●	22	10	72	40
.472	12,00	**F2AL1200 A/B DL30**	●	●	22	**F4AL1200 A/B DL30**	●	●	26	12	83	45
.551	14,00	**F2AL1400 A/B DL30**	●	●	22	**F4AL1400 A/B DL30**	●	●	26	14	83	45
.63	16,00	**F2AL1600 A/B DL30**	●	●	26	**F4AL1600 A/B DL30**	●	●	32	16	92	48
.709	18,00	**F2AL1800 A/B DL30**	●	●	26	**F4AL1800 A/B DL30**	●	●	32	18	92	48
.787	20,00	**F2AL2000 A/B DL30**	●	●	32	**F4AL2000 A/B DL30**	●	●	38	20	104	50

DIN 6528

Shank diameter = Cutting diameter





A = cylindrical shank, no flats
B = Weldon shank

D1 Inch	D1 Metric	2 Flutes, 30° Helix Catalog number A Shank	Grade KC633M A	Grade KC633M B	AP1	4 Flutes, 30° Helix Catalog number A Shank	Grade KC633M A	Grade KC633M B	AP1	D	L	LS
.079	2,00	**F2AL0200ADN30**	●		6	**F4AL0200ADN30**	●		7	2	32	20
.118	3,00	**F2AL0300ADN30**	●		7	**F4AL0300ADN30**	●		8	3	32	20
.158	4,00	**F2AL0400ADN30**	●		8	**F4AL0400ADN30**	●		11	4	50	28
.197	5,00	**F2AL0500ADN30**	●		10	**F4AL0500ADN30**	●		13	5	50	28
.236	6,00	**F2AL0600ADN30**	●		10	**F4AL0600ADN30**	●		13	6	57	36
.315	8,00	**F2AL0800ADN30**	●		16	**F4AL0800ADN30**	●		19	8	63	36
.394	10,00	**F2AL1000ADN30**	●		19	**F4AL1000ADN30**	●		22	10	72	40
.472	12,00	**F2AL1200ADN30**	●		22	**F4AL1200ADN30**	●		26	12	83	45
.551	14,00	**F2AL1400ADN30**	●		22	**F4AL1400ADN30**	●		26	14	83	45
.630	16,00	**F2AL1600ADN30**	●		26	**F4AL1600ADN30**	●		32	16	92	48
.709	18,00	**F2AL1800ADN30**	●		26	**F4AL1800ADN30**	●		32	18	92	48
.787	20,00	**F2AL2000ADN30**	●		32	**F4AL2000ADN30**	●		38	20	104	50

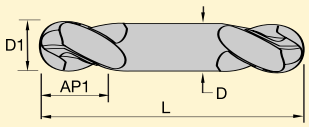
Order example:
A Shank: **F2AL0200ADL30** B Shank: **F2AL0200BDL30**
Grade: **KC633M** Grade: **KC633M**

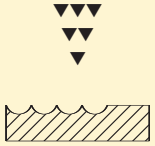
KENNA UNIVERSAL Solid Carbide End Mills – Inch

Double-End Ball Nose, Stub Length — 4 Flutes (30° Helix)

Right-Hand Spiral/Right-Hand Cutting/Center Cutting

DBNEC





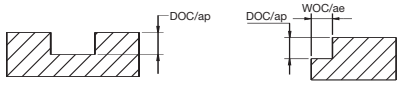
D1			4 Flutes, 30° Helix Catalog number	Grade			
Inch	Fraction	Metric		KC610M	AP1	D	L
.0625	1/16	1,588	**DBNEC062S4**	●	1/8	1/8	1 1/2
.0938	3/32	2,383	**DBNEC094S4**	●	3/16	1/8	1 1/2
.1094	7/64	2,779	**DBNEC109S4**	●	3/16	1/8	1 1/2
.125	1/8	3,175	**DBNEC125S4050**	●	1/4	1/8	1 1/2
.1563	5/32	3,970	**DBNEC156S4**	●	5/16	3/16	2
.1875	3/16	4,763	**DBNEC188S4**	●	3/8	3/16	2
.250	1/4	6,350	**DBNEC250S4**	●	1/2	1/4	2 1/2
.3125	5/16	7,938	**DBNEC312S4**	●	1/2	5/16	2 1/2
.375	3/8	9,525	**DBNEC375S4**	●	9/16	3/8	2 1/2
.500	1/2	12,700	**DBNEC500S4**	●	5/8	1/2	3

Order example:
Catalog number: **DBNEC062S4**
Grade: **KC610M**

End Mill Series Includes HEC, DHEC, CRHEC, F..DK30, F..DK45, F..DL45, F..DL30, F..DN30

1) Starting parameters are based on using stub-length tools.

2) These guidelines may require possible variations to achieve optimum results.



Low & Plain Carbon, Alloy & Tool Steels (<286 HB) <30 HRC
AISI: 1008, 1010, 1018, 1141, 12L13, 12L14, 1045, 1335, 4140, 4340, 5120, 8620, P20
DIN: 35S20, 9SMnPb28, C45, 36Mn5, 42CrMo4, 34CrNiMo6, 21NiCrMo2,

Cutting Speed	SFM	Vc	
K600	250-350	80-110	Reduce speed by 20% for slotting applications.
KC610M	300-500	90-150	
KC633M	350-450	100-140	
KC635M	350-550	100-140	

Application Parameters

	DOC/ap	WOC/ae
Profiling	1 x dia.	.1 x dia.
Slotting	.5 x dia.	–

Diameter		Profiling Feed/tooth f_z		Slotting Feed/tooth f_z	
inch	mm	inch	mm	inch	mm
1/16	2	.0006	0,015	.0003	0,008
1/8	3	.001	0,025	.0005	0,013
3/16	4	.0012	0,030	.0007	0,018
1/4	6	.002	0,051	.001	0,025
5/16	8	.0022	0,056	.0017	0,043
3/8	10	.0025	0,064	.002	0,051
1/2	12	.003	0,076	.0024	0,061
5/8	16	.0035	0,089	.0028	0,071
3/4	20	.004	0,102	.003	0,076
1	25	.0045	0,114	.0035	0,089

Plain Carbon, Alloy & Tool Steels (294-371 HB) 31-40 HRC
Tool steels: H10, H11, Alloy steels AISI: 1335, 4140, 4150, 4320, 4340, 4422, 5120, 8620
Din: x32 CrMo V3 3, x38CrMoV5-1, 36Mn5, 42CrMo4, 34CrNiMo6, 21NiCrMo2

Cutting Speed	SFM	Vc	
KC610M	150-300	45-90	Reduce speed by 20% for slotting applications.
KC633M	175-325	50-100	
KC635M	175-325	50-100	

Application Parameters

	DOC/ap	WOC/ae
Profiling	1 x dia.	.1 x dia.
Slotting	.5 x dia.	–

Diameter		Profiling Feed/tooth f_z		Slotting Feed/tooth f_z	
inch	mm	inch	mm	inch	mm
1/16	2	.0004	0,010	.0003	0,008
1/8	3	.0006	0,015	.0004	0,010
3/16	4	.001	0,025	.0005	0,013
1/4	6	.0012	0,030	.001	0,025
5/16	8	.002	0,051	.0011	0,028
3/8	10	.0022	0,056	.0013	0,030
1/2	12	.0025	0,064	.0015	0,033
5/8	16	.003	0,076	.0017	0,038
3/4	20	.0035	0,089	.002	0,051
1	25	.004	0,102	.0025	0,064

Austenitic Stainless Steels (200 & 300 Series) Including Duplex (135-275 HB) <28 HRC
AISI: 201, 209, 219, 302, 303, 304, 316, 321, 347, 329, ASTM: XM-1, XM-7, XM-21, CF-8M
DIN: x 8 CrNiS 18-9, X 5 CrNiMo 17-13-3, X6CrNiTi18 10, X6CrNiNb 18 10, GX5 CrNiM0 19-11-2

Cutting Speed	SFM	Vc	
KC610M	250-400	75-120	Reduce speed by 20% for slotting applications.
KC633M	275-500	80-150	
KC635M	275-500	80-150	

Application Parameters

	DOC/ap	WOC/ae
Profiling	1 x dia.	.1 x dia.
Slotting	.5 x dia.	–

Diameter		Profiling Feed/tooth f_z		Slotting Feed/tooth f_z	
inch	mm	inch	mm	inch	mm
1/16	2	.0003	0,008	.0002	0,005
1/8	3	.0005	0,013	.0003	0,008
3/16	4	.0007	0,018	.0004	0,010
1/4	6	.001	0,025	.0007	0,018
5/16	8	.0015	0,033	.001	0,025
3/8	10	.002	0,051	.0015	0,033
1/2	12	.0025	0,064	.0017	0,038
5/8	16	.003	0,076	.0025	0,064
3/4	20	.0035	0,089	.003	0,076
1	25	.004	0,102	.0035	0,089

Ferritic, Martensitic (400 & 500 Series) & PH Stainless Steels (<371 HB) <40 HRC
AISI: 416, 416F, 416Se, 420F, PH Steels 15-5 PH, 17-4 H, 17-7 PH
DIN: X12CrS13, X20Cr13, X4CrNiCuNb164, X7CrNiMoAl157

Cutting Speed	SFM	Vc	
KC610M	200-375	60-115	Reduce speed by 20% for slotting applications.
KC633M	200-450	60-140	
KC635M	200-450	60-140	

Application Parameters

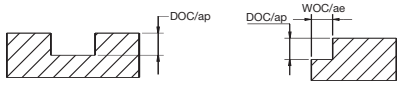
	DOC/ap	WOC/ae
Profiling	1 x dia.	.1 x dia.
Slotting	.5 x dia.	–

Diameter		Profiling Feed/tooth f_z		Slotting Feed/tooth f_z	
inch	mm	inch	mm	inch	mm
1/16	2	.0006	0,015	.0003	0,008
1/8	3	.001	0,025	.0005	0,013
3/16	4	.0012	0,030	.0007	0,018
1/4	6	.002	0,051	.0015	0,033
5/16	8	.0022	0,056	.002	0,051
3/8	10	.0025	0,064	.0024	0,061
1/2	12	.003	0,076	.0028	0,071
5/8	16	.0035	0,089	.003	0,076
3/4	20	.004	0,102	.0035	0,089
1	25	.0045	0,114	.004	0,102

Recommended Starting Speed and Feeds

End Mill Series Includes HEC, DHEC, CRHEC, F..DK30, F..DK45, F..DL45, F..DL30, F..DN30

1) Starting parameters are based on using stub-length tools.
2) These guidelines may require possible variations to achieve optimum results.



Gray Cast Iron (120-220 HB) <18 HRC
ASTM A48: Class 20, 25, 30, 35, 40, 45, 50, 55, 60, SAE J431: grade G1800, G3000, G3500
DIN: GG10, GG15, GG20, GG25, GG30, GG40

Cutting Speed	SFM	Vc	
K600	350-450	110-140	Reduce speed by 20% for slotting applications.
KC633M	425-725	130-220	
KC635M	425-725	130-220	

Application Parameters

	DOC/ap	WOC/ae
Profiling	1 x dia.	.1 x dia.
Slotting	.5 x dia.	–

Diameter		Profiling Feed/tooth f_z		Slotting Feed/tooth f_z	
inch	mm	inch	mm	inch	mm
1/16	2	.0007	0,018	.0005	0,013
1/8	3	.0015	0,033	.0007	0,018
3/16	4	.002	0,051	.0015	0,033
1/4	6	.0025	0,064	.002	0,051
5/16	8	.003	0,076	.0025	0,064
3/8	10	.004	0,102	.003	0,076
1/2	12	.005	0,127	.004	0,102
5/8	16	.006	0,152	.005	0,127
3/4	20	.007	0,178	.006	0,152
1	25	.008	0,203	.007	0,178

Gray Cast Iron (220-320 HB) 19-34 HRC
ASTM A48: Class 20, 25, 30, 35, 40, 45, 50, 55, 60, SAE J431: grade G1800, G3000, G3500
DIN: GG10, GG15, GG20, GG25, GG30, GG40

Cutting Speed	SFM	Vc	
K600	225-325	70-100	Reduce speed by 20% for slotting applications.
KC633M	350-500	110-150	
KC635M	350-500	110-150	

Application Parameters

	DOC/ap	WOC/ae
Profiling	1 x dia.	.1 x dia.
Slotting	.3 x dia.	–

Diameter		Profiling Feed/tooth f_z		Slotting Feed/tooth f_z	
inch	mm	inch	mm	inch	mm
1/16	2	.0006	0,015	.0004	0,010
1/8	3	.001	0,025	.0007	0,018
3/16	4	.0012	0,030	.001	0,025
1/4	6	.002	0,051	.0015	0,033
5/16	8	.0022	0,056	.002	0,051
3/8	10	.003	0,076	.0024	0,061
1/2	12	.0035	0,089	.0028	0,071
5/8	16	.004	0,102	.003	0,076
3/4	20	.0045	0,114	.004	0,102
1	25	.0055	0,140	.0045	0,114

Titanium-alloyed
Commercially pure: Ti99.8, Alpha: TiSa12.5SN, Alpha/Beta: Ti-6Al-4V
DIN: Ti99.8, TiAl6V4

Cutting Speed	SFM	Vc	
KC633M	100-250	30-75	Reduce speed by 20% for slotting applications.
KC635M	100-250	30-75	

Application Parameters

	DOC/ap	WOC/ae
Profiling	1 x dia.	.1 x dia.
Slotting	.5 x dia.	–

Diameter		Profiling Feed/tooth f_z		Slotting Feed/tooth f_z	
inch	mm	inch	mm	inch	mm
1/16	2	.0002	0,005	.0001	0,003
1/8	3	.0005	0,013	.0003	0,008
3/16	4	.0007	0,018	.0004	0,010
1/4	6	.001	0,025	.0006	0,015
5/16	8	.0012	0,030	.0009	0,023
3/8	10	.0015	0,033	.001	0,025
1/2	12	.0018	0,046	.0015	0,033
5/8	16	.0025	0,064	.0018	0,046
3/4	20	.0028	0,071	.0022	0,056
1	25	.003	0,076	.0025	0,064

Titanium-alloyed, Nickel Base
Inconel: 601, 617, 625, 718, X-750, 901, Waspaloy, Hastelloy
DIN: NiCr19Fe19NbMo, NiCr20Co14MoTi, NiCr17Mo17FeW

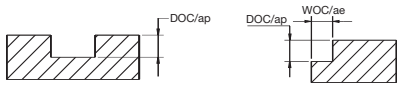
Cutting Speed	SFM	Vc	
KC633M	60-125	20-40	Reduce speed by 20% for slotting applications.
KC635M	60-125	20-40	

Application Parameters

	DOC/ap	WOC/ae
Profiling	1 x dia.	.1 x dia.
Slotting	.3 x dia.	–

Diameter		Profiling Feed/tooth f_z		Slotting Feed/tooth f_z	
inch	mm	inch	mm	inch	mm
1/16	2	.0002	0,005	.0001	0,003
1/8	3	.0005	0,013	.0003	0,008
3/16	4	.0007	0,018	.0004	0,010
1/4	6	.001	0,025	.0006	0,015
5/16	8	.0012	0,030	.0009	0,023
3/8	10	.0015	0,033	.001	0,025
1/2	12	.0018	0,046	.0015	0,033
5/8	16	.0025	0,064	.0018	0,046
3/4	20	.0028	0,071	.0022	0,056
1	25	0.003	0,076	.0025	0,064

1) These guidelines may require possible variations to achieve optimum results.
2) For WOC equal to .5 x diameter on profiling applications, decrease feed by 25%.



Low & Plain Carbon, Alloy & Tool Steels (<286 HB) <30 HRC
AISI: 1008, 1010, 1018, 1141, 12L13, 12L14, 1045, 1335, 4140, 4340, 5120, 8620, P20
DIN: 35S20, 9SMnPb28, C45, 36Mn5, 42CrMo4, 34CrNiMo6, 21NiCrMo2,

Cutting Speed	SFM	Vc	
KC633M	300-350	100-117	Reduce speed by 20% for slotting applications.

Application Parameters

	DOC/ap	WOC/ae
Profiling	1 x dia.	.25 x dia.
Slotting	1 x dia.	–

Diameter		Profiling Feed/tooth f_z		Slotting Feed/tooth f_z	
inch	mm	inch	mm	inch	mm
1/4	6	.002	0,051	.0012	0,030
3/16	8	.0025	0,064	.0015	0,038
3/8	10	.003	0,076	.0025	0,064
1/2	12	.0035	0,089	.003	0,076
5/8	16	.004	0,089	.0035	0,089
3/4	20	.0045	0,114	.004	0,089
1	25	.0045	0,114	.004	0,089

Plain Carbon, Alloy & Tool Steels (294-371 HB) 31-40 HRC
Tool steels: H10, H11, Alloy steels AISI: 1335, 4140, 4150, 4320, 4340, 4422, 5120, 8620
Din: x32 CrMo V3 3, x38CrMoV5-1, 36Mn5, 42CrMo4, 34CrNiMo6, 21NiCrMo2

Cutting Speed	SFM	Vc	
KC633M	200-350	60-110	Reduce speed by 20% for slotting applications.

Application Parameters

	DOC/ap	WOC/ae
Profiling	1 x dia.	.25 x dia.
Slotting	1 x dia.	–

Diameter		Profiling Feed/tooth f_z		Slotting Feed/tooth f_z	
inch	mm	inch	mm	inch	mm
1/4	6	.002	0,051	.0012	0,030
3/16	8	.0025	0,064	.0015	0,038
3/8	10	.003	0,076	.0025	0,064
1/2	12	.0035	0,089	.003	0,076
5/8	16	.004	0,089	.0035	0,089
3/4	20	.0045	0,114	.004	0,089
1	25	.0045	0,114	.004	0,089

Austenitic Stainless Steels (200 & 300 Series) Including Duplex (135-275 HB) <28 HRC
AISI: 201, 209, 219, 302, 303, 304, 316, 321, 347, 329, ASTM: XM-1, XM-7, XM-21, CF-8M
DIN: x 8 CrNiS 18-9, X 5 CrNiMo 17-13-3, X6CrNiTi18 10, X6CrNiNb 18 10, GX5 CrNiM0 19-11-2

Cutting Speed	SFM	Vc	
KC633M	100-200	30-60	Reduce speed by 20% for slotting applications.

Application Parameters

	DOC/ap	WOC/ae
Profiling	1 x dia.	.25 x dia.
Slotting	1 x dia.	–

Diameter		Profiling Feed/tooth f_z		Slotting Feed/tooth f_z	
inch	mm	inch	mm	inch	mm
1/4	6	.0007	0,018	.0006	0,015
3/16	8	.001	0,025	.0008	0,020
3/8	10	.0015	0,033	.001	0,025
1/2	12	.002	0,051	.0012	0,030
5/8	16	.002	0,051	.0014	0,036
3/4	20	.0025	0,064	.0015	0,038
1	25	.0025	0,064	.0016	0,041

Ferritic, Martensitic (400 & 500 Series) & PH Stainless Steels (<371 HB) <40 HRC
AISI: 416, 416F, 416Se, 420F, PH Steels 15-5 PH, 17-4 H, 17-7 PH
DIN: X12CrS13, X20Cr13, X4CrNiCuNb164, X7CrNiMoAl157

Cutting Speed	SFM	Vc	
KC633M	100-200	30-60	Reduce speed by 20% for slotting applications.

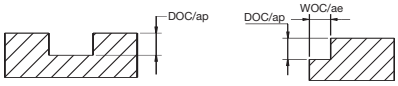
Application Parameters

	DOC/ap	WOC/ae
Profiling	1 x dia.	.25 x dia.
Slotting	1 x dia.	–

Diameter		Profiling Feed/tooth f_z		Slotting Feed/tooth f_z	
inch	mm	inch	mm	inch	mm
1/4	6	.0006	0,015	.0004	0,010
3/16	8	.0008	0,020	.0006	0,020
3/8	10	.001	0,025	.0008	0,020
1/2	12	.0012	0,030	.0008	0,020
5/8	16	.0014	0,036	.001	0,025
3/4	20	.0015	0,038	.001	0,025
1	25	.0016	0,041	.0012	0,030

Recommended Starting Speed and Feeds

End Mill Series MDRHEC, F.BH.BW.20..



1) These guidelines may require possible variations to achieve optimum results.
2) For WOC equal to .5 x diameter on profiling applications, decrease feed by 25%.

Gray Cast Iron (120-220 HB) <18 HRC
ASTM A48: Class 20, 25, 30, 35, 40, 45, 50, 55, 60, SAE J431: grade G1800, G3000, G3500
DIN: GG10, GG15, GG20, GG25, GG30, GG40

Cutting Speed	SFM	Vc	
KC633M	200-350	60-110	Reduce speed by 20% for slotting applications.

Application Parameters

	DOC/ap	WOC/ae
Profiling	1 x dia.	.25 x dia.
Slotting	1 x dia.	–

Diameter		Profiling Feed/tooth f_z		Slotting Feed/tooth f_z	
inch	mm	inch	mm	inch	mm
1/4	6	.002	0,051	.0015	0,033
3/16	8	.0025	0,064	.002	0,051
3/8	10	.003	0,076	.0025	0,064
1/2	12	.0035	0,089	.003	0,076
5/8	16	.004	0,089	.0035	0,089
3/4	20	.0045	0,114	.004	0,089
1	25	.0045	0,114	.004	0,089

High-Temperature Alloys
Commercially pure: Ti99.8, Alpha: TiSa12.5SN, Alpha/Beta: Ti-6Al-4V
DIN: Ti99.8, TiAl6V4

Cutting Speed	SFM	Vc	
KC633M	80-100	25-35	Reduce speed by 20% for slotting applications.

Application Parameters

	DOC/ap	WOC/ae
Profiling	1 x dia.	.25 x dia.
Slotting	1 x dia.	–

Diameter		Profiling Feed/tooth f_z		Slotting Feed/tooth f_z	
inch	mm	inch	mm	inch	mm
1/4	6	.001	0,025	.0006	0,015
3/16	8	.0012	0,030	.0008	0,020
3/8	10	.0015	0,033	.001	0,025
1/2	12	.0018	0,046	.0012	0,030
5/8	16	.0025	0,064	.0015	0,033
3/4	20	.003	0,076	.0025	0,064
1	25	.0035	0,089	.003	0,076

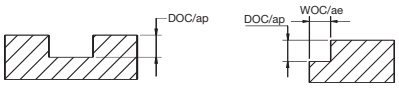
High-Temperature Alloys
Inconel: 601, 617, 625, 718, X-750, 901, Waspaloy, Hastelloy
DIN: NiCr19Fe19NbMo, NiCr20Co14MoTi, NiCr17Mo17FeW

Cutting Speed	SFM	Vc	
KC633M	30-175	10-50	Inconel materials are at lower end of speed range.

Application Parameters

	DOC/ap	WOC/ae
Profiling	1 x dia.	.25 x dia.
Slotting	1 x dia.	–

Diameter		Profiling Feed/tooth f_z		Slotting Feed/tooth f_z	
inch	mm	inch	mm	inch	mm
1/4	6	.001	0,025	.0006	0,015
3/16	8	.0015	0,038	.001	0,025
3/8	10	.002	0,051	.0015	0,038
1/2	12	.0025	0,064	.002	0,051
5/8	16	.003	0,076	.0025	0,064
3/4	20	.0035	0,089	.003	0,076
1	25	.004	0,089	.003	0,076



1) These guidelines may require possible variations to achieve optimum results.
2) For WOC equal to .5 x diameter on profiling applications, decrease feed by 25%.

Aluminum and Other Free-Machining, Non-Ferrous Materials, Low Silicon Aluminum, 6061, 6063, 7075,
DIN/ISO: AlMg1SiCu, AlMg0,5Mn, AlZn5,5MgCu

Cutting Speed	SFM	Vc	
K600	600-1800	180-550	Reduce speed by 20% for slotting applications.
KC625M	800-2000	240-775	

Application Parameters

	DOC/ap	WOC/ae
Profiling	1.5 x dia.	.5 x dia
Slotting	1 x dia.	–

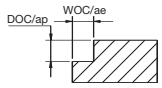
Diameter		Profiling Feed/tooth f_z		Slotting Feed/tooth f_z	
inch	mm	inch	mm	inch	mm
1/4	6	.002	0,051	.0015	0,038
3/16	8	.0025	0,064	.002	0,051
3/8	10	.003	0,076	.0025	0,064
1/2	12	.004	0,102	.003	0,076
5/8	16	.005	0,127	.004	0,102
3/4	20	.0055	0,140	.0045	0,114
1	25	.007	0,178	.006	0,152

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

Recommended Starting Speed and Feeds

End Mill Series — HHEC

1) These guidelines may require possible variations to achieve optimum results.



Austenitic Stainless Steels (200 & 300 Series) Including Duplex (135-275 HB) <28 HRC
AISI: 201, 209, 219, 302, 303, 304, 316, 321, 347, 329, ASTM: XM-1, XM-7, XM-21, CF-8M
DIN: x 8 CrNiS 18-9, X 5 CrNiMo 17-13-3, X6CrNiTi18 10, X6CrNiNb 18 10, GX5 CrNiM0 19-11-2

Cutting Speed	SFM	Vc
KC635M	275-500	80-150

Application Parameters

	DOC/ap	WOC/ae
Profiling	1 x dia.	.1 x dia.

Diameter		Profiling Feed/tooth f_z	
inch	mm	inch	mm
1/8	3	.0005	0,013
3/16	4	.0007	0,018
1/4	6	.001	0,025
5/16	8	.0015	0,033
3/8	10	.002	0,051
1/2	12	.0025	0,064
5/8	16	.003	0,076
3/4	20	.0035	0,089
1	25	.004	0,102

Ferritic, Martensitic (400 & 500 Series) & PH Stainless Steels (<371 HB) <40 HRC
AISI: 416, 416F, 416Se, 420F, PH Steels 15-5 PH, 17-4 H, 17-7 PH
DIN: X12CrS13, X20Cr13, X4CrNiCuNb164, X7CrNiMoAl157

Cutting Speed	SFM	Vc
KC635M	200-450	60-140

Application Parameters

	DOC/ap	WOC/ae
Profiling	1 x dia.	.1 x dia.

Diameter		Profiling Feed/tooth f_z	
inch	mm	inch	mm
1/8	3	.001	0,025
3/16	4	.0012	0,030
1/4	6	.002	0,051
5/16	8	.0022	0,056
3/8	10	.0025	0,064
1/2	12	.003	0,076
5/8	16	.0035	0,089
3/4	20	.004	0,102
1	25	.0045	0,114

Titanium-alloyed
Commercially pure: Ti99.8, Alpha: TiSa12.5SN, Alpha/Beta: Ti-6Al-4V
DIN: Ti99.8, TiAl6V4

Cutting Speed	SFM	Vc
KC635M	150-200	50-70

Application Parameters

	DOC/ap	WOC/ae
Profiling	1 x dia.	.1 x dia.

Diameter		Profiling Feed/tooth f_z	
inch	mm	inch	mm
1/8	3	.0003	0,008
3/16	4	.0004	0,010
1/4	6	.0005	0,013
5/16	8	.0006	0,015
3/8	10	.0007	0,018
1/2	12	.001	0,025
5/8	16	.0015	0,033
3/4	20	.002	0,051
1	25	.003	0,076

Titanium-alloyed, Nickel Base
Inconel: 601, 617, 625, 718, X-750, 901, Waspaloy, Hastelloy
DIN: NiCr19Fe19NbMo, NiCr20Co14MoTi, NiCr17Mo17FeW

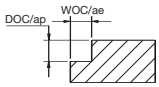
Cutting Speed	SFM	Vc
KC635M	75-100	25-35

Application Parameters

	DOC/ap	WOC/ae
Profiling	1 x dia.	.1 x dia.

Diameter		Profiling Feed/tooth f_z	
inch	mm	inch	mm
1/8	3	.0003	0,008
3/16	4	.0004	0,010
1/4	6	.0005	0,013
5/16	8	.0006	0,015
3/8	10	.0007	0,018
1/2	12	.001	0,025
5/8	16	.0015	0,033
3/4	20	.0018	0,046
1	25	.002	0,051

End Mill Series Includes F.AV..ADL45



2) These guidelines may require possible variations to achieve optimum results.

Hardened Steels: (496-560 HB) 51-55HRc
AISI: 1008, 1010, 1018, 1141, 12L13, 12L14, 1045, 1335, 4140, 4340, 5120, 8620, P20
DIN: 21NiCrMo2, 42CrMo4, 34CrNiMo6, C45

Cutting Speed	SFM	Vc
KC637M	120-500	40-150

Application Parameters

	DOC/ap	WOC/ae
Profiling	1.5 x dia.	.1 x dia.

Diameter mm	Profiling f_z mm
6	0,014
8	0,021
10	0,028
12	0,031
16	0,042
20	0,053
25	0,063

Hardened Steels: (560-654 HB) 56-60HRc
AISI: 1008, 1010, 1018, 1141, 12L13, 12L14, 1045, 1335, 4140, 4340, 5120, 8620, P20
DIN: 21NiCrMo2, 42CrMo4, 34CrNiMo6, C45

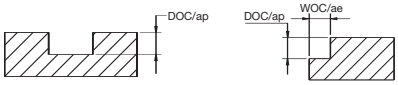
Cutting Speed	SFM	Vc
KC637M	65-390	20-120

Application Parameters

	DOC/ap	WOC/ae
Profiling	1.5 x dia.	.1 x dia.

Diameter mm	Profiling f_z mm
6	0,011
8	0,014
10	0,021
12	0,025
16	0,035
20	0,042
25	0,049

End Mill Series F2AA..DL45



1) These guidelines may require possible variations to achieve optimum results.
2) For WOC equal to .5 x diameter on profiling applications, decrease feed by 25%.

Aluminum and Other Free-Machining, Non-Ferrous Materials, Low Silicon Aluminum, 6061, 6063, 7075,
DIN/ISO: AlMg1SiCu, AlMg0,5Mn, AlZn5,5MgCu

Cutting Speed	SFM	Vc	
K600	600-1800	180-550	Reduce speed by 20% for slotting applications.
KC625M	800-2000	240-775	

Application Parameters

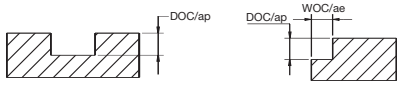
	DOC/ap	WOC/ae
Profiling	<1 x dia.	<1 x dia.
Slotting	1 x dia.	–

Diameter mm	Profiling f_z mm	Slotting f_z mm
4	0,043	0,038
6	0,051	0,043
8	0,076	0,064
10	0,102	0,076
12	0,127	0,102
16	0,152	0,127
20	0,178	0,152

Recommended Starting Speed and Feeds

End Mill Series Includes F3AS..BDK35

1) Starting parameters are based on using stub-length tools.
2) These guidelines may require possible variations to achieve optimum results.



