



ANTI-VIBRATION BARS

Bar code example

1	2	3	4	5	6
M	C	S	20	05D	100

Cartridge code example

13	14	7	8	9	10	11	12
MC	20	S	C	L	C	R	09

Solid bar code example

1	2	3	4	5	7	8	9	10	11	12
M	D	S	10	06D	S	C	L	C	R	06

1 – MEGATEC
M
MEGATEC anti-vibration bar

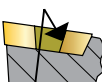
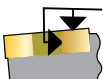
2 – Damper	
C	D
classic, no damper	with damper

3 – Shank type	
S	C
steel shank	shank with carbide core

4 – Shank diameter								
10	12	16	20	25	32	40	50	60
Solid bars		M16 system	M20 system			M40 system		

5 – Work Length to Diameter					
05D	06D	08D	10D	12D	14D
MCS	MDS			MDC	

6 – MAX tool length
100
MAX tool overhang L1

7 – Insert clamping type	
C  Screw	D  Double clamp and screw

8 – Insert shape				
C 	D 	T 	V 	W 

9 – Approach angle				
 L	 N	 Q	 U	X Special

10 – Insert clearance angle	
 C = 7°	 N = 0°

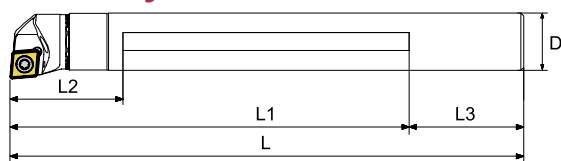
11 – Hand edge	
 L	 R

12 – Length of cutting edge				
C 	D 	T 	V 	W 

13 – MEGATEC CARTRIDGE
MC
MEGATEC cartridge

14 – System size		
M16	M20	M40

M20 system. MCS..-05D-..



MCS20-05D-100
bar shown



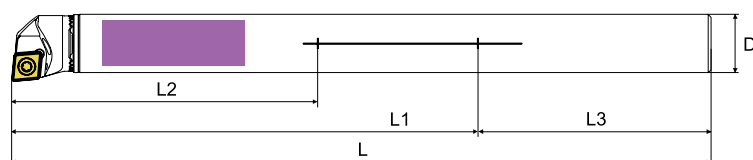
Through coolant

Ordering code	D, mm	Boring ratio	L1, mm	L2, mm	L3, mm	L, mm	Coolant connection thread, G
MCS20-05D-100	20	5 x D	100	40	40	180	G 1/4
MCS25-05D-130	25	5 x D	130	45	45	225	G 1/4
MCS32-05D-172	32	5 x D	172	52	64	288	G 1/4

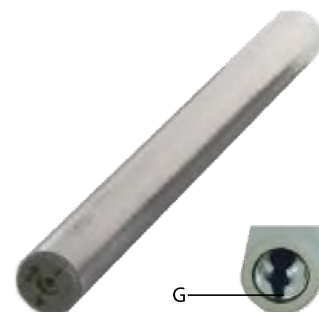
Spare parts

O-ring for M20	Screw	Hex key
		
CSC72	VB0308	CBR25

M20 system. MDS..-08D-..



MDS20-08D-160
bar shown



Through coolant



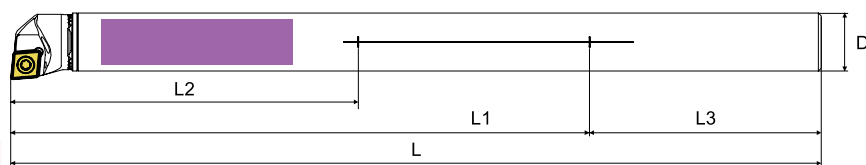
Damper

Ordering code	D, mm	Boring ratio	L1, mm	L2, mm	L3, mm	L, mm	Coolant connection thread, G
MDS20-08D-160	20	8 x D	160	105	80	240	G 1/4
MDS25-08D-200	25	8 x D	200	120	100	300	G 1/4
MDS32-08D-256	32	8 x D	256	142	128	384	G 3/8

Spare parts

O-ring for M20	Screw	Hex key
		
CSC72	VB0308	CBR25

M20 system. MDS..-10D-..



MDS20-10D-200
bar shown



Through coolant

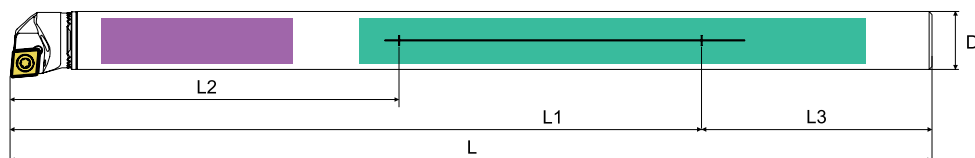


Damper

Ordering code	D, mm	Boring ratio	L1, mm	L2, mm	L3, mm	L, mm	Coolant connection thread, G
MDS20-10D-200	20	10 x D	200	120	80	280	G 1/4
MDS25-10D-250	25	10 x D	250	140	100	350	G 1/4
MDS32-10D-320	32	10 x D	320	165	128	448	G 3/8

Spare parts		
O-ring for M20	Screw	Hex key
		
CSC72	VB0308	CBR25

M20 system. MDC..-12D-..



MDC20-12D-240
bar shown



Through coolant



Damper



Carbide core

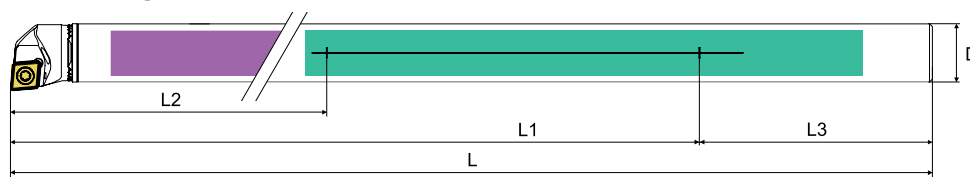


Do not cut

Ordering code	D, mm	Boring ratio	L1, mm	L2, mm	L3, mm	L, mm	Coolant connection thread, G
MDC20-12D-240	20	12 x D	240	135	80	320	G 1/8
MDC25-12D-300	25	12 x D	300	159	100	400	G 1/4
MDC32-12D-384	32	12 x D	384	188	128	512	G 1/4

Spare parts		
O-ring for M20	Screw	Hex key
		
CSC72	VB0308	CBR25

M20 system. MDC..-14D-..



MDC20-14D-280
bar shown



Through coolant



Damper



Carbide core

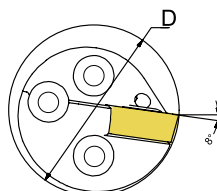
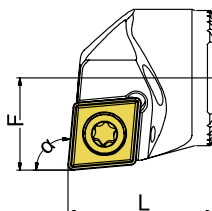


Do not cut

Ordering code	D, mm	Boring ratio	L1, mm	L2, mm	L3, mm	L, mm	Coolant connection thread, G
MDC20-14D-280	20	14 x D	280	152	80	360	G 1/8
MDC25-14D-350	25	14 x D	350	181	100	450	G 1/4
MDC32-14D-448	32	14 x D	448	216	128	576	G 1/4

Spare parts		
O-ring for M20	Screw	Hex key
		
CSC72	VB0308	CBR25

M20 system. MC20-SCLCR/L-09



MC20-SCLCR-09
cartridge shown

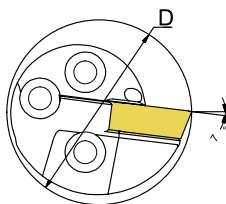
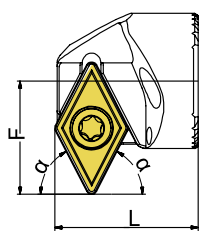


Through coolant

Ordering code	Bar	D, mm	L, mm	F, mm	α	Insert type
MC20-SCLCR/L-09	M..20-...-...	24	20,5	13	13°	CC..09T3..
	M..25-...-...	29				
	M..32-...-...	36				

Spare parts		
O-ring for M20	Screw	Key
		
CSC72	VB0308	CBR25

M20 system. MC20-SDNCR/L-11



MC20-SDNCR-11
cartridge shown

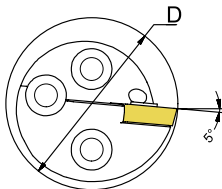
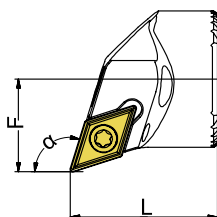


Through coolant

Ordering code	Bar	D, mm	L, mm	F, mm	α	Insert type
MC20-SDNCR/L-11	M..20-...-	26	20,5	16	62,5°	DC..11T3..
	M..25-...-	31				
	M..32-...-	38				

Spare parts		
O-ring for M20	Screw	Key
		
CSC72	TX3509	BTX15

M20 system. MC20-SDQCR/L-07



MC20-SDQCR-07
cartridge shown

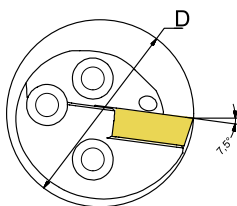
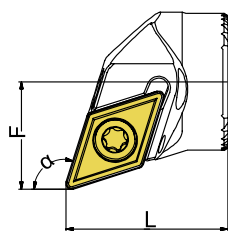


