



# BARRE ANTIVIBRANTI PER TORNITURA 2025



Tecnologia per eliminare  
le vibrazioni nelle lavorazioni  
meccaniche.

**Utensili brevettati:**

- Autoregistranti
- Plug & Play
- Senza manutenzione



## SISTEMA PLUG AND PLAY VIBRATION FREE

Durante le lavorazioni meccaniche, sia con sporgenze elevate (11-15xD), che ridotte (3-6xD) si generano delle vibrazioni con:

- danneggiamento di pezzi e superfici
- scheggiatura e rottura degli inserti da taglio
- aumento dei costi di produzione.

Il sistema **MAQ** **NEUTRALIZZA LE VIBRAZIONI** degli utensili.

La frequenza delle vibrazioni varia per il consumo degli inserti, per i diversi tipi di materiale lavorato ed i parametri macchina utilizzati.

Privo di regolazioni, Il sistema **MAQ** **SI ADATTA AUTOMATICAMENTE** a tutte le condizioni di lavoro garantendo:

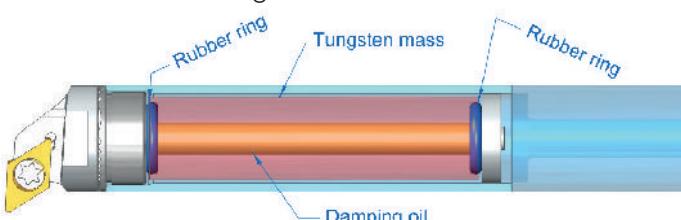
- riduzione dei tempi di lavoro
- miglioramento della qualità delle superfici
- diminuzione delle tolleranze
- elevata ripetibilità dei processi.



## BARRE ANTIVIBRANTI

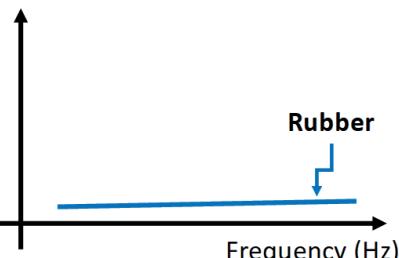
### 4a GENERAZIONE

Anelli di gomma con olio smorzante



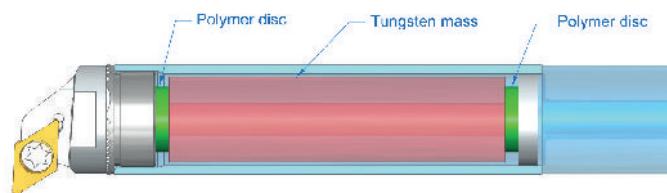
Elastic modulus  
(MPa)

Rubber



### 5a GENERAZIONE MAQ

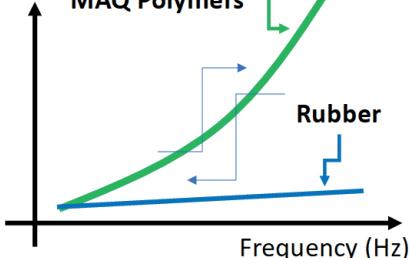
Polimeri con rigidezza dipendente dalla frequenza



Elastic modulus  
(MPa)

MAQ Polymers

Rubber



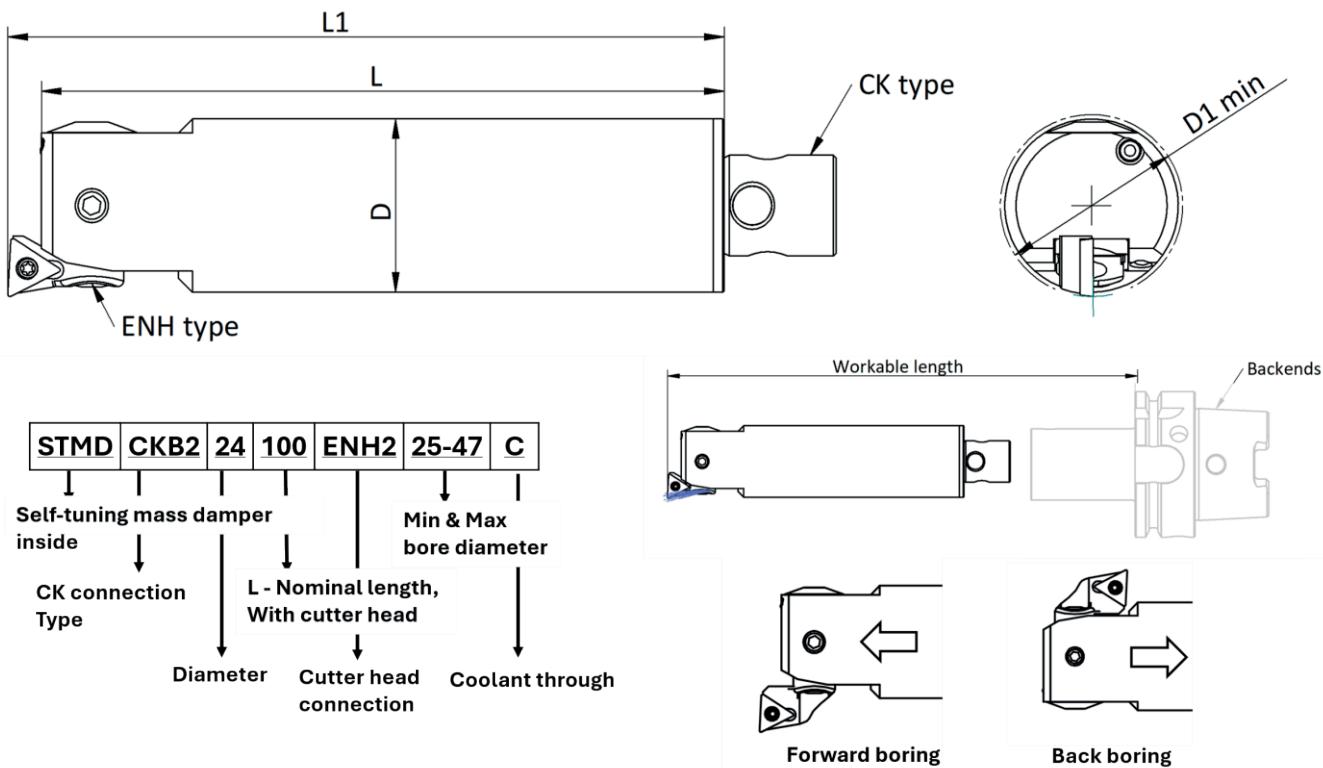
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## Rotational boring

### Fine boring tools

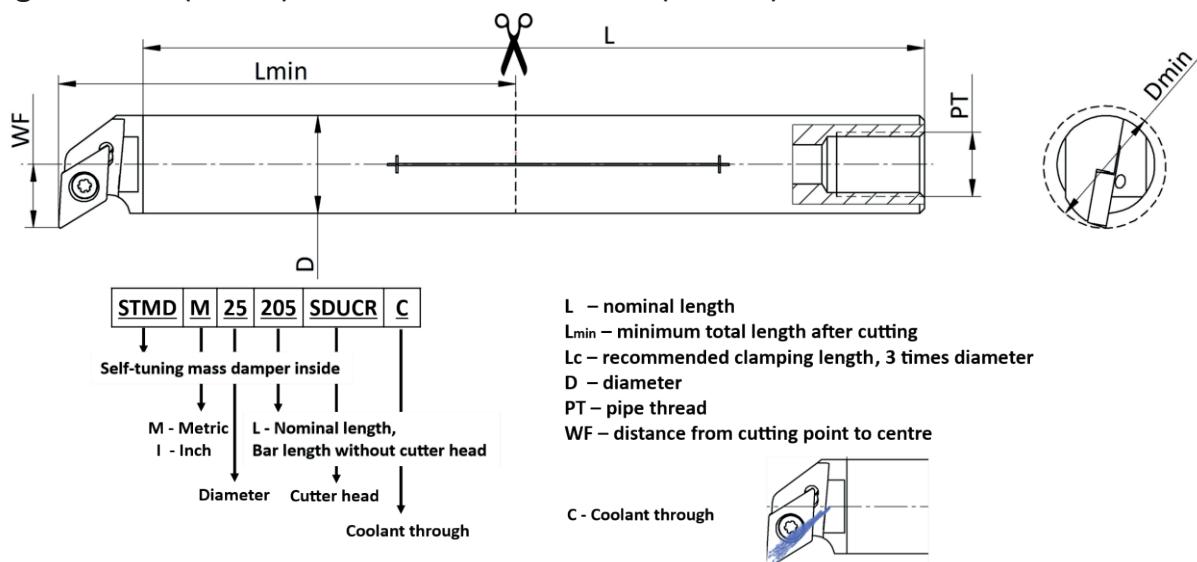


Part number	Type	Fine boring tools with CK backends (1 scale = 0.01 mm or 0.0004 inch)							Forward		Back Boring		Insert
		Workable length (mm)	D (mm)	D1 min (mm)	L (mm)		Part number	Insert holder	Diameter D1 (mm)	L1 (mm)	Diameter D1 (mm)	L1 (mm)	
301274	STMD CKB1 19-080 1C ENH1 (20-36) C	80-140	19	20	80	0.2	301359	ENH 1-1	20-26	83	-	-	TP08
							301360	ENH 1-2	25-31	83	-	-	TP08
							301361	ENH 1-3	30-36	83	30-36	61	TP08
301349	STMD CKB2 24-100 1C ENH2 (25-47) C	100-175	24	25	99	0.4	301362	ENH 2-1	25-33	100.5	-	-	TP08
							301363	ENH 2-2	32-40	100.5	-	-	TP08
							301364	ENH 2-3	39-47	100.5	39-47	76.5	TP08
301350	STMD CKB3 31-128 1C ENH3 (32-60) C	128-224	31	32	128	0.9	301365	ENH 3-1	32-47	122	-	-	TP08
							301366	ENH 3-2	41-51	122	-	-	TP08
							301367	ENH 3-3	50-60	122	50-60	98	TP08
301351	STMD CKB4 39-160 1C ENH4 (41-74) C	160-280	39	41	155	1.3	301368	ENH 4-1	41-54	160	-	-	TC11
							301369	ENH 4-2	50-63	160	53-63	127	TC11
							301370	ENH 4-3	61-74	160	61-74	127	TC11
301352	STMD CKB5 50-200 1C ENH5 (53-95) C	200-350	50	53	196	3.5	301371	ENH 5-1	53-70	200	62-70	162	TC11
							301372	ENH 5-2	65-82	200	65-82	162	TC11
							301373	ENH 5-3	78-95	200	78-95	162	TC11
301353	STMD CKB6 64-240 1C ENH6 (68-150) C	240-448	64	68	235	6.1	301374	ENH 6-1	68-100	240	80-100	191	TC11
							301375	ENH 6-2	94-126	240	94-126	191	TC11
							301376	ENH 6-3	118-150	240	118-150	191	TC11

Insert holder type 1 is included by default when delivering boring tools.

## Turning 3-6xD

### Straight holder (3-6xD) with fixed cutter heads (Metric)



Standard: Metric (with fixed head SDUCR for DCMT insert)												
Part number	Type	D <sub>min</sub> (mm)	Workable length <sup>b</sup> (mm)	L <sub>min</sub> (mm)	L <sub>c</sub> (mm)	WF (mm)	LAMS (°)	GAMO (°)	Master insert	Insert screw	PT	Kg
300205	STMD M12-108 SDUCR C	16	36-72	72	36	9	-6	0	DCMT 070204	IS M2.5x6.0	G 1/4	0.1
300176	STMD M16-138 SDUCR C 0702	20	48-96	96	48	11	-8	0	DCMT 070204	IS M2.5x6.0	G 1/4	0.2
301431	STMD M16-138 SDUCR C 11T3	25	48-96	96	48	14	-8	0	DCMT 11T304	IS M3.5x10.0	G 1/4	0.2
300177	STMD M20-160 SDUCR C	25	60-120	120	60	13	-10	0	DCMT 11T304	IS M3.5x10.0	G 1/4	0.4
300110	STMD M25-205 SDUCR C	32	75-150	155	75	17	-10	0	DCMT 11T304	IS M3.5x10.0	G 1/4	0.6
300178	STMD M32-256 SDUCR C	40	96-192	192	96	22	-10	0	DCMT 11T304	IS M3.5x10.0	G 1/2	1.2
300179	STMD M40-320 SDUCR C	50	120-240	240	120	27	-10	0	DCMT 11T304	IS M3.5x10.0	G 1/2	2.4

Standard: Metric (with fixed head SCLCR for CCMT insert)												
Part number	Type	D <sub>min</sub> (mm)	Workable length <sup>b</sup> (mm)	L <sub>min</sub> (mm)	L <sub>c</sub> (mm)	WF (mm)	LAMS (°)	GAMO (°)	Master insert	Insert screw	PT	Kg
300206	STMD M12-108 SCLCR C	16	36-72	72	36	8,5	-6	0	CCMT 060204	IS M2.5x6.0	G 1/4	0.1
300186	STMD M16-138 SCLCR C	20	48-96	96	48	11	-6	0	CCMT 060204	IS M2.5x6.0	G 1/4	0.2
300188	STMD M20-160 SCLCR C	25	60-120	120	60	13	-10	0	CCMT 09T304	IS M3.5x10.0	G 1/4	0.4
300184	STMD M25-205 SCLCR C	32	75-150	155	75	17	-10	0	CCMT 09T304	IS M3.5x10.0	G 1/4	0.6
300183	STMD M32-256 SCLCR C	40	96-192	192	96	22	-8	0	CCMT 09T304	IS M3.5x10.0	G 1/2	1.2
300181	STMD M40-320 SCLCR C	50	120-240	240	120	27	-10	0	CCMT 09T304	IS M3.5x10.0	G 1/2	2.4

Standard: Metric (with fixed head STFCR for TCMT insert)												
Part number	Type	D <sub>min</sub> (mm)	Workable length <sup>b</sup> (mm)	L <sub>min</sub> (mm)	L <sub>c</sub> (mm)	WF (mm)	LAMS (°)	GAMO (°)	Master insert	Insert screw	PT	Kg
300207	STMD M12-108 STFCR C 0902	16	36-72	72	36	9	-6	0	TCMT 090204	IS M2.2x5.0	G 1/4	0.1
300587	STMD M12-108 STFCR C 1102	16	36-72	72	36	9	-6	0	TCMT 110204	IS M2.5x6.0	G 1/4	0.1
300187	STMD M16-138 STFCR C 0902	20	48-96	96	48	11	-6	0	TCMT 090204	IS M2.2x5.0	G 1/4	0.2
300588	STMD M16-138 STFCR C 1102	20	48-96	96	48	11	-6	0	TCMT 110204	IS M2.5x6.0	G 1/4	0.2
300589	STMD M20-160 STFCR C 1102	25	60-120	120	60	13	-6	0	TCMT 110204	IS M2.5x8.0	G 1/4	0.4
300189	STMD M20-160 STFCR C 1103	25	60-120	120	60	13	-4	0	TCMT 110304	IS M2.5x8.0	G 1/4	0.4
300590	STMD M25-205 STFCR C 1102	32	75-150	155	75	17	-4	0	TCMT 110204	IS M2.5x8.0	G 1/4	0.6
300185	STMD M25-205 STFCR C 1103	32	75-150	155	75	17	-4	0	TCMT 110304	IS M2.5x8.0	G 1/4	0.6
300180	STMD M32-256 STFCR C 16T3	40	96-192	192	96	22	-6	0	TCMT 16T304	IS M3.5x10.0	G 1/2	1.2
300182	STMD M40-320 STFCR C 16T3	50	120-240	240	120	27	-6	0	TCMT 16T304	IS M3.5x10.0	G 1/2	2.4

b – measured from the cutting edge to the clamping
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Standard: Metric (with fixed head SDUCL for DCMT insert)										
Part number	Type	Dmin (mm)	Workable length <sup>b</sup> (mm)	Lmin (mm)	Lc (mm)	WF (mm)	Master insert	Insert screw	PT	KG
300405	STMD M12-108 SDUCL C	16	36-72	72	36	9	DCMT 070204	IS M2.5x6.0	G 1/8	0.1
300406	STMD M16-138 SDUCL C	20	48-96	96	48	11	DCMT 070204	IS M2.5x6.0	G 1/4	0.2
300407	STMD M20-160 SDUCL C	25	60-120	120	60	13	DCMT 11T304	IS M3.5x10.0	G 1/4	0.4
300408	STMD M25-205 SDUCL C	32	75-150	155	75	17	DCMT 11T304	IS M3.5x10.0	G 1/4	0.6
300409	STMD M32-256 SDUCL C	40	96-192	192	96	22	DCMT 11T304	IS M3.5x10.0	G 1/2	1.2
300410	STMD M40-320 SDUCL C	50	120-240	240	120	27	DCMT 11T304	IS M3.5x10.0	G 1/2	2.4