Low & Plain Carbon, Alloy & Tool Steels (<286 HB) <30 HRC
AISI: 1008, 1010, 1018, 1141, 12L13, 12L14, 1045, 1335, 4140, 4340, 5120, 8620, P20
DIN: 35S20, 9SMnPb28, C45, 36Mn5, 42CrMo4, 34CrNiMo6, 21NiCrMo2,

Cutting Speed	SFM	Vc	
KC633M	350-450	100-140	Reduce speed by 20% for slotting applications.

Application Parameters

	DOC/ap	WOC/ae
Profiling	1 x dia.	.1 x dia.
Slotting	.5 x dia.	–

Diameter mm	Profiling f_z mm	Slotting f_z mm
3	0,025	0,018
4	0,030	0,025
6	0,051	0,033
8	0,056	0,043
10	0,064	0,051
12	0,089	0,076
16	0,102	0,089
20	0,127	0,102

Plain Carbon, Alloy & Tool Steels (294-371 HB) 31-40 HRC
Tool steels: H10, H11, Alloy steels AISI: 1335, 4140, 4150, 4320, 4340, 4422, 5120, 8620
Din: x32 CrMo V3 3, x38CrMoV5-1, 36Mn5, 42CrMo4, 34CrNiMo6, 21NiCrMo2

Cutting Speed	SFM	Vc	
KC633M	175-325	50-100	Reduce speed by 20% for slotting applications.

Application Parameters

	DOC/ap	WOC/ae
Profiling	1 x dia.	.1 x dia.
Slotting	.5 x dia.	–

Diameter mm	Profiling f_z mm	Slotting f_z mm
3	0,025	0,015
4	0,030	0,023
6	0,051	0,033
8	0,056	0,038
10	0,064	0,051
12	0,076	0,064
16	0,089	0,076
20	0,114	0,102

Austenitic Stainless Steels (200 & 300 Series) Including Duplex (135-275 HB) <28 HRC
AISI: 201, 209, 219, 302, 303, 304, 316, 321, 347, 329, ASTM: XM-1, XM-7, XM-21, CF-8M
DIN: x 8 CrNiS 18-9, X 5 CrNiMo 17-13-3, X6CrNiTi18 10, X6CrNiNb 18 10, GX5 CrNiM0 19-11-2

Cutting Speed	SFM	Vc	
KC633M	350-450	105-140	Reduce speed by 20% for slotting applications.

Application Parameters

	DOC/ap	WOC/ae
Profiling	1 x dia.	.1 x dia.
Slotting	.5 x dia.	–

Diameter mm	Profiling f_z mm	Slotting f_z mm
3	0,025	0,018
4	0,030	0,025
6	0,033	0,030
8	0,051	0,033
10	0,064	0,051
12	0,076	0,064
16	0,089	0,076
20	0,114	0,102

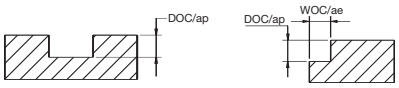
Ferritic, Martensitic (400 & 500 Series) & PH Stainless Steels (<371 HB) <40 HRC
AISI: 416, 416F, 416Se, 420F, PH Steels 15-5 PH, 17-4 H, 17-7 PH
DIN: X12CrS13, X20Cr13, X4CrNiCuNb164, X7CrNiMoAl157

Cutting Speed	SFM	Vc	
KC633M	200-400	60-120	Reduce speed by 20% for slotting applications.

Application Parameters

	DOC/ap	WOC/ae
Profiling	1 x dia.	.1 x dia.
Slotting	.5 x dia.	–

Diameter mm	Profiling f_z mm	Slotting f_z mm
3	0,025	0,013
4	0,030	0,018
6	0,051	0,033
8	0,056	0,051
10	0,064	0,061
12	0,076	0,071
16	0,089	0,076
20	0,102	0,089



1) Starting parameters are based on using stub-length tools.
2) These guidelines may require possible variations to achieve optimum results.

Titanium-alloyed
Commercially pure: Ti99.8, Alpha: TiSa12.5SN, Alpha/Beta: Ti-6AI-4V
DIN: Ti99.8, TiAl6V4

Cutting Speed	SFM	Vc	
KC633M	100-250	30-75	Reduce speed by 20% for slotting applications.

Application Parameters

	DOC/ap	WOC/ae
Profiling	1 x dia.	.1 x dia.
Slotting	.5 x dia.	–

Diameter mm	Profiling f_z mm	Slotting f_z mm
3	0,013	0,008
4	0,018	0,010
6	0,025	0,015
8	0,030	0,023
10	0,033	0,025
12	0,046	0,033
16	0,064	0,046
20	0,071	0,056

Titanium-alloyed, Nickel Base
Inconel: 601, 617, 625, 718, X-750, 901, Waspaloy, Hastelloy
DIN: NiCr19Fe19NbMo, NiCr20Co14MoTi, NiCr17Mo17FeW

Cutting Speed	SFM	Vc	
KC633M	60-150	20-45	Reduce speed by 20% for slotting applications.

Application Parameters

	DOC/ap	WOC/ae
Profiling	1 x dia.	.1 x dia.
Slotting	.3 x dia.	–

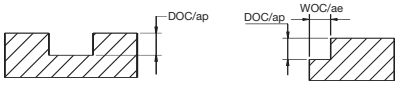
Diameter mm	Profiling f_z mm	Slotting f_z mm
3	0,013	0,008
4	0,018	0,013
6	0,030	0,023
8	0,033	0,025
10	0,046	0,033
12	0,051	0,046
16	0,089	0,076
20	0,101	0,089

To place an order, contact your authorized
Kennametal distributor or visit www.kennametal.com.

Recommended Starting Speed and Feeds

End Mill Series Includes F3BS..BD.35

1) Starting parameters are based on using stub-length tools.
2) These guidelines may require possible variations to achieve optimum results.



Low & Plain Carbon, Alloy & Tool Steels (<286 HB) <30 HRC
AISI: 1008, 1010, 1018, 1141, 12L13, 12L14, 1045, 1335, 4140, 4340, 5120, 8620, P20
DIN: 35S20, 9SMnPb28, C45, 36Mn5, 42CrMo4, 34CrNiMo6, 21NiCrMo2,

Cutting Speed	SFM	Vc	
KC633M	400-550	120-170	Reduce speed by 20% for slotting applications.

Application Parameters

	DOC/ap	WOC/ae
Profiling	1 x dia.	.4 x dia.
Slotting	1 x dia.	–

Diameter mm	Profiling f_z mm	Slotting f_z mm
6	0,036	0,025
8	0,033	0,036
10	0,041	0,033
12	0,076	0,061
16	0,076	0,061
20	0,081	0,071

Austenitic Stainless Steels (200 & 300 Series) Including Duplex (135-275 HB) <28 HRC
AISI: 201, 209, 219, 302, 303, 304, 316, 321, 347, 329, ASTM: XM-1, XM-7, XM-21, CF-8M
DIN: x 8 CrNiS 18-9, X 5 CrNiMo 17-13-3, X6CrNiTi18 10, X6CrNiNb 18 10, GX5 CrNiM0 19-11-2

Cutting Speed	SFM	Vc	
KC633M	300-425	90-130	Reduce speed by 20% for slotting applications.

Application Parameters

	DOC/ap	WOC/ae
Profiling	1 x dia.	.4 x dia.
Slotting	1 x dia.	–

Diameter mm	Profiling f_z mm	Slotting f_z mm
6	0,025	0,018
8	0,033	0,025
10	0,051	0,033
12	0,064	0,038
16	0,076	0,064
20	0,089	0,076

Titanium-alloyed, Nickel Base
Inconel: 601, 617, 625, 718, X-750, 901, Waspaloy, Hastelloy
DIN: NiCr19Fe19NbMo, NiCr20Co14MoTi, NiCr17Mo17FeW

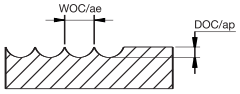
Cutting Speed	SFM	Vc	
KC633M	75-125	20-40	Reduce speed by 20% for slotting applications.

Application Parameters

	DOC/ap	WOC/ae
Profiling	1 x dia.	.4 x dia.
Slotting	1 x dia.	–

Diameter mm	Profiling f_z mm	Slotting f_z mm
6	0,018	0,013
8	0,023	0,018
10	0,028	0,023
12	0,033	0,028
16	0,046	0,033
20	0,064	0,051

1) These guidelines may require possible variations to achieve optimum results.



Low & Plain Carbon, Alloy & Tool Steels (<286 HB) <30 HRC
AISI: 1008, 1010, 1018, 1141, 12L13, 12L14, 1045, 1335, 4140, 4340, 5120, 8620, P20
DIN: 35S20, 9SMnPb28, C45, 36Mn5, 42CrMo4, 34CrNiMo6, 21NiCrMo2,

Cutting Speed	SFM	Vc
K600	250-300	83-100
KC610M	300-400	100-133
KC633M	350-450	117-150
KC635M	350-450	117-150

Application Parameters

	DOC/ap	WOC/ae
Contouring	.2 x dia.	.5 x dia.

Diameter inch	Diameter mm	Contouring Feed/tooth f_z inch	Contouring Feed/tooth f_z mm
1/16	2	.0003	0,008
1/8	3	.0006	0,015
3/16	4	.001	0,025
1/4	6	.0014	0,036
5/16	8	.0017	0,043
3/8	10	.002	0,051
1/2	12	.0024	0,061
5/8	16	.003	0,076
3/4	20	.0035	0,089
1	25	.0045	0,114

Plain Carbon, Alloy & Tool Steels (294-371 HB) 31-40 HRC
Tool steels: H10, H11, Alloy steels AISI: 1335, 4140, 4150, 4320, 4340, 4422, 5120, 8620
Din: x32 CrMo V3 3, x38CrMoV5-1, 36Mn5, 42CrMo4, 34CrNiMo6, 21NiCrMo2

Cutting Speed	SFM	Vc
KC610M	250-300	83-100
KC633M	300-350	100-117
KC635M	300-350	100-117

Application Parameters

	DOC/ap	WOC/ae
Contouring	.2 x dia.	.5 x dia.

Diameter inch	Diameter mm	Contouring Feed/tooth f_z inch	Contouring Feed/tooth f_z mm
1/16	2	.0003	0,008
1/8	3	.0004	0,010
3/16	4	.0007	0,018
1/4	6	.001	0,025
5/16	8	.0013	0,030
3/8	10	.0015	0,033
1/2	12	.002	0,051
5/8	16	.0025	0,064
3/4	20	.003	0,076
1	25	.004	0,102

Austenitic Stainless Steels (200 & 300 Series) Including Duplex (135-275 HB) <28 HRC
AISI: 201, 209, 219, 302, 303, 304, 316, 321, 347, 329, ASTM: XM-1, XM-7, XM-21, CF-8M
DIN: x 8 CrNiS 18-9, X 5 CrNiMo 17-13-3, X6CrNiTi18 10, X6CrNiNb 18 10, GX5 CrNiM0 19-11-2

Cutting Speed	SFM	Vc
KC610M	250-350	83-117
KC633M	300-400	100-130
KC635M	300-400	100-130

Application Parameters

	DOC/ap	WOC/ae
Contouring	.2 x dia.	.5 x dia.

Diameter inch	Diameter mm	Contouring Feed/tooth f_z inch	Contouring Feed/tooth f_z mm
1/16	2	.0003	0,008
1/8	3	.0005	0,013
3/16	4	.001	0,025
1/4	6	.0015	0,033
5/16	8	.0017	0,043
3/8	10	.002	0,051
1/2	12	.0025	0,064
5/8	16	.003	0,076
3/4	20	.0035	0,089
1	25	.004	0,102

Ferritic, Martensitic (400 & 500 Series) & PH Stainless Steels (<371 HB) <40 HRC
AISI: 416, 416F, 416Se, 420F, PH Steels 15-5 PH, 17-4 H, 17-7 PH
DIN: X12CrS13, X20Cr13, X4CrNiCuNb164, X7CrNiMoAl157

Cutting Speed	SFM	Vc
KC610M	200-275	70-95
KC633M	275-350	90-120
KC635M	275-350	90-120

Application Parameters

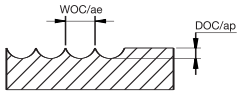
	DOC/ap	WOC/ae
Contouring	.2 x dia.	.5 x dia.

Diameter inch	Diameter mm	Contouring Feed/tooth f_z inch	Contouring Feed/tooth f_z mm
1/16	2	.0003	0,008
1/8	3	.0004	0,010
3/16	4	.0007	0,018
1/4	6	.001	0,025
5/16	8	.0013	0,030
3/8	10	.0015	0,033
1/2	12	.002	0,051
5/8	16	.0025	0,064
3/4	20	.003	0,076
1	25	.004	0,102

Recommended Starting Speed and Feeds

End Mill Series BNEC, DBNEC, F.AL..DL30

1) These guidelines may require possible variations to achieve optimum results.



Gray Cast Iron (120-220 HB) <18 HRC
ASTM A48: Class 20, 25, 30, 35, 40, 45, 50, 55, 60, SAE J431: grade G1800, G3000, G3500
DIN: GG10, GG15, GG20, GG25, GG30, GG40

Cutting Speed	SFM	Vc
K600	300-400	100-130
KC633M	450-550	150-183
KC635M	450-550	150-183

Application Parameters

	DOC/ap	WOC/ae
Contouring	.2 x dia.	.5 x dia.

Contouring

Diameter inch	Diameter mm	Feed/tooth f_z inch	Feed/tooth f_z mm
1/16	2	.0003	0,008
1/8	3	.0005	0,013
3/16	4	.001	0,025
1/4	6	.002	0,051
5/16	8	.003	0,076
3/8	10	.0035	0,089
1/2	12	.004	0,102
5/8	16	.0045	0,114
3/4	20	.005	0,127
1	25	.0055	0,140

Gray Cast Iron (220-320 HB) 19-34 HRC
ASTM A48: Class 20, 25, 30, 35, 40, 45, 50, 55, 60, SAE J431: grade G1800, G3000, G3500
DIN: GG10, GG15, GG20, GG25, GG30, GG40

Cutting Speed	SFM	Vc
K600	250-325	83-110
KC633M	350-450	117-150
KC635M	350-450	117-150

Application Parameters

	DOC/ap	WOC/ae
Contouring	.2 x dia.	.5 x dia.

Profiling

Diameter inch	Diameter mm	Feed/tooth f_z inch	Feed/tooth f_z mm
1/16	2	.0003	0,008
1/8	3	.0005	0,013
3/16	4	.001	0,025
1/4	6	.002	0,051
5/16	8	.003	0,076
3/8	10	.0035	0,089
1/2	12	.004	0,102
5/8	16	.0045	0,114
3/4	20	.005	0,127
1	25	.0055	0,140

Titanium-alloyed
Commercially pure: Ti99.8, Alpha: TiSa12.5SN, Alpha/Beta: Ti-6Al-4V
DIN: Ti99.8, TiAl6V4

Cutting Speed	SFM	Vc
KC633M	100-200	35-70
KC635M	100-200	35-70

Application Parameters

	DOC/ap	WOC/ae
Contouring	.2 x dia.	.5 x dia.

Contouring

Diameter inch	Diameter mm	Feed/tooth f_z inch	Feed/tooth f_z mm
1/16	2	.0002	0,005
1/8	3	.0004	0,010
3/16	4	.0007	0,018
1/4	6	.001	0,025
5/16	8	.0013	0,030
3/8	10	.0015	0,033
1/2	12	.0018	0,046
5/8	16	.002	0,051
3/4	20	.0025	0,064
1	25	.003	0,076

Titanium-alloyed, Nickel Base
Inconel: 601, 617, 625, 718, X-750, 901, Waspaloy, Hastelloy
DIN: NiCr19Fe19NbMo, NiCr20Co14MoTi, NiCr17Mo17FeW

Cutting Speed	SFM	Vc
KC633M	75-150	25-50
KC635M	75-150	25-50

Application Parameters

	DOC/ap	WOC/ae
Contouring	.2 x dia.	.5 x dia.

Contouring

Diameter inch	Diameter mm	Feed/tooth f_z inch	Feed/tooth f_z mm
1/16	2	.0002	0,005
1/8	3	.0004	0,010
3/16	4	.0007	0,018
1/4	6	.001	0,025
5/16	8	.0013	0,030
3/8	10	.0015	0,033
1/2	12	.0018	0,046
5/8	16	.002	0,051
3/4	20	.0025	0,064
1	25	.003	0,076

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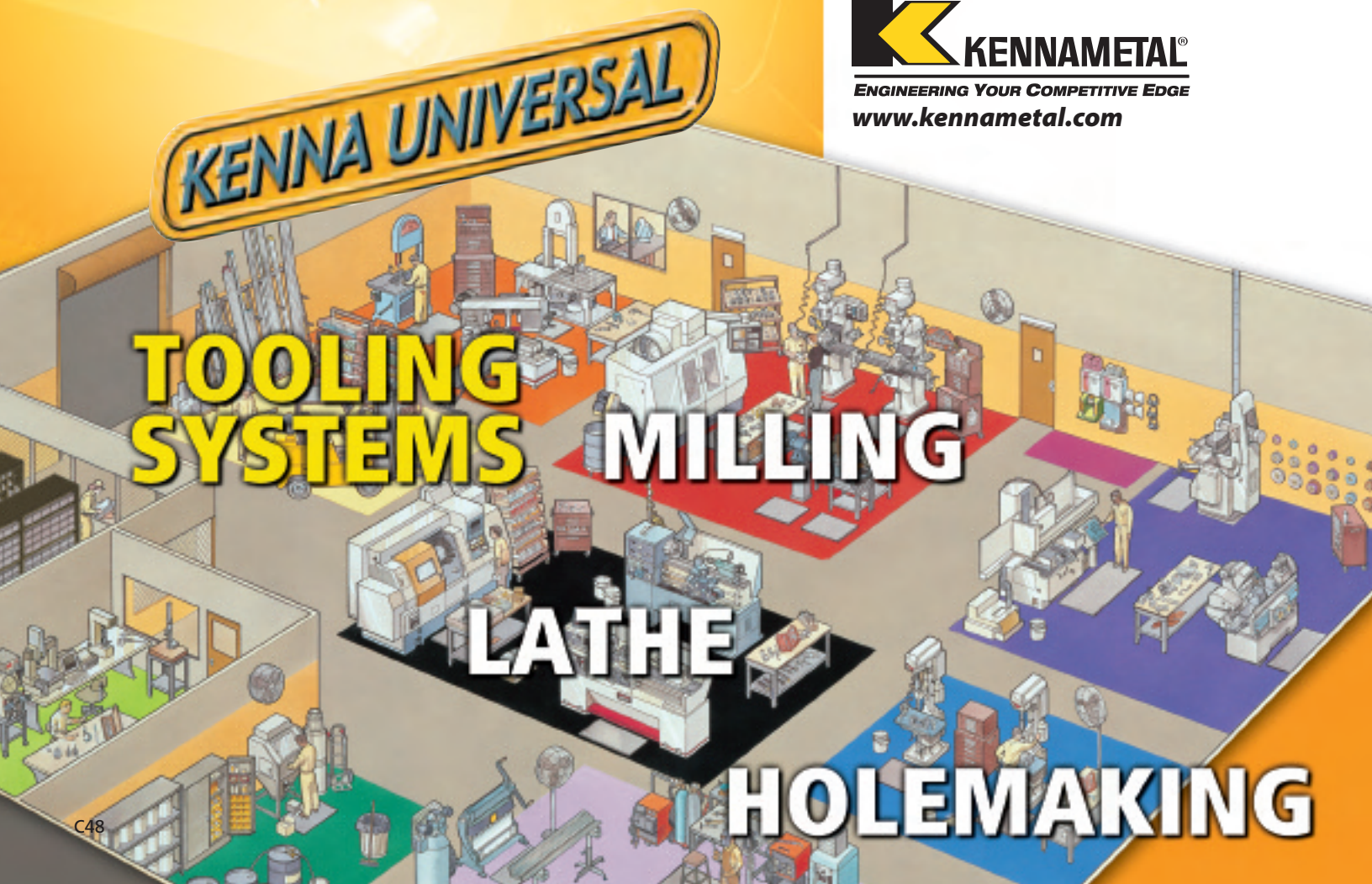


Tooling Systems Products

Table of Contents

CV Shank Tools

- Kennametal's "balanced-by-design" CV toolholders meet or exceed ANSI B5.50 specifications and recent standard updates. The detent hole in the shallow drive slot is deepened to a controlled depth. This modification enables the toolholder still to be loaded in the ATC in only one position, but now corrects the unnecessary inherent imbalance of the CV taper flange to significantly reduce spindle wear at higher speeds.
- The 7/24 shank cones are produced to the highest industry standards according to ISO-1947, with a taper accuracy of AT3 or better to provide optimum fit between the spindle and toolholder.
- Essential surfaces are not black-oxide, to provide better fitments.
- All non-critical surfaces are black-oxide, except for the high-performance toolholders.
- Through-coolant is a standard feature when permitted by toolholder design.
- Depending on the application, Kennametal's CV40 and CV50 balanced-by-design toolholders perform effectively up to 12,000 rpm. All other toolholders are effective at speeds up to 10,000 rpm, unless stated otherwise. Kennametal recommends that toolholder assemblies (toolholder, components, retention knob, collets, cutting tools) should be balanced when used at speeds in excess of 10,000 rpm.

IMPORTANT!

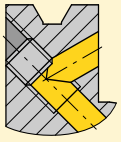
- All critical surfaces must be protected from damage. Neglect from dings and scratches will impair accuracy and performance.
- All assembly components must be clean. Never overtighten the components; this can permanently destroy the function and accuracy of the toolholder.

For retention knobs, please see page D50.

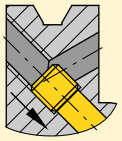
Form B coolant

Some toolholders are equipped with the form B coolant-style feature.

CAUTION!

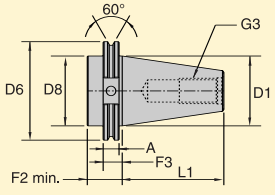


Toolholders are factory set to the form B coolant supply position. When relocating coolant position screws, use of a removable liquid (small screw thread locker) is recommended.



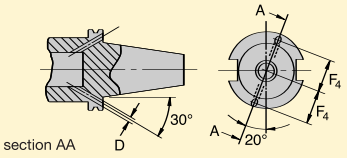
Possible variation of coolant supply to DIN 69871 form AD; tightening screws will stop coolant from escaping through the flange.

Caterpillar (inch) CV – ANSI B5.50



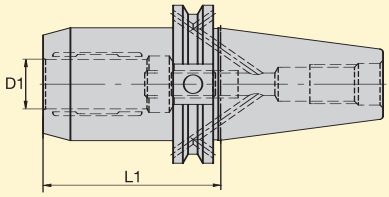
	D1	D6	D8	L1	F2	F3	A	G3
30	1.250 (31,75)	1.812 (46,02)	1.250 (31,75)	1.875 (47,63)	1.375 (35,00)	.750 (19,05)	.125 (3,18)	1/2-13 thread
40	1.750 (44,45)	2.500 (63,05)	1.750 (44,45)	2.687 (68,25)	1.375 (35,00)	.750 (19,05)	.125 (3,18)	5/8-11 thread
45	2.250 (57,15)	3.250 (82,50)	2.250 (57,15)	3.250 (82,55)	1.375 (35,00)	.750 (19,05)	.125 (3,18)	3/4-10 thread
50	2.750 (69,85)	3.875 (98,41)	2.750 (69,85)	4.000 (101,60)	1.375 (35,00)	.750 (19,05)	.125 (3,18)	1-8 thread
60	4.250 (107,95)	5.500 (139,70)	4.250 (107,95)	6.375 (161,93)	1.500 (38,10)	.750 (19,05)	.125 (3,18)	1 1/4-7 thread

Form B – Flange Coolant Entry Ports



	D	F4 ±.004
30	.157 (4,00)	.827 (21,00)
40	.157 (4,00)	1.063 (27,00)
45	.197 (5,00)	1.378 (35,00)
50	.236 (6,00)	1.654 (42,00)

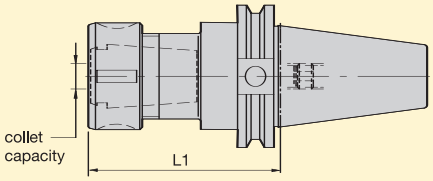
Hydraulic Chucks – BASIC Line



See page D41.

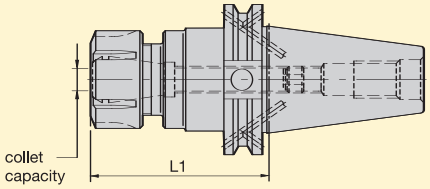
Order number	Catalog number	D1	L1
Inch			
40	**2001976**	**CV40BHCB075400**	3/4	4.00
Metric			
40	**2001975**	**CV40BHCB20M400**	20	102

TG Single-Angle Collet Chucks – Inch



See page D42.

ER Single-Angle Collet Chucks – Inch



See page D46.

TG Single-Angle Collet Chucks

Order number	Catalog number	Collet Series	Collet Capacity min.	Collet Capacity max.	L1
Inch					
40	**1025664**	**CV40TG050279G**	50TG	1/32	17/32	2.79
40	**1025598**	**CV40TG050300**	50TG	1/32	17/32	3.00
40	**1025599**	**CV40TG050479G**	50TG	1/32	17/32	4.79
40	**1025665**	**CV40TG050500**	50TG	1/32	17/32	5.00
40	**1025887**	**CV40TG050800**	50TG	1/32	17/32	8.00
40	**1025888**	**CV40TG0501000**	50TG	1/32	17/32	10.00
40	**1794107**	**CV40TG075254G**	75TG	3/64	3/4	2.54
40	**1025799**	**CV40TG075275**	75TG	3/64	3/4	2.75
40	**1025601**	**CV40TG075579G**	75TG	3/64	3/4	5.79
40	**1025600**	**CV40TG075600**	75TG	3/64	3/4	6.00
40	**1025889**	**CV40TG075800G**	75TG	3/64	3/4	8.00
40	**1025890**	**CV40TG0751000G**	75TG	3/64	3/4	10.00
40	**1025771**	**CV40TG100300**	100TG	5/64	1	3.00
40	**1025773**	**CV40TG100400**	100TG	5/64	1	4.00
40	**1025772**	**CV40TG100600**	100TG	5/64	1	6.00
40	**1013532**	**CV40TG150488**	150TG	23/64	1 1/2	4.88

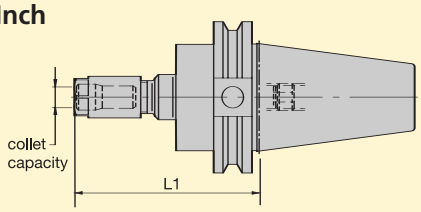
ER Single-Angle Collet Chucks

Inch						
40	**1901019**	**CV40BER16250**	16ER	.02	.41	2.50
40	**1901046**	**CV40BER16500**	16ER	.02	.41	5.00
40	**1261618**	**CV40BER20250**	20ER	.02	.50	2.50
40	**2249531**	**CV40BER20600**	20ER	.02	.50	6.00
40	**2249532**	**CV40BER25250**	25ER	.04	.63	2.50
40	**2249703**	**CV40BER25600**	25ER	.04	.63	6.00
40	**1261619**	**CV40BER32275**	32ER	.08	.81	2.75
40	**1901045**	**CV40BER32600**	32ER	.08	.81	6.00
40	**2249704**	**CV40BER40300**	40ER	.12	1.00	3.00
40	**2249705**	**CV40BER40600**	40ER	.12	1.00	6.00

Order example:
Catalog number: **CV40BHCB075400**
Order number: **2001976**

CV40 Shank Tools

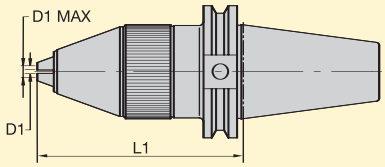
DA Double-Angle Collet Chucks – Inch



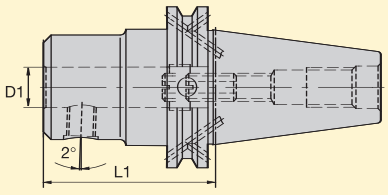
See page D48.