Through coolant

Ordering code	Bar	D, mm	L, mm	F, mm	α	Insert type
MC20-SDQCR/L-07	M..20-...-	24	20,5	13	107,5°	DC..0702..
	M..25-...-	29				
	M..32-...-	36				

Spare parts		
O-ring for M20	Screw	Key
		
CSC72	TX2506	BTX08

M20 system. MC20-SDQCR/L-11



MC20-SDQCR-11
cartridge shown

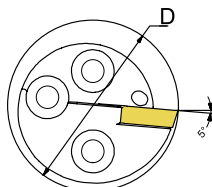
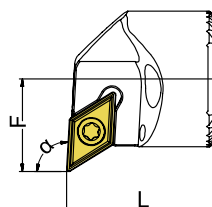


Through coolant

Ordering code	Bar	D, mm	L, mm	F, mm	α	Insert type
MC20-SDQCR/L-11	M..20-...-	26	22,5	15	107,5°	DC..11T3..
	M..25-...-	31				
	M..32-...-	38				

Spare parts		
O-ring for M20	Screw	Key
		
CSC72	TX3509	BTX15

M20 system. MC20-SDUCR/L-07



MC20-SDUCR-07
cartridge shown

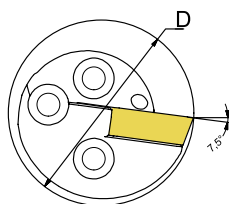
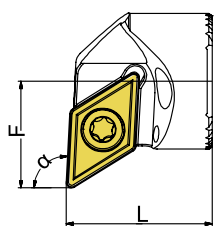


Through coolant

Ordering code	Bar	D, mm	L, mm	F, mm	α	Insert type
MC20-SDUCR/L-07	M..20-...-	24	20,5	13	93°	DC..0702..
	M..25-...-	29				
	M..32-...-	36				

Spare parts		
O-ring for M20	Screw	Key
		
CSC72	TX2506	BTX08

M20 system. MC20-SDUCR/L-11



MC20-SDUCR-11
cartridge shown

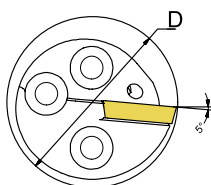
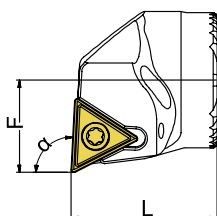


Through coolant

Ordering code	Bar	D, mm	L, mm	F, mm	α	Insert type
MC20-SDUCR/L-11	M..20-...-...	26	20,5	15	93°	DC..11T3..
	M..25-...-...	31				
	M..32-...-...	38				

Spare parts		
O-ring for M20	Screw	Key
		
CSC72	TX3509	BTX15

M20 system. MC20-STUCR/L-11



MC20-STUCR-11
cartridge shown

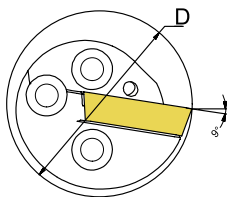
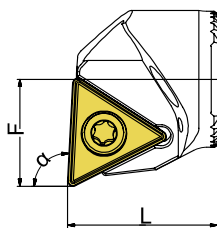


Through coolant

Ordering code	Bar	D, mm	L, mm	F, mm	α	Insert type
MC20-STUCR/L-11	M..20-...-...	24	20,5	13	93°	TC..1102..
	M..25-...-...	29				
	M..32-...-...	36				

Spare parts		
O-ring for M20	Screw	Key
		
CSC72	TX2506	BTX08

M20 system. MC20-STUCR/L-16



MC20-STUCR-16
cartridge shown

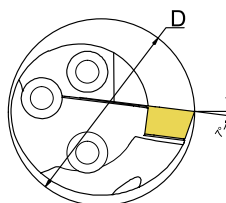
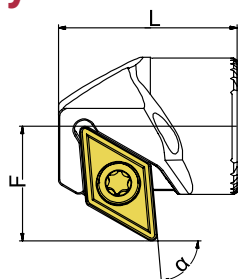


Through coolant

Ordering code	Bar	D, mm	L, mm	F, mm	α	Insert type
MC20-STUCR/L-16	M..20-...-	26				
	M..25-...-	31	21	15	93°	TC..16T3..
	M..32-...-	38				

Spare parts		
O-ring for M20	Screw	Key
		
CSC72	TX3509	BTX15

M20 system. MC20-SDXCR/L-11



MC20-SDXCR-11
cartridge shown

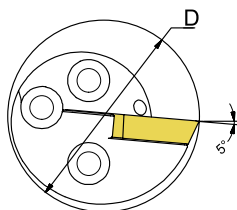
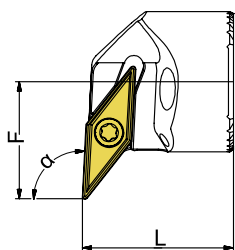


Through coolant

Ordering code	Bar	D, mm	L, mm	F, mm	α	Insert type
MC20-SDXCR/L-11	M..20-...-	26				
	M..25-...-	31	25	16	85°	DC..11T3..
	M..32-...-	38				

Spare parts		
O-ring for M20	Screw	Key
		
CSC72	TX3509	BTX15

M20 system. MC20-SVUCR/L-11



MC20-SVUCR-11
cartridge shown

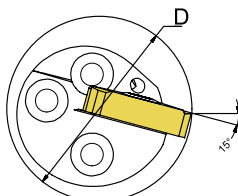
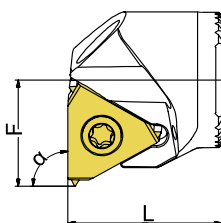


Through coolant

Ordering code	Bar	D, mm	L, mm	F, mm	α	Insert type
MC20-SVUCR/L-11	M..20-...-	26	20,5	16	93°	VC..1103..
	M..25-...-	31				
	M..32-...-	38				

Spare parts		
O-ring for M20	Screw	Key
		
CSC72	TX2506	BTX08

M20 system. MC20-SNR/L-3



MC20-SNR-3
cartridge shown

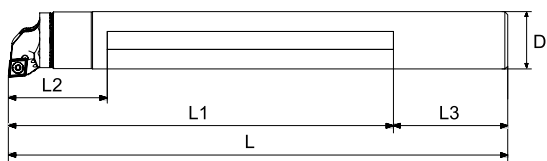


Through coolant

Ordering code	Bar	D, mm	L, mm	F, mm	α	Insert type
MC20-SNR/L-3	M..20-...-	26	21,7	15	90°	3NR...
	M..25-...-	31				
	M..32-...-	38				

Spare parts		
O-ring for M20	Screw	Key
		
CSC72	TX3509	BTX15

M40 system. MCS..-05D-..



MCS40-05D-280
bar shown

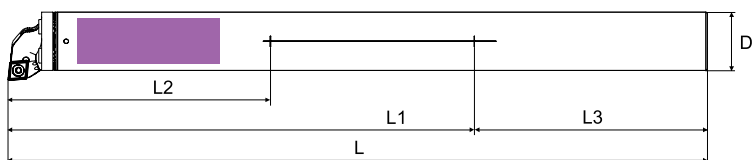


Through coolant

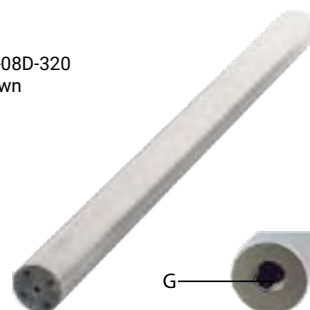
Ordering code	D, mm	Boring ratio	L1, mm	L2, mm	L3, mm	L, mm	Coolant connection thread, G
MCS40-05D-280	40	5 x D	280	72	80	360	G 1/2
MCS50-05D-350	50	5 x D	350	82	100	450	G 1/2
MCS60-05D-420	60	5 x D	420	92	120	540	G 1/2

Spare parts	
Screw	Hex key
	
VB0612	CBR50

M40 system. MDS..-08D-..



MDS40-08D-320
bar shown



Through coolant



Damper

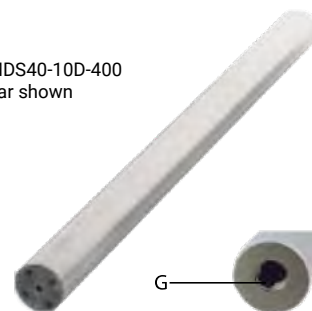
Ordering code	D, mm	Boring ratio	L1, mm	L2, mm	L3, mm	L, mm	Coolant connection thread, G
MDS40-08D-320	40	8 x D	320	180	160	480	G 1/2
MDS50-08D-400	50	8 x D	400	215	200	600	G 1/2
MDS60-08D-480	60	8 x D	480	247	240	720	G 1/2

Spare parts	
Screw	Hex key
	
VB0612	CBR50

M40 system. MDS..-10D-..