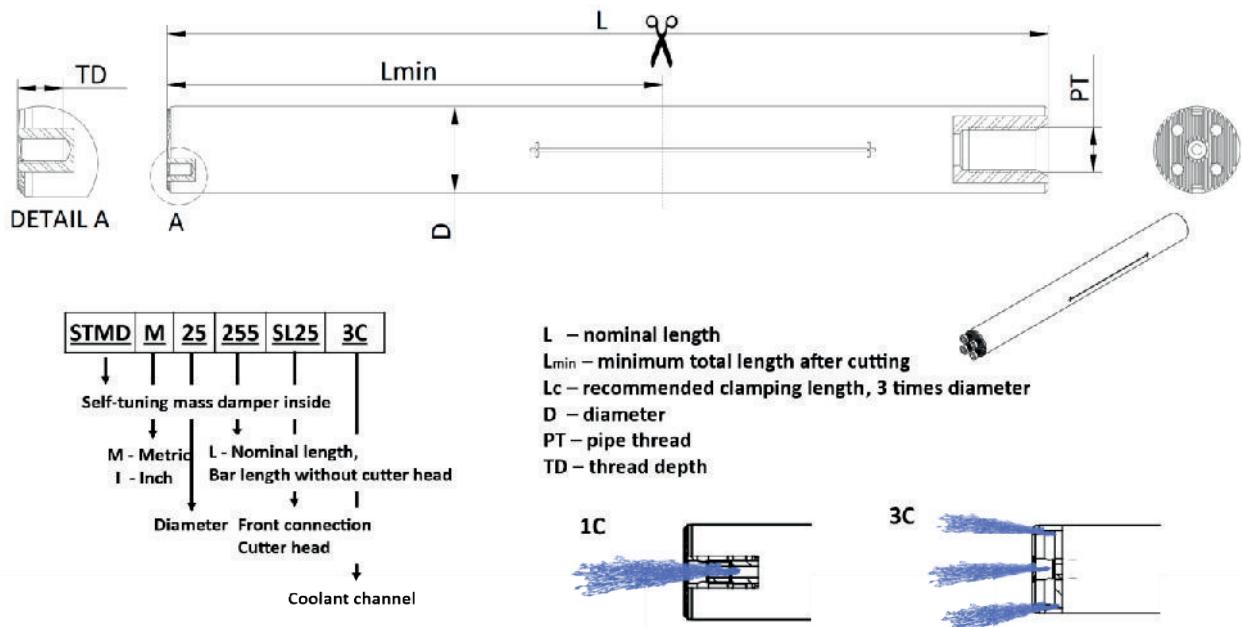
Standard: Metric (with fixed head SCLCL for CCMT insert)										
Part number	Type	Dmin (mm)	Workable length <sup>b</sup> (mm)	Lmin (mm)	Lc (mm)	WF (mm)	Master insert	Insert screw	PT	KG
300411	STMD M12-108 SCLCL C	16	36-72	72	36	8,5	CCMT 060204	IS M2.5x6.0	G 1/8	0.1
300412	STMD M16-138 SCLCL C	20	48-96	96	48	11	CCMT 060204	IS M2.5x6.0	G 1/4	0.2
300413	STMD M20-160 SCLCL C	25	60-120	120	60	13	CCMT 09T304	IS M3.5x10.0	G 1/4	0.4
300414	STMD M25-205 SCLCL C	32	75-150	155	75	17	CCMT 09T304	IS M3.5x10.0	G 1/4	0.6
300415	STMD M32-256 SCLCL C	40	96-192	192	96	22	CCMT 09T304	IS M3.5x10.0	G 1/2	1.2
300416	STMD M40-320 SCLCL C	50	120-240	240	120	27	CCMT 09T304	IS M3.5x10.0	G 1/2	2.4

Standard: Metric (with fixed head STFCL for TCMT insert)										
Part number	Type	Dmin (mm)	Workable length <sup>b</sup> (mm)	Lmin (mm)	Lc (mm)	WF (mm)	Master insert	Insert screw	PT	KG
300591	STMD M12-108 STFCL C 1102	16	36-72	72	36	9	TCMT 110204	IS M2.5x6.0	G 1/8	0.1
300592	STMD M16-138 STFCL C 1102	20	48-96	96	48	11	TCMT 110204	IS M2.5x6.0	G 1/4	0.2
300593	STMD M20-160 STFCL C 1102	25	60-120	120	60	13	TCMT 110204	IS M2.5x8.0	G 1/4	0.4
300594	STMD M25-205 STFCL C 1102	32	75-150	155	75	17	TCMT 110204	IS M2.5x8.0	G 1/4	0.6
300595	STMD M32-256 STFCL C 16T3	40	96-192	192	96	22	TCMT 16T304	IS M3.5x10.0	G 1/2	1.2
300596	STMD M40-320 STFCL C 16T3	50	120-240	240	120	27	TCMT 16T304	IS M3.5x10.0	G 1/2	2.4

	b – measured from the cutting edge to the clamping
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## Turning 6-9xD

Straight holder (6-9xD) with SL (Serration Lock) interface (Metric)



Standard: Metric (with SL interface and exchangeable heads)										
Part number	Type	Workable length <sup>b</sup> (mm)	D min (mm) <sup>g</sup>	Lmin (mm)	Lc (mm)	Screws	TD (mm)	PT	Material	Image
300001	STMD M12-144 SL12 3C	72-96	16	144	36	M2X8 or 14	5.5	G 1/8	S+C <sup>d</sup>	0.18
300004	STMD M16-170 SL16 3C	96-128	20	117	48	M3X8	5.5	G 1/4	Steel	0.25
300005	STMD M20-200 SL20 3C	120-160	25	137	60	M3X8	5.5	G 1/4	Steel	0.50
300006	STMD M25-255 SL25 3C	150-200	32	180	75	M4X9	6.5	G 1/4	Steel	1.10
300008	STMD M32-320 SL32 3C	192-256	40	213	96	M5X12	10	G 1/2	Steel	2.10
300010	STMD M40-408 SL40 1C <sup>e</sup>	240-320	50	260	120	M6X14	10	G 1/2	Steel	3.9
300240	STMD M40-408 SL40 3C	240-320	50	260	120	M6X14	10	G 1/2	Steel	3.9
300012	STMD M50-518 SL40 1C	300-400	60	324	150	M6X14	10	G 3/8	Steel	8.0
300013	STMD M50-518 SL50 1C <sup>e</sup>	300-400	NA	322	150	M8X14	12	G 3/8	Steel	8.0
300015	STMD M60-628 SL40 1C	360-480	70	424	180	M6X14	10	G 3/8	Steel	13.6
300016	STMD M60-628 SL60 1C <sup>e</sup>	360-480	NA	422	180	M8X14	12	G 3/8	Steel	13.6
300585	STMD M80-880 SL40 1C <sup>e</sup>	480-640	90	546	240	M6X14	10	G 1 1/8	Steel	33.0

b – measured from the cutting edge to the clamping.

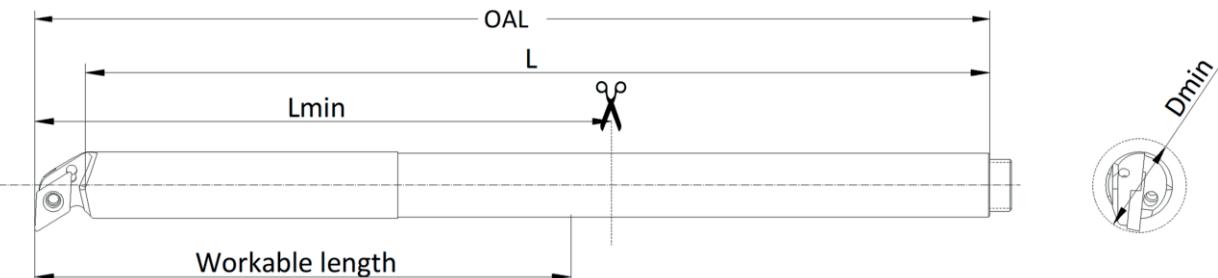
d – Carbide back end joined with steel

e – only on order and with a longer lead-time,

g - estimated with using standard SDUCR cutter heads from MAQ.

## Turning 8-12xD

Straight holder (8-12xD) with fixed cutter heads (Metric)



<b>STMD</b>	<b>M</b>	<b>12</b>	<b>180</b>	<b>SDUCR</b>	<b>C</b>
↓	↓	↓	↓	↓	↓
Self-tuning mass damper inside					
	↓				
M - Metric	I - Inch	L - Nominal length, Bar length without cutter head			
			↓		
Diameter		Front connection Cutter head			
				↓	
				Coolant through	

**L** – nominal length

**L<sub>min</sub>** – minimum total length after cutting

**L<sub>c</sub>** – recommended clamping length, 3 times diameter

**D** – diameter

**WF** – distance from cutting point to centre

**OAL** – overall length

**C** - Coolant through



Standard: Metric (with fixed head)												
Part number	Type	Workable length <sup>b</sup> (mm)	Dmin (mm)	Lmin <sup>a</sup> (mm)	Lc (mm)	WF <sup>c</sup> (mm)	OAL (mm)	PT	Master insert	Insert screw	Material	
300680	STMD M06-90 SCLCR	42-66	8	96	18	3.5	96	NA	CCMT 040102	IS M2.0x4.0	S+C <sup>d</sup>	0.04
301377	STMD M06-90 STUBR	42-66	8	96	18	3.5	96	NA	TBGT 060102	IS M2.0x4.0	S+C <sup>d</sup>	0.04
300565	STMD M08-120 SDQCR C	56-88	11	130	24	6	130	M7x0.5	DCMT 070204	IS M2.5x4.5	S+C <sup>d</sup>	0.15
300567	STMD M08-120 SDQCL C	56-88	11	130	24	6	130	M7x0.5	DCMT 070204	IS M2.5x4.5	S+C <sup>d</sup>	0.15
300310	STMD M08-120 SCLCR C	56-88	10	128	24	5	128	M7x0.5	CCMT 060204	IS M2.5x4.5	S+C <sup>d</sup>	0.15
300568	STMD M08-120 SCLCL C	56-88	10	128	24	5	128	M7x0.5	CCMT 060204	IS M2.5x4.5	S+C <sup>d</sup>	0.15
300386	STMD M08-120 STUBR C	56-88	10	127	24	5	127	M7x0.5	TBGT 060104	IS M2.0x4.0	S+C <sup>d</sup>	0.15
300569	STMD M08-120 STUBL C	56-88	10	127	24	5	127	M7x0.5	TBGT 060104	IS M2.0x4.0	S+C <sup>d</sup>	0.15
300389	STMD M10-150 SDUCR C	70-110	15	160	30	9	160	M9x0.75	DCMT 070204	IS M2.5x6.0	S+C <sup>d</sup>	0.20
300570	STMD M10-150 SDUCL C	70-110	15	160	30	9	160	M9x0.75	DCMT 070204	IS M2.5x6.0	S+C <sup>d</sup>	0.20
300390	STMD M10-150 SCLCR C	70-110	12	161	30	6.1	161	M9x0.75	CCMT 060204	IS M2.5x6.0	S+C <sup>d</sup>	0.20
300571	STMD M10-150 SCLCL C	70-110	12	161	30	6.1	161	M9x0.75	CCMT 060204	IS M2.5x6.0	S+C <sup>d</sup>	0.20
300391	STMD M10-150 STFCR C	70-110	13	161	30	6.8	161	M9x0.75	TCMT 090204	IS M2.2x5.0	S+C <sup>d</sup>	0.20
300572	STMD M10-150 STFCL C	70-110	13	161	30	6.8	161	M9x0.75	TCMT 090204	IS M2.2x5.0	S+C <sup>d</sup>	0.20
300098	STMD M12-180 SDUCR C	84-132	16	179	36	8.9	179	G 1/8	DCMT 070204	IS M2.5x6.0	S+C <sup>d</sup>	0.30
300573	STMD M12-180 SDUCL C	84-132	16	179	36	8.9	179	G 1/8	DCMT 070204	IS M2.5x6.0	S+C <sup>d</sup>	0.30
301414	STMD M12-180 SDXCR C	84-132	16	179	36	9	179	G 1/8	DCMT 070204	IS M2.5x6.0	S+C <sup>d</sup>	0.30
300099	STMD M12-180 SCLCR C	84-132	16	179	36	8.5	179	G 1/8	CCMT 060204	IS M2.5x6.0	S+C <sup>d</sup>	0.30
300574	STMD M12-180 SCLCL C	84-132	16	179	36	8.5	179	G 1/8	CCMT 060204	IS M2.5x6.0	S+C <sup>d</sup>	0.30
300100	STMD M12-180 STFCR C	84-132	16	179	36	9	179	G 1/8	TCMT 090204	IS M2.2x5.0	S+C <sup>d</sup>	0.30
300575	STMD M12-180 STFCL C	84-132	16	179	36	9	179	G 1/8	TCMT 090204	IS M2.2x5.0	S+C <sup>d</sup>	0.30
301215	STMD M12-180 SVJCR C	84-132	14	179	36	7	179	G 1/8	VCMT 080204	IS M2.0x4.0	S+C <sup>d</sup>	0.30

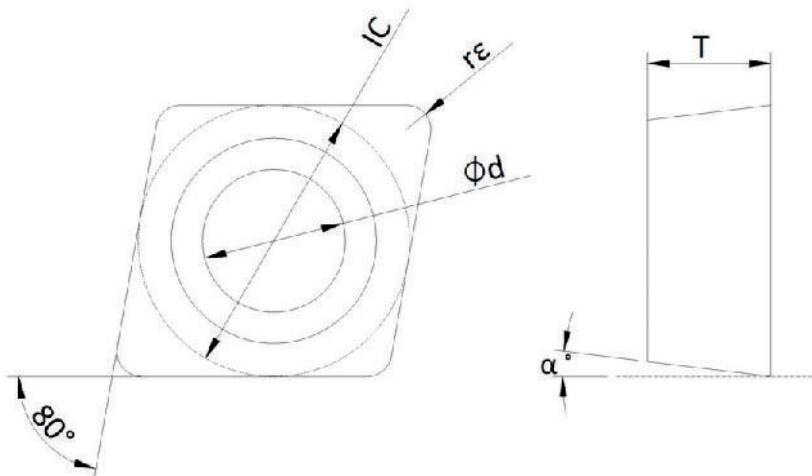
a – total length to the cutting point

b – measured from the cutting edge to the clamping.

