

Modern machining operations demand high-quality, high-performance toolholders that provide straightforward design and application versatility.

Standard WIDIA™ cartridges are ideal for turning tools with one, or several, cutting edges. A wide range of cartridge sizes and styles provide numerous combinations and application possibilities.

Cartridges



Clamping System M

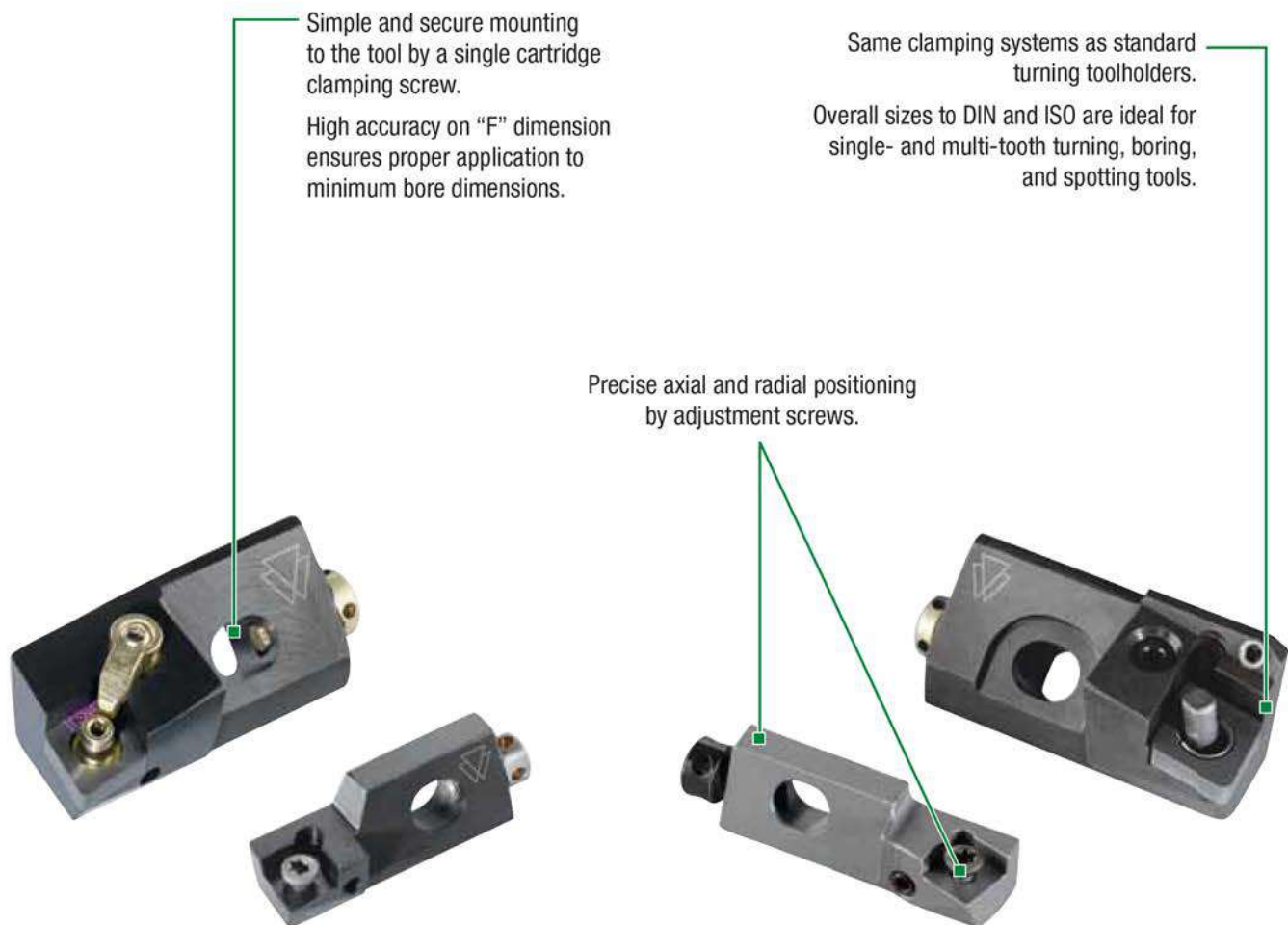
- Combined pin/wedge clamp for negative inserts.
- An extremely sturdy clamping system, specially designed for interrupted cuts.
- The tool is protected by a carbide shim.

Clamping System P

- Lever-type clamping system for negative indexable inserts with hole to DIN 4988 and positive round inserts more than 20mm in diameter.
- Inserts with one- and two-side chip control geometries have positive rakes from 6° to 18°.
- Advantages of this system are fast insert changes and no interference with chip flow.

P-style available in metric sizes only.





Clamping System C

- Top clamping system for negative and positive indexable inserts to DIN 4968.
- This universal clamping system is robust and easy to handle.
- Some height-adjustable clamps enable the use of additional chipbreakers.
- A carbide shim provides additional tool protection.

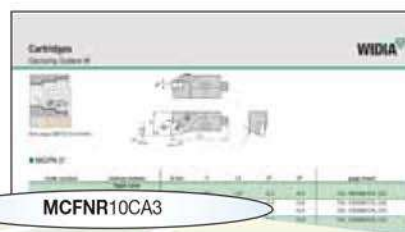


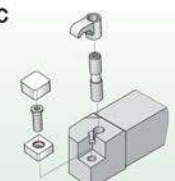
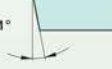
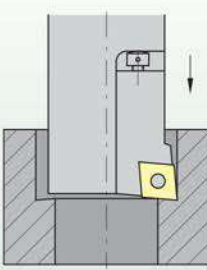
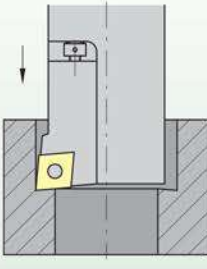
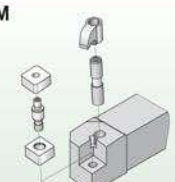
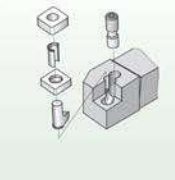
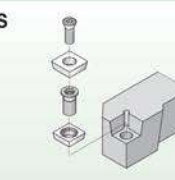
Clamping System S

- Screw clamping system for positive indexable inserts with countersunk hole to DIN 4967.
- Compact design using a minimum of spare parts for high reliability and cost efficiency.
- A carbide shim provides additional tool protection.
- Toolholders with cutting edge heights upwards of 16mm (.625") and insert iCs from 9,52mm (.375") are secured by means of a threaded bushing.

How Do Catalogue Numbers Work?

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



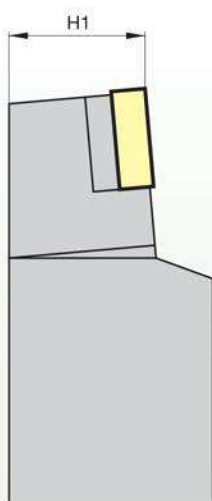
M	C	F	N	R
Insert Clamping System	Insert Shape	Cartridge Style	Insert Clearance Angle	Hand of Tool
C  Top clamping by clamping finger for inserts without hole.	C  D  R  S  T  W 	F  K  L  J  Q  R  S  G 	C  N  P 	Right-hand cartridge R  Left-hand cartridge L 
M  Top and hole clamping for inserts with hole.				
P  Insert clamping by toggle lever for insert hole.				
S  Centre clamping by screw for inserts with hole.				

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

Cartridge Catalogue Numbering System										WIDIA
										
MCFNR10CA3										
10	C	A	3							
Insert iC Number of 1/8ths of "D"										

10

Cartridge Size



H1 = Cutting edge height of cartridge, in inches

C

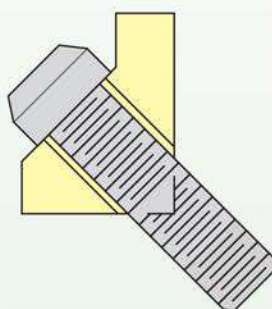
Identifying Code of Cartridge

C = Cartridge

A

Mounting Design of Cartridge

A-design conforming to ISO 5611



3

Insert Size



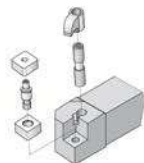
Insert iC
Number of 1/8ths of "D"

Additional Information

Each unique clamping system offers product options to fill your specific toolholder needs. Find the illustration that fits your application and navigate to the corresponding page to get the correct solution.



Clamping System M

M


Combined pin/wedge clamp for negative inserts. An extremely sturdy clamping system, specially designed for interrupted cuts. The tool is protected by a carbide shim.


MCFN

90°

Page:
C92

MCKN

75°

Page:
C93

MCLN

95°

Page:
C94

MDJN

93°

Page:
C95

MDQN

107,5°

Page:
C96

MSKN

75°

Page:
C97

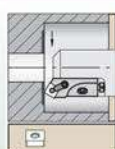
MSRN

75°

Page:
C98

MSSN

45°

Page:
C99

MSTN

60°

Page:
C100

MSYN

85°

Page:
C101

MTFN

90°

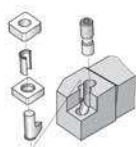
Page:
C102

MTGN

90°

Page:
C103

P-Style Clamping

P


Lever-type clamping system for negative indexable inserts with hole to DIN 4988 and positive round inserts more than 20mm in diameter. Inserts with one- and two-side chip control geometries have positive rakes from 6° to 18°. Advantages of this system are fast insert changes and no interference with chip flow.


PCLN

95°

Page:
C104

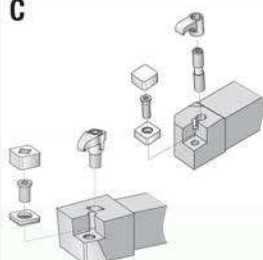
PSKN

75°

Page:
C105

Clamping System C

C



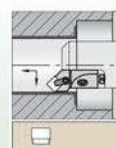
Top clamping system for negative and positive indexable inserts to DIN 4968. This universal clamping system is robust and easy to handle. Some height-adjustable clamps enable the use of additional chipbreakers. A carbide shim provides additional tool protection.



CSKP
75°
Page:
C106



CSRP
75°
Page:
C107



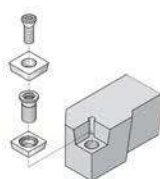
CSSP
45°
Page:
C108



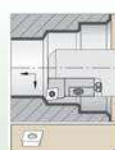
CTFP
90°
Page:
C109

Clamping System S

S



Combined pin/wedge clamp for negative inserts. An extremely sturdy clamping system, specially designed for interrupted cuts. The tool is protected by a carbide shim.



SCFP
90°
Page:
C110



SCGP
90°
Page:
C111



SCLC
95°
Page:
C112



SCLP
95°
Page:
C113



SCRPP
75°
Page:
C114



SCSP
45°
Page:
C115



SCTP
60°
Page:
C116



SCWP
60°
Page:
C117



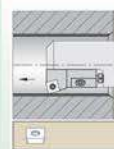
SDJP
93°
Page:
C118



SRGC
75°
Page:
C119



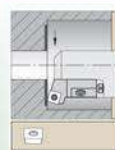
SSKC
75°
Page:
C120



SSKP
75°
Page:
C121



SSRC
75°
Page:
C122



SSRP
75°
Page:
C123



SSSC
45°
Page:
C124



SSSP
45°
Page:
C125



STFP
90°
Page:
C126



STGP
90°
Page:
C127



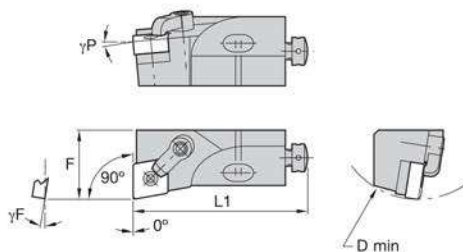
STTP
60°
Page:
C128



STWP
60°
Page:
C129



See pages B30–B46
for inserts.



■ MCFN 90°

order number	catalogue number	D min	F	L1	γF°	γP°	gage insert
right hand							
3870421	MCFNR10CA09	40	14,0	50	-9.0	-9.0	CN..090308/CN..322
3870420	MCFNR12CA12	50	20,0	55	-9.0	-5.0	CN..120408/CN..432
3870419	MCFNR16CA12	60	25,0	63	-9.0	-5.0	CN..120408/CN..432
3870418	MCFNR20CA12	70	25,0	70	-9.0	-5.0	CN..120408/CN..432
left hand							
3870423	MCFNL12CA12	50	20,0	55	-9.0	-5.0	CN..120408/CN..432
3870422	MCFNL16CA12	60	25,0	63	-9.0	-5.0	CN..120408/CN..432

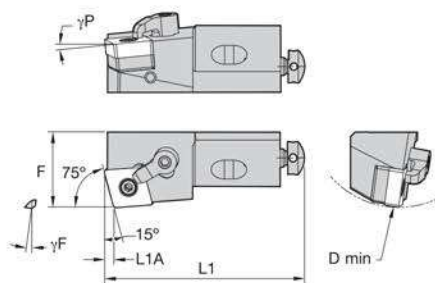
■ Spare Parts



D min	shim	lock pin	hex	clamp	clamp screw	hex	radial adjusting screw	hex	axial adjusting screw	mounting screw	hex	washer
40	—	KLM33	2 mm	CKM36	STCM38	2 mm	KUAM28	2 mm	KUAM30	—	4 mm	CSWM 060 050
50	—	KLM43	2 mm	CKM34	STCM38	2 mm	KUAM22	2 mm	KUAM31	191.406	4 mm	CSWM 060 050
60	ICSN432	KLM46S	2.5 mm	CKM34	STCM9	2.5 mm	KUAM25	2.5 mm	KUAM32	191.407	5 mm	CSWM 080 050
70	ICSN432	KLM46	2.5 mm	CKM34	STCM9	2.5 mm	KUAM25	2.5 mm	KUAM32	191.407	5 mm	CSWM 080 050



See pages B30–B46 for inserts.



■ MCKN 75°

order number	catalogue number	D min	F	L1	L1A	γF°	γP°	gage insert
right hand								
3870416	MCKNR12CA12	50	20,0	55	3	-9.0	-5.0	CN..120408/CN..432
3870415	MCKNR16CA12	60	25,0	63	3	-9.0	-5.0	CN..120408/CN..432
left hand								
3870417	MCKNL12CA12	50	20,0	55	3	-9.0	-5.0	CN..120408/CN..432

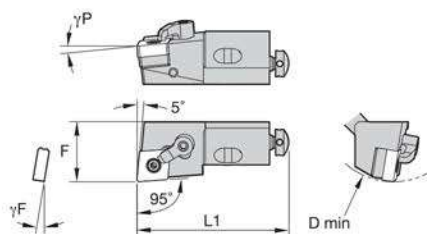
■ Spare Parts



D min	shim	lock pin	hex	clamp	clamp screw	hex	radial adjusting screw	hex	axial adjusting screw	mounting screw	hex	washer
50	—	KLM43	2 mm	CKM34	STCM38	2 mm	KUAM22	2 mm	KUAM31	191.406	4 mm	CSWM 060 050
60	ICSN432	KLM46S	2.5 mm	CKM34	STCM9	2.5 mm	KUAM25	2.5 mm	KUAM32	191.407	5 mm	CSWM 080 050



See pages B30–B46
for inserts.



MCLN 95°

order number	catalogue number	D min	F	L1	γF°	γP°	gage insert
right hand							
3870410	MCLNR12CA12	50	20,0	55	-9.0	-5.0	CN..120408/CN..432
3870409	MCLNR16CA12	60	25,0	63	-9.0	-5.0	CN..120408/CN..432
3870408	MCLNR20CA12	70	25,0	70	-9.0	-5.0	CN..120408/CN..432
3870407	MCLNR25CA19	100	32,0	100	-9.0	-5.0	CN..190612/CN..643
left hand							
3870414	MCLNL12CA12	50	20,0	55	-9.0	-5.0	CN..120408/CN..432
3870413	MCLNL16CA12	60	25,0	63	-9.0	-5.0	CN..120408/CN..432
3870412	MCLNL20CA12	70	25,0	70	-9.0	-5.0	CN..120408/CN..432
3870411	MCLNL25CA19	100	32,0	100	-9.0	-5.0	CN..190612/CN..643

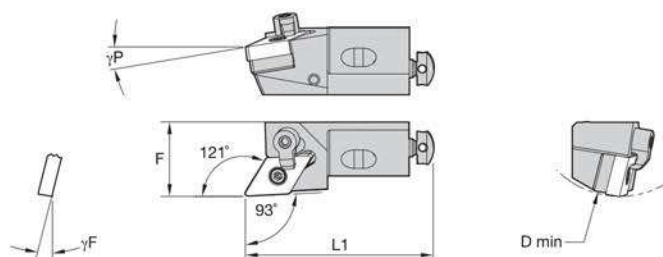
Spare Parts



D min	shim	lock pin	hex	clamp	clamp screw	hex	radial adjusting screw	hex	axial adjusting screw	mounting screw	holding screw	hex	washer
50	—	KLM43	2 mm	CKM34	STCM38	2 mm	KUAM22	2 mm	KUAM31	191.406	—	4 mm	CSWM 060 050
60	ICSN432	KLM46S	2.5 mm	CKM34	STCM9	2.5 mm	KUAM25	2.5 mm	KUAM32	191.407	—	5 mm	CSWM 080 050
70	ICSN432	KLM46	2.5 mm	CKM34	STCM9	2.5 mm	KUAM25	2.5 mm	KUAM32	191.407	—	5 mm	CSWM 080 050
100	ICSN633	KLM68	4 mm	CKM35	STCM8	4 mm	KUAM27	4 mm	KUAM32	—	MS364	8 mm	CSWM 100 080



See pages B47–B64 for inserts.



MDJN 93°

order number	catalogue number	D min	F	L1	γF°	γP°	gage insert
right hand							
3870405	MDJNR16CA15	60	25,0	63	-9.0	-9.0	DN..150408/DN..3.532
3870404	MDJNR20CA15	70	25,0	70	-8.5	-8.5	DN..150408/DN..3.532
left hand							
3870406	MDJNL16CA15	60	25,0	63	-9.0	-9.0	DN..150408/DN..3.532

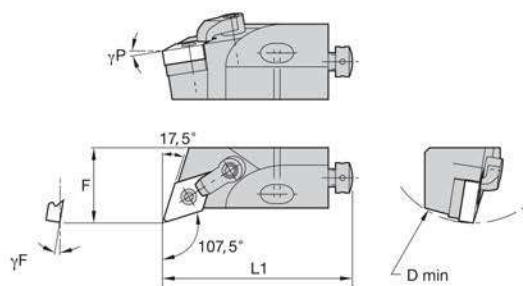
Spare Parts



D min	shim	lock pin	hex	clamp	clamp screw	hex	radial adjusting screw	hex	axial adjusting screw	mounting screw	hex	washer
60	IDSN432	KLM46S	2.5 mm	CKM36	STCM9	2.5 mm	KUAM25	2.5 mm	KUAM32	191.407	5 mm	CSWM 080 050
70	IDSN432	KLM46	2.5 mm	CKM41	STCM40	2.5 mm	KUAM25	2.5 mm	KUAM32	191.407	5 mm	CSWM 080 050



See pages B47–B64
for inserts.