MDS40-10D-400
bar shown



Through coolant



Damper

Ordering code	D, mm	Boring ratio	L1, mm	L2, mm	L3, mm	L, mm	Coolant connection thread, G
MDS40-10D-400	40	10 x D	400	200	160	560	G 1/2
MDS50-10D-500	50	10 x D	500	245	200	700	G 1/2
MDS60-10D-600	60	10 x D	600	280	240	840	G 1/2

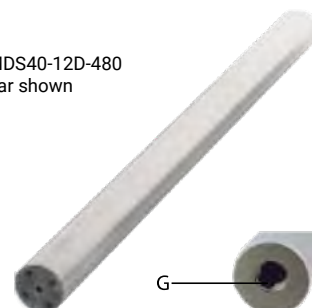
Spare parts

Screw	Hex key
	
VB0612	CBR50

M40 system. MDS..-12D-..



MDS40-12D-480
bar shown



Through coolant



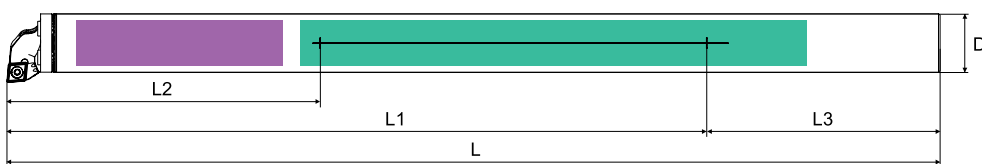
Damper

Ordering code	D, mm	Boring ratio	L1, mm	L2, mm	L3, mm	L, mm	Coolant connection thread, G
MDS40-12D-480	40	12 x D	480	215	160	640	G 1/2
MDS50-12D-600	50	12 x D	600	270	200	800	G 1/2
MDS60-12D-720	60	12 x D	720	325	240	960	G 1/2

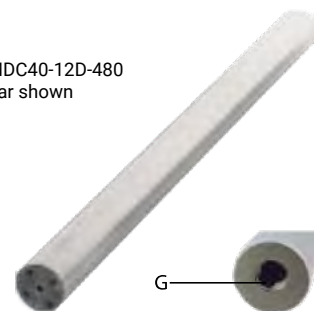
Spare parts

Screw	Hex key
	
VB0612	CBR50

M40 system. MDC..-12D-..



MDC40-12D-480
bar shown



Through coolant



Damper



Carbide core



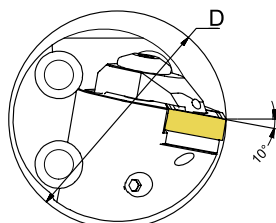
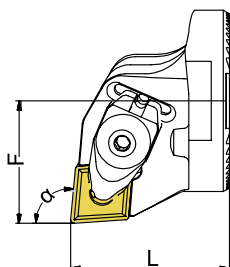
Do not cut

Ordering code	D, mm	Boring ratio	L1, mm	L2, mm	L3, mm	L, mm	Coolant connection thread, G
MDC40-12D-480	40	12 x D	480	215	160	640	G 1/2
MDC50-12D-600	50	12 x D	600	270	200	800	G 1/2
MDC60-12D-720	60	12 x D	720	325	240	960	G 1/2

Spare parts

Screw	Hex key
VB0612	CBR50

M40 system. MC40-DCLNR/L-12



MC40-DCLNR-12
cartridge shown



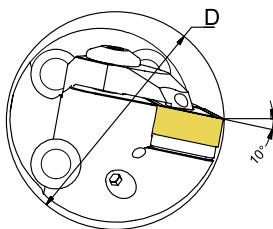
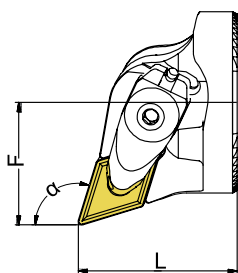
Through coolant

Ordering code	Bar	D, mm	L, mm	F, mm	α	Insert type
MC40-DCLNR/L-12	M..40-...-	48	35	27	95°	CN..1204..
	M..50-...-	58				
	M..60-...-	68				

Spare parts

Shim	Shim Screw	O-ring for clamp	Clamp	Clamp screw	O-ring for M40	Centering pin	Hex key
S8012P	VD0408	OR-SET	DT21R/L	V6017	OR-CS40	DM-05-000	CBR30

M40 system. MC40-DDQNR/L-15



MC40-DDQNR-15
cartridge shown



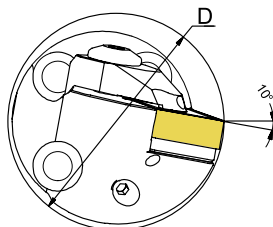
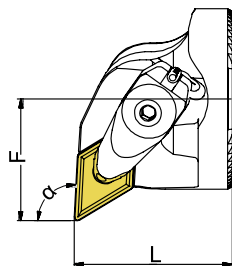
Through coolant

Ordering code	Bar	D, mm	L, mm	F, mm	α	Insert type
MC40-DDQNR/L-15	M..40-...-	48	35	27	107,5°	DN..1506..
	M..50-...-	58				
	M..60-...-	68				

Spare parts

Shim	Shim Screw	O-ring for clamp	Clamp	Clamp screw	O-ring for M40	Centering pin	Hex key
							
S5515D	VD0408	OR-SET	DT22R/L	V6017	OR-CS40	DM-05-000	CBR30

M40 system. MC40-DDUNR/L-15



MC40-DDUNR-15
cartridge shown



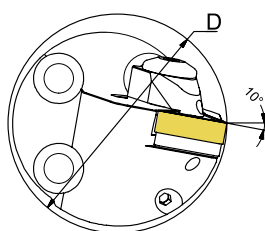
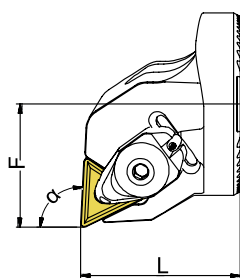
Through coolant

Ordering code	Bar	D, mm	L, mm	F, mm	α	Insert type
MC40-DDUNR/L-15	M..40-...-	48	35	27	93°	DN..1506..
	M..50-...-	58				
	M..60-...-	68				

Spare parts

Shim	Shim Screw	O-ring for clamp	Clamp	Clamp screw	O-ring for M40	Centering pin	Hex key
							
S5515D	VD0408	OR-SET	DT22N	V6017	OR-CS40	DM-05-000	CBR30

M40 system. MC40-DTUNR/L-16



MC40-DTUNR-16
cartridge shown

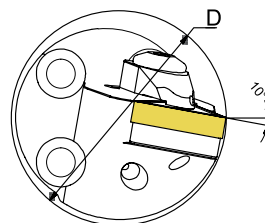
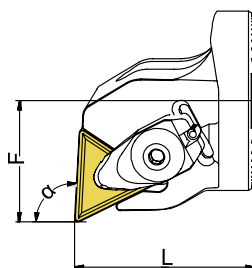


Through coolant

Ordering code	Bar	D, mm	L, mm	F, mm	α	Insert type
MC40-DTUNR/L-22	M..40-...-	48	35	27	107,5°	TN..1604..
	M..50-...-	58				
	M..60-...-	68				

Spare parts							
Shim	Shim Screw	O-ring for clamp	Clamp	Clamp screw	O-ring for M40	Centering pin	Hex key
S6016D	VD0308	OR-SET	DT23R/L	V6017	OR-CS40	DM-05-000	CBR30

M40 system. MC40-DTUNR/L-22



MC40-DTUNR-22
cartridge shown

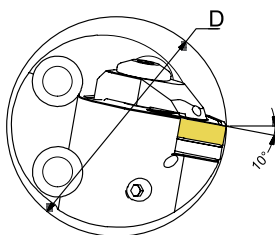
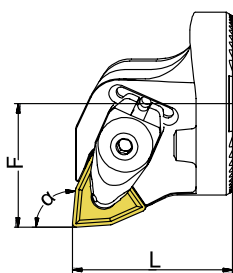


Through coolant

Ordering code	Bar	D, mm	L, mm	F, mm	α	Insert type
MC40-DTUNR/L-22	M..40-...-	48	40	27	93°	TN..22..
	M..50-...-	58				
	M..60-...-	68				

Spare parts							
Shim	Shim Screw	O-ring for clamp	Clamp	Clamp screw	O-ring for M40	Centering pin	Hex key
S6022D	VD0408	OR-SET	DT21R/L	V6017	OR-CS40	DM-05-000	CBR30

M40 system. MC40-DWLNR/L-08



MC40-DWLNR-08
cartridge shown

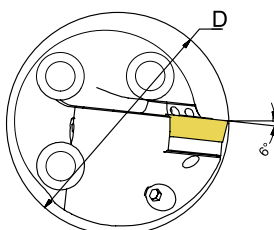
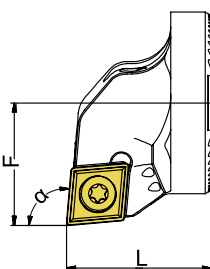


Through coolant

Ordering code	Bar	D, mm	L, mm	F, mm	α	Insert type
MC40-DWLNR/L-08	M..40-...-	48	35	27	95°	WN..0804..
	M..50-...-	58				
	M..60-...-	68				

Spare parts							
Shim	Shim Screw	O-ring for clamp	Clamp	Clamp screw	O-ring for M40	Centering pin	Hex key
							
