

MASTER CATALOG 2018

VOLUME ONE | **TURNING TOOLS**



ISO/ANSI TURNING | GROOVING & CUT-OFF | THREADING | APPLICATION SPECIFIC

➤ A4TM Tooling and BeyondTM Inserts

For All Your O.D. and I.D. Applications

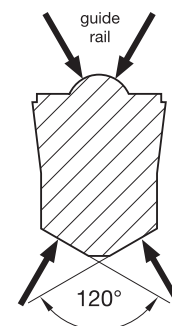
Primary Application

Choose A4 tooling for turning, facing, grooving, face grooving, and cut-off applications across a broad range of workpiece materials. The unique clamping system and versatile insert geometry delivers a very high metal removal rate.

Features and Benefits

A4 Grooving and Turning System

- One tool for turning, facing, grooving, face-grooving, and cut-off in O.D. and I.D. applications 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!
- Rigid clamping securely locks insert in place through the toughest cuts.
- Versatile design enables one system to handle O.D. and I.D. grooving, face grooving, back turning, undercutting, and even threading operations.
- Chip control inserts provide excellent chip evacuation in grooving, and offer better chip control in multidirectional turning.



A4 Chipbreakers



GMN Chipbreaker



GMP Chipbreaker



GMN Chipbreaker



GMP Chipbreaker



GUP Chipbreaker



The A4™ System Increases Productivity

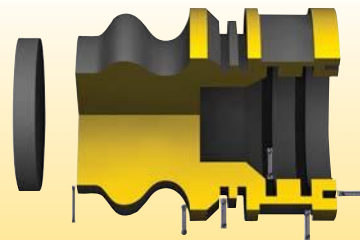
- Covers multiple applications.
- Reduces tool cost.
- Minimizes machining time.



■ Step 1 • Select A4 size for grooving and turning application

What you need to know:

- Groove depth, width, and profile.
- Material being machined.
- Application to be performed (O.D. and I.D. grooving, turning, face grooving, and cut-off).



General Recommendation to Select the Insert Size

for workpiece diameters	insert seat size
<25mm	3
25–50mm	4
>50mm	5–10

■ Step 2 • Select chipbreaker style and feed rate

Based on the application and seat size, determine the recommended geometry and starting feed rate.

Plunge Feed Rates

- first choice
- alternate choice

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

Chip Control	Description	Insert Geometry	Seat Size	Corner Radius	Starting Conditions	Plunge Feed Rates inch/rev (mm/rev)						
				in (mm)	in (mm)	.0020 (0,05)	.0040 (0,10)	.0060 (0,15)	.0080 (0,20)	.0100 (0,25)	.0120 (0,30)	.0140 (0,35)
-GUP	• Groove and turn inserts in new "Beyond" grades. • Available in molded and precision-ground styles. • Positive rake angle with enhanced chip control. • Available in metric widths only.		2	.008 (0,2)	.0031 (0,08)							
			3	.008 (0,2)	.0035 (0,09)							
			4	.016 (0,4)	.0047 (0,12)							
			5	.016 (0,4)	.0059 (0,15)							
			6	.031 (0,8)	.0059 (0,16)							
			7	.016 (0,4)	.0059 (0,16)							
			8	.031 (0,8)	.0071 (0,18)							
			9	.047 (1,2)	.0079 (0,20)							
			10	.016 (0,4)	.0067 (0,17)							
			11	.031 (0,8)	.0079 (0,20)							
-GMP	• Groove and turn inserts. • Available in molded and precision-ground styles. • Positive rake angle. • Available in metric widths only.		2	.008 (0,2)	.0031 (0,08)							
			3	.008 (0,2)	.0035 (0,09)							
			4	.016 (0,4)	.0043 (0,11)							
			5	.016 (0,4)	.0047 (0,12)							
			6	.031 (0,8)	.0059 (0,15)							
			7	.016 (0,4)	.0059 (0,15)							
			8	.031 (0,8)	.0059 (0,16)							
			9	.016 (0,4)	.0071 (0,18)							
			10	.047 (1,2)	.0079 (0,20)							
			11	.016 (0,4)	.0067 (0,17)							
-GMN	• Groove and turn molded and precision ground inserts. • Stable cutting edge. • Available in metric and inch widths.		2	.008 (0,2)	.0031 (0,08)							
			3	.008 (0,2)	.0035 (0,09)							
			4	.016 (0,4)	.0043 (0,11)							
			5	.016 (0,4)	.0047 (0,12)							
			6	.031 (0,8)	.0059 (0,15)							
			7	.016 (0,4)	.0059 (0,15)							
			8	.031 (0,8)	.0059 (0,16)							
			9	.016 (0,4)	.0071 (0,18)							
			10	.047 (1,2)	.0079 (0,20)							
			11	.016 (0,4)	.0067 (0,17)							

Maximum Feed Rate Values

Data is for P and K material groups. Maximum feed rates should be adjusted by multiplying feed rates by following factors for other material groups.

Material Group	Feed Factor
M	.8
N	.8
S	.5
H	1.2

I.D. and Face Grooving

For I.D. and face grooving applications, reduce feed rate by 20%.

Step 3 • Select the starting speed

Based on material and grade,
identify starting speed (vc).
First choice is in **bold** type.

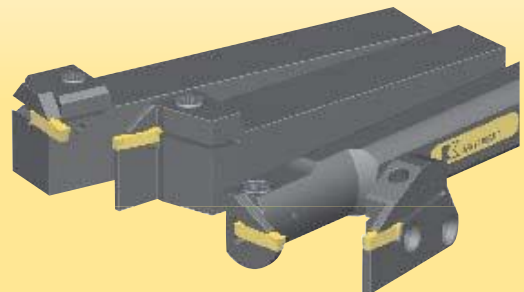
- A** Based on material group and grade,
identify starting speed (vc).
B First choice starting speed is in **bold**.

Recommended Starting Speeds [m/min]																			
Material Group	K313			KCU10/KC5010			KCU25/KC5025			KCP10			KCP25			KCK20B			KY3500
P	0-1	-	-	-	140	280	335	110	225	270	185	400	450	145	290	365	200	440	490
	2	-	-	-	140	200	245	110	160	195	185	270	350	145	200	305	200	300	380
	3	-	-	-	140	155	245	110	125	195	170	190	260	140	155	245	800	200	280
	4	-	-	-	75	110	170	60	90	135	90	145	200	75	110	180	100	160	220
	5	-	-	-	120	200	260	100	160	210	150	220	305	120	200	270	165	240	330
	6	-	-	-	110	150	230	85	120	185	120	180	275	110	150	230	130	190	300
M	1	60	90	120	140	219	260	90	170	245	-	-	-	-	-	-	-	-	-
	2	45	75	110	120	200	245	90	150	245	-	-	-	-	-	-	-	-	-
	3	35	65	100	120	180	245	90	140	210	-	-	-	-	-	-	-	-	-
K	1	30	75	120	120	180	245	100	145	195	170	245	440	140	200	360	210	305	550
	2	25	70	110	90	150	210	70	120	170	120	195	340	100	160	280	150	245	430
	3	20	60	90	60	110	150	50	85	120	120	170	270	100	140	220	150	210	335
N	1-2	150	370	610	150	550	975	120	440	780	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4	120	275	430	120	365	610	100	290	490	-	-	-	-	-	-	-	-	-
	5	45	90	150	90	170	245	70	135	195	-	-	-	-	-	-	-	-	-
	6	40	75	150	120	210	305	100	170	245	-	-	-	-	-	-	-	-	-
S	1	8	30	75	15	55	135	8	40	60	-	-	-	-	-	-	-	-	-
	2	8	35	75	15	60	135	8	30	75	-	-	-	-	-	-	-	-	-
	3	8	40	75	15	70	135	15	40	75	-	-	-	-	-	-	-	-	-
	4	8	45	75	15	70	170	8	50	110	-	-	-	-	-	-	-	-	-
H	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2	-	-	-	15	30	45	-	-	-	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Step 4 • Select toolholder based on application

Choose the high-performance holder based on
your specific grooving or cut-off application,
with the corresponding seat size.

	conventional toolholders	modular blades
O.D. Grooving, Cut-Off, and Turning	1st Choice	2nd Choice
Face Grooving	1st Choice	2nd Choice
I.D. Grooving, Cut-Off, and Turning	1st Choice	—



NOTE: Insert seat size must match the seat size of the toolholder.

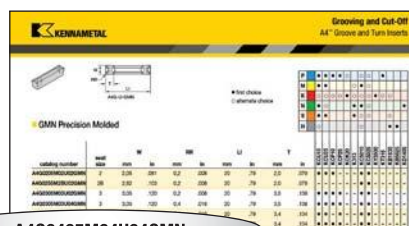
Step 5 • Select the insert and holder from catalog page

Congratulations!

You have successfully maximized your productivity by selecting the best insert geometry, grade, and cutting specifications for your application!



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



A4G0405M04U04GMN

A4

G

0405

M

04

U

04

GMN

G = Square
R = Full
radius
C = Cut-off

Expressed
in 1/100mm
or .00"

M = Metric
N = Inch

GMN =
Grooving and turning
medium machining
stable cutting edge

GMP =
Grooving and turning
medium machining
positive rake angle

GUP =
Grooving and turning
high positive geometry.
Especially in stainless
steels and
high-temp alloys

B =
Flat top for special
forms and applications

E =
Flat top, slight
honed edge

S =
Negative land
plus hone

ST =
Single tip

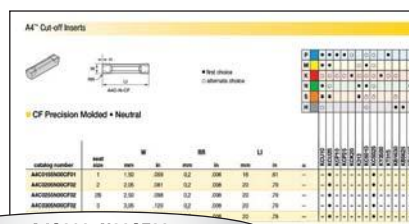
pocket seat size	cutting width	
	in	mm
02	.079–.103	2,00–2,62
2B	.094–.103	2,39–2,62
03	.118–.120	3,0–3,05
04	.157–.159	4,0–4,05
05	.197–.159	5,0–5,05
06	.236–.199	6,0–6,05
08	.315–.238	8,0–8,05
10	.394–.317	10,0–10,05
2S	.079–.396	2,00–2,62
3S	.118–.120	3,00–3,05
4S	.157–.159	4,00–4,05
5S	.197–.199	5,00–5,05

P = Precision ground
grooving width tolerance:
 $\pm .001"$ (0,025mm)

U = Utility molded
grooving width tolerance:

$$3,05-4,05: \quad \frac{+ .006''}{0} \quad \frac{(+0,15\text{mm})}{0}$$
$$5,05-10,05: \frac{+ .010''}{-0} \quad \frac{(+0,25\text{mm})}{-0}$$

in	mm
0 = .004	01 = 0,1
05 = .008	02 = 0,2
1 = .016	04 = 0,4
2 = .032	08 = 0,8
3 = .047	12 = 1,2
full radius = 00	



A4C0305N00CF02

A4

C

0305

N

00

Main Cutting
Edge Lead
Angle

CF

Chipbreaker
Type

02

Corner Radius

A4 =
Grooving
and Turning

C = Cut-off

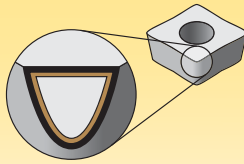
Expressed in
1/100mm

R = Right hand
L = Left hand
N = Neutral

- 00 = Neutral
- 06 = 6°
- 10 = 10°

CF =
Cut-off fine
positive rake

in	mm
.008	02 = 0,2

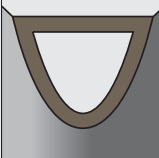
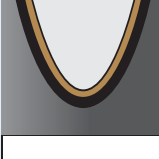


Coatings provide high-speed capability and are engineered for finishing to light roughing.

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

wear resistance ← → toughness

Grades

Coating	Grade Description		05	10	15	20	25	30	35	40	45
KCU10	 Composition: An advanced multilayer PVD coating over a very deformation-resistant unalloyed carbide substrate. The new and improved coating improves edge stability with wide range speed and feed capabilities. Application: The KCU10™ grade is ideal for finishing to general machining of most workpiece materials at a wide range of speed and feed capabilities. Excellent for machining most steels, stainless steels, cast irons, non-ferrous materials, and high-temp alloys with improved edge toughness, notch resistance, and higher cutting speed/feed capability.	P									
		M									
		K									
		N									
		S									
		H									
KCU25	 Composition: An advanced PVD grade with hard AlTiN coating and fine-grain unalloyed substrate. The new and improved coating improves edge stability with wide range speed and feed capabilities. Application: The KCU25™ grade is ideal for general machining of most steels, stainless steels, high-temp alloys, titanium, irons, and non-ferrous materials in a wide range of speeds and feeds with improved edge toughness for interrupted cut and high feed rates.	P									
		M									
		K									
		N									
		S									
		H									
KCP10	 Composition: A specially engineered cobalt-enriched carbide grade with thick MTCVD TiCN-Al ₂ O ₃ coating for maximum wear resistance. Application: An excellent finishing to medium machining grade for a variety of workpiece materials, including most steels, ferritic, martensitic, and PH stainless steels, and cast irons. The cobalt-enriched substrate offers a balanced combination of deformation resistance and edge toughness, while the thick coating layers offer outstanding abrasion resistance and crater wear resistance for high-speed machining. Smooth coating provides resistance to edge build-up and microchipping and produces excellent surface finishes.	P									
		K									
		N									
		S									
		H									
KCP25	 Composition: A tough cobalt-enriched carbide grade with a multilayer MTCVD TiCN-Al ₂ O ₃ coating with superior interlayer adhesion. Application: Best general-purpose turning grade for most steels and ferritic and martensitic stainless steels. The substrate design ensures adequate deformation resistance with excellent insert edge strength. Coating layers offer good wear resistance over a wide range of machining conditions and the post-coat treatment minimizes microchipping and improves coating adhesion to substrate leading to long tool life and improved workpiece finishes.	P									
		K									
		N									
		S									
		H									
KCK20	 Composition: A specially toughened MTCVD TiCN-Al ₂ O ₃ coating over a wear-resistant substrate. Application: Specifically engineered to maximize coating adhesion and edge strength making this grade ideal in wet interrupted cutting of gray and ductile irons. It can be used in a wide range of applications from finishing to roughing to maximize productivity wherever strength and reliability are needed.	P									
		K									
		N									
		S									
		H									

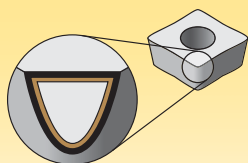
beyond

beyond

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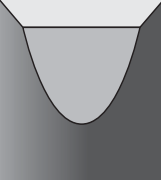
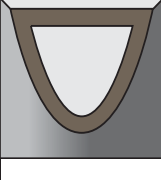
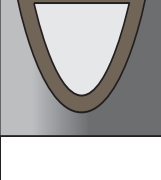


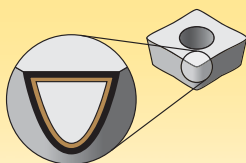
Coatings provide high-speed capability and are engineered for finishing to light roughing.

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

wear resistance ← → toughness

Grades

Coating	Grade Description		05	10	15	20	25	30	35	40	45
K313	 Composition: A hard, low binder content, unalloyed WC/Co fine-grain grade. Application: Exceptional edge wear resistance combined with very high strength for machining titanium, cast irons, austenitic stainless steels, non-ferrous metals, non-metals, and most high-temp alloys. Superior thermal deformation and depth-of-cut notch resistance. The grain structure is well controlled for minimal pits and flaws, which contributes to long, reliable service.										
		M									
		K									
		N									
		S									
KC5010	 Composition: An advanced PVD AlTiN coating over a very deformation-resistant unalloyed carbide substrate. Application: The KC5010™ grade is ideal for finishing to general machining of most workpiece materials at higher speeds. Excellent for machining most steels, stainless steels, cast irons, non-ferrous materials, and high-temp alloys under stable conditions. It also performs well machining hardened and short chipping materials.	P									
		M									
		K									
		N									
		S									
KC5025	 Composition: An advanced PVD-AlTiN-coated grade with a tough, ultra-fine-grain unalloyed substrate. Application: For general-purpose machining of most steels, stainless steels, high-temp alloys, titanium, irons, and non-ferrous materials. Speeds may vary from low to medium and will handle interruptions and high feed rates.	P									
		M									
		K									
		N									
		S									



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

P	Steel
M	Stainless Steel
K	Cast Iron
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wear resistance ← → toughness

Grades

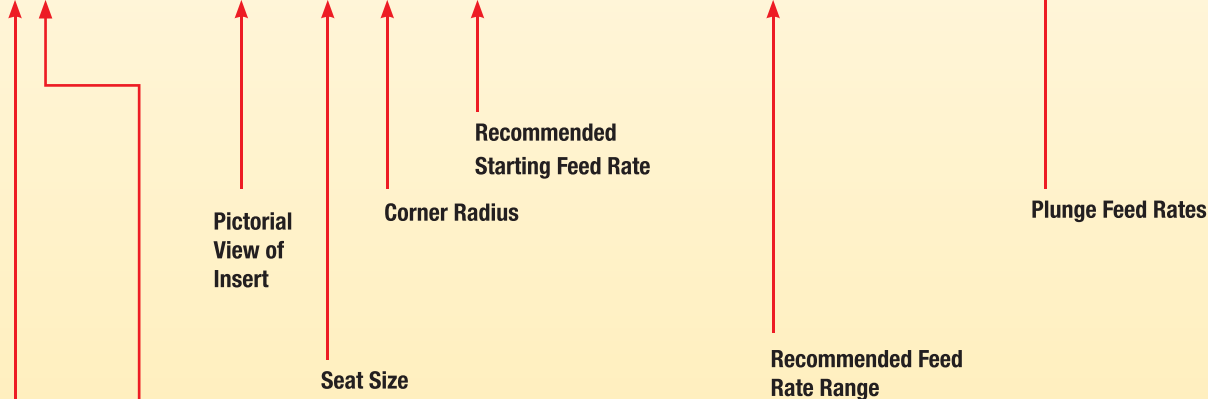
Coating	Grade Description		05	10	15	20	25	30	35	40	45
KY3500		Composition: Pure silicon nitride grade. Application: Maximum toughness. Used at high feed rates for rough machining of gray cast iron, including machining through interruptions.									
KT315		Composition: A multilayer PVD TiN/TiCN/TiN-coated cermet turning grade. Application: Ideal for high-speed finishing to medium machining of most carbon and alloy steels and stainless steels. Performs very well in cast and ductile iron applications, too. Provides long and consistent tool life and will produce excellent workpiece finishes.	P								
KB1630		Composition: An uncoated high content PcBN grade. PcBN tips are brazed onto a carbide insert. Application: Designed for roughing to finishing in interrupted cuts on hardened steels (>45 HRC). It can also be applied on gray cast iron, chilled irons, high chrome alloyed steels, high temp alloys and sintered powder metals. The tipped PcBN inserts are available in a wide range of insert styles, including Top Notch™ and Screw-On geometries.									
KB5625		Composition: A medium content PcBN with a PVD-TiN/AlTiN coating for added wear resistance. Application: Designed for roughing to finishing of hardened steels (>45 HRC). Use on bearing steels, hot and cold work steels, die steels, case hardened steels, carburized and nitrided irons and some hard coatings.									
KD1405		Composition: A pure CVD-deposited diamond-sheet tool brazed directly to a carbide substrate. Application: KD1405™ is the best Kennametal abrasion-resistant tool material for non-ferrous and non-metallic materials. Best applied when abrasion resistance is the desired benefit.									

Select the geometry

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

- first choice
- alternate choice

Chip Control	Description	Insert Geometry	Seat Size	Corner Radius	Starting Conditions	Plunge Feed Rates inch/rev (mm/rev)						
				in (mm)	in (mm)	.0020 (0,05)	.0040 (0,10)	.0060 (0,15)	.0080 (0,20)	.0100 (0,25)	.0120 (0,30)	.0140 (0,35)
-GUP	Groove and turn inserts in new Beyond™ grades.		2	.008 (0,2)	.0031 (0,08)							
			3	.008 (0,2)	.0035 (0,09)							
				.016 (0,4)	.0043 (0,11)							
			4	.016 (0,4)	.0047 (0,12)							
				.031 (0,8)	.0059 (0,15)							



Primary Workpiece Material Group

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

- first choice
- alternate choice

Chip Control Geometry Designation

Maximum Feed Rate Values

Data above is for P and K material groups. Maximum feed rates should be adjusted by multiplying max feed rate values by following factors for shown material groups.	Material Group	Feed Factor
	M	.8
	N	1.2
	S	.8
	H	.5

Plunge Feed Rates

- first choice
- alternate choice

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

Chip Control	Description	Insert Geometry	Seat Size	Corner Radius		Starting Conditions	Plunge Feed Rates inch/rev (mm/rev)						
				in (mm)	in (mm)		.0020 (0,05)	.0040 (0,10)	.0060 (0,15)	.0080 (0,20)	.0100 (0,25)	.0120 (0,30)	.0140 (0,35)
-GUP	- Groove and turn inserts in new Beyond™ grades. - Available in molded and precision-ground styles. - Positive rake angle with enhanced chip control. - Available in metric widths only.		2	.008 (0,2)	.0031 (0,08)								
			3	.008 (0,2)	.0035 (0,09)								
				.016 (0,4)	.0043 (0,11)								
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			6	.016 (0,4)	.0059 (0,16)								
				.031 (0,8)	.0071 (0,18)								
				.047 (1,2)	.0079 (0,20)								
-GMP	- Groove and turn inserts. - Available in molded and precision-ground styles. - Positive rake angle. - Available in metric widths only.		2	.008 (0,2)	.0031 (0,08)								
			3	.008 (0,2)	.0035 (0,09)								
				.016 (0,4)	.0043 (0,11)								
			4	.016 (0,4)	.0047 (0,12)								
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				.031 (0,8)	.0071 (0,18)								
				.047 (1,2)	.0079 (0,20)								
-GMN	- Groove and turn molded and precision ground inserts. - Stable cutting edge. - Available in metric and inch widths.		2	.008 (0,2)	.0031 (0,08)								
			3	.008 (0,2)	.0035 (0,09)								
				.016 (0,4)	.0043 (0,11)								
			4	.016 (0,4)	.0047 (0,12)								
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				.031 (0,8)	.0071 (0,18)								
				.047 (1,2)	.0079 (0,20)								

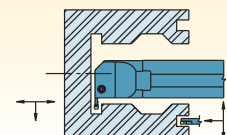
Maximum Feed Rate Values

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

Material Group	Feed Factor
M	.8
N	.8
S	.5
H	1.2

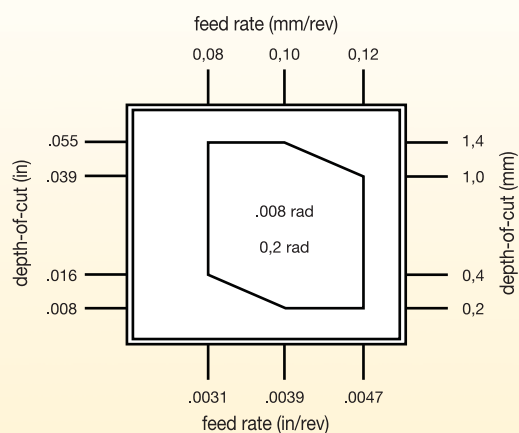
I.D. and Face Grooving

For I.D. and face grooving applications, reduce feed rate by 20%.