Order number	Catalog number	Collet Series	Collet Capacity min.	Collet Capacity max.	L1
Inch					
40	**1015515**	**CV40DA208300**	200DA	1/64	25/64	3.00
40	**1015305**	**CV40DA208500**	200DA	1/64	25/64	5.00
40	**1015596**	**CV40DA188300**	180DA	1/64	3/4	3.00
40	**1015304**	**CV40DA188600**	180DA	1/64	3/4	6.00

Drill Chucks – Inch



Whistle Notch Adapters – Metric



Drill Chucks

Order number	Catalog number	D1	D1 max.	L1
Inch				
40	**2262967**	**CV40DC13M421**	.039	.512	4.21

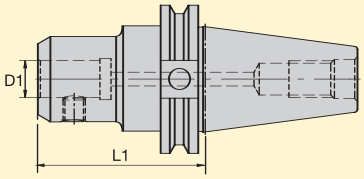
Whistle Notch Adapters

Metric					
40	**1549300**	**CV40BWN06M244**	6	–	62
40	**1549315**	**CV40BWN08M244**	8	–	62
40	**1549317**	**CV40BWN10M244**	10	–	62
40	**1549320**	**CV40BWN12M260**	12	–	66
40	**1549326**	**CV40BWN14M260**	14	–	66
40	**1549328**	**CV40BWN16M275**	16	–	70
40	**1549329**	**CV40BWN18M275**	18	–	70
40	**1549342**	**CV40BWN20M275**	20	–	70
40	**1549330**	**CV40BWN25M375**	25	–	95
40	**1549341**	**CV40BWN32M388**	32	–	99

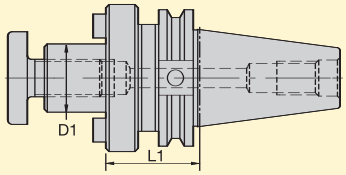
To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

Order example:
Catalog number: **CV40DA208300**
Order number: **1015515**

End Mill Adapters – Inch



Shell Mill Adapters – Inch



End Mill Adapters

Order number	Catalog number	D1	L1
Inch			
40	**1026404**	*** CV40ZEM012138**	1/8	1.38
40	**1026405**	**CV40EM012450**	1/8	4.50
40	**1026406**	*** CV40ZEM018138**	3/16	1.38
40	**1025921**	**CV40EM018250**	3/16	2.50
40	**1026407**	**CV40EM018450**	3/16	4.50
40	**1026408**	*** CV40ZEM025138**	1/4	1.38
40	**1018427**	**CV40EM025250**	1/4	2.50
40	**1026409**	**CV40EM025450**	1/4	4.50
40	**1026410**	*** CV40ZEM031138**	5/16	1.38
40	**1026411**	**CV40EM031450**	5/16	4.50
40	**1026412**	*** CV40ZEM038138**	3/8	1.38
40	**1026338**	**CV40EM038250**	3/8	2.50
40	**1013350**	**CV40EM038450**	3/8	4.50
40	**1013351**	**CV40EM038650**	3/8	6.50
40	**1013352**	*** CV40ZEM044175**	7/16	1.75
40	**1013353**	**CV40EM044450**	7/16	4.50
40	**1026380**	*** CV40ZEM050175**	1/2	1.75
40	**1025922**	**CV40EM050262**	1/2	2.63
40	**1013374**	**CV40EM050462**	1/2	4.63
40	**1013375**	**CV40EM050662**	1/2	6.62
40	**1026381**	*** CV40ZEM062175**	5/8	1.75
40	**1025923**	**CV40EM062375**	5/8	3.75
40	**1013376**	**CV40EM062575**	5/8	5.75
40	**1026382**	*** CV40ZEM075175**	3/4	1.75
40	**1025944**	**CV40EM075375**	3/4	3.75
40	**1013377**	**CV40EM075575**	3/4	5.75
40	**1013378**	*** CV40ZEM088175**	7/8	1.75
40	**1025945**	**CV40EM088400**	7/8	4.00
40	**1013424**	**CV40EM088600**	7/8	6.00
40	**1026383**	*** CV40ZEM100175**	1	1.75
40	**1025946**	**CV40EM100400**	1	4.00
40	**1013425**	**CV40EM100600**	1	6.00
40	**1013426**	*** CV40ZEM125200**	1 1/4	2.00
40	**1025947**	**CV40EM125425**	1 1/4	4.25
40	**1013427**	**CV40EM125625**	1 1/4	6.25
40	**1025986**	*** CV40EM150462**	1 1/2	4.63
40	**1013428**	**CV40EM150662**	1 1/2	6.63

Shell Mill Adapters

Inch				
40	**1018237**	**CV40SM050138**	1/2	1.38
40	**1926572**	**CV40SM050350**	1/2	3.50
40	**1025918**	**CV40SM075138**	3/4	1.38
40	**1013431**	**CV40SM075350**	3/4	3.50
40	**1013432**	**CV40SM075600**	3/4	6.00
40	**1025917**	**CV40ZSM100100**	1	1.00
40	**1026339**	**CV40SM100206**	1	2.06
40	**1013433**	**CV40SM100400**	1	4.00
40	**1013444**	**CV40SM100600**	1	6.00
40	**1025919**	**CV40SM125212**	1 1/4	2.12
40	**1013445**	**CV40SM125400**	1 1/4	4.00
40	**1025920**	**CV40SM150241**	1 1/2	2.41
40	**1013446**	**CV40SM150400**	1 1/2	4.00

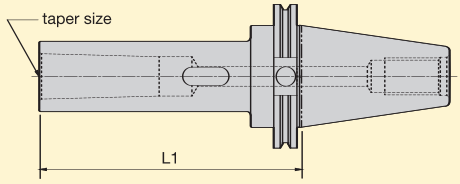
* Deviates from ANSI-B5.50 standard. The 1.750 diameter in front of the V-flange has been eliminated.

Order example:
Catalog number: **CV40ZEM012138**
Order number: **1026404**

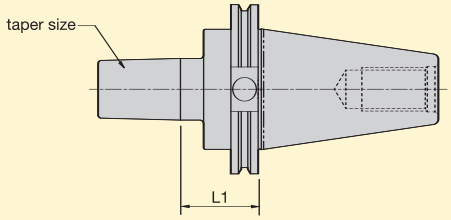
To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

CV40 Shank Tools

Morse Taper Adapters – Inch



Jacobs Taper Adapters – Inch



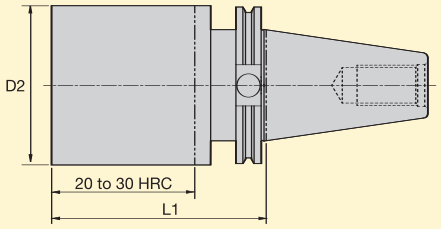
Morse Taper Adapters

	Order number	Catalog number	Taper Size	L1
Inch				
40	**1025948**	**CV40MT1175**	1	1.750
40	**1025949**	**CV40MT2244**	2	2.440
40	**1025950**	**CV40MT3300**	3	3.000
40	**1025987**	**CV40MT4388**	4	3.875

Jacobs Taper Adapters

Inch				
40	**1025951**	**CV40JT2244**	2	1.565
40	**1025953**	**CV40JT3278**	3	1.561
40	**1025952**	**CV40JT33256**	33	1.560

Bar Blanks – Inch

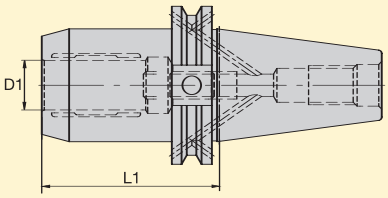


	Order number	Catalog number	D2	L1
Inch				
40	**1020563**	**CV40BB400600**	4.00	6.00
40	**1020634**	**CV40BB400120**	4.00	12.00

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

Order example:
Catalog number: **CV40MT1175**
Order number: **1025948**

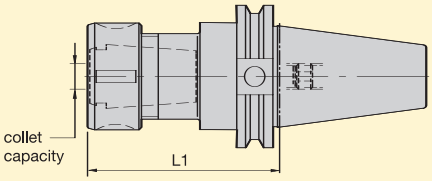
Hydraulic Chucks – BASIC Line



See page D41.

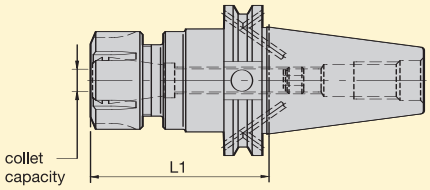
	Order number	Catalog number	D1	L1
Inch				
50	**2001978**	**CV50BHCB075400**	3/4	4.00
Metric				
50	**2001977**	**CV50BHCB20M400**	20	102

TG Single-Angle Collet Chucks – Inch



See page D42.

ER Single-Angle Collet Chucks – Inch



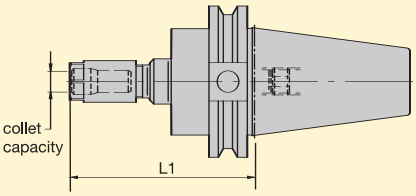
See page D46.

TG Single-Angle Collet Chucks

	Order number	Catalog number	Collet Series	Collet Capacity min.	Collet Capacity max.	L1
Inch						
50	**1025602**	**CV50TG050279G**	50TG	1/32	17/32	2.79
50	**1025666**	**CV50TG050300**	50TG	1/32	17/32	3.00
50	**1025636**	**CV50TG050479G**	50TG	1/32	17/32	4.79
50	**1025668**	**CV50TG050500**	50TG	1/32	17/32	5.00
50	**1025891**	**CV50TG050800**	50TG	1/32	17/32	8.00
50	**1025892**	**CV50TG0501000**	50TG	1/32	17/32	10.00
50	**1025893**	**CV50TG0501200**	50TG	1/32	17/32	12.00
50	**1025603**	**CV50TG075279G**	75TG	3/64	3/4	2.79
50	**1025667**	**CV50TG075300**	75TG	3/64	3/4	3.00
50	**1025801**	**CV50TG075450**	75TG	3/64	3/4	4.50
50	**1025635**	**CV50TG075579G**	75TG	3/64	3/4	5.79
50	**1025634**	**CV50TG075600**	75TG	3/64	3/4	6.00
50	**1025914**	**CV50TG075800G**	75TG	3/64	3/4	8.00
50	**1025915**	**CV50TG0751000G**	75TG	3/64	3/4	10.00
50	**1025916**	**CV50TG0751200G**	75TG	3/64	3/4	12.00
50	**1025743**	**CV50TG100300**	100TG	5/64	1	3.00
50	**1025695**	**CV50TG100350**	100TG	5/64	1	3.50
50	**1025694**	**CV50TG100550**	100TG	5/64	1	5.50
50	**1025673**	**CV50TG100750**	100TG	5/64	1	7.50
50	**1013535**	**CV50TG150300**	150TG	23/64	1 1/2	3.00
50	**1013530**	**CV50TG150350**	150TG	23/64	1 1/2	3.50
50	**1013528**	**CV50TG150550**	150TG	23/64	1 1/2	5.50
50	**1013536**	**CV50TG150750**	150TG	23/64	1 1/2	7.50
	ER Single-Angle Collet Chucks					
Inch						
50	**2249706**	**CV50BER16250**	16ER	.02	.41	2.50
50	**2249707**	**CV50BER16400**	16ER	.02	.41	4.00
50	**2249708**	**CV50BER16600**	16ER	.02	.41	6.00
50	**2249709**	**CV50BER20250**	20ER	.02	.50	2.50
50	**1261782**	**CV50BER20400**	20ER	.02	.50	4.00
50	**2249710**	**CV50BER20600**	20ER	.02	.50	6.00
50	**2249711**	**CV50BER25250**	25ER	.04	.63	2.50
50	**2249712**	**CV50BER25400**	25ER	.04	.63	4.00
50	**2249713**	**CV50BER25600**	25ER	.04	.63	6.00
50	**2249714**	**CV50BER32275**	32ER	.08	.81	2.75
50	**1261783**	**CV50BER32400**	32ER	.08	.81	4.00
50	**2249715**	**CV50BER32600**	32ER	.08	.81	6.00
50	**2249716**	**CV50BER40300**	40ER	.12	1.00	3.00
50	**2249717**	**CV50BER40600**	40ER	.12	1.00	6.00

CV50 Shank Tools

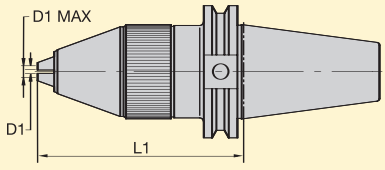
DA Double-Angle Collet Chucks – Inch



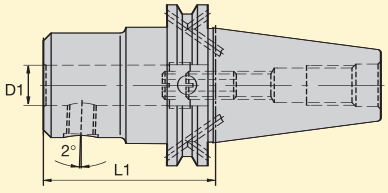
See page D48.

Order number	Catalog number	Collet Series	Collet Capacity min.	Collet Capacity max.	L1
Inch					
50 **1015306**	**CV50DA188300**	180DA	1/64	3/4	3.00
50 **1015307**	**CV50DA188600**	180DA	1/64	3/4	6.00

Drill Chucks – Inch



Whistle Notch Adapters – Metric



Drill Chucks

Order number	Catalog number	D1	D1 max.	L1
Inch				
50 **2262968**	**CV50DC13M421**	.039	.512	.421

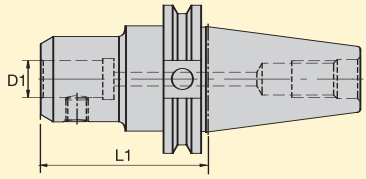
Whistle Notch Adapters

Metric					
50	**1549343**	**CV50BWN06M244**	6	-	62
50	**1549344**	**CV50BWN08M244**	8	-	62
50	**1549378**	**CV50BWN10M244**	10	-	62
50	**1549345**	**CV50BWN12M264**	12	-	67
50	**1549346**	**CV50BWN14M264**	14	-	67
50	**1549352**	**CV50BWN16M275**	16	-	70
50	**1549353**	**CV50BWN18M275**	18	-	70
50	**1549362**	**CV50BWN20M275**	20	-	70
50	**1549354**	**CV50BWN25M375**	25	-	95
50	**1549355**	**CV50BWN32M388**	32	-	99

Order example:
Catalog number: **CV50DA188300**
Order number: **1015306**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

End Mill Adapters – Inch



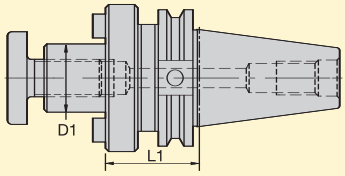
	Order number	Catalog number	D1	L1
Inch				
50	**1013379**	**CV50EM018250**	3/16	2.50
50	**1013408**	**CV50EM018450**	3/16	4.50
50	**1013409**	**CV50EM018650**	3/16	6.50
50	**1013380**	**CV50EM025250**	1/4	2.50
50	**1013410**	**CV50EM025450**	1/4	4.50
50	**1013411**	**CV50EM025650**	1/4	6.50
50	**1013381**	**CV50EM031250**	5/16	2.50
50	**1013412**	**CV50EM031450**	5/16	4.50
50	**1013413**	**CV50EM031650**	5/16	6.50
50	**1026020**	**CV50EM038250**	3/8	2.50
50	**1026286**	**CV50EM038450**	3/8	4.50
50	**1026093**	**CV50EM038650**	3/8	6.50
50	**1013382**	**CV50EM038850**	3/8	8.50
50	**1013383**	**CV50EM044250**	7/16	2.50
50	**1026021**	**CV50EM050262**	1/2	2.62
50	**1026114**	**CV50EM050462**	1/2	4.62
50	**1026115**	**CV50EM050662**	1/2	6.62
50	**1013404**	**CV50EM050850**	1/2	8.50
50	**1026022**	**CV50EM062375**	5/8	3.75
50	**1026116**	**CV50EM062575**	5/8	5.75
50	**1026117**	**CV50EM062775**	5/8	7.75
50	**1026250**	**CV50EM075375**	3/4	3.75
50	**1026118**	**CV50EM075575**	3/4	5.75
50	**1026119**	**CV50EM075775**	3/4	7.75
50	**1013405**	**CV50EM0751000**	3/4	10.00
50	**1026023**	**CV50EM088375**	7/8	3.75
50	**1026120**	**CV50EM088575**	7/8	5.75
50	**1026121**	**CV50EM088775**	7/8	7.75
50	**1026044**	**CV50EM100400**	1	4.00
50	**1026287**	**CV50EM100600**	1	6.00
50	**1026122**	**CV50EM100800**	1	8.00
50	**1013406**	**CV50EM1001000**	1	10.00
50	**1026045**	**CV50EM125400**	1 1/4	4.00
50	**1026123**	**CV50EM125600**	1 1/4	6.00
50	**1026288**	**CV50EM125800**	1 1/4	8.00
50	**1013407**	**CV50EM1251000**	1 1/4	10.00
50	**1026284**	**CV50EM150400**	1 1/2	4.00
50	**1026289**	**CV50EM150600**	1 1/2	6.00
50	**1026144**	**CV50EM150800**	1 1/2	8.00
50	**1026046**	**CV50EM200562**	2	5.62
50	**1026145**	**CV50EM200762**	2	7.62
50	**1026290**	**CV50EM200962**	2	9.62

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

Order example:
Catalog number: **CV50EM018250**
Order number: **1013379**

CV50 Shank Tools

Shell Mill Adapters – Inch



	Order number	Catalog number	D1	L1
Inch				
50	**1926613**	**CV50SM050150**	1/2	1.50
50	**1926614**	**CV50SM050350**	1/2	3.50
50	**1026146**	**CV50SM050550**	1/2	5.50
50	**1026251**	**CV50SM075150**	3/4	1.50
50	**1026147**	**CV50SM075350**	3/4	3.50
50	**1026148**	**CV50SM075550**	3/4	5.50
50	**1013447**	**CV50SM075700**	3/4	7.00
50	**1013448**	**CV50SM075900**	3/4	9.00
50	**1026253**	**CV50SM100200**	1	2.00
50	**1026087**	**CV50SM100400**	1	4.00
50	**1026089**	**CV50SM100600**	1	6.00
50	**1013449**	**CV50SM100800**	1	8.00
50	**1013450**	**CV50SM1001000**	1	10.00
50	**1026047**	**CV50SM125150**	1 1/4	1.50
50	**1026149**	**CV50SM125350**	1 1/4	3.50
50	**1026291**	**CV50SM125550**	1 1/4	5.50
50	**1013451**	**CV50SM125700**	1 1/4	7.00
50	**1013452**	**CV50SM125900**	1 1/4	9.00
50	**1026053**	**CV50SM150240**	1 1/2	2.40
50	**1026285**	**CV50SM150400**	1 1/2	4.00
50	**1019103**	**CV50SM150600**	1 1/2	6.00
50	**1013453**	**CV50SM150800**	1 1/2	8.00
50	**1026252**	**CV50SM200240**	2	2.40
50	**1026150**	**CV50SM200400**	2	4.00
50	**1026292**	**CV50SM200600**	2	6.00
50	**1013474**	**CV50SM200800**	2	8.00
50	**1026048**	**CV50SM250240**	2 1/2	2.40
50	**1026293**	**CV50SM250400**	2 1/2	4.00

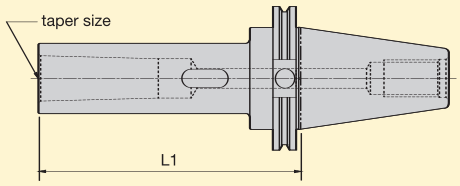
Basic Line

"Basic Line" hydraulic chucks have the same high-quality runout specification of 0,003 (.0001"). Basic Line chucks are balanced-by-design for speeds up to 10,000 rpm. The simple axial back-up screw adjustment of 10,0 (.375") is achieved through the chuck bore the same way as the Trend Line. Larger body diameters give this chuck higher stability along with higher torque transmission (grip) of 300 Nm (220 ft-lb). Please note that the standard SEFAS chamfering ring cannot be used on this chuck design.

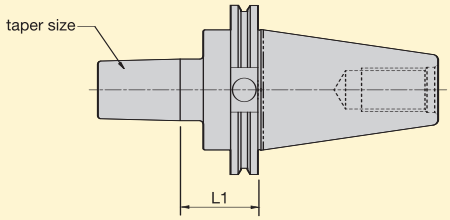
Order example:
Catalog number: **CV50SM050150**
Order number: **1926613**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

Morse Taper Adapters – Inch



Jacobs Taper Adapters – Inch



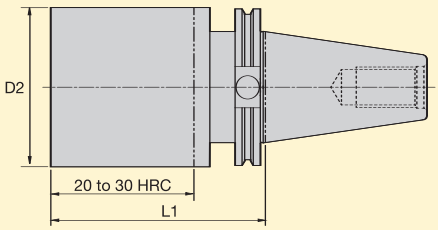
Morse Taper Adapters

	Order number	Catalog number	Taper Size	L1
Inch				
50	**1026049**	**CV50MT1150**	1	1.500
50	**1026050**	**CV50MT2200**	2	2.000
50	**1026051**	**CV50MT3250**	3	2.500
50	**1026052**	**CV50MT4338**	4	3.380
50	**1026091**	**CV50MT5375**	5	3.750

Jacobs Taper Adapters

	Order number	Catalog number	Taper Size	L1
Inch				
50	**1026379**	**CV50JT3268**	3	1.461

Bar Blanks – Inch



	Order number	Catalog number	D2	L1
Inch				
50	**1020558**	**CV50BB400600**	4.00	6.00
50	**1065951**	**CV50BB400120**	4.00	12.00
50	**1020559**	**CV50BB600600**	6.00	6.00
50	**1020560**	**CV50BB600120**	6.00	12.00
50	**1020307**	**CV50BB612700**	6.12	7.00

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

Order example:
Catalog number: **CV50MT1150**
Order number: **1026049**

BT Shank Tools

- Meets or exceeds JIS B 6339 specifications and all current standard updates.
- The 7/24 shank cones are produced to the highest industry standards, per ISO-1947. With a taper accuracy of AT3 or better, an optimum fit between spindle and toolholder is provided.
- Essential surfaces are not black-oxided, to provide better fitments.
- All non-critical surfaces are black-oxided, except for the high-performance toolholders.
- Wherever the toolholder design allows, through coolant is a standard feature.
- Depending on the application, Kennametal's BT30, BT40, and BT50 "balanced-by-design" toolholders will perform effectively up to 12,000 rpm. All other toolholders are good up to 10,000 rpm unless otherwise stated. Kennametal recommends that in excess of these speeds, the toolholder assembly (toolholder, components, retention knob, collets, cutting tools, etc.) should be balanced.

IMPORTANT!

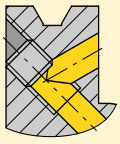
- All critical surfaces must be protected from damage. Neglect from dings and scratches will impair accuracy and performance.
- All assembly components must be clean. Never overtighten the components; this can permanently destroy the function and accuracy of the toolholder.

For retention knobs, please see page D50.

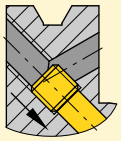
Form B coolant

Some toolholders are equipped with the form B coolant-style feature.

CAUTION!

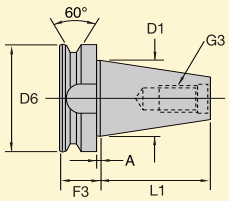


Toolholders are factory set to the form B coolant supply position. When relocating coolant position screws, use of a removable liquid (small screw thread locker) is recommended.



Possible variation of coolant supply to DIN 69871 form AD; tightening screws will stop coolant from escaping through the flange.

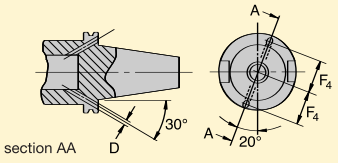
Tooling Standard Dimensions – JIS B6339



	D1	D6	L1	F3	A	G3
30	1.250 (31,75)	1.811 (46,00)	1.906 (48,40)	.866 (22,00)	.079 (2,00)	M12 thread
35*	1.500 (38,10)	2.087 (53,00)	2.224 (56,50)	.945 (24,00)	.079 (2,00)	M12 thread
40	1.750 (44,45)	2.480 (63,00)	2.575 (65,40)	1.063 (27,00)	.079 (2,00)	M16 thread
45	2.250 (57,15)	3.346 (85,00)	3.260 (82,80)	1.299 (33,00)	.118 (3,00)	M20 thread
50	2.750 (69,85)	3.937 (100,00)	4.008 (101,80)	1.496 (38,00)	.118 (3,00)	M24 thread

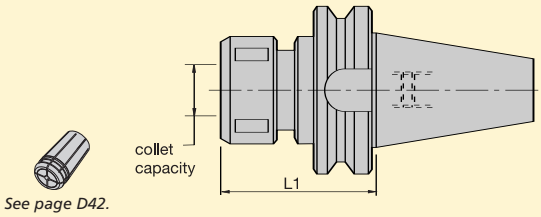
*Manufactured to MAS-403-1972 standards.

Form B – Flange Coolant Entry Ports



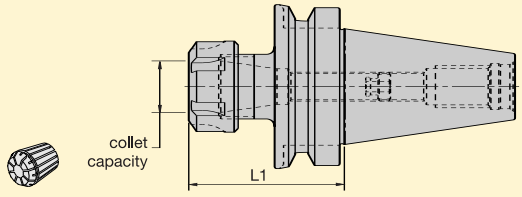
	D	F4 ±.004
30	.157 (4,00)	.827 (21,00)
40	.157 (4,00)	1.063 (27,00)
45	.197 (5,00)	1.378 (35,00)
50	.236 (6,00)	1.654 (42,00)

TG Single-Angle Collet Chucks – Metric



See page D42.

ER Single-Angle Collet Chucks – Metric



See page D46.

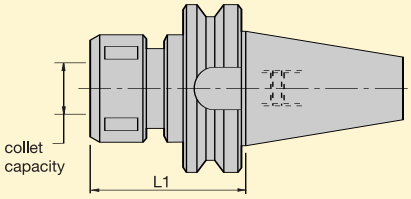
TG Single-Angle Collet Chucks

	Order number	Catalog number	Collet Series	Collet Capacity min.	Collet Capacity max.	L1
Metric						
30	**1156351**	**BT30TG075075M**	75TG	2,6	20,0	75

ER Single-Angle Collet Chucks

Metric						
30	**1258023**	**BT30ER16060M**	16ER	0,5	10,0	60
30	**1021296**	**BT30ER20060M**	20ER	0,5	13,0	60
30	**1258025**	**BT30ER25060M**	25ER	1,0	16,0	60
30	**1156350**	**BT30ER32070M**	32ER	2,0	20,0	70

DA Double-Angle Collet Chucks – Metric



See page D48.

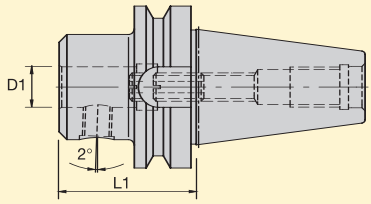
	Order number	Catalog number	Collet Series	Collet Capacity min.	Collet Capacity max.	L1
Metric						
30	**1258011**	**BT30DA208060M**	200DA	0,2	10,0	60
30	**1191712**	**BT30DA188060M**	180DA	2,2	20,0	60

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

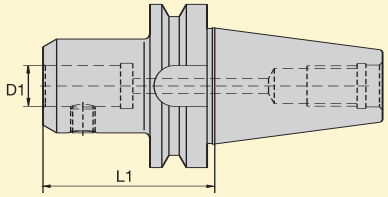
Order example:
Catalog number: **BT30TG075075M**
Order number: **1156351**

BT30 Shank Tools

Whistle Notch Adapters – Metric



End Mill Adapters



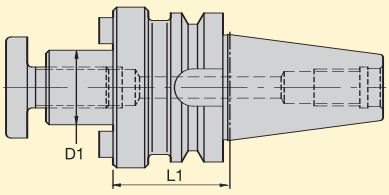
Whistle Notch Adapters – Metric

Order number	Catalog number	D1	L1
Metric			
30	**1861102**	**BT30WN06080M**	6	80
30	**1861123**	**BT30WN08080M**	8	80
30	**2255556**	**BT30WN10080M**	10	80
30	**2255557**	**BT30WN12090M**	12	90
30	**2255558**	**BT30WN14090M**	14	90
30	**2255559**	**BT30WN16090M**	16	90

End Mill Adapters

Inch				
30	**2249689**	**BT30EM012236**	1/8	2.36
30	**2249690**	**BT30EM018236**	3/16	2.36
30	**1258012**	**BT30EM025236**	1/4	2.36
30	**2249691**	**BT30EM031236**	5/16	2.36
30	**1258013**	**BT30EM038236**	3/8	2.36
30	**1258014**	**BT30EM050236**	1/2	2.36
30	**1258016**	**BT30EM062236**	5/8	2.36
30	**1258017**	**BT30EM075236**	3/4	2.36
Metric				
30	**1258015**	**BT30EM06050M**	6	50
30	**1258018**	**BT30EM08060M**	8	60
30	**1258019**	**BT30EM10060M**	10	60
30	**1155346**	**BT30EM12060M**	12	60
30	**1258020**	**BT30EM16060M**	16	60
30	**1258021**	**BT30EM20080M**	20	80

Shell Mill Adapters

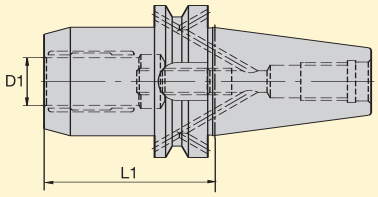


Order number	Catalog number	D1	L1
Inch			
30	**1925467**	**BT30SM050118**	1/2	1.18
30	**1258049**	**BT30SM075118**	3/4	1.18
30	**1258050**	**BT30SM100177**	1	1.77
Metric			
30	**2255553**	**BT30SM16035M**	16	35
30	**2255554**	**BT30SM22040M**	22	40
30	**2255555**	**BT30SM27045M**	27	45

Order example:
Catalog number: **BT30WN06080M**
Order number: **1861102**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

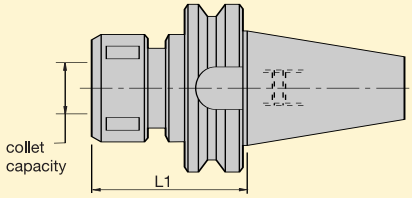
Hydraulic Chucks – BASIC Line



See page D41.

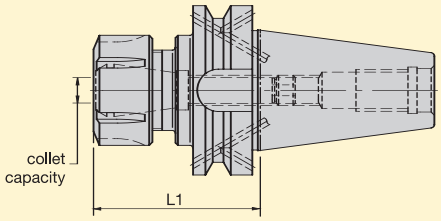
	Order number	Catalog number	D1	L1
Inch				
40	**2263074**	**BT40BHCB075374**	3/4	3.74
Metric				
40	**1599687**	**BT40BHCB20095M**	20	95

TG Single-Angle Collet Chucks – Metric



See page D42.

ER Single-Angle Collet Chucks – Metric



See page D46.

TG Single-Angle Collet Chucks

	Order number	Catalog number	Collet Series	Collet Capacity min.	Collet Capacity max.	L1
Metric						
40	**1156366**	**BT40TG075070M**	75TG	2,6	20,0	70
40	**1156367**	**BT40TG100080M**	100TG	2,6	25,5	80
40	**1191754**	**BT40TG100100M**	100TG	2,6	25,5	100
40	**1191755**	**BT40TG100150M**	100TG	2,6	25,5	150
40	**1191756**	**BT40TG150110M**	150TG	11,6	40,0	110

ER Single-Angle Collet Chucks

Metric						
40	**1315660**	**BT40BER16060M**	16ER	0,5	10,0	60
40	**1623345**	**BT40BER16120M**	16ER	0,5	10,0	120
40	**1718315**	**BT40BER25070M**	25ER	1,0	16,0	70
40	**1610709**	**BT40BER25120M**	25ER	1,0	16,0	120
40	**1538985**	**BT40BER32070M**	32ER	2,0	20,0	70
40	**1538986**	**BT40BER32120M**	32ER	2,0	20,0	120
40	**1871535**	**BT40BER40080M**	40ER	3,0	26,0	80
40	**1871538**	**BT40BER40120M**	40ER	3,0	26,0	120

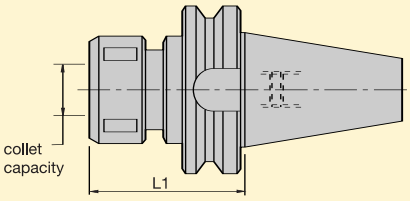
To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

Order example:
Catalog number: **BT40BHCB075374**
Order number: **2263074**

BT40 Shank Tools

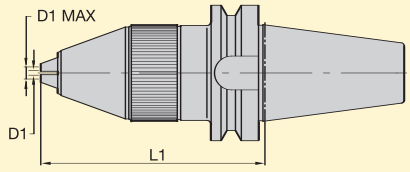
DA Double-Angle Collet Chucks – Metric

See page D48.