S8008P	VD0408B	OR-SET	DT21R/L	V6017	OR-CS40	DM-05-000	CBR30

M40 system. MC40-SCLCR/L-12



MC40-SCLCR-12
cartridge shown

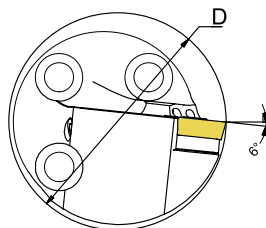
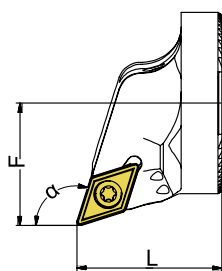


Through coolant

Ordering code	Bar	D, mm	L, mm	F, mm	α	Insert type
MC40-SCLCR/L-12	M..40-...-	49	32	27	95°	CC..1204..
	M..50-...-	59				
	M..60-...-	69				

Spare parts					
Shim	Shim Screw	Screw	O-ring for M40	Centering pin	Hex key
					
S8012P	B0609	TX4014	OR-CS40	DM-05-000	BTX15

M40 system. MC40-SDQCR/L-11



MC40-SDQCR-11
cartridge shown

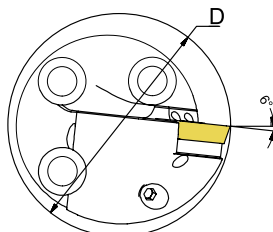
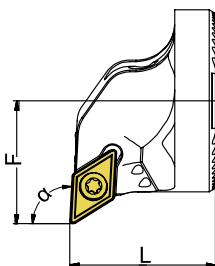


Through coolant

Ordering code	Bar	D, mm	L, mm	F, mm	α	Insert type
MC40-SDQCR/L-11	M..40-...-	48	32	27	107,5°	DC..11T3..
	M..50-...-	58				
	M..60-...-	68				

Spare parts					
Shim	Shim Screw	Screw	O-ring for M40	Centering pin	Hex key
S5511P	B0509	TX3513	OR-CS40	DM-05-000	BTX15

M40 system. MC40-SDUCR/L-11



MC40-SDUCR-11
cartridge shown

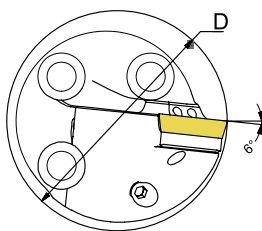
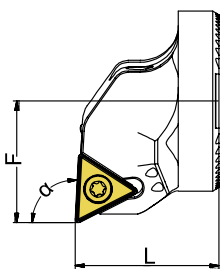


Through coolant

Ordering code	Bar	D, mm	L, mm	F, mm	α	Insert type
MC40-SDUCR/L-11	M..40-...-	49	32	27	93°	DC..11T3..
	M..50-...-	59				
	M..60-...-	69				

Spare parts					
Shim	Shim Screw	Screw	O-ring for M40	Centering pin	Hex key
S5511P	B0509	TX3513	OR-CS40	DM-05-000	BTX15

M40 system. MC40-STUCR/L-16



MC40-STUCR-16
cartridge shown



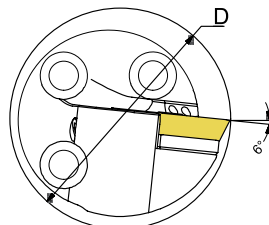
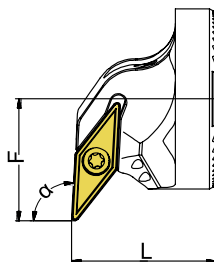
Through coolant

Ordering code	Bar	D, mm	L, mm	F, mm	α	Insert type
MC40-STUCR/L-16	M..40-...-	49	32	27	93°	TC..16T3..
	M..50-...-	59				
	M..60-...-	69				

Spare parts

Shim	Shim Screw	Screw	O-ring for M40	Centering pin	Hex key
					
S6016P	B0509	TX3513	OR-CS40	DM-05-000	BTX15

M40 system. MC40-SVUCR/L-16



MC40-SVUCR-16
cartridge shown



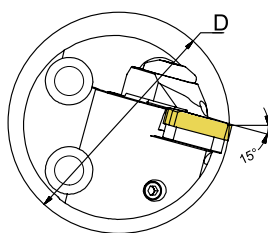
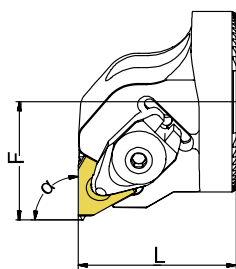
Through coolant

Ordering code	Bar	D, mm	L, mm	F, mm	α	Insert type
MC40-SVUCR/L-16	M..40-...-	49	32	27	93°	VC..1604..
	M..50-...-	59				
	M..60-...-	69				

Spare parts

Shim	Shim Screw	Screw	O-ring for M40	Centering pin	Hex key
					
S3516P	B0509	TX3513	OR-CS40	DM-05-000	BTX15

M40 system. MC40-DNR/L-3



MC40-DNR-3
cartridge shown

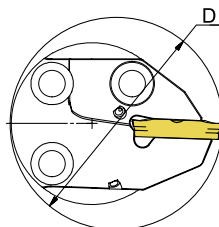
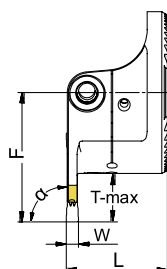


Through coolant

Ordering code	Bar	D, mm	L, mm	F, mm	α	Insert type
MC40-DNR/L-3	M..40-...-	49	35	26	90°	3 NR..
	M..50-...-	59				
	M..60-...-	69				

Spare parts							
Shim	Shim Screw	O-ring for clamp	Clamp	Clamp screw	O-ring for M40	Centering pin	Hex key
S6016R	TX4007	OR-SET	DT24R/L	V6017	OR-CS40	DM-05-000	CBR30

M40 system. MC40-MGIR/L-2E-11



MC40-MGIR-2E-11
cartridge shown

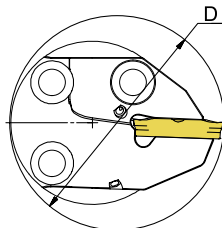
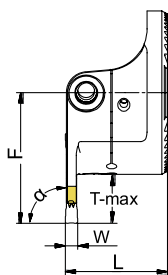


Through coolant

Ordering code	Bar	D, mm	L, mm	F, mm	α	Insert width W, mm	MAX Cutting depth T, mm	Insert seat size
MC40-MGIR/L-2E-11	M..40-...-	52,5	25	32	90°	2.0	11	E*
	M..50-...-	65,5						
	M..60-...-	72,5						

Spare parts			
Screw	O-ring for M40	Centering pin	Hex key
TX3513	OR-CS40	DM-05-000	BTX15

M40 system. MC40-MGIR/L-3G-11



MC40-MGIR-3G-11
cartridge shown



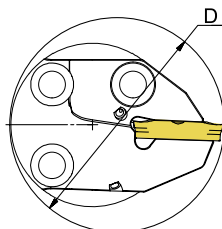
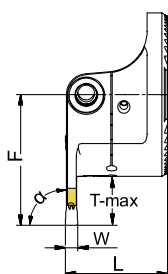
Through coolant

Ordering code	Bar	D, mm	L, mm	F, mm	α	Insert width W, mm	MAX Cutting depth T, mm	Insert seat size
MC40-MGIR/L-3G-11	M..40-...-...	52,5						
	M..50-...-...	65,5	25	32	90°	3,0	11	G*
	M..60-...-...	72,5						

Spare parts

Screw	O-ring for M40	Centering pin	Hex key
			
VB0518	OR-CS40	DM-05-000	CBR40

M40 system. MC40-MGIR/L-4H-11



MC40-MGIR-4H-11
cartridge shown



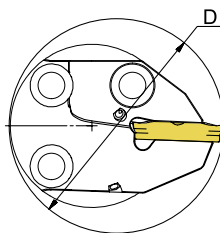
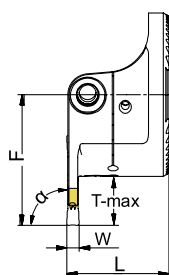
Through coolant

Ordering code	Bar	D, mm	L, mm	F, mm	α	Insert width W, mm	MAX Cutting depth T, mm	Insert seat size
MC40-MGIR/L-4H-11	M..40-...-...	52,5						
	M..50-...-...	65,5	25	32	90°	4,0	11	H*
	M..60-...-...	72,5						

Spare parts

Screw	O-ring for M40	Centering pin	Hex key
			
VB0518	OR-CS40	DM-05-000	CBR40

M40 system. MC40-MGIR/L-5J-11



MC40-MGIR-5J-11
cartridge shown

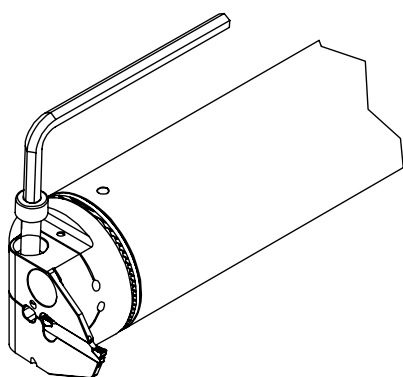


Through coolant

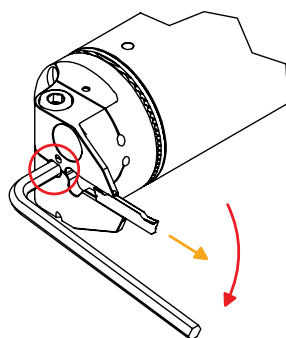
Ordering code	Bar	D, mm	L, mm	F, mm	α	Insert width W, mm	MAX Cutting depth T, mm	Insert seat size
MC40-MGIR/L-5J-11	M..40-...-...	52,5						
	M..50-...-...	65,5	25	32	90°	5,0	11	J*
	M..60-...-...	72,5						

Spare parts			
Screw	O-ring for M40	Centering pin	Hex key
			
VB0518	OR-CS40	DM-05-000	CBR40

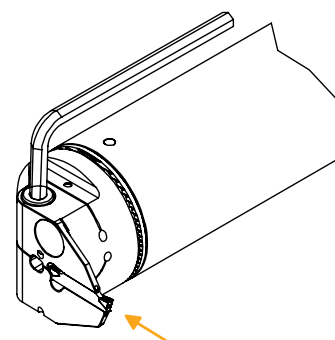
Mounting and Replacing Inserts in MGIR cartridges



Unlock the top screw
using the key provided.