■ MDQN 107,5°

order number	catalogue number	D min	F	L1	γF°	γP°	gage insert
right hand							
3870361	MDQNR16CA15	60	25,0	63	-9.0	-6.0	DN..150408/DN..3.532
3870360	MDQNR20CA15	70	25,0	70	-9.0	-8.0	DN..150408/DN..3.532
left hand							
3870403	MDQNL16CA15	60	25,0	63	-9.0	-6.0	DN..150408/DN..3.532
3870362	MDQNL20CA15	70	25,0	70	-9.0	-8.0	DN..150408/DN..3.532

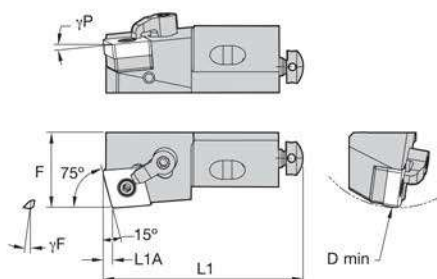
■ Spare Parts



D min	shim	lock pin	hex	clamp	clamp screw	hex	radial adjusting screw	hex	axial adjusting screw	mounting screw	hex	washer
60	IDSN432	KLM46S	2.5 mm	CKM36	STCM9	2.5 mm	KUAM25	2.5 mm	KUAM32	191.407	5 mm	CSWM 080 050
70	IDSN432	KLM46	2.5 mm	CKM34	STCM9	2.5 mm	KUAM25	2.5 mm	KUAM32	191.407	5 mm	CSWM 080 050



See pages B68–B80 for inserts.



■ MSKN 75°

order number	catalogue number	D min	F	L1	L1A	γF°	γP°	gage insert
right hand								
3870352	MSKNR10CA09	40,0	14,0	50	2,2	-9.0	-5.0	SN..090308/SN..322
3870351	MSKNR12CA12	50,0	20,0	55	3,0	-9.0	-5.0	SN..120408/SN..432
3870350	MSKNR16CA12	60,0	25,0	63	3,0	-9.0	-5.0	SN..120408/SN..432
3870349	MSKNR20CA15	70,0	25,0	70	3,7	-9.0	-5.0	SN..150612/SN..543
3870348	MSKNR25CA19	100,0	32,0	100	4,6	-9.0	-5.0	SN..190612/SN..543
left hand								
3870356	MSKNL10CA09	40,0	14,0	50	2,2	-9.0	-5.0	SN..090308/SN..322
3870354	MSKNL16CA12	60,0	25,0	63	3,0	-9.0	-5.0	SN..120408/SN..432
3870353	MSKNL20CA15	70,0	25,0	70	3,7	-9.0	-5.0	SN..150612/SN..543

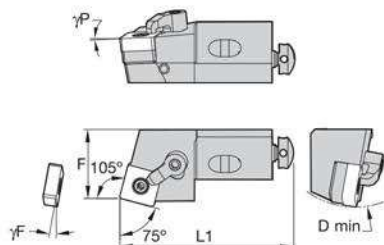
■ Spare Parts



D min	shim	lock pin	hex	clamp	clamp screw	hex	radial adjusting screw	hex	axial adjusting screw	mounting screw	holding screw	hex	washer
40	—	KLM33	2 mm	CKM36	STCM38	2 mm	KUAM28	2 mm	KUAM30	191.405	—	4 mm	CSWM 060 050
50	—	KLM43	2 mm	CKM34	STCM38	2 mm	KUAM22	2 mm	KUAM31	191.406	—	4 mm	CSWM 060 050
60	ISSN432	KLM46S	2.5 mm	CKM34	STCM9	2.5 mm	KUAM25	2.5 mm	KUAM32	191.407	—	5 mm	CSWM 080 050
70	SKSN566K	KLM54	2.5 mm	CKM37	STCM40	2.5 mm	KUAM25	2.5 mm	KUAM32	191.407	—	5 mm	CSWM 080 050
100	ISSN633	KLM68	4 mm	CKM35	STCM8	4 mm	KUAM27	4 mm	KUAM32	—	MS364	8 mm	CSWM 100 080



See pages B68–B80
for inserts.



■ MSRN 75°

order number	catalogue number	D min	F	L1	γF°	γP°	gage insert
right hand							
3870344	MSRNR10CA09	40,0	14,0	50	-9,0	-5,0	SN..090308/SN..322
3870343	MSRNR12CA12	50,0	20,0	55	-9,0	-5,0	SN..120408/SN..432
3870341	MSRNR20CA15	70,0	25,0	70	-9,0	-5,0	SN..150612/SN..543
left hand							
3870347	MSRNL12CA12	50,0	20,0	55	-9,0	-5,0	SN..120408/SN..432
3870346	MSRNL16CA12	60,0	25,0	63	-9,0	-5,0	SN..120408/SN..432
3870345	MSRNL20CA15	70,0	25,0	70	-9,0	-5,0	SN..150612/SN..543

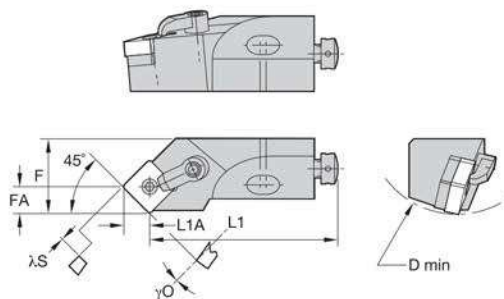
■ Spare Parts



D min	shim	lock pin	hex	clamp	clamp screw	hex	radial adjusting screw	hex	axial adjusting screw	mounting screw	hex	washer
40	—	KLM33	2 mm	CKM36	STCM38	2 mm	KUAM28	2 mm	KUAM30	191.405	4 mm	CSWM 060 050
50	—	KLM43	2 mm	CKM34	STCM38	2 mm	KUAM22	2 mm	KUAM31	191.406	4 mm	CSWM 060 050
60	ISSN432	KLM46S	2.5 mm	CKM34	STCM9	2.5 mm	KUAM25	2.5 mm	KUAM32	191.407	5 mm	CSWM 080 050
70	SKSN566K	KLM54	2.5 mm	CKM37	STCM40	2.5 mm	KUAM25	2.5 mm	KUAM32	191.407	5 mm	CSWM 080 050



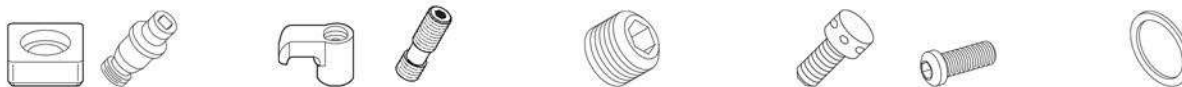
See pages B68–B80 for inserts.



■ MSSN 45°

order number	catalogue number	D min	F	L1	L1A	λS°	γO°	gage insert
right hand								
3870336	MSSNR10CA09	40,0	14,0	44	6,1	-13.0	0.0	SN..090308/SN..322
3870335	MSSNR12CA12	50,0	20,0	47	8,3	-13.0	0.0	SN..120408/SN..432
3870334	MSSNR16CA12	60,0	25,0	53	8,3	-13.0	0.0	SN..120408/SN..432
3870333	MSSNR20CA15	70,0	25,0	60	10,3	-13.0	0.0	SN..150612/SN..543
left hand								
3870340	MSSNL10CA09	40,0	14,0	44	6,1	-13.0	0.0	SN..090308/SN..322
3870339	MSSNL12CA12	50,0	20,0	47	8,3	-13.0	0.0	SN..120408/SN..432
3870338	MSSNL16CA12	60,0	25,0	53	8,3	-13.0	0.0	SN..120408/SN..432

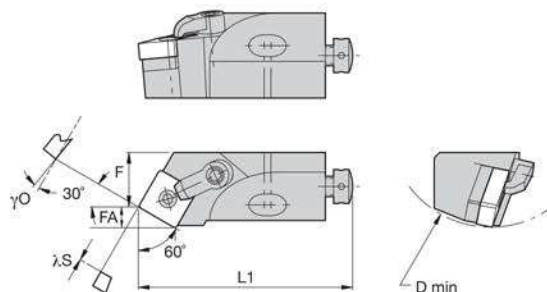
■ Spare Parts



D min	shim	lock pin	hex	clamp	clamp screw	hex	radial adjusting screw	hex	axial adjusting screw	mounting screw	hex	washer
40	—	KLM33	2 mm	CKM36	STCM38	2 mm	KUAM28	2 mm	KUAM30	191.405	4 mm	CSWM 060 050
50	—	KLM43	2 mm	CKM34	STCM38	2 mm	KUAM22	2 mm	KUAM31	191.406	4 mm	CSWM 060 050
60	ISSN432	KLM46S	2.5 mm	CKM36	STCM9	2.5 mm	KUAM25	2.5 mm	KUAM32	191.407	5 mm	CSWM 080 050
70	SKSN566K	KLM54	2.5 mm	CKM37	STCM40	2.5 mm	KUAM25	2.5 mm	KUAM32	191.407	5 mm	CSWM 080 050



See pages B68–B80
for inserts.



■ MSTN 60°

order number	catalogue number	D min	F	L1	FA	λS°	γO°	gage insert
right hand								
3870312	MSTNR10CA09	40,0	9,0	50	13,3	-11,0	0,0	SN..090308/SN..322
3870311	MSTNR12CA12	50,0	13,0	55	5,9	-11,0	0,0	SN..120408/SN..432
3870310	MSTNR16CA12	60,0	15,0	63	5,9	0,0	-11,0	SN..120408/SN..432

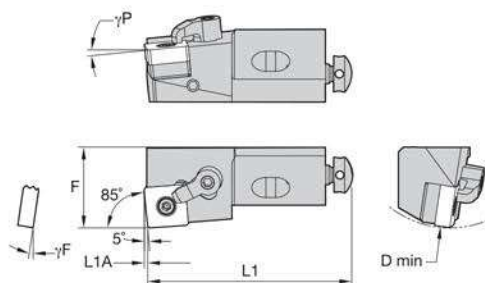
■ Spare Parts



D min	shim	lock pin	hex	clamp	clamp screw	hex	radial adjusting screw	hex	axial adjusting screw	mounting screw	hex	washer
40	—	KLM33	2 mm	CKM36	STCM38	2 mm	KUAM28	2 mm	KUAM30	191.405	4 mm	CSWM 060 050
50	—	KLM43	2 mm	CKM34	STCM38	2 mm	KUAM22	2 mm	KUAM31	191.406	4 mm	CSWM 060 050
60	ISSN432	KLM46S	2.5 mm	CKM34	STCM9	2.5 mm	KUAM25	2.5 mm	KUAM32	191.407	5 mm	CSWM 080 050



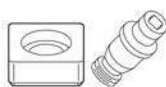
See pages B68–B80 for inserts.



■ MSYN 85°

order number	catalogue number	D min	F	L1	L1A	γF°	γP°	gage insert
right hand								
3870308	MSYNR10CA09	40,0	14,0	50	0,8	-9,0	-5,0	SN..090308/SN..322
3870307	MSYNR12CA12	50,0	20,0	55	1,0	-9,0	-5,0	SN..120408 / SN..432
3870306	MSYNR16CA12	60,0	25,0	63	1,0	-9,0	-5,0	SN..120408 / SN..432
3870305	MSYNR25CA19	100,0	32,0	100	1,5	-9,0	-5,0	SN..190612/SN..643
left hand								
3870309	MSYNL10CA09	40,0	14,0	50	0,8	-9,0	-5,0	SN..090308/SN..322

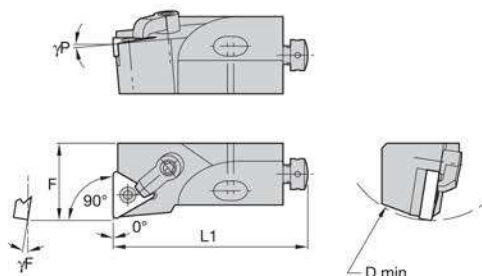
■ Spare Parts



D min	shim	lock pin	hex	clamp	clamp screw	hex	radial adjusting screw	hex	axial adjusting screw	mounting screw	holding screw	hex	washer
40	—	KLM33	2 mm	CKM36	STCM38	2 mm	KUAM28	2 mm	KUAM30	191.405	—	4 mm	CSWM 060 050
50	—	KLM43	2 mm	CKM34	STCM38	2 mm	KUAM22	2 mm	KUAM31	191.406	—	4 mm	CSWM 060 050
60	ISSN432	KLM46S	2.5 mm	CKM34	STCM9	2.5 mm	KUAM25	2.5 mm	KUAM32	191.407	—	5 mm	CSWM 080 050
100	ISSN633	KLM68	4 mm	CKM35	STCM8	4 mm	KUAM27	4 mm	KUAM33	—	MS364	8 mm	CSWM 100 080



See pages B81–B93 for inserts.



MTFN 90°

order number	catalogue number	D min	F	L1	γF°	γP°	gage insert
right hand							
3871303	MTFNR12CA16	50,0	20,0	55	-9.0	-5.0	TN..160408/TN..332
3871302	MTFNR16CA16	60,0	25,0	63	-9.0	-5.0	TN..160408/TN..332
3871301	MTFNR20CA22	70,0	25,0	70	-9.0	-5.0	TN..220408/TN..432
3871300	MTFNR25CA27	100,0	32,0	100	-9.0	-5.0	TN..270612/TN..443
left hand							
3871306	MTFNL12CA16	50,0	20,0	55	-9.0	-5.0	TN..160408/TN..332
3871305	MTFNL16CA16	60,0	25,0	63	-9.0	-5.0	TN..160408/TN..332

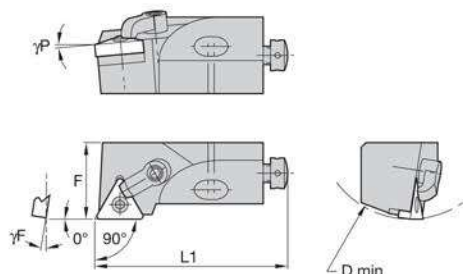
Spare Parts



D min	shim	lock pin	hex	clamp	clamp screw	hex	radial adjusting screw	hex	axial adjusting screw	mounting screw	holding screw	hex	washer
50	—	KLM33L	2 mm	CKM34	STCM38	2 mm	KUAM22	2 mm	KUAM31	191.406	—	4 mm	CSWM 060 050
60	ITSN322	KLM34L	2 mm	CKM34	STCM9	2 mm	KUAM25	2 mm	KUAM32	191.407	—	5 mm	CSWM 080 050
70	ITSN433	KLM46	2.5 mm	CKM35	STCM37	2.5 mm	KUAM25	2.5 mm	KUAM32	191.407	—	5 mm	CSWM 080 050
100	ITSN534	KLM58	3 mm	CKM38	STCM39	3 mm	KUAM26	3 mm	KUAM32	—	MS364	8 mm	CSWM 100 080



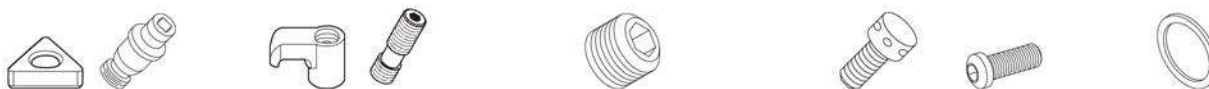
See pages B81–B93 for inserts.



■ MTGN 90°

order number	catalogue number	D min	F	L1	γF°	γP°	gage insert
right hand							
3871296	MTGNR12CA16	50,0	20,0	55	-9.0	-5.0	TN..160408/TN..332
3871295	MTGNR16CA16	60,0	25,0	63	-9.0	-5.0	TN..160408/TN..332
3871294	MTGNR20CA22	70,0	25,0	70	-9.0	-5.0	TN..220408/TN..432
left hand							
3871299	MTGNL12CA16	50,0	20,0	55	-9.0	-5.0	TN..160408/TN..332
3871298	MTGNL16CA16	60,0	25,0	63	-9.0	-5.0	TN..160408/TN..332
3871297	MTGNL20CA22	70,0	25,0	70	-9.0	-5.0	TN..220408/TN..432

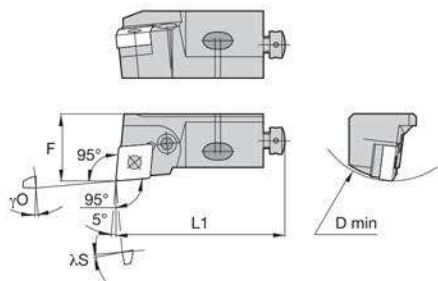
■ Spare Parts



D min	shim	lock pin	hex	clamp	clamp screw	hex	radial adjusting screw	hex	axial adjusting screw	mounting screw	hex	washer
50	—	KLM33L	2 mm	CKM34	STCM38	2 mm	KUAM22	2 mm	KUAM31	191.406	4 mm	CSWM 060 050
60	ITSN322	KLM34L	2 mm	CKM34	STCM9	2 mm	KUAM25	2 mm	KUAM32	191.407	5 mm	CSWM 080 050
70	ITSN433	KLM46	2.5 mm	CKM35	STCM37	2.5 mm	KUAM25	2.5 mm	KUAM32	191.407	5 mm	CSWM 080 050



See pages B30–B46 for inserts.



PCLN 95°

order number	catalogue number	D min	F	L1	λS°	γO°	gage insert
right hand							
3871291	PCLNR12CA12	50	20,0	55	-6.0	-9.0	CN..120408/CN..432
3871290	PCLNR16CA12	60	25,0	63	-6.0	-7.0	CN..120408/CN..432
left hand							
3871293	PCLNL16CA12	60	25,0	63	-6.0	-7.0	CN..120408/CN..432
3871292	PCLNL20CA16	70	25,0	70	—	—	CN..160612/CN..543

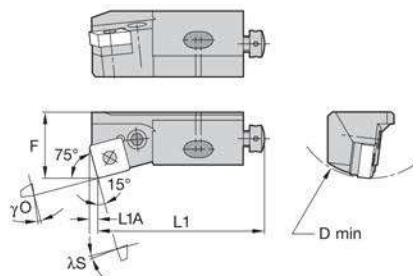
Spare Parts



D min	shim	shim pin	toggle lever	lever screw	wrench size lever screw	radial adjusting screw	hex	axial adjusting screw	mounting screw	hex	washer
50	—	—	511.022	514.122	10 IP	KUAM28	2 mm	KUAM31	191.406	4 mm	CSWM 060 050
60	512.112	513.023	511.023	514.123	15 IP	KUAM23	2.5 mm	KUAM32	191.407	5 mm	CSWM 080 050
70	512.117	513.025	511.025	514.125	15 IP	KUAM23	2.5 mm	KUAM32	191.407	5 mm	CSWM 080 050



See pages B68–B80 for inserts.



■ PSKN 75°

order number	catalogue number	D min	F	L1	L1A	λS°	γO°	gage insert
right hand								
3871287	PSKNR12CA12	50,0	20,0	55	3,1	-8.0	-6.0	SN..120408/SN..432
3871286	PSKNR16CA12	60,0	25,0	63	3,1	-6.0	-6.0	SN..120408/SN..432
3871289	PSKNR20CA15	70,0	25,0	70	3,8	—	—	SN..150612/SN..543
left hand								
3871288	PSKNL16CA12	60,0	25,0	63	3,1	-6.0	-6.0	SN..120408/SN..432

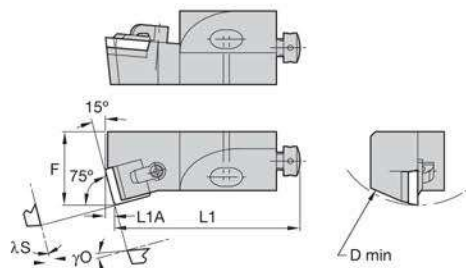
■ Spare Parts



D min	shim	shim pin	toggle lever	lever screw	wrench size lever screw	radial adjusting screw	hex	axial adjusting screw	mounting screw	hex	washer
50	—	—	511.022	514.122	10 IP	KUAM28	2 mm	KUAM31	191.406	4 mm	CSWM 060 050
60	512.063	513.023	511.023	514.123	15 IP	KUAM23	2.5 mm	KUAM32	191.407	5 mm	CSWM 080 050
70	512.025	513.025	511.025	514.125	15 IP	KUAM23	2.5 mm	KUAM32	191.407	5 mm	CSWM 080 050



See pages B186–B191 and B211–B212 for inserts.