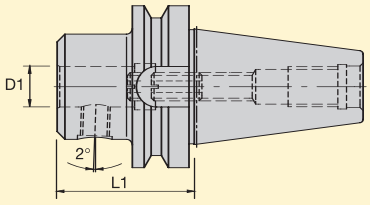


Order number	Catalog number	Collet Series	Collet Capacity min.	Collet Capacity max.	L1
Metric					
40	**1191725**	**BT40DA208070M**	200DA	0,2	10,0	70
40	**1191722**	**BT40DA108070M**	100DA	1,7	14,0	70
40	**1191723**	**BT40DA188070M**	180DA	2,2	20,0	70
40	**1258159**	**BT40DA188100M**	180DA	2,2	20,0	100
40	**1191724**	**BT40DA188150M**	180DA	2,2	20,0	150

Drill Chucks – Metric



Whistle Notch Adapters – Metric



Drill Chucks

Order number	Catalog number	D1	D1 max.	L1
Metric				
40	**1131693**	**BT40REX1396M**	1,0	13	103,5
40	**1131713**	**BT40REX16112M**	2,5	16	119,5

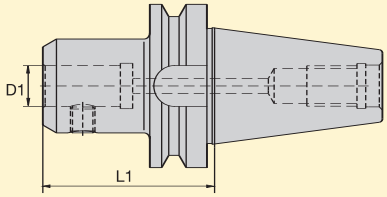
Whistle Notch Adapters

Order number	Catalog number	D1	D1 max.	L1
Metric				
40	**1126481**	**BT40BWN06050M**	6	–	50
40	**1126482**	**BT40BWN08050M**	8	–	50
40	**1126850**	**BT40BWN10063M**	10	–	63
40	**1126483**	**BT40BWN12063M**	12	–	63
40	**1126844**	**BT40BWN14063M**	14	–	63
40	**1126845**	**BT40BWN16063M**	16	–	63
40	**1126846**	**BT40BWN18063M**	18	–	63
40	**1126847**	**BT40BWN20063M**	20	–	63
40	**1126479**	**BT40BSWN25075M**	25	–	75
40	**1126848**	**BT40BWN25090M**	25	–	90
40	**1126480**	**BT40BSWN32075M**	32	–	75
40	**1126849**	**BT40BWN32100M**	32	–	100

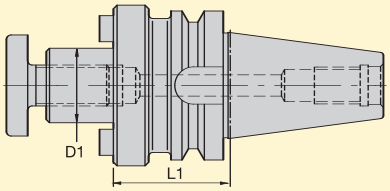
Order example:
Catalog number: **BT40DA208070M**
Order number: **1191725**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

End Mill Adapters



Shell Mill Adapters



End Mill Adapters

Order number	Catalog number	D1	L1
Inch			
40	**1258164**	**BT40EM025255**	1/4	2.55
40	**1258165**	**BT40EM031255**	5/16	2.55
40	**1258166**	**BT40EM038255**	3/8	2.55
40	**1026620**	**BT40EM050255**	1/2	2.55
40	**1064863**	**BT40EM050400**	1/2	4.00
40	**1258176**	**BT40EM062255**	5/8	2.55
40	**1084589**	**BT40EM075150**	3/4	1.50
40	**1258177**	**BT40EM075255**	3/4	2.55
40	**1258184**	**BT40EM088335**	7/8	3.35
40	**1084590**	**BT40EM100162**	1	1.63
40	**1150875**	**BT40EM100374**	1	3.74
40	**1064864**	**BT40EM100500**	1	5.00
40	**1084591**	**BT40EM125250**	1 1/4	2.50
40	**1258194**	**BT40EM125335**	1 1/4	3.35
Metric			
40	**1126852**	**BT40BEM08050M**	8	50
40	**1126853**	**BT40BEM10063M**	10	63
40	**1127275**	**BT40BEM12063M**	12	63
40	**1126914**	**BT40BEM14063M**	14	63
40	**1126915**	**BT40BEM16063M**	16	63
40	**1126916**	**BT40BEM18063M**	18	63
40	**1126917**	**BT40BEM20063M**	20	63
40	**1126478**	**BT40BEM25090M**	25	90

Shell Mill Adapters

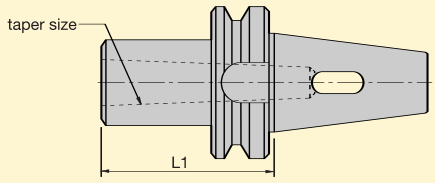
Inch			
40	**1925468**	**BT40SM050177**	1/2	1.77
40	**1925469**	**BT40SM050400**	1/2	4.00
40	**1258302**	**BT40SM075177**	3/4	1.77
40	**1018488**	**BT40SM075400**	3/4	4.00
40	**1018487**	**BT40SM075600**	3/4	6.00
40	**1104312**	**BT40SM100177**	1	1.77
40	**1018492**	**BT40SM100400**	1	4.00
40	**1018490**	**BT40SM100600**	1	6.00
40	**1026619**	**BT40SM125236**	1 1/4	2.36
40	**1018486**	**BT40SM125500**	1 1/4	5.00
40	**1191740**	**BT40SM150236**	1 1/2	2.36
Metric			
40	**1191741**	**BT40SM16050M**	16	50
40	**1156365**	**BT40SM22055M**	22	55
40	**1191743**	**BT40SM22100M**	22	100
40	**1191744**	**BT40SM27055M**	27	55
40	**1191746**	**BT40SM27100M**	27	100
40	**1191747**	**BT40SM32060M**	32	60
40	**1191748**	**BT40SM32100M**	32	100
40	**1191749**	**BT40SM40060M**	40	60
40	**1191750**	**BT40SM40100M**	40	100

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

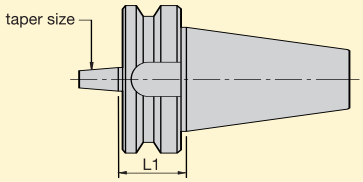
Order example:
Catalog number: **BT40EM025255**
Order number: **1258164**

BT40 Shank Tools

Morse Taper Adapters – Metric



Jacobs Taper Adapters – Metric



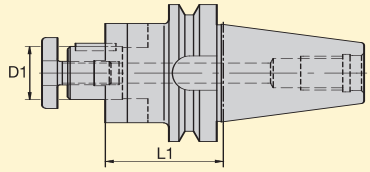
Morse Taper Adapters

	Order number	Catalog number	Taper Size	L1
Metric				
40	**1156364**	**BT40MT1050M**	1	50
40	**119135**	**BT40MT2050M**	2	50
40	**1191736**	**BT40MT3070M**	3	70
40	**1191737**	**BT40MT4095M**	4	95

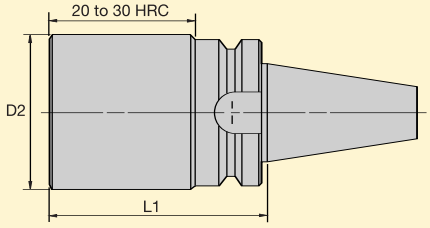
Jacobs Taper Adapters

Metric				
40	**1156363**	**BT40JT33045M**	33	45,0

Combi Shell Mill Adapters – Metric



Bar Blanks – Metric



Combi Shell Mill Adapters

	Order number	Catalog number	D1	D2	L1
Metric					
40	**1191713**	**BT40CS16055M**	16	-	55
40	**1191714**	**BT40CS16100M**	16	-	100
40	**1191715**	**BT40CS22055M**	22	-	55
40	**1191716**	**BT40CS22150M**	22	-	150
40	**1191717**	**BT40CS27055M**	27	-	55
40	**1191718**	**BT40CS27150M**	27	-	150
40	**1191719**	**BT40CS32060M**	32	-	60
40	**1191720**	**BT40CS32150M**	32	-	150
40	**1191721**	**BT40CS40080M**	40	-	80

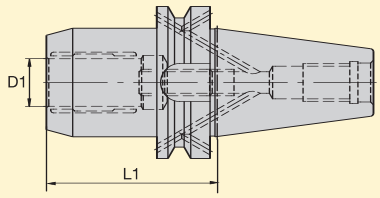
Bar Blanks

Metric					
40	**1258122**	**BT40BB104200M**	-	104	200

Order example:
Catalog number: **BT40MT1050M**
Order number: **1156364**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

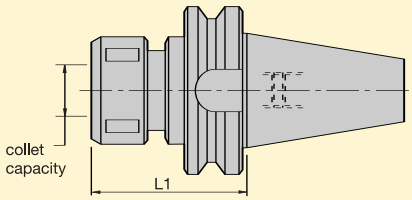
Hydraulic Chucks – BASIC Line



See page D41.

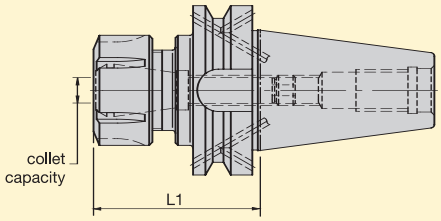
	Order number	Catalog number	D1	L1
Inch				
50	**2263082**	**BT50BHCB075413**	3/4	4.13
Metric				
50	**1599688**	**BT50BHCB20105M**	20	105

TG Single-Angle Collet Chucks – Metric



See page D42.

ER Single-Angle Collet Chucks – Metric



See page D46.

TG Single-Angle Collet Chucks

	Order number	Catalog number	Collet Series	Collet Capacity min.	Collet Capacity max.	L1
Metric						
50	**1156372**	**BT50TG100090M**	100TG	2,6	25,5	90
50	**1188173**	**BT50TG100150M**	100TG	2,6	25,5	150
50	**1188172**	**BT50TG100200M**	100TG	2,6	25,5	200
50	**1191801**	**BT50TG150100M**	150TG	11,6	40,0	100
50	**1258570**	**BT50TG150150M**	150TG	11,6	40,0	150

ER Single-Angle Collet Chucks

Metric						
50	**1586520**	**BT50BER16100M**	16ER	0,5	10,0	100
50	**1871539**	**BT50BER16150M**	16ER	0,5	10,0	150
50	**1871540**	**BT50BER25070M**	25ER	1,0	16,0	70
50	**1871541**	**BT50BER25150M**	25ER	1,0	16,0	150
50	**1587031**	**BT50BER32070M**	32ER	2,0	20,0	70
50	**1729881**	**BT50BER32150M**	32ER	2,0	20,0	150
50	**1556433**	**BT50BER40080M**	40ER	3,0	26,0	80
50	**1187371**	**BT50BER40150M**	40ER	3,0	26,0	150

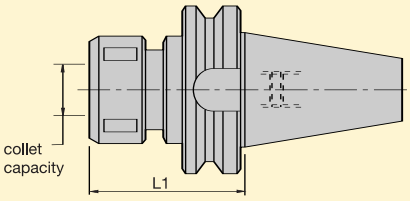
To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

Order example:
Catalog number: **BT50BHCB075413**
Order number: **2263082**

BT50 Shank Tools

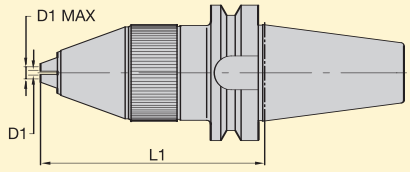
DA Double-Angle Collet Chucks – Metric

See page D48.

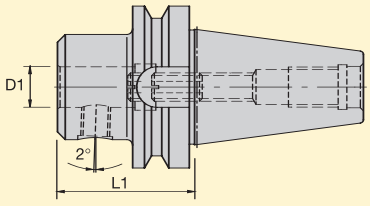


Order number	Catalog number	Collet Series	Collet Capacity min.	Collet Capacity max.	L1
Metric					
50	**1191767**	**BT50DA188070M**	180DA	2,2	20,0	70
50	**1197722**	**BT50DA188150M**	180DA	2,2	20,0	150
50	**1258441**	**BT50DA188200M**	180DA	2,2	20,0	200

Drill Chucks – Metric



Whistle Notch Adapters – Metric



Drill Chucks

Order number	Catalog number	D1	D1 max.	L1
Metric				
50	**1131734**	**BT50REX1396M**	1,0	13	114,5
50	**1131738**	**BT50REX16112M**	2,5	16	130,5

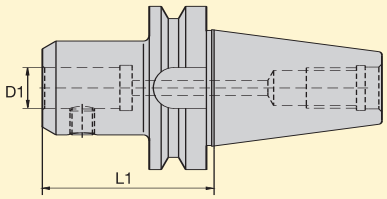
Whistle Notch Adapters –Metric

Metric					
50	**1175468**	**BT50BWN06063M**	6	-	63
50	**1300426**	**BT50BWN08063M**	8	-	63
50	**1137510**	**BT50BWN10063M**	10	-	63
50	**1137518**	**BT50BWN12080M**	12	-	80
50	**1137526**	**BT50BWN14080M**	14	-	80
50	**1137535**	**BT50BWN16080M**	16	-	80
50	**1137543**	**BT50BWN18080M**	18	-	80
50	**1137550**	**BT50BWN20080M**	20	-	80
50	**1134607**	**BT50BSWN25075M**	25	-	75
50	**1137558**	**BT50BWN25100M**	25	-	100
50	**1134608**	**BT50BSWN32075M**	32	-	75
50	**1137576**	**BT50BWN32105M**	32	-	105

Order example:
Catalog number: **BT50DA188070M**
Order number: **1191767**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

End Mill Adapters



	Order number	Catalog number	D1	L1
Inch				
50	**1258444**	**BT50EM050295**	1/2	2.95
50	**1258447**	**BT50EM075295**	3/4	2.95
50	**1258450**	**BT50EM100413**	1	4.13
50	**1258451**	**BT50EM100600**	1	6.00
50	**1258456**	**BT50EM125413**	1 1/4	4.13
50	**1258457**	**BT50EM125600**	1 1/4	6.00
50	**1258459**	**BT50EM150413**	1 1/2	4.13
50	**1232393**	**BT50EM200531**	2	5.31
Metric				
50	**1191769**	**BT50EM06063M**	6	63
50	**1258446**	**BT50EM06150M**	6	150
50	**1191770**	**BT50EM08063M**	8	63
50	**1191771**	**BT50EM10080M**	10	80
50	**1258453**	**BT50EM10100M**	10	100
50	**1191772**	**BT50EM12080M**	12	80
50	**1191773**	**BT50EM16080M**	16	80
50	**1191774**	**BT50EM20080M**	20	80
50	**1191776**	**BT50EM25105M**	25	105
50	**1156369**	**BT50EM32105M**	32	105
50	**1191777**	**BT50EM40120M**	40	120
50	**1258473**	**BT50EM50130M**	50	130

Heat up your profits...Shrink your costs!

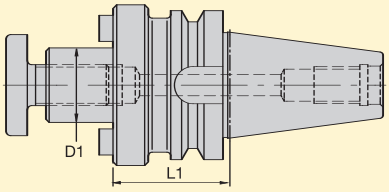
- Concentricity less than .0001 (0,003 mm) can be achieved.
- Strong gripping forces...one of the strongest cutting tool clamping systems available today
- Excellent rigidity
- Great for roughing and finishing operations
- Best toolholder design for high-speed machining
- Axial adjustment with through-coolant capability
- If the Kennametal induction heater unit is used properly, one toolholder with 1/4" (6 mm) bore and higher can withstand over 5,000 cutting tool changes.

Order example:
Catalog number: **BT50EM050295**
Order number: **1258444**

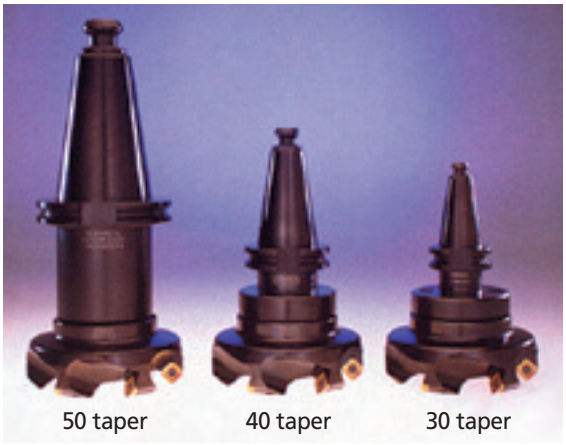
To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

BT50 Shank Tools

Shell Mill Adapters



Order number	Catalog number	D1	L1
Inch			
50 **1925470**	**BT50SM050177**	1/2	1.77
50 **1087398**	**BT50SM050400**	1/2	4.00
50 **1925471**	**BT50SM075177**	3/4	1.77
50 **1925472**	**BT50SM075400**	3/4	4.00
50 **1925513**	**BT50SM100177**	1	1.77
50 **1925514**	**BT50SM100400**	1	4.00
50 **1258537**	**BT50SM125177**	1 1/4	1.77
50 **1925515**	**BT50SM125400**	1 1/4	4.00
50 **1064918**	**BT50SM150177**	1 1/2	1.77
50 **1925516**	**BT50SM150400**	1 1/2	4.00
50 **1258541**	**BT50SM200236**	2	2.36
50 **1925517**	**BT50SM200400**	2	4.00
50 **1925518**	**BT50SM250236**	1 1/2	2.36
50 **1925519**	**BT50SM250400**	2 1/2	4.00
Metric			
50 **1258538**	**BT50SM16045M**	16	45
50 **1191789**	**BT50SM22045M**	22	45
50 **1191790**	**BT50SM22100M**	22	100
50 **1228269**	**BT50SM22150M**	22	150
50 **1322082**	**BT50SM22160M**	22	160
50 **1191791**	**BT50SM27045M**	27	45
50 **1556919**	**BT50SM27060M**	27	60
50 **1191792**	**BT50SM27100M**	27	100
50 **1258547**	**BT50SM27150M**	27	150
50 **1191793**	**BT50SM32045M**	32	45
50 **1191794**	**BT50SM32100M**	32	100
50 **1258551**	**BT50SM32150M**	32	150
50 **1191795**	**BT50SM40050M**	40	50
50 **1191796**	**BT50SM40100M**	40	100
50 **1258555**	**BT50SM40150M**	40	150
50 **1191797**	**BT50SM60090M**	60	90



Taper Size

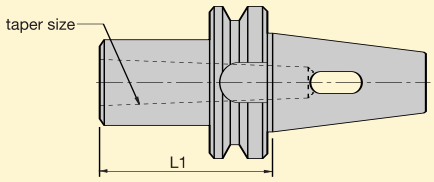
Realistic tooling decisions need to be made based on your machine's taper size. When choosing cutting parameters, realize that a machine with a 30 taper spindle will not be able to achieve the same heavy cuts or use as large a cutter as a 50 taper machine.

Shown are four-inch diameter cutters mounted to 50, 40, and 30 taper adapters. It's unrealistic to try to achieve the same heavy cut with the 30 taper as you can with a 50 taper.

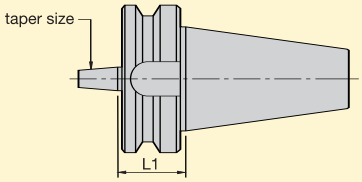
Order example:
Catalog number: **BT50SM050177**
Order number: **1925470**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

Morse Taper Adapters – Metric



Jacobs Taper Adapters – Metric



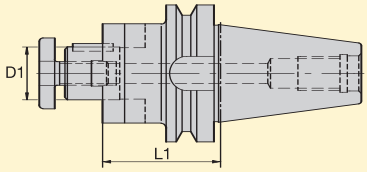
Morse Taper Adapters

	Order number	Catalog number	Taper Size	L1
Metric				
50	**1191785**	**BT50MT5105M**	5	105

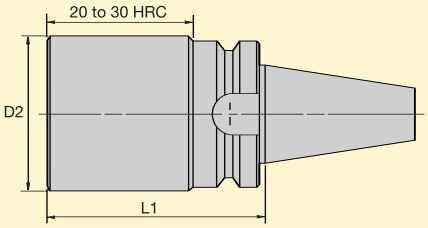
Jacobs Taper Adapters

Metric				
50	**1258492**	**BT50JT33041M**	33	41,1

Combi Shell Mill Adapters – Metric



Bar Blanks



Combi Shell Mill Adapters

	Order number	Catalog number	D1	D2	L1
Metric					
50	**1258428**	**BT50CS16070M**	16	-	70
50	**1258431**	**BT50CS16150M**	16	-	150
50	**1191760**	**BT50CS22070M**	22	-	70
50	**1258433**	**BT50CS22150M**	22	-	150
50	**1191761**	**BT50CS22200M**	22	-	200
50	**1191762**	**BT50CS27070M**	27	-	70
50	**1258435**	**BT50CS27150M**	27	-	150
50	**1191763**	**BT50CS32070M**	32	-	70
50	**1258437**	**BT50CS32150M**	32	-	150
50	**1191764**	**BT50CS40070M**	40	-	70
50	**1191765**	**BT50CS40150M**	40	-	150
50	**1258438**	**BT50CS40200M**	40	-	200
50	**1258439**	**BT50CS50075M**	50	-	75
50	**1191766**	**BT50CS50150M**	50	-	150

Bar Blanks

Metric					
50	**1258386**	**BT50BB134250M**	-	134	250

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

Order example:
Catalog number: **BT50MT5105M**
Order number: **1191785**

DV40 Shank Tools

- Meets or exceeds DIN69871 specifications and all current standard updates.
- The 7/24 shank cones are produced to the highest industry standards, per ISO-1947. With a taper accuracy of AT3 or better, an optimum fit between spindle and toolholder is provided.
- Essential surfaces are not black-oxided, which provides better fitments.
- All non-critical surfaces are black-oxided, except for the high-performance toolholders.
- Wherever the toolholder design allows, through coolant is a standard feature.
- Depending on application and symmetry of toolholder assembly (toolholder, components, retention knob, collets, cutting tools, etc.) DV40 and DV50 toolholders will perform effectively up to 10,000 rpm before the complete toolholder assembly needs to be balanced. At speeds above 10,000 rpm, Kennametal recommends that the toolholder assembly be balanced.

IMPORTANT!

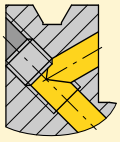
- All critical surfaces must be protected from damage. Neglect from dings and scratches will impair accuracy and performance.
- All assembly components must be clean. Never overtighten the components; this can permanently destroy the function and accuracy of the toolholder.

For retention knobs, please see page D50.

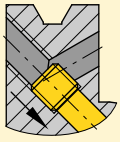
Form B coolant

Some toolholders are equipped with the form B coolant-style feature.

CAUTION!

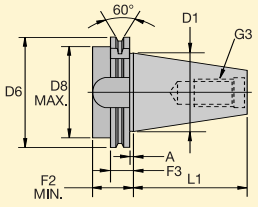


Toolholders are factory set to the form B coolant supply position. When relocating coolant position screws, use of a removable liquid (small screw thread locker) is recommended.



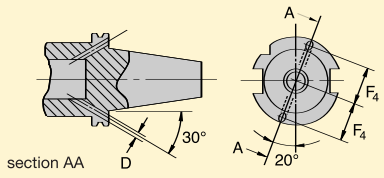
Possible variation of coolant supply to DIN 69871 form AD; tightening screws will stop coolant from escaping through the flange.

DIN 69871
DV Form A



	D1	D6	D8 Max.	L1	F2 min.	F3	A	G3
30	1.250 (31,75)	1.967 (49,95)	1.772 (45,00)	1.876 (47,65)	1.378 (35,00)	.750 (19,05)	.126 (3,20)	M12 thread
40	1.750 (44,45)	2.480 (63,00)	1.969 (50,00)	2.687 (68,25)	1.378 (35,00)	.750 (19,05)	.126 (3,20)	M16 thread
45	2.250 (57,15)	3.228 (82,00)	2.480 (63,00)	3.250 (82,55)	1.378 (35,00)	.750 (19,05)	.126 (3,20)	M20 thread
50	2.750 (69,85)	3.837 (97,45)	3.150 (80,00)	4.000 (101,60)	1.378 (35,00)	.750 (19,05)	.126 (3,20)	M24 thread

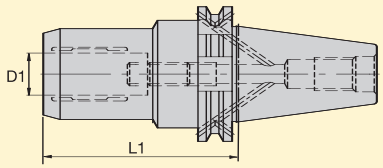
DIN 69871
DV Form B – Flange Coolant Entry Ports



	D	F4 ±.004
30	.157 (4,00)	.827 (21,00)
40	.157 (4,00)	1.063 (27,00)
45	.197 (5,00)	1.378 (35,00)
50	.236 (6,00)	1.654 (42,00)

Hydraulic Chucks – BASIC Line – Metric

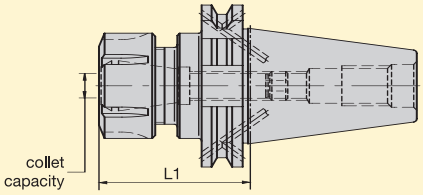
See page D41.



Order number	Catalog number	D1	L1
Metric			
40 **1599399**	**DV40BHCB20082M**	20	82

ER Single-Angle Collet Chucks – Metric

See page D46.



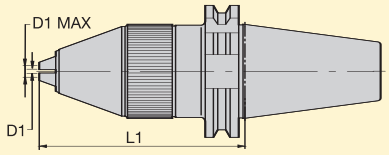
Order number	Catalog number	Collet Series	Collet Capacity min.	Collet Capacity max.	L1
Metric					
40 **1770957**	**DV40BER16070M**	16ER	0,5	10,0	70
40 **1770958**	**DV40BER16120M**	16ER	0,5	10,0	120
40 **1263807**	**DV40BER25065M**	25ER	1,0	16,0	65
40 **1263808**	**DV40BER25120M**	25ER	1,0	16,0	120
40 **1263809**	**DV40BER32070M**	32ER	2,0	20,0	70
40 **1263810**	**DV40BER32120M**	32ER	2,0	20,0	120
40 **1263811**	**DV40BER40080M**	40ER	3,0	26,0	80
40 **1263812**	**DV40BER40120M**	40ER	3,0	26,0	120

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

Order example:
Catalog number: **DV40BHCB20082M**
Order number: **1599399**

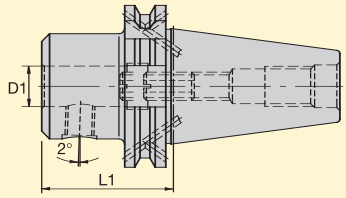
DV40 Shank Tools

Drill Chucks – Metric

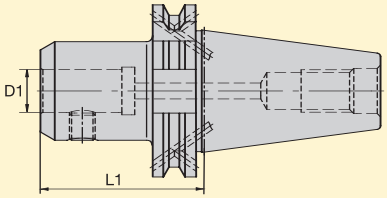


Order number	Catalog number	D1	D1 max.	L1
Metric				
40 **1124477**	**DV40REX1396M**	1,0	13	95,5
40 **1124486**	**DV40REX16112M**	2,5	16	109,5

Whistle Notch Adapters – Metric



End Mill Adapters – Metric



Whistle Notch Adapters

Order number	Catalog number	D1	L1
Metric			
40 **1135194**	**DV40BWN06050M**	6	50
40 **1135203**	**DV40BWN08050M**	8	50
40 **1135210**	**DV40BWN10050M**	10	50
40 **1135219**	**DV40BWN12050M**	12	50
40 **1135227**	**DV40BWN14050M**	14	50
40 **1135245**	**DV40BWN16063M**	16	63
40 **1135255**	**DV40BWN18063M**	18	63
40 **1135265**	**DV40BWN20063M**	20	63
40 **1134537**	**DV40BSWN25075M**	25	75
40 **1135273**	**DV40BWN25100M**	25	100
40 **1134538**	**DV40BSWN32075M**	32	75
40 **1135282**	**DV40BWN32100M**	32	100

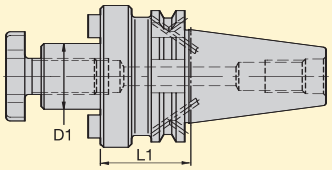
End Mill Adapters

Metric				
40	**1263781**	**DV40BEM06050M**	6	50
40	**1263784**	**DV40BEM08050M**	8	50
40	**1263787**	**DV40BEM10050M**	10	50
40	**1263790**	**DV40BEM12050M**	12	50
40	**1263796**	**DV40BEM16063M**	16	63
40	**1263799**	**DV40BEM20063M**	20	63
40	**1156378**	**DV40BEM25100M**	25	100
40	**1237816**	**DV40BEM32100M**	32	100

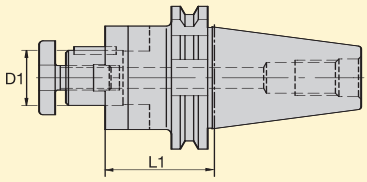
Order example:
Catalog number: **DV40REX1396M**
Order number: **1124477**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

Shell Mill Adapters – Metric



Combi Shell Mill Adapters – Metric



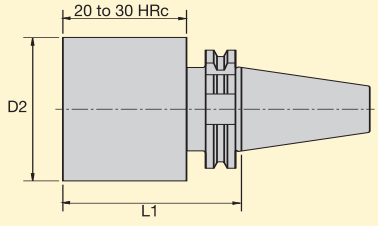
Shell Mill Adapters

	Order number	Catalog number	D1	L1
Metric				
40	**1839491**	**DV40BSM22035M**	22	35
40	**1839565**	**DV40BSM22100M**	22	100
40	**1839492**	**DV40BSM27035M**	27	35
40	**1839566**	**DV40BSM27100M**	27	100
40	**1839489**	**DV40BSM32050M**	32	50
40	**1839567**	**DV40BSM32100M**	32	100
40	**1839564**	**DV40BSM40050M**	40	50
40	**1839568**	**DV40BSM40100M**	40	100

Combi Shell Mill Adapters

Metric				
40	**1263828**	**DV40CS16055M**	16	55
40	**1191920**	**DV40CS16100M**	16	100
40	**1236436**	**DV40CS22055M**	22	55
40	**1191921**	**DV40CS22100M**	22	100
40	**1156379**	**DV40CS27055M**	27	55
40	**1263832**	**DV40CS27100M**	27	100
40	**1263833**	**DV40CS27150M**	27	150
40	**1191922**	**DV40CS32060M**	32	60
40	**1263835**	**DV40CS32100M**	32	100
40	**1191923**	**DV40CS40060M**	40	60

Bar Blanks – Metric

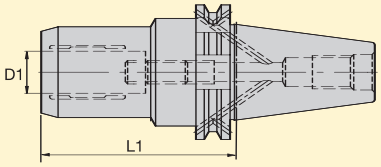


	Order number	Catalog number	D2	L1
Metric				
40	**1263773**	**DV40BB063280M**	63	280
40	**1263774**	**DV40BB082280M**	82	280
40	**1263775**	**DV40BB104200M**	104	200

Order example:
Catalog number: **DV40BSM22035M**
Order number: **1839491**

DV50 Shank Tools

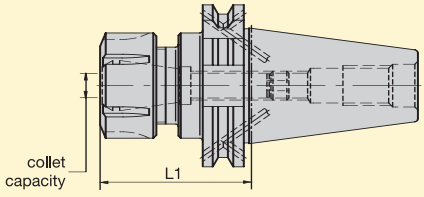
Hydraulic Chuck – BASIC Line – Metric



See page D41.