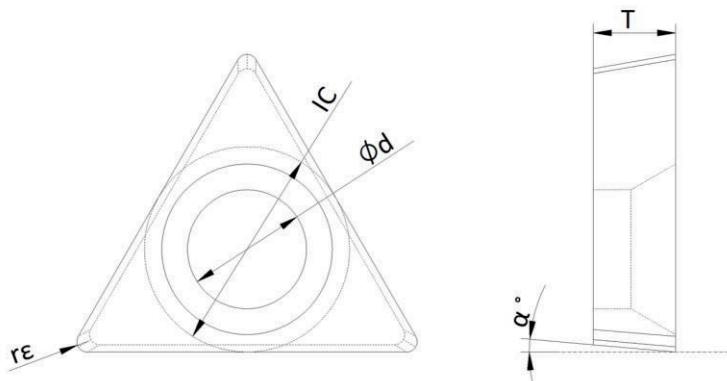
c – distance from cutting point to centre with master insert.

d – Carbide back end joined with steel

## Small tool inserts

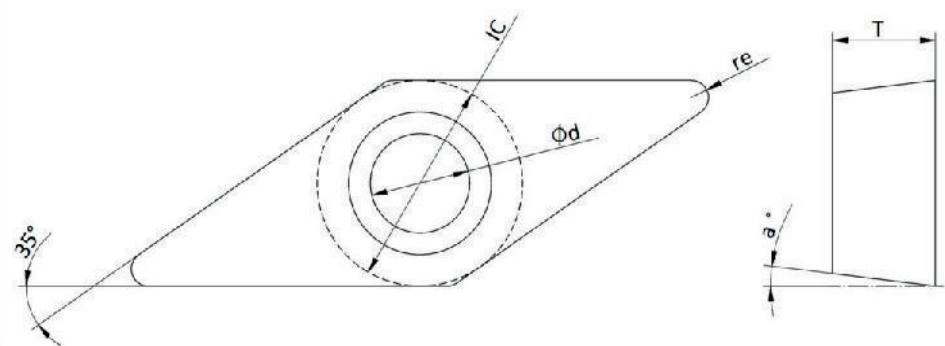
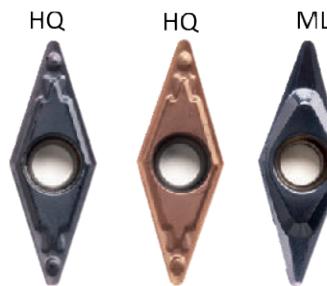


Part Number	Insert Type	IC	d	T	rε	α	P	M
301221	CCGT 040101 L <sup>a</sup> -F P10U Cermet	4.3	2.3	1.8	0.1	7°	●	○
301222	CCGT 040102 L <sup>a</sup> -F P10U Cermet	4.3	2.3	1.8	0.2	7°	●	○
301223	CCGT 040104 L <sup>a</sup> -F P10U Cermet	4.3	2.3	1.8	0.4	7°	●	○
301224	CCGT 040101 L <sup>a</sup> -F P15C Carbide	4.3	2.3	1.8	0.1	7°	○	●
301225	CCGT 040102 L <sup>a</sup> -F P15C Carbide	4.3	2.3	1.8	0.2	7°	○	●
301226	CCGT 040104 L <sup>a</sup> -F P15C Carbide	4.3	2.3	1.8	0.4	7°	○	●
<sup>a</sup> In internal turning, L - left hand used for Right hand cutter heads/tools								
<sup>b</sup> Order oriented product, 10 pcs/package, 2 weeks delivery time								



Part Number	Insert Type	IC	d	T	rε	α	P	M	N
301227	TBGT 060102 L <sup>a</sup> P10U Cermet <sup>b</sup>	3.97	2.3	1.59	0.2	5°	●	○	-
301228	TBGT 060104 L <sup>a</sup> P10U Cermet <sup>b</sup>	3.97	2.3	1.59	0.4	5°	●	○	-
301229	TBGT 060102 L <sup>a</sup> P15C Carbide <sup>b</sup>	3.97	2.3	1.59	0.2	5°	○	●	-
301230	TBGT 060104 L <sup>a</sup> P15C Carbide <sup>b</sup>	3.97	2.3	1.59	0.4	5°	○	●	-
301231	TBGT 060102 N01 PCD	3.97	2.3	1.59	0.2	5°	-	-	●
<sup>a</sup> In internal turning, L - left hand used for Right hand cutter heads/tools									
<sup>b</sup> Order oriented product, 10 pcs/package, 2 weeks delivery time									

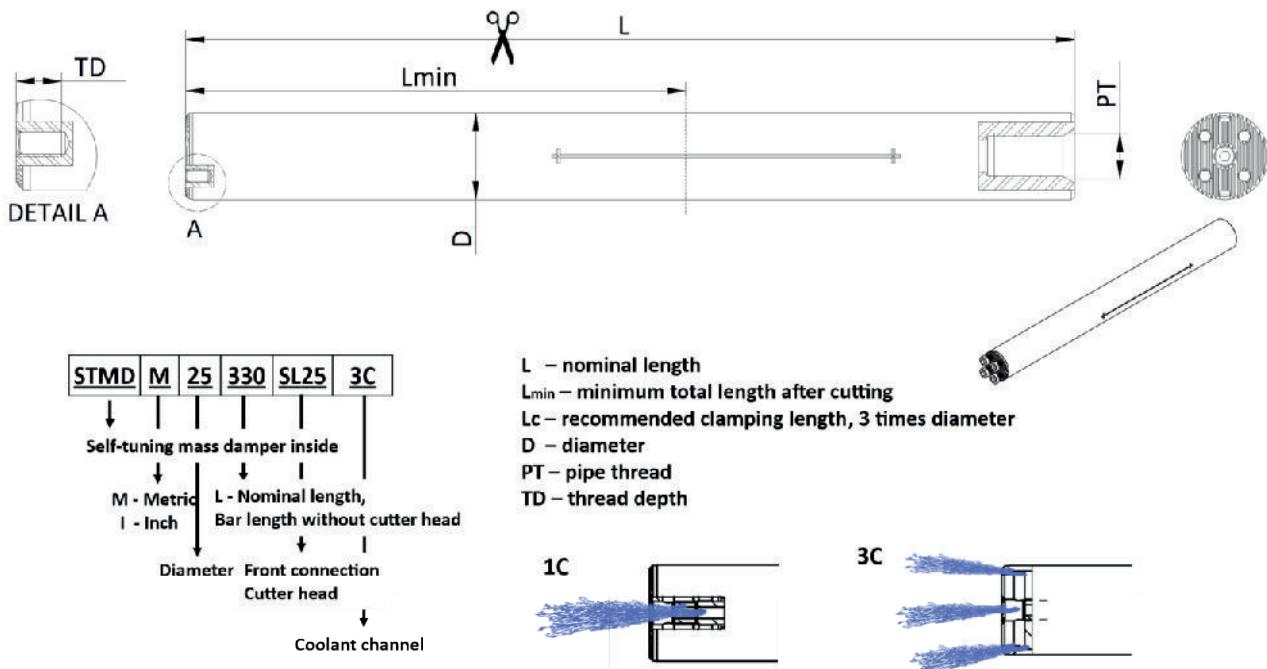
Chip breaker:



Part Number	Insert Type	IC	d	T	rε	α	P	M	N
301232	VCMT 080202 HQ P10U Cermet <sup>a</sup>	4.76	2.3	2.38	0.2	7	•	○	-
301233	VCMT 080204 HQ P10U Cermet <sup>a</sup>	4.76	2.3	2.38	0.4	7	•	○	-
301234	VCMT 080202 HQ P05C Carbide <sup>a</sup>	4.76	2.3	2.38	0.2	7	○	●	-
301235	VCMT 080204 HQ P05C Carbide <sup>a</sup>	4.76	2.3	2.38	0.4	7	○	●	-
301236	VCMT 080202 N01 PCD <sup>a</sup>	4.76	2.3	2.38	0.2	7	-	-	●
301237	VCMT 080204 N01 PCD <sup>a</sup>	4.76	2.3	2.38	0.4	7	-	-	●

<sup>a</sup> Order oriented product, 10 pcs/package, 2 weeks delivery time

## Straight holder (8-12xD) with SL (Serration Lock) interface (Metric)



Standard: Metric (with SL interface and exchangeable heads)										
Part number	Type	Workable length <sup>b</sup> (mm)	D min (mm) <sup>g</sup>	Lmin (mm)	Lc (mm)	Screws	TD (mm)	PT	Material	KG
300017	STMD M16-204 SL16 3C	128-176	20	204	48	M3X8	5.5	G 1/8	S+C <sup>d</sup>	0.50
300018	STMD M20-260 SL20 3C	160-220	25	260	60	M3X8	5.5	G 1/4	S+C <sup>d</sup>	1.00
300019	STMD M25-330 SL25 3C	200-275	32	255	75	M4X9	6.5	G 1/4	Steel	1.70
300020	STMD M32-416 SL32 3C	256-352	40	309	96	M5X12	10	G 1/2	Steel	3.50
300241	STMD M40-528 SL40 1C <sup>e</sup>	320-440	50	312	120	M6X14	10	G 1/2	Steel	5.00
300021	STMD M40-528 SL40 3C	320-440	50	312	120	M6X14	10	G 1/2	Steel	5.00
300022	STMD M50-660 SL40 1C	400-550	60	384	150	M6X14	10	G 3/4	Steel	9.40
300023	STMD M50-660 SL50 1C <sup>e</sup>	400-550	NA	382	150	M8X14	12	G 3/4	Steel	9.40
300024	STMD M60-808 SL40 1C	480-660	70	484	180	M6X14	10	G 3/4	Steel	16.4
300025	STMD M60-808 SL60 1C <sup>e</sup>	480-660	NA	482	180	M8X14	12	G 3/4	Steel	16.4
300242	STMD M80-1200 SL40 1C <sup>e</sup>	640-880	90	645	240	M6X14	10	G 1 1/4	Steel	42.0

b – measured from the cutting edge to the clamping.

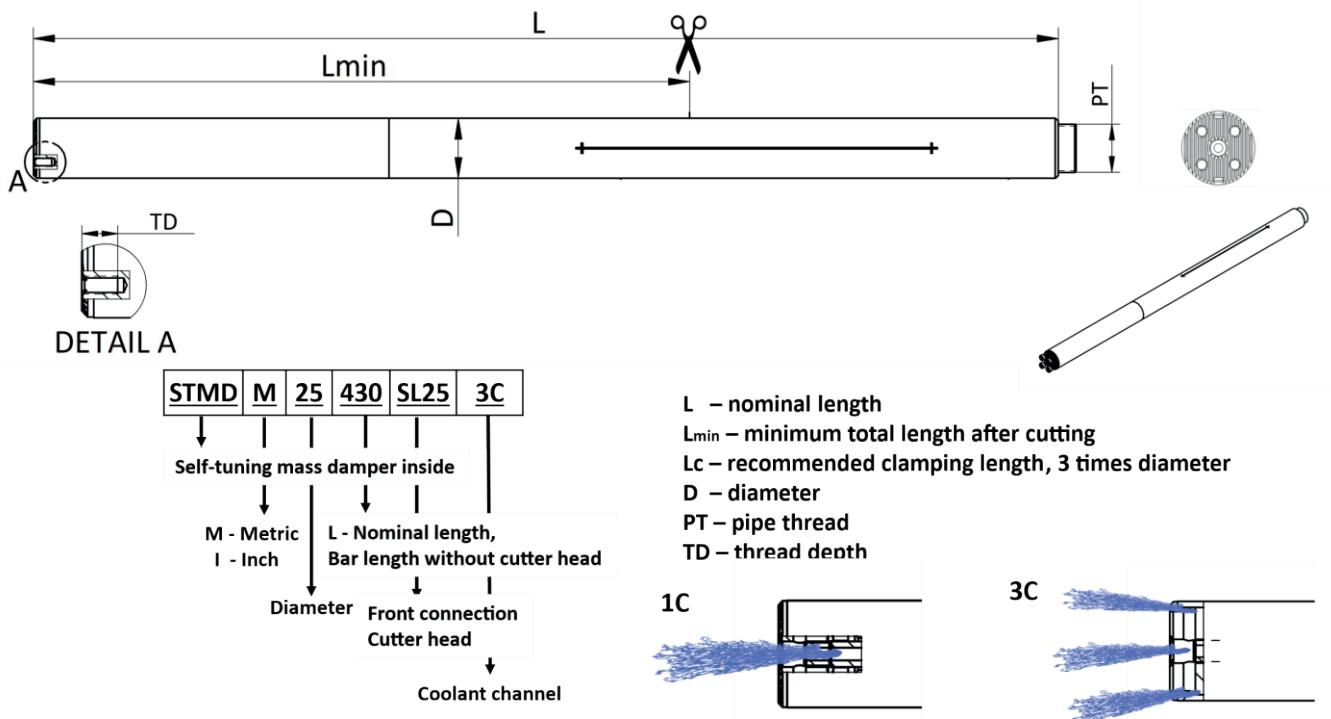
d – Carbide back end joined with steel

e – only on order and with a longer lead time

g – estimated with using standard SDUCR cutter heads from MAQ.

## Turning 11-15xD

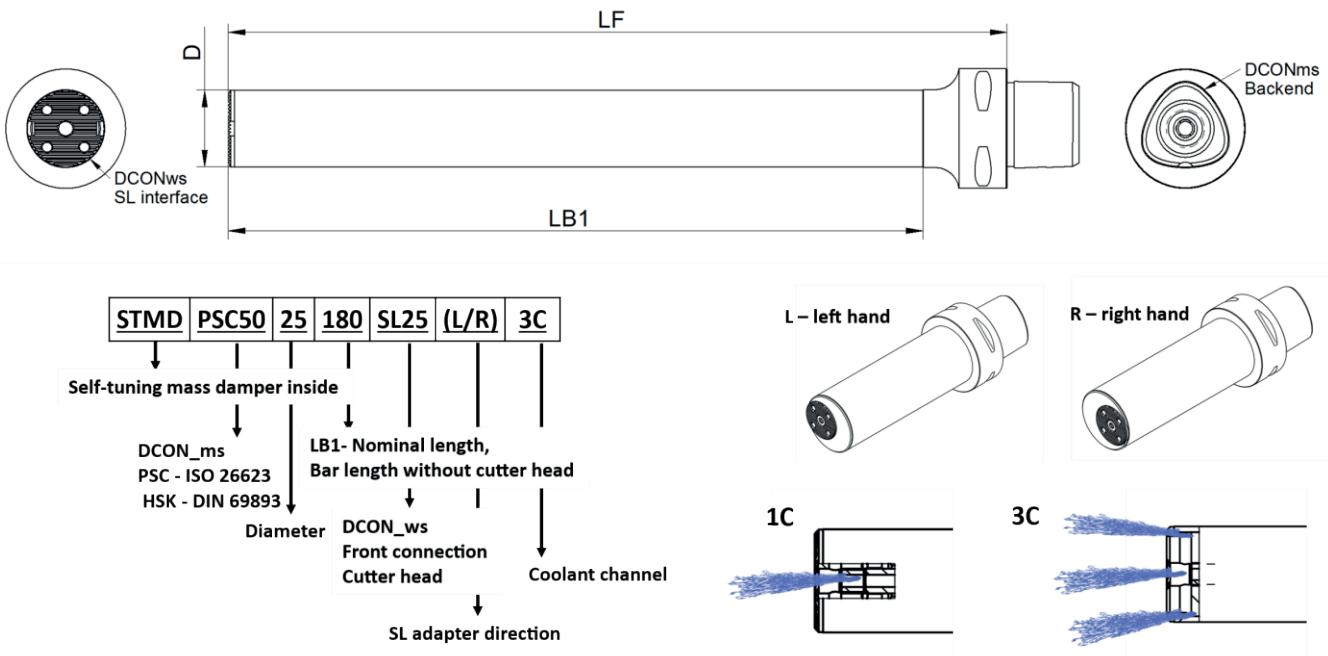
Straight holder (11-15xD) with SL (Serration Lock) interface (Metric)