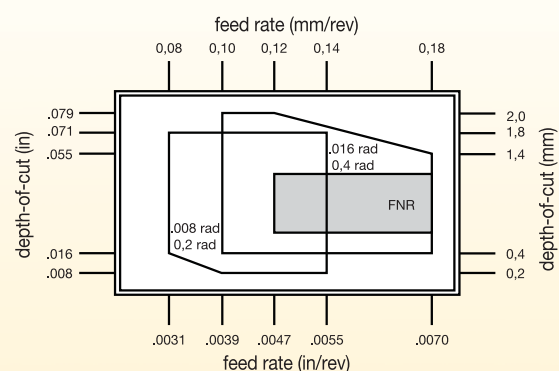


Turn and profile feed rates • GUP/GMP Geometries

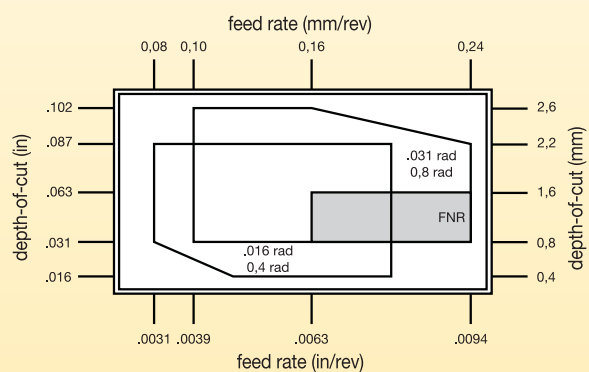
Seat Size 2



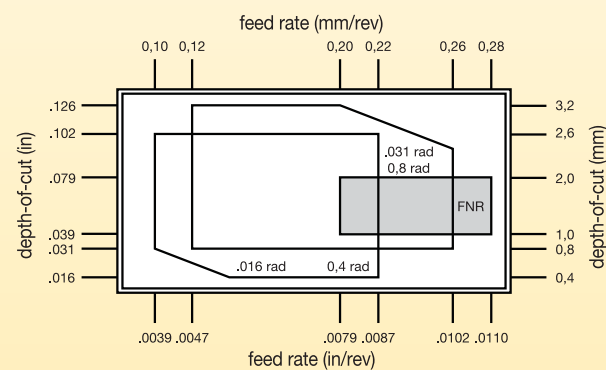
Seat Size 3



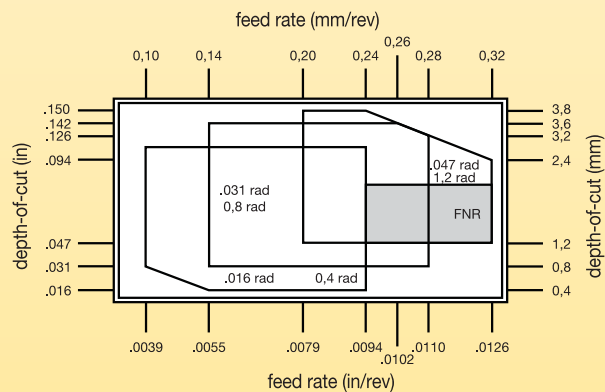
Seat Size 4



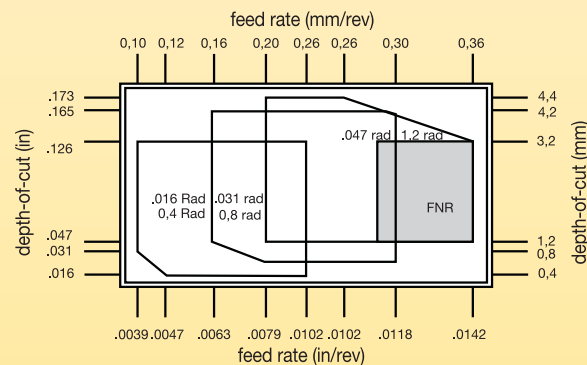
Seat Size 5



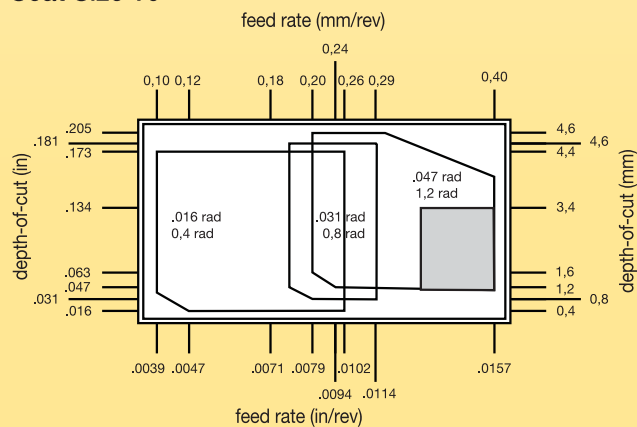
Seat Size 6



Seat Size 8

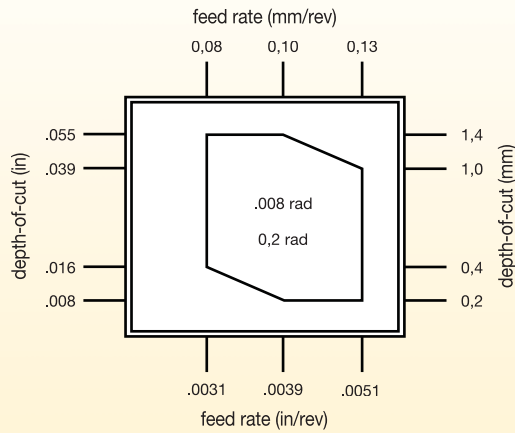


Seat Size 10

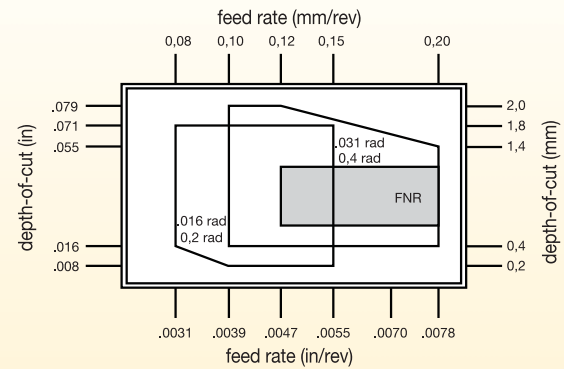


■ Turn and profile feed rates • GMN Geometries

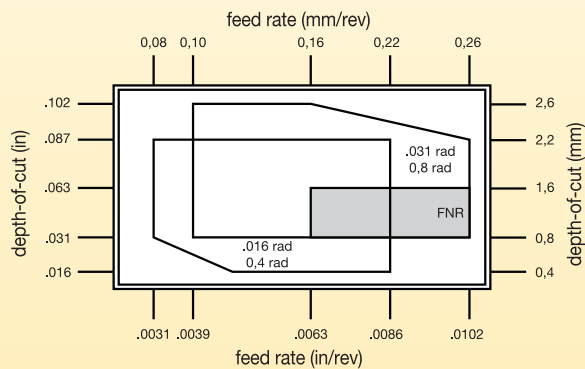
Seat Size 2



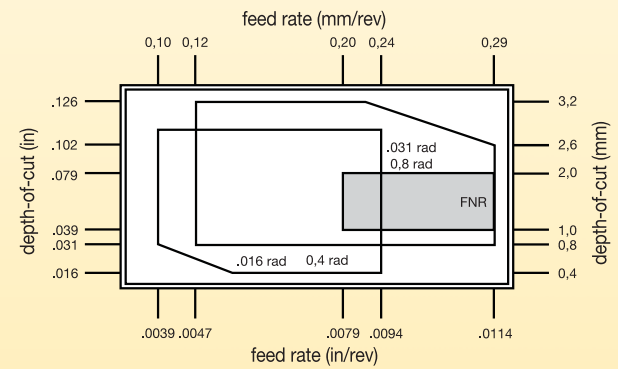
Seat Size 3



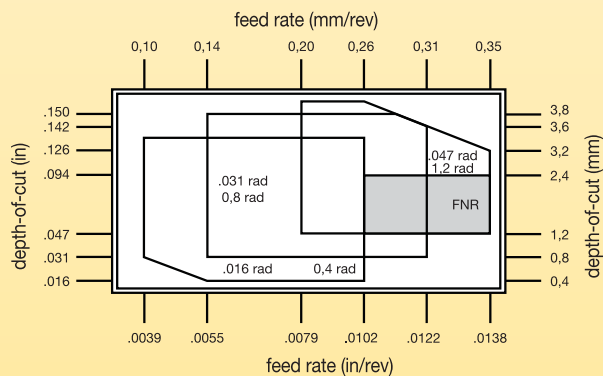
Seat Size 4



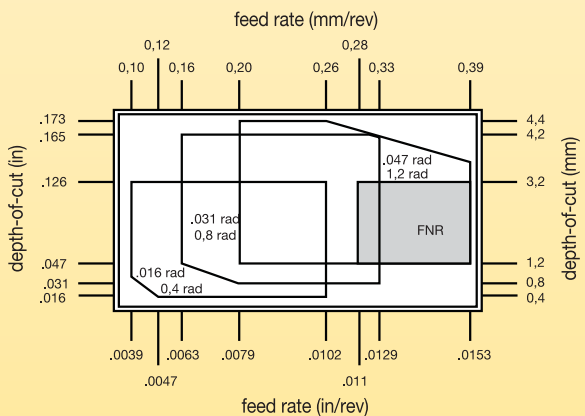
Seat Size 5



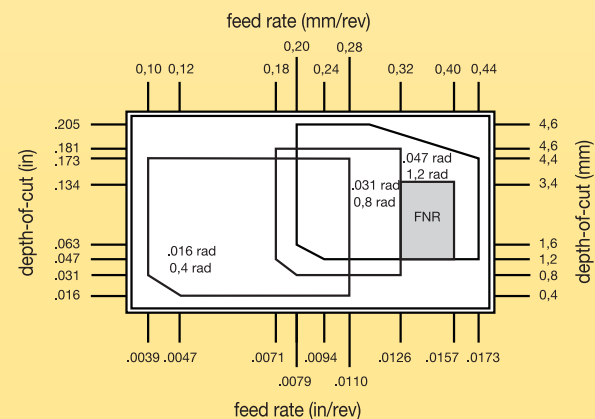
Seat Size 6



Seat Size 8



Seat Size 10



■ Cut-Off Feed Rates

- first choice
- alternate choice

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

Chip Control	Description	Insert Geometry	Seat Size	Starting Conditions	Cut-Off Feed Rates inch/rev (mm/rev)			
				in (mm)	.0020 (0,05)	.0040 (0,10)	.0060 (0,15)	.0080 (0,20)
-A4C-CF	- High positive rake angle. - Sharp cutting edge. - Available in neutral lead angle in 6° and 10° right- and left-hand styles.		1B	.0024 (0,06)	●	○		
			2/2B	.0028 (0,07)	○	●		
			3	.0035 (0,09)		○	●	
			4	.0043 (0,11)			○	●

Maximum Feed Rate Values

Data is for P and K material groups. Maximum feed rates should be adjusted by multiplying feed rate values by following factors for other material groups.	Material Group	Feed Factor
	M	.8
	N	.8
	S	.5
	H	1.2

Mobile Apps

The Kennametal mobile app makes it easy to access product information and calculators on both iPhone® and Android™ devices. We've highlighted a few of the key features...

There's an app for that.

SPEEDS & FEEDS

View speeds and feeds information for metalworking products.

PRODUCT AVAILABILITY

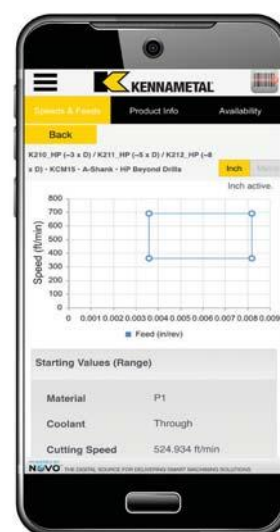
Check global availability of products. View available quantities by providing your Konnect login credentials.

CALCULATORS

Utilize our machining calculators for milling and drilling applications.

➔ By just scanning the bar code on the insert packet, you can find the most productive cutting conditions for tool life, process time, and chip control.

NOTE: The app is currently only available in the English-language version. We have plans to translate the app in different languages with future releases.



Recommended Starting Speeds [m/min]

Material Group		K313	KCU10/KC5010	KCU25/KC5025	KCP10	KCP25	KCK20B	KY3500
P	0-1	- - -	140 280 335	110 225 270	185 400 450	145 290 365	200 440 490	- - -
	2	- - -	140 200 245	110 160 195	185 270 350	145 200 305	200 300 380	- - -
	3	- - -	140 155 245	110 125 195	170 190 260	140 155 245	600 200 280	- - -
	4	- - -	75 110 170	60 90 135	90 145 200	75 110 180	100 160 220	- - -
	5	- - -	120 200 260	100 160 210	150 220 305	120 200 270	165 240 330	- - -
	6	- - -	110 150 230	85 120 185	120 180 275	110 150 230	130 190 300	- - -
M	1	60 90 120	140 210 260	90 170 245	- - -	- - -	- - -	- - -
	2	45 75 110	120 200 245	90 150 245	- - -	- - -	- - -	- - -
	3	35 65 100	120 180 245	90 140 210	- - -	- - -	- - -	- - -
K	1	30 75 120	120 180 245	100 145 195	170 245 440	140 200 360	210 305 550	180 760 1040
	2	25 70 110	90 150 210	70 120 170	120 195 340	100 160 280	150 245 430	275 365 500
	3	20 60 90	60 110 150	50 85 120	120 170 270	100 140 220	150 210 335	- - -
N	1-2	150 370 610	150 550 975	120 440 780	- - -	- - -	- - -	- - -
	3	- - -	- - -	- - -	- - -	- - -	- - -	- - -
	4	120 275 430	120 365 610	100 290 490	- - -	- - -	- - -	- - -
	5	45 90 150	90 170 245	70 135 195	- - -	- - -	- - -	- - -
	6	40 75 150	120 210 305	100 170 245	- - -	- - -	- - -	- - -
S	1	8 30 75	15 55 135	8 40 60	- - -	- - -	- - -	- - -
	2	8 35 75	15 60 135	8 30 75	- - -	- - -	- - -	- - -
	3	8 40 75	15 70 135	15 40 75	- - -	- - -	- - -	- - -
	4	8 45 75	15 70 170	8 50 110	- - -	- - -	- - -	- - -
H	1	- - -	30 45 60	- - -	- - -	- - -	- - -	- - -
	2	- - -	15 30 45	- - -	- - -	- - -	- - -	- - -
	3	- - -	- - -	- - -	- - -	- - -	- - -	- - -
	4	- - -	- - -	- - -	- - -	- - -	- - -	- - -

Material Group		KT315	KB5625	KB1630	KD1405
P	0-1	180 440 475	- - -	- - -	- - -
	2	195 270 400	- - -	- - -	- - -
	3	180 210 275	- - -	- - -	- - -
	4	75 160 210	- - -	- - -	- - -
	5	150 250 310	- - -	- - -	- - -
	6	140 200 300	- - -	- - -	- - -
M	1	- - -	- - -	- - -	- - -
	2	- - -	- - -	- - -	- - -
	3	- - -	- - -	- - -	- - -
K	1	60 275 550	- - -	180 760 1040	- - -
	2	135 275 360	- - -	- - -	- - -
	3	180 230 360	- - -	- - -	- - -
N	1-2	- - -	- - -	- - -	365 610 1040
	3	- - -	- - -	- - -	275 480 800
	4	- - -	- - -	- - -	300 550 920
	5	- - -	- - -	- - -	275 610 1070
	6	- - -	- - -	- - -	150 460 760
S	1	- - -	- - -	120 200 275	- - -
	2	- - -	- - -	120 215 275	- - -
	3	- - -	- - -	120 250 275	- - -
	4	- - -	- - -	- - -	- - -
H	1	- - -	45 150 230	45 120 170	- - -
	2	- - -	45 140 230	45 110 170	- - -
	3	- - -	45 130 230	45 100 170	- - -
	4	- - -	45 120 230	45 90 170	- - -

NOTE: FIRST choice starting speeds are in **bold** type.
As the average chip thickness increases, the speed should be decreased.

(continued)

(Recommended Starting Speeds — continued)

 Recommended Starting Speeds [SFM]

Material Group		K313			KCU10/KC5010			KCU25/KC5025			KCP10			KCP25			KCK20B			KY3500		
P	0-1	-	-	-	450	925	1100	360	740	880	600	1320	1475	475	925	1200	660	1450	1620	-	-	-
	2	-	-	-	450	650	800	360	520	640	600	880	1150	475	650	1000	660	970	1260	-	-	-
	3	-	-	-	450	510	800	360	410	640	550	630	850	450	510	800	600	700	920	-	-	-
	4	-	-	-	250	360	550	200	290	440	300	480	650	250	360	600	330	530	710	-	-	-
	5	-	-	-	400	660	850	320	530	680	500	720	1000	400	650	875	550	800	1100	-	-	-
	6	-	-	-	350	500	750	280	400	600	400	600	900	350	500	750	440	660	990	-	-	-
M	1	200	300	400	450	700	850	300	550	800	-	-	-	-	-	-	-	-	-	-	-	-
	2	150	250	350	400	650	800	300	500	800	-	-	-	-	-	-	-	-	-	-	-	-
	3	120	220	320	400	600	800	300	450	700	-	-	-	-	-	-	-	-	-	-	-	-
K	1	100	250	400	400	600	800	320	480	640	560	800	1440	455	650	1170	700	1000	1800	600	2500	3400
	2	75	225	350	300	500	700	240	400	560	400	640	1120	325	520	910	500	800	1400	900	1200	1650
	3	65	190	300	200	350	500	160	280	400	400	560	880	325	455	715	500	700	1100	-	-	-
N	1-2	500	1200	2000	500	1800	3200	400	1440	2560	-	-	-	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4	400	900	1400	400	1200	2000	320	960	1600	-	-	-	-	-	-	-	-	-	-	-	-
	5	150	300	500	300	550	800	240	440	640	-	-	-	-	-	-	-	-	-	-	-	-
	6	120	250	500	400	700	1000	320	560	800	-	-	-	-	-	-	-	-	-	-	-	-
S	1	25	100	250	50	180	450	25	125	200	-	-	-	-	-	-	-	-	-	-	-	-
	2	25	110	250	50	195	450	25	100	250	-	-	-	-	-	-	-	-	-	-	-	-
	3	25	125	250	50	225	450	50	125	250	-	-	-	-	-	-	-	-	-	-	-	-
	4	25	150	250	50	225	550	25	175	350	-	-	-	-	-	-	-	-	-	-	-	-
H	1	-	-	-	100	150	200	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2	-	-	-	50	100	150	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Material Group		KT315			KB5625			KB1630			KD1405		
P	0-1	600	1450	1600	-	-	-	-	-	-	-	-	-
	2	650	880	1300	-	-	-	-	-	-	-	-	-
	3	600	680	900	-	-	-	-	-	-	-	-	-
	4	300	530	725	-	-	-	-	-	-	-	-	-
	5	500	800	1025	-	-	-	-	-	-	-	-	-
	6	475	660	975	-	-	-	-	-	-	-	-	-
M	1	-	-	-	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-	-	-	-
K	1	200	900	1800	-	-	-	600	2500	3400	-	-	-
	2	450	900	1200	-	-	-	-	-	-	-	-	-
	3	600	750	1200	-	-	-	-	-	-	-	-	-
N	1-2	-	-	-	-	-	-	-	-	-	1200	2000	3400
	3	-	-	-	-	-	-	-	-	-	900	1600	2600
	4	-	-	-	-	-	-	-	-	-	1000	1800	3000
	5	-	-	-	-	-	-	-	-	-	900	2000	3500
	6	-	-	-	-	-	-	-	-	-	500	1500	2500
S	1	-	-	-	-	-	-	400	650	900	-	-	-
	2	-	-	-	-	-	-	400	700	900	-	-	-
	3	-	-	-	-	-	-	400	810	900	-	-	-
	4	-	-	-	-	-	-	-	-	-	-	-	-
H	1	-	-	-	150	500	760	150	400	560	-	-	-
	2	-	-	-	150	460	760	150	360	560	-	-	-
	3	-	-	-	150	430	760	150	330	560	-	-	-
	4	-	-	-	150	400	760	150	300	560	-	-	-

NOTE: FIRST choice starting speeds are in **bold** type.

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

NOVO KNOWS SEARCH

Searching for a tool has been enhanced by Advise and Select functions from NOVO™ applications — saving you time and money.

ADVISE

Uses a rules-based approach to provide cutting tool recommendations:

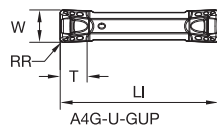
- Define Machining Feature (face milling, slotting, blind hole, etc.)
- Apply Constraint Requirements (geometric, material, tolerance, etc.)
- Set Machining Sequence (single or multi-step operations, rough then finish, etc.)
- Receive Ranked Results

SELECT

A method of selecting cutting tools from a tree structure via a hierarchy or parametric search:

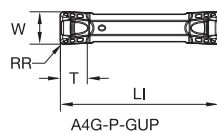
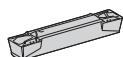
- If you know which product you are looking for, a quick search can be performed by just the catalog number or product description.
- Smart filters significantly reduce the amount of potential tooling solutions.
- After the tool is selected, NOVO also provides cutting and adaptive item options that fit with your solution.