Order number	Catalog number	D1	L1
Metric			
50 **1599686**	**DV50BHCB20082M**	20	82

ER Single-Angle Collet Chucks – Metric



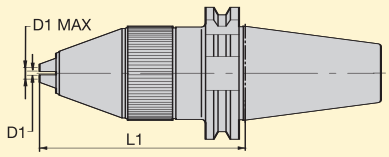
See page D46.

Order number	Catalog number	Collet Series	Collet Capacity min.	Collet Capacity max.	L1
Metric					
50 **1748235**	**DV50BER16100M**	16ER	0,5	10,0	100
50 **1972537**	**DV50BER16150M**	16ER	0,5	10,0	150
50 **1264126**	**DV50BER25070M**	25ER	1,0	16,0	70
50 **1264127**	**DV50BER25150M**	25ER	1,0	16,0	150
50 **1264128**	**DV50BER32070M**	32ER	2,0	20,0	70
50 **1264129**	**DV50BER32150M**	32ER	2,0	20,0	150
50 **1264130**	**DV50BER40080M**	40ER	3,0	26,0	80
50 **1264132**	**DV50BER40150M**	40ER	3,0	26,0	150

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

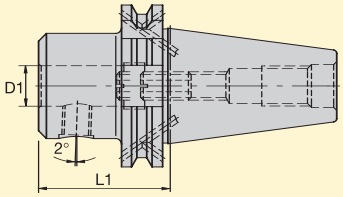
Order example:
Catalog number: **DV50BHCB20082M**
Order number: **1599686**

Drill Chucks



Order number	Catalog number	D1	D1 max.	L1
Metric				
50	**1156398**	**DV50REX1396M**	1,0	13	95,5
50	**1133416**	**DV50REX16112M**	2,5	16	111,5

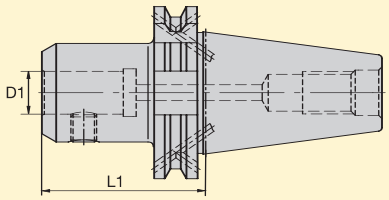
Whistle Notch Adapters – Metric



Whistle Notch Adapters

Order number	Catalog number	D1	L1
Metric			
50	**1136755**	**DV50BWN06063M**	6	63
50	**1136774**	**DV50BWN08063M**	8	63
50	**1136783**	**DV50BWN10063M**	10	63
50	**1191334**	**DV50BWN12063M**	12	63
50	**1136800**	**DV50BWN14063M**	14	63
50	**1136806**	**DV50BWN16063M**	16	63
50	**1136814**	**DV50BWN18063M**	18	63
50	**1136823**	**DV50BWN20063M**	20	63
50	**1134539**	**DV50BSWN25070M**	25	70
50	**1136842**	**DV50BWN25080M**	25	80
50	**1134540**	**DV50BSWN32070M**	32	70
50	**1136851**	**DV50BWN32100M**	32	100

End Mill Adapters – Metric



End Mill Adapters

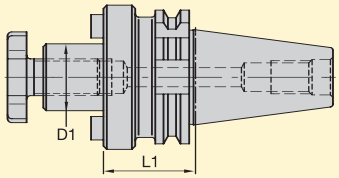
Order number	Catalog number	D1	L1
Metric			
50	**1264207**	**DV50EM06063M**	6	63
50	**1264208**	**DV50EM06150M**	6	150
50	**1264210**	**DV50EM08063M**	8	63
50	**1264212**	**DV50EM08150M**	8	150
50	**1264214**	**DV50EM10063M**	10	63
50	**1264216**	**DV50EM10150M**	10	150
50	**1191975**	**DV50EM12063M**	12	63
50	**1264219**	**DV50EM12150M**	12	150
50	**1191976**	**DV50EM16063M**	16	63
50	**1189666**	**DV50EM16150M**	16	150
50	**1264225**	**DV50EM20063M**	20	63
50	**1152193**	**DV50EM20150M**	20	150
50	**1191977**	**DV50EM25080M**	25	80
50	**1191978**	**DV50EM32100M**	32	100
50	**1264239**	**DV50EM40110M**	40	110
50	**1191979**	**DV50EM50120M**	50	120

Order example:
Catalog number: **DV50REX1396M**
Order number: **1156398**

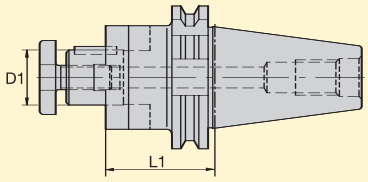
To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

DV50 Shank Tools

Shell Mill Adapters – Metric



Combi Shell Mill Adapters – Metric



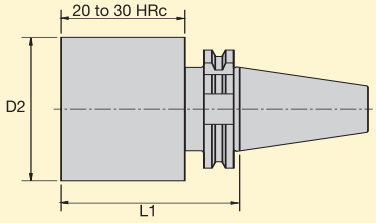
Shell Mill Adapters

	Order number	Catalog number	D1	L1
Metric				
50	**1264293**	**DV50SM16035M**	16	35
50	**1191990**	**DV50SM22035M**	22	35
50	**1156400**	**DV50SM22100M**	22	100
50	**1243965**	**DV50SM22150M**	22	150
50	**1191991**	**DV50SM27035M**	27	35
50	**1191992**	**DV50SM27100M**	27	100
50	**1264311**	**DV50SM27150M**	27	150
50	**1191993**	**DV50SM32035M**	32	35
50	**1264317**	**DV50SM32100M**	32	100
50	**1264318**	**DV50SM32150M**	32	150
50	**1104327**	**DV50SM40050M**	40	50
50	**1191994**	**DV50SM40100M**	40	100
50	**1191995**	**DV50SM40150M**	40	150
50	**1191996**	**DV50SM60070M**	60	70

Combi Shell Mill Adapters

	Order number	Catalog number	D1	L1
Metric				
50	**1264174**	**DV50CS16055M**	16	55
50	**1191972**	**DV50CS22055M**	22	55
50	**1264181**	**DV50CS22100M**	22	100
50	**1236218**	**DV50CS22150M**	22	150
50	**1191973**	**DV50CS27055M**	27	55
50	**1264185**	**DV50CS27100M**	27	100
50	**1264186**	**DV50CS27150M**	27	150
50	**1191974**	**DV50CS32055M**	32	55
50	**1264188**	**DV50CS32100M**	32	100
50	**1264189**	**DV50CS32150M**	32	150
50	**1188351**	**DV50CS40055M**	40	55
50	**1232559**	**DV50CS40100M**	40	100
50	**1264192**	**DV50CS40150M**	40	150
50	**1264194**	**DV50CS50075M**	50	75
50	**1264195**	**DV50CS50150M**	50	150

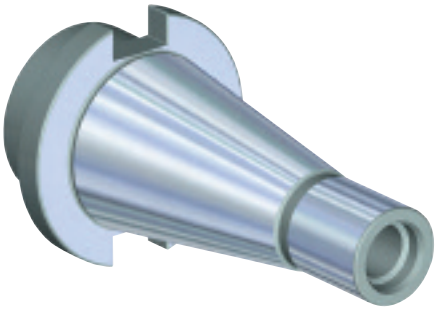
Bar Blanks – Metric



	Order number	Catalog number	D2	L1
Metric				
50	**1264076**	**DV50BB104350M**	104	350
50	**1123987**	**DV50BB134250M**	134	250

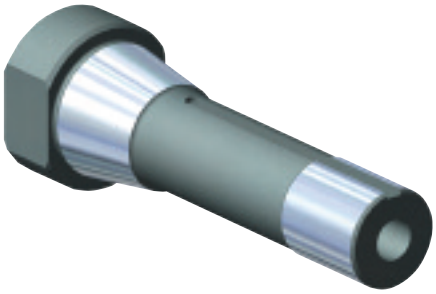
Order example:
Catalog number: **DV50SM16035M**
Order number: **1264293**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.



Quick Change 30, 40 & 50 Taper Sizes

- Quick-change (QC) shank design is similar to and interchangeable with NMTB shank tooling.
- Hub at the tail end of the taper cone houses the machine's draw bar bolt.
- Drive flange faces are precision ground to accommodate QC locknuts.
- QC locknuts can be retrofitted to manual-loading milling machine spindles to convert them to quick-change systems.
- Tapers are similar to the 7/24 shank cones of the CV, BT and DV tooling.
- Tapers are manufactured to the highest industry standards per ISO-1947.
- Taper accuracy provides optimum fit between spindle and toolholder.



R8 Taper Shank Tooling

- Locking groove aligns into a locking mechanism when inserted into the spindle.
- Milling machine draw bar bolt draws the tool into the spindle for a secure connection.

Straight Shank Tooling

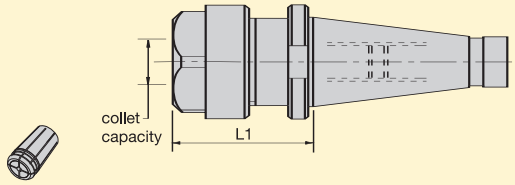
- Ideal for extending tool to get to those hard-to-reach spots that need machined.
- Use in combination with other toolholder and adapter systems.

General Notes:

- All non-critical surfaces are black-oxide.
- Coolant is standard feature as enabled by toolholder design.
- Collets, QC, R8, and straight shank toolholders perform effectively up to 8,000 rpm, depending on the application and unless stated otherwise. Kennametal recommends the toolholder assembly (toolholder, components, collets, cutting tools) be balanced when operating at speeds higher than 8,000 rpm.
- All critical surfaces need to be protected from damage. Neglect from dings and scratches from cutting edges will impair accuracy and performance.
- Make sure components are clean when assembled.
- Never overtighten toolholders. This can permanently destroy their function and accuracy.

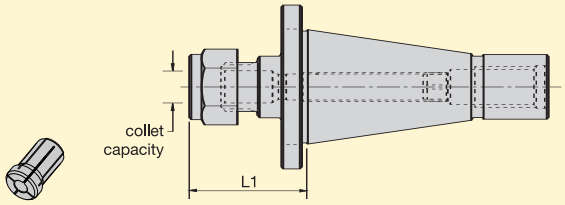
QC30 Shank Tools

TG Collet Chucks – Inch



See page D42.

DA Collet Chucks – Inch



See page D48.

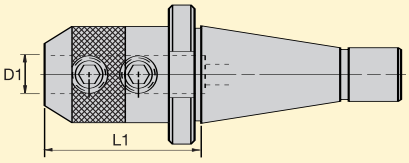
TG Collet Chucks

Order number	Catalog number	Collet Series	Collet Capacity min.	Collet Capacity max.	L1
Inch					
30	**1025640**	**QC30TG075253**	75TG	3/64	3/4	2.53
30	**1025641**	**QC30TG100394**	100TG	5/64	1	3.94

DA Collet Chucks

Inch						
30	**1015552**	**QC30DA308162**	300DA	1/64	1/4	1.62
30	**1015546**	**QC30DA208181**	200DA	1/64	25/64	1.81
30	**1015544**	**QC30DA108200**	100DA	1/64	9/16	2.00
30	**1015595**	**QC30DA188206**	180DA	1/64	3/4	2.06

End Mill Adapters – Inch

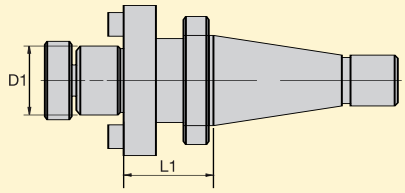


Order number	Catalog number	D1	L1
Inch			
30	**1018668**	**QC30EM018175**	3/16	1.75
30	**1018242**	**QC30EM025175**	1/4	1.75
30	**1018669**	**QC30EM038175**	3/8	1.75
30	**1018670**	**QC30EM050175**	1/2	1.75
30	**1018671**	**QC30EM062175**	5/8	1.75
30	**1018672**	**QC30EM075213**	3/4	2.13
30	**1018673**	**QC30EM088250**	7/8	2.50
30	**1018714**	**QC30EM100269**	1	2.69
30	**1018715**	**QC30EM125363**	1 1/4	3.63

Order example:
Catalog number: **QC30TG075253**
Order number: **1025640**

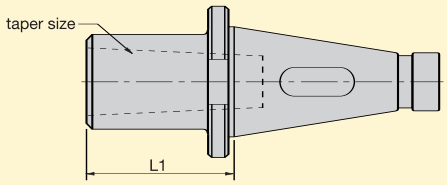
To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

Shell Mill Adapters – Inch

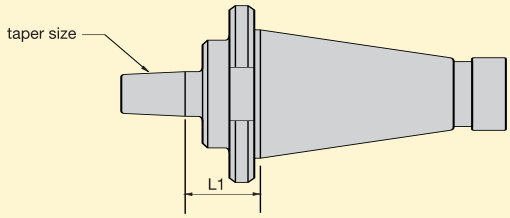


Inch	Order number	Catalog number	D1	L1
30	**1018716**	**QC30SM050125**	1/2	1.25
30	**1018717**	**QC30SM075131**	3/4	1.31
30	**1018718**	**QC30SM100131**	1	1.31
30	**1018719**	**QC30SM125144**	1 1/4	1.44
30	**1018720**	**QC30SM150156**	1 1/2	1.56

Morse Taper Adapters – Inch



Jacobs Taper Adapters – Inch



Morse Taper Adapters

Inch	Order number	Catalog number	Taper Size	L1
30	**1018721**	**QC30MT1100**	1	1.00
30	**1018722**	**QC30MT2212**	2	2.12
30	**1018723**	**QC30MT3281**	3	2.81

Jacobs Taper Adapters

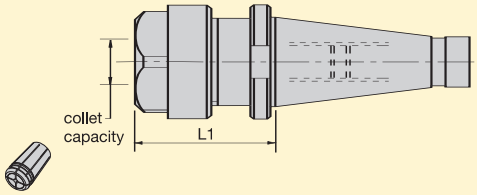
Inch				
30	**1018774**	**QC30JT1159**	1	.934
30	**1018775**	**QC30JT2181**	2	.935
30	**1018776**	**QC30JT3219**	3	.971
30	**1018779**	**QC30JT33197**	33	.970
30	**1018777**	**QC30JT4262**	4	.964
30	**1018778**	**QC30JT6197**	6	.970

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

Order example:
Catalog number: **QC30SM050125**
Order number: **1018716**

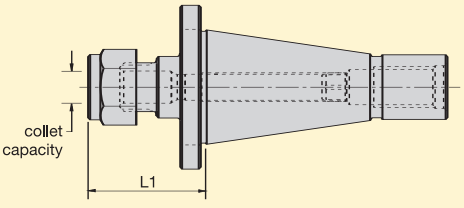
QC40 Shank Tools

TG Collet Chucks – Inch



See page D42.

DA Double-Angle Collet Chucks – Inch



See page D48.

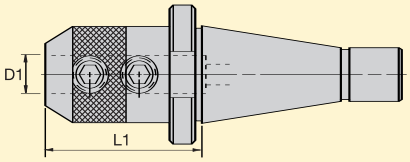
TG Collet Chucks

Order number	Catalog number	Collet Series	Collet Capacity min.	Collet Capacity max.	L1
Inch					
40	**1025642**	**QC40TG075211**	75TG	3/64	3/4	2.11
40	**1025643**	**QC40TG100255**	100TG	5/64	1	2.55
40	**1013525**	**QC40TG150450**	150TG	23/64	1 1/2	4.50

DA Double-Angle Collet Chucks

Inch						
40	**1015413**	**QC40DA308163**	300DA	1/64	1/4	1.62
40	**1015412**	**QC40DA208181**	200DA	1/64	25/64	1.79
40	**1015410**	**QC40DA108200**	100DA	1/64	9/16	2.00
40	**1015411**	**QC40DA188206**	180DA	1/64	3/4	2.06

End Mill Adapters – Inch

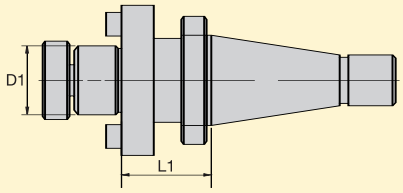


Order number	Catalog number	D1	L1
Inch			
40	**1018781**	**QC40EM018231**	3/16	2.31
40	**1018667**	**QC40EM025138**	1/4	1.38
40	**1018782**	**QC40EM038231**	3/8	2.31
40	**1018783**	**QC40EM050231**	1/2	2.31
40	**1018844**	**QC40EM062231**	5/8	2.31
40	**1018845**	**QC40EM075231**	3/4	2.31
40	**1018846**	**QC40EM088294**	7/8	2.94
40	**1018847**	**QC40EM100338**	1	3.38
40	**1018848**	**QC40EM125369**	1 1/4	3.69
40	**1019099**	**QC40EM150395**	1 1/2	3.95

Order example:
Catalog number: **QC40TG075211**
Order number: **1025642**

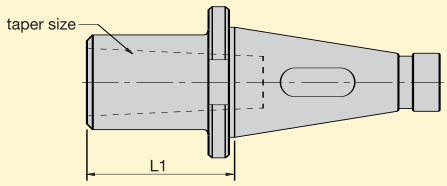
To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

Shell Mill Adapters – Inch

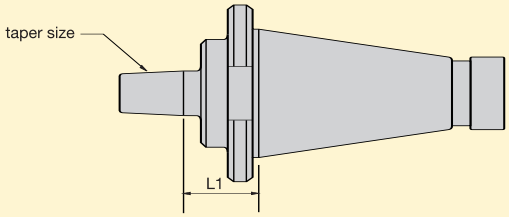


	Order number	Catalog number	D1	L1
Inch				
40	**1018849**	**QC40SM050088**	1/2	.88
40	**1018850**	**QC40SM075088**	3/4	.88
40	**1018851**	**QC40SM100131**	1	1.31
40	**1018852**	**QC40SM125150**	1 1/4	1.50
40	**1018853**	**QC40SM150163**	1 1/2	1.63
40	**1018904**	**QC40SM200163**	2	1.63

Morse Taper Adapters – Inch



Jacobs Taper Adapters – Inch



Morse Taper Adapters

	Order number	Catalog number	Taper Size	L1
Inch				
40	**1018905**	**QC40MT1094**	1	.94
40	**1018906**	**QC40MT2206**	2	2.06
40	**1018907**	**QC40MT3225**	3	2.25
40	**1018908**	**QC40MT4306**	4	3.06
40	**1019097**	**QC40MT5700**	5	7.00

Jacobs Taper Adapters

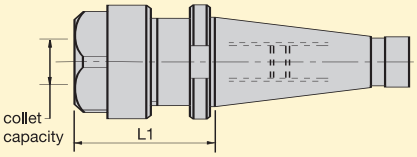
Inch				
40	**1018909**	**QC40JT2188**	2	1.005
40	**1018910**	**QC40JT3225**	3	1.031
40	**1018913**	**QC40JT33194**	33	.940
40	**1018911**	**QC40JT4269**	4	1.034
40	**1018912**	**QC40JT6194**	6	.940

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

Order example:
Catalog number: **QC40SM050088**
Order number: **1018849**

QC50 Shank Tools

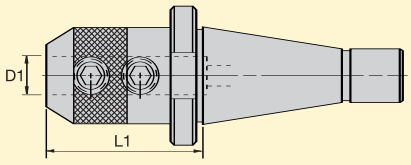
TG Collet Chucks – Inch



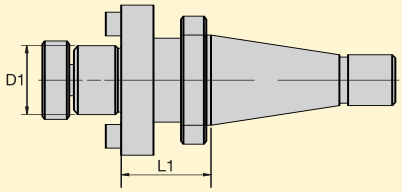
See page D42.

	Order number	Catalog number	Collet Series	Collet Capacity min.	Collet Capacity max.	L1
Inch						
50	**1025798**	**QC50TG100272**	100TG	5/64	1	2.72
50	**1013526**	**QC50TG150284**	150TG	23/64	1 1/2	2.84

End Mill Adapters – Inch



Shell Mill Adapters – Inch



End Mill Adapters

	Order number	Catalog number	D1	L1
Inch				
50	**1019096**	**QC50EM038275**	3/8	2.75
50	**1018979**	**QC50EM050275**	1/2	2.75
50	**1019101**	**QC50EM062275**	5/8	2.75
50	**1019100**	**QC50EM075275**	3/4	2.75
50	**1018980**	**QC50EM088200**	7/8	2.00
50	**1018981**	**QC50EM100306**	1	3.06
50	**1019102**	**QC50EM125306**	1 1/4	3.06
50	**1019145**	**QC50EM150350**	1 1/2	3.50
50	**1018982**	**QC50EM200475**	2	4.75

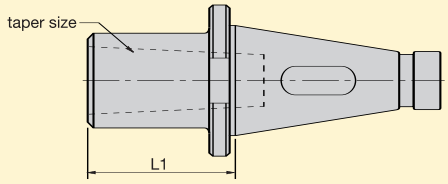
Shell Mill Adapters

	Order number	Catalog number	D1	L1
Inch				
50	**1925520**	**QC50SM050125**	1/2	1.25
50	**1018983**	**QC50SM075125**	3/4	1.25
50	**1019273**	**QC50SM075600**	3/4	6.00
50	**1019024**	**QC50SM100188**	1	1.88
50	**1019334**	**QC50SM100600**	1	6.00
50	**1019335**	**QC50SM100800**	1	8.00
50	**1019025**	**QC50SM125188**	1 1/4	1.88
50	**1019336**	**QC50SM125600**	1 1/4	6.00
50	**1019146**	**QC50SM150188**	1 1/2	1.88
50	**1019095**	**QC50SM200188**	2	1.88
50	**1019026**	**QC50SM250200**	2 1/2	2.00

Order example:
Catalog number: **QC50TG100272**
Order number: **1025798**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

Morse Taper Adapters – Inch



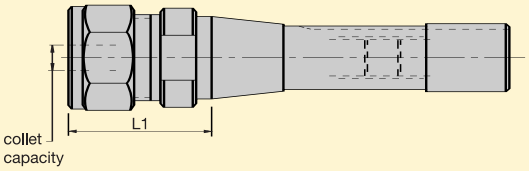
	Order number	Catalog number	Taper Size	L1
Inch				
50	**1019027**	**QC50MT2188**	2	1.88
50	**1019028**	**QC50MT3238**	3	2.38
50	**1019029**	**QC50MT4325**	4	3.25
50	**1019030**	**QC50MT5462**	5	4.62

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

Order example:
Catalog number: **QC50MT2188**
Order number: **1019027**

R8 Shank Tools

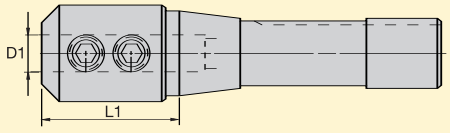
DA Double-Angle Collet Chucks – Inch



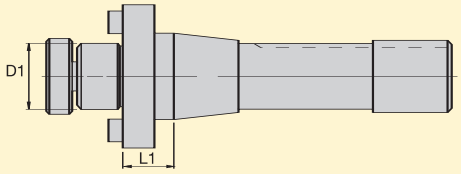
See page D48.

	Order number	Catalog number	Collet Series	Collet Capacity min.	Collet Capacity max.	L1
Inch						
R8	**1015548**	**R8DA188181**	180DA	1/64	3/4	1.81

End Mill Adapters – Inch



Shell Mill Adapters – Inch



End Mill Adapters

	Order number	Catalog number	D1	L1
Inch				
R8	**1286048**	**R8EM018112**	3/16	1.12
R8	**1286049**	**R8EM038100**	3/8	1.00
R8	**1286050**	**R8EM050112**	1/2	1.12
R8	**1286051**	**R8EM062150**	5/8	1.50
R8	**1229174**	**R8EM075262**	3/4	2.62
R8	**1286052**	**R8EM088306**	7/8	3.06
R8	**1286053**	**R8EM100306**	1	3.06
R8	**1286054**	**R8EM125306**	1 1/4	3.06

Shell Mill Adapters

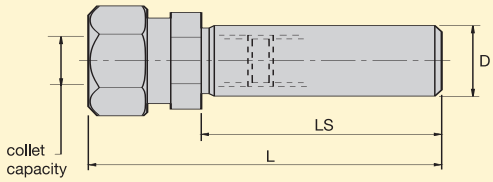
Inch				
R8	**1286058**	**R8SM050102**	1/2	1.02
R8	**1286059**	**R8SM075102**	3/4	1.02
R8	**1286060**	**R8SM100102**	1	1.02
R8	**1286061**	**R8SM125102**	1 1/4	1.02

Order example:
Catalog number: **R8DA188181**
Order number: **1015548**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

TG Collet Chucks – Inch

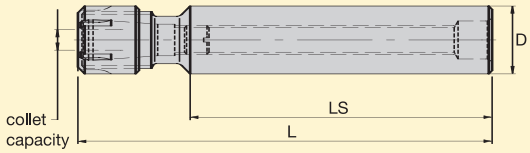
See page D42.



D	Order number	Catalog number	Collet Series	Collet Capacity min.	Collet Capacity max.	L	LS
Inch							
1.000	**1025637**	**SS100TG050698G**	50TG	3/64	17/32	6.98	5.50
1.000	**1082537**	**SS100TG050719**	50TG	3/64	17/32	7.19	5.50
1.250	**1025794**	**SS125TG075850**	75TG	1/16	3/4	8.50	6.00
1.500	**1025797**	**SS150TG075775**	75TG	1/16	3/4	7.75	6.02
1.500	**1025638**	**SS150TG100925**	100TG	3/32	1	9.25	6.00
1.750	**1025796**	**SS175TG100819**	100TG	3/32	1	8.19	6.02
2.000	**1025795**	**SS200TG100819**	100TG	3/32	1	8.19	6.02

ER Single-Angle Collet Chucks

See page D46.

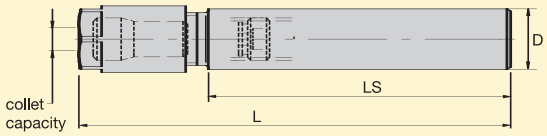


D	Order number	Catalog number	Collet Series	Collet Capacity min.	Collet Capacity max.	L	LS
Inch							
.375	**1021460**	**SS038ER08500**	8ER	.020	.197	5.00	4.14
.500	**1021462**	**SS050ER11700**	11ER	.020	.276	7.00	5.51
.750	**1021494**	**SS075ER16700**	16ER	.020	.406	7.00	5.51
1.000	**1021496**	**SS100ER20700**	20ER	.020	.512	7.00	5.51
1.000	**1021498**	**SS100ER25750**	25ER	.040	.630	7.50	5.69
Metric							
12,0	**1288261**	**SS120ER11107M**	11ER	0,5	7,0	107,0	80,0
16,0	**1288285**	**SS160ER11132M**	11ER	0,5	7,0	132,0	100,0
20,0	**1125015**	**SS200ER16182M**	16ER	0,5	10,0	182,0	140,0
20,0	**1288303**	**SS200ER25146M**	25ER	1,0	16,0	146,0	100,0
20,0	**1288304**	**SS200ER32154M**	32ER	2,0	20,0	154,0	100,0
25,0	**1288321**	**SS250ER20190M**	20ER	0,5	13,0	190,0	150,0

To place an order, contact your authorized
Kennametal distributor or visit www.kennametal.com.

Order example:
Catalog number: **SS100TG050698G**
Order number: **1025637**

DA 04-Style Double-Angle Collet Chucks



See page D48.

D	Order number	Catalog number	Collet Series	Collet Capacity min.	Collet Capacity max.	L	LS
Inch							
.500	**1015308**	**SS050DA304438**	300DA	1/64	1/4	4.38	3.00
.500	**1015311**	**SS050DA304681**	300DA	1/64	1/4	6.81	5.42
.750	**1015334**	**SS075DA204469**	200DA	1/64	25/64	4.69	3.03
.750	**1015337**	**SS075DA204712**	200DA	1/64	25/64	7.12	5.50
1.000	**1015338**	**SS100DA104488**	100DA	1/64	9/16	4.88	2.97
1.000	**1015342**	**SS100DA104731**	100DA	1/64	9/16	7.31	5.40
1.250	**1015517**	**SS125DA184738**	180DA	1/64	3/4	7.38	5.41
Metric							
12,5	**1015037**	**SS125DA304109M**	300DA	0,2	6,0	109,0	72,4
12,5	**1015038**	**SS125DA304173M**	300DA	0,2	6,0	173,0	136,4
19,0	**1015034**	**SS190DA204117M**	200DA	0,2	10,0	117,0	73,9
19,0	**1015013**	**SS190DA204181M**	200DA	0,2	10,0	181,0	137,9
20,0	**1015035**	**SS200DA204117M**	200DA	0,2	10,0	117,0	73,9
20,0	**1015036**	**SS200DA204181M**	200DA	0,2	10,0	181,0	137,9
25,0	**1015011**	**SS250DA104122M**	100DA	1,7	14,0	122,0	72,9
25,0	**1015012**	**SS250DA104186M**	100DA	1,7	14,0	186,0	136,9

Toolholders and Adapters: Tech Tips

The toolholder and adapter are a crucial component of the complete machining setup, where any problem in this area could ruin a workpiece. Please review the following areas of concern:

Cleanliness

Mounting surfaces of toolholders and adapters must be clean and free of any nicks or gouges that might affect radial and or axial runout.

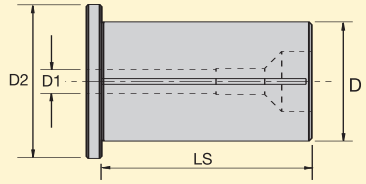
Storage

Toolholders and adapters should always be stored safely in a dry, clean atmosphere, where the mounting surfaces are protected and not allowed to be damaged by rolling around.

Toolholder and Adapter Length

Always use the shortest possible shell mill, end mill, or collet-style adapter to obtain the best possible rigidity. Deep-pocket milling may require longer adapters, which in turn require lower speed, feed rates, and depth-of-cut to eliminate chatter.