Standard: Metric (with SL interface and exchangeable heads)										
Part number	Type	Workable length <sup>b</sup> (mm)	D min (mm) <sup>g</sup>	Lmin (mm)	Lc (mm)	Screws	TD (mm)	PT	Material	Image
300089	STMD M16-268 SL16 3C	176-240	20	268	48	M3X8	5.5	G 1/8	S+C <sup>d</sup>	0.75
300090	STMD M20-340 SL20 3C	220-300	25	340	60	M3X8	5.5	G 1/4	S+C <sup>d</sup>	1.50
300091	STMD M25-430 SL25 3C	275-375	32	430	75	M4X9	6.5	G 1/4	S+C <sup>d</sup>	3.20
300085	STMD M32-544 SL32 3C	352-480	40	544	96	M5X12	10	G 1/4	S+C <sup>d</sup>	6.40
300309	STMD M40-688 SL40 1C	440-600	50	688	120	M6x14	10	M36x1	S+C <sup>d</sup>	9.40
300093	STMD M40-688 SL40 3C	440-600	50	688	120	M6x14	10	M36x1	S+C <sup>d</sup>	9.40
300094	STMD M50-861 SL40 1C	550-750	60	861	150	M6X14	10	G 1/4	S+C <sup>d</sup>	18.6
300095	STMD M50-861 SL50 1C	550-750	NA	861	150	M6X14	10	G 1/4	S+C <sup>d</sup>	18.6
300096	STMD M60-1040 SL40 1C <sup>e</sup>	660-900	70	1040	180	M6x14	10	G 3/8	S+C <sup>d</sup>	34.4
300097	STMD M60-1040 SL60 1C <sup>e</sup>	660-900	NA	1040	180	M6x14	10	G 3/8	S+C <sup>d</sup>	34.4
301214	STMD M80-1400 SL40 1C <sup>e</sup>	880-1200	90	1400	240	M6x14	10	G 3/4	S+C <sup>d</sup>	80

	<p>b – measured from the cutting edge to the clamping.</p> <p>d – Carbide back end joined with steel</p> <p>e – only on order and with a longer lead-time,</p> <p>g – estimated with using standard SDUCR cutter heads from MAQ.</p>
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## Turning – Multitask with modular backends.



Standard: PSC32 (with SL interface and exchangeable heads)

Standard: PSC32 (with SL interface and exchangeable heads)										
Part number	Type	Backend	D (mm)	Dmin (mm) <sup>d</sup>	LF (mm)	LB1 (mm)	Screws	Material	Weight (kg)	
300476	STMD PSC32 16-064 SL16 3C	PSC32	16	20	99	64	M3X8	Steel	0.3	
300477	STMD PSC32 16-096 SL16 3C	PSC32	16	20	131	96	M3X8	Steel	0.3	
300478	STMD PSC32 20-090 SL20 3C	PSC32	20	25	125	90	M3X8	Steel	0.3	
300479	STMD PSC32 20-130 SL20 3C	PSC32	20	25	165	130	M3X8	Steel	0.4	
300480	STMD PSC32 25-130 SL25 3C	PSC32	25	32	165	130	M4X9	Steel	0.6	
300481	STMD PSC32 25-180 SL25 3C	PSC32	25	32	215	180	M4X9	Steel	0.8	
300482	STMD PSC32 25-230 SL25 3C	PSC32	25	32	265	230	M4X9	Steel	1.0	
300483	STMD PSC32 32-170 SL32 3C	PSC32	32	40	205	170	M5X12	Steel	1.8	
300484	STMD PSC32 32-230 SL32 3C	PSC32	32	40	265	230	M5X12	Steel	2.4	

d - estimated with using standard SDUCR cutter heads from MAQ.

## Standard: PSC40 (with SL interface and exchangeable heads)

Standard: PSC40 (with SL interface and exchangeable heads)									
Part number	Type	Backend	D (mm)	Dmin (mm) <sup>d</sup>	LF (mm)	LB1 (mm)	Screws	Material	KG
300485	<b>STMD PSC40 16-064 SL16 3C</b>	PSC40	16	20	100	64	M3X8	Steel	0.4
300486	<b>STMD PSC40 16-096 SL16 3C</b>	PSC40	16	20	132	96	M3X8	Steel	0.5
300487	<b>STMD PSC40 20-090 SL20 3C</b>	PSC40	20	25	126	90	M3X8	Steel	0.5
300488	<b>STMD PSC40 20-130 SL20 3C</b>	PSC40	20	25	166	130	M3X8	Steel	0.7
300489	<b>STMD PSC40 25-130 SL25 3C</b>	PSC40	25	32	167	130	M4X9	Steel	0.8
300490	<b>STMD PSC40 25-180 SL25 3C</b>	PSC40	25	32	216	180	M4X9	Steel	0.9
300491	<b>STMD PSC40 25-230 SL25 3C</b>	PSC40	25	32	266	230	M4X9	Steel	1.2
300492	<b>STMD PSC40 32-170 SL32 3C</b>	PSC40	32	40	206	170	M5X12	Steel	1.5
300493	<b>STMD PSC40 32-230 SL32 3C</b>	PSC40	32	40	266	230	M5X12	Steel	2.0
300494	<b>STMD PSC40 32-294 SL32 3C</b>	PSC40	32	40	330	294	M5X12	Steel	2.6
300495	<b>STMD PSC40 40-210 SL40 3C</b>	PSC40	40	50	246	210	M6X14	Steel	1.7
300496	<b>STMD PSC40 40-290 SL40 3C</b>	PSC40	40	50	326	290	M6x14	Steel	3.4

d - estimated with using standard SDUCR cutter heads from MAQ.

## Standard: PSC50 (with SL interface and exchangeable heads)

Standard: PSC50 (with SL interface and exchangeable heads)									
Part number	Type	Backend	D (mm)	Dmin (mm) <sup>d</sup>	LF (mm)	LB1 (mm)	Screws	Material	KG
300497	<b>STMD PSC50 16-064 SL16 3C</b>	PSC50	16	20	99	64	M3X8	Steel	0.5
300498	<b>STMD PSC50 16-096 SL16 3C</b>	PSC50	16	20	131	96	M3X8	Steel	0.7
300499	<b>STMD PSC50 20-090 SL20 3C</b>	PSC50	20	25	131	96	M3X8	Steel	0.7
300500	<b>STMD PSC50 20-130 SL20 3C</b>	PSC50	20	25	165	130	M3X8	Steel	0.9
300501	<b>STMD PSC50 25-130 SL25 3C</b>	PSC50	25	32	165	130	M4X9	Steel	1.0
300462	<b>STMD PSC50 25-180 SL25 3C</b>	PSC50	25	32	215	180	M4X9	Steel	1.2
300463	<b>STMD PSC50 25-230 SL25 3C</b>	PSC50	25	32	265	230	M4X9	Steel	1.4
300502	<b>STMD PSC50 32-170 SL32 3C</b>	PSC50	32	40	205	170	M5X12	Steel	1.4
300464	<b>STMD PSC50 32-230 SL32 3C</b>	PSC50	32	40	265	230	M5X12	Steel	1.8
300465	<b>STMD PSC50 32-294 SL32 3C</b>	PSC50	32	40	329	294	M5X12	Steel	2.4
300503	<b>STMD PSC50 40-210 SL40 3C</b>	PSC50	40	50	245	210	M6X14	Steel	2.2
300504	<b>STMD PSC50 40-290 SL40 3C</b>	PSC50	40	50	325	290	M6x14	Steel	3.6
300505	<b>STMD PSC50 40-370 SL40 3C</b>	PSC50	40	50	405	370	M6x14	Steel	4.2
301184	<b>STMD PSC50 50-270 SL40 L 1C</b>	PSC50	50	60	305	270	M6x14	Steel	5.2
301185	<b>STMD PSC50 50-370 SL40 L 1C</b>	PSC50	50	60	405	370	M6x14	Steel	7.1
301200	<b>STMD PSC50 50-270 SL40 R 1C</b>	PSC50	50	60	305	270	M6x14	Steel	5.2
301201	<b>STMD PSC50 50-370 SL40 R 1C</b>	PSC50	50	60	405	370	M6x14	Steel	7.1

d - estimated with using standard SDUCR cutter heads from MAQ.

Standard: PSC63 (with SL interface and exchangeable heads)

Standard: PSC63 (with SL interface and exchangeable heads)									
Part number	Type	Backend	D (mm)	Dmin (mm) <sup>d</sup>	LF (mm)	LB1 (mm)	Screws	Material	KG
300506	<b>STMD PSC63 16-064 SL16 3C</b>	PSC63	16	20	102	64	M3X8	Steel	1.0
300507	<b>STMD PSC63 16-096 SL16 3C</b>	PSC63	16	20	134	96	M3X8	Steel	1.2
300508	<b>STMD PSC63 20-090 SL20 3C</b>	PSC63	20	20	128	90	M3X8	Steel	1.0
300509	<b>STMD PSC63 20-130 SL20 3C</b>	PSC63	20	25	168	130	M3X8	Steel	1.2
300510	<b>STMD PSC63 25-130 SL25 3C</b>	PSC63	25	32	168	130	M4X9	Steel	1.5
300511	<b>STMD PSC63 25-180 SL25 3C</b>	PSC63	25	32	218	180	M4X9	Steel	1.6
300512	<b>STMD PSC63 25-230 SL25 3C</b>	PSC63	25	32	268	230	M4X9	Steel	1.7
300513	<b>STMD PSC63 32-170 SL32 3C</b>	PSC63	32	40	208	170	M5X12	Steel	1.8
300514	<b>STMD PSC63 32-230 SL32 3C</b>	PSC63	32	40	268	230	M5X12	Steel	2.2
300515	<b>STMD PSC63 32-294 SL32 3C</b>	PSC63	32	40	332	294	M5X12	Steel	2.7
300516	<b>STMD PSC63 40-210 SL40 3C</b>	PSC63	40	50	248	210	M6X14	Steel	2.6
300517	<b>STMD PSC63 40-290 SL40 3C</b>	PSC63	40	50	328	290	M6x14	Steel	3.9
300518	<b>STMD PSC63 40-370 SL40 3C<sup>a</sup></b>	PSC63	40	50	408	370	M6x14	Steel	4.2
301186	<b>STMD PSC63 50-270 SL40 L 1C</b>	PSC63	50	60	308	270	M6x14	Steel	5.7
301187	<b>STMD PSC63 50-370 SL40 L 1C</b>	PSC63	50	60	408	370	M6x14	Steel	7.6
301188	<b>STMD PSC63 50-470 SL40 L 1C</b>	PSC63	50	60	508	470	M6x14	Steel	9.3
301192	<b>STMD PSC63 60-330 SL40 L 1C</b>	PSC63	60	70	368	330	M6x14	Steel	8.0
301193	<b>STMD PSC63 60-450 SL40 L 1C</b>	PSC63	60	70	488	450	M6x14	Steel	10.6
301202	<b>STMD PSC63 50-270 SL40 R 1C</b>	PSC63	50	60	308	270	M6x14	Steel	5.7
301203	<b>STMD PSC63 50-370 SL40 R 1C</b>	PSC63	50	60	408	370	M6x14	Steel	7.6
301204	<b>STMD PSC63 50-470 SL40 R 1C</b>	PSC63	50	60	508	470	M6x14	Steel	9.3
301205	<b>STMD PSC63 60-330 SL40 R 1C</b>	PSC63	60	70	368	330	M6x14	Steel	8.0
301206	<b>STMD PSC63 60-450 SL40 R 1C</b>	PSC63	60	70	488	450	M6x14	Steel	10.6

d - estimated with using standard SDUCR cutter heads from MAQ.

## Standard: PSC80 (with SL interface and exchangeable heads)

Standard: PSC80 (with SL interface and exchangeable heads)										
Part number	Type	Backend	D (mm)	Dmin (mm) <sup>d</sup>	LF (mm)	LB1 (mm)	Screws	Material	KG	
300519	<b>STMD PSC80 16-064 SL16 3C</b>	PSC80	16	20	94	64	M3X8	Steel	1.1	
300520	<b>STMD PSC80 16-096 SL16 3C</b>	PSC80	16	20	126	96	M3X8	Steel	1.3	
300521	<b>STMD PSC80 20-090 SL20 3C</b>	PSC80	20	25	120	90	M3X8	Steel	1.4	
300522	<b>STMD PSC80 20-130 SL20 3C</b>	PSC80	20	25	160	130	M3X8	Steel	1.6	
300523	<b>STMD PSC80 25-130 SL25 3C</b>	PSC80	25	32	160	130	M4X9	Steel	2.0	
300524	<b>STMD PSC80 25-180 SL25 3C</b>	PSC80	25	32	210	180	M4X9	Steel	2.5	
300525	<b>STMD PSC80 25-230 SL25 3C</b>	PSC80	25	32	260	230	M4X9	Steel	3.0	
300526	<b>STMD PSC80 32-170 SL32 3C</b>	PSC80	32	40	200	170	M5X12	Steel	2.8	
300527	<b>STMD PSC80 32-230 SL32 3C</b>	PSC80	32	40	260	230	M5X12	Steel	3.6	
300528	<b>STMD PSC80 32-294 SL32 3C</b>	PSC80	32	40	324	294	M5X12	Steel	4.5	
300529	<b>STMD PSC80 40-210 SL40 3C</b>	PSC80	40	50	240	210	M6X14	Steel	3.7	
300530	<b>STMD PSC80 40-290 SL40 3C</b>	PSC80	40	50	320	290	M6x14	Steel	5.2	
300531	<b>STMD PSC80 40-370 SL40 3C<sup>a</sup></b>	PSC80	40	50	400	370	M6x14	Steel	5.4	
301189	<b>STMD PSC80 50-270 SL40 L 1C</b>	PSC80	50	60	302	270	M6x14	Steel	6.4	
301190	<b>STMD PSC80 50-370 SL40 L 1C</b>	PSC80	50	60	402	370	M6x14	Steel	8.3	
301191	<b>STMD PSC80 50-470 SL40 L 1C</b>	PSC80	50	60	502	470	M6x14	Steel	10.0	
301194	<b>STMD PSC80 60-330 SL40 L 1C</b>	PSC80	60	70	362	330	M6x14	Steel	8.7	
301195	<b>STMD PSC80 60-450 SL40 L 1C</b>	PSC80	60	70	482	450	M6x14	Steel	11.3	
301196	<b>STMD PSC80 60-570 SL40 L 1C</b>	PSC80	60	70	602	570	M6x14	Steel	13.2	
301207	<b>STMD PSC80 50-270 SL40 R 1C</b>	PSC80	50	60	302	270	M6x14	Steel	6.4	
301208	<b>STMD PSC80 50-370 SL40 R 1C</b>	PSC80	50	60	402	370	M6x14	Steel	8.3	
301209	<b>STMD PSC80 50-470 SL40 R 1C</b>	PSC80	50	60	502	470	M6x14	Steel	10.0	
301210	<b>STMD PSC80 60-330 SL40 R 1C</b>	PSC80	60	70	362	330	M6x14	Steel	8.7	
301211	<b>STMD PSC80 60-450 SL40 R 1C</b>	PSC80	60	70	482	450	M6x14	Steel	11.3	
301212	<b>STMD PSC80 60-570 SL40 R 1C</b>	PSC80	60	70	602	570	M6x14	Steel	13.2	
301197	<b>STMD PSC80 80-450 SL40 L 1C</b>	PSC80	80	90	482	450	M6x14	Steel	12.1	
301198	<b>STMD PSC80 80-610 SL40 L 1C</b>	PSC80	80	90	642	610	M6x14	Steel	18.2	
301199	<b>STMD PSC80 80-740 SL40 L 1C</b>	PSC80	80	90	772	740	M6x14	Steel	20.6	

d - estimated with using standard SDUCR cutter heads from MAQ.