NOVO applications can ensure you have the right tools on your machines, in the right sequence. Resulting in flawless execution that accelerates every job, and maximizes every shift. kennametal.com/novo



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

catalog number	seat size	W		RR		LI		T		KC100	KC25	KCP10	KCP25	KCK20	K313	KC5010	KC5025	KV3500	KT315	KB1630	KB6625	KD1405
		mm	in	mm	in	mm	in	mm	in													
A4G0205M02U02GUP	2	2,05	.081	0,2	.008	20	.79	2,0	.079	●	●	●	●	-	-	-	-	-	-	-	-	-
A4G0305M03U02GUP	3	3,05	.120	0,2	.008	20	.79	3,0	.118	●	●	●	●	-	-	-	-	-	-	-	-	-
A4G0305M03U04GUP	3	3,05	.120	0,4	.016	20	.79	3,0	.118	●	●	●	●	-	-	-	-	-	-	-	-	-
A4G0405M04U04GUP	4	4,05	.159	0,4	.016	20	.79	3,4	.134	●	●	●	●	-	-	-	-	-	-	-	-	-
A4G0405M04U08GUP	4	4,05	.159	0,8	.031	20	.79	3,4	.134	●	●	●	●	-	-	-	-	-	-	-	-	-
A4R0405M04U00GUP	4	4,05	.159	—	—	20	.79	—	—	-	●	-	-	-	-	-	-	-	-	-	-	-
A4G0505M05U04GUP	5	5,05	.199	0,4	.016	25	.99	4,2	.165	●	●	●	●	-	-	-	-	-	-	-	-	-
A4G0505M05U08GUP	5	5,05	.199	0,8	.031	25	.99	4,2	.165	●	●	●	●	-	-	-	-	-	-	-	-	-
A4G0605M06U04GUP	6	6,05	.238	0,4	.016	30	1.19	4,5	.177	●	●	●	●	-	-	-	-	-	-	-	-	-
A4G0605M06U08GUP	6	6,05	.238	0,8	.031	30	1.19	4,5	.177	●	●	●	●	-	-	-	-	-	-	-	-	-
A4G0605M06U12GUP	6	6,05	.238	1,2	.047	30	1.19	4,5	.177	●	●	●	●	-	-	-	-	-	-	-	-	-
A4R0605M06U00GUP	6	6,05	.238	—	—	30	1.19	4,9	.193	-	●	-	-	-	-	-	-	-	-	-	-	-
A4G0805M08U08GUP	8	8,05	.317	0,8	.031	30	1.19	6,0	.236	●	●	●	●	-	-	-	-	-	-	-	-	-
A4G0805M08U12GUP	8	8,05	.317	1,2	.047	30	1.19	6,0	.236	●	●	●	●	-	-	-	-	-	-	-	-	-
A4R0805M08U00GUP	8	8,05	.317	—	—	30	1.19	6,5	.256	-	●	-	-	-	-	-	-	-	-	-	-	-
A4G1005M10U08GUP	10	10,05	.396	0,8	.031	30	1.19	6,0	.236	●	●	●	-	-	-	-	-	-	-	-	-	-
A4G1005M10U12GUP	10	10,05	.396	1,2	.047	30	1.19	6,1	.238	-	●	-	●	-	-	-	-	-	-	-	-	-



A4G-P-GUP

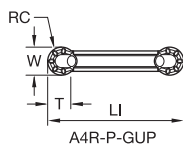
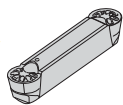
- first choice
- alternate choice

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

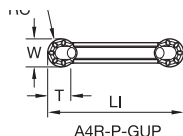
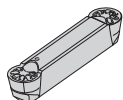
■ GUP Precision Ground

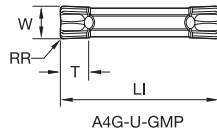
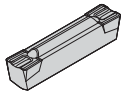
[illegible]

Grooving and Cut-Off



P												
M												
K												
N												
S												
H												

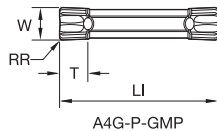
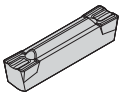
[illegible][illegible]



- first choice
- alternate choice

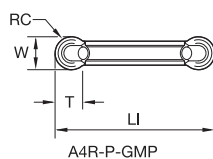
P	■	■	■	■	○	○	○	■									
M	■	■				○	■	○									
K	○	○	○	○	■	○	○	○	■	○	○						
N	■	○				■	■	○								■	
S	■	■				■	○	○				○					
H	○					○						■	■				

■ GMP Precision Molded

[illegible]

■ GMP Precision Ground

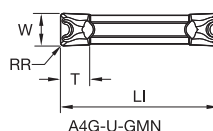
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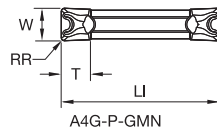
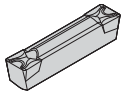
- first choice
- alternate choice

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

catalog number	seat size	W		RC		LI		T		KCUI10	KCUI25	KCP10	KCP25	KCK20	K313	KC5010	KC5025	KY3500	KT315	KB1630	KB5625	KD1405
		mm	in	mm	in	mm	in	mm	in													
A4R0200M02P00GMP	2	2,00	.079	1,0	.039	20	.78	1,7	.065	●	●	-	-	-	●	●	●	-	-	-	-	-
A4R0300M03P00GMP	3	3,00	.118	1,5	.059	20	.78	2,5	.098	●	●	-	-	-	●	●	●	-	-	-	-	-
A4R0400M04P00GMP	4	4,00	.157	2,0	.079	20	.78	—	—	●	●	-	-	-	●	●	●	-	-	-	-	-
A4R0500M05P00GMP	5	5,00	.197	2,5	.098	25	.98	4,1	.160	●	●	-	-	-	●	●	●	-	-	-	-	-
A4R0600M06P00GMP	6	6,00	.236	3,0	.118	30	1.18	4,8	.189	●	●	-	-	-	-	●	●	-	-	-	-	-
A4R0800M08P00GMP	8	8,00	.315	4,0	.158	30	1.18	6,4	.252	●	●	-	-	-	-	●	●	-	-	-	-	-



in	KCU10	KCU25	KCP10	KCP25	KCK20	K313	KCS010	KCS025	KV3500	KT315	KB1630	KB5625	KD3405
.079	●	●	●	-	-	-	●	●	-	-	-	-	-
.079	-	-	-	-	-	-	-	●	-	-	-	-	-
.138	●	●	●	●	-	-	●	●	-	-	-	-	-
.138	●	●	●	●	-	-	●	●	-	-	-	-	-
.134	●	●	-	●	-	-	-	-	-	-	-	-	-
.134	●	●	●	●	-	-	●	●	-	-	-	-	-
.165	●	●	●	●	-	-	●	●	-	-	-	-	-
.165	●	●	●	●	-	-	●	●	-	-	-	-	-
.193	●	●	●	●	-	-	●	●	-	-	-	-	-
.193	●	●	●	●	-	-	●	●	-	●	-	-	-
.193	-	-	-	●	-	-	●	●	-	-	-	-	-
.252	●	●	●	●	-	-	●	-	-	-	-	-	-
.252	-	●	●	●	-	-	●	-	-	-	-	-	-
.319	-	●	●	●	-	-	●	●	-	-	-	-	-
.319	-	-	-	●	-	-	●	-	-	-	-	-	-

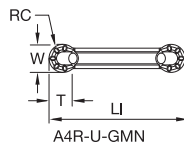
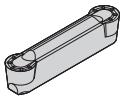


- first choice
- alternate choice

P																			
M																			
K																			
N																			
S																			
H																			

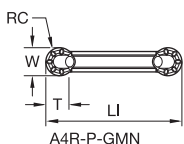
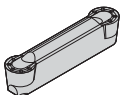
GMN Precision Ground

		W		RR		LI		T														
catalog number	seat size	mm	in	mm	in	mm	in	mm	in	KCU10	KCU25	KCP10	KCP25	KCK20	K313	KC5010	KC5025	KY3500	KT315	KB1630	KB5625	KD1405
A4G094I2BP05GMN	2B	2,39	.094	0,2	.008	20	.79	1,9	.075	●	-	-	-	-	-	●	-	-	-	-	-	-
A4G125I03P05GMN	3	3,18	.125	0,2	.008	20	.79	3,4	.134	●	●	-	-	-	-	●	●	-	-	-	-	-
A4G125I03P1GMN	3	3,18	.125	0,4	.016	20	.79	3,4	.134	●	●	-	-	-	-	●	●	-	-	-	-	-
A4G187I04P1GMN	4	4,76	.187	0,4	.016	20	.79	3,5	.138	●	●	-	-	-	-	●	-	-	-	-	-	-
A4G187I04P2GMN	4	4,76	.187	0,8	.031	20	.79	3,5	.138	●	●	-	-	-	-	●	●	-	-	-	-	-
A4G250I06P1GMN	6	6,35	.250	0,4	.016	30	1.18	4,7	.187	●	●	-	-	-	-	●	-	-	-	-	-	-
A4G250I06P2GMN	6	6,35	.250	0,8	.031	30	1.18	4,7	.187	●	●	-	-	-	-	●	-	-	-	-	-	-
A4G312I08P1GMN	8	7,94	.312	0,4	.016	30	1.18	6,2	.246	-	●	-	-	-	-	●	-	-	-	-	-	-
A4G375I10P1GMN	10	9,53	.375	0,4	.016	30	1.18	7,9	.312	-	-	-	-	-	-	●	-	-	-	-	-	-
A4G375I10P2GMN	10	9,53	.375	0,8	.031	30	1.18	7,9	.313	●	-	-	-	-	-	●	-	-	-	-	-	-



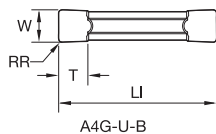
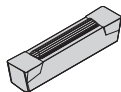
■ GMN Full Radius Precision Molded

										KCU10	KCU25	KCP10	KCP25	KCK20	K313	KC5010	KC5025	KY3500	KT315	KB1630	KB5625	KD1405
	W		RC		LI		T															
catalog number	seat size	mm	in	mm	in	mm	in	mm	in													
A4R0205M02U00GMN	2	2,05	.081	1,1	.042	20	.79	1,8	.069	-	●	●	-	-	-	●	●	-	-	-	-	-
A4R0305M03U00GMN	3	3,05	.120	1,5	.060	20	.79	2,6	.101	●	●	●	●	-	-	●	●	-	-	-	-	-
A4R0405M04U00GMN	4	4,05	.159	2,0	.080	20	.79	3,5	.136	●	●	●	●	-	-	●	●	-	-	-	-	-
A4R0505M05U00GMN	5	5,05	.199	2,5	.099	25	.99	4,2	.163	●	●	●	●	-	-	●	●	-	-	-	-	-
A4R0605M06U00GMN	6	6,05	.238	3,0	.119	30	1.19	4,9	.194	●	●	●	●	-	-	●	●	-	-	-	-	-
A4R0805M08U00GMN	8	8,05	.317	4,0	.159	30	1.19	6,5	.256	●	●	●	●	-	-	●	●	-	-	-	-	-
A4R1005M10U00GMN	10	10,05	.396	5,0	.198	30	1.19	8,2	.322	●	●	-	●	-	-	-	-	-	-	-	-	-



■ GMN Full Radius Precision Ground

catalog number	seat size	W		RC		LI		T		KC10	KC25	KCP10	KCP25	KCK20	K313	KC5010	KC5025	KY3500	KT315	KB1630	KB5625	KD1405
		mm	in	mm	in	mm	in	mm	in													
A4R125I03P00GMN	3	3,18	.125	1,6	.063	20	.79	2,7	.108	●	●	-	-	-	-	●	●	-	-	-	-	-
A4R187I04P00GMN	4	4,76	.187	2,4	.094	20	.79	3,8	.149	●	●	-	-	-	-	●	●	-	-	-	-	-
A4R250I06P00GMN	6	6,35	.250	3,2	.125	30	1.18	5,3	.208	●	●	-	-	-	-	●	●	-	-	-	-	-
A4R312I08P00GMN	8	7,94	.313	4,0	.157	30	1.18	6,4	.254	●	-	-	-	-	-	-	-	-	-	-	-	-
A4R375I10P00GMN	10	9,53	.375	4,8	.188	30	1.18	7,3	.289	-	-	-	-	-	-	-	●	-	-	-	-	-



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

catalog number	seat size	W		RR		LI		T		KC10	KC25	KCP10	KCP25	KCK20	K313	KC5010	KC5025	KY3500	KT315	KB1630	KB5625	KD1405
		mm	in	mm	in	mm	in	mm	in													
A4G0305M03U02B	3	3,05	.120	0,2	.008	20	.79	3,5	.138	-	●	-	-	●	-	-	●	-	-	-	-	-
A4G0405M04U04B	4	4,05	.159	0,4	.015	20	.79	3,4	.134	-	-	-	-	●	-	-	●	-	-	-	-	-
A4G0505M05U04B	5	5,05	.199	0,4	.015	25	.98	4,2	.165	-	●	-	-	-	-	-	-	-	-	-	-	-
A4G0605M06U04B	6	6,05	.238	0,4	.016	30	1.18	4,9	.193	-	●	-	-	●	-	-	-	-	-	-	-	-
A4G0805M08U08B	8	8,05	.317	0,8	.031	30	1.18	6,4	.252	-	-	-	-	●	-	-	-	-	-	-	-	-
A4G1005M10U08B	10	10.05	.396	0.8	.031	30	1.18	8,1	.319	-	-	-	-	●	-	-	-	-	-	-	-	-

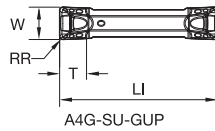
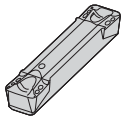
W
 RR
 T
 LI
 A4G-SP-GUP

● first choice
 ○ alternate choice

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

[illegible]

C108



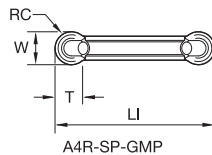
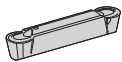
- first choice
- alternate choice

P	■	■	■	■	○		○	○	■			
M	■	■					○	■	○			
K	■	○	○	○	○	■	○	○	○	■	○	○
N	■	○					■	■	○			■
S	■	■					■	○	○		○	
H	■	○					○				■	■

■ GUP Precision Ground • Small Diameter Face Grooving

[illegible]

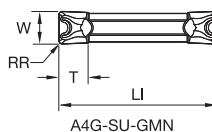
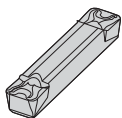
NOTE: A4-S inserts are reduced-height A4 inserts. For example, a 2S seat size holder will not accept a seat size 2 insert.



■ GMP Full Radius Precision Ground • Small Diameter Face Grooving

[illegible]

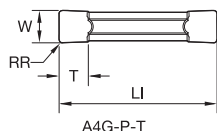
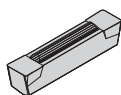
NOTE: A4-S inserts are reduced-height A4 inserts. For example, a 2S seat size holder will not accept a seat size 2 insert.



■ **GMN Precision Molded • Small Diameter Face Grooving**

[illegible]

NOTE: A4-S inserts are reduced-height A4 inserts. For example, a 2S seat size holder will not accept a seat size 2 insert.

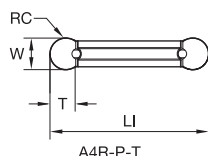
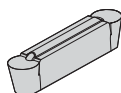


A4G-P-T

P		
M		
K		
N		
S		
H		

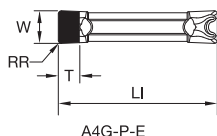
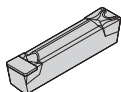
Grooving and Cut-Off

ISO catalog number	ANSI catalog number	seat size	W		RR		LI		T	
			mm	in	mm	in	mm	in	mm	in
A4G0300M03P04T01025	A4G0300M03P04T01025	3	3,00	.118	0,4	.016	20	.79	3,4	.134
A4G125I03P1T0425	A4G125I03P1T0425	3	3,18	.125	0,4	.016	20	.79	3,4	.134
A4G0400M04P04T01025	A4G0400M04P04T01025	4	4,00	.157	0,4	.016	20	.79	3,4	.134
A4G0500M05P08T01025	A4G0500M05P08T01025	5	5,00	.197	0,8	.031	25	.98	4,2	.165
A4G0600M06P08T01025	A4G0600M06P08T01025	6	6,00	.236	0,8	.031	30	1.18	4,8	.189
A4G250I06P2T0425	A4G250I06P2T0425	6	6,35	.250	0,8	.031	30	1.18	4,9	.193
A4G0800M08P08T01025	A4G0800M08P08T01025	8	8,00	.315	0,8	.031	30	1.18	6,4	.250



A4R-P-T

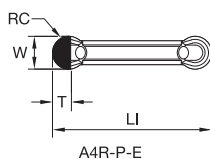
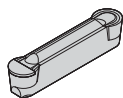
ISO catalog number	ANSI catalog number	seat size	W		RC		LI		T	
			mm	in	mm	in	mm	in	mm	in
A4R0300M03P00T01025	A4R0300M03P00T01025	3	3,00	.118	1,5	.059	20	.79	2,4	.095
A4R0500M05P00T01025	A4R0500M05P00T01025	5	5,00	.197	2,5	.098	25	.98	4,1	.163
A4R0600M06P00T01025	A4R0600M06P00T01025	6	6,00	.236	3,0	.118	30	1.18	4,3	.167
A4R250I06P00T0425	A4R250I06P00T0425	6	6,35	.250	3,2	.125	30	1.18	4,8	.191
A4R0800M08P00T01025	A4R0800M08P00T01025	8	8,00	.315	4,0	.157	30	1.18	6,4	.250



A4G-P-E

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

[illegible]

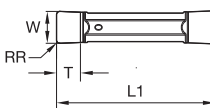
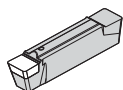


A4R-P-F

- first choice
- alternate choice

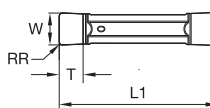
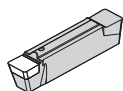
P	●	●	●	●	○		○	○		●				
M	■	●	●			○	●	○				■		
K	■	○	○	○	○	●	○	○	○	●	○	○		■
N	■	●	○			○	●	●	○					●
S	■	●	●				●	○	○			○		
H	■	○					○					●	●	

■ Flat Top Full Radius Precision Ground • PCD

[illegible]

A4G-P-F-ST

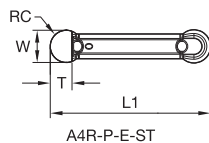
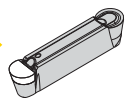
■ Flat Top Precision Ground • PcBN

[illegible]

A4G-P-S-ST

■ Flat Top Precision Ground • T Land • PcBN

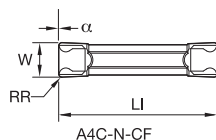
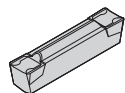
[illegible]



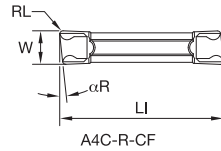
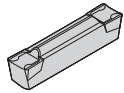
P											
M											
K											
N											
S											
H											

[illegible]

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



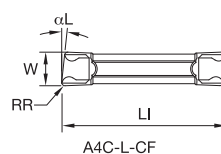
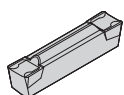
catalog number	seat size	W		RR		LI		α	KCJ10	KCJ25	KCP10	KCP25	KCK20	K313	KC5010	KC5025	KY3500	KT315	KB1630	KB5625	KD1405
		mm	in	mm	in	mm	in														
A4C0155N00CF01	1	1,50	.059	0,2	.006	16	.61	—	—	●	—	—	—	—	—	●	—	—	—	—	—
A4C0205N00CF02	2	2,05	.081	0,2	.008	20	.79	—	—	●	—	—	—	—	—	●	—	—	—	—	—
A4C0255N00CF02	2B	2,50	.098	0,2	.008	20	.79	—	—	●	—	—	—	—	—	●	—	—	—	—	—
A4C0305N00CF02	3	3,05	.120	0,2	.008	20	.79	—	—	●	—	—	—	—	—	●	—	—	—	—	—
A4C0405N00CF02	4	4,05	.159	0,2	.008	20	.79	—	—	●	—	—	—	—	—	●	—	—	—	—	—



A4C-R-CF

CF Precision Molded • Right Hand

catalog number	seat size	W		RL		LI		αR	KCU10	KCU25	KCP10	KCP25	KCK20	K313	KC5010	KC5025	KY3500	KT315	KB1630	KB5625	KD1405
		mm	in	mm	in	mm	in														
A4C0155R06CF01	1	1,50	.059	0,2	.006	16	.61	6.0	-	-	-	-	-	-	-	●	-	-	-	-	-
A4C0155R10CF01	1	1,50	.059	0,2	.006	16	.61	10.0	-	●	-	-	-	-	-	-	-	-	-	-	-
A4C0155R16CF01	1	1,50	.059	0,2	.006	16	.61	16.0	-	-	-	-	-	-	-	●	-	-	-	-	-
A4C0205R06CF02	2	1,99	.078	0,2	.008	20	.79	6.0	-	●	-	-	-	-	-	●	-	-	-	-	-
A4C0205R10CF02	2	1,99	.078	0,2	.008	20	.79	10.0	-	●	-	-	-	-	-	-	-	-	-	-	-
A4C0255R06CF02	2B	2,49	.098	0,2	.008	20	.79	6.0	-	-	-	-	-	-	-	●	-	-	-	-	-
A4C0305R06CF02	3	3,05	.120	0,2	.008	20	.79	6.0	-	●	-	-	-	-	-	●	-	-	-	-	-
A4C0305R10CF02	3	3,05	.120	0,2	.008	20	.79	10.0	-	●	-	-	-	-	-	●	-	-	-	-	-
A4C0405R06CF02	4	4,05	.159	0,2	.008	20	.79	6.0	-	●	-	-	-	-	-	-	-	-	-	-	-
A4C0405R10CF02	4	4,05	.159	0,2	.008	20	.79	10.0	-	●	-	-	-	-	-	●	-	-	-	-	-



A4C-L-CF

CF Precision Molded • Left Hand

catalog number	seat size	W		RR		LI		αL	KCU10	KCU25	KCP10	KCP25	KCK20	K313	KC5010	KC5025	KY3500	KT315	KB1630	KB5625	KD1405
		mm	in	mm	in	mm	in														
A4C0155L06CF01	1	1,50	.059	0,2	.006	16	.61	6.0	-	-	-	-	-	-	-	●	-	-	-	-	-
A4C0205L06CF02	2	1,99	.078	0,2	.008	20	.79	6.0	-	●	-	-	-	-	-	-	-	-	-	-	-
A4C0205L10CF02	2	1,99	.078	0,2	.008	20	.79	10.0	-	-	-	-	-	-	-	●	-	-	-	-	-
A4C0305L06CF02	3	3,05	.120	0,2	.008	20	.79	6.0	-	●	-	-	-	-	-	●	-	-	-	-	-
A4C0305L10CF02	3	3,05	.120	0,2	.008	20	.79	10.0	-	●	-	-	-	-	-	-	-	-	-	-	-
A4C0405L06CF02	4	4,05	.159	0,2	.008	20	.79	6.0	-	●	-	-	-	-	-	-	-	-	-	-	-
A4C0405L10CF02	4	4,05	.159	0,2	.008	20	.79	10.0	-	●	-	-	-	-	-	-	-	-	-	-	-

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

- first choice
- alternate choice

How Do Catalog Numbers Work?