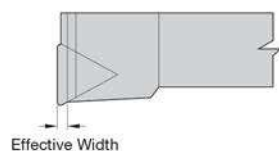
CSKP 75°

order number	catalogue number	D min	F	L1	L1A	λS°	γO°	gage insert
right hand								
3870437	CSKPR10CA09	40,0	14,0	50	2,2	0.0	5.0	SP..090308/SP..322
3870436	CSKPR12CA12	50,0	20,0	55	3,1	0.0	5.0	SP..120308/SP..422

Spare Parts

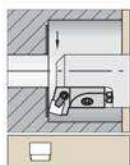


D min	clamp	clamp screw	hex	radial adjusting screw	hex	axial adjusting screw	mounting screw	hex	washer
40	CKM34	STCM38	2 mm	KUAM28	2 mm	KUAM30	191.405	4 mm	CSWM 060 050
50	CKM34	STCM38	2 mm	KUAM22	2 mm	KUAM31	191.406	4 mm	CSWM 060 050

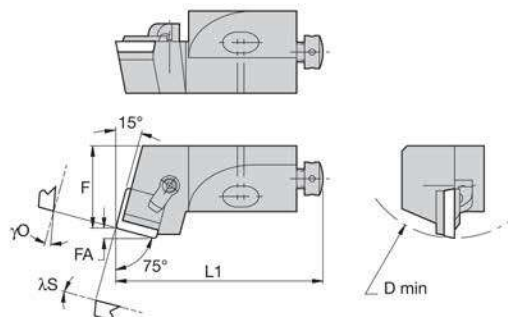


Chipbreakers for C-Style Cartridges

Chipbreakers			note
insert	chipbreaker	effective width	
SP..090308/SP..322	CBS-12	2.1	**For chipbreaking on both primary and secondary cutting edges
	CBS-12D**	2.1	
SP..120308/SP..422	CBS16	4.4	**For chipbreaking on both primary and secondary cutting edges
	CBS-16D**	2.8	
	CBS-16N	3.0	
	CBS16F	2.1	



See pages B186–B191 and B211–B212 for inserts.



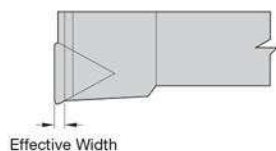
■ CSRP 75°

order number	catalogue number	D min	F	L1	FA	λS°	γO°	gage insert
right hand								
3870435	CSRP10CA09	40,0	14,0	50	2,2	0.0	0.0	SP..090308/SP..322
3870434	CSRP12CA12	50,0	20,0	55	3,0	3.0	0.0	SP..120308/SP..422

■ Spare Parts



D min	clamp	clamp screw	hex	radial adjusting screw	hex	axial adjusting screw	mounting screw	hex	washer
40	CKM34	STCM38	2 mm	KUAM28	2 mm	KUAM30	191.405	4 mm	CSWM 060 050
50	CKM34	STCM38	2 mm	KUAM22	2 mm	KUAM31	191.406	4 mm	CSWM 060 050

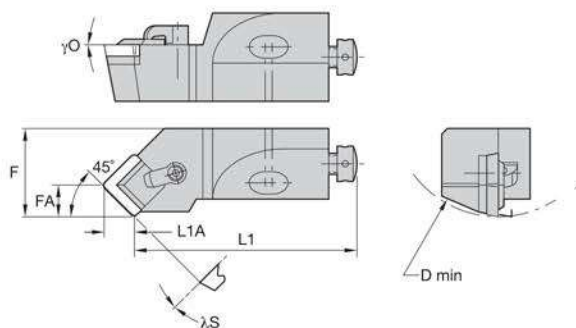


■ Chipbreakers for C-Style Cartridges

Chipbreakers			note
insert	chipbreaker	effective width	
SP..090308/SP..322	CBS-12	2.1	**For chipbreaking on both primary and secondary cutting edges
	CBS-12D**	2.1	
SP..120308/SP..422	CBS16	4.4	**For chipbreaking on both primary and secondary cutting edges
	CBS-16D**	2.8	
	CBS-16N	3.0	
	CBS16F	2.1	



See pages B186–B191 and B211–B212 for inserts.



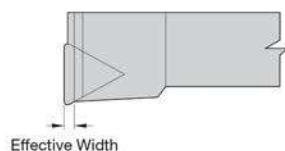
■ CSSP 45°

order number	catalogue number	D min	F	L1	FA	L1A	λS°	γO°	gage insert
right hand									
3870430	CSSPR10CA09	40,0	14,0	44	6,5	6,1	0,0	0,0	SP..090308/SP..322
3870429	CSSPR12CA12	50,0	20,0	47	8,7	8,3	0,0	0,0	SP..120308/SP..422
left hand									
3870433	CSSPL10CA09	40,0	14,0	44	6,5	6,1	0,0	0,0	SP..090308/SP..322
3870432	CSSPL12CA12	50,0	20,0	47	8,7	8,3	0,0	0,0	SP..120308/SP..422
3870431	CSSPL20CA12	70,0	25,0	60	—	8,3	0,0	0,0	SP..120308/SP..422

■ Spare Parts



D min	shim	shim screw	hex	clamp	clamp screw	hex	radial adjusting screw	hex	axial adjusting screw	mounting screw	hex	washer
40	—	—	—	CKM34	STCM38	2 mm	KUAM28	2 mm	KUAM30	191.405	4 mm	CSWM 060 050
50	—	—	—	CKM34	STCM38	2 mm	KUAM22	2 mm	KUAM31	191.406	4 mm	CSWM 060 050
70	SM840	MS111	2 mm	CKM20	STCM11	3 mm	KUAM26	3 mm	KUAM32	191.407	5 mm	CSWM 080 050

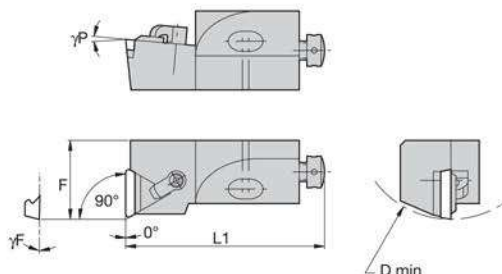


■ Chipbreakers for C-Style Cartridges

Chipbreakers			note
insert	chipbreaker	effective width	
SP..090308/SP..322	CBS-12	2.1	**For chipbreaking on both primary and secondary cutting edges
	CBS-12D**	2.1	
SP..120308/SP..422	CBS16	4.4	**For chipbreaking on both primary and secondary cutting edges
	CBS-16D**	2.8	
	CBS-16N	3.0	
	CBS16F	2.1	



See pages B192–B194 and B212–B216 for inserts.



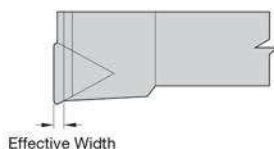
CTFP 90°

order number	catalogue number	D min	F	L1	γF°	γP°	gage insert
right hand							
3870427	CTFPR10CA11	40,0	14,0	50	0.0	5.0	TP..110304/TP..421
3870426	CTFPR12CA16	50,0	20,0	55	0.0	5.0	TP..160308/TP..322
3870424	CTFPR20CA22	70,0	25,0	70	0.0	5.0	TP..220408/TP..432
left hand							
3870428	CTFPL12CA16	50,0	20,0	55	0.0	5.0	TP..160308/TP..322

Spare Parts



D min	shim	shim screw	clamp	clamp screw	hex	radial adjusting screw	hex	axial adjusting screw	mounting screw	hex	washer
40	—	—	CKM34	STCM38	2 mm	KUAM28	2 mm	KUAM30	191.405	4 mm	CSWM 060 050
50	—	—	CKM34	STCM38	2 mm	KUAM22	2 mm	KUAM31	191.406	4 mm	CSWM 060 050
70	SM837	MS125	CKM35	STCM8	4 mm	KUAM25	2.5 mm	KUAM32	191.407	5 mm	CSWM 080 050

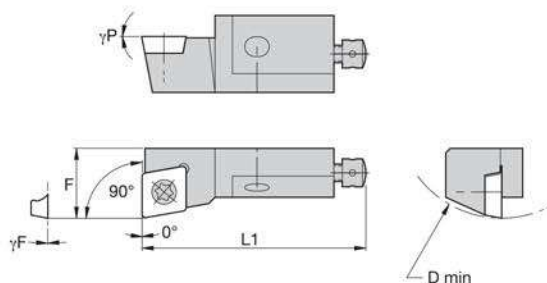


Chipbreakers for C-Style Cartridges

Chipbreakers			note
insert	chipbreaker	effective width	
TP..110304/TP..421	CBT-8	2.2	
TP..160308/TP..322	CBT-12*	4.0	*Use with CTC-style holder only
	CBT-12*	2.7	*Use with CTC-style holder only
	CBT-12*	2.2	*Use with CTC-style holder only
TP..220408/TP..432	CBT-16	5.5	
	CBT-16N	3.2	
	CBT-16F	2.1	



See pages B30–B46
for inserts.



■ SCFP 90°

order number	catalogue number	D min	F	L1	γF°	γP°	gage insert
right hand							
3871284	SCFPR06CA05	20	8,0	25	0.0	0.0	CP..050204/CP..18151
3871283	SCFPR08CA06	25	10,0	32	0.0	0.0	CP..060204/CP..2151
3871272	SCFPR10CA09	40	14,0	50	0.0	0.0	CP..09T308/CP..3252
left hand							
3871285	SCFPL08CA06	25	10,0	32	0.0	0.0	CP..060204/CP..2151

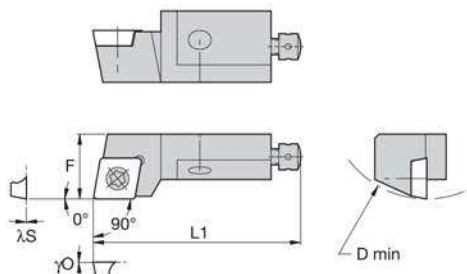
■ Spare Parts



D min	insert screw	Torx	radial adjusting screw	hex	axial adjusting screw	mounting screw	holding screw	hex	washer
20	MS1933	T7	KUAM34	1.5 mm	KUAM35	—	MS2173	2 mm	CSWM 035 040
25	MS1153	T7	KUAM34	1.5 mm	KUAM20	—	MS2175	2.5 mm	CSWM 040 050
40	MS1155	T15	KUAM28	2 mm	KUAM30	191.405	—	4 mm	CSWM 060 050



See pages B30–B46 for inserts.



■ SCGP 90°

order number	catalogue number	D min	F	L1	λS°	γO°	gage insert
right hand							
3871270	SCGPR08CA06	25	10,0	32	0.0	0.0	CP..060204/CP..2151
left hand							
3871271	SCGPL08CA06	25	10,0	32	0.0	0.0	CP..060204/CP..2151

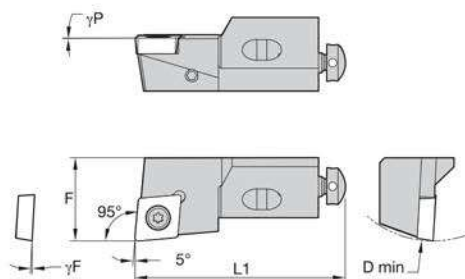
■ Spare Parts



D min	insert screw	Torx	radial adjusting screw	hex	axial adjusting screw	holding screw	hex	washer
25	MS1153	T7	KUAM34	1.5 mm	KUAM20	MS2175	2.5 mm	CSWM 040 050



See pages B30–B46
for inserts.



■ SCLC 95°

order number	catalogue number	D min	F	L1	γF°	γP°	gage insert
right hand							
3871268	SCLCR10CA09	40	14,0	50	-3.0	0.0	CC..09T308/CC..3252
3871265	SCLCR12CA12	50	20,0	55	-3.0	0.0	CC..120408/CC..432
left hand							
3871267	SCLCL12CA12	50	20,0	55	-3.0	0.0	CC..120408/CC..432
3871266	SCLCL16CA12	60	25,0	63	-3.0	0.0	CC..120408/CC..432

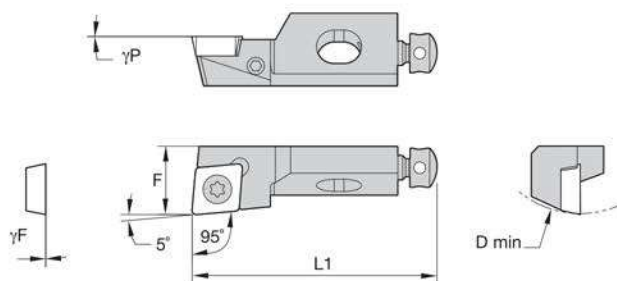
■ Spare Parts



D min	insert screw	Torx	radial adjusting screw	hex	axial adjusting screw	mounting screw	hex	washer
40	MS1155	T15	KUAM28	2 mm	KUAM30	191.405	4 mm	CSWM 060 050
50	MS1157	T15	KUAM23	2.5 mm	KUAM31	191.406	4 mm	CSWM 060 050
60	MS1157	T15	KUAM25	2.5 mm	KUAM32	191.407	5 mm	CSWM 080 050



See pages B30–B46 for inserts.



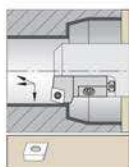
■ SCLP 95°

order number	catalogue number	D min	F	L1	γF°	γP°	gage insert
right hand							
3871261	SCLPR06CA05	20	8,0	25	0.0	0.0	CP..050204/CP..18151
3871260	SCLPR08CA06	25	10,0	32	0.0	0.0	CP..060204/CP..2151
3871259	SCLPR10CA09	40	14,0	50	0.0	0.0	CP..09T308/CP..3252
left hand							
3871264	SCLPL06CA05	20	8,0	25	0.0	0.0	CP..050204/CP..18151
3871263	SCLPL08CA06	25	10,0	32	0.0	0.0	CP..060204/CP..2151
3871262	SCLPL10CA09	40	14,0	50	0.0	0.0	CP..09T308/CP..3252

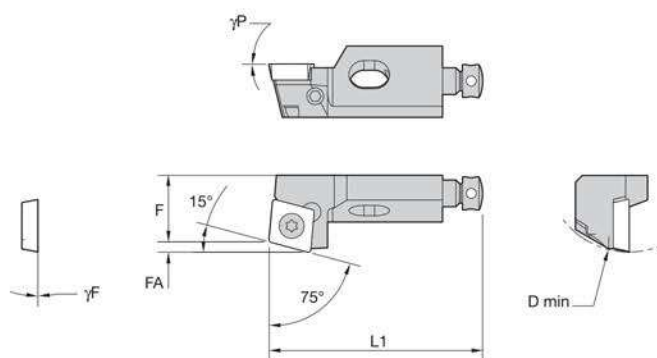
■ Spare Parts



D min	insert screw	Torx	radial adjusting screw	hex	axial adjusting screw	mounting screw	holding screw	hex	washer
20	MS1933	T7	KUAM34	1.5 mm	KUAM35	—	MS2173	2 mm	CSWM 035 040
25	MS1153	T7	KUAM34	1.5 mm	KUAM20	—	MS2175	2.5 mm	CSWM 040 050
40	MS1155	T15	KUAM28	2 mm	KUAM30	191.405	—	4 mm	CSWM 060 050



See pages B30–B46
for inserts.



■ SCRPR 75°

order number	catalogue number	D min	F	FA	L1	γF°	γP°	gage insert
right hand								
3871257	SCRPR08CA06	25	10,0	1,5	32	0.0	0.0	CP..060204/CP..2151
left hand								
3871258	SCRPL08CA06	25	10,0	1,5	32	0.0	0.0	CP..060204/CP..2151

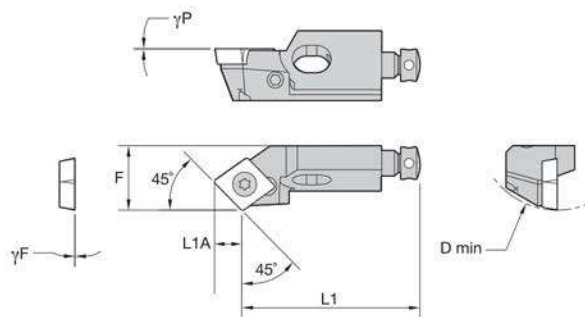
■ Spare Parts



D min	insert screw	Torx	radial adjusting screw	hex	axial adjusting screw	holding screw	hex	washer
25	MS1153	T7	KUAM34	1.5 mm	KUAM20	MS2175	2.5 mm	CSWM 040 050



See pages B30–B46 for inserts.



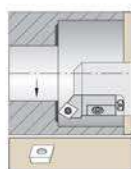
■ SCSP 45°

order number	catalogue number	D min	F	L1	L1A	γF°	γP°	gage insert
right hand								
3871255	SCSPR06CA05	20	8,0	21	4	0.0	0.0	CP..050204/CP..18151
3871254	SCSPR08CA06	25	10,0	28	4	0.0	0.0	CP..060204/CP..2151

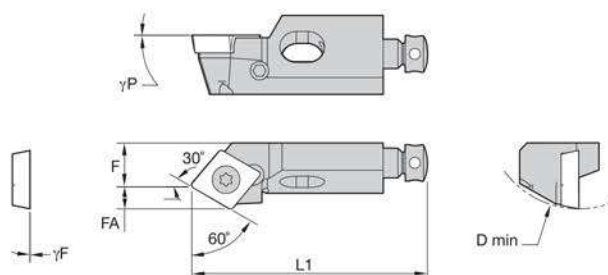
■ Spare Parts



D min	insert screw	Torx	radial adjusting screw	hex	axial adjusting screw	holding screw	hex	washer
20	MS1933	T7	—	—	KUAM35	MS2173	2 mm	CSWM 035 040
25	MS1153	T7	KUAM34	1.5 mm	KUAM20	MS2175	2.5 mm	CSWM 040 050



See pages B30–B46
for inserts.



■ SCTP 60°

order number	catalogue number	D min	F	FA	L1	γF°	γP°	gage insert
right hand								
3871252	SCTPR06CA05	20	5,5	2,6	25	0.0	0.0	CP..050204/CP..18151
3871251	SCTPR08CA06	25	6,0	3,0	32	0.0	0.0	CP..060204/CP..2151
left hand								
3871253	SCTPL08CA06	25	6,0	3,0	32	0.0	0.0	CP..060204/CP..2151

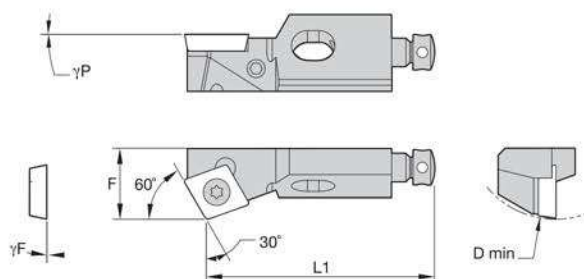
■ Spare Parts



D min	insert screw	Torx	radial adjusting screw	hex	axial adjusting screw	holding screw	hex	washer
20	MS1933	T7	—	—	KUAM35	MS2173	2 mm	CSWM 035 040
25	MS1153	T7	KUAM34	1.5 mm	KUAM20	MS2175	2.5 mm	CSWM 040 050



See pages B30–B46 for inserts.