Place the same key in
the "pocket." Turn and
hold the key to loosen
the pocket. Remove and
replace the insert



Now remove the key from
the pocket and secure the
insert by firmly locking the
top screw.

M16 system. MDS16-06D-96



MDS16-06D-96
bar shown



Through coolant

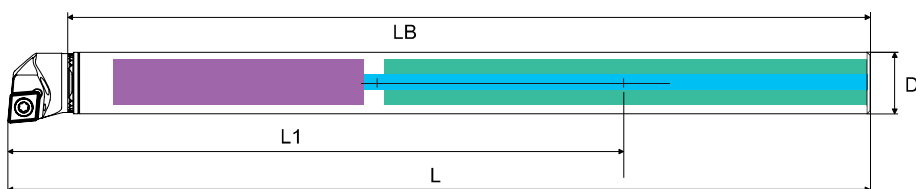


Damper

Ordering code	D, mm	Boring ratio	L1, mm	L, mm	LB, mm	Cartridge type
MDS16-06D-96	16	6 x D	96	160	140	MC16-SCLCR/L-06
						MC16-SDUCR/L-07
						MC16-SDXCR/L-07
						MC16-STUCR/L-11

Spare parts	
Screw	Key
	
TX3009	BTX09

M16 system. MDC16-08D-.., MDC16-10D-..



MDC16-08D-128
bar shown



Through coolant



Damper



Carbide core

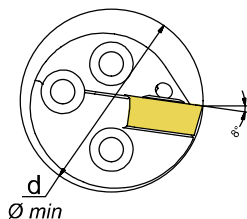
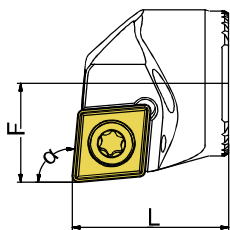


Do not cut

Ordering code	D, mm	Boring ratio	L1, mm	L, mm	LB, mm	Cartridge type
MDC16-08D-128	16	8 x D	128	192	172	MC16-SCLCR/L-06
						MC16-SDUCR/L-07
MDC16-10D-160		10 x D	160	224	204	MC16-SDXCR/L-07
						MC16-STUCR/L-11

Spare parts	
Screw	Key
	
TX3009	BTX09

M16 system. RH16-SCLCR/L-06



RH16-SCLCR-06
cartridge shown

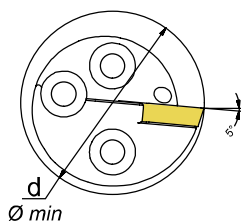
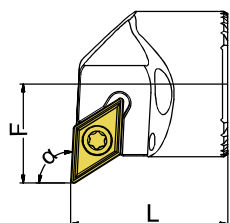


Through coolant

Ordering code	Bar	D min, mm	L, mm	F, mm	α	Insert size
RH16-SCLCR/L-06	M..16-...-...	20	20	11	93°	CC..0602..

Spare parts	
Screw	Key
	
TX2506	BTX08

M16 system. RH16-SDUCR/L-07



RH16-SDUCR-07
cartridge shown

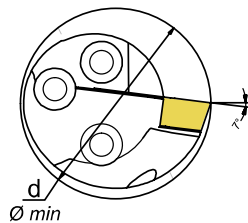
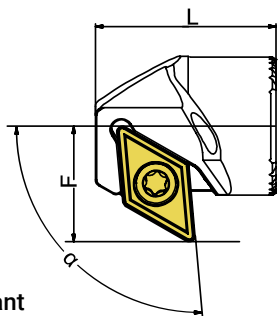


Through coolant

Ordering code	Bar	D min, mm	L, mm	F, mm	α	Insert size
RH16-SDUCR/L-07	M..16-...-...	20	20	11	93°	DC..0702..

Spare parts	
Screw	Key
	
TX2506	BTX08

M16 system. RH16-SDXCR/L-07



RH16-SDXCR-07
bar shown

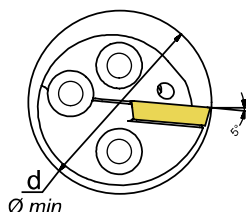
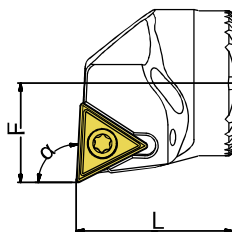


Through coolant

Ordering code	Bar	D min, mm	L, mm	F, mm	α	Insert size
RH16-SDXCR/L-07	M..16-...-...	22	26,6	13	93°	DC..0702..

Spare parts	
Screw	Key
	
TX2506	BTX08

M16 system. RH16-STUCR/L-11



RH16-STUCR-11
bar shown

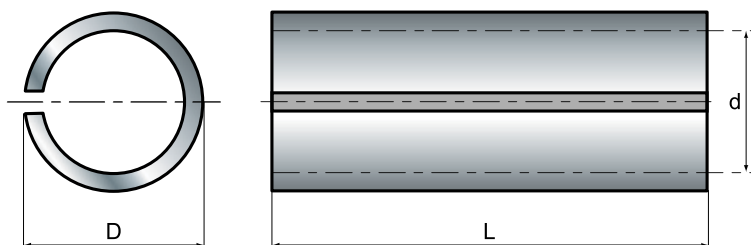


Through coolant

Ordering code	Bar	D min, mm	L, mm	F, mm	α	Insert size
RH16-STUCR/L-11	M..16-...-...	22	26,6	13	93°	TC..1102

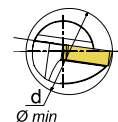
Spare parts	
Screw	Key
	
TX2506	BTX08

Tool Holder Bushing for M20 and M40 bars



Ordering code	External diameter D, mm	Internal diameter d, mm	Length L, mm
BDT 2520-080	25	20	80
BDT 3225-100	32	25	100
BDT 4032-128	40	32	128
BDT 5040-160	50	40	160
BDT 6050-200	60	50	200

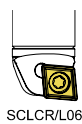
MDS10-06D-..



No through
coolant



Damper



SCLCR/L06



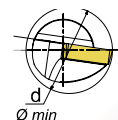
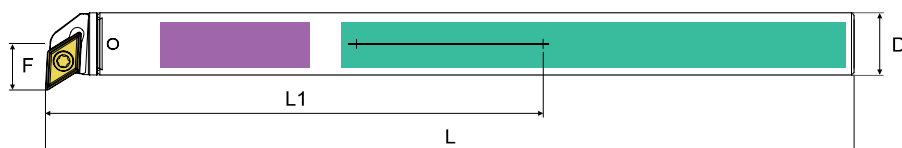
SDUCR/L07



STUCR/L09

Ordering code	D, mm	Boring ratio	L1, mm	L, mm	Insert type	F, mm	Ø d min, mm	Spare parts	
								Screw	Key
MDS10-06D-SCLCR/L06	10	6 x D	60	110	CCMT06..	5,5	12	TX2506	BTX08
MDS10-06D-SDUCR/L07					DCMT07..	8	14	TX2506	BTX08
MDS10-06D-STUCR/L09					TCMT09..	6	12	TX2207	BTX07

MDC10-08D-.., MDC10-10D-..



No through
coolant



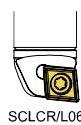
Damper



Do not cut



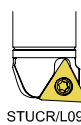
Carbide core



SCLCR/L06



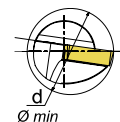
SDUCR/L07



STUCR/L09

Ordering code	D, mm	Boring ratio	L1, mm	L, mm	Insert type	F, mm	Ø d min, mm	Spare parts	
								Screw	Key
MDC10-08D-SCLCR/L06	10	8 x D	80	130	CCMT06..	5,5	12	TX2506	BTX08
MDC10-08D-SDUCR/L07					DCMT07..	8	14	TX2506	BTX08
MDC10-08D-STUCR/L09					TCMT09..	6	12	TX2207	BTX07
MDC10-10D-SCLCR/L06	10	10 x D	100	150	CCMT06..	5,5	12	TX2506	BTX08
MDC10-10D-SDUCR/L07					DCMT07..	8	14	TX2506	BTX08
MDC10-10D-STUCR/L09					TCMT09..	6	12	TX2207	BTX07

MDS12-06D-..