## Standard: HSK63T (with SL interface and exchangeable heads)

Standard: HSK63T (with SL interface and exchangeable heads)										
Part number	Type	Backend	D (mm)	Dmin (mm) <sup>d</sup>	LF (mm)	LB1 (mm)	Screws	Material	KG	
300532	STMD HSK63T 16-064 SL16 3C	HSK63	16	20	120	64	M3X8	Steel	1.0	
300533	STMD HSK63T 16-096 SL16 3C	HSK63	16	20	152	96	M3X8	Steel	1.2	
300534	STMD HSK63T 20-090 SL20 3C	HSK63	20	25	146	90	M3X8	Steel	1.0	
300535	STMD HSK63T 20-130 SL20 3C	HSK63	20	25	186	130	M3X8	Steel	1.2	
300536	STMD HSK63T 25-130 SL25 3C	HSK63	25	32	186	130	M4X9	Steel	1.5	
300537	STMD HSK63T 25-180 SL25 3C	HSK63	25	32	236	180	M4X9	Steel	1.6	
300538	STMD HSK63T 25-230 SL25 3C	HSK63	25	32	286	230	M4X9	Steel	1.7	
300539	STMD HSK63T 32-170 SL32 3C	HSK63	32	40	226	170	M5X12	Steel	1.8	
300540	STMD HSK63T 32-230 SL32 3C	HSK63	32	40	286	230	M5X12	Steel	2.2	
300541	STMD HSK63T 32-294 SL32 3C	HSK63	32	40	350	294	M5X12	Steel	2.7	
300542	STMD HSK63T 40-210 SL40 3C	HSK63	40	50	266	210	M6X14	Steel	2.6	
300543	STMD HSK63T 40-290 SL40 3C	HSK63	40	50	346	290	M6x14	Steel	3.9	
300544	STMD HSK63T 40-370 SL40 3C <sup>a</sup>	HSK63	40	50	426	370	M6x14	Steel	4.2	

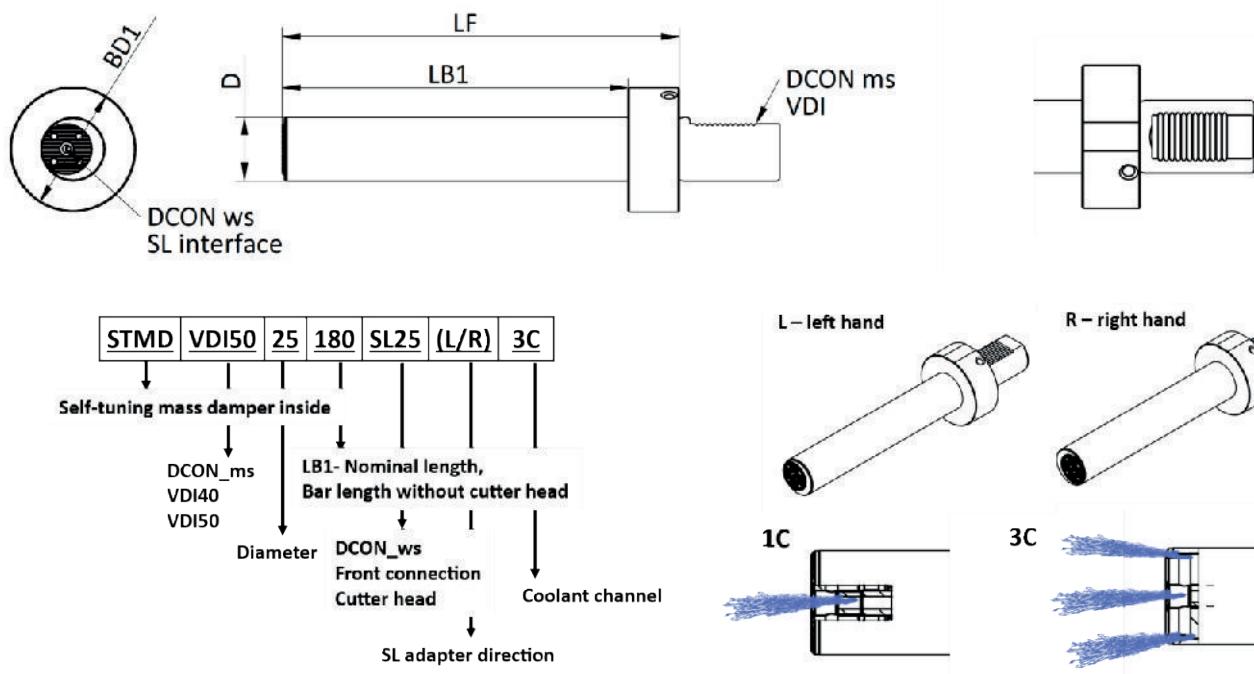
d - estimated with using standard SDUCR cutter heads from MAQ.

## Standard: KM63 XMZ (with SL interface and exchangeable heads)

Standard: KM63 XMZ (with SL interface and exchangeable heads)										
Part number	Type	Backend	D (mm)	Dmin (mm) <sup>d</sup>	LF (mm)	LB1 (mm)	Screws	Material	KG	
301380 <sup>e</sup>	STMD KM63 XMZ 16-064 SL16 3C	KM63 XMZ	16	20	120	64	M3X8	Steel	1.0	
301381 <sup>e</sup>	STMD KM63 XMZ 16-096 SL16 3C	KM63 XMZ	16	20	152	96	M3X8	Steel	1.2	
301382 <sup>e</sup>	STMD KM63 XMZ 20-090 SL20 3C	KM63 XMZ	20	25	146	90	M3X8	Steel	1.0	
301383 <sup>e</sup>	STMD KM63 XMZ 20-130 SL20 3C	KM63 XMZ	20	25	186	130	M3X8	Steel	1.2	
301384 <sup>e</sup>	STMD KM63 XMZ 25-130 SL25 3C	KM63 XMZ	25	32	186	130	M4X9	Steel	1.5	
301385 <sup>e</sup>	STMD KM63 XMZ 25-180 SL25 3C	KM63 XMZ	25	32	236	180	M4X9	Steel	1.6	
301386 <sup>e</sup>	STMD KM63 XMZ 25-230 SL25 3C	KM63 XMZ	25	32	286	230	M4X9	Steel	1.7	
301387 <sup>e</sup>	STMD KM63 XMZ 32-170 SL32 3C	KM63 XMZ	32	40	226	170	M5X12	Steel	1.8	
301388 <sup>e</sup>	STMD KM63 XMZ 32-230 SL32 3C	KM63 XMZ	32	40	286	230	M5X12	Steel	2.2	
301389 <sup>e</sup>	STMD KM63 XMZ 32-294 SL32 3C	KM63 XMZ	32	40	350	294	M5X12	Steel	2.7	
301390	STMD KM63 XMZ 40-210 SL40 3C	KM63 XMZ	40	50	266	210	M6X14	Steel	2.6	
301391	STMD KM63 XMZ 40-290 SL40 3C	KM63 XMZ	40	50	346	290	M6x14	Steel	3.9	
301392	STMD KM63 XMZ 40-370 SL40 3Ca	KM63 XMZ	40	50	426	370	M6x14	Steel	4.2	
301393	STMD KM63 XMZ 50-270 SL40 L 1C	KM63 XMZ	50	60	308	270	M6x14	Steel	5.7	
301394	STMD KM63 XMZ 50-370 SL40 L 1C	KM63 XMZ	50	60	408	370	M6x14	Steel	7.6	
301395	STMD KM63 XMZ 50-470 SL40 L 1C	KM63 XMZ	50	60	508	470	M6x14	Steel	9.3	
301396	STMD KM63 XMZ 60-330 SL40 L 1C	KM63 XMZ	60	70	368	330	M6x14	Steel	8.0	
301397	STMD KM63 XMZ 60-450 SL40 L 1C	KM63 XMZ	60	70	488	450	M6x14	Steel	10.6	
301398	STMD KM63 XMZ 50-270 SL40 R 1C	KM63 XMZ	50	60	308	270	M6x14	Steel	5.7	
301399	STMD KM63 XMZ 50-370 SL40 R 1C	KM63 XMZ	50	60	408	370	M6x14	Steel	7.6	
301400	STMD KM63 XMZ 50-470 SL40 R 1C	KM63 XMZ	50	60	508	470	M6x14	Steel	9.3	
301401	STMD KM63 XMZ 60-330 SL40 R 1C	KM63 XMZ	60	70	368	330	M6x14	Steel	8.0	
301402	STMD KM63 XMZ 60-450 SL40 R 1C	KM63 XMZ	60	70	488	450	M6x14	Steel	10.6	

d - estimated with using standard SDUCR cutter heads from MAQ.

e - available from Jan 2025.



### Standard: VDI30 (with SL interface and exchangeable heads)

Part number	Type	Backend	D (mm)	Dmin (mm) <sup>d</sup>	LF (mm)	LB1 (mm)	Screws	Material	KG
301405	<b>STMD VDI30 25-130 SL25 3C</b>	VDI30	25	32	168	130	M4X9	Steel	2.0
301406	<b>STMD VDI30 25-180 SL25 3C</b>	VDI30	25	32	218	180	M4X9	Steel	2.5
301407	<b>STMD VDI30 25-230 SL25 3C</b>	VDI30	25	32	268	230	M4X9	Steel	3.0
301408	<b>STMD VDI30 32-170 SL32 3C</b>	VDI30	32	40	208	170	M5X12	Steel	2.8
301409	<b>STMD VDI30 32-230 SL32 3C</b>	VDI30	32	40	268	230	M5X12	Steel	3.6
301410	<b>STMD VDI30 32-294 SL32 3C</b>	VDI30	32	40	332	294	M5X12	Steel	4.5
301411	<b>STMD VDI30 40-210 SL40 3C</b>	VDI30	40	50	248	210	M6X14	Steel	3.7
301412	<b>STMD VDI30 40-290 SL40 3C</b>	VDI30	40	50	328	290	M6x14	Steel	5.2

**Standard: VDI40 (with SL interface and exchangeable heads)**

Standard: VDI40 (with SL interface and exchangeable heads)										
Part number	Type	Backend	D (mm)	Dmin (mm) <sup>d</sup>	LF (mm)	LB1 (mm)	Screws	Material	KG	
301297	<b>STMD VDI40 25-130 SL25 3C</b>	VDI40	25	32	170	130	M4X9	Steel	2.0	
301298	<b>STMD VDI40 25-180 SL25 3C</b>	VDI40	25	32	220	180	M4X9	Steel	2.5	
301299	<b>STMD VDI40 25-230 SL25 3C</b>	VDI40	25	32	270	230	M4X9	Steel	3.0	
301300	<b>STMD VDI40 32-170 SL32 3C</b>	VDI40	32	40	210	170	M5X12	Steel	2.8	
301301	<b>STMD VDI40 32-230 SL32 3C</b>	VDI40	32	40	270	230	M5X12	Steel	3.6	
301302	<b>STMD VDI40 32-294 SL32 3C</b>	VDI40	32	40	334	294	M5X12	Steel	4.5	
301303	<b>STMD VDI40 40-210 SL40 3C</b>	VDI40	40	50	250	210	M6X14	Steel	3.7	
301304	<b>STMD VDI40 40-290 SL40 3C</b>	VDI40	40	50	330	290	M6x14	Steel	5.2	
301305	<b>STMD VDI40 40-370 SL40 3C</b>	VDI40	40	50	410	370	M6x14	Steel	5.4	
301306	<b>STMD VDI40 50-270 SL40 L 1C</b>	VDI40	50	60	310	270	M6x14	Steel	6.4	
301307	<b>STMD VDI40 50-370 SL40 L 1C</b>	VDI40	50	60	410	370	M6x14	Steel	8.3	
301308	<b>STMD VDI40 50-470 SL40 L 1C</b>	VDI40	50	60	510	470	M6x14	Steel	10.0	
301309	<b>STMD VDI40 60-330 SL40 L 1C</b>	VDI40	60	70	370	330	M6x14	Steel	8.7	
301310	<b>STMD VDI40 60-450 SL40 L 1C</b>	VDI40	60	70	490	450	M6x14	Steel	11.3	
301311	<b>STMD VDI40 60-570 SL40 L 1C</b>	VDI40	60	70	610	570	M6x14	Steel	13.2	
301312	<b>STMD VDI40 50-270 SL40 R 1C</b>	VDI40	50	60	310	270	M6x14	Steel	6.4	
301313	<b>STMD VDI40 50-370 SL40 R 1C</b>	VDI40	50	60	410	370	M6x14	Steel	8.3	
301314	<b>STMD VDI40 50-470 SL40 R 1C</b>	VDI40	50	60	510	470	M6x14	Steel	10.0	
301315	<b>STMD VDI40 60-330 SL40 R 1C</b>	VDI40	60	70	370	330	M6x14	Steel	8.7	
301316	<b>STMD VDI40 60-450 SL40 R 1C</b>	VDI40	60	70	490	450	M6x14	Steel	11.3	
301317	<b>STMD VDI40 60-570 SL40 R 1C</b>	VDI40	60	70	610	570	M6x14	Steel	13.2	
301318	<b>STMD VDI40 80-450 SL40 L 1C</b>	VDI40	80	90	490	450	M6x14	Steel	12.1	
301319	<b>STMD VDI40 80-610 SL40 L 1C</b>	VDI40	80	90	650	610	M6x14	Steel	18.2	
301320	<b>STMD VDI40 80-740 SL40 L 1C</b>	VDI40	80	90	780	740	M6x14	Steel	20.6	

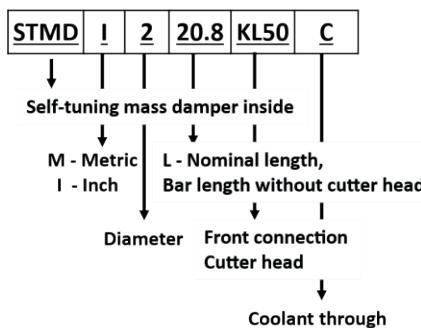
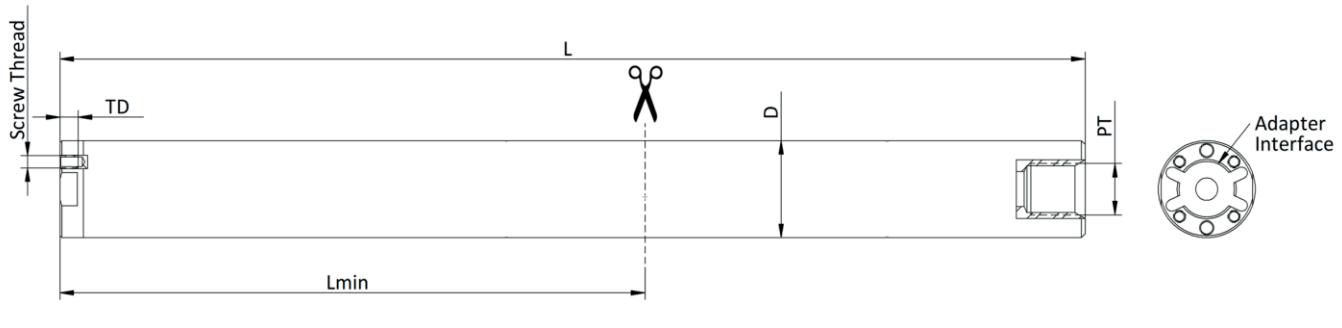
d - estimated with using standard SDUCR cutter heads from MAQ.