Order example:
Catalog number: **SS050DA304438**
Order number: **1015308**



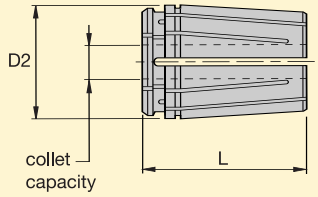
D1	12HC D = 12 mm D2 = 21 mm LS = 41,5 mm Order number	Catalog number	20HC D = 20 mm D2 = 29 mm LS = 46,5 mm Order number	Catalog number	32HC D = 32 mm D2 = 41 mm LS = 57,5 mm Order number	Catalog number
Metric with Metric Bores						
3,0	**1984810**	**280.476**	**1984811**	**280.475**		
4,0	**1156790**	**280.473**	**1156793**	**280.474**		
6,0	**1125003**	**280.455**	**1125021**	**280.458**		
8,0	**1156792**	**280.456**	**1156804**	**280.459**		
10,0	**1125014**	**280.457**	**1156805**	**280.460**		
12,0			**1156416**	**280.461**		
14,0			**1156806**	**280.462**		
16,0			**1125040**	**280.463**	**1125047**	**280.469**
18,0					**1156807**	**280.470**
20,0					**1156808**	**280.471**
25,0					**1125057**	**280.472**
Metric with Inch Bores						
3/16			**1093566**	**20HCM0188**		
1/4			**1093567**	**20HCM0250**		
5/16			**1093568**	**20HCM0312**		
3/8			**1093569**	**20HCM0375**		
7/16			**1093570**	**20HCM0438**		
1/2			**1093571**	**20HCM0500**	**1093594**	**32HCM0500**
9/16			**1093572**	**20HCM0562**	**1093595**	**32HCM0562**
5/8			**1093573**	**20HCM0625**	**1093596**	**32HCM0625**
11/16					**1093597**	**32HCM0688**
3/4					**1093598**	**32HCM0750**
7/8					**1093599**	**32HCM0875**
1					**1093600**	**32HCM1000**

D1	50HC D = .500 in. D2 = .827 in. LS = 1.634 in. Order number	Catalog number	75HC D = .750 in. D2 = 1.142 in. LS = 1.831 in. Order number	Catalog number	12HC D = 1.250 in. D2 = 1.614 in. LS = 2.264 in. Order number	Catalog number
Inch with Metric Bores						
3,0	**2248993**	**50HC030M**	**2248995**	**75HC030M**		
4,0	**1606050**	**50HC040M**	**2248996**	**75HC040M**		
5,0	**2248994**	**50HC050M**	**2248997**	**75HC050M**		
6,0	**1606061**	**50HC060M**	**1093271**	**75HC060M**		
8,0	**1606062**	**50HC080M**	**1093272**	**75HC080M**		
10,0	**1606064**	**50HC100M**	**1093273**	**75HC100M**		
12,0			**1093524**	**75HC120M**		
14,0			**1093525**	**75HC140M**		
16,0			**1093526**	**75HC160M**	**1093538**	**12HC160M**
18,0					**1093539**	**12HC180M**
20,0					**1093540**	**12HC200M**
25,0					**1093541**	**12HC250M**
Inch with Inch Bores						
1/8	**2248951**	**50HC0125**	**1937870**	**75HC0125**		
3/16	**1606046**	**50HC0188**	**1093496**	**75HC0188**		
1/4	**1606047**	**50HC0250**	**1093497**	**75HC0250**		
5/16	**1606048**	**50HC0312**	**1093498**	**75HC0312**		
3/8	**1606049**	**50HC0375**	**1093500**	**75HC0375**		
7/16			**1093501**	**75HC0438**		
1/2			**1093268**	**75HC0500**	**1093527**	**12HC0500**
9/16			**1093269**	**75HC0562**	**1093528**	**12HC0562**
5/8			**1093270**	**75HC0625**	**1093529**	**12HC0625**
11/16					**1093530**	**12HC0688**
3/4					**1093533**	**12HC0750**
13/16					**2248952**	**12HC0812**
7/8					**1093535**	**12HC0875**
1					**1093536**	**12HC1000**

Collets and Sleeves

TG Collets

TG 50 – Inch and Metric



Collet Capacity	50TG Standard D2 = .760 in. L = 1.438 in. Order number	Catalog number
Inch		
3/64	**1014266**	**50TG0047**
1/16	**1014269**	**50TG0062**
5/64	**1014267**	**50TG0078**
3/32	**1013719**	**50TG0094**
7/64	**1013722**	**50TG0109**
1/8	**1013686**	**50TG0125**
9/64	**1013747**	**50TG0141**
5/32	**1013687**	**50TG0156**
11/64	**1013751**	**50TG0172**
3/16	**1013689**	**50TG0188**
13/64	**1013776**	**50TG0203**
7/32	**1013690**	**50TG0219**
15/64	**1013781**	**50TG0234**
1/4	**1013691**	**50TG0250**
17/64	**1013796**	**50TG0266**
9/32	**1013692**	**50TG0281**
19/64	**1013801**	**50TG0297**
5/16	**1013834**	**50TG0312**
21/64	**1013836**	**50TG0328**
11/32	**1013839**	**50TG0344**
23/64	**1013842**	**50TG0359**
3/8	**1014268**	**50TG0375**
25/64	**1013858**	**50TG0391**
13/32	**1013861**	**50TG0406**
27/64	**1013874**	**50TG0422**
7/16	**1013714**	**50TG0438**
29/64	**1013879**	**50TG0453**
15/32	**1013715**	**50TG0469**
31/64	**1013914**	**50TG0484**
1/2	**1014232**	**50TG0500**
33/64	**1013920**	**50TG0516**
17/32	**1014272**	**50TG0531**

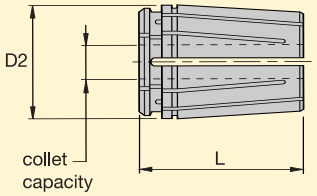
Collet Capacity	50TG Standard D2 = 19,30 mm L = 36,53 mm Order number	Catalog number
Metric		
1,50	**1105225**	**50TG015M**
2,00	**1105226**	**50TG020M**
2,50	**1105127**	**50TG025M**
3,00	**1105128**	**50TG030M**
3,50	**1105129**	**50TG035M**
4,00	**1105130**	**50TG040M**
4,50	**1105334**	**50TG045M**
5,00	**1105131**	**50TG050M**
5,50	**1105132**	**50TG055M**
6,00	**1105133**	**50TG060M**
6,50	**1105234**	**50TG065M**
7,00	**1105228**	**50TG070M**
7,50	**1105229**	**50TG075M**
8,00	**1105231**	**50TG080M**
8,50	**1105232**	**50TG085M**
9,00	**1105233**	**50TG090M**
9,50	**1105244**	**50TG095M**
10,00	**1105245**	**50TG100M**
10,50	**1105246**	**50TG105M**
11,00	**1105247**	**50TG110M**
11,50	**1105248**	**50TG115M**
12,00	**1105249**	**50TG120M**
12,50	**1105251**	**50TG125M**
13,00	**1105252**	**50TG130M**
13,50	**1105253**	**50TG135M**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

Order example:
Catalog number: **50TG0047**
Order number: **1014266**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

TG 75 – Inch and Metric



Collet Capacity	75TG Standard D2 = 1.062 in. L = 1.844 in. Order number	Catalog number
Inch		
1/16	**1013717**	**75TG0062**
5/64	**1013718**	**75TG0078**
3/32	**1013720**	**75TG0094**
7/64	**1013723**	**75TG0109**
1/8	**1013745**	**75TG0125**
9/64	**1013748**	**75TG0141**
5/32	**1013688**	**75TG0156**
11/64	**1013752**	**75TG0172**
3/16	**1013774**	**75TG0188**
13/64	**1013777**	**75TG0203**
7/32	**1013779**	**75TG0219**
15/64	**1013782**	**75TG0234**
1/4	**1013794**	**75TG0250**
17/64	**1013797**	**75TG0266**
9/32	**1013799**	**75TG0281**
19/64	**1013802**	**75TG0297**
5/16	**1013693**	**75TG0312**
21/64	**1013837**	**75TG0328**
11/32	**1013840**	**75TG0344**
23/64	**1013843**	**75TG0359**
3/8	**1013855**	**75TG0375**
13/32	**1013862**	**75TG0406**
27/64	**1013875**	**75TG0422**
7/16	**1013877**	**75TG0438**
29/64	**1013880**	**75TG0453**
15/32	**1013882**	**75TG0469**
31/64	**1013915**	**75TG0484**
1/2	**1013917**	**75TG0500**
33/64	**1013921**	**75TG0516**
17/32	**1013934**	**75TG0531**
35/64	**1013937**	**75TG0547**
9/16	**1013940**	**75TG0562**
37/64	**1013943**	**75TG0578**
19/32	**1013975**	**75TG0594**
39/64	**1013978**	**75TG0609**
5/8	**1013980**	**75TG0625**
41/64	**1013983**	**75TG0641**
21/32	**1013995**	**75TG0656**
43/64	**1013998**	**75TG0672**
11/16	**1014000**	**75TG0688**
45/64	**1014003**	**75TG0703**
23/32	**1014025**	**75TG0719**
47/64	**1013716**	**75TG0734**
3/4	**1014030**	**75TG0750**

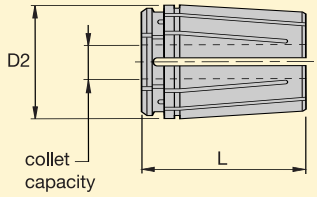
Collet Capacity	75TG Standard D2 = 26,98 mm L = 46,84 mm Order number	Catalog number
Metric		
3,0	**1014554**	**75TG030M**
3,5	**1014555**	**75TG035M**
4,0	**1014556**	**75TG040M**
4,5	**1014557**	**75TG045M**
5,0	**1014558**	**75TG050M**
5,5	**1014559**	**75TG055M**
6,0	**1014560**	**75TG060M**
6,5	**1014561**	**75TG065M**
7,0	**1014562**	**75TG070M**
7,5	**1014563**	**75TG075M**
8,0	**1014594**	**75TG080M**
8,5	**1014595**	**75TG085M**
9,0	**1014596**	**75TG090M**
9,5	**1014597**	**75TG095M**
10,0	**1014533**	**75TG100M**
10,5	**1014598**	**75TG105M**
11,0	**1014599**	**75TG110M**
11,5	**1014600**	**75TG115M**
12,0	**1014601**	**75TG120M**
12,5	**1014602**	**75TG125M**
13,0	**1014603**	**75TG130M**
13,5	**1014624**	**75TG135M**
14,0	**1014625**	**75TG140M**
14,5	**1014626**	**75TG145M**
15,0	**1014627**	**75TG150M**
15,5	**1014628**	**75TG155M**
16,0	**1014629**	**75TG160M**
16,5	**1014630**	**75TG165M**
17,0	**1014631**	**75TG170M**
17,5	**1014632**	**75TG175M**
18,0	**1014633**	**75TG180M**
18,5	**1014654**	**75TG185M**
19,0	**1014655**	**75TG190M**
19,5	**1014656**	**75TG195M**
20,0	**1014657**	**75TG200M**

Order example:
Catalog number: **75TG0062**
Order number: **1013717**

Collets and Sleeves

TG Collets

TG 100 – Inch and Metric



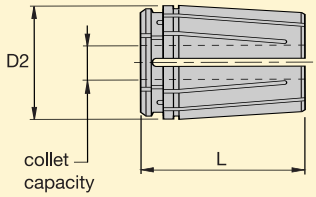
Collet Capacity	100TG Standard D2 = 1.379 in. L = 2.375 in. Order number	Catalog number
Inch		
3/32	**1013721**	**100TG0094**
7/64	**1013744**	**100TG0109**
1/8	**1013746**	**100TG0125**
9/64	**1013749**	**100TG0141**
5/32	**1013750**	**100TG0156**
11/64	**1013753**	**100TG0172**
3/16	**1013775**	**100TG0188**
13/64	**1013778**	**100TG0203**
7/32	**1013780**	**100TG0219**
15/64	**1013783**	**100TG0234**
1/4	**1013795**	**100TG0250**
17/64	**1013798**	**100TG0266**
9/32	**1013800**	**100TG0281**
19/64	**1013803**	**100TG0297**
5/16	**1013835**	**100TG0312**
21/64	**1013838**	**100TG0328**
11/32	**1013841**	**100TG0344**
23/64	**1013854**	**100TG0359**
3/8	**1013856**	**100TG0375**
25/64	**1013860**	**100TG0391**
13/32	**1013863**	**100TG0406**
27/64	**1013876**	**100TG0422**
7/16	**1013878**	**100TG0438**
29/64	**1013881**	**100TG0453**
15/32	**1013883**	**100TG0469**
31/64	**1013916**	**100TG0484**
1/2	**1013918**	**100TG0500**
33/64	**1013922**	**100TG0516**
17/32	**1013935**	**100TG0531**
35/64	**1013938**	**100TG0547**
9/16	**1013941**	**100TG0562**
37/64	**1013974**	**100TG0578**
19/32	**1013976**	**100TG0594**
39/64	**1013979**	**100TG0609**
5/8	**1013981**	**100TG0625**
41/64	**1013994**	**100TG0641**
21/32	**1013996**	**100TG0656**
43/64	**1013999**	**100TG0672**
11/16	**1014001**	**100TG0688**
45/64	**1014024**	**100TG0703**
23/32	**1014026**	**100TG0719**
47/64	**1014028**	**100TG0734**
3/4	**1014031**	**100TG0750**
49/64	**1014033**	**100TG0766**
25/32	**1014044**	**100TG0781**
51/64	**1014046**	**100TG0797**
13/16	**1014047**	**100TG0812**
53/64	**1014049**	**100TG0828**
27/32	**1014050**	**100TG0844**
55/64	**1014052**	**100TG0859**
7/8	**1014053**	**100TG0875**
57/64	**1014075**	**100TG0891**
29/32	**1014076**	**100TG0906**
59/64	**1014078**	**100TG0922**
15/16	**1014079**	**100TG0938**
61/64	**1014081**	**100TG0953**
31/32	**1014082**	**100TG0969**
63/64	**1014104**	**100TG0984**
1	**1014105**	**100TG1000**

Collet Capacity	100TG Standard D2 = 35,03 mm L = 60,33 mm Order number	Catalog number
Metric		
3,0	**1014659**	**100TG030M**
3,5	**1014660**	**100TG035M**
4,0	**1014661**	**100TG040M**
4,5	**1014662**	**100TG045M**
5,0	**1014663**	**100TG050M**
5,5	**1014694**	**100TG055M**
6,0	**1014695**	**100TG060M**
6,5	**1014696**	**100TG065M**
7,0	**1014697**	**100TG070M**
7,5	**1014698**	**100TG075M**
8,0	**1014699**	**100TG080M**
8,5	**1014700**	**100TG085M**
9,0	**1014701**	**100TG090M**
9,5	**1014702**	**100TG095M**
10,0	**1014703**	**100TG100M**
10,5	**1014714**	**100TG105M**
11,0	**1014715**	**100TG110M**
11,5	**1014716**	**100TG115M**
12,0	**1014717**	**100TG120M**
12,5	**1014718**	**100TG125M**
13,0	**1014719**	**100TG130M**
13,5	**1014720**	**100TG135M**
14,0	**1014721**	**100TG140M**
14,5	**1014722**	**100TG145M**
15,0	**1014723**	**100TG150M**
15,5	**1014744**	**100TG155M**
16,0	**1014745**	**100TG160M**
16,5	**1014746**	**100TG165M**
17,0	**1014747**	**100TG170M**
17,5	**1014748**	**100TG175M**
18,0	**1014749**	**100TG180M**
18,5	**1014750**	**100TG185M**
19,0	**1014751**	**100TG190M**
19,5	**1014752**	**100TG195M**
20,0	**1014753**	**100TG200M**
20,5	**1014774**	**100TG205M**
21,0	**1014775**	**100TG210M**
21,5	**1014776**	**100TG215M**
22,0	**1014777**	**100TG220M**
22,5	**1014778**	**100TG225M**
23,0	**1014779**	**100TG230M**
23,5	**1014780**	**100TG235M**
24,0	**1014781**	**100TG240M**
24,5	**1014782**	**100TG245M**
25,0	**1014783**	**100TG250M**
25,5	**1014814**	**100TG255M**

Order example:
Catalog number: **100TG0094**
Order number: **1013721**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

TG 150 – Inch and Metric



Collet Capacity	150TG Standard D2 = 2.000 in. L = 3.000 in. Order number	Catalog number
Inch		
3/8	**1013857**	**150TG0375**
25/64	**1029094**	**150TG0391**
13/32	**1029095**	**150TG0406**
27/64	**1029096**	**150TG0422**
7/16	**2420208**	**150TG0438**
29/64	**1092283**	**150TG0453**
15/32	**1083003**	**150TG0468**
31/64	**1029099**	**150TG0484**
1/2	**1013919**	**150TG0500**
33/64	**1013923**	**150TG0516**
17/32	**1013936**	**150TG0531**
35/64	**1013939**	**150TG0547**
9/16	**1013942**	**150TG0562**
37/64	**1014290**	**150TG0578**
19/32	**1013977**	**150TG0594**
39/64	**1014291**	**150TG0609**
5/8	**1013982**	**150TG0625**
41/64	**1014292**	**150TG0641**
21/32	**1013997**	**150TG0656**
43/64	**1014293**	**150TG0672**
11/16	**1014002**	**150TG0688**
45/64	**1014273**	**150TG0703**
23/32	**1014027**	**150TG0719**
47/64	**1014029**	**150TG0734**
3/4	**1014032**	**150TG0750**
49/64	**1014314**	**150TG0766**
25/32	**1014045**	**150TG0781**
51/64	**1014288**	**150TG0797**
13/16	**1014048**	**150TG0812**
53/64	**1014285**	**150TG0828**
27/32	**1014051**	**150TG0844**
55/64	**1014315**	**150TG0859**
7/8	**1014074**	**150TG0875**
57/64	**1014316**	**150TG0891**
29/32	**1014077**	**150TG0906**
59/64	**1014317**	**150TG0922**
15/16	**1014080**	**150TG0938**
61/64	**1014318**	**150TG0953**
31/32	**1014083**	**150TG0969**
63/64	**1014289**	**150TG0984**
1	**1014106**	**150TG1000**
1 1/64	**1014286**	**150TG1016**
1 1/32	**1014108**	**150TG1031**
1 3/64	**1014265**	**150TG1047**
1 1/16	**1014109**	**150TG1062**
1 5/64	**1014110**	**150TG1078**
1 3/32	**1014111**	**150TG1094**
1 7/64	**1014264**	**150TG1109**
1 1/8	**1014112**	**150TG1125**
1 9/64	**1014319**	**150TG1141**
1 5/32	**1014113**	**150TG1156**
1 11/64	**1014287**	**150TG1172**
1 3/16	**1014134**	**150TG1187**
1 13/64	**1014233**	**150TG1203**
1 7/32	**1014135**	**150TG1219**
1 15/64	**1014136**	**150TG1234**
1 1/4	**1014137**	**150TG1250**
1 17/64	**1014139**	**150TG1266**

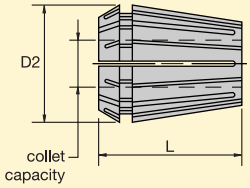
Collet Capacity	150TG Standard D2 = 2.000 in. L = 3.000 in. Order number	Catalog number
Inch		
1 9/32	**1014140**	**150TG1281**
1 19/64	**1014320**	**150TG1297**
1 5/16	**1014141**	**150TG1312**
1 21/64	**1014321**	**150TG1328**
1 11/32	**1014142**	**150TG1344**
1 23/64	**1014322**	**150TG1359**
1 3/8	**1014143**	**150TG1375**
1 25/64	**1014323**	**150TG1391**
1 13/32	**1014164**	**150TG1406**
1 27/64	**1014165**	**150TG1422**
1 7/16	**1014166**	**150TG1438**
1 29/64	**1014167**	**150TG1453**
1 15/32	**1014168**	**150TG1469**
1 31/64	**1014169**	**150TG1484**
1 1/2	**1014170**	**150TG1500**

Collet capacity	150TG Standard D2 = 50,83 mm L = 76,20 mm Order number	Catalog number
Metric		
12,00	**1014815**	**150TG120M**
12,50	**1014816**	**150TG125M**
13,00	**1014817**	**150TG130M**
13,50	**1014818**	**150TG135M**
14,00	**1014819**	**150TG140M**
14,50	**1014820**	**150TG145M**
15,00	**1014821**	**150TG150M**
15,50	**1014822**	**150TG155M**
16,00	**1014823**	**150TG160M**
16,50	**1014844**	**150TG165M**
17,00	**1014845**	**150TG170M**
17,50	**1014846**	**150TG175M**
18,00	**1014847**	**150TG180M**
18,50	**1014848**	**150TG185M**
19,00	**1014849**	**150TG190M**
19,50	**1014850**	**150TG195M**
20,00	**1014851**	**150TG200M**
20,50	**1014852**	**150TG205M**
21,00	**1014853**	**150TG210M**
21,50	**1014874**	**150TG215M**
22,00	**1014875**	**150TG220M**
22,50	**1014876**	**150TG225M**
23,00	**1014877**	**150TG230M**
23,50	**1014878**	**150TG235M**
24,00	**1014879**	**150TG240M**
24,50	**1014880**	**150TG245M**
25,00	**1014881**	**150TG250M**
25,50	**1014882**	**150TG255M**
26,00	**1014883**	**150TG260M**
26,50	**1014914**	**150TG265M**
27,00	**1014915**	**150TG270M**
27,50	**1014916**	**150TG275M**
28,00	**1014917**	**150TG280M**
28,50	**1014918**	**150TG285M**
29,00	**1014919**	**150TG290M**
29,50	**1014920**	**150TG295M**
30,00	**1014921**	**150TG300M**
30,50	**1014922**	**150TG305M**
31,00	**1014923**	**150TG310M**
31,50	**1014944**	**150TG315M**
32,00	**1014945**	**150TG320M**
32,50	**1014946**	**150TG325M**
33,00	**1014947**	**150TG330M**
33,50	**1014948**	**150TG335M**
34,00	**1014949**	**150TG340M**
34,50	**1014950**	**150TG345M**
35,00	**1014951**	**150TG350M**
35,50	**1014952**	**150TG355M**
36,00	**1014953**	**150TG360M**
36,50	**1014964**	**150TG365M**
37,00	**1014965**	**150TG370M**
37,50	**1014966**	**150TG375M**
38,00	**1014967**	**150TG380M**
38,50	**1014968**	**150TG385M**
39,00	**1014969**	**150TG390M**
39,50	**1014970**	**150TG395M**
40,00	**1014971**	**150TG400M**

Collets and Sleeves

ER Series Collets – Inch

DIN 6499 form B



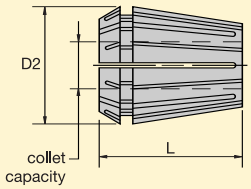
Maximum collapse is .040.

Collet Capacity			ER16 D2 = .669 in. L = 1.083 in.		ER20 D2 = .827 in. L = 1.240 in.		ER25 D2 = 1.024 in. L = 1.339 in.		ER32 D2 = 1.299 in. L = 1.575 in.		ER40 D2 = 1.614 in. L = 1.811 in.		
	range		Order number	Catalog number	Order number	Catalog number	Order number	Catalog number	Order number	Catalog number	Order number	Catalog number	Collet Capacity
fraction	max.	min.											
1/16	.0625	.0225	**1730499**	**16ER0062**	**1730500**	**20ER0062**	**1949805**	**25ER0062**					1/16
3/32	.0938	.0538	**1949904**	**16ER0094**	**2269917**	**20ER0094**	**2269934**	**25ER0094**					3/32
1/8	.1250	.0850	**1729816**	**16ER0125**	**1729831**	**20ER0125**	**1729852**	**25ER0125**	**1729903**	**32ER0125**	**1949806**	**40ER0125**	1/8
5/32	.1563	.1163	**1949905**	**16ER0156**	**2269918**	**20ER0156**	**2269935**	**25ER0156**	**2269943**	**32ER0156**	**2269954**	**40ER0156**	5/32
3/16	.1875	.1475	**1729817**	**16ER0188**	**1729833**	**20ER0188**	**1729855**	**25ER0188**	**1729904**	**32ER0188**	**1729932**	**40ER0188**	3/16
7/32	.2188	.1788	**1950125**	**16ER0219**	**2269919**	**20ER0219**	**2269936**	**25ER0219**	**2269944**	**32ER0219**	**2269955**	**40ER0219**	7/32
1/4	.2500	.2100	**1729818**	**16ER0250**	**1729834**	**20ER0250**	**1729857**	**25ER0250**	**1729905**	**32ER0250**	**1729933**	**40ER0250**	1/4
9/32	.2813	.2413	**1950126**	**16ER0281**	**2269920**	**20ER0281**	**2269937**	**25ER0281**	**2269945**	**32ER0281**	**2269956**	**40ER0281**	9/32
5/16	.3125	.2725	**1729819**	**16ER0312**	**1729836**	**20ER0312**	**1950129**	**25ER0312**	**1950132**	**32ER0312**	**1950158**	**40ER0312**	5/16
11/32	.3438	.3038	**1950127**	**16ER0344**	**2269921**	**20ER0344**	**2269938**	**25ER0344**	**2269946**	**32ER0344**	**2269957**	**40ER0344**	11/32
3/8	.3750	.3350	**1729820**	**16ER0375**	**1729837**	**20ER0375**	**1729859**	**25ER0375**	**1729906**	**32ER0375**	**1729934**	**40ER0375**	3/8
13/32	.4063	.3663	**1950128**	**16ER0406**	**2269922**	**20ER0406**	**2269939**	**25ER0406**	**2269947**	**32ER0406**	**2269958**	**40ER0406**	13/32
7/16	.4375	.3975			**1729838**	**20ER0438**	**1950130**	**25ER0438**	**1950154**	**32ER0438**	**1950162**	**40ER0438**	7/16
15/32	.4688	.4288			**2269933**	**20ER0469**	**2269940**	**25ER0469**	**2269948**	**32ER0469**	**2269959**	**40ER0469**	15/32
1/2	.5000	.4600			**1729839**	**20ER0500**	**1729862**	**25ER0500**	**1729908**	**32ER0500**	**1729936**	**40ER0500**	1/2
17/32	.5313	.4913					**2269941**	**25ER0531**	**2269949**	**32ER0531**	**2269960**	**40ER0531**	17/32
9/16	.5625	.5225					**1950131**	**25ER0562**	**1950155**	**32ER0562**	**1950203**	**40ER0562**	9/16
19/32	.5938	.5538					**2269942**	**25ER0594**	**2269950**	**32ER0594**	**2269961**	**40ER0594**	19/32
5/8	.6250	.5850					**1950131**	**25ER0625**	**1729909**	**32ER0625**	**1729938**	**40ER0625**	5/8
21/32	.6563	.6163							**2269951**	**32ER0656**	**2269962**	**40ER0656**	21/32
11/16	.6875	.6475							**1950156**	**32ER0688**	**1950204**	**40ER0688**	11/16
23/32	.7188	.6788							**2269952**	**32ER0719**	**2269963**	**40ER0719**	23/32
3/4	.7500	.7100							**1729910**	**32ER0750**	**1729939**	**40ER0750**	3/4
25/32	.7813	.7413							**2269953**	**32ER0781**	**2269964**	**40ER0781**	25/32
13/16	.8125	.7725							**1950157**	**32ER0812**	**1950205**	**40ER0812**	13/16
27/32	.8438	.8038									**2269965**	**40ER0844**	27/32
7/8	.8750	.8350									**1950206**	**40ER0875**	7/8
29/32	.9063	.8663									**2269966**	**40ER0906**	29/32
15/16	.9375	.8975									**1950207**	**40ER0938**	15/16
31/32	.9688	.9288									**2269967**	**40ER0969**	31/32
1	1.0000	.9600									**1729940**	**40ER1000**	1

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

Order example:
Catalog number: **16ER0062**
Order number: **1730499**

DIN 6499 form B



Maximum collapse is 0,5 mm.

Collet Capacity range max.	min.	ER11 D2 = 11,5 mm L = 18 mm Order number	Catalog number
1,0	0,5	**1025778**	**11ER010M**
1,5	1,0	**1025779**	**11ER015M**
2,0	1,5	**1025780**	**11ER020M**
2,5	2,0	**1025781**	**11ER025M**
3,0	2,5	**1025782**	**11ER030M**
3,5	3,0	**1025783**	**11ER035M**
4,0	3,5	**1025804**	**11ER040M**
4,5	4,0	**1025805**	**11ER045M**
5,0	4,5	**1025806**	**11ER050M**
5,5	5,0	**1025807**	**11ER055M**
6,0	5,5	**1025808**	**11ER060M**
6,5	6,0	**1025809**	**11ER065M**
7,0	6,5	**1025810**	**11ER070M**

Maximum collapse is 1,0 mm.