■ SCWP 60°

order number	catalogue number	D min	F	L1	γF°	γP°	gage insert
right hand							
3871249	SCWPR08CA06	25	10,0	32	0.0	0.0	CP..060204/CP..2151
left hand							
3871250	SCWPL08CA06	25	10,0	32	0.0	0.0	CP..060204/CP..2151

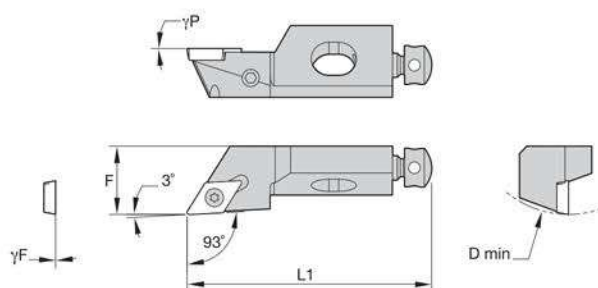
■ Spare Parts



D min	insert screw	Torx	radial adjusting screw	hex	axial adjusting screw	holding screw	hex	washer
25	MS1153	T7	KUAM34	1.5 mm	KUAM20	MS2175	2.5 mm	CSWM 040 050



See pages B47–B64
for inserts.



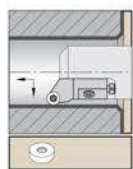
■ SDJP 93°

order number	catalogue number	D min	F	L1	γF°	γP°	gage insert
right hand							
3871247	SDJPR10CA07	40	14,0	50	0.0	0.0	DP..070204/DP..2151
left hand							
3871248	SDJPL10CA07	40	14,0	50	0.0	0.0	DP..070204/DP..2151

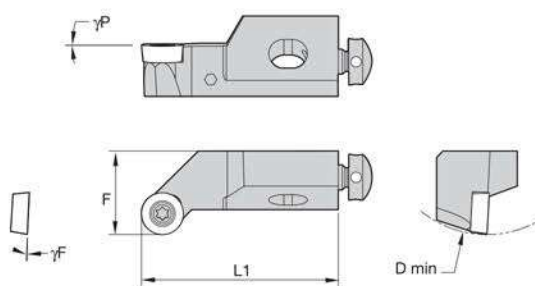
■ Spare Parts



D min	insert screw	Torx	radial adjusting screw	hex	axial adjusting screw	mounting screw	hex	washer
40	MS1153	T7	KUAM28	2 mm	KUAM30	191.405	4 mm	CSWM 060 050



See pages B65–B67 for inserts.



■ SRGC

order number	catalogue number	D min	F	L1	γF°	γP°	gage insert
right hand							
3871245	SRGCR08CA06	25	10,0	32	-4.0	0.0	RC..0602M0/RC..215
3871244	SRGCR10CA08	40	14,0	50	-3.0	0.0	RC..0803M0/RC..0803M0
left hand							
3871246	SRGCL12CA10	50	20,0	55	-3.0	0.0	RC..10T3M0/RC..10T3M0

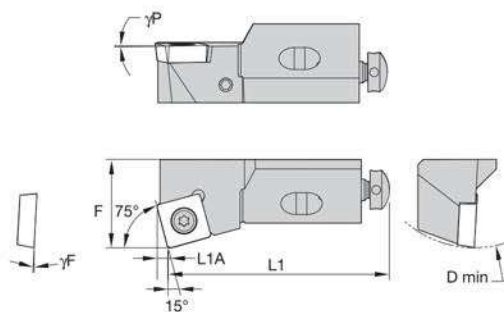
■ Spare Parts



D min	insert screw	Torx	radial adjusting screw	hex	axial adjusting screw	mounting screw	holding screw	hex	washer
25	MS1153	T7	KUAM34	1.5 mm	KUAM20	—	MS2175	2.5 mm	CSWM 040 050
40	MS1154	T9	KUAM28	2 mm	KUAM30	191.405	—	4 mm	CSWM 060 050
50	MS1155	T15	KUAM23	2.5 mm	KUAM31	191.406	—	4 mm	CSWM 060 050



See pages B68–B80
for inserts.



SSKC 75°

order number	catalogue number	D min	F	L1	γF°	γP°	gage insert
right hand							
3871192	SSKCR10CA09	40	14,0	50	-4.3	-2.5	SC..09T308/SC..3252
3871191	SSKCR12CA12	50	20,0	55	-3.0	0.0	SC..120408/SC..432
3871190	SSKCR16CA12	60	25,0	63	-3.0	0.0	SC..120408/SC..432
left hand							
3871243	SSKCL12CA12	50	20,0	55	-3.0	0.0	SC..120408/SC..432

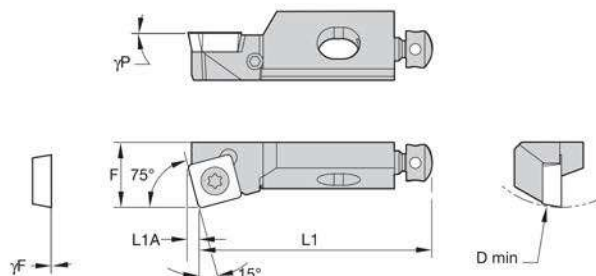
Spare Parts



D min	insert screw	Torx	radial adjusting screw	hex	axial adjusting screw	mounting screw	hex	washer
40	MS1155	T15	KUAM28	2 mm	KUAM30	191.405	4 mm	CSWM 060 050
50	MS1157	T15	KUAM23	2.5 mm	KUAM31	191.406	4 mm	CSWM 060 050
60	MS1157	T15	KUAM25	2.5 mm	KUAM32	191.407	5 mm	CSWM 080 050



See pages B68–B80 for inserts.



■ SSKP 75°

order number	catalogue number	D min	F	L1	γF°	γP°	gage insert
right hand							
3870393	SSKPR10CA09	40	14,0	50	0.0	0.0	SP..09T308/SP..3252
3870392	SSKPR12CA09	50	20,0	55	0.0	0.0	SP..09T308/SP..3252
left hand							
3870394	SSKPL10CA09	40	14,0	50	0.0	0.0	SP..09T308/SP..3252

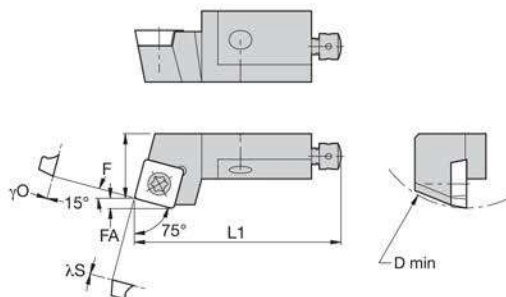
■ Spare Parts



D min	insert screw	Torx	radial adjusting screw	hex	axial adjusting screw	mounting screw	hex	washer
40	MS1155	T15	KUAM28	2 mm	KUAM30	191.405	4 mm	CSWM 060 050
50	MS1155	T15	KUAM23	2.5 mm	KUAM31	191.406	4 mm	CSWM 060 050



See pages B68–B80
for inserts.



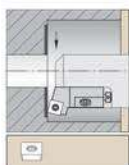
■ SSRC 75°

order number	catalogue number	D min	F	FA	L1	λS°	γO°	gage insert
right hand								
3870390	SSRCR12CA12	50	20,0	3,1	55	-3.0	0.0	SC..120408/SC..432
left hand								
3870391	SSRCL12CA12	50	20,0	3,1	55	-3.0	0.0	SC..120408/SC..432

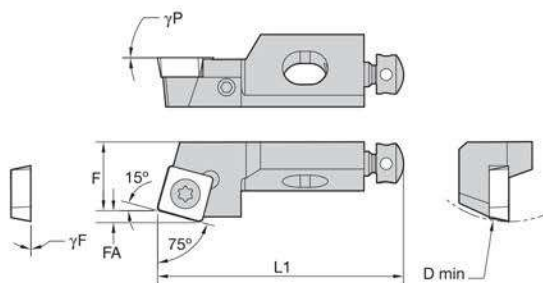
■ Spare Parts



D min	insert screw	Torx	radial adjusting screw	hex	axial adjusting screw	mounting screw	hex	washer
50	MS1157	T15	KUAM23	2.5 mm	KUAM31	191.406	4 mm	CSWM 060 050



See pages B68–B80 for inserts.



■ SSRP 75°

order number	catalogue number	D min	F	FA	L1	γF°	γP°	gage insert
right hand								
3870388	SSRPR10CA09	40	14,0	2,2	50	0,0	0,0	SP..09T308/SP..3252
left hand								
3870389	SSRPL10CA09	40	14,0	2,2	50	0,0	0,0	SP..09T308/SP..3252

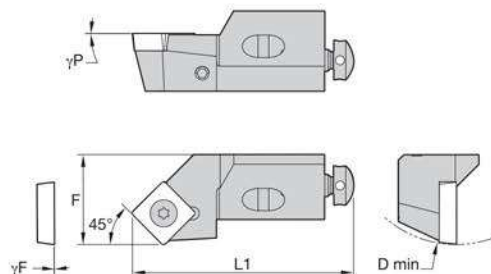
■ Spare Parts



D min	insert screw	Torx	radial adjusting screw	hex	axial adjusting screw	mounting screw	hex	washer
40	MS1155	T15	KUAM28	2 mm	KUAM30	191.405	4 mm	CSWM 060 050



See pages B68–B80
for inserts.



SSSC 45°

order number	catalogue number	D min	F	L1	γF°	γP°	gage insert
right hand							
3870386	SSSCR10CA09	40	14,0	44	-3.0	0.0	SC..09T308/SC..3252
3870385	SSSCR12CA12	50	20,0	47	-3.0	0.0	SC..120408/SC..432
3870384	SSSCR16CA12	60	25,0	53	0.0	0.0	SC..120408/SC..432
left hand							
3870387	SSSCL12CA12	50	20,0	47	-3.0	0.0	SC..120408/SC..432

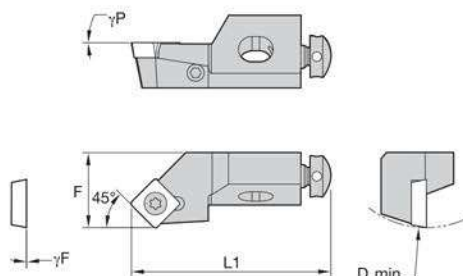
Spare Parts



D min	insert screw	Torx	radial adjusting screw	hex	axial adjusting screw	mounting screw	hex	washer
40	MS1155	T15	KUAM28	2 mm	KUAM30	191.405	4 mm	CSWM 060 050
50	MS1157	T15	KUAM23	2.5 mm	KUAM31	191.406	4 mm	CSWM 060 050
60	MS1157	T15	KUAM25	2.5 mm	KUAM32	191.407	5 mm	CSWM 080 050



See pages B68–B80 for inserts.



SSSP 45°

order number	catalogue number	D min	F	L1	γF°	γP°	gage insert
right hand							
3870382	SSSPR10CA09	40	14,0	44	0.0	0.0	SP..09T308/SP..3252
left hand							
3870383	SSSPL10CA09	40	14,0	44	0.0	0.0	SP..09T308/SP..3252

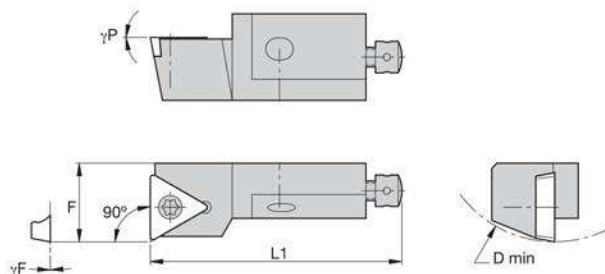
Spare Parts



D min	insert screw	Torx	radial adjusting screw	hex	axial adjusting screw	mounting screw	hex	washer
40	MS1155	T15	KUAM28	2 mm	KUAM30	191.405	4 mm	CSWM 060 050



See pages B81–B93
for inserts.



STFP 90°

order number	catalogue number	D min	F	L1	γF°	γP°	gage insert
right hand							
3870378	STFPR08CA09	25	10,0	32	0.0	0.0	TP..090204/TP..18151
3870377	STFPR10CA11	40	14,0	50	0.0	0.0	TP..110204/TP..2151
3870376	STFPR12CA16	50	20,0	55	0.0	0.0	TP..16T308/TP..3252
left hand							
3870381	STFPL08CA09	25	10,0	32	0.0	0.0	TP..090204/TP..18151
3870380	STFPL10CA11	40	14,0	50	0.0	0.0	TP..110204/TP..2151
3870379	STFPL12CA16	50	20,0	55	0.0	0.0	TP..16T308/TP..3252

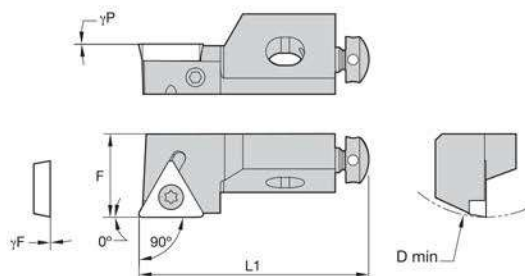
Spare Parts



D min	insert screw	Torx	radial adjusting screw	hex	axial adjusting screw	mounting screw	holding screw	hex	washer
25	MS1152	T7	KUAM34	1.5 mm	KUAM20	—	MS2175	2.5 mm	CSWM 040 050
40	MS1153	T7	KUAM28	2 mm	KUAM30	191.405	—	4 mm	CSWM 060 050
50	MS1155	T15	KUAM23	2.5 mm	KUAM31	191.406	—	4 mm	CSWM 060 050



See pages B81–B93 for inserts.



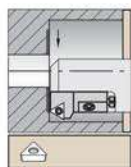
STGP 90°

order number	catalogue number	D min	F	L1	γF°	γP°	gage insert
right hand							
3870372	STGPR08CA09	25	10,0	32	0.0	0.0	TP..090204/TP..18151
3870371	STGPR10CA11	40	14,0	50	0.0	0.0	TP..110204/TP..2151
3870370	STGPR12CA16	50	20,0	55	0.0	0.0	TP..16T308/TP..3252
left hand							
3870374	STGPL08CA09	25	10,0	32	0.0	0.0	TP..090204/TP..18151
3870373	STGPL10CA11	40	14,0	50	0.0	0.0	TP..110204/TP..2151

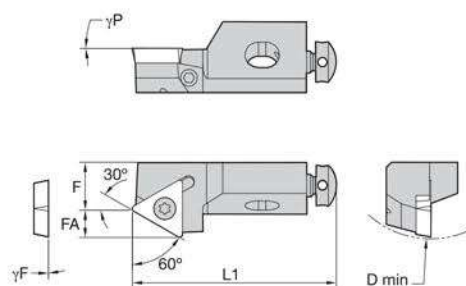
Spare Parts



D min	insert screw	Torx	radial adjusting screw	hex	axial adjusting screw	mounting screw	holding screw	hex	washer
25	MS1152	T7	KUAM34	1.5 mm	KUAM20	—	MS2175	2.5 mm	CSWM 040 050
40	MS1153	T7	KUAM28	2 mm	KUAM30	191.405	—	4 mm	CSWM 060 050
50	MS1155	T15	KUAM23	2.5 mm	KUAM31	191.406	—	4 mm	CSWM 060 050



See pages B81–B93
for inserts.



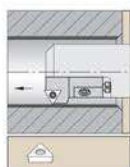
STTP 60°

order number	catalogue number	D min	F	FA	L1	γF°	γP°	gage insert
right hand								
3870369	STTPR08CA09	25	6,0	4,3	32	0.0	0.0	TP..090204/TP..18151
3870368	STTPR10CA11	40	9,0	4,9	50	0.0	0.0	TP..110204/TP..2151
3870367	STTPR12CA16	50	13,0	7,2	55	0.0	0.0	TP..16T308/TP..3252

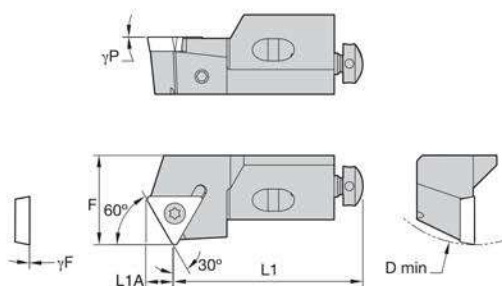
Spare Parts



D min	insert screw	Torx	radial adjusting screw	hex	axial adjusting screw	mounting screw	holding screw	hex	washer
25	MS1152	T7	KUAM34	1.5 mm	KUAM20	—	MS2175	2.5 mm	CSWM 040 050
40	MS1153	T7	KUAM28	2 mm	KUAM30	191.405	—	4 mm	CSWM 060 050
50	MS1155	T15	KUAM23	2.5 mm	KUAM31	191.406	—	4 mm	CSWM 060 050



See pages B99–B105 for inserts.



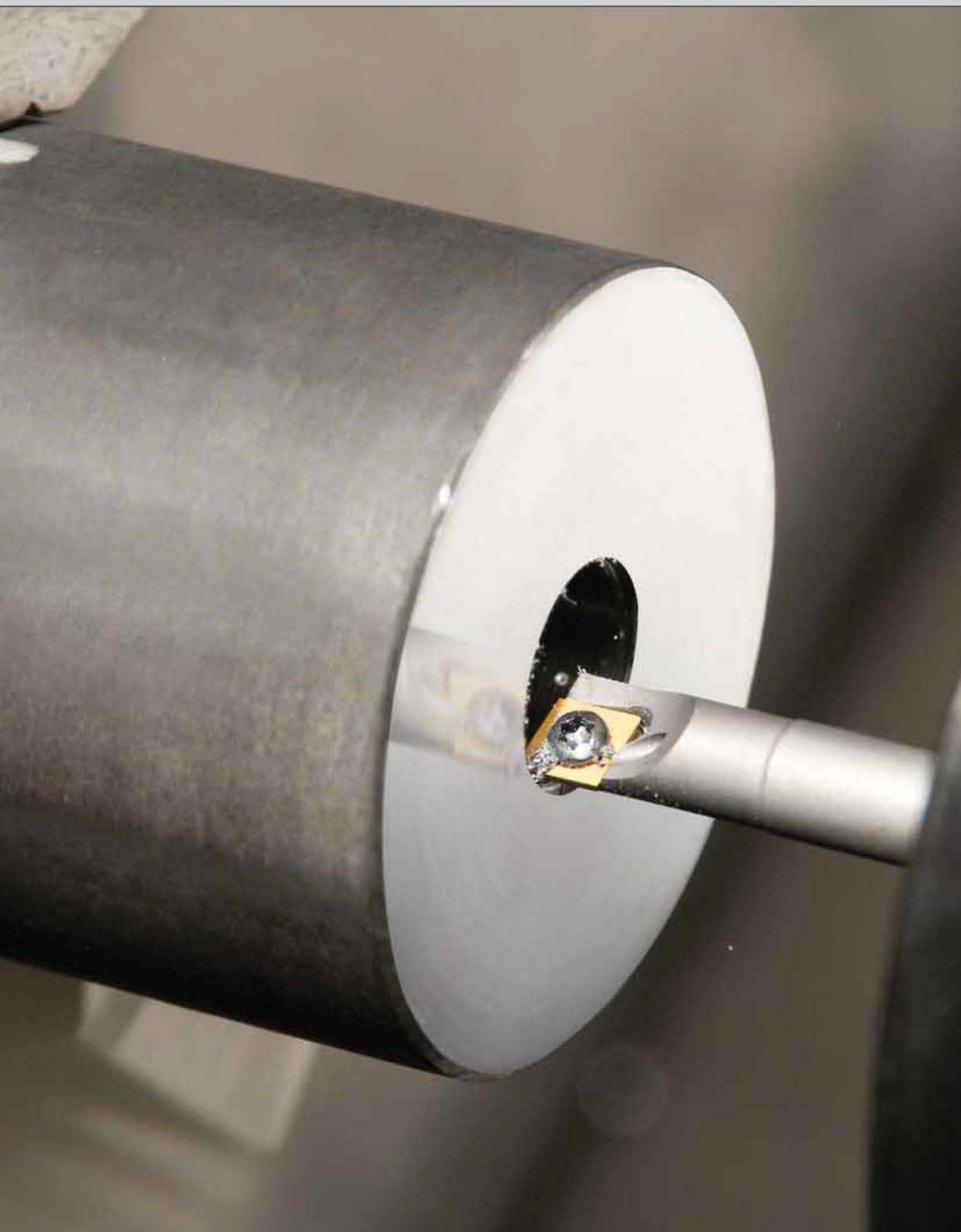
STWP 60°

order number	catalogue number	D min	F	L1	L1A	γF°	γP°	gage insert
right hand								
3870364	STWPR08CA09	25	10,0	28	4,3	0.0	0.0	TP..090204/TP..18151
3870363	STWPR10CA11	40	14,0	44	5,0	0.0	0.0	TP..110204/TP..2151
3870252	STWPR12CA16	50	20,0	47	7,2	0.0	0.0	TP..16T308/TP..3252
left hand								
3870366	STWPL10CA11	40	14,0	44	5,0	0.0	0.0	TP..110204/TP..2151
3870365	STWPL12CA16	50	20,0	47	7,2	0.0	0.0	TP..16T308/TP..3252

Spare Parts



D min	insert screw	Torx	radial adjusting screw	hex	axial adjusting screw	mounting screw	holding screw	hex	washer
25	MS1152	T7	KUAM34	1.5 mm	KUAM20	—	MS2175	2.5 mm	CSWM 040 050
40	MS1153	T7	KUAM28	2 mm	KUAM30	191.405	—	4 mm	CSWM 060 050
50	MS1155	T15	KUAM23	2.5 mm	KUAM31	191.406	—	4 mm	CSWM 060 050



Turning • Tools for Small Hole Boring

Small Hole Boring I.D. Indexable Insert Tooling.....	D2–D59
A/B Series	D60–D71
Quadralock.....	D72–D84
Technical Information	D86–D89
Custom Solution Worksheet	D90–D91

The WIDIA™ line of micro boring bars provide accurate holemaking tooling in diameters as small as 1,57mm. These economical, indexable inserts are available in both steel and carbide shanks and are stocked in both metric and inch sizes. Ideal for a wide range of applications, including precision micro boring.