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

Grooving and Cut-Off
A4 - Integral Toolholders

Integral Straight - Inch

Order Number	Toolholder Number	Shank Size	Seat Size	Max Grooving Depth	Toolholder Length	Toolholder Width	Toolholder Height	Toolholder Weight	Toolholder Volume	Toolholder Area
1001	A4SMR100214	1.00	0.25	0.00	1.00	0.25	0.00	1.00	0.25	0.00
1002	A4SMR100214	1.00	0.25	0.00	1.00	0.25	0.00	1.00	0.25	0.00
1003	A4SMR100214	1.00	0.25	0.00	1.00	0.25	0.00	1.00	0.25	0.00
1004	A4SMR100214	1.00	0.25	0.00	1.00	0.25	0.00	1.00	0.25	0.00
1005	A4SMR100214	1.00	0.25	0.00	1.00	0.25	0.00	1.00	0.25	0.00
1006	A4SMR100214	1.00	0.25	0.00	1.00	0.25	0.00	1.00	0.25	0.00
1007	A4SMR100214	1.00	0.25	0.00	1.00	0.25	0.00	1.00	0.25	0.00
1008	A4SMR100214	1.00	0.25	0.00	1.00	0.25	0.00	1.00	0.25	0.00
1009	A4SMR100214	1.00	0.25	0.00	1.00	0.25	0.00	1.00	0.25	0.00
1010	A4SMR100214	1.00	0.25	0.00	1.00	0.25	0.00	1.00	0.25	0.00

A4SMR100214

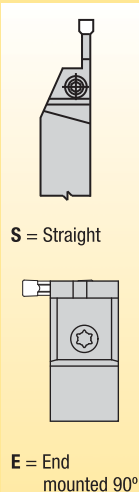
A4

Tooling System

A4 =
Grooving
and Turning

S

Tool Style



M

Support Type

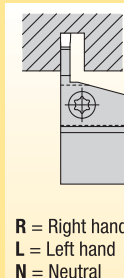
M =
Maximum support for specific groove widths and straight clearance
for unlimited workpiece diameters

E =
No steel support for face grooving

C =
Reinforced Support

R

Hand of Tool



10

Shank Size

02

Seat Size

02
03
04
05
06
08
10

14

Max Grooving Depth

in millimeters

inch:
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

By referencing this easy-to-use guide, you can identify the correct product to meet your needs.

Grooving and Cut-Off
A4™ Integral Boring Bars

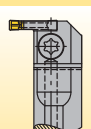
Steel Boring Bar • Inch

order number	catalog number	inch	mm	W max	D	L1	P	L15	A	change	search code
right hand											
000000	A12RA4EMR0207N	2	25.4	27.5	7.62	304	0.02	0.02	0.06	14	000000
000000	A12RA4EMR0207N	3	25.4	27.5	7.62	304	0.02	0.02	0.06	14	000000
000000	A12RA4EMR0207N	4	25.4	27.5	7.62	304	0.02	0.02	0.06	14	000000
000000	A12RA4EMR0207N	5	25.4	27.5	7.62	304	0.02	0.02	0.06	14	000000
000000	A12RA4EMR0207N	6	25.4	27.5	7.62	304	0.02	0.02	0.06	14	000000
000000	A12RA4EMR0207N	8	25.4	27.5	7.62	304	0.02	0.02	0.06	14	000000
000000	A12RA4EMR0207N	10	25.4	27.5	7.62	304	0.02	0.02	0.06	14	000000
000000	A12RA4EMR0207N	12	25.4	27.5	7.62	304	0.02	0.02	0.06	14	000000

A12RA4EMR0207N

A

Steel
Bar with
Coolant



12

Bar
Diameter

R

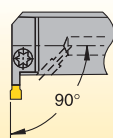
Bar
Length

A4

A4™ Groove
and Turn
System

E

Tool
Style



E = End mounted (90°)

M

Support
Type

R

Hand
of Tool

02

Insert
Seat Size

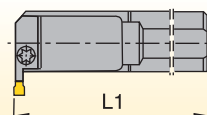
07

Grooving
Depth in
mm

N

Tool
Units

N = Inch
M = Metric

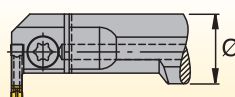


inch bars:

R = 8"
S = 10"
T = 12"

metric bars:

R = 200mm
S = 150mm
T = 300mm



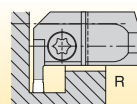
inch bars:

A two-digit number which indicates the bar diameter in 1/16" increments.

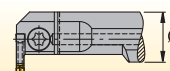
metric bars:

Bar diameter in millimeters

pocket seat size	cutting width (mm)
02	2,00–2,62
2B	2,39–2,62
03	3,0–3,05
04	4,0–4,05
05	5,0–5,05
06	6,0–6,05
08	8,0–8,05
10	10,0–10,05



R = Right hand



L = Left hand

M = Maximum support

How Do Catalog Numbers Work?

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



Metric					
KGM	S	L	2525M	50	C
Inch					
KGM	S	L	16	50	C
Family Name	Tool Style	Hand	Shank Size	Blade Size	Coolant
Grooving Modular System	S = Straight mount E = End mount (90°)	L = Left hand R = Right hand	Metric = Height x Width in mm letter indicates tool length according to ISO Inch = Height x Width in 1/16" increments	50 65	C = Through coolant capable

Kennametal on the Web

kennametal.com

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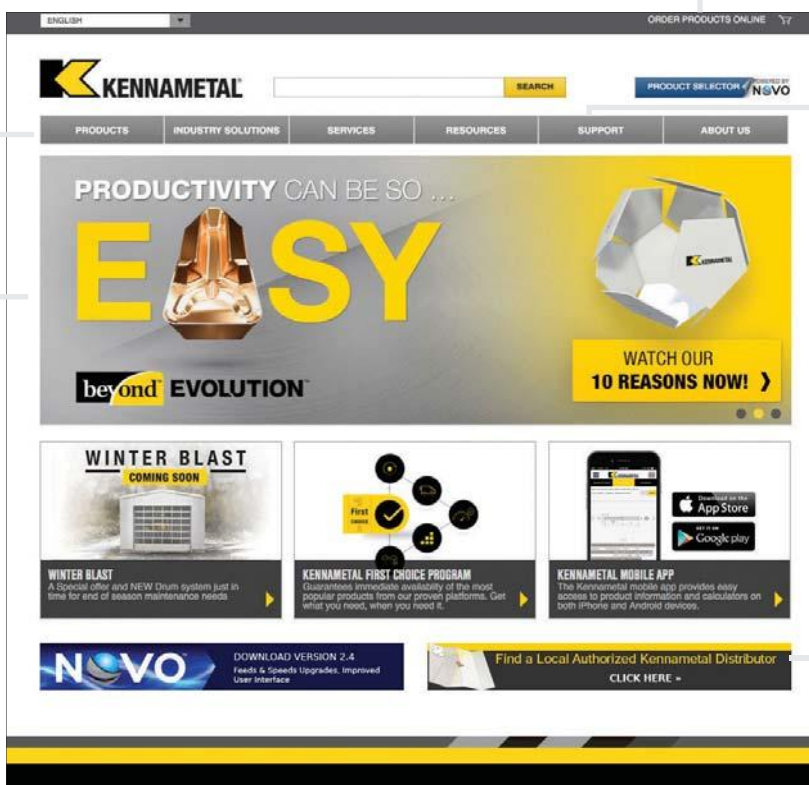
Register on Konnect for the full functionality of the Kennametal online ordering website.

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How Do Catalog Numbers Work?

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

Grooving and Cut-Off
A4™ Integral Toolholders

Integral Face Grooving • End Mount • Dual Handed • Inch

Order Number	Catalog Number	Mod	CS	W	W max	CS max	H	H1	H2	W1	W2	L	L1	Hand	Tool	Part Number
0014128	A4M50R0414B048-072	5	.25	.718	2.750	.750	.75	.750	1.25	6.00	.80	.80	.80	Right	T01	0014128
0014128	A4M50R0414B048-072	5	.25	.718	2.750	1.00	1.00	1.00	1.25	6.00	1.25	.80	.80	Left	T02	0014129
0014128	A4M50R0414B048-072	4	.25	.718	2.750	.75	.75	.750	1.25	6.00	.80	.80	.80	Right	T03	0014130
0014128	A4M50R0414B048-072	4	.25	.718	2.750	1.00	1.00	1.00	1.25	6.00	1.25	.80	.80	Left	T04	0014131

A4M50R0414B048-072

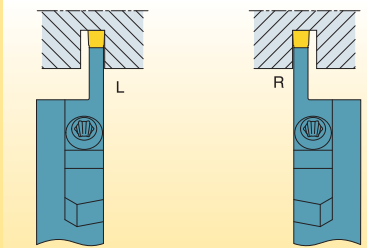
A4M
Family Name

A4 Modular Blade

50
Modular System Size

50
65

R
Hand of Tool



By referencing this easy-to-use guide, you can identify the correct product to meet your needs.

A4M50R0414B048-072

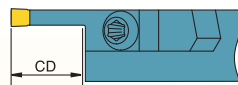
04

Seat Size

pocket seat size	cutting width	
	in	mm
02	0.08–0.10	2,00–2,62
2B	0.09–0.10	2,39–2,62
03	0.12–0.12	3,0–3,05
04	0.16–0.16	4,0–4,05
05	0.20–0.20	5,0–5,05
06	0.24–0.24	6,0–6,05
08	0.31–0.32	8,0–8,05
10	0.39–0.40	10,0–10,05

14

Maximum Groove Depth



conversions:

mm	inch
14mm	.55"
19mm	.75"
20mm	.79"
26mm	1.02"

B

Tool Style



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

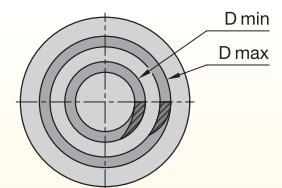


A = Inboard sweep face grooving toolholder

B = Outboard sweep face grooving toolholder

048-072

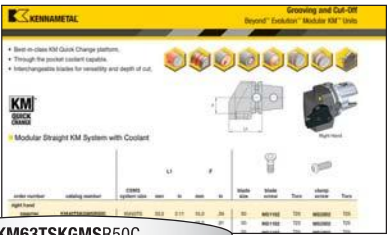
Face Grooving Diameter Range



diameters are min and max for outer face groove dia.
999 = unlimited D max

How Do Catalog Numbers Work?

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



KM63TSKGMRS50C

KM

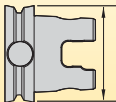
KM™
Quick-Change

KM
KM4X™
PSC

63

System
Size

40 = 40mm
50 = 50mm
63 = 63mm
80 = 80mm
100 = 100mm



TS

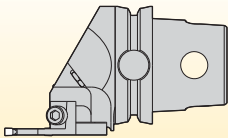
Feature

TS
XMZ

KGM

Insert
Holding Method

KGM



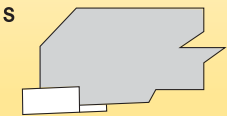
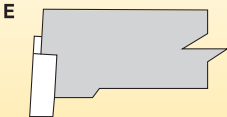
Modular Grooving

S

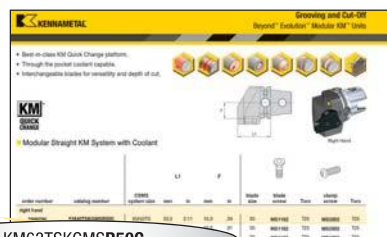
Insert
Location

E = End mount

S = Side mount



By referencing this easy-to-use guide, you can identify the correct product to meet your needs.



KM63TSKGMSR50C

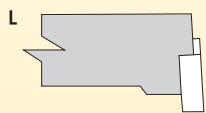
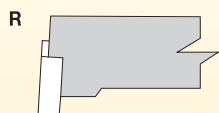
R

Hand
of Tool

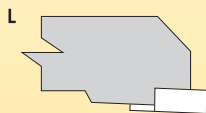
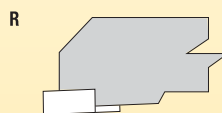
R = Right hand

L = Left hand

End Mount



Side Mount



50

Blade Size

50
60

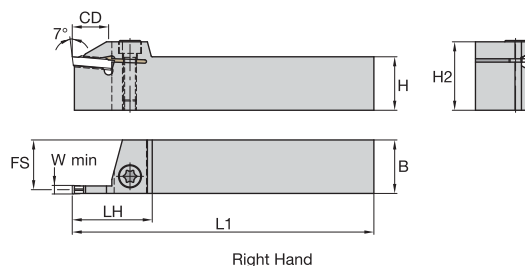
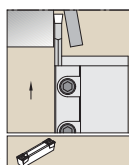
C

Coolant

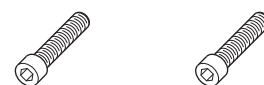
C = Through the pocket coolant capable

Special
Features

Y = Mazak®
INTEGREX®



■ Integral Straight • Inch



order number	catalog number	seat size	CD	W min	H	B	H2	L1	FS	LH	clamp screw	clamp screw	Torx
right hand													
2976495	A4SMR100214	2	.55	.079	.625	.625	.98	5.00	.59	1.18	—	MS1160	T20
2976496	A4SMR120214	2	.55	.079	.750	.750	.95	5.00	.71	1.18	—	MS1160	T20
2976497	A4SMR120217	2	.67	.079	.750	.750	1.18	5.00	.71	1.34	MS1944	—	T25
2976498	A4SMR160217	2	.67	.079	1.000	1.000	1.24	6.00	.96	1.34	MS1944	—	T25
1953177	A4SMR100314	3	.55	.118	.625	.625	1.03	5.00	.57	1.38	MS2091	—	T25
1953179	A4SMR120314	3	.55	.118	.750	.750	1.06	5.00	.69	1.38	MS1595	—	T30
1953181	A4SMR160317	3	.67	.118	1.000	1.000	1.26	6.00	.94	1.46	MS1970	—	T30
1957224	A4SMR100414	4	.55	.157	.625	.625	1.03	5.00	.55	1.38	MS2091	—	T25
1953323	A4SMR120414	4	.55	.157	.750	.750	1.06	5.00	.67	1.38	MS1595	—	T30
1953325	A4SMR160417	4	.67	.157	1.000	1.000	1.26	6.00	.92	1.46	MS1970	—	T30
1957226	A4SMR200417	4	.67	.157	1.250	1.250	1.54	6.00	1.17	1.46	MS1970	—	T30
1953327	A4SMR120519	5	.75	.197	.750	.750	1.10	5.00	.65	1.57	MS1595	—	T30
1953329	A4SMR160520	5	.79	.197	1.000	1.000	1.30	6.00	.90	1.57	MS1970	—	T30
1957228	A4SMR200522	5	.87	.197	1.250	1.250	1.54	6.00	1.15	1.65	MS1970	—	T30
2263175	A4SMR120620	6	.79	.236	.750	.750	1.06	5.00	.64	1.57	MS1595	—	T30
2263176	A4SMR160620	6	.79	.236	1.000	1.000	1.30	6.00	.89	1.57	MS1970	—	T30
2263177	A4SMR160624	6	.94	.236	1.000	1.000	1.30	6.00	.89	1.69	MS1970	—	T30
2263178	A4SMR200626	6	1.02	.236	1.250	1.250	1.57	6.00	1.14	1.77	MS1970	—	T30
2263179	A4SMR240626	6	1.02	.236	1.500	1.500	1.81	7.00	1.39	1.77	MS1970	—	T30
2263185	A4SMR160820	8	.79	.315	1.000	1.000	1.34	6.00	.86	1.69	MS1490	—	T45
2263186	A4SMR160824	8	.94	.315	1.000	1.000	1.34	6.00	.86	1.81	MS1490	—	T45
2263187	A4SMR200826	8	1.02	.315	1.250	1.250	1.61	6.00	1.11	1.85	MS1490	—	T45
2263188	A4SMR240826	8	1.02	.315	1.500	1.500	1.85	7.00	1.36	1.85	MS1490	—	T45
2263193	A4SMR201026	10	1.02	.394	1.250	1.250	1.61	6.00	1.08	1.85	MS1490	—	T45

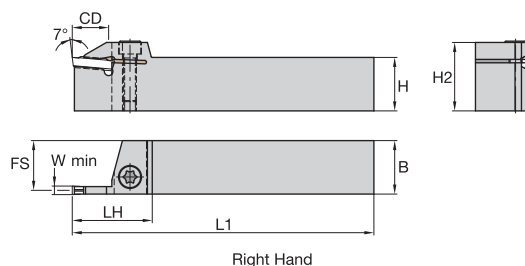
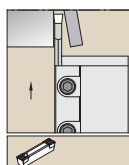
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(Integral Straight • Inch — continued)

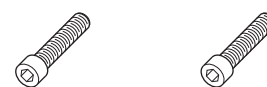


order number	catalog number	seat size	CD	W min	H	B	H2	L1	FS	LH	clamp screw	clamp screw	Torx
left hand													
2976491	A4SML100214	2	.55	.079	.625	.625	.98	5.00	.59	1.18	—	MS1160	T20
2976493	A4SML120217	2	.67	.079	.750	.750	1.18	5.00	.71	1.34	MS1944	—	T25
2976494	A4SML160217	2	.67	.079	1.000	1.000	1.24	6.00	.96	1.34	MS1944	—	T25
1953178	A4SML100314	3	.55	.118	.625	.625	1.03	5.00	.57	1.38	MS2091	—	T25
1953180	A4SML120314	3	.55	.118	.750	.750	1.06	5.00	.69	1.38	MS1595	—	T30
1953182	A4SML160317	3	.67	.118	1.000	1.000	1.26	6.00	.94	1.46	MS1970	—	T30
1953324	A4SML120414	4	.55	.157	.750	.750	1.06	5.00	.67	1.38	MS1595	—	T30
1953326	A4SML160417	4	.67	.157	1.000	1.000	1.26	6.00	.92	1.46	MS1970	—	T30
1957227	A4SML200417	4	.67	.157	1.250	1.250	1.54	6.00	1.17	1.46	MS1970	—	T30
1953328	A4SML120519	5	.75	.197	.750	.750	1.10	5.00	.65	1.57	MS1595	—	T30
1953330	A4SML160520	5	.79	.197	1.000	1.000	1.30	6.00	.90	1.57	MS1970	—	T30
1957229	A4SML200522	5	.87	.197	1.250	1.250	1.54	6.00	1.15	1.65	MS1970	—	T30
2263180	A4SML120620	6	.79	.236	.750	.750	1.06	5.00	.64	1.57	MS1595	—	T30
2263181	A4SML160620	6	.79	.236	1.000	1.000	1.30	6.00	.89	1.57	MS1970	—	T30
2263182	A4SML160624	6	.94	.236	1.000	1.000	1.30	6.00	.89	1.69	MS1970	—	T30
2263183	A4SML200626	6	1.02	.236	1.250	1.250	1.57	6.00	1.14	1.77	MS1970	—	T30
2263184	A4SML240626	6	1.02	.236	1.500	1.500	1.81	7.00	1.39	1.77	MS1970	—	T30
2263190	A4SML160824	8	.94	.315	1.000	1.000	1.34	6.00	.86	1.81	MS1490	—	T45
2263194	A4SML201026	10	1.02	.394	1.250	1.250	1.61	6.00	1.08	1.85	MS1490	—	T45

Grooving and Cut-Off



■ Integral Straight • Metric



order number	catalog number	seat size	CD	W min	H	B	H2	L1	FS	LH	clamp screw	clamp screw	Torx
right hand													
3017341	A4SMR2020K0214	2	14	—	20	20	25	125	19	30	—	MS1160	T20
3017342	A4SMR1616K0214	2	14	2	16	16	25	125	15	30	—	MS1160	T20
2974425	A4SMR2020K0217	2	17	2	20	20	31	125	19	34	MS1944	—	T25
3017340	A4SMR2525M0214	2	14	2	25	25	30	150	24	30	—	MS1160	T20
3017339	A4SMR2525M0217	2	17	2	25	25	31	150	24	34	MS1944	—	T25
1949633	A4SMR1616K0314	3	14	3	16	16	27	125	15	35	MS2091	—	T25
2503557	A4SMR2016K0317	3	17	3	20	16	32	125	15	37	MS1970	—	T30
1949635	A4SMR2020K0314	3	14	3	20	20	27	125	19	35	MS1595	—	T30
2503551	A4SMR2020K0317	3	17	3	20	20	32	125	19	37	MS1970	—	T30
1949637	A4SMR2525M0317	3	17	3	25	25	32	150	24	37	MS1970	—	T30
2503559	A4SMR2016K0417	4	17	4	20	16	32	125	14	37	MS1970	—	T30
1949639	A4SMR2020K0414	4	14	4	20	20	27	125	18	35	MS1595	—	T30
2503553	A4SMR2020K0417	4	17	4	20	20	32	125	18	37	MS1970	—	T30
1949641	A4SMR2525M0417	4	17	4	25	25	32	150	23	37	MS1970	—	T30
1949643	A4SMR3225P0417	4	17	4	32	25	40	170	23	37	MS1970	—	T30
1949645	A4SMR2020K0519	5	19	5	20	20	28	125	18	40	MS1595	—	T30
1949647	A4SMR2525M0520	5	20	5	25	25	33	150	23	40	MS1970	—	T30
1949649	A4SMR3225P0522	5	22	5	32	25	40	170	23	42	MS1970	—	T30
2503555	A4SMR2020K0620	6	20	6	20	20	33	125	17	40	MS1970	—	T30
2245484	A4SMR2525M0620	6	20	6	25	25	33	150	22	40	MS1970	—	T30
2263089	A4SMR3225P0626	6	26	6	32	25	40	170	22	45	MS1970	—	T30
2245485	A4SMR2525M0820	8	20	8	25	25	34	150	21	43	MS1490	—	T45
2263091	A4SMR3225P0826	8	26	8	32	25	41	170	21	47	MS1490	—	T45
2263173	A4SMR3225P1026	10	26	10	32	25	41	170	21	47	MS1490	—	T45