Collet Capacity range		ER16 D2 = 17 mm L = 27,5 mm		ER20 D2 = 21 mm L = 31,5 mm		ER25 D2 = 26 mm L = 34 mm		ER32 D2 = 33 mm L = 40 mm		ER40 D2 = 41 mm L = 46 mm	
max.	min.	Order number	Catalog number	Order number	Catalog number	Order number	Catalog number	Order number	Catalog number	Order number	Catalog number
1,0	0,5	**1125005**	**16ER010M***	**1025811**	**20ER010M**						
1,0	1,5	**1295604**	**16ER015M***								
1,0	2,0	**1123683**	**16ER020M**	**1025812**	**20ER020M**	**1125486**	**25ER020M**				
1,5	2,5	**1126832**	**16ER025M**								
2,0	3,0	**1136014**	**16ER030M**	**1025813**	**20ER030M**	**1123793**	**25ER030M**	**1125478**	**32ER030M**		
2,5	3,5	**1108458**	**16ER035M**								
3,0	4,0	**1123978**	**16ER040M**	**1025834**	**20ER040M**	**1123892**	**25ER040M**	**1123753**	**32ER040M**	**1128808**	**40ER040M**
3,5	4,5	**1110558**	**16ER045M**								
4,0	5,0	**1107148**	**16ER050M**	**1025835**	**20ER050M**	**1135954**	**25ER050M**	**1123901**	**32ER050M**	**1127120**	**40ER050M**
4,5	5,5	**1110557**	**16ER055M**								
5,0	6,0	**1123829**	**16ER060M**	**1025836**	**20ER060M**	**1135935**	**25ER060M**	**1106008**	**32ER060M**	**1127102**	**40ER060M**
5,5	6,5	**1108459**	**16ER065M**								
6,0	7,0	**1123759**	**16ER070M**	**1025837**	**20ER070M**	**1123871**	**25ER070M**	**1105988**	**32ER070M**	**1127094**	**40ER070M**
6,5	7,5	**1110559**	**16ER075M**								
7,0	8,0	**1123945**	**16ER080M**	**1025838**	**20ER080M**	**1135918**	**25ER080M**	**1084750**	**32ER080M**	**1123939**	**40ER080M**
7,5	8,5	**1154644**	**16ER085M**								
8,0	9,0	**1123931**	**16ER090M**	**1025839**	**20ER090M**	**1135885**	**25ER090M**	**1123722**	**32ER090M**	**1136034**	**40ER090M**
8,5	9,5	**1154645**	**16ER095M**								
9,0	10,0	**1123730**	**16ER100M**	**1025840**	**20ER100M**	**1123690**	**25ER100M**	**1123865**	**32ER100M**	**1123786**	**40ER100M**
10,0	11,0			**1025841**	**20ER110M**	**1135945**	**25ER110M**	**1084749**	**32ER110M**	**1129723**	**40ER110M**
11,0	12,0			**1025842**	**20ER120M**	**1135900**	**25ER120M**	**1123840**	**32ER120M**	**1128825**	**40ER120M**
12,0	13,0			**1025843**	**20ER130M**	**1135972**	**25ER130M**	**1093519**	**32ER130M**	**1128832**	**40ER130M**
13,0	14,0					**1126258**	**25ER140M**	**1125471**	**32ER140M**	**1130414**	**40ER140M**
14,0	15,0					**1131214**	**25ER150M**	**1124997**	**32ER150M**	**1128237**	**40ER150M**
15,0	16,0					**1135962**	**25ER160M**	**1105989**	**32ER160M**	**1127868**	**40ER160M**
16,0	17,0							**1125453**	**32ER170M**	**1130406**	**40ER170M**
17,0	18,0							**1123909**	**32ER180M**	**1123699**	**40ER180M**
18,0	19,0							**1123879**	**32ER190M**	**1127110**	**40ER190M**
19,0	20,0							**1123833**	**32ER200M**	**1123924**	**40ER200M**
20,0	21,0									**1123738**	**40ER210M**
21,0	22,0									**1130401**	**40ER220M**
22,0	23,0									**1123671**	**40ER230M**
23,0	24,0									**1130133**	**40ER240M**
24,0	25,0									**1123951**	**40ER250M**
25,0	26,0									**1123885**	**40ER260M**

***** *These collets have a maximum collapse of 0,5 mm.*

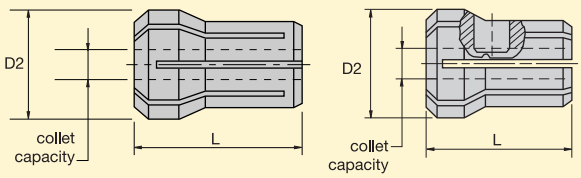
Order example:
Catalog number: **11ER010M**
Order number: **1025778**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

Collets and Sleeves

DA Collets – Inch

DA Double-Angle Series – Inch

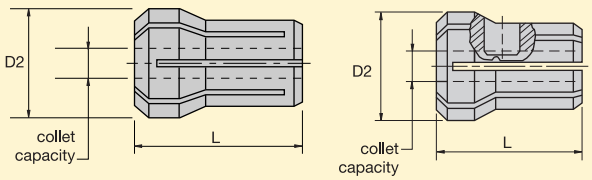


Collet Capacity	300DA Standard D2 = .375 in. L = 1.000 in. Order number	300DA Standard D2 = .375 in. L = 1.000 in. Catalog number	300DAC Coolant-Bonded D2 = .375 in. L = 1.000 in. Order number	300DAC Coolant-Bonded D2 = .375 in. L = 1.000 in. Catalog number	200DA Standard D2 = .539 in. L = 1.188 in. Order number	200DA Standard D2 = .539 in. L = 1.188 in. Catalog number	200DAC Coolant-Bonded D2 = .539 in. L = 1.188 in. Order number	200DAC Coolant-Bonded D2 = .539 in. L = 1.188 in. Catalog number
1/32	1014511	300DA0031						
3/64	1014534	300DA0047			1014513	200DA0047		
1/16	1014537	300DA0062			1014536	200DA0062		
5/64	1014541	300DA0078			1014540	200DA0078		
3/32	1014574	300DA0094			1014543	200DA0094		
7/64	1014578	300DA0109			1014577	200DA0109		
1/8	1014581	300DA0125	1086631	300DAC0125	1014580	200DA0125	1086613	200DAC0125
9/64	1014606	300DA0141	1086630	300DAC0141	1014605	200DA0141	1086614	200DAC0141
5/32	1014611	300DA0156	1086583	300DAC0156	1014610	200DA0156	1086615	200DAC0156
11/64	1014645	300DA0172	1086633	300DAC0172	1014644	200DA0172	1086616	200DAC0172
3/16	1014649	300DA0188	1086632	300DAC0188	1014648	200DA0188	1086617	200DAC0188
13/64	1014653	300DA0203	1086686	300DAC0203	1014652	200DA0203	1086618	200DAC0203
7/32	1014678	300DA0219	1086685	300DAC0219	1014677	200DA0219	1086619	200DAC0219
15/64	1014683	300DA0234	1086684	300DAC0234	1014682	200DA0234	1086620	200DAC0234
1/4	1014728	300DA0250	1086687	300DAC0250	1014727	200DA0250	1086621	200DAC0250
17/64					1014732	200DA0266	1086622	200DAC0266
9/32					1014755	200DA0281	1086623	200DAC0281
19/64					1014759	200DA0297	1086624	200DAC0297
5/16					1014762	200DA0312	1086625	200DAC0312
21/64					1014796	200DA0328	1086626	200DAC0328
11/32					1014800	200DA0344	1086629	200DAC0344
23/64					1014824	200DA0359	1086627	200DAC0359
3/8					1014828	200DA0375	1086628	200DAC0375
25/64					1014833	200DA0391	1086688	200DAC0391

Collet Capacity	100DA Standard D2 = .769 in. L = 1.438 in. Order number	100DA Standard D2 = .769 in. L = 1.438 in. Catalog number	100DAC Coolant-Bonded D2 = .769 in. L = 1.438 in. Order number	100DAC Coolant-Bonded D2 = .769 in. L = 1.438 in. Catalog number	180DA Standard D2 = 1.035 in. L = 1.625 in. Order number	180DA Standard D2 = 1.035 in. L = 1.625 in. Catalog number	180DAC Coolant-Bonded D2 = 1.035 in. L = 1.625 in. Order number	180DAC Coolant-Bonded D2 = 1.035 in. L = 1.625 in. Catalog number	180DANP Milling/Non-Pullout D2 = 1.035 in. L = 1.625 in. Order number	180DANP Milling/Non-Pullout D2 = 1.035 in. L = 1.625 in. Catalog number
3/64	1021108	100DA0047			1014512	180DA0047				
1/16	1021109	100DA0062			1014535	180DA0062				
5/64	1014538	100DA0078			1014539	180DA0078				
3/32	1021110	100DA0094			1014542	180DA0094				
7/64	1021111	100DA0109			1014576	180DA0109				
1/8	1021112	100DA0125	1080566	100DAC0125	1014579	180DA0125				
9/64	1014583	100DA0141	1080567	100DAC0141	1014604	180DA0141				
5/32	1014608	100DA0156	1080568	100DAC0156	1014609	180DA0156				
11/64	1021113	100DA0172	1080569	100DAC0172	1014613	180DA0172				
3/16	1014646	100DA0188	1080570	100DAC0188	1014647	180DA0188				
13/64	1021144	100DA0203	1083014	100DAC0203	1014651	180DA0203				
7/32	1014675	100DA0219	1080571	100DAC0219	1014676	180DA0219				
15/64	1014680	100DA0234	1080572	100DAC0234	1014681	180DA0234				
1/4	1014725	100DA0250	1080573	100DAC0250	1014726	180DA0250	1080594	180DAC0250		
17/64	1014730	100DA0266	1080574	100DAC0266	1014731	180DA0266	1080595	180DAC0266		
9/32	1014733	100DA0281	1080575	100DAC0281	1014754	180DA0281	1080596	180DAC0281		
19/64	1014757	100DA0297	1080576	100DAC0297	1014758	180DA0297	1080597	180DAC0297		
5/16	1014760	100DA0312	1080577	100DAC0312	1014761	180DA0312	1080298	180DAC0312		
21/64	1014794	100DA0328	1080578	100DAC0328	1014795	180DA0328	1080599	180DAC0328		
11/32	1014798	100DA0344	1080579	100DAC0344	1014799	180DA0344	1080600	180DAC0344		
23/64	1014802	100DA0359	1080580	100DAC0359	1014803	180DA0359	1080601	180DAC0359		
3/8	1014826	100DA0375	1080581	100DAC0375	1014827	180DA0375	1080602	180DAC0375	1015264	180DANP0375
25/64	1014831	100DA0391	1080582	100DAC0391	1014832	180DA0391	1080603	180DAC0391		
13/32	1014865	100DA0406	1080583	100DAC0406	1014866	180DA0406	1080604	180DAC0406		
27/64	1014868	100DA0422	1080584	100DAC0422	1014869	180DA0422	1080605	180DAC0422		
7/16	1014871	100DA0438	1080585	100DAC0438	1014872	180DA0438	1080606	180DAC0438		
29/64	1014895	100DA0453	1080586	100DAC0453	1014896	180DA0453	1080607	180DAC0453		
15/32	1014898	100DA0469	1080587	100DAC0469	1014899	180DA0469	1080608	180DAC0469		
31/64	1014901	100DA0484	1080588	100DAC0484	1014902	180DA0484	1080609	180DAC0484		
1/2	1014934	100DA0500	1080589	100DAC0500	1014935	180DA0500	1080610	180DAC0500	1015265	180DANP0500
33/64	1014938	100DA0516	1080590	100DAC0516	1014939	180DA0516	1080611	180DAC0516		
17/32	1014941	100DA0531	1080591	100DAC0531	1014942	180DA0531	1080612	180DAC0531		
35/64	1014975	100DA0547	1080592	100DAC0547	1014976	180DA0547	1080613	180DAC0547		
9/16	1014978	100DA0562	1080593	100DAC0562	1014979	180DA0562	1080614	180DAC0562		
37/64					1014982	180DA0578	1080615	180DAC0578		
19/32					1014983	180DA0594	1080616	180DAC0594		
39/64					1015016	180DA0609	1080617	180DAC0609		
5/8					1015018	180DA0625	1080618	180DAC0625	1015266	180DANP0625
41/64					1015021	180DA0641	1080619	180DAC0641		
21/32					1015023	180DA0656	1080620	180DAC0656		
43/64					1015046	180DA0672	1080621	180DAC0672		
11/16					1015048	180DA0688	1080622	180DAC0688		
45/64					1015051	180DA0703	1080623	180DAC0703		
23/32					1015053	180DA0719	1080624	180DAC0719		
47/64					1015086	180DA0734	1080625	180DAC0734		
3/4					1015088	180DA0750	1080626	180DAC0750	1015267	180DANP0750

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

DA Double-Angle Series – Metric



Collet Capacity	300DA Standard D2 = 9,53 mm L = 25,40 mm		200DA Standard D2 = 13,69 mm L = 30,18 mm		200DAC Coolant-Bonded D2 = 13,69 mm L = 30,18 mm		100DA Standard D2 = 19,53 mm L = 36,53 mm	
	Order number	Catalog number	Order number	Catalog number	Order number	Catalog number	Order number	Catalog number
1,0	1297411	300DA010M	1191023	200DA010M				
1,5	1297412	300DA015M	1191024	200DA015M				
2,0	1297413	300DA020M	1191025	200DA020M				
2,5	1297414	300DA025M	1191026	200DA025M			1110458	100DA025M
3,0	1297415	300DA030M	1191027	200DA030M			1108138	100DA030M
3,5	1014249	300DA035M	1014215	200DA035M			1014124	100DA035M
4,0	1014250	300DA040M	1014216	200DA040M			1014125	100DA040M
4,5	1014251	300DA045M	1014217	200DA045M			1014126	100DA045M
5,0	1014252	300DA050M	1014218	200DA050M			1014127	100DA050M
5,5	1014253	300DA055M	1014219	200DA055M			1014128	100DA055M
6,0	1014294	300DA060M	1014220	200DA060M	1092302	200DAC060M	1014129	100DA060M
6,5			1014221	200DA065M			1014130	100DA065M
7,0			1014222	200DA070M			1014131	100DA070M
7,5			1014223	200DA075M			1014132	100DA075M
8,0			1014244	200DA080M	1086796	200DAC080M	1014133	100DA080M
8,5			1014245	200DA085M			1014174	100DA085M
9,0			1014246	200DA090M			1014175	100DA090M
9,5			1014247	200DA095M			1014176	100DA095M
10,0			1014248	200DA100M	1086087	200DAC100M	1014093	100DA100M
10,5							1014177	100DA105M
11,0							1014178	100DA110M
11,5							1014179	100DA115M
12,0							1014180	100DA120M
12,5							1014181	100DA125M
13,0							1014182	100DA130M
13,5							1014183	100DA135M
14,0							1014214	100DA140M

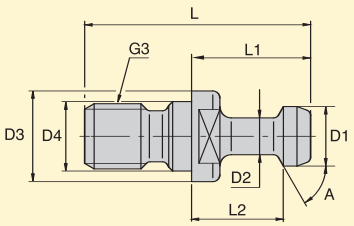
Collet Capacity	100DAC Coolant-Bonded D2 = 19,53 mm L = 36,53 mm		180DA Standard D2 = 26,29 mm L = 41,28 mm		180DAC Coolant-Bonded D2 = 26,29 mm L = 41,28 mm		180DANP Milling/Non-Pullout D2 = 26,29 mm L = 41,28 mm	
	Order number	Catalog number	Order number	Catalog number	Order number	Catalog number	Order number	Catalog number
3,0			1174153	180DA030M				
3,5			1014436	180DA035M				
4,0			1014437	180DA040M				
4,5			1014438	180DA045M				
5,0			1014439	180DA050M				
5,5			1014440	180DA055M				
6,0	1092179	100DAC060M	1014441	180DA060M	1092287	180DAC060M		
6,5			1014442	180DA065M				
7,0			1014443	180DA070M				
7,5			1014474	180DA075M				
8,0	1092180	100DAC080M	1014475	180DA080M	1092288	180DAC080M		
8,5			1014476	180DA085M				
9,0			1014477	180DA090M				
9,5			1014478	180DA095M				
10,0	1092181	100DAC100M	1014435	180DA100M	1092289	180DAC100M	1014529	180DANP100M
10,5			1014479	180DA105M				
11,0			1014480	180DA110M				
11,5			1014481	180DA115M				
12,0	1092182	100DAC120M	1014482	180DA120M	1092290	180DAC120M	1014532	180DANP120M
12,5			1014483	180DA125M				
13,0			1014494	180DA130M				
13,5			1014495	180DA135M				
14,0	1092183	100DAC140M	1014496	180DA140M	1092291	180DAC140M		
14,5			1014497	180DA145M				
15,0			1014498	180DA150M				
15,5			1014499	180DA155M				
16,0			1014500	180DA160M	1092292	180DAC160M	1014530	180DANP160M
16,5			1014501	180DA165M				
17,0			1014502	180DA170M				
17,5			1014503	180DA175M				
18,0			1014524	180DA180M	1092293	180DAC180M		
18,5			1014525	180DA185M				
19,0			1014526	180DA190M				
19,5			1014527	180DA195M				
20,0			1014528	180DA200M	1092294	180DAC200M		

Accessories

Retention Knobs

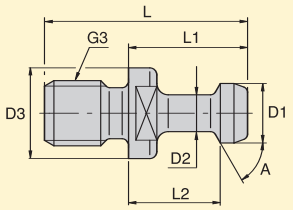
BT Style

BT MAS-Style with Pilot



Order number	Catalog number	G3	A	D1	D2	D3	D4	L	L1	L2	Catalog number	Suggested Torque Max. ft./lbs.	Suggested Torque Max. Nm
Inch with Pilot													
40	**1026729**	**RK31114**	5/8 - 11	45°	.591	.394	.94	.636	2.250	1.264	.988	**RKW40**	85	118
40	**1025459**	**RK31114B**	5/8 - 11	90°	.591	.394	.94	.636	2.250	1.264	.988	**RKW40**	85	118
50	**1021844**	**RK31118**	1 - 8	45°	.905	.670	1.44	1.021	3.355	1.778	1.384	**RKW50**	110	152
50	**1021800**	**RK31118B**	1 - 8	90°	.905	.670	1.44	1.021	3.355	1.778	1.384	**RKW50**	110	152
Metric with Pilot													
30	**1192417**	**RK30BT1M**	M12 - 1.75	45°	.433	.276	.650	.492	1.693	.906	.709	**RKW30**	40	55
30	**1192416**	**RK30BT2M**	M12 - 1.75	60°	.433	.276	.650	.492	1.693	.906	.709	**RKW30**	40	55
40	**1192419**	**RK40BT1M**	M16 - 2.0	45°	.591	.394	.906	.669	2.362	1.378	1.102	**RKW40**	85	118
40	**1192420**	**RK40BT2M**	M16 - 2.0	60°	.591	.394	.906	.669	2.362	1.378	1.102	**RKW40**	85	118
40	**1285441**	**RK40BT3M**	M16 - 2.0	90°	.591	.394	.906	.669	2.362	1.378	1.102	**RKW40**	85	118
50	**1192426**	**RK50BT1M**	M24 - 3.0	45°	.906	.669	1.496	.984	3.307	1.772	1.378	**RKW50M**	110	152
50	**1192427**	**RK50BT2M**	M24 - 3.0	60°	.906	.669	1.496	.984	3.307	1.772	1.378	**RKW50M**	110	152
50	**1285482**	**RK50BT3M**	M24 - 3.0	90°	.906	.669	1.496	.984	3.307	1.772	1.378	**RKW50M**	110	152

BT MAS-Style without Pilot



Order number	Catalog number	G3	A	D1	D2	D3	D4	L	L1	L2	Catalog number	Suggested Torque Max. ft./lbs.	Suggested Torque Max. Nm
Inch without Pilot													
40	**1026730**	**RK32114**	5/8 - 11	45°	.591	.394	.904	–	2.125	1.264	.988	**RKW40**	85	118

WARNING!

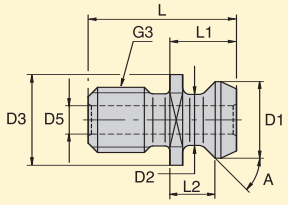
Retention knobs are available in various styles, and are not necessarily interchangeable. At all times the proper retention knob must be used with the appropriate adapter, according to machine specifications as provided by the machine's original manufacturer. Failure to use the correct retention knob, or to adequately install and tighten the retention knob, may result in the adapter coming loose. The use of a combination of metric and non-metric components can result in inadequate coupling of the adapter to the spindle during machining, and a failure of the component. While Kennametal has endeavored to obtain accurate and up-to-date information regarding retention knob selection based on individual machine tool builder specifications, we cannot guarantee that the information and specifications contained in this catalog are complete and that they have not been modified or superseded by the manufacturer. **You, the machine tool operator, are ultimately responsible for proper selection and use of retention knobs.** The purchase of retention knobs from Kennametal is subject to Kennametal's Standard Terms and Conditions of Sale.

Order example:
Catalog number: **RK31114**
Order number: **1026729**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

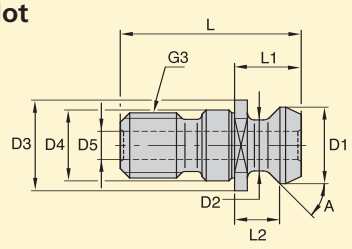
ANSI Style

Short CV without Pilot



	Order number	Catalog number	G3	A	D1	D2	D3	D5	L	L1	L2	Catalog number	Suggested Torque Max. ft./lbs.	Nm
Inch														
40	**1026590**	**RK40CV**	5/8 - 11	45°	.740	.490	.900	.281	1.500	.640	.440	**RKW40**	85	118
50	**1026690**	**RK50CV**	1 - 8	45°	1.140	.820	1.40	.500	2.300	1.000	.700	**RKW50**	110	152
Metric														
40	**1192421**	**RK40CV1M**	M16 - 2.0	45°	.740	.490	.886	.274	1.500	.642	.440	**RKW40**	85	118
50	**1285478**	**RK50AV1M**	M24 - 3.0	45°	1.146	.772	1.457	.455	2.362	1.006	.707	**RKW50M**	110	152

ANSI Style with Pilot – Short CV with Pilot



	Order number	Catalog number	G3	A	D1	D2	D3	D4	D5	L	L1	L2	Catalog number	Suggested Torque Max. ft./lbs.	Nm
Metric															
40	**1192422**	**RK40CV3M**	M16 - 2.0	45°	.740	.490	.930	.669	.281	1.624	.640	.440	**RKW40**	85	118
50	**1026734**	**RK50HPCV**	M24 - 3.0	45°	1.140	.820	1.430	.984	.468	2.575	1.000	.700	**RKW50**	110	152

Order example:
Catalog number: **RK40CV**
Order number: **1026590**

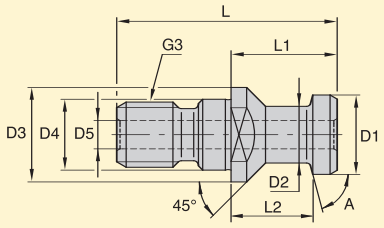
To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

Accessories

Retention Knobs — Metric

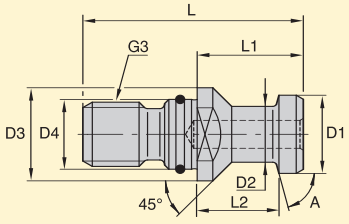
DIN Style

DIN 69872 form A



	Order number	Catalog number	G3	A	D1	D2	D3	D4	D5	L	L1	L2	Catalog number	Suggested Torque Max. ft./lbs.	Nm.
Metric															
40	**1192424**	**RK40DVM**	M16 - 2.0	75°	.747	.550	.902	.668	.278	2.126	1.024	.787	**RKW40**	85	55
50	**1192430**	**RK50DVM**	M24 - 3.0	75°	1.101	.825	1.413	.983	.455	2.913	1.339	.984	**RKW50M**	110	118

DIN 69872 form B, with O-ring



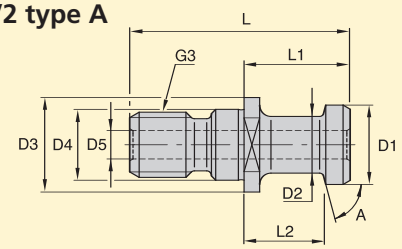
	Order number	Catalog number	G3	A	D1	D2	D3	D4	L	L1	L2	Catalog number	Suggested Torque Max. ft./lbs.	Nm.
Metric														
40	**1192423**	**RK40DVBM**	M16 - 2.0	75°	.747	.550	.902	.668	2.126	1.024	.787	**RKW40**	85	55
50	**1192429**	**RK50DVBM**	M24 - 3.0	75°	1.101	.825	1.413	.983	2.913	1.339	.984	**RKW50M**	110	118

Order example:
Catalog number: **RK40DVM**
Order number: **1192424**

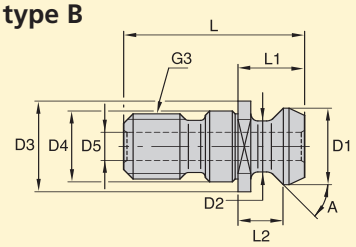
To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

ISO Style

ISO 7388/2 type A

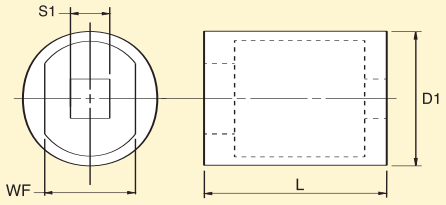


ISO 7388/2 type B



Order number	Catalog number	G3	A	D1	D2	D3	D4	D5	L	L1	L2	Catalog number	Suggested Torque Max. ft./lbs.	Nm
ISO 7388/2 type A														
Metric														
40	**1285460**	**RK40ISAM**	M16 - 2.0	75°	.747	.550	.902	.668	.278	2.126	1.024	.787	**RKW40**	85	55
50	**1285502**	**RK50ISAM**	M24 - 3.0	75°	1.101	.825	1.413	.983	.455	2.913	1.339	.984	**RKW50M**	110	118
ISO 7388/2 type B														
Metric														
40	**1192425**	**RK40ISBM**	M16 - 2.0	45°	.740	.504	.856	.668	.295	1.752	.640	.433	**RKW40M**	85	55
50	**1192431**	**RK50ISBM**	M24 - 3.0	45°	1.140	.766	1.418	.983	.461	2.579	1.000	.700	**RKW50M**	110	118

Retention Knob — Socket Wrench



Order number	Catalog number	WF inch	WF mm	D1 inch	D1 mm	L inch	L mm	S1 inch	S1 mm
30	**2407087**	**RKW30**	.536	13,61	1.000	25,40	1.500	38,10	.500	12,70
40	**2407088**	**RKW40**	.755	19,18	1.937	49,20	1.250	31,75	.500	12,70
40	**2407089**	**RKW40M**	.711	18,06	1.250	31,75	1.250	31,75	.500	12,70
50	**2407090**	**RKW50**	1.255	31,88	1.750	44,45	1.625	41,28	.500	12,70
50	**2407091**	**RKW50M**	1.190	30,23	1.750	44,45	2.375	60,33	.500	12,70

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

Order example:
Catalog number: **RK40ISAM**
Order number: **1285460**

KENNAMETAL®

KM25

Modular Quick-Change Tooling

- most economical modular quick-change tooling system available
- reduces downtime, increases productivity
- replaces conventional square-shank tooling
- no machine modifications required
- ideal for machines up to 30 hp (22kW)

KM25 Calculation Example	Conventional	KM25 Quick-Change
number of set-ups per shift	1	1
number of tools per set-up	6	6
time per tool for set-up (minutes)	5	0.5
number of insert indexes per shift	6	6
insert indexing time (minutes)	5	0.5
number of measuring cuts per shift	6	0*
measuring cut time (minutes)	5	5
number of shifts per year	240**	240**
minimum cost per hour	75	75

Result	Conventional	KM25 Quick-Change	SAVINGS PER SHIFT (minutes)
total set-up time/shift (minutes)	30	3	27
total insert indexing time (minutes)	30	3	27
total measuring cut time (minutes)	30	0	30
TOTAL TIME	**90**	**6**	**84**

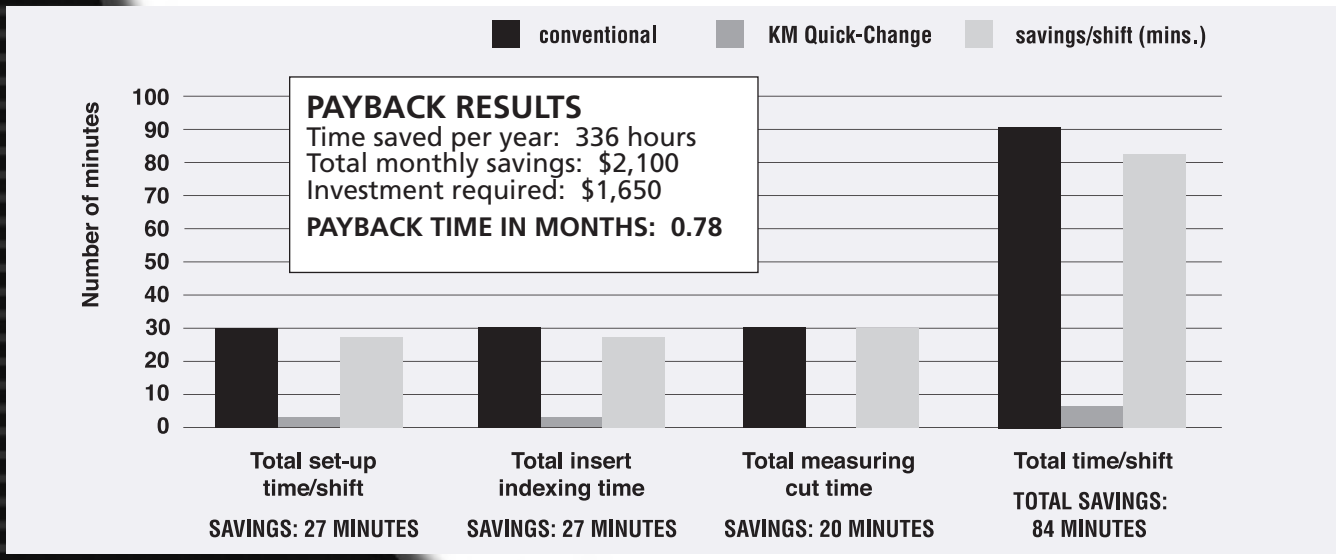
*Pre-gaged off line. **Based on one shift a day.

THREE-YEAR SAVINGS*

	YEAR ONE	YEAR TWO	YEAR THREE
Opening Balance	0	$23,550	$48,750
Investment	$1,650	0	0
Savings ($\frac{84 \text{ min.} \times 240 \times 75}{60}$)	$25,200	$25,200	$25,200
Closing Balance	$23,550	$48,750	**$73,950**

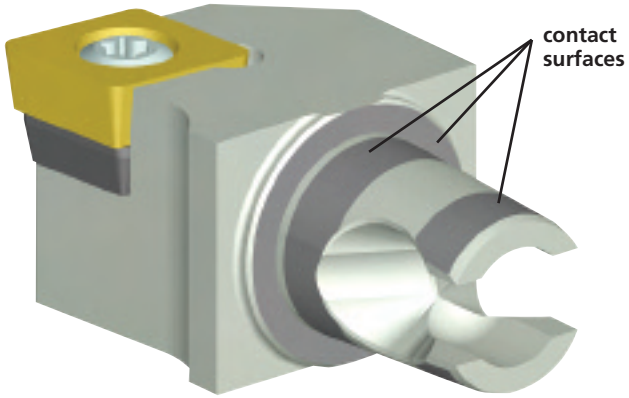
*All figures in U.S. dollars.

THREE-YEAR SAVINGS WITH KM... $73,950.00!



The KM25 Coupling

The rigidity and stiffness of the patented KM25 joint is achieved through a combination of unique design elements incorporated in both the shank of the tool and the clamping mechanism. The KM25 joint was developed as a system and takes full advantage of both the tool shank and the mechanism to obtain maximum benefit from the space utilized.



Taper Shank

All KM25 tooling is designed around a short 10:1 tapered shank. Extensive testing of many different lengths and angles proves this combination provides the maximum stiffness and input forces required for locking/unlocking. The taper is self-centering to promote easy tool loading and unloading.

Face and Taper Contact

KM25 tooling is designed to have simultaneous taper and face contact. With KM25 tooling, elastic deformation takes the form of expansion of the female taper (on the clamping unit) as the larger male taper (on the cutting unit) is pulled back during lockup. Our testing proved that an optimum combination of pull-back force and elastic deformation (rather than a close tolerance) provides greater static and dynamic stiffness, achieves a metal-to-metal fit, and is less costly to manufacture.

Clamping Mechanism

The mechanism design consists of two components: the torque screw and the wedge nut. This simple, yet highly effective, clamping mechanism enables the user to lock and unlock the cutting unit by simply using a preset torque wrench.

Reliability

The KM25 cutting unit and clamping mechanism are on a shared axis and provide accurate axial and radial repeatability of ± .00008 inch (± 2 micron) for a specific cutting unit in a specific clamping unit.

When more than one cutting unit is used, the accuracy of each cutting unit must be considered. Pre-gaging (when changing tools) measures the deviations of each tool from the nominal. These deviations can then be compensated for by the machine tool control offsets.

Locking Sequence

The clamping sequence starts by inserting the cutting unit into the female taper of the clamping unit. The torque screw is activated by a preset torque wrench at a right angle to the centerline of the cutting tool, located behind the gage face of the clamping unit.