Small Hole Boring • I.D. Indexable Insert Tooling



80° Diamond Insert Boring Bars

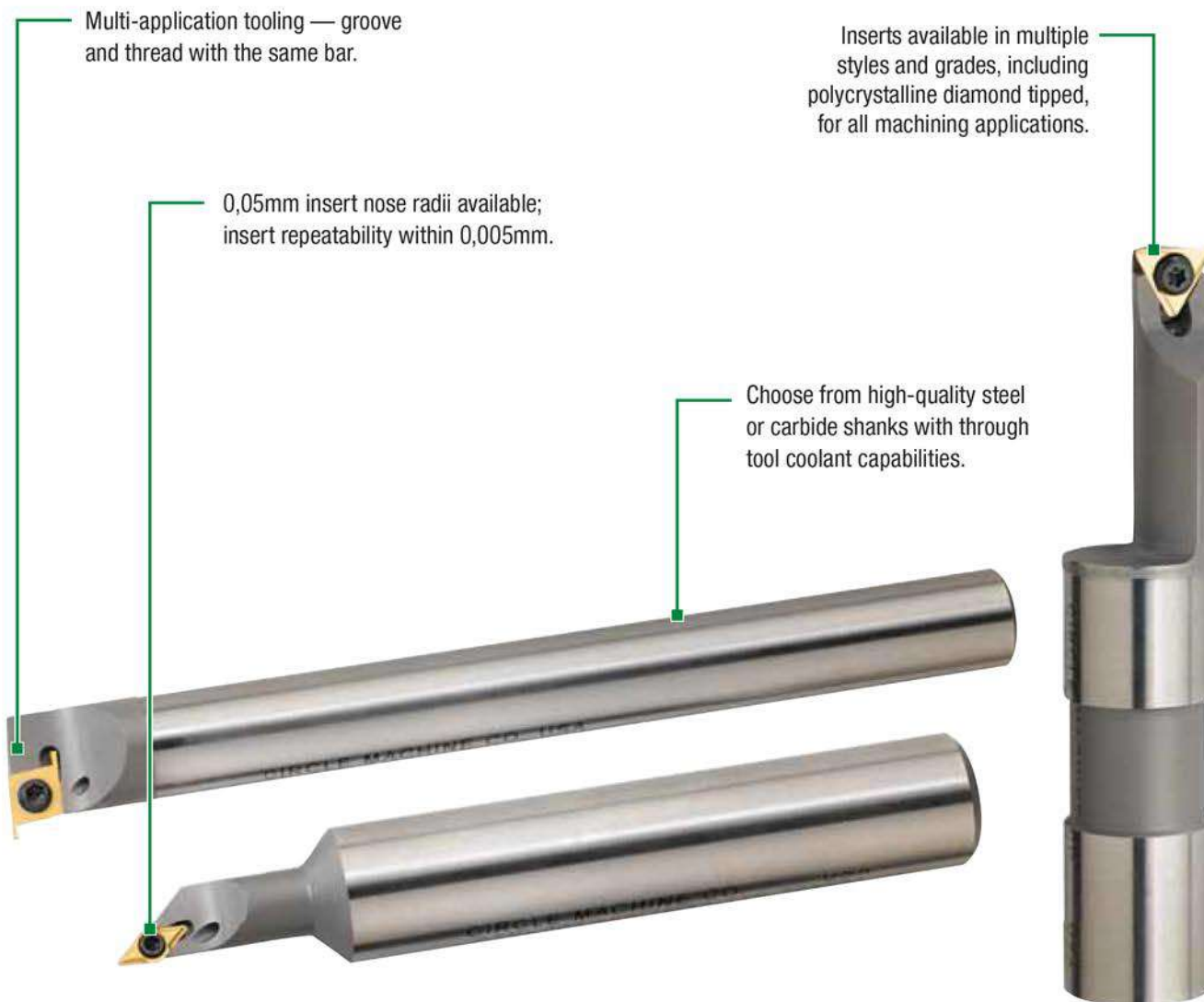
- Available in shanks as small as 4mm to bore >4,57mm diameter.
- Positive rake geometry for free cutting action and better surface finishes.
- Superior, unobstructed chip evacuation.
- Stocked in multiple grades to bore a wide range of materials.



Threading and Grooving Boring Bars

- Easy insert changes for threading and grooving.
- Thread down to a 48 TPI, 1,3mm TP (pitch).
- Thread and groove capabilities to an inside bore diameter of 6,91mm.





Triangle Insert Boring Bars

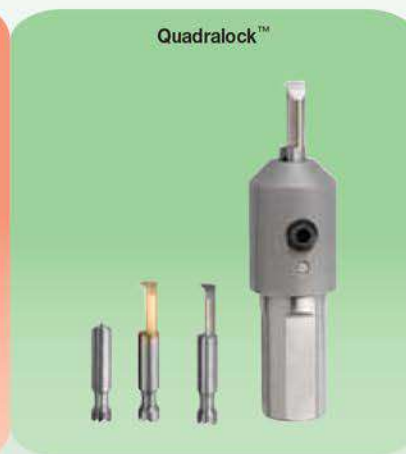
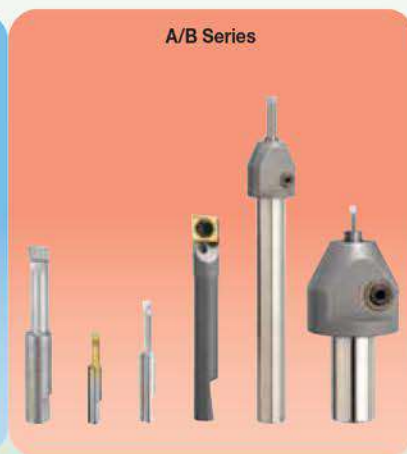
- Designed for less obstruction and greater chip evacuation.
- Positive rake geometry to bore holes >6,98mm diameter.
- Stocked in all grades, including diamond-tipped and borazon-tipped styles.
- Stocked in shanks as small as 6mm for 7,06mm minimum bore diameter.



The World's Most Comprehensive Boring Solutions

Trust the WIDIA™ full line of boring tools to meet all of your demanding job requirements. Whatever the work at hand, you are sure to find the most appropriate solution in this comprehensive, easy-to-use guide.

We engineer only the BEST boring tools, guaranteed to reduce your machining time, provide superior results, and outperform the competition.



Select the Correct Small Hole Boring Product Platform for Your Application

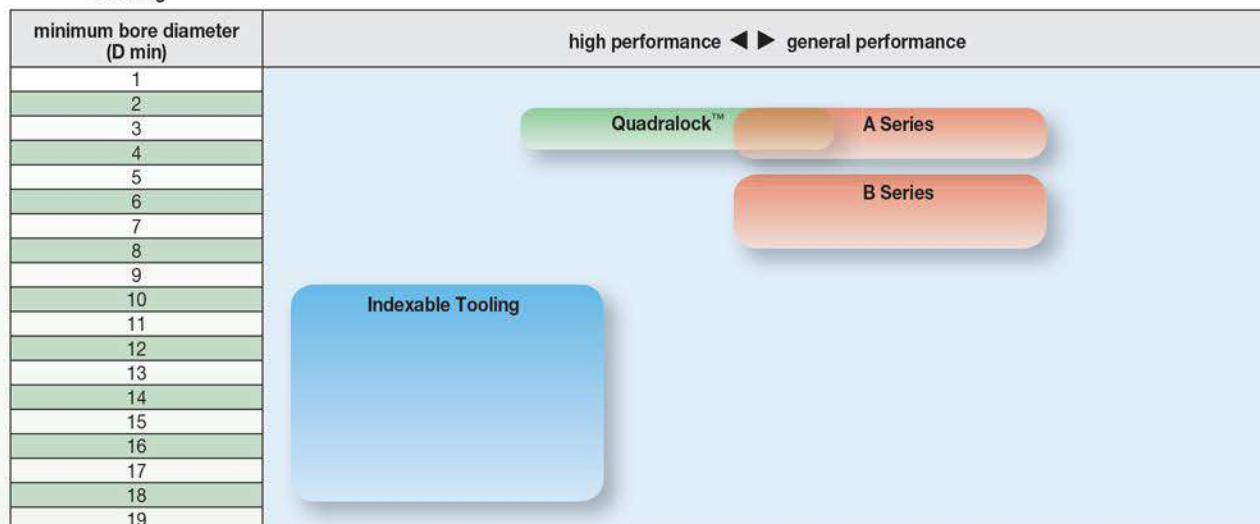
1 Determine tooling system to be used based on hole size to be bored (D min).

NOTE: Proper bar selection will have largest minimum bore dimension under hole size to be bored.

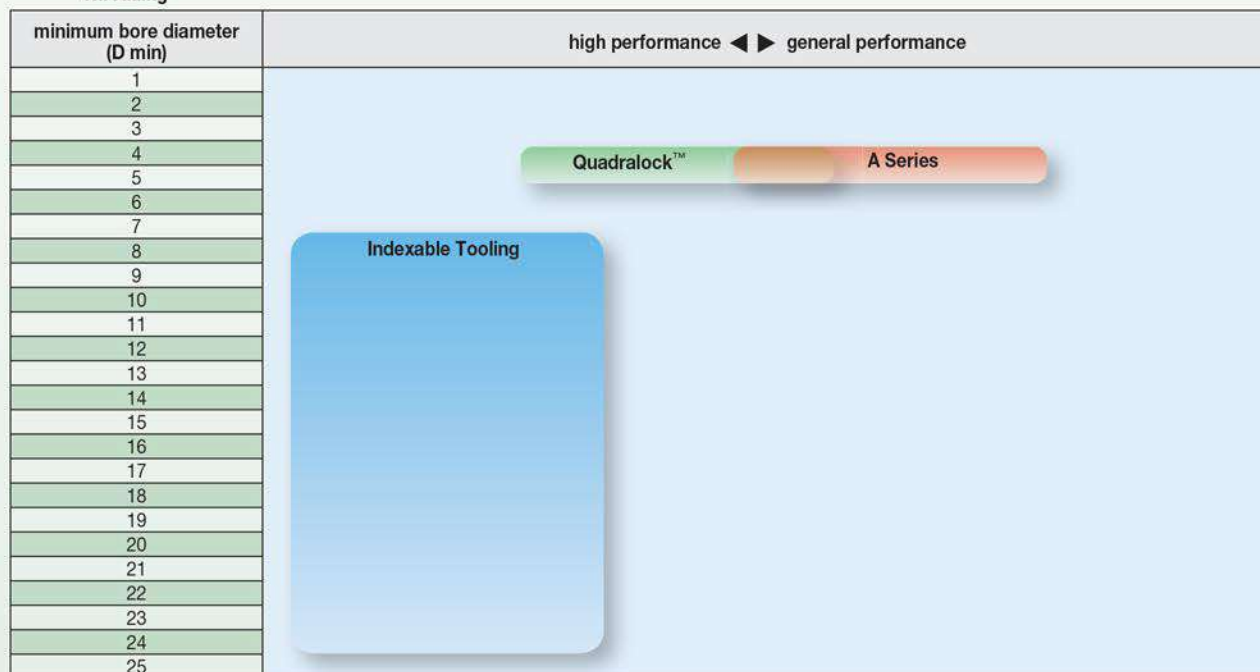
- Indexable Tooling
- A/B Series
- Quadralock

Boring	
minimum bore diameter (D min)	high performance ◀ ▶ general performance
1	Quadralock™
2	
3	A Series
4	
5	B Series
6	
7	Indexable Tooling
8	
9	Indexable Tooling
10	
11	Indexable Tooling
12	
13	Indexable Tooling
14	
15	Indexable Tooling
16	
17	Indexable Tooling
18	
19	Indexable Tooling
20	
21	Indexable Tooling
22	
23	Indexable Tooling
24	
25	Indexable Tooling
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27	Indexable Tooling
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29	Indexable Tooling
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31	Indexable Tooling
32	
33	Indexable Tooling
34	
35	Indexable Tooling

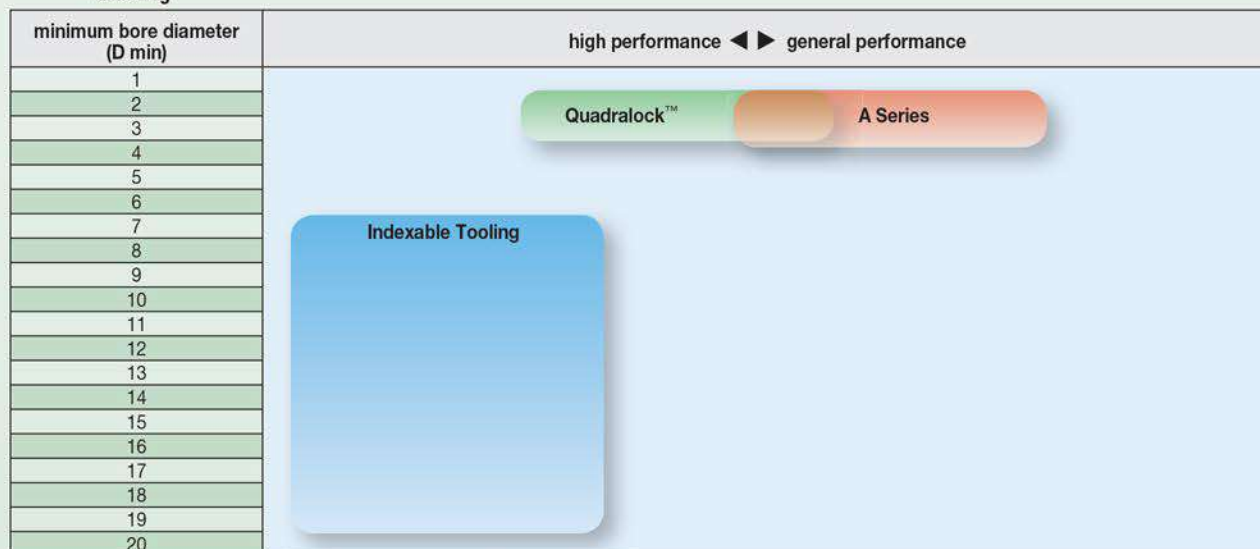
Profiling



Threading



Grooving



NOTE: Proper bar selection will have largest minimum bore dimension under hole size to be bored.

2 Determine boring bar (D).

A Select shank size (D) based on your machine's requirements.

B Determine bore depth (how far the boring bar extends from the holder). Multiply bar diameter by 4. If bore depth is less, use a steel bar. If bore depth exceeds 4:1 ratio, use a carbide bar. Use L1 or L4 depending on bar selected. (See recommended maximum overhang chart on [page D86](#).) For indexable tooling, go to **step 3**. For all other tooling systems, go directly to **step 4**.

C Determine lead angle (KRA). Zero degree lead angle is used when maximum stability is required. Lead angle may vary based on changing conditions, such as boring in a blind hole.

Small Hole Boring Bars for Turning
Clamping System S • Carbide

■ CCBM

order number	catalogue number	KR1	D	D min	F	L1	A	qF°	qF°	gage insert	insert screw	Tors
2831801	CCBM5100R	90	5.35	5.34	3.18	130.56	1.62	0.0°	5.0°	CD 54T002	CC11	T8
2896025	CCBM5100R	90	6.00	7.08	3.73	100.33	1.19	0.0°	5.0°	CD 54T002	CC11	T8
2831277	CCBM51520R	90	8.00	8.04	4.70	152.15	2.36	0.0°	5.0°	CD 54T002	CC11	T8
2831826	CCBM5100SR	95	5.00	5.94	3.00	130.56	1.00	0.0°	5.0°	CD 54T002	CC11	T8
2831311	CCBM5152SR	95	6.00	7.08	3.73	152.15	1.19	0.0°	5.0°	CD 54T002	CC11	T8
2831821	CCBM5100SR	95	6.00	7.08	3.73	100.33	1.19	0.0°	5.0°	CD 54T002	CC11	T8
2831289	CCBM5152SR	95	6.00	9.04	4.70	152.15	2.36	0.0°	5.0°	CD 54T002	CC11	T8

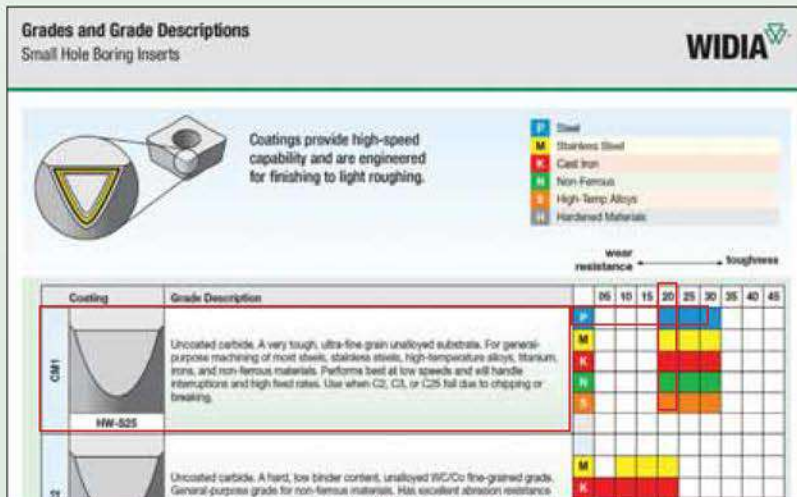
3 Determine which chipbreaker is best for the material to be machined.