MDS12-06D-SDUCR07
bar shown



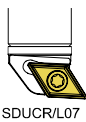
No through
coolant



Damper



SCLCR/L06



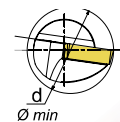
SDUCR/L07



STUCR/L09

Ordering code	D, mm	Boring ratio	L1, mm	L, mm	Insert type	F, mm	Ø d min, mm	Spare parts	
								Screw	Key
MDS12-06D-SCLCR/L06	12	6 x D	72	132	CCMT06..	6,5	14	TX2506	BTX08
MDS12-06D-SDUCR/L07					DCMT07..	9	16	TX2506	BTX08
MDS12-06D-STUCR/L09					TCMT09..	8	15	TX2207	BTX07

MDC12-08D-..



MDC12-08D-SDUCR/L07
bar shown



No through
coolant



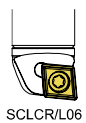
Damper



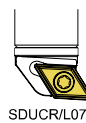
Do not cut



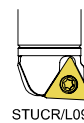
Carbide core



SCLCR/L06



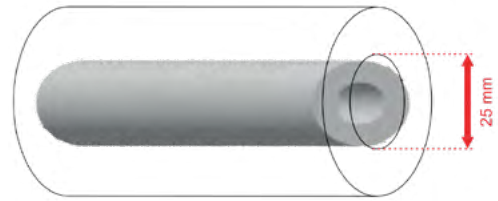
SDUCR/L07



STUCR/L09

Ordering code	D, mm	Boring ratio	L1, mm	L, mm	Insert type	F, mm	Ø d min, mm	Spare parts	
								Screw	Key
MDC12-08D-SCLCR/L06	12	8 x D	96	156	CCMT06..	6,5	14	TX2506	BTX08
MDC12-08D-SDUCR/L07					DCMT07..	9	16	TX2506	BTX08
MDC12-08D-STUCR/L09					TCMT09..	8	15	TX2207	BTX07
MDC12-10D-SCLCR/L06	12	10 x D	120	180	CCMT06..	6,5	14	TX2506	BTX08
MDC12-10D-SDUCR/L07					DCMT07..	9	16	TX2506	BTX08
MDC12-10D-STUCR/L09					TCMT09..	8	15	TX2207	BTX07

Normally in DEEP HOLE BORING operations the diameter of the boring bar is limited by the dimensions of the hole diameter to be bored. The smaller the hole the smaller the diameter of the bar and has to be. This also means that a "thin" bar will possibly cause vibrations if the hole to be machined is deep. Standard tools can only reach a maximum cutting ratio of 4 x Diameter. Solid carbide tools can reach a cutting ratio of 6 x D. But, beyond this, only specialized tools, such as a **MEGATEC** ANTIVIBRATION BARS, can get the job done. **MEGATEC** ANTIVIBRATION BARS can manage: accurate machining, precise tolerance, good surface finish.

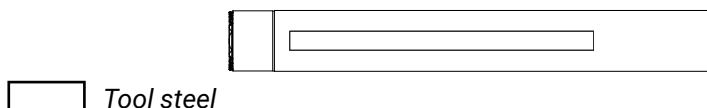


There are TWO MEGATEC ANTI-VIBRATION BAR types are exist:

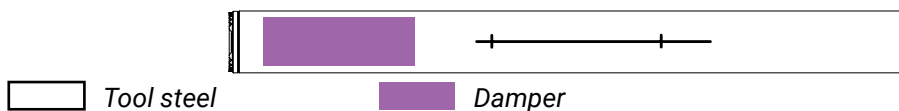
- ✓ **MODULAR** – consist of modular bar and cartridge
- ✓ **SOLID** microbars with damper

There are THREE types of MODULAR BAR are exist:

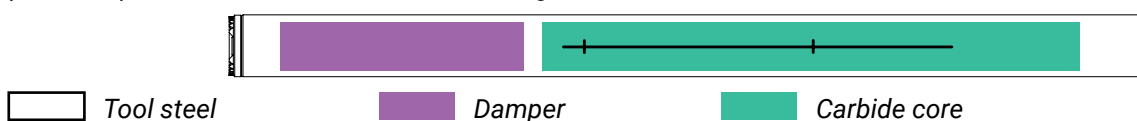
1. **STEEL** – provides up to 5 x D boring ratio. Bar Diameter: 20, 25, 32, 40, 50, 60



2. **STEEL with DAMPER** – provides up to 6 x D; 8 x D or 10 x D boring ratio. Bar Diameter: 16, 20, 25, 32, 40, 50, 60



3. **STEEL with CARBIDE CORE and DAMPER** – provides up to 8 x D; 10 x D; 12 x D or 14 x D boring ratio. Bar Diameter: 16, 20, 25, 32, 40, 50, 60



MEGATEC ANTI-VIBRATION BAR features

- ✓ Solid body made of Steel specially treated to obtain vibration damping specifications
- ✓ Through coolant
- ✓ Threaded coolant connection for high pressure 70 bar max
- ✓ Vibration damper system with through coolant
- ✓ Carbide core with through coolant for additional rigidity and vibration damping capability

Anti-vibration bar setup

OVERHANG PROPORTIONS

MEGATEC ANTI-VIBRATION bars must have a very precise overhang length.

In the case of 60 mm 10 x D the overall length will be of 840 mm so divided:

- 600 mm overhang
- 240 mm for clamping in collet

Going over suggested lengths will minimize vibration damping capabilities. Staying below suggested values means the full potential of the **MEGATEC** ANTI-VIBRATION BARS will not be expressed.



Example: Ø 60, 10 x D Anti-vibration bar setup

How to hold Anti-vibration bar?

There are FOUR methods to hold the bars. **MEGATEC** ANTI-VIBRATION BAR with DAMPER suggests method 3 or 4 for the best possible result.

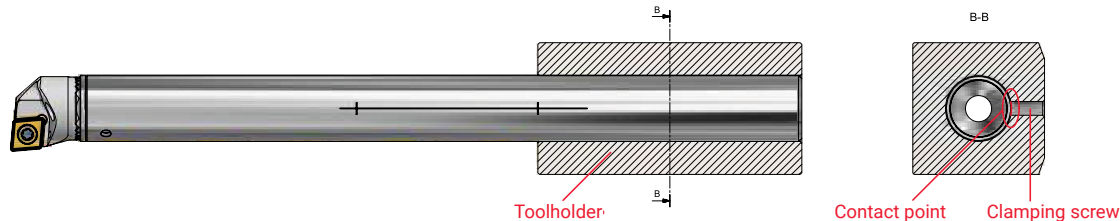
Steel ANTI-VIBRATION BAR without DAMPER has two flats on the shank and allows to hold it by clamping screws in a classic bar holder.

#	Clamping method	Contact in clamping area	Bushing	Toolholder	Rating
1	By screw	Point(s)	No	One piece	Not suitable
2	By screw with split bushing	Point(s)	Split	One piece	Suitable
3	Split toolholder	Surface	No	Split	Good
4	Split toolholder and split bushing	Surface	Split	Split	Excellent

Methods of the BAR holding in detail

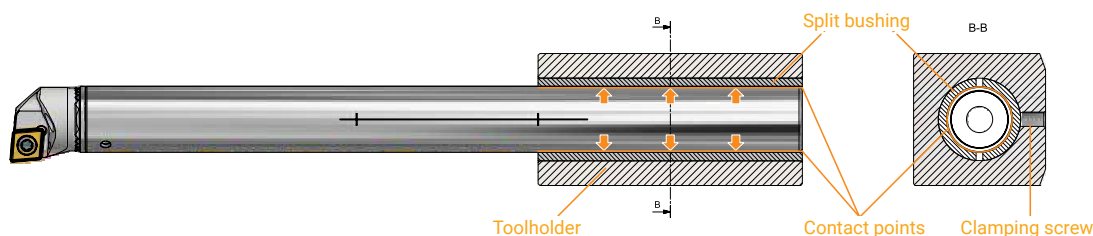
1. Clamping by screw (not suitable)

Clamping screws press on the bar at the points only – anti-vibration system does not work.



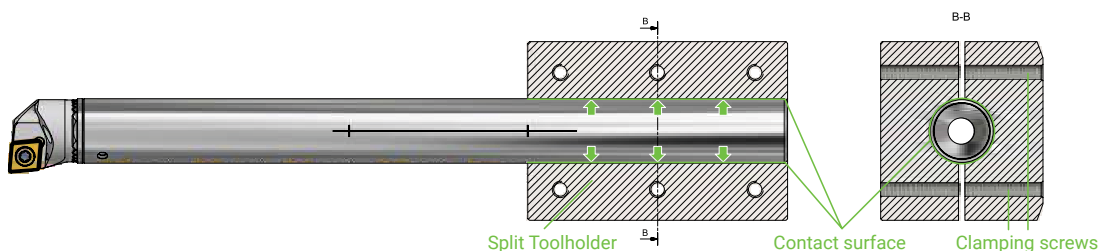
2. Clamping by screw with split bushing (suitable)

Clamping screws press on the split bushing at the points too, but the split bushing transforms a point contact into a surface contact, therefore the anti-vibration system works.