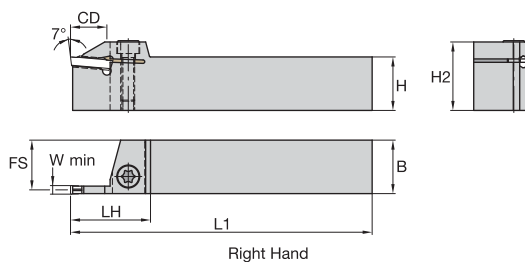
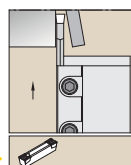
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(Integral Straight • Metric — continued)



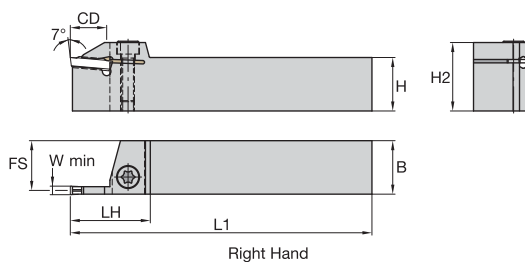
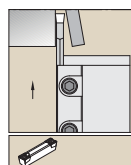
order number	catalog number	seat size	CD	W min	H	B	H2	L1	FS	LH	clamp screw	clamp screw	Torx
left hand													
3017336	A4SML2020K0214	2	14	—	20	20	25	125	19	30	—	MS1160	T20
3017338	A4SML1616K0214	2	14	2	16	16	25	125	15	30	—	MS1160	T20
3017337	A4SML2020K0217	2	17	2	20	20	31	125	19	34	MS1944	—	T25
3017335	A4SML2525M0214	2	14	2	25	25	30	150	24	30	—	MS1160	T20
3017334	A4SML2525M0217	2	17	2	25	25	31	150	24	34	MS1944	—	T25
1949634	A4SML1616K0314	3	14	3	16	16	27	125	15	35	MS2091	—	T25
2503556	A4SML2016K0317	3	17	3	20	16	32	125	15	37	MS1970	—	T30
1949636	A4SML2020K0314	3	14	3	20	20	27	125	19	35	MS1595	—	T30
2503550	A4SML2020K0317	3	17	3	20	20	32	125	19	37	MS1970	—	T30
1949638	A4SML2525M0317	3	17	3	25	25	32	150	24	37	MS1970	—	T30
1949640	A4SML2020K0414	4	14	4	20	20	27	125	18	35	MS1595	—	T30
2503552	A4SML2020K0417	4	17	4	20	20	32	125	18	37	MS1970	—	T30
1949642	A4SML2525M0417	4	17	4	25	25	32	150	23	37	MS1970	—	T30
1949644	A4SML3225P0417	4	17	4	32	25	40	170	23	37	MS1970	—	T30
1949646	A4SML2020K0519	5	19	5	20	20	28	125	18	40	MS1595	—	T30
1949648	A4SML2525M0520	5	20	5	25	25	33	150	23	40	MS1970	—	T30
1949650	A4SML3225P0522	5	22	5	32	25	40	170	23	42	MS1970	—	T30
2503554	A4SML2020K0620	6	20	6	20	20	33	125	17	40	MS1970	—	T30
2245486	A4SML2525M0620	6	20	6	25	25	33	150	22	40	MS1970	—	T30
2263090	A4SML3225P0626	6	26	6	32	25	40	170	22	45	MS1970	—	T30
2245487	A4SML2525M0820	8	20	8	25	25	34	150	21	43	MS1490	—	T45
2263092	A4SML3225P0826	8	26	8	32	25	41	170	21	47	MS1490	—	T45
2263174	A4SML3225P1026	10	26	10	32	25	41	170	21	47	MS1490	—	T45

Grooving and Cut-Off



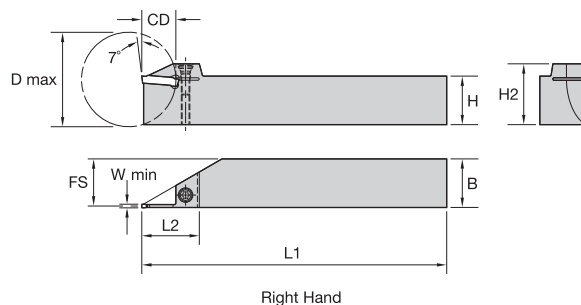
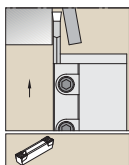
■ Integral Straight • Short Projection Toolholders • Inch

order number	catalog number	seat size	CD	W min	H	B	H2	L1	FS	LH	clamp screw	Torx
right hand												
3854277	A4SMR120308	3	.32	.118	.750	.750	1.01	5.00	.69	1.10	MS1595	T30
3854281	A4SMR160510	5	.39	.197	1.000	1.000	1.30	6.00	.91	1.26	MS1970	T30

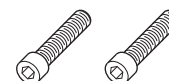


■ Integral Straight • Short Projection Toolholders • Metric

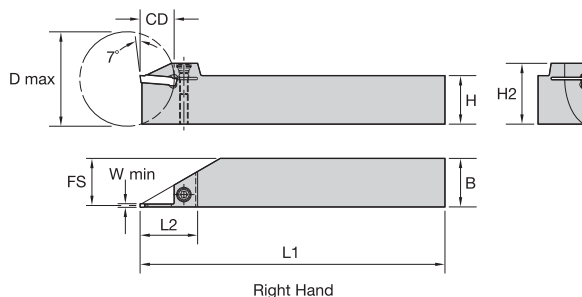
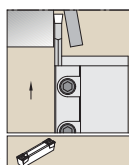
order number	catalog number	seat size	CD	W min	H	B	H2	L1	FS	LH	clamp screw	clamp screw	Torx
right hand													
3854265	A4SMR2020K0208	2	8	2	20	20	24	125	19	26	—	MS1160	T20
3854267	A4SMR2020K0308	3	8	3	20	20	27	125	19	28	MS1595	—	T30
3854269	A4SMR2020K0408	4	8	4	20	20	27	125	18	28	MS1595	—	T30
3854271	A4SMR2525M0510	5	10	5	25	25	33	150	23	32	MS1970	—	T30
3854273	A4SMR2525M0610	6	10	6	25	25	33	150	22	37	MS1970	—	T30
left hand													
3854266	A4SML2020K0208	2	8	2	20	20	24	125	19	26	—	MS1160	T20
3854268	A4SML2020K0308	3	8	3	20	20	27	125	19	28	MS1595	—	T30
3854270	A4SML2020K0408	4	8	4	20	20	27	125	18	28	MS1595	—	T30
3854272	A4SML2525M0510	5	10	5	25	25	33	150	23	32	MS1970	—	T30
3854274	A4SML2525M0610	6	10	6	25	25	33	150	22	37	MS1970	—	T30



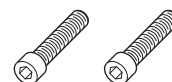
■ Integral Straight Top Clamp • Inch



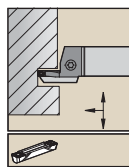
order number	catalog number	seat size	CD	W min	H	B	H2	H3	L1	FS	LH	clamp screw	clamp screw	wrench size clamp screw
right hand														
2981197	A4SCR060113	1	.53	.059	.375	.375	.82	.25	4.50	.35	.98	MS1156	—	T15
2981196	A4SCR080113	1	.53	.059	.500	.500	.82	.13	4.50	.47	.98	MS1156	—	T15
2981195	A4SCR100113	1	.53	.059	.625	.625	.82	—	4.50	.60	.98	MS1156	—	T15
2981194	A4SCR120113	1	.53	.059	.750	.743	.95	—	5.00	.72	.98	MS1156	—	T15
4168856	A4SCR080214	2	.57	.079	.500	.500	.82	.13	4.50	.46	1.10	MS1160	—	T20
4168857	A4SCR100217	2	.69	.079	.625	.625	1.02	.16	4.50	.59	1.22	—	MS1944	T25
4168858	A4SCR080314	3	.57	.118	.500	.500	.90	.13	4.50	.45	1.18	—	MS2091	25 IP
4168859	A4SCR100317	3	.69	.118	.625	.625	1.06	.16	4.50	.57	1.30	—	MS2091	25 IP
left hand														
2981102	A4SCL080113	1	.53	.059	.500	.500	.82	.13	4.50	.47	.98	MS1156	—	T15
2981101	A4SCL100113	1	.53	.059	.625	.625	.82	—	4.50	.60	.98	MS1156	—	T15
2981100	A4SCL120113	1	.53	.059	.750	.750	.95	—	5.00	.72	.98	MS1156	—	T15
4168860	A4SCL080214	2	.57	.079	.500	.500	.82	.13	4.50	.46	1.10	MS1160	—	T20
4168861	A4SCL100217	2	.69	.079	.625	.625	1.02	.16	4.50	.59	1.22	—	MS1944	T25
4168862	A4SCL080314	3	.57	.118	.500	.500	.90	.13	4.50	.45	1.18	—	MS2091	25 IP
4168863	A4SCL100317	3	.69	.118	.625	.625	1.06	.16	4.50	.57	1.30	—	MS2091	25 IP



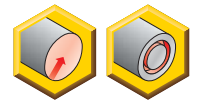
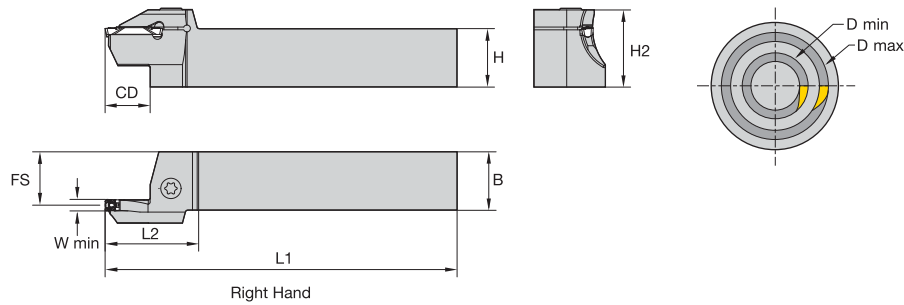
■ Integral Straight Top Clamp • Metric



order number	catalog number	seat size	D max	CD	W min	H	B	H2	L1	FS	LH	clamp screw	clamp screw	wrench size clamp screw
right hand														
2982224	A4SCR1010K0113	1	27	13,500	1,50	10	10	21	125	9,40	25	MS1156	—	T15
2978378	A4SCR1212K0113	1	27	13,500	1,50	12	12	21	125	11,40	25	MS1156	—	T15
2982223	A4SCR1616K0113	1	27	13,500	1,50	16	16	21	125	15,40	25	MS1156	—	T15
2982172	A4SCR2020K0113	1	27	13,500	1,50	20	20	25	125	19,40	25	MS1156	—	T15
4169745	A4SCR1212K0214	2	28	14,000	2,00	12	12	21	125	11,17	28	MS1160	—	T20
4169746	A4SCR1616K0217	2	34	17,000	2,00	16	16	26	125	15,20	31	—	MS1944	T25
4169747	A4SCR1212K0314	3	28	14,000	3,00	12	12	23	125	10,72	30	—	MS2091	25 IP
4169748	A4SCR1616K0317	3	34	17,000	3,00	16	16	27	125	14,72	33	—	MS2091	25 IP
left hand														
2982170	A4SCL1212K0113	1	27	13,500	1,50	12	12	21	125	11,40	25	MS1156	—	T15
2982169	A4SCL1616K0113	1	27	13,500	1,50	16	16	21	125	15,40	25	MS1156	—	T15
2982168	A4SCL2020K0113	1	27	13,500	1,50	20	20	25	125	19,40	25	MS1156	—	T15
4169749	A4SCL1212K0214	2	28	14,000	2,00	12	12	21	125	11,17	28	MS1160	—	T20
4169750	A4SCL1616K0217	2	34	17,000	2,00	16	16	26	125	15,20	31	—	MS1944	T25
4169752	A4SCL1616K0317	3	34	17,000	3,00	16	16	27	125	14,72	33	—	MS2091	25 IP



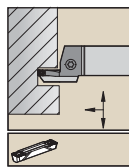
Right hand
shown.



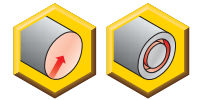
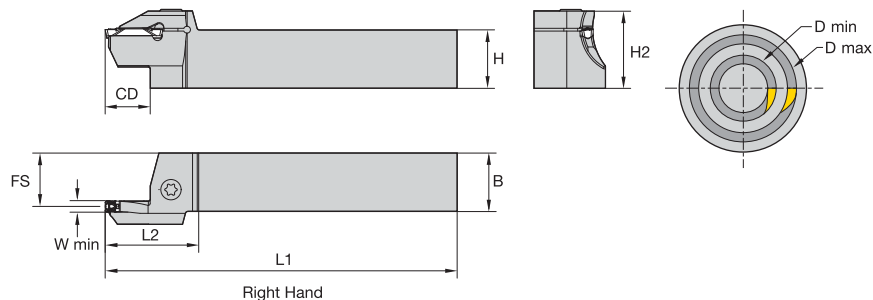
Grooving and Cut-Off

■ Integral Face Grooving • Outboard • Inch

order number	catalog number	seat size	CD	D min	D max	W min	H	B	H2	L1	FS	LH	clamp screw	clamp screw	Torx
right hand															
3865852	A4SBR122S12016020	2S	.47	.630	.787	.079	.750	.750	.95	5.00	.72	1.10	MS1160	—	T20
3865903	A4SBR122S12020025	2S	.47	.787	.984	.079	.750	.750	.95	5.00	.72	1.10	MS1160	—	T20
3865905	A4SBR123S14020025	3S	.55	.787	.984	.118	.750	.750	1.07	5.00	.70	1.18	—	MS1595	T30
3865906	A4SBR123S14025036	3S	.55	.984	1.417	.118	.750	.750	1.07	5.00	.70	1.38	—	MS1595	T30
3865910	A4SBR165S19038058	5S	.75	1.496	2.284	.197	1.000	1.000	1.32	6.00	.91	1.57	—	MS1970	T30
left hand															
3865911	A4SBL122S12016020	2S	.47	.630	.787	.079	.750	.750	.95	5.00	.72	1.10	MS1160	—	T20

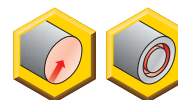
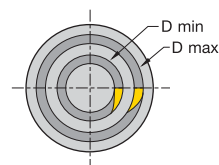
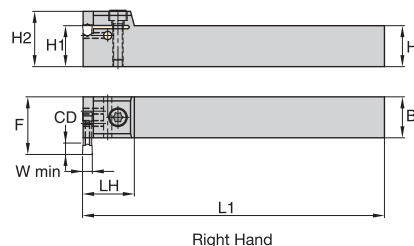
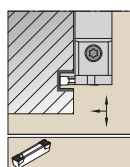


Right hand
shown.



■ Integral Face Grooving • Outboard • Metric

order number	catalog number	seat size	CD	D min	D max	W min	H	B	H2	L1	FS	LH	clamp screw	Torx
right hand														
3865920	A4SBR2020K2S12016020	2S	12	16	20	2,00	20	20	25	125	19,20	28	—	T20
3865921	A4SBR2020K2S12020025	2S	12	20	25	2,00	20	20	25	125	19,20	28	—	T20
3865922	A4SBR2020K2S12025036	2S	12	25	36	2,00	20	20	25	125	19,20	28	—	T20
3865923	A4SBR2020K3S14020025	3S	14	20	25	3,00	20	20	28	125	18,70	35	MS1595	T30
3865924	A4SBR2020K3S14025036	3S	14	25	36	3,00	20	20	28	125	18,70	35	MS1595	T30
3865926	A4SBR2020K4S14035048	4S	14	35	48	4,00	20	20	28	125	18,20	35	MS1595	T30
3865927	A4SBR2525M5S19028038	5S	19	28	38	5,00	25	25	33	150	22,70	40	MS1970	T30
3865928	A4SBR2525M5S19038058	5S	19	38	58	5,00	25	25	33	150	22,70	40	MS1970	T30
left hand														
3865929	A4SBL2020K2S12016020	2S	12	16	20	2,00	20	20	25	125	19,20	28	—	T20
3865931	A4SBL2020K2S12025036	2S	12	25	36	2,00	20	20	25	125	19,20	28	—	T20
3865932	A4SBL2020K3S14020025	3S	14	20	25	3,00	20	20	28	125	18,70	35	MS1595	T30
3865934	A4SBL2020K4S14025035	4S	14	25	35	4,00	20	20	28	125	18,20	35	MS1595	T30
3865937	A4SBL2525M5S19038058	5S	19	38	58	5,00	25	25	33	150	22,70	40	MS1970	T30



■ Integral Face Grooving • End Mount • Dual Handed • Inch

order number	catalog number	seat size	CD	W min	D min	H	H1	B	H2	L1	F	LH	clamp screw	Torx	hex seating screw
2414138	A4ENN120305	3	.20	.118	2.756	.750	.75	.750	1.06	5.00	.96	.98	MS2091	T25	MS2090
2414139	A4ENN160305	3	.20	.118	2.756	1.000	1.00	1.000	1.26	6.00	1.21	.98	MS2091	T25	MS2090
1953331	A4ENN120407	4	.28	.157	3.543	.750	.75	.750	1.06	5.00	1.06	.98	MS2091	T25	MS2090
1953332	A4ENN160407	4	.28	.157	3.543	1.000	1.00	1.000	1.26	6.00	1.31	.98	MS2091	T25	MS2090
1953334	A4ENN160509	5	.35	.197	4.724	1.000	1.00	1.000	1.30	6.00	1.40	1.34	MS1970	T30	193.297
2511469	A4ENN160611	6	.43	.236	4.724	1.000	1.00	1.000	1.30	6.00	1.54	1.34	MS1970	T30	193.297
2511470	A4ENN200611	6	.43	.236	4.724	1.250	1.25	1.250	1.57	6.00	1.70	1.34	MS1970	T30	193.297
2511471	A4ENN160811	8	.43	.315	4.724	1.000	1.00	1.000	1.38	6.00	1.54	1.57	MS1490	T45	193.407

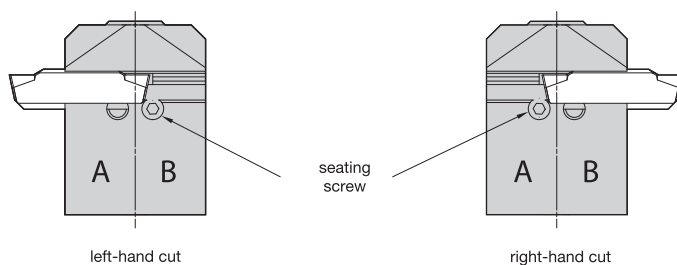
NOTE: D min for face grooving applications.

A4EN-style toolholders are designed without steel support for face grooving capacity. Cutting feed recommendations should be reduced by 25–30%.

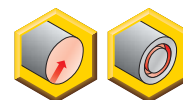
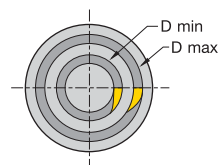
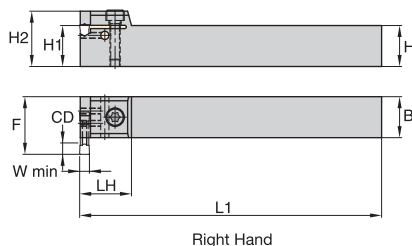
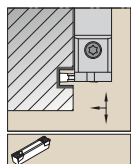
Recommended clamp screw torque, 6–8 Nm (50–70 in. lbs.).

Minimum cutting width supplied for reference only; see insert listing for actual width. Always match seat size of insert to seat size of holder.

A4EN Insert Mounting



A4EN-style holders can be used for either left- or right-hand applications. The seating screw is to be used in position B for a left-hand cut and in position A for a right-hand cut.



■ Integral Face Grooving • End Mount • Dual Handed • Metric



order number	catalog number	seat size	CD	W min	D min	H1	B	H2	L1	F	LH	clamp screw	Torx	hex seating screw	hex (mm)
2414136	A4ENN2020K0305	3	5	3,00	70	20	20	27	125,0	25,4	25	MS2091	T25	MS2090	1.5 mm
2414137	A4ENN2525M0305	3	5	3,00	70	25	25	32	150,0	30,4	25	MS2091	T25	MS2090	1.5 mm
1949651	A4ENN2020K0407	4	7	4,00	90	20	20	27	125,0	27,9	25	MS2091	T25	MS2090	1.5 mm
1949652	A4ENN2525M0407	4	7	4,00	90	25	25	32	150,0	33,1	25	MS2091	T25	MS2090	1.5 mm
1949654	A4ENN2525M0509	5	9	5,00	120	25	25	33	150,0	35,1	34	MS1970	T30	193.297	1.5 mm
2503543	A4ENN2020K0611	6	11	6,00	120	20	20	28	125,0	35,4	34	MS1595	T30	193.297	2 mm
2503544	A4ENN2525M0611	6	11	6,00	120	25	25	33	150,0	38,9	34	MS1970	T30	193.297	2 mm
2503545	A4ENN3232P0611	6	11	6,00	120	32	32	40	170,0	43,4	34	MS1970	T30	193.297	2 mm

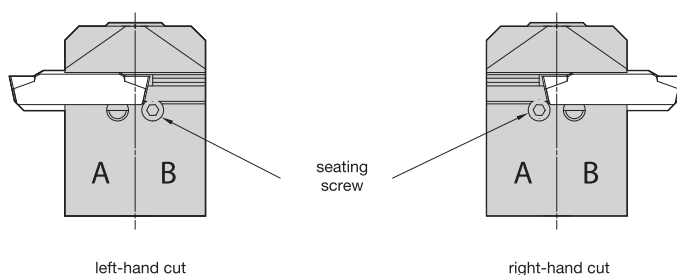
NOTE: D min for face grooving applications.