Consult the Small Hole Boring Chipbreaker Geometry charts on [pages D34–D37](#).

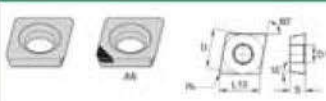


4 Determine which grade is best for the material to be machined.

Consult the Grades and Grade Descriptions charts on [pages D38–D39](#).



5 Select the appropriate insert based on style, grade, and geometry.

Small Hole Boring Positive Inserts										WIDIA	
											
■ CDHB											
ISO catalogue number	D	L10	S	R6	D1	max	C2	C25	C3	CG5	CG55
CDHB54T0X0	3.97	4.03	1.02	0.06	2.13	—	2830087	2830087	2830087	2830087	2830087
CDHB54T0X2M	3.97	4.03	1.02	0.06	2.13	1.30	2830087	2830087	2830087	2830087	2830087
CDHB54T002	3.97	4.03	1.02	0.18	2.13	—	2830064	2830064	2830064	2830064	2830064
CDHB54T002M	3.97	4.03	1.02	0.18	2.13	0.96	2830064	2830064	2830064	2830064	2830064
CDHB54T004M	3.97	4.03	1.02	0.38	2.13	0.96	2830090	2830090	2830090	2830090	2830090
CDHB54T004	3.97	4.03	1.02	0.38	2.13	—	2830090	2830090	2830090	2830090	2830090

NOTE: Max DOC only applies to tipped inserts, which are designated with an "M" at the end of the catalogue number.

6 Determine the Speed and Feed Chart with the appropriate cutting data.

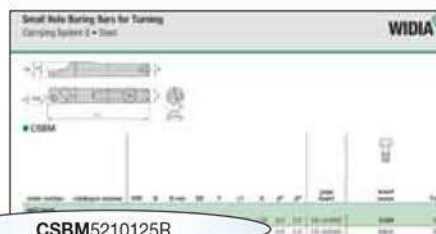
- A Based on grade and edge geometry, identify starting speed (vc) and feed (fz). The first choice starting feed is in bold.
- B Use the corresponding speed located in the same column below the feed information.

Speed and Feed Chart
Positive Inserts • Metric

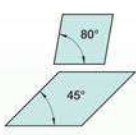
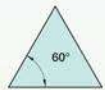
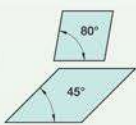
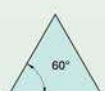
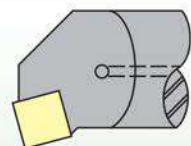
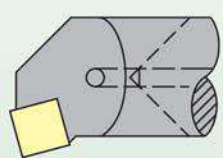
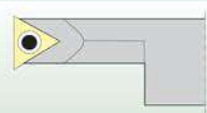
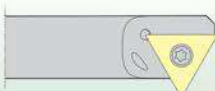
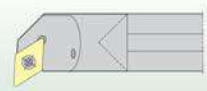
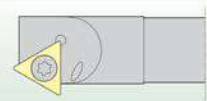
Material Group		Cutting Speed — vc m/min											
		C2			C25			C3			CG5		
		min	Start	max	min	Start	max	min	Start	max	min	Start	max
P	ap [mm]	—	—	—	—	—	—	—	—	—	0.061	—	0.300
	f [mm/rev]	—	—	—	—	—	—	—	—	—	0.025	—	0.300
	0/1	—	—	—	—	—	—	—	—	—	95	115	140
	2	—	—	—	—	—	—	—	—	—	60	75	90
	3	—	—	—	—	—	—	—	—	—	60	75	90
	4	—	—	—	—	—	—	—	—	—	45	60	70
M	ap [mm]	0.051	—	0.300	0.051	—	0.300	0.051	—	0.300	0.051	—	0.300
	f [mm/rev]	0.025	—	0.300	0.025	—	0.300	0.025	—	0.300	0.025	—	0.300
	1	55	70	80	60	80	95	60	80	95	75	90	110
	2	50	60	75	55	70	85	55	70	85	65	80	100
	3	35	45	55	45	50	65	45	50	65	50	60	75
	4	—	—	—	—	—	—	—	—	—	40	50	60
K	ap [mm]	0.051	—	0.300	0.051	—	0.300	0.051	—	0.300	0.051	—	0.300
	f [mm/rev]	0.025	—	0.300	0.025	—	0.300	0.025	—	0.300	0.025	—	0.300
	1	50	65	80	60	70	85	60	70	85	60	75	90
	2	65	80	100	75	90	110	75	90	110	75	95	115
	3	50	60	75	55	65	80	55	65	80	55	70	80
	4	—	—	—	—	—	—	—	—	—	—	—	—
N	ap [mm]	0.051	—	0.300	0.051	—	0.300	0.051	—	0.300	0.051	—	0.300
	f [mm/rev]	0.025	—	0.300	0.025	—	0.300	0.025	—	0.300	0.025	—	0.300
	1	400	505	605	400	505	605	400	505	605	400	505	605
	2	295	370	440	295	370	445	295	370	445	295	370	445
	3	70	85	105	70	85	105	70	85	105	85	105	125
	4	310	380	465	310	385	465	310	385	465	140	175	210

How Do Catalogue Numbers Work?

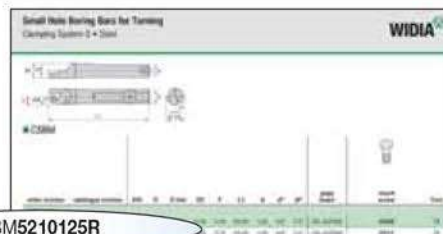
Each character in our catalogue number signifies a specific trait of that product. Use the following key columns and corresponding images to easily identify which attributes apply.



CSBM5210125R

C	S	B	M	
Series Type	Bar Type	Bar Style Designation	Units	Insert Shape (optional)
C  F   G  L  Q    S  	S  S = Steel (with coolant) C  C = Carbide (with coolant)		M = Metric	C  W 
		B Boring Bar 		O Offset Boring Bar 
		C External Chamfering Bar 		P Profiling Bar 
		I Internal Threading Bar 		R Reverse Chamfer or Back Chamfer Bar 
		M Offset Internal Grooving Bar 		

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



CSBM5210125R

52

Head Diameter
shown as "D2"

Metric

7 = 6,60mm
8 = 8,18mm/8,20mm
10 = 9,78mm
13 = 12,70mm/
12,95mm
45 = 4,57mm
48 = 4,80mm
52 = 5,16mm
53 = 5,30mm
64 = 6,60mm
66 = 6,55mm/6,60mm
82 = 8,15mm
95 = 9,50mm
99 = 9,91mm
159 = 15,88mm

10

Shank Diameter
shown as "D"

Metric

4 = 4,00mm
5 = 5,00mm
6 = 6,00mm
8 = 8,00mm
10 = 10,00mm
12 = 12,00mm
16 = 16,00mm

12

Length/Depth shown
as "L1/L4"

Bore Length for Step Bars
Thread Depth for Threading Bars
Overall Length for Straight
Shank Bars

Metric

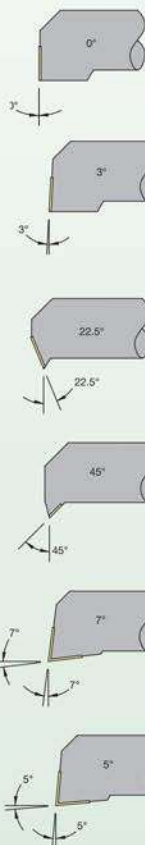
12 = 12,70mm
19 = 19,05mm
22 = 22,23mm
25 = 25,40mm
32 = 31,75mm
38 = 38,10mm
48 = 47,63mm
51 = 50,80mm
63 = 63,50mm
64 = 64,00mm
76 = 76,00mm
79 = 79,38mm
100 = 100,58mm/
101,50mm/
101,60mm
102 = 101,60mm
127 = 127,00mm
152 = 152,00mm
152,40mm
178 = 177,80mm
179,90mm
203 = 203,20mm
254 = 254,00mm

5

Lead Angle*

0 = 90°
Used for
Threading/
Grooving Bars

3 = 3°
5 = 5°
7 = 7°
225 = 22.5°
30 = 30°
45 = 45°
60 = 60°



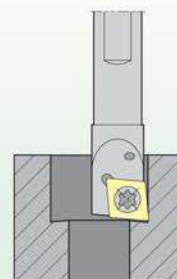
R

Hand of Tool

R = Right hand
L = Left hand

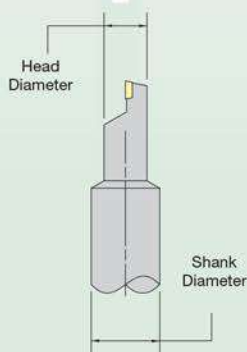
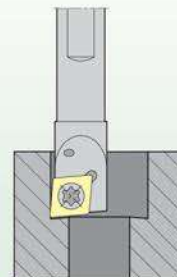
Right-hand boring bar

R



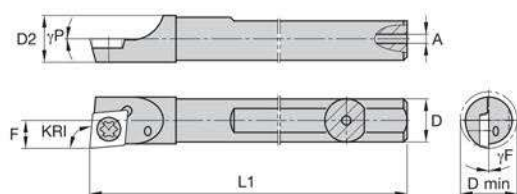
Left-hand boring bar

L



NOTE: Only shown on stepped-style bars.

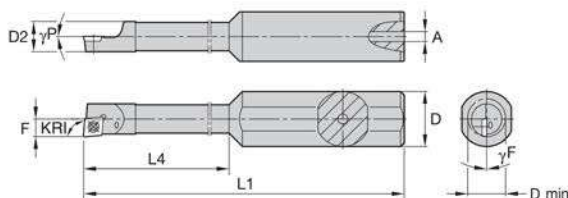
*NOTE: Shown as "KRI" for metric bars.



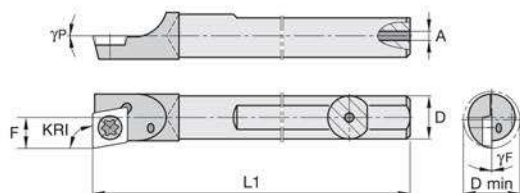
CSBM

order number	catalogue number	KRI	D	D min	D2	F	L1	A	γF°	γP°	gage insert	insert screw	Torx
right hand													
3896205	CSBM5650R	90	5,00	5,94	5,16	3,10	63,50	1,02	0.0°	5.0°	CD..S4T002	CC09	T6
2831676	CSBM6650R	90	6,00	7,09	6,20	3,73	63,50	1,02	0.0°	5.0°	CD..S4T002	CC11	T6
2831441	CSBM5655R	95	5,00	5,79	5,16	2,95	63,50	1,02	0.0°	5.0°	CD..S4T002	CC09	T6
2831687	CSBM6655R	95	6,00	7,09	6,21	3,73	63,50	1,02	0.0°	5.0°	CD..S4T002	CC11	T6
2831666	CSBM8765R	95	8,00	9,04	8,18	4,70	76,20	1,52	0.0°	5.0°	CD..S4T002	CC11	T6
2831701	CSBM4657R	97	4,00	4,57	4,22	2,41	63,50	1,02	0.0°	0.0°	CD..S4T002	CC09	T6
left hand													
3896204	CSBM5650L	90	5,00	5,94	5,16	3,10	63,50	1,02	0.0°	5.0°	CD..S4T002	CC09	T6
3896207	CSBM6650L	90	6,00	7,09	6,20	3,73	63,50	1,02	0.0°	5.0°	CD..S4T002	CC11	T6
3896209	CSBM8760L	90	8,00	9,05	8,18	4,70	76,00	2,40	0.0°	5.0°	CD..S4T002	CC11	T6
3896206	CSBM5655L	95	5,00	5,78	5,16	2,95	63,50	1,02	0.0°	5.0°	CD..S4T002	CC09	T6
3896208	CSBM6655L	95	6,00	7,09	6,20	3,73	63,50	1,02	0.0°	5.0°	CD..S4T002	CC11	T6
3517652	CSBM8765L	95	8,00	9,04	8,18	9,04	76,20	1,52	0.0°	5.0°	CD..S4T002	CC11	T6
2831695	CSBM4657L	97	4,00	4,57	4,22	2,41	63,50	1,02	0.0°	0.0°	CD..S4T002	CC09	T6




CSBM • STEPPED

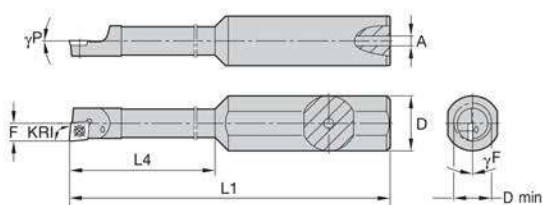
order number	catalogue number	KRI	D	D min	D2	F	L1	L4	A	γF°	γP°	gage insert	insert screw	Torx
right hand														
2831606	CSBM5210250R	90	10,00	5,94	5,16	3,10	70,00	25,72	1,02	0.0°	5.0°	CD..S4T002	CC11	T6
2831499	CSBM5212250R	90	12,00	5,94	5,16	3,10	70,00	25,40	1,02	0.0°	5.0°	CD..S4T002	CC11	T6
2831477	CSBM6412190R	90	12,00	7,42	6,60	3,86	70,00	19,05	1,02	0.0°	5.0°	CD..S4T002	CC11	T6
2831462	CSBM6412320R	90	12,00	7,42	6,60	3,86	70,00	31,75	1,02	0.0°	5.0°	CD..S4T002	CC11	T6
2831661	CSBM4510125R	95	10,00	5,18	4,57	5,18	69,85	12,70	1,02	0.0°	5.0°	CD..S4T002	CC09	T6
2831639	CSBM5210125R	95	10,00	5,78	5,16	2,95	70,00	12,30	1,02	0.0°	5.0°	CD..S4T002	CC09	T6
2831615	CSBM5210255R	95	10,00	5,78	5,16	5,78	69,85	24,96	1,02	0.0°	5.0°	CD..S4T002	CC11	T6
2831595	CSBM6410195R	95	10,00	7,24	6,60	3,68	70,00	19,05	1,02	0.0°	5.0°	CD..S4T002	CC11	T6
2831548	CSBM4512125R	95	12,00	5,18	4,57	2,64	69,85	12,70	1,02	0.0°	5.0°	CD..S4T002	CC09	T6
2831512	CSBM5212255R	95	12,00	5,78	5,16	2,95	70,00	25,40	1,02	0.0°	5.0°	CD..S4T002	CC09	T6
2831490	CSBM6412195R	95	12,00	7,24	6,60	3,68	70,00	19,05	1,02	0.0°	5.0°	CD..S4T002	CC11	T6
2831468	CSBM6412325R	95	12,00	7,24	6,60	3,68	70,00	31,75	1,02	0.0°	5.0°	CD..S4T002	CC11	T6
left hand														
2831656	CSBM4510125L	95	10,00	5,18	4,57	2,64	70,00	12,70	1,02	0.0°	5.0°	CD..S4T002	CC09	T6
2831588	CSBM6410195L	95	10,00	7,24	6,60	3,68	70,00	19,05	1,02	0.0°	5.0°	CD..S4T002	CC11	T6
3890853	CSBM4512125L	95	12,00	5,18	4,57	2,64	69,85	12,70	1,02	0.0°	5.0°	CD..S4T002	CC09	T6
3890854	CSBM4512255L	95	12,00	5,18	4,57	2,64	69,85	25,40	1,02	0.0°	5.0°	CD..S4T002	CC09	T6
2831528	CSBM5212125L	95	12,00	5,78	5,16	2,95	70,00	12,70	1,02	0.0°	5.0°	CD..S4T002	CC11	T6
2831483	CSBM6412195L	95	12,00	7,24	6,60	3,68	70,00	19,05	1,02	0.0°	5.0°	CD..S4T002	CC11	T6
3890855	CSBM6412325L	95	12,00	7,24	6,60	3,68	70,00	31,75	1,02	0.0°	5.0°	CD..S4T002	CC11	T6



CCBM

order number	catalogue number	KRI	D	D min	F	L1	A	γF°	γP°	gage insert	insert screw	Torx
right hand												
2831801	CCBM51000R	90	5,00	5,94	3,18	100,58	1,02	0.0°	5.0°	CD..S4T002	CC11	T6
3896025	CCBM61000R	90	6,00	7,08	3,73	100,33	1,19	0.0°	5.0°	CD..S4T002	CC11	T6
2831277	CCBM81520R	90	8,00	9,04	4,70	152,15	2,36	0.0°	5.0°	CD..S4T002	CC11	T6
2831826	CCBM51005R	95	5,00	5,94	3,02	100,58	1,02	0.0°	5.0°	CD..S4T002	CC11	T6
2831311	CCBM61525R	95	6,00	7,08	3,73	152,15	1,19	0.0°	5.0°	CD..S4T002	CC11	T6
2831821	CCBM61005R	95	6,00	7,09	3,73	100,33	1,19	0.0°	5.0°	CD..S4T002	CC11	T6
2831289	CCBM81525R	95	8,00	9,04	4,70	152,15	2,36	0.0°	5.0°	CD..S4T002	CC11	T6
2831832	CCBM41007R	97	3,96	4,57	2,41	100,33	1,02	0.0°	0.0°	CD..S4T002	CC09	T6
2831324	CCBM41527R	97	4,00	4,57	2,41	152,40	1,02	0.0°	0.0°	CD..S4T002	CC09	T6
left hand												
3896023	CCBM51000L	90	5,00	5,94	3,18	100,58	1,02	0.0°	5.0°	CD..S4T002	CC11	T6
3896024	CCBM61000L	90	6,00	7,08	3,73	100,33	1,19	0.0°	5.0°	CD..S4T002	CC11	T6
3896026	CCBM61520L	90	6,00	7,09	3,73	152,15	1,19	0.0°	5.0°	CD..S4T002	CC11	T6
3896028	CCBM81520L	90	8,00	9,04	4,70	152,15	2,36	0.0°	5.0°	CD..S4T002	CC11	T6
2831807	CCBM51005L	95	5,00	5,94	3,02	100,58	1,02	0.0°	5.0°	CD..S4T002	CC11	T6
2831025	CCBM51525L	95	5,00	5,94	3,02	152,40	1,02	0.0°	5.0°	CD..S4T002	CC09	T6
2831307	CCBM61525L	95	6,00	7,08	3,73	152,15	1,19	0.0°	5.0°	CD..S4T002	CC11	T6
2831791	CCBM61005L	95	6,00	7,09	3,73	100,33	1,19	0.0°	5.0°	CD..S4T002	CC11	T6
3896027	CCBM81005L	95	8,00	9,04	4,70	101,60	2,36	0.0°	5.0°	CD..S4T002	CC11	T6
2831283	CCBM81525L	95	8,00	9,04	4,70	152,40	2,36	0.0°	5.0°	CD..S4T002	CC11	T6
2831813	CCBM41007L	97	3,96	4,57	2,41	100,33	1,02	0.0°	0.0°	CD..S4T002	CC09	T6
3896002	CCBM41527L	97	4,00	4,57	2,41	152,40	1,02	0.0°	0.0°	CD..S4T002	CC09	T6