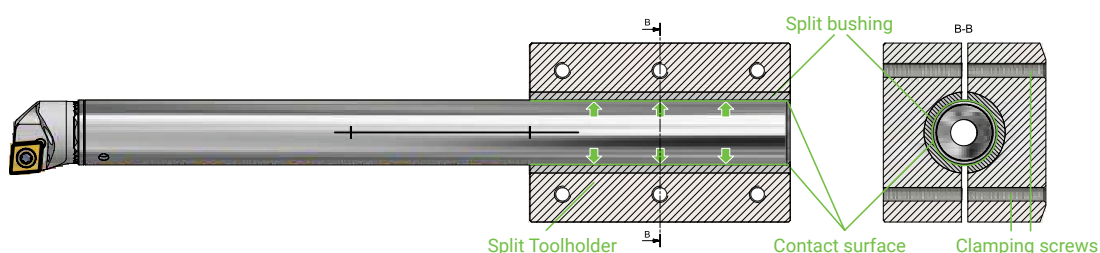
3. Clamping into split toolholder

Clamping screws act on the bar through a split toolholder, which provides a surface contact and good force distribution into the bar shank, so the anti-vibration system works good.



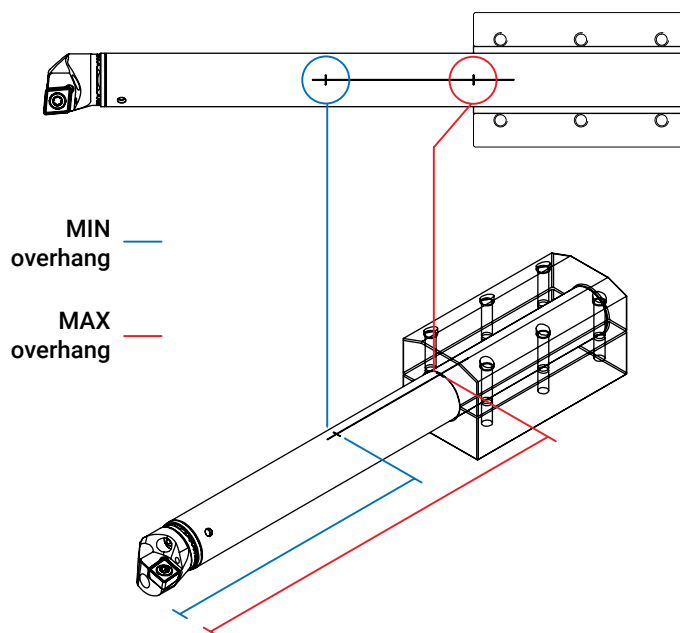
4. Clamping into split toolholder with split bushing

Clamping screws act on the bar through a split toolholder and a split bushing, which provides very equable surface contact and very good force distribution into the bar shank that finally leads to excellent work of the anti-vibration system.



Overhang setup

To adjust the **MEGATEC** ANTI-VIBRATION BARS overhang, find the centering line drawn on the bar and set the bar into toolholder between the two overhang notches



5 x D		
Ø mm	MIN overhang	MAX overhang
20	40	100
25	45	125
32	52	160
40	72	200
50	82	250
60	92	300

8 x D		
Ø mm	MIN overhang	MAX overhang
20	105	160
25	120	200
32	142	256
40	180	320
50	215	400
60	247	480

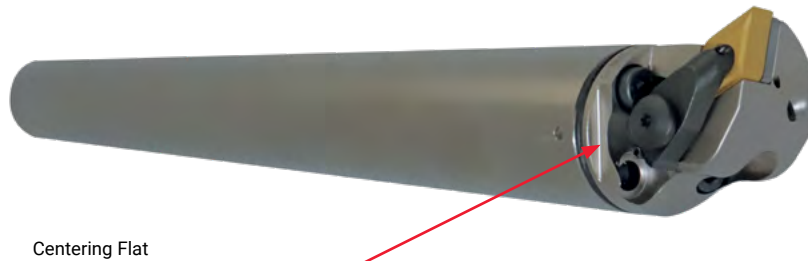
10 x D		
Ø mm	MIN overhang	MAX overhang
20	120	200
25	140	250
32	165	320
40	200	400
50	245	500
60	280	600

12 x D		
Ø mm	MIN overhang	MAX overhang
20	135	240
25	159	300
32	188	384
40	215	480
50	270	600
60	325	720

14 x D		
Ø mm	MIN overhang	MAX overhang
20	152	280
25	181	350
32	216	448

Bar centering

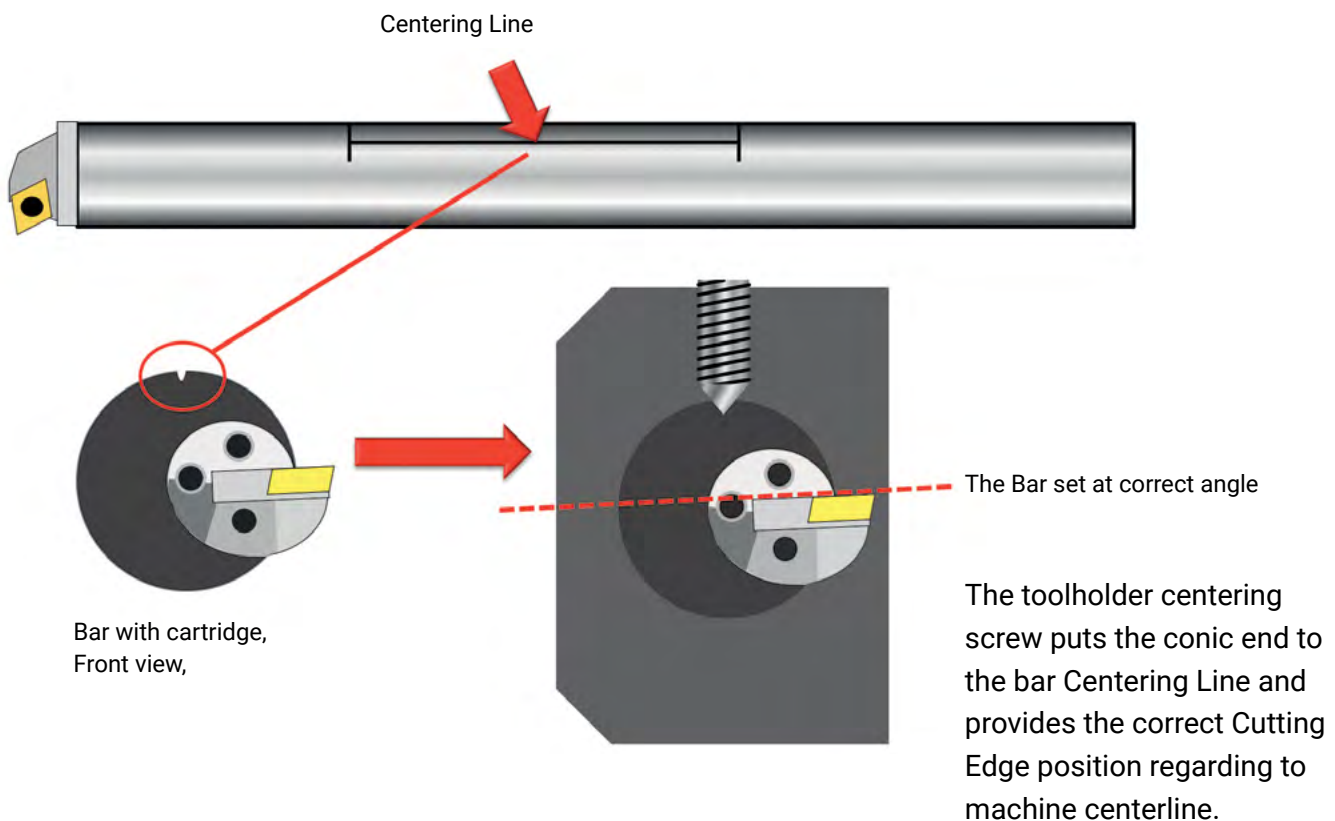
To install a **MEGATEC** anti-vibration holder with a damper into a toolholder without Centering Screw - for example, in a classic toolholder with screw clamping through a split bushing BDT, the Centering Flat on the cartridge can be used to center the holder. The Centering Flat on the cartridge should set parallel to the machine X-axis, for example with a dial indicator.