## Standard: VDI50 (with SL interface and exchangeable heads)

Standard: VDI50 (with SL interface and exchangeable heads)										
Part number	Type	Backend	D (mm)	Dmin (mm) <sup>d</sup>	LF (mm)	LB1 (mm)	Screws	Material	KG	
301321	<b>STMD VDI50 25-130 SL25 3C</b>	VDI50	25	32	170	130	M4X9	Steel	2.0	
301322	<b>STMD VDI50 25-180 SL25 3C</b>	VDI50	25	32	220	180	M4X9	Steel	2.5	
301323	<b>STMD VDI50 25-230 SL25 3C</b>	VDI50	25	32	270	230	M4X9	Steel	3.0	
301324	<b>STMD VDI50 32-170 SL32 3C</b>	VDI50	32	40	210	170	M5X12	Steel	2.8	
301325	<b>STMD VDI50 32-230 SL32 3C</b>	VDI50	32	40	270	230	M5X12	Steel	3.6	
301326	<b>STMD VDI50 32-294 SL32 3C</b>	VDI50	32	40	334	294	M5X12	Steel	4.5	
301327	<b>STMD VDI50 40-210 SL40 3C</b>	VDI50	40	50	250	210	M6X14	Steel	3.7	
301328	<b>STMD VDI50 40-290 SL40 3C</b>	VDI50	40	50	330	290	M6x14	Steel	5.2	
301329	<b>STMD VDI50 40-370 SL40 3C</b>	VDI50	40	50	410	370	M6x14	Steel	5.4	
301330	<b>STMD VDI50 50-270 SL40 L 1C</b>	VDI50	50	60	310	270	M6x14	Steel	6.4	
301331	<b>STMD VDI50 50-370 SL40 L 1C</b>	VDI50	50	60	410	370	M6x14	Steel	8.3	
301332	<b>STMD VDI50 50-470 SL40 L 1C</b>	VDI50	50	60	510	470	M6x14	Steel	10.0	
301333	<b>STMD VDI50 60-330 SL40 L 1C</b>	VDI50	60	70	370	330	M6x14	Steel	8.7	
301334	<b>STMD VDI50 60-450 SL40 L 1C</b>	VDI50	60	70	490	450	M6x14	Steel	11.3	
301335	<b>STMD VDI50 60-570 SL40 L 1C</b>	VDI50	60	70	610	570	M6x14	Steel	13.2	
301336	<b>STMD VDI50 50-270 SL40 R 1C</b>	VDI50	50	60	310	270	M6x14	Steel	6.4	
301337	<b>STMD VDI50 50-370 SL40 R 1C</b>	VDI50	50	60	410	370	M6x14	Steel	8.3	
301338	<b>STMD VDI50 50-470 SL40 R 1C</b>	VDI50	50	60	510	470	M6x14	Steel	10.0	
301339	<b>STMD VDI50 60-330 SL40 R 1C</b>	VDI50	60	70	370	330	M6x14	Steel	8.7	
301340	<b>STMD VDI50 60-450 SL40 R 1C</b>	VDI50	60	70	490	450	M6x14	Steel	11.3	
301341	<b>STMD VDI50 60-570 SL40 R 1C</b>	VDI50	60	70	610	570	M6x14	Steel	13.2	
301342	<b>STMD VDI50 80-450 SL40 L 1C</b>	VDI50	80	90	490	450	M6x14	Steel	12.1	
301343	<b>STMD VDI50 80-610 SL40 L 1C</b>	VDI50	80	90	650	610	M6x14	Steel	18.2	
301344	<b>STMD VDI50 80-740 SL40 L 1C</b>	VDI50	80	90	780	740	M6x14	Steel	20.6	

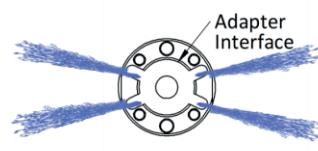
d - estimated with using standard SDUCR cutter heads from MAQ.

## Tools with KL interface



**L** – nominal length  
**L<sub>min</sub>** – minimum total length after cutting  
**L<sub>c</sub>** – recommended clamping length, 3 times diameter  
**D** – diameter  
**PT** – pipe thread  
**TD** – thread depth

**C** – Coolant through



Standard: Metric (with KL interface and exchangeable heads)										
Part number	Type	Workable length <sup>c</sup> (mm)	D min (mm) <sup>g</sup>	Lmin (mm)	Lc (mm)	Screws	TD (mm)	PT	Material	KG
300648	STMD M50-528-KL50 C <sup>a,b</sup>	300-400	60	322	150	1/4"-20 x 1/2	9	G 3/4	Steel	8.0
300649	STMD M60-642-KL60 C <sup>a,b</sup>	360-480	70	422	180	5/16"-18 x 1/2	12	G 3/4	Steel	13.6

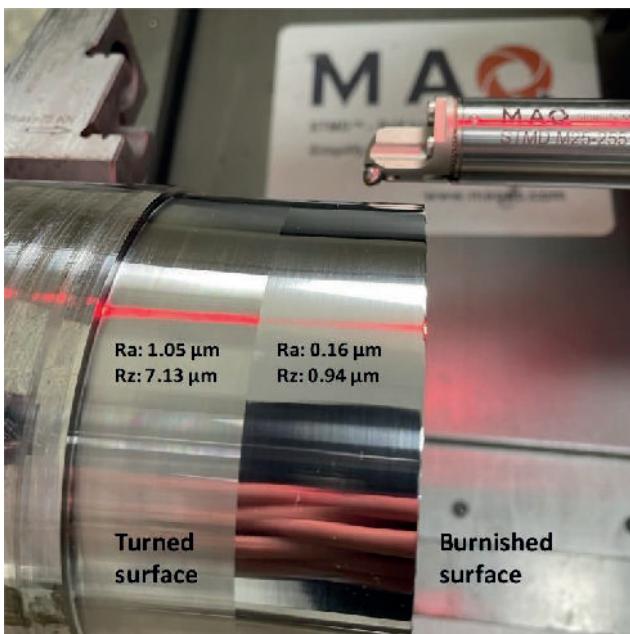
Standard: Inch (with KL interface and exchangeable heads)										
Part number	Type	Workable length <sup>c</sup> (inch)	D min (inch) <sup>g</sup>	Lmin (inch)	Lc (inch)	Screws	TD (mm)	PT	Material	KG
300650	STMD I 2-20.8-KL50 C <sup>a,b</sup>	12.000-16.000	2.362	12.7	5.90	1/4"-20 x 1/2	9	G 3/4	Steel	8.0
300651	STMD I 2 1/2-25.3-KL60 C <sup>a,b</sup>	15.000-20.000	2.756	16.7	7.10	5/16"-18 x 1/2	12	G 3/4	Steel	13.6

Standard: Metric (with KL interface and exchangeable heads)										
Part number	Type	Workable length <sup>c</sup> (mm)	D min (mm) <sup>g</sup>	Lmin (mm)	Lc (mm)	Screws	TD (mm)	PT	Material	KG
300646	STMD M50-670-KL50 C <sup>a,b</sup>	400-550	60	384	150	1/4"-20 x 1/2	9	G 3/4	Steel	9.4
300647	STMD M60-822-KL60 C <sup>a,b</sup>	480-660	70	484	180	5/16"-18 x 1/2	12	G 3/4	Steel	16.4

Standard: Inch (with KL interface and exchangeable heads)										
Part number	Type	Workable length <sup>c</sup> (inch)	D min (inch) <sup>g</sup>	Lmin (inch)	Lc (inch)	Screws	TD (mm)	PT	Material	KG
300637	STMD I 2-26.4-KL50 C <sup>a,b</sup>	16.000-22.000	2.362	15.0	5.90	1/4"-20 x 1/2	9	G 3/4	Steel	9.4
300638	STMD I 2 1/2-32.4-KL60 C <sup>a,b</sup>	20.000-27.500	2.756	19.1	7.10	5/16"-18 x 1/2	12	G 3/4	Steel	16.4

a – delivery time 3 weeks b – exchangeable to KM Lock interface c – measured from the cutting edge to the clamping. g – estimated with standard KM Lock SDUCR cutter head
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## Burnishing



**Mirror surface finish in one pass, up to 15xD!**

The MAQ diamond burnishing tool works on carbon steel, tool steel, cast iron, ferrous and non-ferrous (P, M, K, N, S) materials.

Suggested starting machining parameter to all materials:

- a. Interference with workpiece material 0.05-0.2 mm (0.002-0.003 inch)
- b. Cutting speed 60-230 m/min (200-750 SFM)
- c. Feed rate 0.08-0.15 mm/rev (0.003-0.006 IPR)

We recommend a feed rate at 70% of the feed rate in previous turning operation.

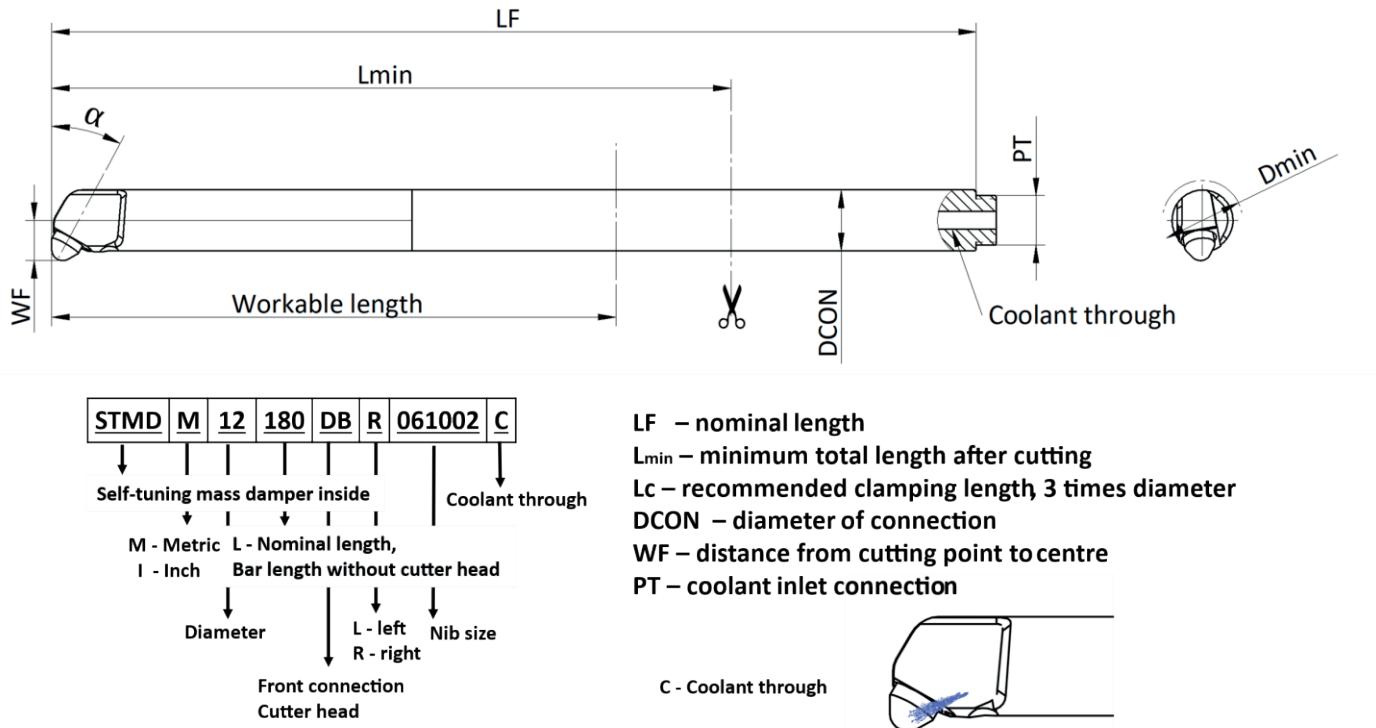
We recommend start with interference of 0.1 mm (0.004 μinch) and increase the interference if the surface finish is not reached.

Recommended surface finish prior burnishing operation is  $Ra < 1.6 \mu\text{m}$  (64 μinch). After burnishing, the surface finish can normally reach  $Ra < 0.3 \mu\text{m}$ .

Diamond burnishing works well on STMD tools and can reach mirror surface finish up to 15xD setup.

Note: diamond burnishing normally has negligible impact on the size of the bore. A typical bore size change in burnishing of high alloy steel 4340 is within 10-15  $\mu\text{m}$  (0.0004-0.0006 inch).

## Diamond burnishing tools – Monoblock

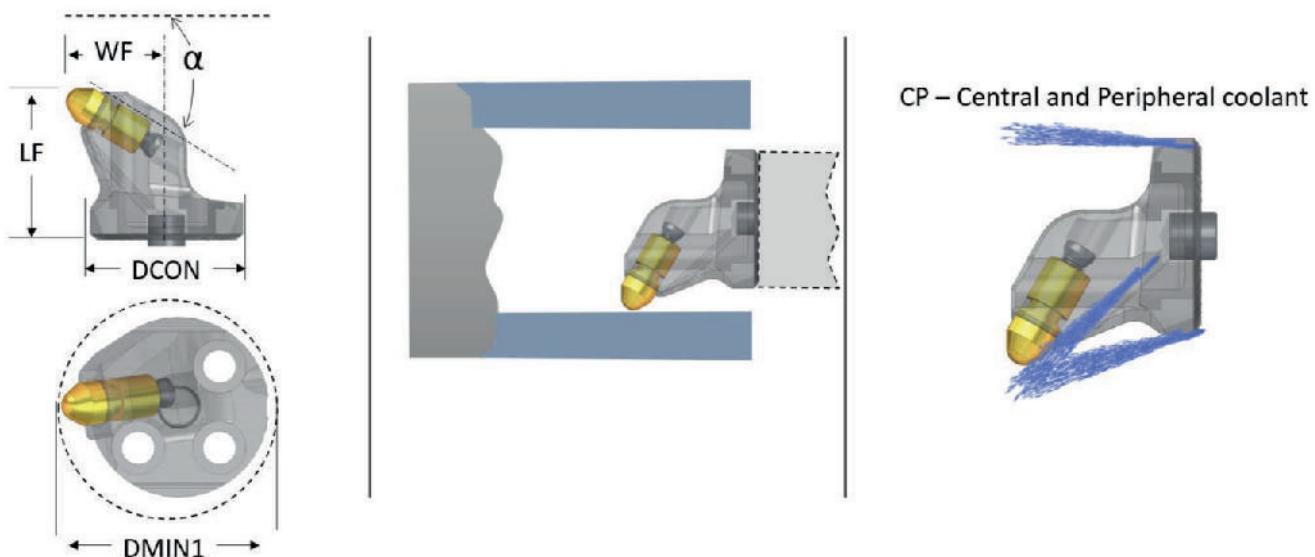


Standard: Metric (with fixed head)												
Part number	Type	Workable length <sup>b</sup> (mm)	Dmin (mm)	Lmin <sup>a</sup> (mm)	Lc (mm)	WF <sup>c</sup> (mm)	α (°)	PT	Master nib	Insert screw	Material	KG
301355	STMD M12-180 DB R 061002	72-132	16	180	36	8	30	G1/8	DB 061002	IS M3x7	S+C <sup>d</sup>	0.30
301356	STMD M16-224 DB R 061002	96-176	20	224	48	10	30	M12x1	DB 061002	IS M3x7	S+C <sup>d</sup>	0.55