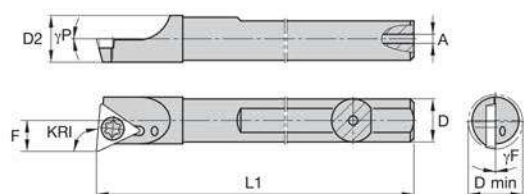




CCBM • STEPPED



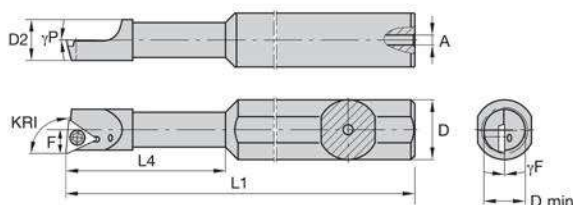
order number	catalogue number	KRI	D	D min	F	L1	L4	A	γF°	γP°	gage insert	insert screw	Torx
right hand													
2831211	CCBM5312510R	90	12,00	5,94	3,18	88,90	50,80	3,18	0.0°	5.0°	CD..S4T002	CC11	T6
2831188	CCBM6612320R	90	12,00	7,42	3,85	69,85	31,75	3,18	0.0°	5.0°	CD..S4T002	CC11	T6
2831175	CCBM6612630R	90	12,00	7,42	3,86	101,60	63,50	3,18	0.0°	5.0°	CD..S4T002	CC11	T6
2831127	CCBM5316510R	90	16,00	6,10	3,18	114,30	50,80	3,18	0.0°	5.0°	CD..S4T002	CC11	T6
2831110	CCBM6516320R	90	16,00	7,42	3,86	95,25	31,75	3,18	0.0°	5.0°	CD..S4T002	CC11	T6
2831265	CCBM4812225R	95	12,00	5,28	2,64	60,32	22,22	3,18	0.0°	5.0°	CD..S4T002	CC09	T6
2831255	CCBM4812485R	95	12,00	5,28	2,64	85,73	47,63	3,18	0.0°	5.0°	CD..S4T002	CC09	T6
2831244	CCBM5312255R	95	12,00	5,94	3,02	63,50	25,40	1,02	0.0°	5.0°	CD..S4T002	CC11	T6
2831201	CCBM6612325R	95	12,00	7,24	3,68	69,85	31,75	3,18	0.0°	5.0°	CD..S4T002	CC11	T6
3896019	CCBM6612635R	95	12,00	7,24	3,68	101,60	63,50	3,18	0.0°	5.0°	CD..S4T002	CC11	T6
3896015	CCBM4816225R	95	16,00	5,28	2,64	85,72	22,23	3,18	0.0°	5.0°	CD..S4T002	CC09	T6
3896017	CCBM4816485R	95	16,00	5,28	2,64	111,12	47,62	3,18	0.0°	5.0°	CD..S4T002	CC09	T6
2831162	CCBM5316255R	95	16,00	5,94	3,02	88,90	25,40	3,18	0.0°	5.0°	CD..S4T002	CC11	T6
2831139	CCBM5316515R	95	16,00	5,94	3,02	114,30	50,80	3,18	0.0°	5.0°	CD..S4T002	CC11	T6
3896018	CCBM6516325R	95	16,00	7,24	3,68	95,25	31,75	3,18	0.0°	5.0°	CD..S4T002	CC11	T6
left hand													
2831194	CCBM6612325L	95	12,00	7,24	3,68	69,85	31,75	3,18	0.0°	5.0°	CD..S4T002	CC11	T6
3896093	CCBM6612635L	95	12,00	7,24	3,68	101,60	63,50	3,18	0.0°	5.0°	CD..S4T002	CC11	T6
2831157	CCBM5316255L	95	16,00	5,94	3,02	88,90	25,40	3,18	0.0°	5.0°	CD..S4T002	CC11	T6
2831132	CCBM5316515L	95	16,00	5,94	3,02	114,30	50,80	3,18	0.0°	5.0°	CD..S4T002	CC11	T6
2831117	CCBM6516325L	95	16,00	7,24	3,68	95,25	31,75	3,18	0.0°	5.0°	CD..S4T002	CC11	T6



■ FSBM

order number	catalogue number	KRI	D	D min	D2	F	L1	A	γF°	γP°	gage insert	insert screw	Torx
right hand													
2829554	FSBM61000R	90	6,00	7,06	6,20	3,71	101,60	1,02	0.0°	5.0°	TD..07S102	FC11	T7
2829566	FSBM61005R	95	6,00	7,06	6,20	3,71	101,60	1,02	0.0°	5.0°	TD..07S102	FC11	T7
left hand													
3896211	FSBM61000L	90	6,00	7,06	6,20	3,71	101,60	1,02	0.0°	5.0°	TD..07S102	FC11	T7
3896213	FSBM81000L	90	8,00	9,14	8,20	4,80	101,60	1,52	0.0°	5.0°	TD..07S102	FC11	T7
2829545	FSBM81005L	95	8,00	9,14	8,20	4,80	101,60	1,52	0.0°	5.0°	TD..07S102	FC11	T7

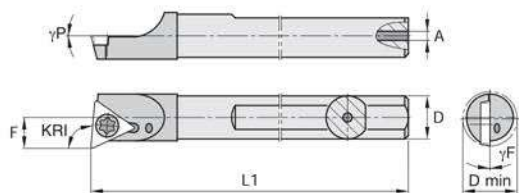




FSBM • STEPPED

order number	catalogue number	KRI	D	D min	D2	F	L1	L4	A	γF°	γP°	gage insert	insert screw	Torx
right hand														
3890858	FSBM6612320R	90	12,00	7,52	6,58	3,96	76,20	31,75	1,02	0.0°	5.0°	TD..07S102	FC14	T7
2829472	FSBM8212250R	90	12,00	9,09	8,15	4,75	76,00	25,40	1,52	0.0°	5.0°	TD..07S102	FC14	T7
2829448	FSBM8212380R	90	12,00	9,09	8,15	4,75	76,20	38,10	1,52	0.0°	5.0°	TD..07S102	FC14	T7
3890860	FSBM6616190R	90	16,00	7,52	6,58	3,96	101,60	19,05	1,02	0.0°	5.0°	TD..07S102	FC14	T7
2829533	FSBM5212125R	95	12,00	6,99	5,16	3,20	76,20	12,70	1,02	0.0°	5.0°	TD..07S102	FC11	T7
3890857	FSBM5212255R	95	12,00	6,99	5,16	3,20	76,20	25,40	1,02	0.0°	5.0°	TD..07S102	FC11	T7
2829508	FSBM6612195R	95	12,00	7,52	6,58	3,96	76,00	19,05	1,02	0.0°	5.0°	TD..07S102	FC14	T7
2829459	FSBM8212385R	95	12,00	9,09	8,15	4,75	76,00	38,10	1,52	0.0°	5.0°	TD..07S102	FC14	T7
3897011	FSBM5216125R	95	16,00	6,99	5,16	3,20	101,60	12,70	1,02	0.0°	5.0°	TD..07S102	FC11	T7
3890862	FSBM6616325R	95	16,00	7,52	6,58	3,96	101,60	31,75	1,02	0.0°	5.0°	TD..07S102	FC14	T7
2829429	FSBM6616195R	95	16,00	7,52	6,60	3,96	102,00	19,05	1,02	0.0°	5.0°	TD..07S102	FC14	T7
left hand														
2829442	FSBM8212380L	90	12,00	9,09	8,15	4,75	76,00	38,10	1,52	0.0°	5.0°	TD..07S102	FC14	T7
3890861	FSBM6616320L	90	16,00	7,52	6,58	3,96	101,60	31,75	1,02	0.0°	5.0°	TD..07S102	FC14	T7
3890856	FSBM5212125L	95	12,00	6,99	5,16	3,20	76,20	12,70	1,02	0.0°	5.0°	TD..07S102	FC11	T7

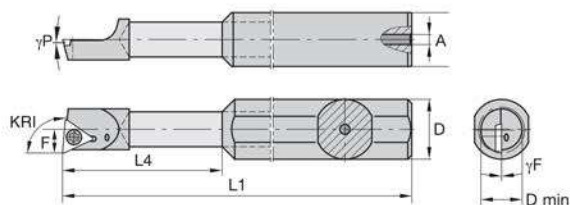




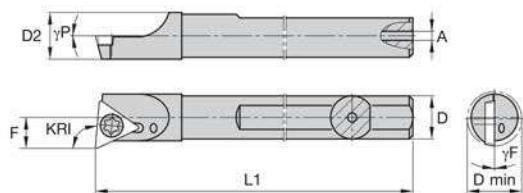
FCBM

order number	catalogue number	KRI	D	D min	F	L1	A	γF°	γP°	gage insert	insert screw	Torx
right hand												
3896036	FCBM51000R	90	5,00	6,98	3,40	100,58	1,02	0.0°	5.0°	TD..07S102	FC11	T7
3896031	FCBM61520R	90	6,00	7,06	3,70	152,40	1,19	0.0°	5.0°	TD..07S102	FC11	T7
2829356	FCBM81520R	90	8,00	9,16	4,80	152,40	2,36	0.0°	5.0°	TD..07S102	FC14	T7
2829390	FCBM61525R	95	6,00	7,06	3,71	152,40	1,19	0.0°	5.0°	TD..07S102	FC11	T7
2829368	FCBM81525R	95	8,00	9,16	4,80	152,40	2,36	0.0°	5.0°	TD..07S102	FC14	T7
left hand												
3896035	FCBM51000L	90	5,00	6,98	3,40	100,58	1,02	0.0°	5.0°	TD..07S102	FC11	T7
3896030	FCBM61520L	90	6,00	7,06	3,71	152,40	1,19	0.0°	5.0°	TD..130805	FC11	T7
3896032	FCBM81520L	90	8,00	9,16	4,80	152,40	2,36	0.0°	5.0°	TD..130805	FC11	T7
3896037	FCBM51005L	95	5,00	6,98	3,20	100,58	1,02	0.0°	5.0°	TD..07S102	FC11	T7
2829385	FCBM61525L	95	6,00	7,06	3,71	152,40	1,19	0.0°	5.0°	TD..07S102	FC11	T7



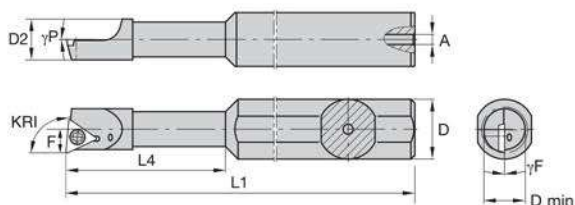

FCBM • STEPPED


order number	catalogue number	KRI	D	D min	F	L1	L4	A	γF°	γP°	gage insert	insert screw	Torx
right hand													
3896072	FCBM6612630R	90	12,00	7,52	3,96	101,60	63,50	1,19	0.0°	5.0°	TD..07S102	FC14	T7
2829268	FCBM8212790R	90	12,00	9,09	4,75	117,48	79,38	3,18	0.0°	5.0°	TD..07S102	FC14	T7
3896069	FCBM5316250R	90	16,00	6,98	3,40	88,90	25,40	3,18	0.0°	5.0°	TD..07S102	FC11	T7
3896084	FCBM6616320R	90	16,00	7,52	3,96	95,25	31,75	3,18	0.0°	5.0°	TD..07S102	FC11	T7
3896086	FCBM8216380R	90	16,00	9,09	4,75	101,60	38,10	3,18	0.0°	5.0°	TD..07S102	FC14	T7
3896095	FCBM8216790R	90	16,00	9,09	4,75	142,87	79,37	3,18	0.0°	5.0°	TD..07S102	FC14	T7
2829350	FCBM5312255R	95	12,00	6,98	3,20	63,50	25,40	3,18	0.0°	5.0°	TD..07S102	FC11	T7
2829323	FCBM6612325R	95	12,00	7,52	3,96	69,85	31,75	3,18	0.0°	5.0°	TD..07S102	FC14	T7
3896083	FCBM6612635R	95	12,00	7,52	3,96	101,60	63,50	3,18	0.0°	5.0°	TD..07S102	FC11	T7
2829301	FCBM8212385R	95	12,00	9,09	4,75	76,20	38,10	3,18	0.0°	5.0°	TD..07S102	FC14	T7
2829279	FCBM8212795R	95	12,00	9,09	4,75	117,48	79,38	3,18	0.0°	5.0°	TD..07S102	FC14	T7
3897085	FCBM5316255R	95	16,00	6,98	3,20	88,90	25,40	3,18	0.0°	5.0°	TD..07S102	FC11	T7
3790247	FCBM6616325R	95	16,00	7,52	3,96	95,25	31,75	3,18	0.0°	5.0°	TD..07S102	FC14	T7
3786518	FCBM6616635R	95	16,00	7,52	3,96	127,00	63,50	3,18	0.0°	5.0°	TD..07S102	FC14	T7
3786519	FCBM8216795R	95	16,00	9,09	4,75	117,48	79,38	3,18	0.0°	5.0°	TD..07S102	FC14	T7
left hand													
3896067	FCBM5312510L	90	12,00	6,98	3,40	88,90	50,80	3,18	0.0°	5.0°	TD..07S102	FC11	T7
2829344	FCBM5312255L	95	12,00	6,98	3,20	63,50	25,40	3,18	0.0°	5.0°	TD..07S102	FC11	T7
3896068	FCBM5312515L	95	12,00	6,98	3,20	88,90	50,80	3,18	0.0°	5.0°	TD..07S102	FC11	T7
2829319	FCBM6612325L	95	12,00	7,52	3,96	69,85	31,75	3,18	0.0°	5.0°	TD..07S102	FC14	T7
2829295	FCBM8212385L	95	12,00	9,09	4,75	76,20	38,10	3,18	0.0°	5.0°	TD..07S102	FC14	T7
3896070	FCBM5316255L	95	16,00	6,98	3,20	88,90	25,40	3,18	0.0°	5.0°	TD..07S102	FC11	T7
3896085	FCBM6616325L	95	16,00	7,52	3,96	95,25	31,75	3,18	0.0°	5.0°	TD..07S102	FC11	T7
3896087	FCBM8216385L	95	16,00	9,09	4,75	101,60	38,10	3,18	0.0°	5.0°	TD..07S102	FC14	T7



■ QSBM

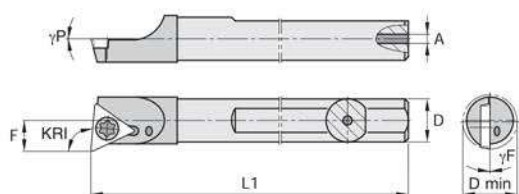
order number	catalogue number	KRI	D	D min	D2	F	L1	A	γF°	γP°	gage insert	insert screw	Torx
													
right hand													
3886552	QSBM101275R	95	10,00	11,15	10,21	5,79	127,00	3,20	0.0°	5.0°	TP..110202	QC21	T9
left hand													
3886550	QSBM101270L	90	10,00	11,15	10,21	5,79	127,00	3,20	0.0°	5.0°	TP..110202	QC21	T9
3886943	QSBM121520L	90	12,00	13,16	12,19	6,81	152,40	4,00	0.0°	5.0°	TP..110202	QC26	T9
3886551	QSBM101275L	95	10,00	11,15	10,21	5,79	127,00	3,20	0.0°	5.0°	TP..110202	QC21	T9



■ QSBM • STEPPED

order number	catalogue number	KRI	D	D min	D2	F	L1	L4	A	γF°	γP°	gage insert	insert screw	Torx
right hand														
2825013	QSBM9912480R	90	12,00	11,12	9,91	5,61	95,25	47,63	2,03	0.0°	5.0°	TP..110202	QC21	T9
3890865	QSBM9916480R	90	16,00	11,12	9,91	5,61	107,95	47,63	2,03	0.0°	5.0°	TP..110202	QC21	T9
3886949	QSBM15920630R	90	20,00	17,47	15,88	8,97	114,30	63,50	2,49	0.0°	5.0°	TP..110202	QC26	T9
2825052	QSBM9912295R	95	12,00	11,12	9,91	5,61	95,25	28,58	2,03	0.0°	5.0°	TP..110202	QC21	T9
2825024	QSBM9912485R	95	12,00	11,12	9,91	5,61	95,25	47,63	2,03	0.0°	5.0°	TP..110202	QC21	T9
3890864	QSBM9916295R	95	16,00	11,12	9,91	5,61	107,95	28,58	2,03	0.0°	5.0°	TP..110202	QC21	T9
2824993	QSBM9916485R	95	16,00	11,12	9,91	5,61	107,95	47,63	2,03	0.0°	5.0°	TP..110202	QC21	T9
3886945	QSBM1316385R	95	16,00	14,30	12,95	7,52	107,95	38,10	2,03	0.0°	5.0°	TP..110202	QC26	T9
3886948	QSBM1316635R	95	16,00	14,30	12,95	7,52	107,95	63,50	2,03	0.0°	5.0°	TP..110202	QC26	T9
2824950	QSBM9920385R	95	20,00	11,12	9,91	5,61	101,60	38,10	2,03	0.0°	5.0°	TP..110202	QC21	T9
3886950	QSBM15920635R	95	20,00	17,47	15,88	8,97	114,30	63,50	2,49	0.0°	5.0°	TP..110202	QC26	T9
left hand														
2825019	QSBM9912485L	95	12,00	11,12	9,91	5,61	95,25	47,63	2,03	0.0°	5.0°	TP..110202	QC21	T9
3896089	QSBM9916295L	95	16,00	11,12	9,91	5,61	107,95	28,58	2,03	0.0°	5.0°	TP..110202	QC21	T9
3886944	QSBM1316385L	95	16,00	14,30	12,95	7,52	107,95	38,10	2,03	0.0°	5.0°	TP..110202	QC26	T9
3886947	QSBM1316635L	95	16,00	14,30	12,95	7,52	107,95	63,50	2,03	0.0°	5.0°	TP..110202	QC26	T9
2824945	QSBM9920385L	95	20,00	11,12	9,91	5,61	101,60	38,10	2,03	0.0°	5.0°	TP..110202	QC21	T9



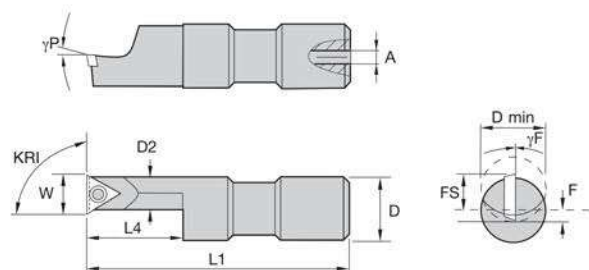


■ QCBM

order number	catalogue number	KRI	D	D min	F	L1	A	γF°	γP°	gage insert	insert screw	Torx
right hand												
3854445	QCBM102540R	90	10,00	11,15	5,79	254,00	3,20	0.0°	5.0°	TP..110202	QC21	T9
2824776	QCBM102545R	95	10,00	11,15	5,79	254,00	3,20	0.0°	5.0°	TP..110202	QC21	T9
2824747	QCBM122545R	95	12,00	13,16	6,81	254,00	4,70	0.0°	5.0°	TP..110202	QC21	T9
left hand												
3896043	QCBM122540L	90	12,00	13,16	6,81	254,00	4,70	0.0°	5.0°	TP..110202	QC26	T9
3896044	QCBM122545L	95	12,00	13,16	6,81	254,00	4,70	0.0°	5.0°	TP..110202	QC26	T9



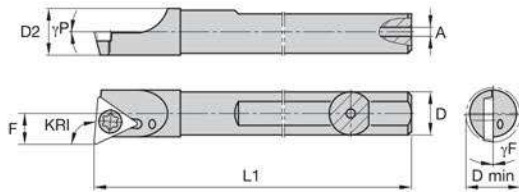
Clamping System S • Steel



■ QSOM

order number	catalogue number	KRI	D	D min	D2	F	L1	L4	FS	W	A	γF°	γP°	gage insert	insert screw	Torx
right hand																
2824819	QSOM9516385R	95	16,00	16,51	9,50	0,64	95,25	38,10	10,63	10,70	2,03	0.0°	5.0°	TP..110202	QC26	T9