A4EN-style toolholders are designed without steel support for face grooving capacity. Cutting feed recommendations should be reduced by 25–30%.

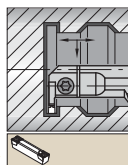
Recommended clamp screw torque, 50–70 in. lbs. (6–8 Nm).

Minimum cutting width supplied for reference only; see insert listing for actual width. Always match seat size of insert to seat size of holder.

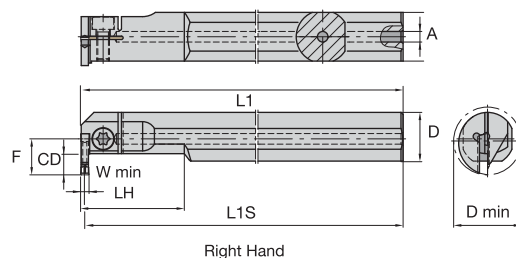
A4EN Insert Mounting



A4EN-style holders can be used for either left- or right-hand applications. The seating screw is to be used in position B for a left-hand cut and in position A for a right-hand cut.

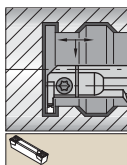


Steel shank with through coolant.

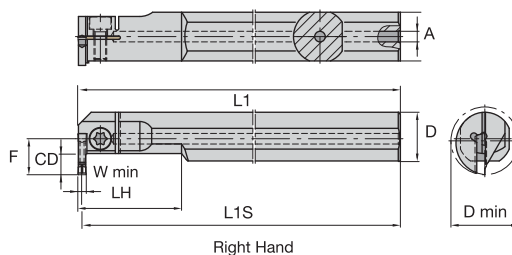


Steel Boring Bar • Inch

order number	catalog number	seat size	CD	W min	D	D min	L1	F	L1S	A	clamp screw	wrench size clamp screw
right hand												
2979227	A12RA4EMR0207N	2	.276	.079	.750	.984	8.02	.507	7.98	.16	MS2089	25 IP
1953335	A12RA4EMR0307N	3	.276	.118	.750	.984	8.00	.512	7.94	.16	MS2089	25 IP
1953341	A12RA4EMR0407N	4	.276	.157	.750	.984	8.00	.512	7.92	.16	MS2089	25 IP
2979229	A16RA4EMR0210N	2	.394	.079	1.000	1.260	8.02	.664	7.98	.20	MS2089	25 IP
1953337	A16RA4EMR0310N	3	.394	.118	1.000	1.260	8.02	.669	7.96	.20	MS1595	T30
1953343	A16RA4EMR0410N	4	.394	.157	1.000	1.260	8.02	.669	7.94	.20	MS1595	T30
1953339	A20SA4EMR0312N	3	.472	.118	1.250	1.575	10.00	.866	9.94	.24	MS1595	T30
1953345	A20SA4EMR0412N	4	.472	.157	1.250	1.575	10.00	.866	9.92	.24	MS1595	T30
1953349	A20SA4EMR0516N	5	.630	.197	1.250	1.732	10.00	1.024	9.90	.24	MS1595	T30
2263203	A20SA4EMR0616N	6	.646	.236	1.250	1.732	10.00	1.024	9.88	.24	MS1595	T30
1953347	A24TA4EMR0416N	4	.630	.157	1.500	2.047	12.00	1.181	11.92	.24	MS1970	T30
1953351	A24TA4EMR0516N	5	.630	.197	1.500	2.047	12.00	1.181	11.90	.24	MS1970	T30
2263199	A24TA4EMR0616N	6	.646	.236	1.500	2.047	12.00	1.181	11.88	.24	MS1970	T30
2263200	A32TA4EMR0616N	6	.646	.236	2.000	2.559	12.00	1.378	11.88	.24	MS1970	T30
left hand												
1953336	A12RA4EML0307N	3	.276	.118	.750	.984	8.00	.512	7.94	.16	MS2089	25 IP
1953342	A12RA4EML0407N	4	.276	.157	.750	.984	8.00	.512	7.92	.16	MS2089	25 IP
1953338	A16RA4EML0310N	3	.394	.118	1.000	1.260	8.02	.669	7.96	.20	MS1595	T30
1953344	A16RA4EML0410N	4	.394	.157	1.000	1.260	8.02	.669	7.94	.20	MS1595	T30
1953352	A24TA4EML0516N	5	.646	.197	1.500	2.047	12.00	1.181	11.90	.24	MS1970	T30
2263201	A24TA4EML0616N	6	.646	.236	1.500	2.047	12.00	1.181	11.88	.24	MS1970	T30



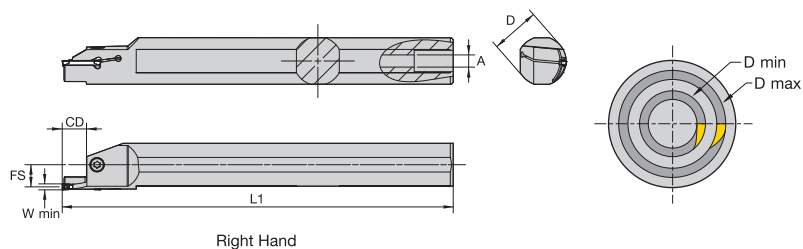
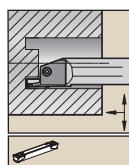
Steel shank with through coolant.



Steel Boring Bar • Metric



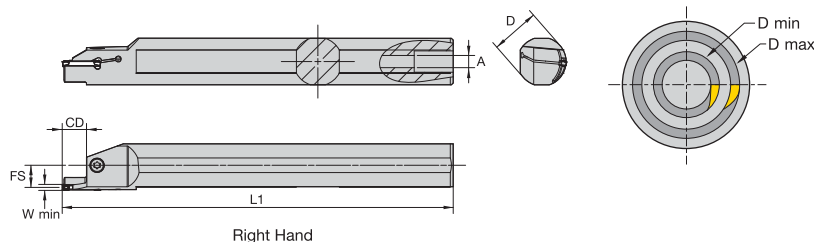
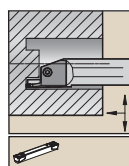
order number	catalog number	seat size	CD	W min	D	D min	L1	F	L1S	A	clamp screw	wrench size clamp screw
right hand												
2979223	A20RA4EMR0207M	2	7,00	2,00	20	25	200	13	199,0	4,00	MS2089	25 IP
2979225	A25RA4EMR0210M	2	10,00	2,00	25	32	200	17	199,0	5,00	MS2089	25 IP
1949655	A20RA4EMR0307M	3	7,00	3,00	20	25	200	13	198,5	4,00	MS2089	25 IP
1949657	A25RA4EMR0310M	3	10,00	3,00	25	32	200	17	198,5	5,00	MS1595	T30
1949659	A32SA4EMR0312M	3	12,00	3,00	32	40	250	22	248,5	6,00	MS1595	T30
1949661	A20RA4EMR0407M	4	7,00	4,00	20	25	200	13	198,0	4,00	MS2089	25 IP
1949663	A25RA4EMR0410M	4	10,00	4,00	25	32	200	17	198,0	5,00	MS1595	T30
1949665	A32SA4EMR0412M	4	12,00	4,00	32	40	250	22	248,0	6,00	MS1595	T30
1949667	A40TA4EMR0416M	4	16,00	4,00	40	52	300	30	298,0	6,00	MS1970	T30
1949669	A32SA4EMR0516M	5	16,00	5,00	32	44	250	26	247,5	6,00	MS1595	T30
1949671	A40TA4EMR0516M	5	16,00	5,00	40	52	300	30	297,5	6,00	MS1970	T30
2263197	A40TA4EMR0616M	6	16,00	6,00	40	52	300	30	297,0	6,00	MS1970	T30
left hand												
2979192	A20RA4EML0207M	2	7,00	2,00	20	25	200	13	199,0	4,00	MS2089	25 IP
2979224	A25RA4EML0210M	2	10,00	2,00	25	32	200	17	199,0	5,00	MS2089	25 IP
1949656	A20RA4EML0307M	3	7,00	3,00	20	25	200	13	198,5	4,00	MS2089	25 IP
1949658	A25RA4EML0310M	3	10,00	3,00	25	32	200	17	198,5	5,00	MS1595	T30
1949660	A32SA4EML0312M	3	12,00	3,00	32	40	250	22	248,5	6,00	MS1595	T30
1949662	A20RA4EML0407M	4	7,00	4,00	20	25	200	13	198,0	4,00	MS2089	25 IP
1949664	A25RA4EML0410M	4	10,00	4,00	25	32	200	17	198,0	5,00	MS1595	T30
1949666	A32SA4EML0412M	4	12,00	4,00	32	40	250	22	248,0	6,00	MS1595	T30
1949668	A40TA4EML0416M	4	16,00	4,00	40	52	300	30	298,0	6,00	MS1970	T30
1949670	A32SA4EML0516M	5	16,00	5,00	32	44	250	26	247,5	6,00	MS1595	T30
1949672	A40TA4EML0516M	5	16,00	5,00	40	52	300	30	297,5	6,00	MS1970	T30
2263198	A40TA4EML0616M	6	16,00	6,00	40	52	300	30	297,0	6,00	MS1970	T30



■ Steel Face Grooving Boring Bar • Inch



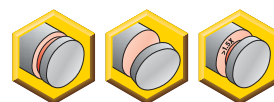
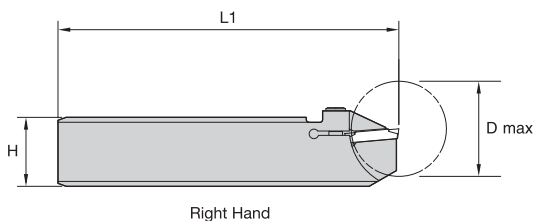
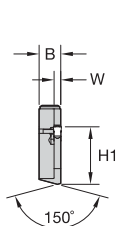
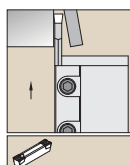
order number	catalog number	seat size	CD	D min	D max	W min	D	L1	FS	A	clamp screw	wrench size clamp screw
right hand												
3871028	A10RA4SAR2S12N017021	2S	.47	.669	.827	.079	.63	8.01	.28	.158	MS1160	T20
3871029	A12RA4SAR2S12N021026	2S	.47	.827	1.024	.079	.75	8.01	.34	.158	MS1160	T20
3871030	A16RA4SAR2S12N026036	2S	.47	1.024	1.417	.079	1.00	8.01	.47	.250	MS1160	T20
3871032	A16RA4SAR3S14N026036	3S	.55	1.024	1.417	.118	1.00	8.01	.45	.250	MS1160	T20
left hand												
3871023	A10RA4SAL2S12N017021	2S	.47	.669	.827	.079	.63	8.01	.28	.158	MS1160	T20
3871027	A16RA4SAL3S14N026036	3S	.55	1.024	1.417	.118	1.00	8.01	.45	.250	MS1160	T20



■ Steel Face Grooving Boring Bar • Metric



order number	catalog number	seat size	CD	D min	D max	W min	D	L1	FS	A	clamp screw	wrench size clamp screw
right hand												
3871038	A16RA4SAR2S12M017021	2S	12,00	17	21	2,00	16	201	7	4,00	MS1160	T20
3871039	A20RA4SAR2S12M021026	2S	12,00	21	23	2,00	20	201	9	4,00	MS1160	T20
3871040	A25RA4SAR2S12M026036	2S	12,00	26	36	2,00	25	201	12	6,35	MS1160	T20
3871041	A20RA4SAR3S14M021026	3S	14,00	21	26	3,00	20	201	9	4,00	MS1160	T20
3871042	A25RA4SAR3S14M026036	3S	14,00	26	36	3,00	25	201	11	6,35	MS1160	T20
left hand												
3871033	A16RA4SAL2S12M017021	2S	12,00	17	21	2,00	16	201	7	4,00	MS1160	T20
3871034	A20RA4SAL2S12M021026	2S	12,00	21	26	2,00	20	201	9	4,00	MS1160	T20
3871035	A25RA4SAL2S12M026036	2S	12,00	26	36	2,00	25	201	12	6,35	MS1160	T20
3871037	A25RA4SAL3S14M026036	3S	14,00	26	36	3,00	25	201	11	6,35	MS1160	T20



Single-Ended Cut-Off Blade • Inch



order number	catalog number	seat size	H	W	H1	L1	B	D max	clamp screw	Torx
right hand										
3967127	A4BHCL26K0317R	3	1.024	.118	.843	4.921	.31	1.378	MS1571	T20
3967124	A4BHCL32K0317R	3	1.260	.118	.984	4.921	.31	1.378	MS1571	T20
3967117	A4BHCR32K0217R	2	1.260	.079	.984	4.921	.31	1.378	MS1571	T20
left hand										
3967136	A4BHCL32K0217L	2	1.260	.079	.984	4.921	.31	1.378	MS1571	T20
3967137	A4BHCL32K0317L	3	1.260	.118	.984	4.921	.31	1.378	MS1571	T20
3967134	A4BHCR26K0317L	3	1.024	.118	.843	4.921	.31	1.378	MS1571	T20

RH Blade
RH Pocket



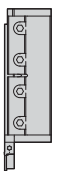
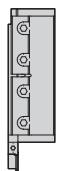
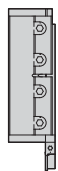
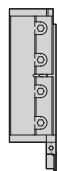
RH Blade
LH Pocket

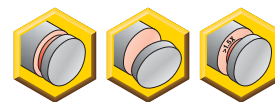
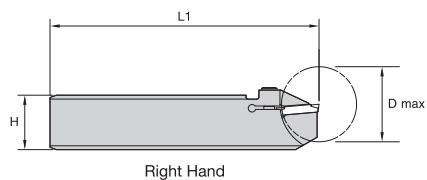
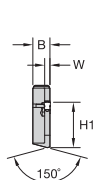
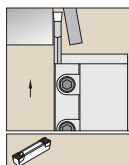


LH Blade
RH Pocket



LH Blade
LH Pocket





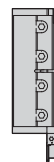
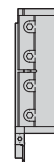
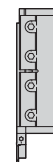
Single-Ended Cut-Off Blade • Metric

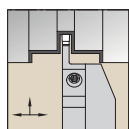


order number	catalog number	seat size	H	W	H1	L1	B	D max	clamp screw	Torx
right hand										
3967127	A4BHCL26K0317R	3	26	3,0	21,4	125	7,95	35	MS1571	T20
3967124	A4BHCL32K0317R	3	32	3,0	25,0	125	7,95	35	MS1571	T20
3967117	A4BHCR32K0217R	2	32	2,0	25,0	125	7,95	35	MS1571	T20
left hand										
3967136	A4BHCL32K0217L	2	32	2,0	25,0	125	7,95	35	MS1571	T20
3967137	A4BHCL32K0317L	3	32	3,0	25,0	125	7,95	35	MS1571	T20
3967134	A4BHCR26K0317L	3	26	3,0	21,4	125	7,95	35	MS1571	T20

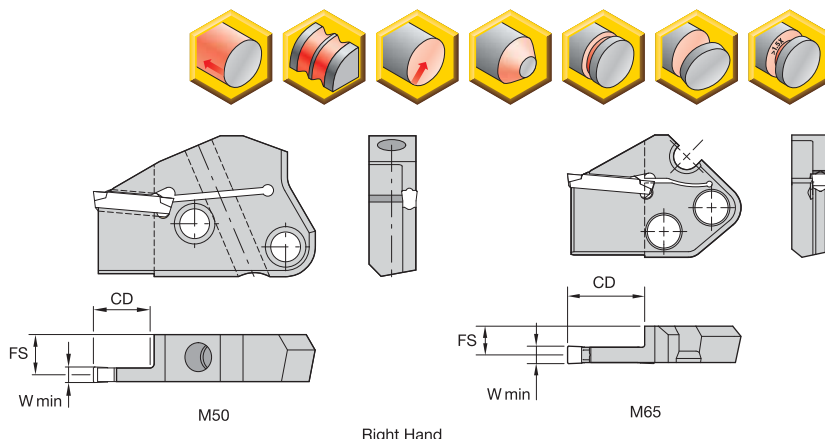
NOTE: Seat size 1 blades only.

Assembly wrenches 170.137 and 170.130 must be ordered separately.

RH Blade
RH PocketRH Blade
LH PocketLH Blade
RH PocketLH Blade
LH Pocket

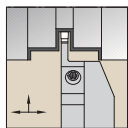


Right hand shown



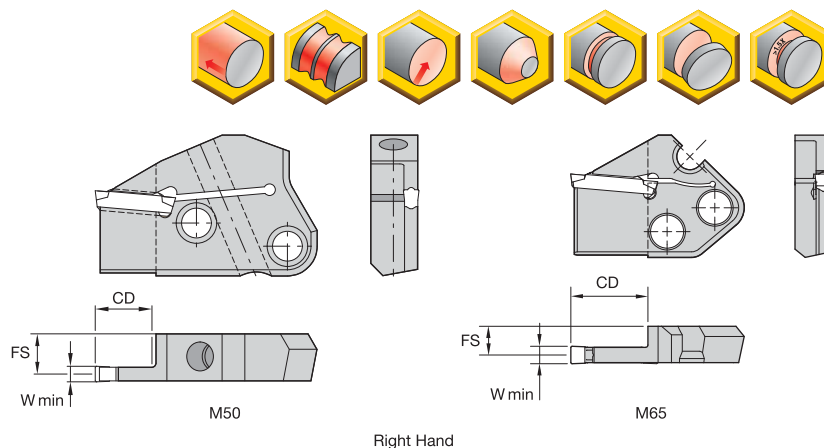
Modular Straight Blade with Coolant

		CD			FS		
order number	catalog number	seat size	mm	in	mm	in	blade size
right hand							
6401815	A4M50R0314MC	3	14,0	.55	10,42	.410	50
6401817	A4M50R0414MC	4	14,0	.55	9,92	.391	50
6401819	A4M50R0519MC	5	19,0	.75	9,42	.371	50
6401834	A4M65R0620MC	6	20,0	.79	9,88	.389	65
6401838	A4M65R0820MC	8	20,0	.79	9,00	.354	65
6401852	A4M65R1020MC	10	20,0	.79	8,35	.329	65
6401831	A4M65R0522MC	5	22,0	.87	10,28	.405	65
6401835	A4M65R0626MC	6	26,0	1.02	9,88	.389	65
6401839	A4M65R0826MC	8	26,0	1.02	9,00	.354	65
6401853	A4M65R1026MC	10	26,0	1.02	8,35	.329	65
left hand							
6401814	A4M50L0314MC	3	14,0	.55	10,42	.410	50
6401816	A4M50L0414MC	4	14,0	.55	9,92	.391	50
6401818	A4M50L0519MC	5	19,0	.75	9,43	.371	50
6401832	A4M65L0620MC	6	20,0	.79	9,88	.389	65
6401836	A4M65L0820MC	8	20,0	.79	9,00	.354	65
6401840	A4M65L1020MC	10	20,0	.79	8,35	.329	65
6401820	A4M65L0522MC	5	22,0	.87	10,28	.405	65
6401833	A4M65L0626MC	6	26,0	1.02	9,88	.389	65
6401837	A4M65L0826MC	8	26,0	1.02	9,00	.354	65
6401851	A4M65L1026MC	10	26,0	1.02	8,35	.329	65



Right hand shown.

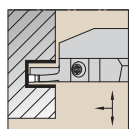
Grooving and Cut-Off



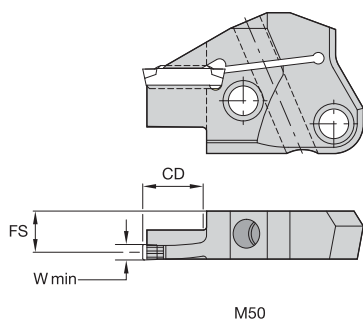
■ Modular Straight Blade

		W min			CD		FS		
order number	catalog number	seat size	mm	in	mm	in	mm	in	blade size
right hand									
3051624	A4M50R0214M	2	2,00	.079	14,0	.55	10,87	.428	50
1989348	A4M50R0314M	3	3,00	.118	14,0	.55	10,43	.410	50
1989350	A4M50R0414M	4	4,00	.157	14,0	.55	9,93	.391	50
1989352	A4M50R0519M	5	5,00	.197	19,0	.75	9,43	.371	50
3557114	A4M65R0620M	6	6,00	.236	20,0	.79	9,88	.389	65
3557116	A4M65R0626M	6	6,00	.236	26,0	1.02	9,88	.389	65
3557120	A4M65R0826M	8	8,00	.315	26,0	1.02	9,00	.354	65
3557124	A4M65R1026M	10	10,00	.394	26,0	1.02	8,35	.329	65
left hand									
3022625	A4M50L0214M	2	2,00	.079	14,0	.55	10,87	.428	50
1989347	A4M50L0314M	3	3,00	.118	14,0	.55	10,43	.410	50
1989349	A4M50L0414M	4	4,00	.157	14,0	.55	9,93	.391	50
3051623	A4M50L2B14M	2B	2,50	.098	14,0	.55	10,70	.421	50
1989351	A4M50L0519M	5	5,00	.197	19,0	.75	9,43	.371	50
3557115	A4M65L0620M	6	6,00	.236	20,0	.79	9,88	.389	65
3557119	A4M65L0820M	8	8,00	.315	20,0	.79	9,00	.354	65
3557123	A4M65L1020M	10	10,00	.394	20,0	.79	8,35	.329	65
3557117	A4M65L0626M	6	6,00	.236	26,0	1.02	9,88	.389	65
3557121	A4M65L0826M	8	8,00	.315	26,0	1.02	9,00	.354	65
3557125	A4M65L1026M	10	10,00	.394	26,0	1.02	8,35	.329	65

NOTE: Seat size 2B only accepts 2B inserts. Seat size 2 accepts 2 or 2B inserts.