Standard: Inch (with fixed head)												
Part number	Type	Workable length <sup>b</sup> (inch)	Dmin (inch)	Lmina (inch)	Lc (inch)	WF <sup>c</sup> (inch)	α (°)	PT	Master nib	Insert screw	Material	KG
301357	STMD i 1/2-7.1 DB R 061002	3-5.5	0.63	7.1	1.5	0.31	30	G1/8	DB 061002	IS M3x7	S+C <sup>d</sup>	0.30
301358	STMD i 5/8-8.8 DB R 061002	3.75-6.88	0.79	8.8	1.88	0.39	30	M12x1	DB 061002	IS M3x7	S+C <sup>d</sup>	0.55

	a – total length to the cutting point b – measured from the cutting edge to the clampin c – distance from cutting point to centre d – Carbide back end joined with steel
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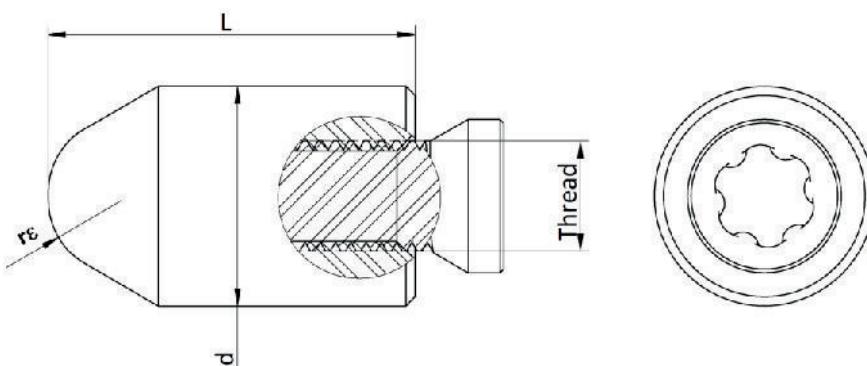
## Diamond burnishing heads



Part Number	Type	DCON (mm)	DMIN1 (mm)	LF (mm)	WF (mm)	$\alpha$ (°)	Burnishing Nib	Nib screw	KG
300631	<b>SL20 DB R CP</b>	SL 20	24	21	12	30	R 061402	IS M3x7	0.02
300632	<b>SL25 DB R CP</b>	SL 25	30	25	16	30	R 061402	IS M3x7	0.04
300633	<b>SL32 DB R CP</b>	SL 32	38	33	20	30	R 061402	IS M3x7	0.07
300634	<b>SL40 DB R CP</b>	SL 40	43	34	24	30	R 061402	IS M3x7	0.14

All burnishing heads are delivered with the burnishing nib and nib screw.

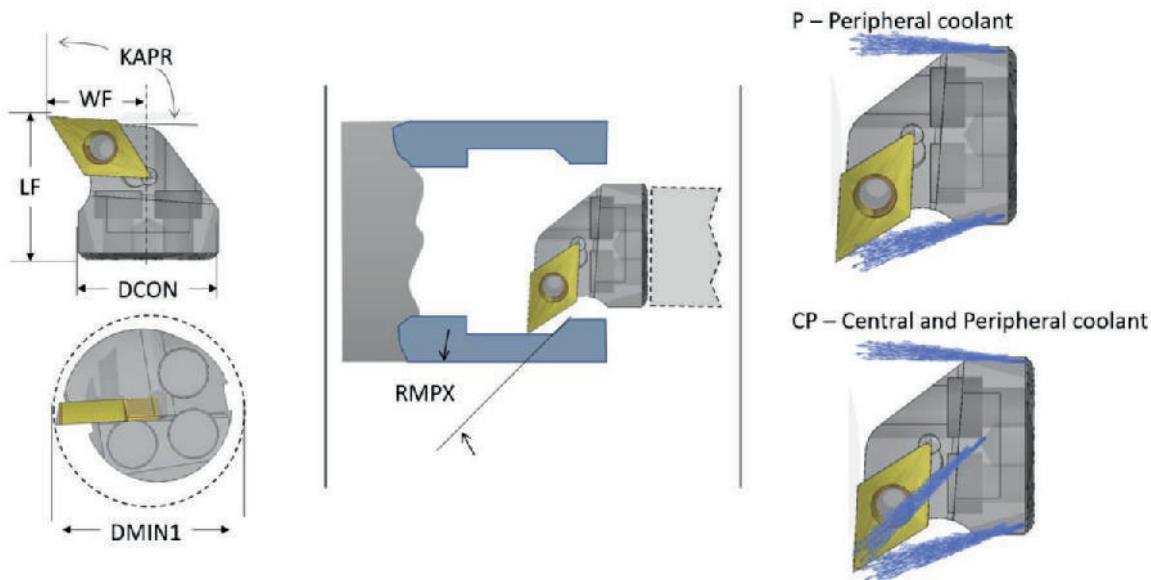
## Diamond burnishing nibs



Part Number	Nib Type	d	L	rε	Thread	P	M	K	H	S	N
301379	DB 061002	6	10	2	M3	•	•	•	•	•	•
300630	DB 061402	6	14	2	M3	•	•	•	•	•	•

## End-effecters

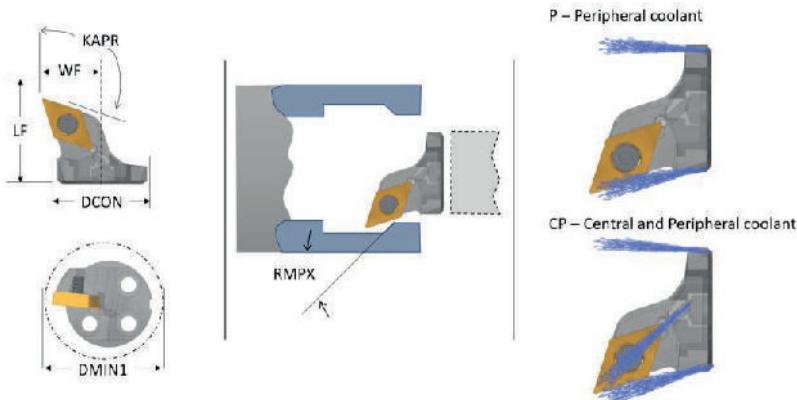
### SDUCR, SDUCL for DCMT Inserts



Part Number	Type	DMIN1 (mm)	LF (mm)	WF (mm)	KAPR ( $^{\circ}$ )	RMPX ( $^{\circ}$ )	Master insert	Insert screw	KG
300118	SL12 SDUCL P <sup>a</sup>	16	14	9	93	30	DCMT 070204	IS M2.5x6.0	0.01
300059	SL12 SDUCR P <sup>a</sup>	16	14	9	93	30	DCMT 070204	IS M2.5x6.0	0.01
300119	SL16 SDUCL P <sup>a</sup>	20	16	11	93	30	DCMT 070204	IS M2.5x6.0	0.01
300060	SL16 SDUCR P <sup>a</sup>	20	16	11	93	30	DCMT 070204	IS M2.5x6.0	0.01
300120	SL20 SDUCL P <sup>a</sup>	25	20	13	93	30	DCMT 11T304	IS M3.5x10.0	0.02
300061	SL20 SDUCR P <sup>a</sup>	25	20	13	93	30	DCMT 11T304	IS M3.5x10.0	0.02
300121	SL25 SDUCL P <sup>a</sup>	32	22	17	93	30	DCMT 11T304	IS M3.5x10.0	0.04
300062	SL25 SDUCR P <sup>a</sup>	32	22	17	93	30	DCMT 11T304	IS M3.5x10.0	0.04
300122	SL32 SDUCL P <sup>a</sup>	40	27	22	93	30	DCMT 11T304	IS M3.5x10.0	0.07
300063	SL32 SDUCR P <sup>a</sup>	40	27	22	93	30	DCMT 11T304	IS M3.5x10.0	0.07
300064	SL40 SDUCR P <sup>a</sup>	50	32	27	93	30	DCMT 11T304	IS M3.5x10.0	0.14
300209	SL40 SDUCL CP <sup>b</sup>	50	32	27	93	30	DCMT 11T304	IS M3.5x10.0	0.14
300195	SL40 SDUCR CP <sup>b</sup>	50	32	27	93	30	DCMT 11T304	IS M3.5x10.0	0.14

	All cutter heads are delivered with the insert clamp screw and torx key a - P - Peripheral coolant works for SL connection with 3C b - CP -Central and Peripheral coolant works with SL connection with both 1C and 3C
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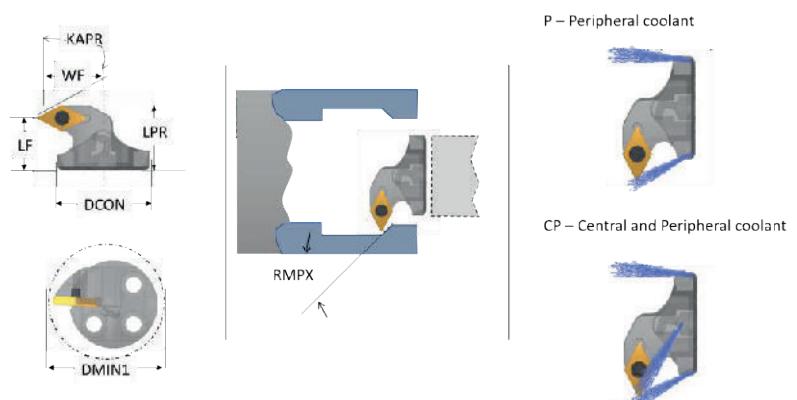
## SDQCR for DCMT Inserts



Part Number	Type	DMIN1 (mm)	LF (mm)	WF (mm)	KAPR (°)	RMPX (°)	Master insert	Insert screw	
300545	SL16 SDQCR P <sup>a</sup>	20	18	11	107.5	17	DCMT 070204	IS M2.5x6.0	0.01
300546	SL20 SDQCR CP <sup>b</sup>	25	24	13	107.5	17	DCMT 11T304	IS M3.5x10.0	0.02
300547	SL25 SDQCR CP <sup>b</sup>	32	24	17	107.5	17	DCMT 11T304	IS M3.5x10.0	0.04
300548	SL32 SDQCR CP <sup>b</sup>	40	26	22	107.5	17	DCMT 11T304	IS M3.5x10.0	0.07
300549	SL40 SDQCR CP <sup>b</sup>	50	26	27	107.5	17	DCMT 11T304	IS M3.5x10.0	0.14

All cutter heads are delivered with the insert clamp screw and torx key
a - P - Peripheral coolant works for SL connection with 3C
b - CP -Central and Peripheral coolant works with SL connection with both 1C and 3C

## SDXCR for DCMT Inserts

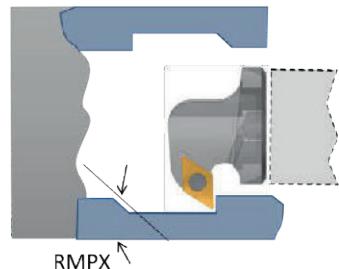
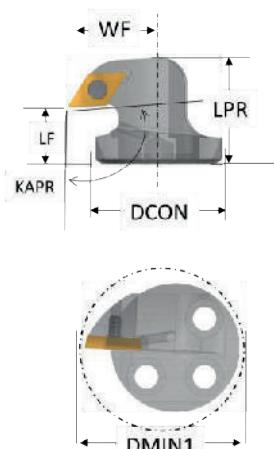


Part Number	Type	DMIN1 (mm)	LF (mm)	LPR (mm)	WF (mm)	KAPR (°)	RMPX (°)	Master insert	Insert screw	
300550	SL16 SDXCR CP <sup>a</sup>	22	12.5	16	13	62.5	60	DCMT 070204	IS M2.5x6.0	0.01
300551	SL20 SDXCR CP <sup>b</sup>	27	13	17	15	62.5	60	DCMT 070204	IS M2.5x8.0	0.02
300552	SL25 SDXCR CP <sup>b</sup>	33	14	17.6	18	62.5	60	DCMT 070204	IS M2.5x8.0	0.04
300553	SL32 SDXCR CP <sup>b</sup>	40	17	22.5	22	62.5	60	DCMT 11T304	IS M3.5x10.0	0.07
300554	SL40 SDXCR CP <sup>b</sup>	50	17	22	27	62.5	60	DCMT 11T304	IS M3.5x10.0	0.14

All cutter heads are delivered with the insert clamp screw and torx key
a - P - Peripheral coolant works for SL connection with 3C
b - CP -Central and Peripheral coolant works with SL connection with both 1C and 3C

## Back boring – B-SDUCR for DCMT Inserts

P – Peripheral coolant



P – Peripheral coolant



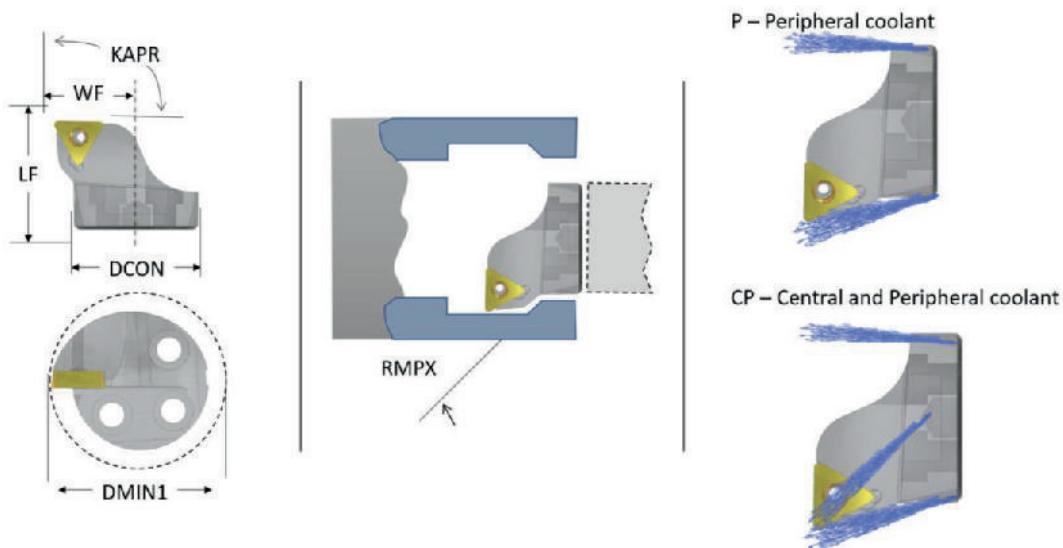
CP – Central and Peripheral coolant

Part Number	Type	DMIN1 (mm)	LF (mm)	LPR (mm)	WF (mm)	KAPR (°)	RMPX (°)	Master insert	Insert screw	KG
300555	SL16 B-SDUCR CP <sup>a</sup>	20	11	20	13	93	30	DCMT 070204	IS M2.5x6.0	0.01
300556	SL20 B-SDUCR CP <sup>a</sup>	25	11	20	15	93	30	DCMT 070204	IS M2.5x6.0	0.02
300557	SL25 B-SDUCR CP <sup>a</sup>	32	11	21	18	93	30	DCMT 070204	IS M2.5x8.0	0.04
300558	SL32 B-SDUCR CP <sup>a</sup>	40	13	27	22	93	30	DCMT 11T304	IS M3.5x10.0	0.07
300559	SL40 B-SDUCR CP <sup>a</sup>	50	15	29	27	93	30	DCMT 11T304	IS M3.5x10.0	0.14

All cutter heads are delivered with the insert clamp screw and torx key
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a - CP -Central and Peripheral coolant exits