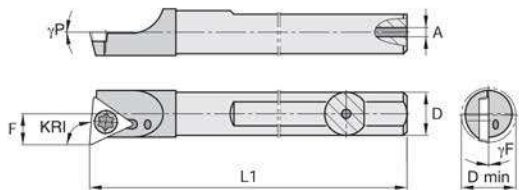


SSBM

order number	catalogue number	KRI	D	D min	D2	F	L1	A	γF°	γP°	gage insert	insert screw	Torx
right hand													
3886968	SSBM202030R	90	20,00	21,23	20,19	10,90	203,20	4,00	0.0°	5.0°	TP..160302	SC30	T10
left hand													
3886967	SSBM202030L	90	20,00	21,23	20,19	10,90	203,20	4,00	0.0°	5.0°	TP..160302	SC30	T10
3886969	SSBM202035L	95	20,00	21,23	20,19	10,90	203,20	4,00	0.0°	5.0°	TP..160302	SC30	T10



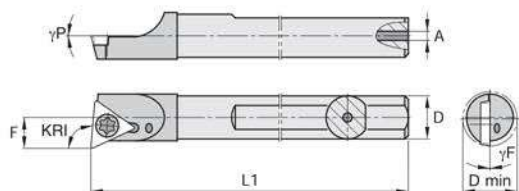
Clamping System S • Carbide



SCBM

order number	catalogue number	KRI	D	D min	F	L1	A	γF°	γP°	gage insert	insert screw	Torx
right hand												
3895892	SCBM162540R	90	16,00	17,25	8,89	254,00	5,51	0.0°	5.0°	TP..160302	SC30	T10
3896004	SCBM162545R	95	16,00	17,25	8,89	254,00	5,51	0.0°	5.0°	TP..160302	SC30	T10
3896006	SCBM202545R	95	20,00	21,25	10,90	254,00	7,11	0.0°	5.0°	TP..160302	SC30	T10
left hand												
3895891	SCBM162540L	90	16,00	17,25	8,89	254,00	5,51	0.0°	5.0°	TP..160302	SC30	T10
3896005	SCBM202540L	90	20,00	21,25	10,90	254,00	7,11	0.0°	5.0°	TP..160302	SC30	T10
3896003	SCBM162545L	95	16,00	17,25	8,89	254,00	5,51	0.0°	5.0°	TP..160302	SC30	T10
3896091	SCBM202545L	95	20,00	21,25	10,90	254,00	7,11	0.0°	5.0°	TP..160302	SC30	T10

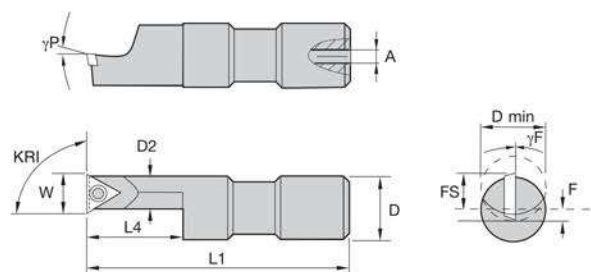




SDBM

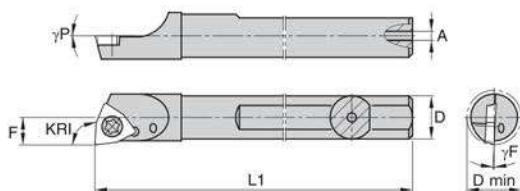
order number	catalogue number	KRI	D	D min	D2	F	L1	A	γF°	γP°	gage insert	insert screw	Torx
right hand													
3896011	SDBM162540R	90	16,00	17,25	—	8,89	254,00	5,51	0.0°	5.0°	TP..160302	SC30	T10
3896014	SDBM202540R	90	20,00	21,25	—	10,90	254,00	7,11	0.0°	5.0°	TP..160302	SC30	T10
2822085	SDBM162545R	95	16,00	17,25	16,13	8,89	254,00	5,54	0.0°	5.0°	TP..160302	SC30	T10
3896092	SDBM202545R	95	20,00	21,25	—	10,90	254,00	7,11	0.0°	5.0°	TP..160302	SC30	T10
left hand													
3896010	SDBM162540L	90	16,00	17,25	—	8,89	254,00	5,51	0.0°	5.0°	TP..160302	SC30	T10
3896013	SDBM202540L	90	20,00	21,25	—	10,90	254,00	7,11	0.0°	5.0°	TP..160302	SC30	T10
3896012	SDBM162545L	95	16,00	17,25	—	8,89	254,00	5,51	0.0°	5.0°	TP..160302	SC30	T10
3897084	SDBM202545L	95	20,00	21,25	—	10,90	254,00	7,11	0.0°	5.0°	TP..160302	SC30	T10

Clamping System S • Steel



SSOM

order number	catalogue number	KRI	D	D min	D2	F	L1	L4	FS	W	A	γF°	γP°	gage insert	insert screw	Torx
right hand																
3896090	SSOM1325380R	90	24,99	24,61	12,70	1,78	95,25	38,10	14,46	16,24	3,00	0.0°	5.0°	TPHB160302	SC30	T10
3890867	SSOM1325630R	90	24,99	24,61	12,70	1,78	120,65	63,50	14,46	16,24	3,00	0.0°	5.0°	TPHB160302	SC30	T10
3890866	SSOM1325385R	95	24,99	24,61	12,70	1,78	95,25	38,10	14,40	16,18	3,00	0.0°	5.0°	TPHB160302	SC30	T10
3890868	SSOM1325635R	95	24,99	24,61	12,70	1,78	120,65	63,50	14,40	16,18	3,00	0.0°	5.0°	TPHB160302	SC30	T10



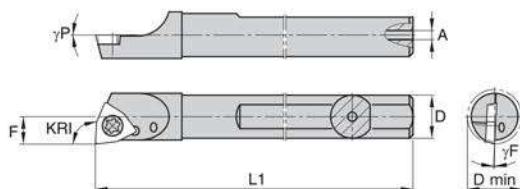
■ GSBMW

order number	catalogue number	KRI	D	D min	D2	F	L1	A	γF°	γP°	gage insert	insert screw	Torx
right hand													
2828122	GSBMW61003R	93	6,00	6,78	6,21	3,43	101,60	1,02	-3.0°	0.0°	WP..S30104	CT11	T6
3886549	GSBMW81003R	93	8,00	8,10	8,18	4,42	101,60	2,40	-3.0°	0.0°	WP..S30104	CT11	T6
left hand													
2828116	GSBMW61003L	93	6,00	6,78	6,21	3,43	101,60	1,02	-3.0°	0.0°	WP..S30104	CT11	T6
3886548	GSBMW81003L	93	8,00	8,10	8,18	4,42	101,60	2,40	-3.0°	0.0°	WP..S30104	CT11	T6



Tools for Small Hole Boring

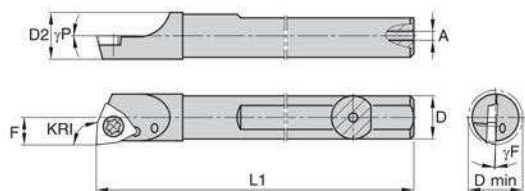
Clamping System S • Carbide



■ GCBMW

order number	catalogue number	KRI	D	D min	F	L1	A	γF°	γP°	gage insert	insert screw	Torx
right hand												
3896040	GCBMW51523R	93	5,00	6,60	3,20	152,40	1,02	-3.0°	0.0°	WP..S30104	CT11	T6
2827711	GCBMW61523R	93	6,00	6,78	3,43	152,40	1,19	-3.0°	0.0°	WP..S30104	CT11	T6
left hand												
3896039	GCBMW51523L	93	5,00	6,60	3,20	152,40	1,02	-3.0°	0.0°	WP..S30104	CT11	T6
2827705	GCBMW61523L	93	6,00	6,78	3,43	152,40	1,19	-3.0°	0.0°	WP..S30104	CT11	T6
3897012	GCBMW81523L	93	8,00	8,80	4,42	152,40	2,36	-3.0°	0.0°	WP..S30104	CT11	T6

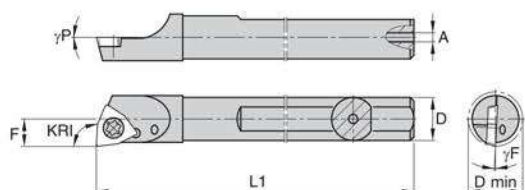




■ QSBMW

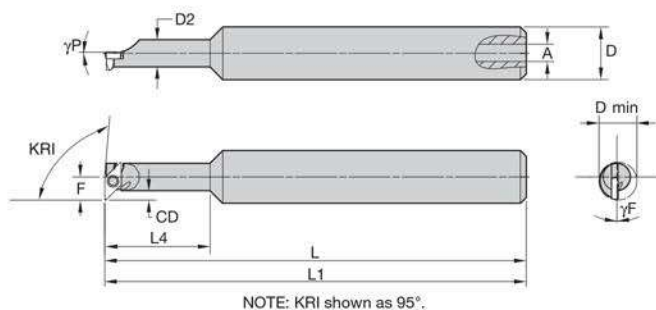
order number	catalogue number	KRI	D	D min	D2	F	L1	A	γF°	γP°	gage insert	insert screw	Torx
													
right hand													
3393828	QSBMW121523R	93	12,00	12,90	12,19	6,55	152,40	4,00	-3.0°	0.0°	WP..040204	QTM20	T7
left hand													
3886952	QSBMW101273L	93	10,00	10,94	10,70	5,59	127,00	3,20	-3.0°	0.0°	WP..040204	QTM20	T7

Clamping System S • Carbide

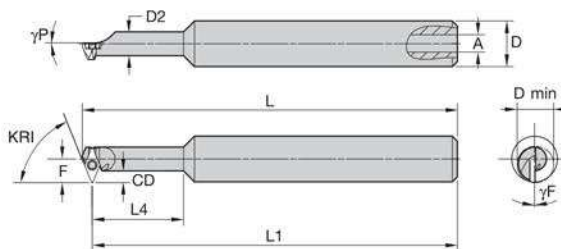


■ QCBMW

order number	catalogue number	KRI	D	D min	F	L1	A	γF°	γP°	gage insert	insert screw	Torx
												
right hand												
3782378	QCBMW102543R	93	10,00	10,95	5,59	254,00	3,20	-3.0°	0.0°	WP..040204	QTM20	T7
left hand												
3896045	QCBMW102543L	93	10,00	10,95	5,59	254,00	3,20	-3.0°	0.0°	WP..040204	QTM20	T7
3896046	QCBMW122543L	93	12,00	12,90	6,55	254,00	4,70	-3.0°	0.0°	WP..040204	QTM20	T7



NOTE: KRI shown as 95°.

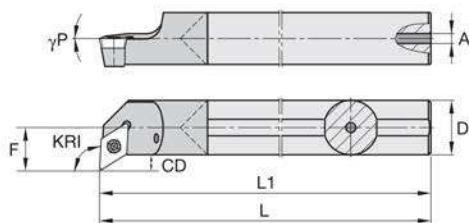


NOTE: KRI shown as 67,5°.

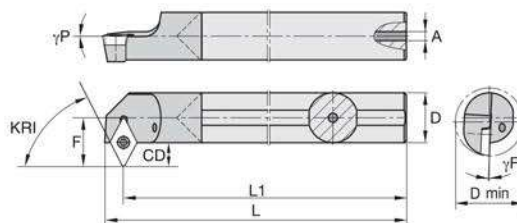
CSPM

order number	catalogue number	KRI	D	D min	D2	F	CD	L	L1	L4	A	γF°	γP°	gage insert	insert screw	Torx
right hand																
2831399	CSPM71225225R	67.5	12,00	10,16	6,60	6,60	3,30	104,00	101,60	25,40	1,02	0.0°	0.0°	GC..050102	CT15	T6
3758942	CSPM81232225R	67.5	12,00	11,37	8,18	7,01	2,92	105,16	101,60	31,75	1,02	0.0°	0.0°	GC..050102	CT15	T6
2831411	CSPM712255R	95.0	12,00	9,14	6,60	5,59	2,29	101,60	101,60	25,40	1,02	0.0°	0.0°	GC..050102	CT15	T6
left hand																
2831394	CSPM71225225L	67.5	12,00	10,16	6,60	6,60	3,30	104,00	101,60	25,40	1,02	0.0°	0.0°	GPHW050102	CT15	T6
2831378	CSPM81232225L	67.5	12,00	11,38	8,18	7,01	2,92	104,10	101,60	31,75	1,02	0.0°	0.0°	GC..050102	CT15	T6
2831405	CSPM712255L	95.0	12,00	9,14	6,60	5,59	2,29	101,60	101,60	25,40	1,02	0.0°	0.0°	GP..050102	CT15	T6
2831383	CSPM812325L	95.0	12,00	10,74	8,20	6,38	2,27	101,60	101,60	31,75	1,02	0.0°	0.0°	GP..050102	CT15	T6





NOTE: KRI shown as 95°.

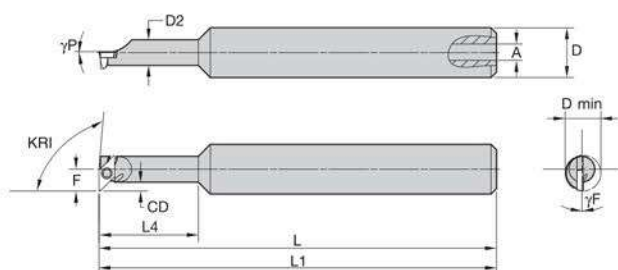


NOTE: KRI shown as 67,5°.

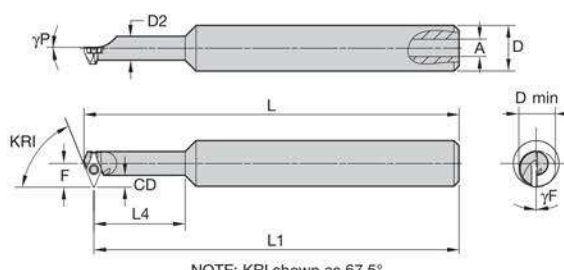
CCPM

order number	catalogue number	KRI	D	D min	F	CD	L	L1	A	γF°	γP°	gage insert	insert screw	Torx
right hand														
2831010	CCPM6152225R	67.5	6,00	10,16	6,60	3,51	154,61	152,40	1,19	0.0°	0.0°	GP..050102	CT15	T6
2831020	CCPM61525R	95.0	6,00	9,14	5,59	2,49	152,40	152,40	1,19	0.0°	0.0°	GP..050102	CT15	T6
left hand														
2831004	CCPM6152225L	67.5	6,00	10,15	6,60	3,51	152,61	152,40	1,19	0.0°	0.0°	GP..050102	CT15	T6
2830980	CCPM8152225L	67.5	8,00	11,38	7,01	2,92	155,96	152,40	2,36	0.0°	0.0°	GP..050102	CT15	T6
3897899	CCPM61525L	95.0	6,00	9,14	5,59	2,49	152,40	152,40	1,19	0.0°	0.0°	GP..050102	CT15	T6
3896022	CCPM81525L	95.0	8,00	10,74	6,38	2,28	152,40	152,40	2,23	0.0°	0.0°	GP..050102	CT15	T6

Clamping System S • Steel



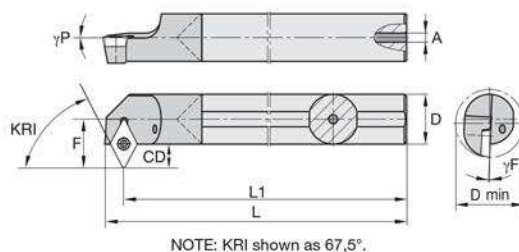
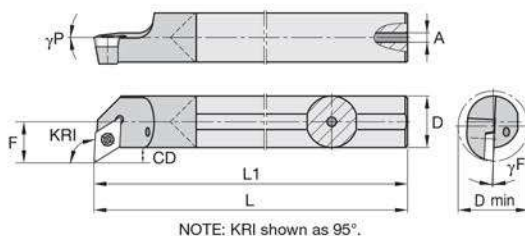
NOTE: KRI shown as 95°.



NOTE: KRI shown as 67,5°.

GSPM

order number	catalogue number	KRI	D	D min	D2	F	CD	L	L1	L4	A	γF°	γP°	gage insert	insert screw	Torx
right hand																
3518694	GSPM1316515R	95.0	16,00	16,00	12,95	9,50	3,02	127,00	127,00	50,80	2,49	0.0°	0.0°	GC..060202	GT21	T7
left hand																
3897894	GSPM101638225L	67.5	16,00	13,72	9,78	8,59	3,70	105,01	101,60	38,10	2,49	0.0°	0.0°	GC..060202	GT21	T7
3897896	GSPM131651225L	67.5	16,00	16,89	12,95	10,16	3,68	130,90	127,00	50,80	2,49	0.0°	0.0°	GC..060202	GT21	T7
3897895	GSPM1016385L	95.0	16,00	13,08	9,78	7,93	3,04	114,30	114,30	38,10	2,49	0.0°	0.0°	GC..060202	GT21	T7
3896052	GSPM1316515L	95.0	16,00	16,00	12,95	9,50	3,02	127,00	127,00	50,80	2,49	0.0°	0.0°	GC..060202	GT21	T7



■ GCPM

order number	catalogue number	KRI	D	D min	F	CD	L	L1	A	γF°	γP°	gage insert	insert screw	Torx
right hand														
2827656	GCPM10254225R	67.5	10,00	14,20	8,81	3,68	258,47	254,00	3,20	0.0°	0.0°	GC..060202	GT21	T7
3897906	GCPM12254225R	67.5	12,00	16,18	9,80	3,71	257,86	254,00	4,70	0.0°	0.0°	GC..060202	GT21	T7
3896073	GCPM16254225R	67.5	16,00	20,09	11,76	3,67	258,01	254,00	5,51	0.0°	0.0°	GC..060202	GT21	T7
3897904	GCPM102545R	95.0	10,00	13,54	8,15	3,06	254,00	254,00	3,20	0.0°	0.0°	GC..060202	GT21	T7
3759184	GCPM122545R	95.0	12,00	15,52	9,14	3,05	254,00	254,00	4,70	0.0°	0.0°	GC..060202	GT21	T7
3897909	GCPM162545R	95.0	16,00	19,43	11,10	3,01	254,00	254,00	5,51	0.0°	0.0°	GC..060202	GT21	T7
left hand														
3897903	GCPM10254225L	67.5	10,00	14,20	8,81	3,72	257,49	254,00	3,20	0.0°	0.0°	GC..060202	GT21	T7
3897905	GCPM12254225L	67.5	12,00	16,18	9,80	3,71	257,86	254,00	4,70	0.0°	0.0°	GC..060202	GT21	T7
3897908	GCPM16254225L	67.5	16,00	20,07	11,76	3,67	258,02	254,00	5,51	0.0°	0.0°	GC..060202	GT21	T7
3782377	GCPM102545L	95.0	10,00	13,54	8,15	3,02	254,00	254,00	3,20	0.0°	0.0°	GC..060202	GT21	T7
3897907	GCPM122545L	95.0	12,00	15,52	9,14	3,05	254,00	254,00	4,70	0.0°	0.0°	GC..060202	GT21	T7
2827644	GCPM162545L	95.0	16,00	19,43	11,10	3,01	254,00	254,00	5,51	0.0°	0.0°	GC..060202	GT21	T7