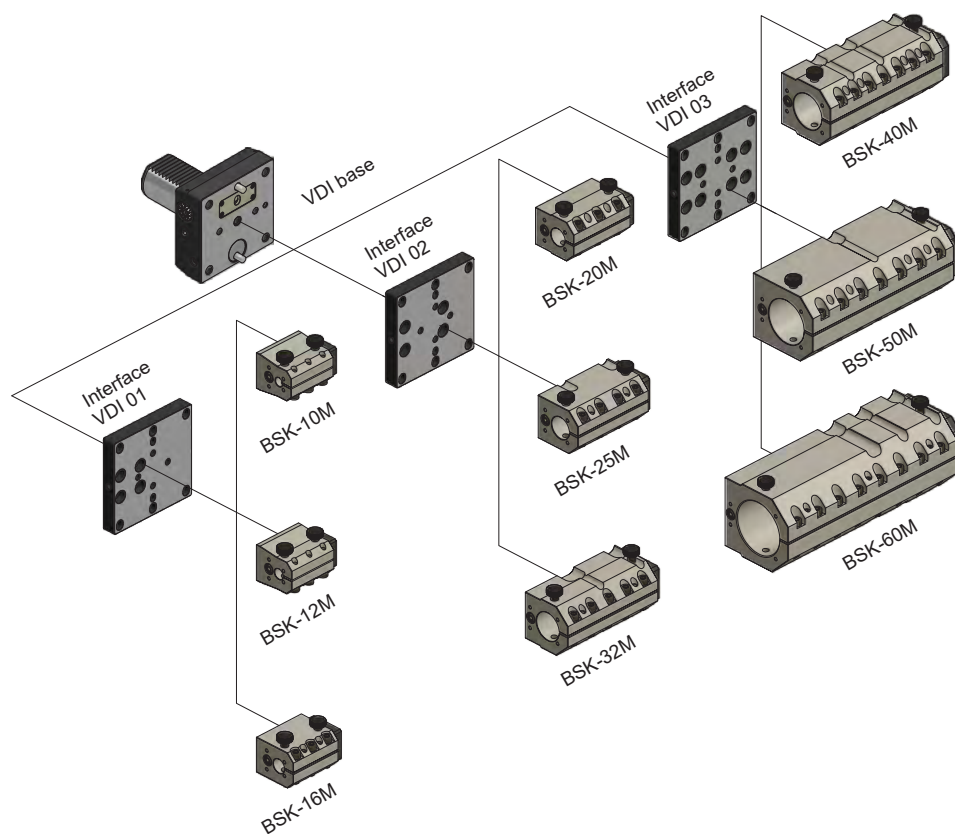
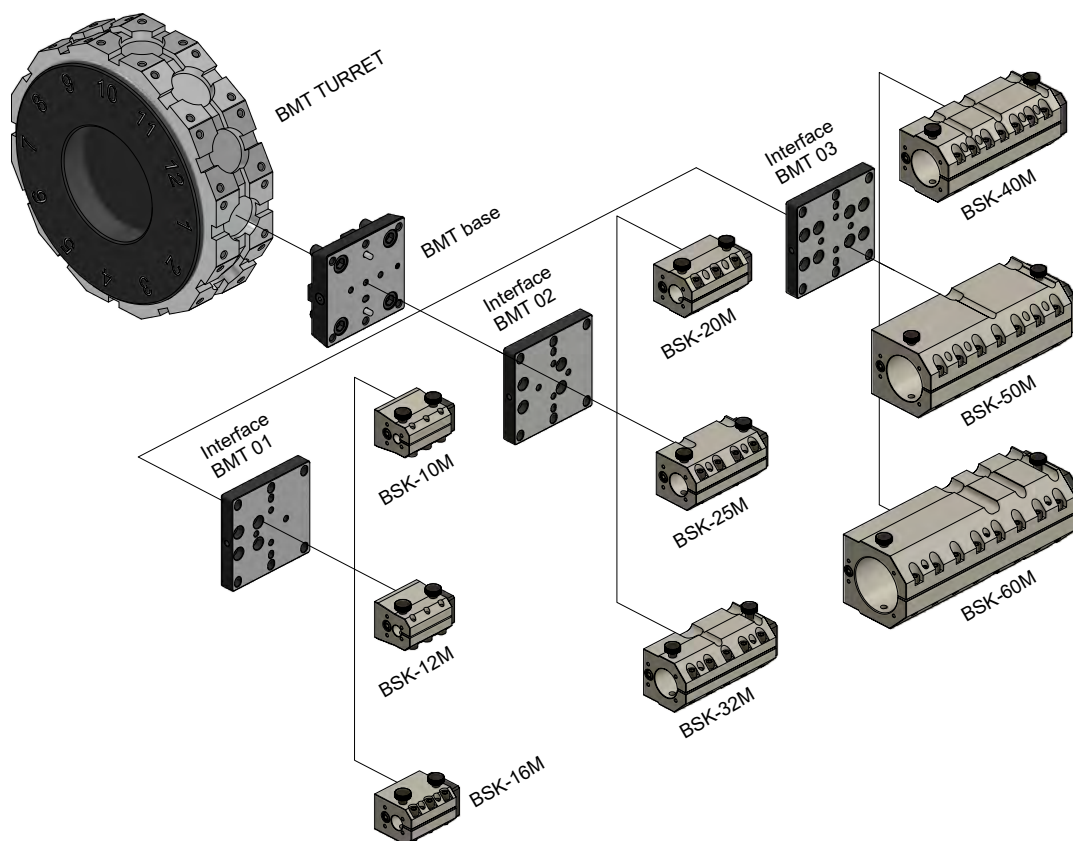


MEGATEC steel ANTI-VIBRATION BAR without Damper has two flats to hold it by clamping screws in a classic bar holder.

MEGATEC ANTI-VIBRATION BAR with Damper has a special Centering Line.

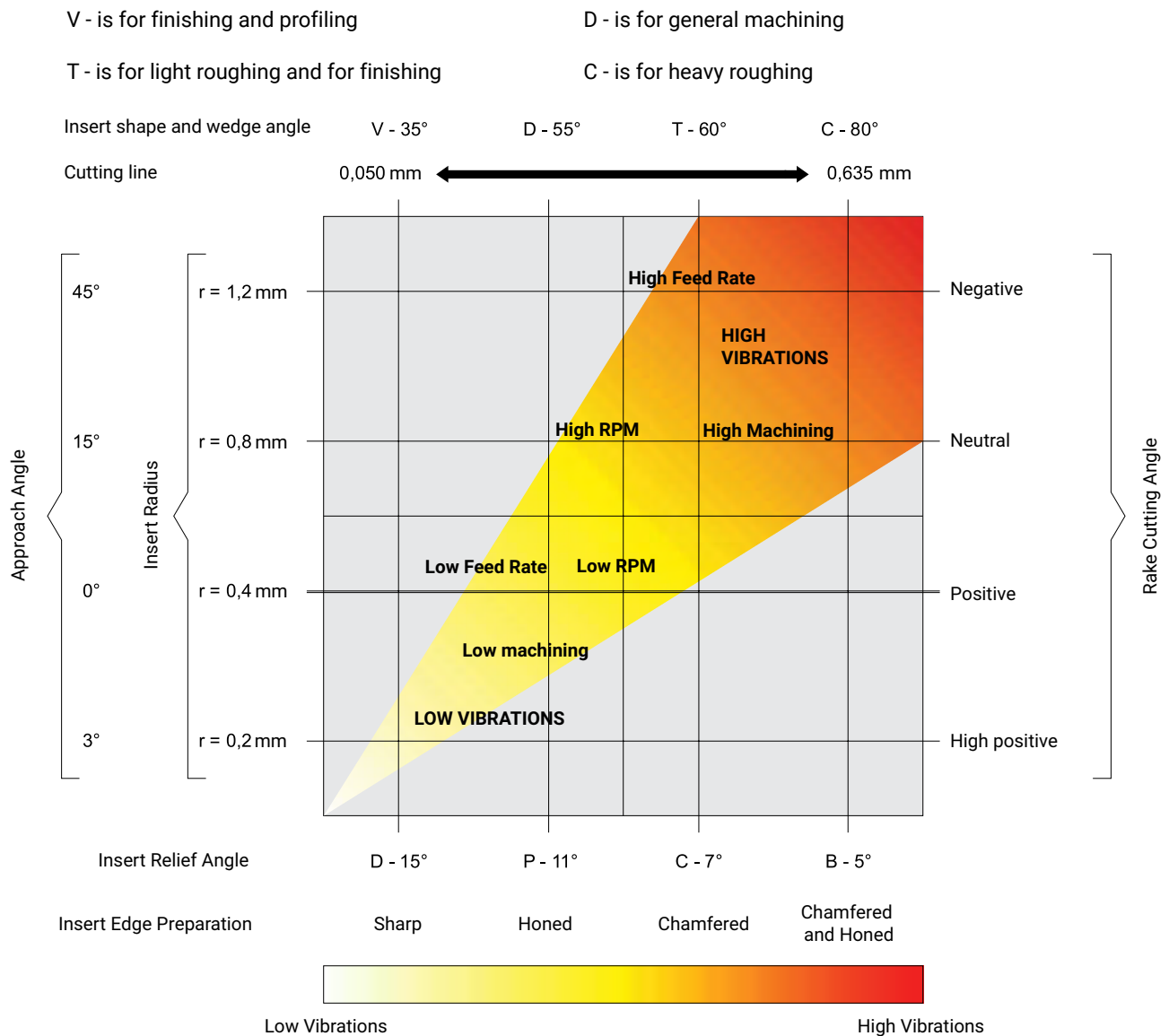
MEGATEC ANTI-VIBRATION BAR with Damper centering





Best performance

There are many variables should be taken into consideration, to be sure your **MEGATEC** boring bars are always performing at the peak of their specifications. An “at a glance” method is given by the “vibration matrix” which shows all potential variables that can determine the ANTI-VIBRATION BAR performance.



Maximum Overhang recommended

Bar type	Boring	Grooving	Threading
MCS – steel without Damper	5 x D	3 x D	3 x D
MDS – steel with Damper	8 x D or 10 x D	4 x D or 5x D	4 x D or 5 x D
MDC – with Damper and Carbide core	12 x D or 14 x D	6 x D or 7 x D	7 x D
<i>D meant as a BAR diameter</i>			