A small amount of elastic deformation takes place at the front of the female taper as the locking force is applied. As the torque screw is tightened to the preset torque of 25-30 ft-lbs (34-40 Nm), (4-1/4 turns), the cutting unit advances until the gage face makes contact with the face of the clamping unit. The final amount of torque applied enables the tail of the cutting unit to spread to clamp securely between the clamping mechanism and the clamping unit inside diameter.

Installation

When first clamping the KM25 shank in a machine tool slot, a cutting unit should be in the shank.

Lubrication

Using a hex wrench, back out the torque screw against the positive stop and generously apply grease to the threads and conical surface of the component hardware. Also, apply grease to the female taper surface. Do this periodically. Recommended grease: Gleitmo 805.

Summary

The KM25 coupling offers a very rigid joint with a high degree of repeatability while maintaining a very compact envelope. This permits a high degree of versatility without sacrificing cutting performance.

KM25 Tooling – Technical Information

Operating Instructions for KM25

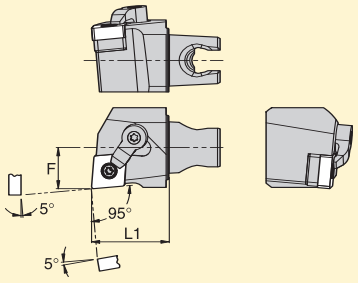
To change tooling, the machine operator simply releases the locking system, changes the KM25 cutting unit, and locks the new tool into position. The operator then makes the offset adjustments according to the previously recorded pre-gaged data. This process takes about 30 seconds versus up to 10 minutes, yielding dramatic productivity improvements.

Specific steps in the tool change process:

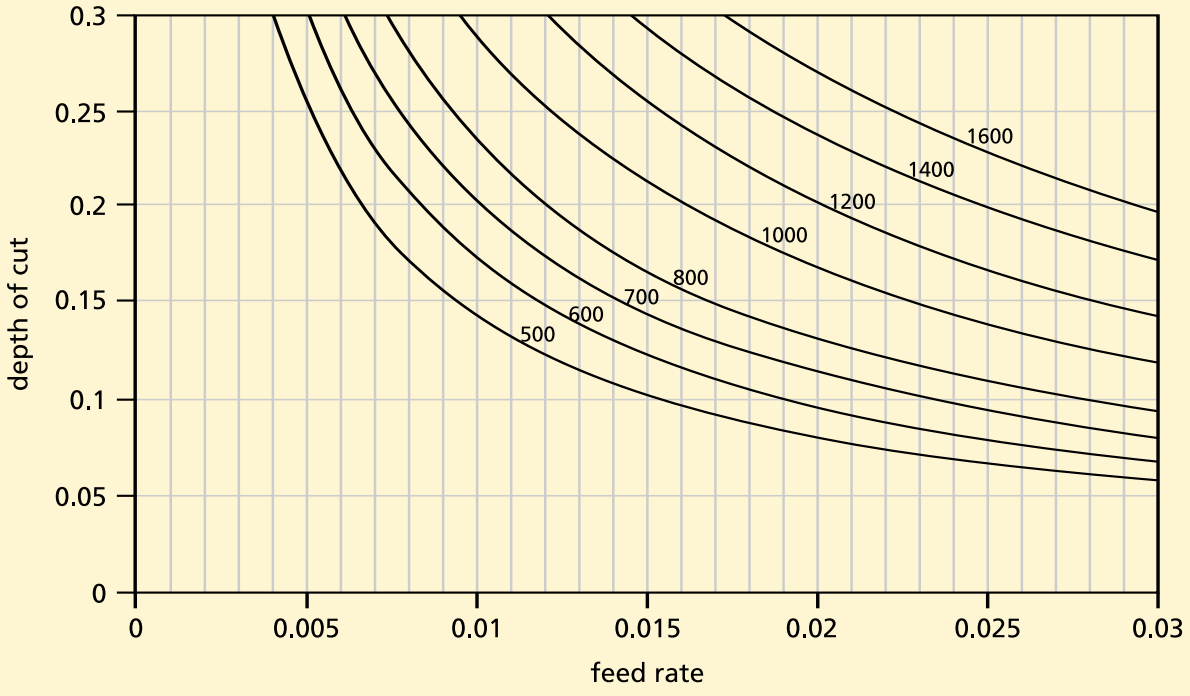
1. Use shop air to clean the clamping unit/cutting unit.
2. Using the appropriate wrench, turn the torque screw in a counterclockwise direction until it reaches an internal stop.
3. Remove the cutting unit. (Note: If cutting unit does not release, internal stop has not been reached.)
4. Use shop air to clean the clamping unit/cutting unit.
5. Insert the new cutting unit into the taper.
6. Tighten the torque screw by turning it in a clockwise direction, until the required torque specification is achieved.
7. If the machine being used has the ability to pre-gage, adjust machine offsets as required.

Maximum Tangential Load – KM25 Cutting Units

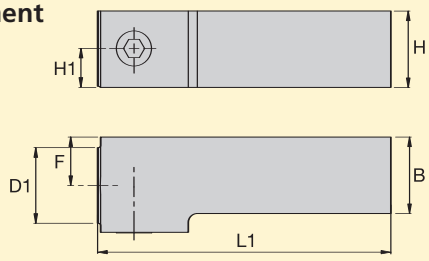
F dimension (mm)	L1 dimension (mm)	tangential load (lbf)	tangential load (kN)
16	30	1600	7,12
22	30	1100	4,89
28,5	30	750	3,34
24	30	950	4,23
16	35	1250	5,56
16	45	750	3,34
25,3	30	850	3,78
32	30	600	2,67



Depth of Cut (inch) and Feed Rate (ipr) vs. Tangential Forces (lbs.) for KM25



RCM/NCM – Square Shank Replacement

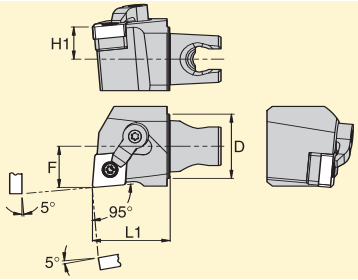


Note: A torque wrench must be used to achieve required clamping force. See page D61.

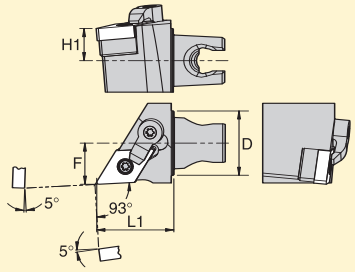
Catalog number Right hand/Left hand	D1	B inch	 mm	H inch	 mm	L1 inch	 mm	F inch	 mm	H1 inch	 mm	Spares Package	Hex	Tightening Torque
Inch														
KM25 R/L CM16382	25 mm	1.000	25,40	1.000	25,40	3.819	97,00	.630	16,00	.508	12,90	**KM25NOPKG**	6 mm	25-30 ft./lbs.
KM25 R/L CM16482	25 mm	1.000	25,40	1.000	25,40	4.819	122,40	.630	16,00	.508	12,90	**KM25NOPKG**	6 mm	25-30 ft./lbs.
Metric														
KM25NCM2525120	25 mm	.984	25,00	.984	25,00	4.724	120,00	.630	16,00	.492	12,50	**KM25NOPKG**	6 mm	34-40 Nm

KM25 Cutting Units – KENLOC

MCLN 95°



MDJN 93°



MCLN 95°

Catalog number Right hand/Left hand	D	L1 inch	 mm	F inch	 mm	H1 inch	 mm	Insert	Shim	Lock Pin	Clamp	Clamp Screw	Wrench	Torx
KM25MCLN R/L 1230	25 mm	1.181	30,00	.630	16,00	.492	12,50	**CNMG432** **CNMG120408**	**ICSN433**	**KLM4615IP**	**CKM20LP**	**STCM1115IP**	**K15IP**	T15IP

MDJN 93°

KM25MDJN R/L 150430	25 mm	1.181	30,00	.630	16,00	.492	12,50	**DNMG432** **DNMG150408**	**IDSN442**	**KLM46L15IP**	**CKM20LP**	**STCM1115IP**	**K15IP**	T15IP

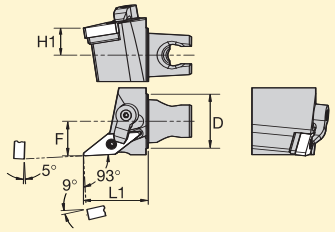
To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

Order example:
Right hand: **KM25RCM16382** Left hand: **KM25LCM16382**

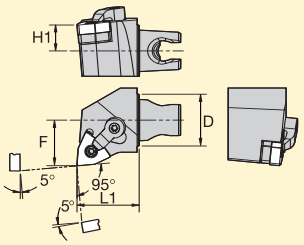
KM25 Tooling

KM Clamping Units – KENLOC

MVJN 93°



MWLN 95°



MVJN 93°

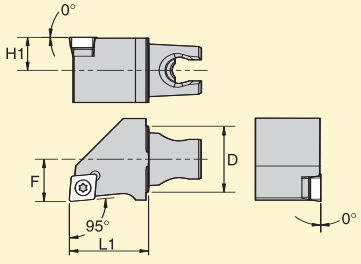
Catalog number Right hand/Left hand	D	L1 inch	L1 mm	F inch	F mm	H1 inch	H1 mm	Insert	Shim	Lock Pin	Clamp	Clamp Screw	Wrench	Torx
KM25MVJN R/L 1630	25 mm	1.181	30,00	.630	16,00	.492	12,50	**VNMG332 VNMG160408**	**IVSN322**	**KLM34L9IP**	**CKM20LP**	**STCM119IP**	**K9IP**	T9IP

MWLN 95°

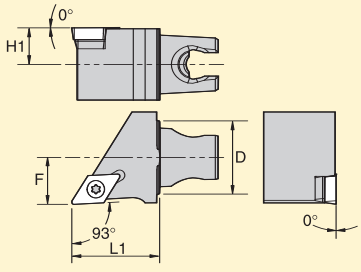
Catalog number Right hand/Left hand	D	L1 inch	L1 mm	F inch	F mm	H1 inch	H1 mm	Insert	Shim	Lock Pin	Clamp	Clamp Screw	Wrench	Torx
KM25MWLN R/L 0830	25 mm	1.181	30,00	.866	22,00	.492	12,50	**WNMG432 WNMG080408**	**IWSN433**	**KLM4615IP**	**CKM20LP**	**STCM1115IP**	**K15IP**	T15IP

Cutting Units – SCREW-ON

SCLC 95°



SDJC 93°



SCLC 95°

Catalog number Right hand/Left hand	D	L1 inch	L1 mm	F inch	F mm	H1 inch	H1 mm	Insert	Insert Screw	Shim	Shim Screw	Wrench	Torx
KM25SCLC R/L 1230	25 mm	1.181	30,00	.630	16,00	.492	12,50	**CCMT432 CCMT120408**	**MS1158**	**SKCP453**	**SRS4**	**FT154**	T15

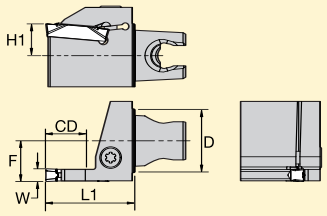
SDJC 93°

Catalog number Right hand/Left hand	D	L1 inch	L1 mm	F inch	F mm	H1 inch	H1 mm	Insert	Insert Screw	Shim	Shim Screw	Wrench	Torx
KM25SDJC R/L 1130	25 mm	1.181	30,00	.630	16,00	.492	12,50	**DCMT3252 DCMT11T308**	**MS1156**	**SKDP343**	**SRS3**	**FT1535**	T15

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

Order example:
Right hand: **KM25MVJNR1630** Left hand: **KM25MVJNL1630**

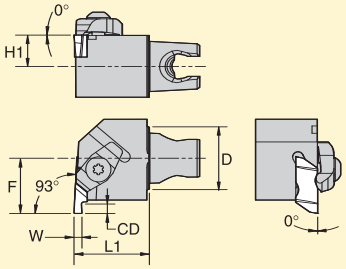
A4SM – Straight Mount



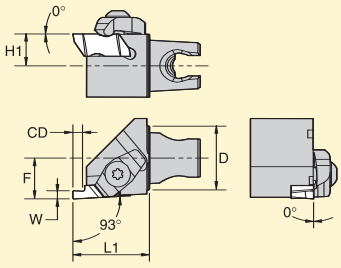
Catalog number Right hand/Left hand	D	L1 inch	L1 mm	F inch	F mm	W inch	W mm	CD inch	CD mm	H1 inch	H1 mm	Insert Seat Size	Clamp Screw	Wrench	Torx
KM25A4SM R/L 031430	25 mm	1.181	30,00	.630	16,00	.118	3,00	.551	14,00	.492	12,50	3	**MS2091**	**K25IP**	T25IP
KM25A4SM R/L 041430	25 mm	1.181	30,00	.630	16,00	.157	4,00	.551	14,00	.492	12,50	4	**MS2091**	**K25IP**	T25IP
KM25A4SM R/L 051935	25 mm	1.378	35,00	.630	16,00	.197	5,00	.748	19,00	.492	12,50	5	**MS2091**	**K25IP**	T25IP

KM25 Cutting Units – TOP NOTCH

NE 93° – End Mount



NS 93° – Side Mount



NE 93° – End Mount

Catalog number Right hand	Catalog number Left hand	D	L1 inch	L1 mm	F inch	F mm	W inch	W mm	CD inch	CD mm	H1 inch	H1 mm	Insert	Clamp	Clamp Screw	Wrench	Torx
KM25NER330		25 mm	1.181	30,00	.866	22,00	.047-.189	1,19 - 4,80	.075-.150	1,90 - 3,81	.492	12,50	**NG3L**	**CM73LP**	**MS2111**	**K25IP**	T25IP
	KM25NEL330	25 mm	1.181	30,00	.866	22,00	.047-.189	1,19 - 4,80	.075-.150	1,90 - 3,81	.492	12,50	**NG3R**	**CM72LP**	**MS2111**	**K25IP**	T25IP

NS 93° – Side Mount

KM25NSR230		25 mm	1.181	30,00	.630	16,00	.031-.125	0,79 - 3,17	.050-.110	1,27 - 2,80	.492	12,50	**NG2R**	**CM 74**	**MS1200**	**KT10**	T10
	KM25NSL230	25 mm	1.181	30,00	.630	16,00	.031-.125	0,79 - 3,17	.050-.110	1,27 - 2,80	.492	12,50	**NG2L**	**CM 75**	**MS1200**	**KT10**	T10
KM25NSR330		25 mm	1.181	30,00	.630	16,00	.047-.189	1,19 - 4,80	.075-.150	1,90 - 3,81	.492	12,50	**NG3R**	**CM 72LP**	**MS2111**	**K25IP**	T25IP
	KM25NSL330	25 mm	1.181	30,00	.630	16,00	.047-.189	1,19 - 4,80	.075-.150	1,90 - 3,81	.492	12,50	**NG3L**	**CM 73LP**	**MS2111**	**K25IP**	T25IP
KM25NSR430		25 mm	1.181	30,00	.630	16,00	.125-.250	3,17 - 6,35	.150-.250	3,81 - 6,35	.492	12,50	**NG4R**	**CM212LP**	**MS2111**	**K25IP**	T25IP
	KM25NSL430	25 mm	1.181	30,00	.630	16,00	.125-.250	3,17 - 6,35	.150-.250	3,81 - 6,35	.492	12,50	**NG4L**	**CM213LP**	**MS2111**	**K25IP**	T25IP

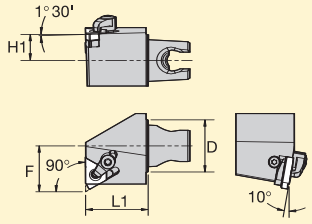
Order example:
Right hand: **KM25A4SMR031430** Left hand: **KM25A4SML031430**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

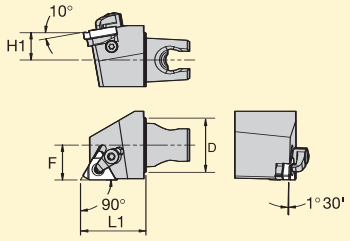
KM25 Tooling

KM25 Cutting Units – LT Threading

LSE – End Mount



LSS – Side Mount

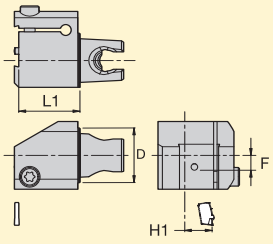


LSE – End Mount

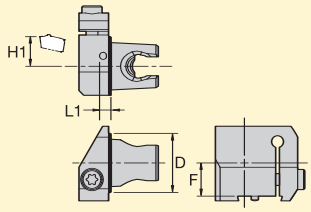
Catalog number Right hand	Catalog number Left hand	D	L1 inch	L1 mm	F inch	F mm	H1 inch	H1 mm	Insert	Shim	Insert Screw	Shim Screw	Torx Size	Clamp Assembly	Torx Size
KM25LSER1630		25 mm	1.181	30,00	.866	22,00	.492	12,50	**LT16EL**	**SMYI3**	**SSA3T**	**SSY3T**	T10	**CKC3**	T15
	KM25LSEL1630	25 mm	1.181	30,00	.866	22,00	.492	12,50	**LT16ER**	**SMYE3**	**SSA3T**	**SSY3T**	T10	**CKC3**	T15
LSS – Side Mount															
KM25LSSR1630		25 mm	1.181	30,00	.630	16,00	.492	12,50	**LT16ER**	**SMYE3**	**SSA3T**	**SSY3T**	T10	**CKC3**	T15
	KM25LSSL1630	25 mm	1.181	30,00	.630	16,00	.492	12,50	**LT16EL**	**SMYI3**	**SSA3T**	**SSY3T**	T10	**CKC3**	T15

KM25 Cutting Units – A2 Modular Cut-Off

BE – End Mount



BS – Side Mount



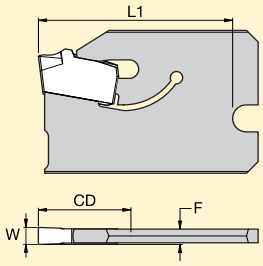
BE – End Mount

Catalog number Right hand/Left hand	D	L1 inch	L1 mm	F inch	F mm	H1 inch	H1 mm	Clamp Screw	Blade	Torx
KM25BE R/L	25 mm	1.103	28,0	.268	6,80	.492	12,50	**MS1898**	**A2BHSN-**	T27
BS – Side Mount										
KM25BS R/L	25 mm	.189	4,80	.552	14,00	.492	12,50	**MS1898**	**A2BHSN-**	T27

Order example:
Right hand: **KM25LSER1630** Left hand: **KM25LSEL1630**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

A2 Modular Blade

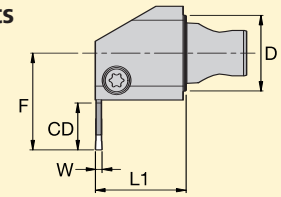


Order blade separately.

Catalog number Right hand/Left hand	L1 inch	L1 mm	F inch	F mm	W inch	W mm	CD inch	CD mm	Insert	Assembly Wrench*
A2BHSN19X0211	.795	20,19	.079	2,00	.087	2,20	.433	11,00	**A2022-**	**170.137**
A2BHSN19X0216	.992	25,20	.079	2,00	.087	2,20	.630	16,00	**A2022-**	**170.137**
A2BHSN19X0116	.992	25,20	.067	1,70	.063	1,60	.600	15,25	**A2016-**	**170.137**

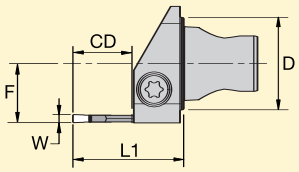
*Assembly wrench 170.137 must be ordered separately.

KM25 Cutting Units with A2 Modular Blade Assemblies BE – End Mount



F (assembly) = F (toolholder) + L1 (blade)
L1 (assembly) = L1 (toolholder) + F (blade)

KM25 Cutting Units with A2 Modular Blade Assemblies BS – Side Mount



F (assembly) = F (toolholder) + F (blade)
L1 (assembly) = L1 (toolholder) + L1 (blade)

KM25 Accessories

Torque Wrench

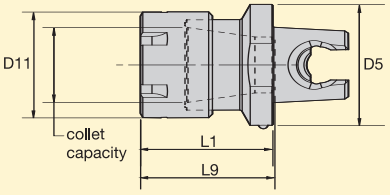
Catalog number	KM Size dK_M	Wrench Type	Adapter Square Size	Driver Hex Size	Torque	Torque Wrench Description
TW628R	25	ratchet	.375	6 mm	28 ft./lbs. (38 Nm)	complete with adapter & driver bit

Order example:
Right hand: **A2BHSN19X0211**

KM3225 Tooling

KM3225 Cutting Units

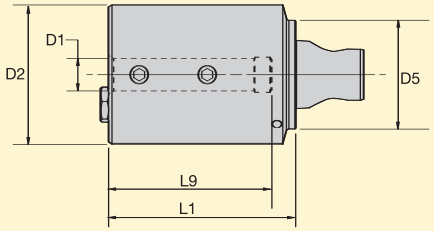
KM3225 Cutting Units - ER Collet Chucks



See page D46.

Order number	Catalog number	System Size	Collet System Size	Collet Capacity inch	Collet Capacity mm	D5 mm	D11 inch	D11 mm	L1 inch	L1 mm	L9 inch	L9 mm	Locknut	Wrench	Torque ft./lbs.	Torque Nm	kg.	lbs.
2527514	**KM3225ER1630**	KM3225	ER 16	1/64 - 3/8	0,5-10,0	32	.866	22	1.181	30	1.173	29,8	**LER16M**	**ER16WEM**	20	27	0.09	0.20
2527516	**KM3225ER2035**	KM3225	ER 20	1/16 - 1/2	0,5-13,0	32	1.102	28	1.378	35	1.390	35.3	**LER20M**	**ER20WEM**	50	68	0.119	0.26
2527515	**KM3225ER2540**	KM3225	ER 25	1/32 - 5/8	1,0-16,0	32	1.654	42	1.575	40	1.409	35.8	**LNER25M**	**ER25WM**	100	136	0.218	0.48

KM3225 Cutting Units - Boring Bar Adapters

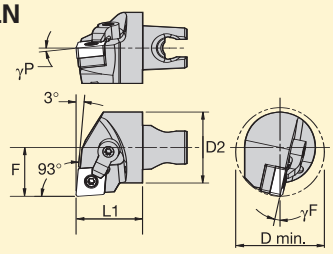


Order number	Catalog number	System Size	D1 inch	D1 mm	D2 inch	D2 mm	D5 mm	L1 inch	L1 mm	L9 inch	L9 mm	Set Screw	Hex Size SW
Inch													
2527490	**KM3225BA06217**	KM3225	.375	9,53	1.614	41	32	2.165	55	1.890	48	**S843**	1/8
2527491	**KM3225BA08236**	KM3225	.500	12,7	1.693	43	32	2.362	60	2.047	52	**S852**	5/32
2527492	**KM3225BA10256**	KM3225	.625	15,88	1.850	47	32	2.559	65	2.165	55	**S863**	3/16
2527503	**KM3225BA12276**	KM3225	.750	19,05	1.969	50	32	2.756	70	2.283	58	**S1716**	1/4
Metric													
2527505	**KM3225BA0645M**	KM3225	.236	6,00	1.457	37	32	1.772	45	1.417	36	**MS 1210**	2,5
2527506	**KM3225BA0845M**	KM3225	.315	8,00	1.535	39	32	1.772	45	1.417	36	**MS 1210**	2,5
2527507	**KM3225BA1055M**	**KM3225**	.394	10,00	1.614	41	32	2.165	55	1.890	48	**MS 1211**	4
2527508	**KM3225BA1260M**	KM3225	.472	12,00	1.693	43	32	2.362	60	2.047	52	**MS 1211**	4
2527509	**KM3225BA1665M**	KM3225	.630	16,00	1.850	47	32	2.559	65	2.165	55	**MS 1935**	6
2527510	**KM3225BA2070M**	KM3225	.787	20,00	1.969	50	32	2.756	70	2.283	58	**MS 1935**	6

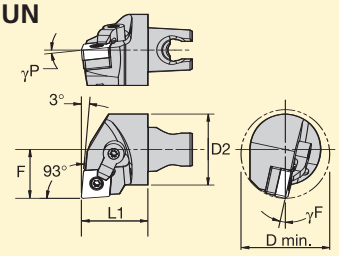
Order example:
Catalog number: **KM3225ER1630**
Order number: **2527514**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

KM3225 MCLN

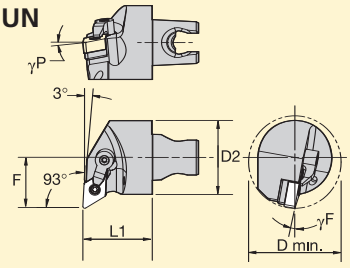


KM3225 MDUN

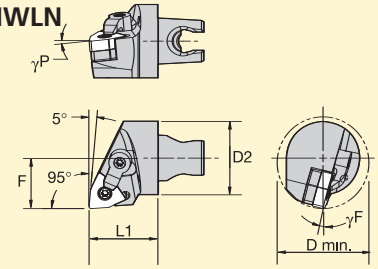


Catalog number Right hand/Left hand	System Size	D min inch	D min mm	D2 mm	L1 inch	L1 mm	F inch	F mm	γP°	γF°	Insert inch	Insert mm	Shim	Lock Pin	Clamp	Clamp Screw	Wrench	Torx Size
KM3225MCLN R/L 1230	KM3225	1.575	40	32	1.181	30	.866	22	-5	-12	CNMG432	CNMG120408	**ICSN432**	**KLM 46L15IP**	**CKM20LP**	**STCM1115IP**	K15IP	15IP
MDUN																		
KM3225MDUN R/L 150430	KM3225	1.575	40	32	1.181	30	.866	22	-3	-12	DMNG432	DMNG150408	**IDSN432**	**KLM 4615IP**	**CKM20LP**	**STCM1115IP**	K15IP	15IP

KM3225 MDUN



KM3225 MWLN



Catalog number Right hand/Left hand	System Size	D min inch	D min mm	D2 mm	L1 inch	L1 mm	F inch	F mm	γP°	γF°	Insert inch	Insert mm	Shim	Lock Pin	Clamp	Clamp Screw	Wrench	Torx Size
MDUN																		
KM3225MDUN R/L 1130	KM3225	1.575	40	32	1.181	30	.866	22	-3	-10	DNMG332	DNMG110408	**IDSN322**	**KLM34LT9**	**CKM7LP**	**STCM9T9**	KT9	T9
MWLN																		
KM3225MWLN R/L 0830	KM3225	1.575	40	32	1.181	30	.866	22	-5	-14	WNMG432	WNMG080408	**IWSN433**	**KLM4615IP**	**CKM20LP**	**STCM1115IP**	K15IP	15IP

To place an order, contact your authorized
Kennametal distributor or visit www.kennametal.com.

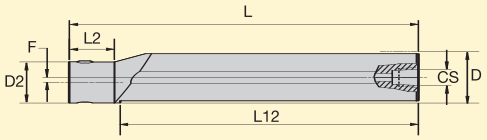
Order example:
Right hand: **KM3225MCLNR1230**

Left hand: **KM3225MCLNL1230**

KM3225 Tooling

KM3225 Clamping Units

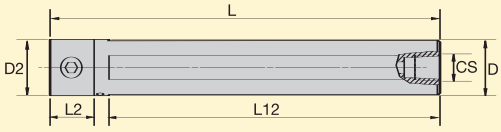
Eccentric Shank



Note: A torque wrench must be used to achieve required clamping force. See page D61.

Order number	Catalog number	System Size	D inch	D mm	D2 mm	L inch	L mm	L2 inch	L2 mm	L12 inch	L12 mm	F inch	F mm	CS	Spare Parts	Hex	Torque ft./lbs.	Torque Nm
2541730	**KM3225ECMS24**	KM3225	1.5	38,1	32	10	254	1.378	35	8.465	215	.120	3,04	1/4-18 NPT	**KM3225NRPKG**	6 mm	25-30	34-40
2541836	**KM3225ECMS40**	KM3225	1.574	40	32	10.65	270	–	–	9.134	232	.157	3,99	1/4-18 NPT	**KM3225NRPKG**	6 mm	25-30	34-40

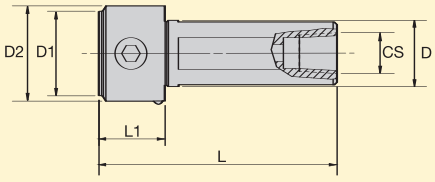
Boring Bar



Note: A torque wrench must be used to achieve required clamping force. See page D61.

Order number	Catalog number	System Size	D inch	D mm	D2 mm	L inch	L mm	L2 inch	L2 mm	L12 inch	L12 mm	CS	Spare Parts	Hex	Torque ft./lbs.	Torque Nm
Inch																
2541835	**KM3225NCMS20**	KM3225	1.250	31,75	32	6.750	172	.984	25	5.512	140	1/4-18 NPT	**KM3225NRPKG**	6 mm	25-30	34-40
2541837	**KM3225NCMS32**	KM3225	1.260	32	32	8.661	220	.984	25	7.402	188	1/4-18 NPT	**KM3225NRPKG**	6 mm	25-30	34-40

Straight Shank



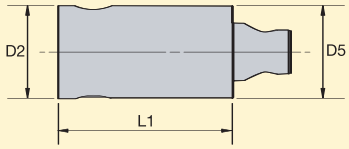
Note: A torque wrench must be used to achieve required clamping force. See page D61.

Order number	Catalog number	System Size	D inch	D mm	D1 mm	D2 inch	D2 mm	L inch	L mm	L1 inch	L1 mm	CS	Spare Parts	Hex	Torque ft./lbs.	Torque Nm
2594729	**KM3225NCMSS16098**	KM3225	1.000	25,4	32	1.417	36	3.543	90	.984	25	1/4-18 NPT	**KM3225NRPKG**	6 mm	25-30	34-40
2594730	**KM3225NCMSS2525**	KM3225	.984	25,0	32	1.417	36	3.543	90	.984	25	1/4-18 NPT	**KM3225NRPKG**	6 mm	25-30	34-40

Order example:
Catalog number: **KM3225ECMS24**
Order number: **2541730**

To place an order, contact your authorized Kennametal distributor or visit www.kennametal.com.

Extension



Note: A torque wrench must be used to achieve required clamping force. See page D61.

Order number	Catalog number	System Size	D2 inch	D2 mm	D5 inch	D5 mm	L1 inch	L1 mm	Spare Parts	Hex	Torque ft./lbs.	Torque Nm
2541964	**KM3225S3240**	KM3225	1.260	32	1.260	32	1.575	40	**KM3225NRPKG**	6 mm	25-30	34-40
2541965	**KM3225S3260**	KM3225	1.260	32	1.260	32	2.362	60	**KM3225NRPKG**	6 mm	25-30	34-40

Order example:
Catalog number: **KM3225S3240**
Order number: **2541964**

Notes

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