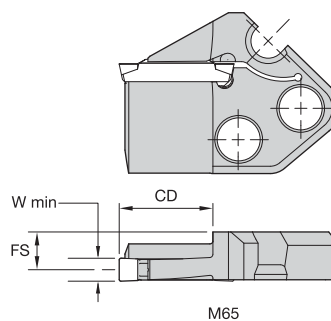
Right hand shown.



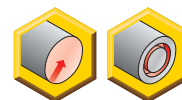
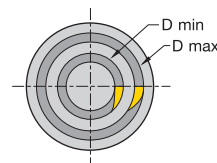
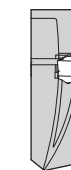
M50



Right Hand



M65



Grooving and Cut-Off

Modular Face Grooving Blade • Inboard

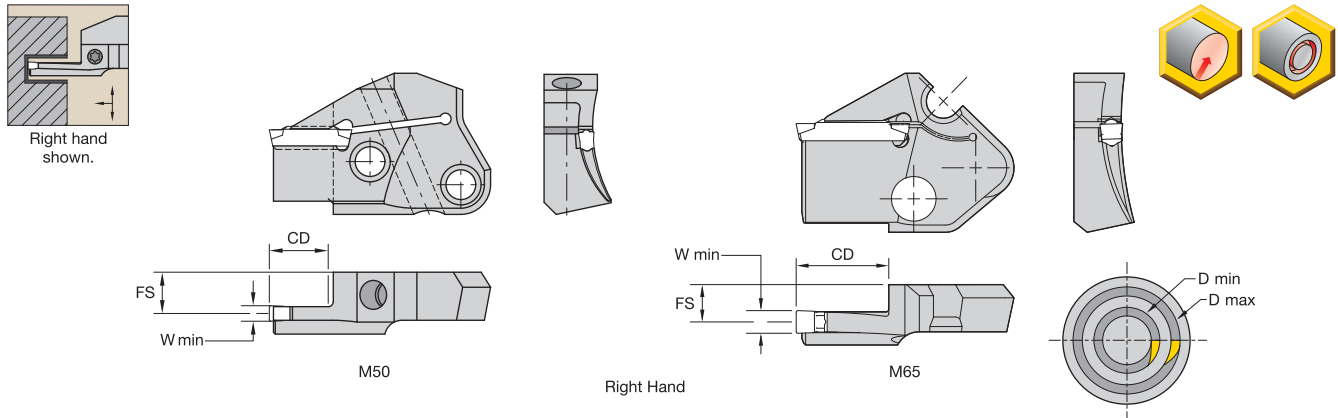
		D min			D max					
order number	catalog number	seat size	mm	in	mm	in	W min	CD	FS	cartridge size
right hand										
3051670	A4M50R0212A036046	2	36	1.417	46	1.811	.079	.47	0.429	50
3051671	A4M50R0212A042054	2	42	1.654	54	2.126	.079	.47	0.429	50
3051672	A4M50R0212A050064	2	50	1.969	64	2.520	.079	.47	0.429	50
3051673	A4M50R0212A060084	2	60	2.362	84	3.307	.079	.47	0.429	50
3051674	A4M50R0212A080124	2	80	3.150	124	4.882	.079	.47	0.429	50
3051675	A4M50R0212A120254	2	120	4.724	254	10.000	.079	.47	0.429	50
3051676	A4M50R0212A250999	2	250	9.843	—	—	.079	.47	0.429	50
2542517	A4M50R0314A036048	3	36	1.417	48	1.890	.118	.55	0.413	50
2542518	A4M50R0314A042058	3	42	1.654	58	2.284	.118	.55	0.413	50
2542519	A4M50R0314A052074	3	52	2.047	74	2.913	.118	.55	0.413	50
2542520	A4M50R0314A068100	3	68	2.677	100	3.937	.118	.55	0.413	50
2542521	A4M50R0314A090160	3	90	3.543	160	6.299	.118	.55	0.413	50
2542522	A4M50R0314A130300	3	130	5.118	300	11.811	.118	.55	0.413	50
2542523	A4M50R0314A290999	3	290	11.417	—	—	.118	.55	0.413	50
2542531	A4M50R0414A048072	4	48	1.890	72	2.835	.157	.55	0.394	50
2542532	A4M50R0414A064100	4	64	2.520	100	3.937	.157	.55	0.394	50
2542533	A4M50R0414A092150	4	92	3.622	150	5.906	.157	.55	0.394	50
2542534	A4M50R0414A132300	4	132	5.197	300	11.811	.157	.55	0.394	50
2542535	A4M50R0414A290999	4	290	11.417	—	—	.157	.55	0.394	50
2542541	A4M50R0519A058094	5	58	2.284	94	3.701	.197	.75	0.374	50
2542542	A4M50R0519A080136	5	80	3.150	136	5.354	.197	.75	0.374	50
2542543	A4M50R0519A120300	5	120	4.724	300	11.811	.197	.75	0.374	50
2542544	A4M50R0519A250999	5	250	9.843	—	—	.197	.75	0.374	50
3557131	A4M65R0624A070-112	6	70	2.756	112	4.409	.236	.94	0.389	65
3557163	A4M65R0624A100-212	6	100	3.937	212	8.347	.236	.94	0.389	65
3557165	A4M65R0624A200-999	6	200	7.874	999	39.331	.236	.94	0.389	65
3557167	A4M65R0824A090-200	8	90	3.543	200	7.874	.315	.94	0.354	65
3557169	A4M65R0824A184-999	8	184	7.244	999	39.331	.315	.94	0.354	65
3557173	A4M65R1024A200-999	10	200	7.874	999	39.331	.394	.94	0.329	65

(continued)

(Modular Face Grooving Blade • Inboard — continued)

Grooving and Cut-Off

		D min			D max					
order number	catalog number	seat size	mm	in	mm	in	W min	CD	FS	cartridge size
left hand										
3051629	A4M50L0212A060084	2	60	2.362	84	3.307	.079	.47	0.429	50
3051631	A4M50L0212A120254	2	120	4.724	254	10.000	.079	.47	0.429	50
3051632	A4M50L0212A250999	2	250	9.843	—	—	.079	.47	0.429	50
2542524	A4M50L0314A036048	3	36	1.417	48	1.890	.118	.55	0.413	50
2542527	A4M50L0314A068100	3	68	2.677	100	3.937	.118	.55	0.413	50
2542528	A4M50L0314A090160	3	90	3.543	160	6.299	.118	.55	0.413	50
2542529	A4M50L0314A130300	3	130	5.118	300	11.811	.118	.55	0.413	50
2542530	A4M50L0314A290999	3	290	11.417	—	—	.118	.55	0.413	50
2542537	A4M50L0414A064100	4	64	2.520	100	3.937	.157	.55	0.394	50
2542538	A4M50L0414A092150	4	92	3.622	150	5.906	.157	.55	0.394	50
2542539	A4M50L0414A132300	4	132	5.197	300	11.811	.157	.55	0.394	50
2542540	A4M50L0414A290999	4	290	11.417	—	—	.157	.55	0.394	50
2542545	A4M50L0519A058094	5	58	2.284	94	3.701	.197	.75	0.374	50
2542546	A4M50L0519A080136	5	80	3.150	136	5.354	.197	.75	0.374	50
2542547	A4M50L0519A120300	5	120	4.724	300	11.811	.197	.75	0.374	50
2542548	A4M50L0519A250999	5	250	9.843	—	—	.197	.75	0.374	50
3557132	A4M65L0624A070-112	6	70	2.756	112	4.409	.236	.94	0.389	65
3557164	A4M65L0624A100-212	6	100	3.937	212	8.347	.236	.94	0.389	65
3557166	A4M65L0624A200-999	6	200	7.874	999	39.331	.236	.94	0.389	65
3557174	A4M65L1024A200-999	10	200	7.874	999	39.331	.394	.94	0.329	65



■ Modular Face Grooving Blade • Outboard

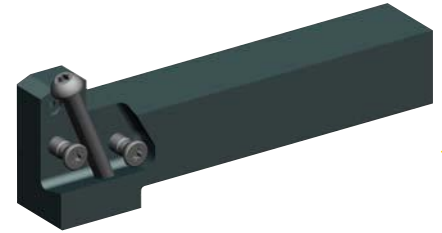
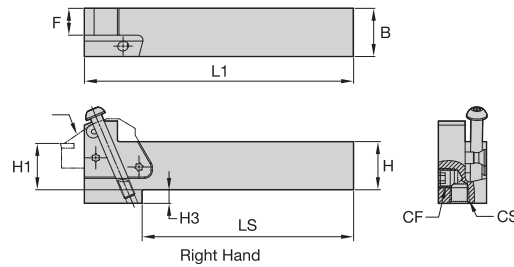
		D min			D max		CD			FS		cartridge size
order number	catalog number	seat size	mm	in	mm	in	W min	mm	in	mm	in	
right hand												
3051677	A4M50R0212B036046	2	36	1.417	46	1.811	.079	12,00	.47	10,900	.429	50
3051678	A4M50R0212B042054	2	42	1.654	54	2.126	.079	12,00	.47	10,900	.429	50
3051679	A4M50R0212B050064	2	50	1.969	64	2.520	.079	12,00	.47	10,900	.429	50
3051680	A4M50R0212B060084	2	60	2.362	84	3.307	.079	12,00	.47	10,900	.429	50
3051681	A4M50R0212B080124	2	80	3.150	124	4.882	.079	12,00	.47	10,900	.429	50
3051682	A4M50R0212B120254	2	120	4.724	254	10.000	.079	12,00	.47	10,900	.429	50
3051683	A4M50R0212B250999	2	250	9.843	—	—	.079	12,00	.47	10,900	.429	50
3867457	A4M50R2S12B016020	2S	16	.630	20	.787	.079	12,00	.47	10,900	.429	50
3867458	A4M50R2S12B020025	2S	20	.787	25	.984	.079	12,00	.47	10,900	.429	50
3867459	A4M50R2S12B025036	2S	25	.984	36	1.417	.079	12,00	.47	10,900	.429	50
2398751	A4M50R0314B036048	3	36	1.417	48	1.890	.118	14,00	.55	10,500	.413	50
2398752	A4M50R0314B042058	3	42	1.654	58	2.284	.118	14,00	.55	10,500	.413	50
2398763	A4M50R0314B052074	3	52	2.047	74	2.913	.118	14,00	.55	10,500	.413	50
2398764	A4M50R0314B068100	3	68	2.677	100	3.937	.118	14,00	.55	10,500	.413	50
2398765	A4M50R0314B090160	3	90	3.543	160	6.299	.118	14,00	.55	10,500	.413	50
2398766	A4M50R0314B130300	3	130	5.118	300	11.811	.118	14,00	.55	10,500	.413	50
2398767	A4M50R0314B290999	3	290	11.417	—	—	.118	14,00	.55	10,500	.413	50
2398775	A4M50R0414B048072	4	48	1.890	72	2.835	.157	14,00	.55	10,000	.394	50
2398776	A4M50R0414B064100	4	64	2.520	100	3.937	.157	14,00	.55	10,000	.394	50
2398777	A4M50R0414B092150	4	92	3.622	150	5.906	.157	14,00	.55	10,000	.394	50
2398778	A4M50R0414B132300	4	132	5.197	300	11.811	.157	14,00	.55	10,000	.394	50
2398779	A4M50R0414B290999	4	290	11.417	—	—	.157	14,00	.55	10,000	.394	50
3867460	A4M50R3S14B020025	3S	20	.787	25	.984	.118	14,00	.55	10,490	.413	50
3867461	A4M50R3S14B025036	3S	25	.984	36	1.417	.118	14,00	.55	10,490	.413	50
3867462	A4M50R4S14B025035	4S	25	.984	35	1.378	.157	14,00	.55	10,000	.394	50
3867464	A4M50R5S17B028038	5S	28	1.102	38	1.496	.197	17,00	.67	9,500	.374	50
2398785	A4M50R0519B058094	5	58	2.284	94	3.701	.197	19,00	.75	9,500	.374	50
2398786	A4M50R0519B080136	5	80	3.150	136	5.354	.197	19,00	.75	9,500	.374	50
2398787	A4M50R0519B120300	5	120	4.724	300	11.811	.197	19,00	.75	9,500	.374	50
2398788	A4M50R0519B250999	5	250	9.843	—	—	.197	19,00	.75	9,500	.374	50
3557175	A4M65R0624B070-112	6	70	2.756	112	4.409	.236	24,00	.94	9,870	.389	65
3557177	A4M65R0624B100-212	6	100	3.937	212	8.347	.236	24,00	.94	9,870	.389	65
3557179	A4M65R0624B200-999	6	200	7.874	999	39.331	.236	24,00	.94	9,870	.389	65
3557181	A4M65R0824B090-200	8	90	3.543	200	7.874	.315	24,00	.94	9,000	.354	65
3557193	A4M65R0824B184-999	8	184	7.244	999	39.331	.315	24,00	.94	9,000	.354	65
3557195	A4M65R1024B100-220	10	100	3.937	220	8.661	.394	24,00	.94	8,350	.329	65
3557197	A4M65R1024B200-999	10	200	7.874	999	39.331	.394	24,00	.94	8,350	.329	65

(continued)

(Modular Face Grooving Blade • Outboard — continued)

Grooving and Cut-Off

		D min			D max		CD			FS		cartridge size
order number	catalog number	seat size	mm	in	mm	in	W min	mm	in	mm	in	
left hand												
3051663	A4M50L0212B036046	2	36	1.417	46	1.811	.079	12,00	.47	10,900	.429	50
3051664	A4M50L0212B042054	2	42	1.654	54	2.126	.079	12,00	.47	10,900	.429	50
3051665	A4M50L0212B050064	2	50	1.969	64	2.520	.079	12,00	.47	10,900	.429	50
3051666	A4M50L0212B060084	2	60	2.362	84	3.307	.079	12,00	.47	10,900	.429	50
3051667	A4M50L0212B080124	2	80	3.150	124	4.882	.079	12,00	.47	10,900	.429	50
3051668	A4M50L0212B120254	2	120	4.724	254	10.000	.079	12,00	.47	10,900	.429	50
3867466	A4M50L2S12B016020	2S	16	.630	20	.787	.079	12,00	.47	10,900	.429	50
3867467	A4M50L2S12B020025	2S	20	.787	25	.984	.079	12,00	.47	10,900	.429	50
3867468	A4M50L2S12B025036	2S	25	.984	36	1.417	.079	12,00	.47	10,900	.429	50
2398768	A4M50L0314B036048	3	36	1.417	48	1.890	.118	14,00	.55	10,500	.413	50
2398769	A4M50L0314B042058	3	42	1.654	58	2.284	.118	14,00	.55	10,500	.413	50
2398770	A4M50L0314B052074	3	52	2.047	74	2.913	.118	14,00	.55	10,500	.413	50
2398771	A4M50L0314B068100	3	68	2.677	100	3.937	.118	14,00	.55	10,500	.413	50
2398772	A4M50L0314B090160	3	90	3.543	160	6.299	.118	14,00	.55	10,500	.413	50
2398773	A4M50L0314B130300	3	130	5.118	300	11.811	.118	14,00	.55	10,500	.413	50
2398774	A4M50L0314B290999	3	290	11.417	—	—	.118	14,00	.55	10,500	.413	50
2398780	A4M50L0414B048072	4	48	1.890	72	2.835	.157	14,00	.55	10,000	.394	50
2398781	A4M50L0414B064100	4	64	2.520	100	3.937	.157	14,00	.55	10,000	.394	50
2398782	A4M50L0414B092150	4	92	3.622	150	5.906	.157	14,00	.55	10,000	.394	50
2398783	A4M50L0414B132300	4	132	5.197	300	11.811	.157	14,00	.55	10,000	.394	50
2398784	A4M50L0414B290999	4	290	11.417	—	—	.157	14,00	.55	10,000	.394	50
3867469	A4M50L3S14B020025	3S	20	.787	25	.984	.118	14,00	.55	10,490	.413	50
3867470	A4M50L3S14B025036	3S	25	.984	36	1.417	.118	14,00	.55	10,490	.413	50
3867472	A4M50L4S14B035048	4S	35	1.378	48	1.890	.157	14,00	.55	10,000	.394	50
3867484	A4M50L5S17B028038	5S	28	1.102	38	1.496	.197	17,00	.67	9,500	.374	50
2398789	A4M50L0519B058094	5	58	2.284	94	3.701	.197	19,00	.75	9,500	.374	50
2398790	A4M50L0519B080136	5	80	3.150	136	5.354	.197	19,00	.75	9,500	.374	50
2398791	A4M50L0519B120300	5	120	4.724	300	11.811	.197	19,00	.75	9,500	.374	50
2398792	A4M50L0519B250999	5	250	9.843	—	—	.197	19,00	.75	9,500	.374	50
3557176	A4M65L0624B070-112	6	70	2.756	112	4.409	.236	24,00	.94	9,870	.389	65
3557178	A4M65L0624B100-212	6	100	3.937	212	8.347	.236	24,00	.94	9,870	.389	65
3557180	A4M65L0624B200-999	6	200	7.874	999	39.331	.236	24,00	.94	9,870	.389	65
3557182	A4M65L0824B090-200	8	90	3.543	200	7.874	.315	24,00	.94	9,000	.354	65
3557194	A4M65L0824B184-999	8	184	7.244	999	39.331	.315	24,00	.94	9,000	.354	65
3557198	A4M65L1024B200-999	10	200	7.874	999	39.331	.394	24,00	.94	8,350	.329	65



Grooving and Cut-Off

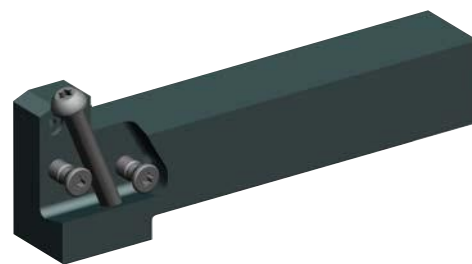
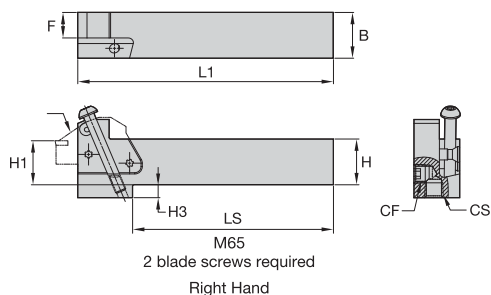
■ Modular Straight Toolholder • Inch

NOTE: For modular straight toolholder with coolant, see page C65.



order number	catalog number	H	B	L1	LS	F	H2	H3	blade size	blade screw	Torx	clamp screw	Torx
right hand													
1600245	KGMSR1650N	1.00	1.00	5.5	4.26	.56	—	6.35	KT25	MS1162	T25	MS2002	T25
3556992	KGMSR1665N	1.00	1.00	6.0	4.82	.53	2.09	12.70	KT30L	MS1163	T30	—	—
1617400	KGMSR2050N	1.25	1.25	5.5	—	.81	—	—	KT25	MS1162	T25	MS2002	T25
3557104	KGMSR2065N	1.25	1.25	6.0	4.90	.78	2.09	6.35	KT30L	MS1163	T30	—	—
1903553	KGMSR2450N	1.50	1.50	5.5	—	1.06	—	—	KT25	MS1162	T25	MS2002	T25
3557106	KGMSR2465N	1.50	1.50	7.0	5.90	1.03	2.09	—	KT30L	MS1163	T30	—	—
left hand													
1600246	KGMSL1650N	1.00	1.00	5.5	4.26	.56	—	6.35	KT25	MS1162	T25	MS2002	T25
3557103	KGMSL1665N	1.00	1.00	6.0	4.82	.53	2.09	12.70	KT30L	MS1163	T30	—	—
1617591	KGMSL2050N	1.25	1.25	5.5	—	.81	—	—	KT25	MS1162	T25	MS2002	T25
3557105	KGMSL2065N	1.25	1.25	6.0	4.90	.78	2.09	6.35	KT30L	MS1163	T30	—	—
1909004	KGMSL2450N	1.50	1.50	5.5	—	1.06	—	—	KT25	MS1162	T25	MS2002	T25
3557107	KGMSL2465N	1.50	1.50	7.0	5.90	1.03	2.09	—	KT30L	MS1163	T30	—	—

NOTE: KGMS...: Right-hand holder uses right-hand blades.
 KGME...: Right-hand holder uses left-hand blades.
 M50 blade and clamp screw torque equals 71–88 in. lbs. (8–10 Nm)
 M65 blade and clamp screw torque equals 159–177 in. lbs. (18–20 Nm)



■ Modular Straight Toolholder • Metric

NOTE: For modular straight toolholder with coolant, see page C66.

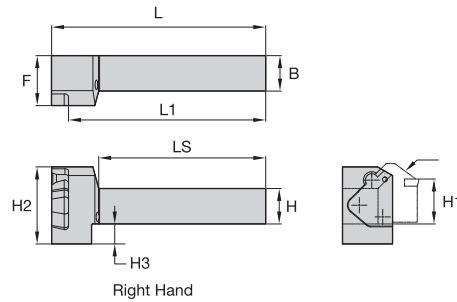
order number	catalog number	B	H	L1	F	LS	H3	blade screw	Torx	clamp screw	Torx
right hand											
1600249	KGMSR2525M50	25	25	138,75	13,84	109,00	7,00	MS1162	T25	MS2002	T25
3553429	KGMSR2525M65	25	25	150,00	13,00	120,00	14,00	MS1163	T30	—	—
1621083	KGMSR3232P50	32	32	158,75	20,81	—	—	MS1162	T25	MS2002	T25
3553431	KGMSR3232P65	32	32	170,00	20,79	158,00	7,00	MS1163	T30	—	—
left hand											
1600250	KGMSL2525M50	25	25	138,75	13,84	109,00	7,00	MS1162	T25	MS2002	T25
3553430	KGMSL2525M65	25	25	150,00	13,00	120,00	14,00	MS1163	T30	—	—
1621084	KGMSL3232P50	32	32	158,75	20,81	—	—	MS1162	T25	MS2002	T25
3553432	KGMSL3232P65	32	32	170,00	20,79	158,00	7,00	MS1163	T30	—	—

NOTE: KGMS...: Right-hand holder uses right-hand blades.

KGME...: Right-hand holder uses left-hand blades.

M50 blade and clamp screw torque equals 8–10 Nm (71–88 in. lbs.).

M65 blade and clamp screw torque equals 18–20 Nm (159–177 in. lbs.).

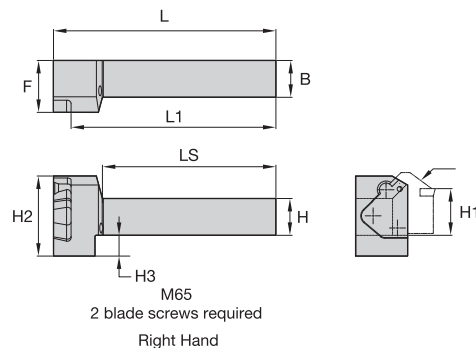


■ Modular End Mount Toolholder • Inch

NOTE: For modular end mount toolholder with coolant, see page C67.

order number	catalog number	H	B	L1	LS	F	H2	H3	blade size	blade screw	Torx	clamp screw	Torx
right hand													
1600263	KGMER1650N	1.00	1.00	5.5	4.96	1.70	—	6,10	KT25	MS1162	T25	MS2002	T25
3557108	KGMER1665N	1.00	1.00	5.5	4.70	1.38	2.09	12,70	KT30L	MS1163	T30	—	—
1617592	KGMER2050N	1.25	1.25	5.5	4.96	1.70	—	—	KT25	MS1162	T25	MS2002	T25
3557110	KGMER2065N	1.25	1.25	5.5	4.70	1.38	2.09	6,35	KT30L	MS1163	T30	—	—
1907344	KGMER2450N	1.50	1.50	5.5	4.96	1.70	—	—	KT25	MS1162	T25	MS2002	T25
left hand													
1600264	KGME1650N	1.00	1.00	5.5	4.96	1.70	—	6,10	KT25	MS1162	T25	MS2002	T25
3557109	KGME1665N	1.00	1.00	5.5	4.70	1.38	2.09	12,70	KT30L	MS1163	T30	—	—
1617593	KGME2050N	1.25	1.25	5.5	4.96	1.70	—	—	KT25	MS1162	T25	MS2002	T25
3557111	KGME2065N	1.25	1.25	5.5	4.70	1.38	2.09	6,35	KT30L	MS1163	T30	—	—
3557113	KGME2465N	1.50	1.50	6.5	5.70	1.50	2.09	—	KT30L	MS1163	T30	—	—

NOTE: KGMS...: Right-hand holder uses right-hand blades.
 KGME...: Right-hand holder uses left-hand blades.
 M50 blade and clamp screw torque equals 71–88 in. lbs. (8–10 Nm)
 M65 blade and clamp screw torque equals 159–177 in. lbs. (18–20 Nm)



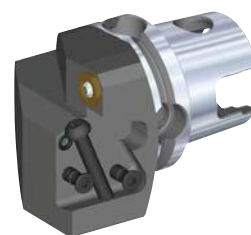
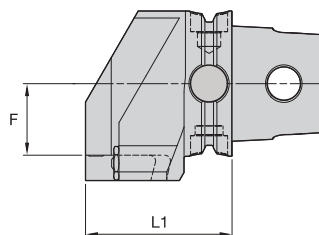
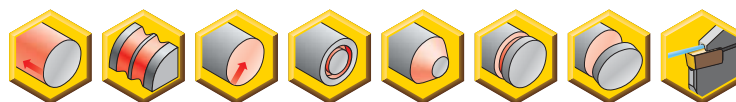
■ Modular End Mount Toolholders • Metric

NOTE: For modular end mount toolholder with coolant, see page C68.

order number	catalog number	B	H	L1	F	LS	H3	L	blade screw (2 required)	Torx	clamp screw	Torx
right hand												
1600270	KGMER2525M50	25	25	139,25	42,75	125,25	6,84	150,25	MS1162	T25	MS2002	T25
3553453	KGMER2525M65	25	25	138,15	35,00	129,00	14,00	150,00	MS1163	T30	—	—
1621085	KGMER3232P50	32	32	159,25	42,75	145,25	—	170,25	MS1162	T25	MS2002	T25
3553455	KGMER3232P65	32	32	158,15	35,00	153,00	7,00	170,00	MS1163	T30	—	—
left hand												
1600271	KGME2525M50	25	25	139,25	42,75	125,25	6,84	150,25	MS1162	T25	MS2002	T25
3553454	KGME2525M65	25	25	138,15	35,00	129,00	14,00	150,00	MS1163	T30	—	—
1621086	KGME3232P50	32	32	159,25	42,75	145,25	—	170,25	MS1162	T25	MS2002	T25
3553456	KGME3232P65	32	32	158,15	35,00	153,00	7,00	170,00	MS1163	T30	—	—

NOTE: KGMS...: Right-hand holder uses right-hand blades.
 KGME...: Right-hand holder uses left-hand blades.
 M50 blade and clamp screw torque equals 8–10 Nm (71–88 in. lbs.).
 M65 blade and clamp screw torque equals 18–20 Nm (159–177 in. lbs.).

- Best-in-class KM Quick-Change platform.
- Through the pocket coolant capable.
- Interchangeable blades for versatility and depth of cut.



Right Hand



■ Modular Straight KM System with Coolant



order number	catalog number	CSMS system size	L1		F		blade size	blade screw	Torx	clamp screw	Torx
			mm	in	mm	in					
right hand											
5999790	KM40TSKGMSR50C	KM40TS	53,5	2.11	15,0	.59	50	MS1162	T25	MS2002	T25
6000422	KM50TSKGMSR65C	KM50TS	53,5	2.11	22,0	.87	65	MS1163	T30	—	—
5999864	KM50TSKGMSR50C	KM50TS	58,5	2.30	23,0	.91	50	MS1162	T25	MS2002	T25
6000431	KM63TSKGMSR65C	KM63TS	58,5	2.30	30,0	1.18	65	MS1163	T30	—	—
5999948	KM63TSKGMSR50C	KM63TS	63,5	2.50	31,0	1.22	50	MS1162	T25	MS2002	T25
5999972	KM63XMZKGMSR50CY	KM63XMZ	63,5	2.50	31,0	1.22	50	MS1162	T25	MS2002	T25
6017695	KM80TSKGMSR65C	KM80TS	63,5	2.50	40,0	1.58	65	MS1163	T30	—	—
6000018	KM80ATCKGMSR50C	KM80ATC	66,5	2.62	41,0	1.61	50	MS1162	T25	MS2002	T25
6000014	KM80TSKGMSR50C	KM80TS	66,5	2.62	41,0	1.61	50	MS1162	T25	MS2002	T25
left hand											
5999861	KM40TSKGMSL50C	KM40TS	53,5	2.11	15,0	.59	50	MS1162	T25	MS2002	T25
6000424	KM50TSKGMSL65C	KM50TS	53,5	2.11	22,0	.87	65	MS1163	T30	—	—
5999865	KM50TSKGMSL50C	KM50TS	58,5	2.30	23,0	.91	50	MS1162	T25	MS2002	T25
6000433	KM63TSKGMSL65C	KM63TS	58,5	2.30	30,0	1.18	65	MS1163	T30	—	—
5999949	KM63TSKGMSL50C	KM63TS	63,5	2.50	31,0	1.22	50	MS1162	T25	MS2002	T25
5999973	KM63XMZKGMSLF50CY	KM63XMZ	63,5	2.50	31,0	1.22	50	MS1162	T25	MS2002	T25
6017696	KM80TSKGMSL65C	KM80TS	63,5	2.50	40,0	1.58	65	MS1163	T30	—	—
6000019	KM80ATCKGMSL50C	KM80ATC	66,5	2.62	41,0	1.61	50	MS1162	T25	MS2002	T25
6000015	KM80TSKGMSL50C	KM80TS	66,5	2.62	41,0	1.61	50	MS1162	T25	MS2002	T25

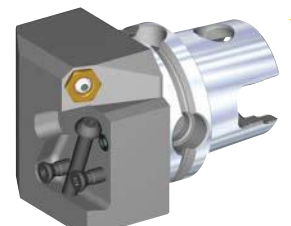
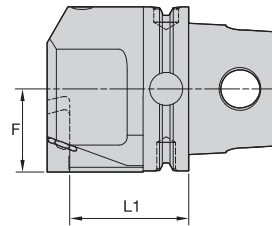
NOTE: KGMS...: Right-hand holder uses right-hand blades.

KGME...: Right-hand holder uses left-hand blades.

M50 blade and clamp screw torque equals 71–88 in. lbs. (8–10 Nm).

M65 blade and clamp screw torque equals 159–177 in. lbs. (18–20 Nm).

- Best-in-class KM Quick-Change platform.
- Through the pocket coolant capable.
- Interchangeable blades for versatility and depth of cut.



Right Hand

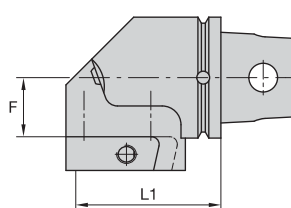
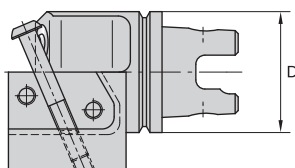
Grooving and Cut-Off

■ Modular End Mount KM System with Coolant • Metric



order number	catalog number	CSMS system size	L1		F		blade size	blade screw	Torx	clamp screw	Torx
			mm	in	mm	in					
right hand											
5999788	KM40TSKGMER50C	KM40TS	28,0	1.10	20,50	0.81	50	MS1162	T25	MS2002	T25
5999862	KM50TSKGMER50C	KM50TS	38,0	1.50	25,50	1.00	50	MS1162	T25	MS2002	T25
6000410	KM50TSKGMER65C	KM50TS	47,0	1.85	25,50	1.00	65	MS1163	T30	—	—
6000425	KM63TSKGMER65C	KM63TS	47,0	1.85	32,52	1.28	65	MS1163	T30	—	—
5999946	KM63TSKGMER50C	KM63TS	48,0	1.89	32,50	1.28	50	MS1162	T25	MS2002	T25
6000434	KM63XMZKGMER65CY	KM63XMZ	47,0	1.85	32,50	1.28	65	MS1163	T30	—	—
5999950	KM63XMZKGMER50CY	KM63XMZ	48,0	1.89	32,50	1.28	50	MS1162	T25	MS2002	T25
6017697	KM80ATCKGMER65C	KM80ATC	57,0	2.24	40,50	1.59	65	MS1163	T30	—	—
6000016	KM80ATCKGMER50C	KM80ATC	58,0	2.28	40,50	1.59	50	MS1162	T25	MS2002	T25
6017693	KM80TSKGMER65C	KM80TS	57,0	2.24	40,50	1.59	65	MS1163	T30	—	—
6000012	KM80TSKGMER50C	KM80TS	58,0	2.28	40,50	1.59	50	MS1162	T25	MS2002	T25
left hand											
5999789	KM40TSKGMEL50C	KM40TS	28,0	1.10	20,50	0.81	50	MS1162	T25	MS2002	T25
5999863	KM50TSKGMEL50C	KM50TS	38,0	1.50	25,50	1.00	50	MS1162	T25	MS2002	T25
6000421	KM50TSKGMEL65C	KM50TS	47,0	1.85	25,50	1.00	65	MS1163	T30	—	—
6000430	KM63TSKGMEL65C	KM63TS	47,0	1.85	32,52	1.28	65	MS1163	T30	—	—
5999947	KM63TSKGMEL50C	KM63TS	48,0	1.89	32,50	1.28	50	MS1162	T25	MS2002	T25
6000436	KM63XMZKGMELF65CY	KM63XMZ	47,0	1.85	32,50	1.28	65	MS1163	T30	—	—
5999971	KM63XMZKGMELF50CY	KM63XMZ	48,0	1.89	32,50	1.28	50	MS1162	T25	MS2002	T25
6017698	KM80ATCKGMEL65C	KM80ATC	57,0	2.24	40,50	1.59	65	MS1163	T30	—	—
6000017	KM80ATCKGMEL50C	KM80ATC	58,0	2.28	40,50	1.59	50	MS1162	T25	MS2002	T25
6017694	KM80TSKGMEL65C	KM80TS	57,0	2.24	40,50	1.59	65	MS1163	T30	—	—
6000013	KM80TSKGMEL50C	KM80TS	58,0	2.28	40,50	1.59	50	MS1162	T25	MS2002	T25

NOTE: KGMS...: Right-hand holder uses right-hand blades.
 KGME...: Right-hand holder uses left-hand blades.
 M50 blade and clamp screw torque equals 71–88 in. lbs. (8–10 Nm).
 M65 blade and clamp screw torque equals 159–177 in. lbs. (18–20 Nm).



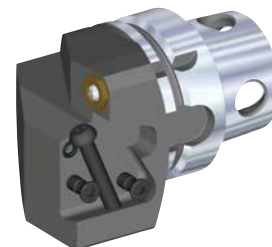
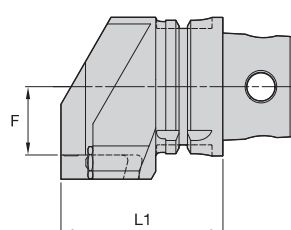
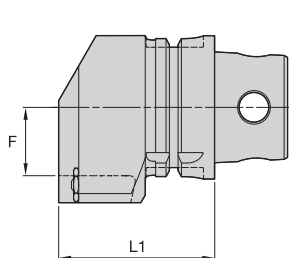
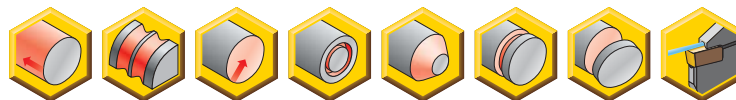
■ Modular End Mount KM-XMZ System with Coolant



order number	catalog number	D	L1	F	blade screw (2 required)	clamp screw	Torx
right hand							
1756550	KM63XMZKGMSR50Y	2.48	2.50	1.22	MS1162	MS2002	T25
left hand							
1756574	KM63XMZKGMSLF50Y	2.48	2.50	1.22	MS1162	MS2002	T25
3588680	KM63XMZKGMSLF65Y	2.48	2.30	1.18	MS1163	—	—

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

- Through the pocket coolant capable.
- Interchangeable blades for versatility and depth of cut.



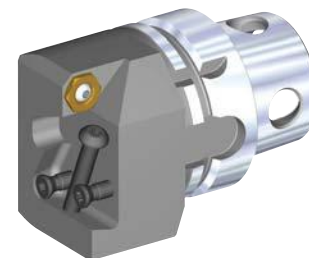
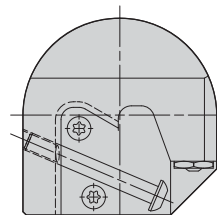
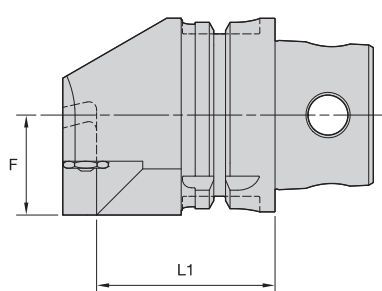
Right Hand

■ Modular Straight KM4X™ System with Coolant



order number	catalog number	CSMS system size	L1		F		blade size	blade screw	Torx	clamp screw	Torx
			mm	in	mm	in					
right hand											
5543560	KM4X63KGMSR65C	KM4X63	68,5	2.70	30,0	1.18	65	MS1163	T30	—	—
6000407	KM4X63KGMSR50C	KM4X63	73,5	2.89	31,0	1.22	50	MS1162	T25	MS2002	T25
left hand											
5543558	KM4X63KGMSL65C	KM4X63	68,5	2.70	30,0	1.18	65	MS1163	T30	—	—
6000408	KM4X63KGMSL50C	KM4X63	73.5	2.89	31.0	1.22	50	MS1162	T25	MS2002	T25

NOTE: KGMS... Right-hand holder uses right-hand blades.
 KGME... Right-hand holder uses left-hand blades.
 M50 blade and clamp screw torque equals 71–88 in. lbs. (8–10 Nm).
 M65 blade and clamp screw torque equals 159–177 in. lbs. (18–20 Nm).



Right Hand

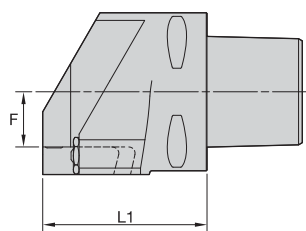
Grooving and Cut-Off

■ Modular End Mount KM4X™ System with Coolant



order number	catalog number	CSMS system size	L1		F		cartridge size	blade screw	nozzle	clamp screw	kg	lbs
			mm	in	mm	in						
right hand												
5543555	KM4X63KGMER65C	KM4X63	57,0	2.244	32,5	1.280	65	MS1163	PMT04525	—	1,87	4.13
6000404	KM4X63KGMER50C	KM4X63	58,0	2.283	32,5	1.280	50	MS1162	PMT04525	MS2002	1,85	4.08
6000407	KM4X63KGMSR50C	KM4X63	73,5	2.894	31,0	1.220	50	MS1162	PMT04525	MS2002	1,86	4.11
left hand												
5543553	KM4X63KGME165C	KM4X63	57,0	2.244	32,5	1.280	65	MS1163	PMT04525	—	1,87	4.13
6000405	KM4X63KGME150C	KM4X63	58,0	2.283	32,5	1.280	50	MS1162	PMT04525	MS2002	1,85	4.08
6000408	KM4X63KGMSL50C	KM4X63	73.5	2.894	31.0	1.220	50	MS1162	PMT04525	MS2002	1,86	4.11

- Standard PSC Quick-Change platform.
- Through the pocket coolant capable.
- Interchangeable blades for versatility and depth of cut.



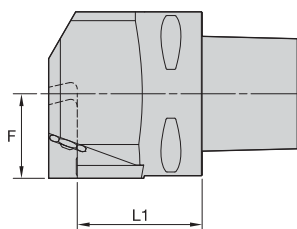
Right Hand

■ Modular Side PSC System with Coolant



order number	catalog number	CSMS system size	L1		F		blade size	blade screw	Torx	clamp screw	Torx
			mm	in	mm	in					
right hand											
6000028	PSC40KGMSR50C	PSC40	63,5	2.50	10,0	.39	50	MS1162	T25	MS2002	T25
5405654	PSC50KGMSR65C	PSC50	49,0	1.93	25,5	1.00	65	MS1163	T30	—	—
6000152	PSC50KGMSR50C	PSC50	63,5	2.50	15,0	.59	50	MS1162	T25	MS2002	T25
6000464	PSC63KGMSR65C	PSC63	60,5	2.38	21,0	.83	65	MS1163	T30	—	—
6000211	PSC63KGMSR50C	PSC63	65,5	2.58	22,0	.87	50	MS1162	T25	MS2002	T25
6000468	PSC80KGMSR65C	PSC80	68,5	2.70	29,0	1.14	65	MS1163	T30	—	—
6000216	PSC80KGMSR50C	PSC80	73,5	2.89	30,0	1.18	50	MS1162	T25	MS2002	T25
left hand											
6000029	PSC40KGMSL50C	PSC40	63,5	2.50	10,0	.39	50	MS1162	T25	MS2002	T25
5405655	PSC50KGMSL65C	PSC50	49,0	1.93	25,5	1.00	65	MS1163	T30	—	—
6000153	PSC50KGMSL50C	PSC50	63,5	2.50	15,0	.59	50	MS1162	T25	MS2002	T25
6000465	PSC63KGMSL65C	PSC63	60,5	2.38	21,0	.83	65	MS1163	T30	—	—
6000213	PSC63KGMSL50C	PSC63	65,5	2.58	22,0	.87	50	MS1162	T25	MS2002	T25
6000469	PSC80KGMSL65C	PSC80	68,5	2.70	29,0	1.14	65	MS1163	T30	—	—
6000217	PSC80KGMSL50C	PSC80	73,5	2.89	30,0	1.18	50	MS1162	T25	MS2002	T25

- Standard PSC Quick-Change platform.
- Through the pocket coolant capable.
- Interchangeable blades for versatility and depth of cut.



Right Hand

Grooving and Cut-Off

■ Modular End Mount PSC System with Coolant



order number	catalog number	L1				F		blade size	blade screw	Torx	clamp screw	Torx
		CSMS system size	mm	in	mm	in						
right hand												
6000026	PSC40KGMER50C	PSC40	33,0	1.30	20,5	.81	50	MS1162	T25	MS2002	T25	
6000030	PSC50KGMER50C	PSC50	43,0	1.69	25,5	1.00	50	MS1162	T25	MS2002	T25	
5405652	PSC50KGMER65C	PSC50	55,5	2.19	22,0	.87	65	MS1163	T30	—	—	
6000159	PSC63KGMER50C	PSC63	48,0	1.89	32,5	1.28	50	MS1162	T25	MS2002	T25	
6000462	PSC63KGMER65C	PSC63	49,0	1.93	32,5	1.28	65	MS1163	T30	—	—	
6000466	PSC80KGMER65C	PSC80	57,0	2.24	40,5	1.59	65	MS1163	T30	—	—	
6000214	PSC80KGMER50C	PSC80	58,0	2.28	40,5	1.59	50	MS1162	T25	MS2002	T25	
left hand												
6000027	PSC40KGME50C	PSC40	33,0	1.30	20,5	.81	50	MS1162	T25	MS2002	T25	
6000151	PSC50KGME50C	PSC50	43,0	1.69	25,5	1.00	50	MS1162	T25	MS2002	T25	
5405653	PSC50KGME65C	PSC50	55,5	2.19	22,0	.87	65	MS1163	T30	—	—	
6000160	PSC63KGME50C	PSC63	48,0	1.89	32,5	1.28	50	MS1162	T25	MS2002	T25	
6000463	PSC63KGME65C	PSC63	49,0	1.93	32,5	1.28	65	MS1163	T30	—	—	
6000467	PSC80KGME65C	PSC80	57,0	2.24	40,5	1.59	65	MS1163	T30	—	—	
6000215	PSC80KGME50C	PSC80	58,0	2.28	40,5	1.59	50	MS1162	T25	MS2002	T25	