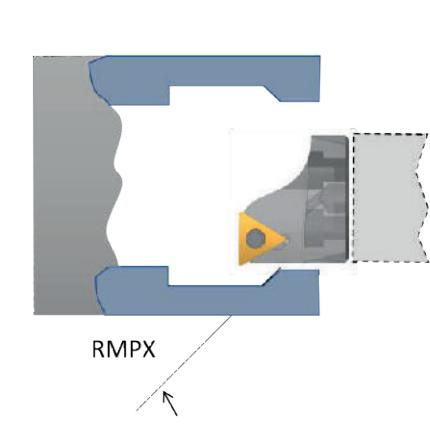
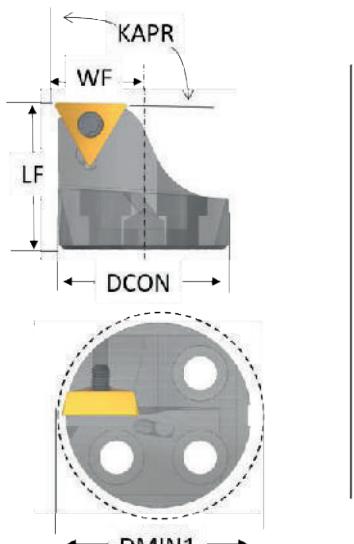
## STFCR, STFCL for TCMT Inserts



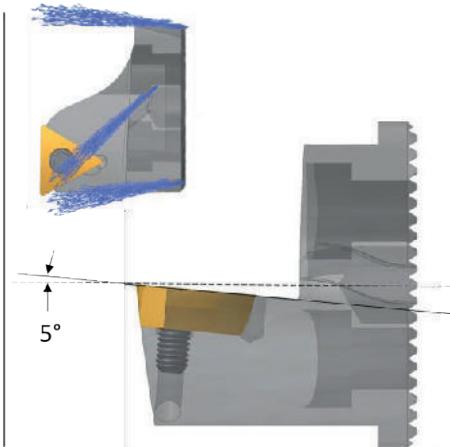
Part Number	Type	DMIN1 (mm)	LF (mm)	WF (mm)	KAPR (°)	RMPX (°)	Master insert	Insert screw	KG
300124	<b>SL12 STFCL P<sup>a</sup></b>	16	14	9	91	NA	TCMT 090204	IS M2.2x5.0	0.01
300065	<b>SL12 STFCR P<sup>a</sup></b>	16	14	9	91	NA	TCMT 090204	IS M2.2x5.0	0.01
300125	<b>SL16 STFCL P<sup>a</sup></b>	20	16	11	91	NA	TCMT 090204	IS M2.2x5.0	0.01
300066	<b>SL16 STFCR P<sup>a</sup></b>	20	16	11	91	NA	TCMT 090204	IS M2.2x5.0	0.01
300126	<b>SL20 STFCL P<sup>a</sup></b>	25	20	13	91	NA	TCMT 110304	IS M2.5x8.0	0.02
300067	<b>SL20 STFCR P<sup>a</sup></b>	25	20	13	91	NA	TCMT 110304	IS M2.5x8.0	0.02
300127	<b>SL25 STFCL P<sup>a</sup></b>	32	22	17	91	NA	TCMT 110304	IS M2.5x8.0	0.04
300068	<b>SL25 STFCR P<sup>a</sup></b>	32	22	17	91	NA	TCMT 110304	IS M2.5x8.0	0.04
300128	<b>SL32 STFCL P<sup>a</sup></b>	40	27	22	91	NA	TCMT 16T304	IS M3.5x10.0	0.07
300069	<b>SL32 STFCR P<sup>a</sup></b>	40	27	22	91	NA	TCMT 16T304	IS M3.5x10.0	0.07
300070	<b>SL40 STFCR P<sup>a</sup></b>	50	32	27	91	NA	TCMT 16T304	IS M3.5x10.0	0.14
300210	<b>SL40 STFCL CP<sup>b</sup></b>	50	32	27	91	NA	TCMT 16T304	IS M3.5x10.0	0.14
300197	<b>SL40 STFCR CP<sup>b</sup></b>	50	32	27	91	NA	TCMT 16T304	IS M3.5x10.0	0.14

	All cutter heads are delivered with the insert clamp screw and torx key a - P - Peripheral coolant works for SL connection with 3C b - CP -Central and Peripheral coolant works with SL connection with both 1C and 3C
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## STFPR for TPMT Inserts



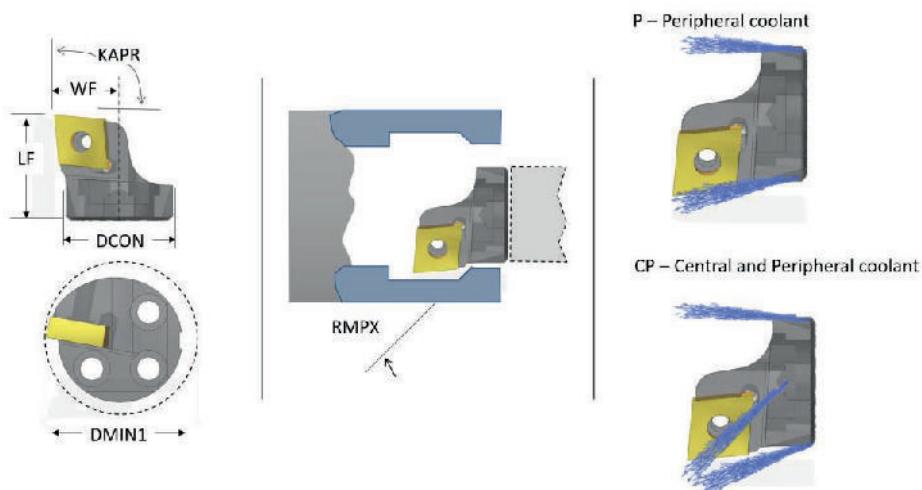
CP – Central and Peripheral coolant



Part Number	Type	DMIN1 (mm)	LF (mm)	WF (mm)	KAPR (°)	RMPX (°)	Master insert	Insert screw	
300466	SL16 STFPR CP <sup>a</sup>	18	17	8.8	91	NA	TPMT 090204	IS M2.2x5.0	0.01
300467	SL20 STFPR CP <sup>a</sup>	22	19	10.8	91	NA	TPMT 110304	IS M2.5x8.0	0.02
300468	SL25 STFPR CP <sup>a</sup>	27	22	13.3	91	NA	TPMT 110304	IS M2.5x8.0	0.04

All cutter heads are delivered with the insert clamp screw and torx key a - CP -Central and Peripheral coolant works with SL connection with both 1C and 3C
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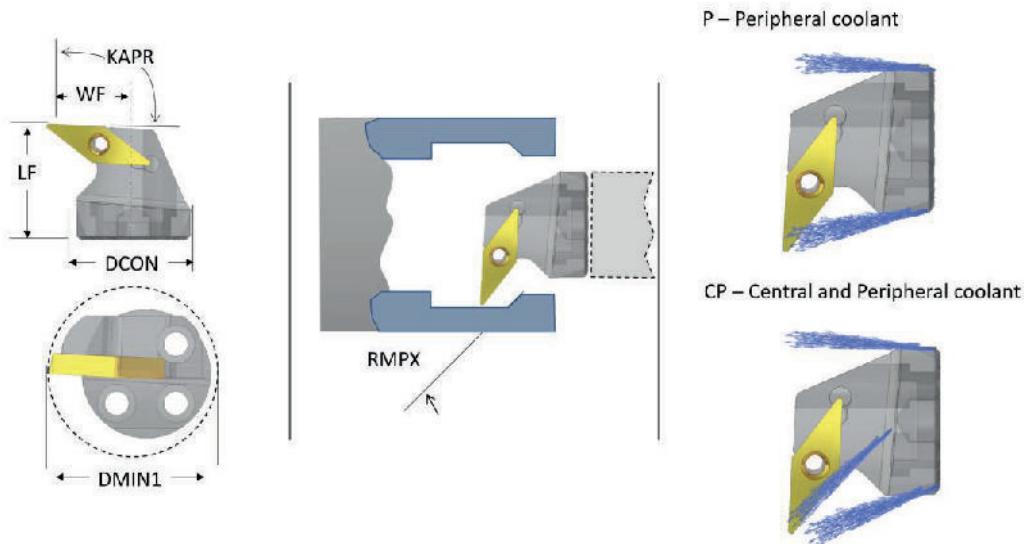
## SCLCR, SCLCL for CCMT Inserts



Part Number	Type	DMIN1 (mm)	LF (mm)	WF (mm)	KAPR (°)	RMPX (°)	Master Insert	Insert screw	
300112	<b>SL12 SCLCL P<sup>a</sup></b>	16	14.4	10	95	NA	CCMT 060204	IS M2.5x6.0	0.01
300071	<b>SL12 SCLCR P<sup>a</sup></b>	16	14.4	10	95	NA	CCMT 060204	IS M2.5x6.0	0.01
300113	<b>SL16 SCLCL P<sup>a</sup></b>	20	15.4	11	95	NA	CCMT 060204	IS M2.5x6.0	0.01
300072	<b>SL16 SCLCR P<sup>a</sup></b>	20	15.4	11	95	NA	CCMT 060204	IS M2.5x6.0	0.01
300114	<b>SL20 SCLCL P<sup>a</sup></b>	25	19.1	13	95	NA	CCMT 09T304	IS M3.5x10.0	0.02
300073	<b>SL20 SCLCR P<sup>a</sup></b>	25	19.1	13	95	NA	CCMT 09T304	IS M3.5x10.0	0.02
300115	<b>SL25 SCLCL P<sup>a</sup></b>	32	21.1	17	95	NA	CCMT 09T304	IS M3.5x10.0	0.04
300074	<b>SL25 SCLCR CP<sup>a</sup></b>	32	21.1	17	95	NA	CCMT 09T304	IS M3.5x10.0	0.04
300116	<b>SL32 SCLCL P<sup>a</sup></b>	40	24.1	22	95	NA	CCMT 09T304	IS M3.5x10.0	0.07
300075	<b>SL32 SCLCR CP<sup>a</sup></b>	40	24.1	22	95	NA	CCMT 09T304	IS M3.5x10.0	0.07
300076	<b>SL40 SCLCL P<sup>a</sup></b>	50	25.1	27	95	NA	CCMT 09T304	IS M3.5x10.0	0.14
300208	<b>SL40 SCLCR CP<sup>b</sup></b>	50	25.1	27	95	NA	CCMT 120404	IS M4.0x15.0	0.14
300196	<b>SL40 SCLCR CP<sup>b</sup></b>	50	25.1	27	95	NA	CCMT 120404	IS M4.0x15.0	0.14

	All cutter heads are delivered with the insert clamp screw and torx key a - P - Peripheral coolant works for SL connection with 3C b - CP -Central and Peripheral coolant works with SL connection with both 1C and 3C
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## SVUCR, SVUCL for VCMT Inserts

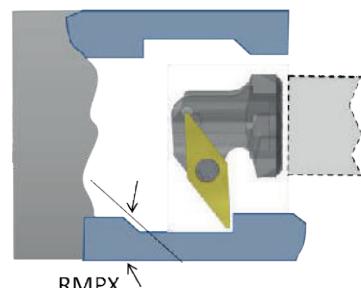
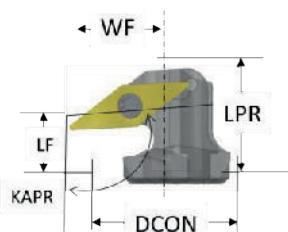


Part Number	Type	DMIN (mm)	LF (mm)	WF (mm)	KAPR (°)	RMPX (°)	Master Insert	Insert screw	KG
300666	<b>SL16 SVUCR P<sup>a,c</sup></b>	25	17	16	93	45	VCMT 110304	IS M2.5x6.0	0.02
300199	<b>SL20 SVUCL P<sup>a</sup></b>	27	20.5	15	93	45	VCMT 110304	IS M2.5x8.0	0.02
300198	<b>SL20 SVUCR P<sup>a</sup></b>	27	20.5	15	93	45	VCMT 110304	IS M2.5x8.0	0.02
300201	<b>SL25 SVUCL P<sup>a</sup></b>	33	20.5	18	93	45	VCMT 110304	IS M2.5x8.0	0.04
300200	<b>SL25 SVUCR P<sup>a</sup></b>	33	20.5	18	93	45	VCMT 110304	IS M2.5x8.0	0.04
300598	<b>SL32 SVUCL CP<sup>b,c</sup></b>	40	25	22	93	45	VCMT 160404	IS M3.5x10.0	0.08
300597	<b>SL32 SVUCR CP<sup>b</sup></b>	40	25	22	93	45	VCMT 160404	IS M3.5x10.0	0.08
300560	<b>SL40 SVUCL CP<sup>b</sup></b>	50	28	27	93	45	VCMT 160404	IS M3.5x10.0	0.12
300561	<b>SL40 SVUCR CP<sup>b</sup></b>	50	28	27	93	45	VCMT 160404	IS M3.5x10.0	0.12

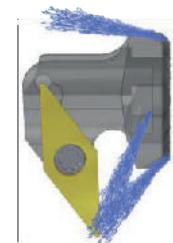
All cutter heads are delivered with the insert clamp screw and torx key a - P - Peripheral coolant works for SL connection with 3C b - CP -Central and Peripheral coolant works with SL connection with both 1C and 3C c - available after Sep. 2023
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## Back boring – B-SVUCR for VCMT Inserts

P – Peripheral coolant



CP – Central and Peripheral coolant



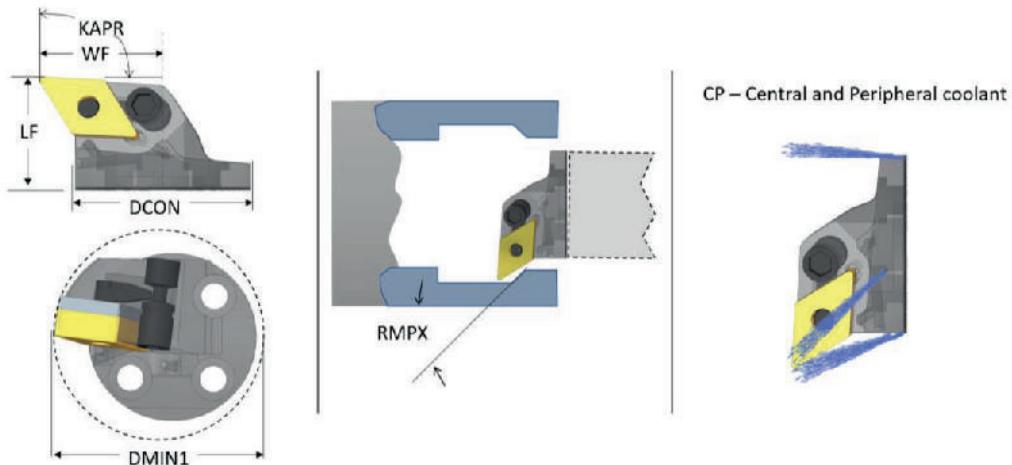
Part Number	Type	DMIN1 (mm)	LF (mm)	LPR (mm)	WF (mm)	KAPR (°)	RMPX (°)	Master insert	Insert screw	
300667	SL16 B SVUCR CP <sup>b</sup>	25	8	17	16	93	45	VCMT 110304	IS M2.5x6.0	0.02

All cutter heads are delivered with the insert clamp screw and torx key

a - P - Peripheral coolant works for SL connection with 3C

b - CP -Central and Peripheral coolant works with SL connection with both 1C and 3C

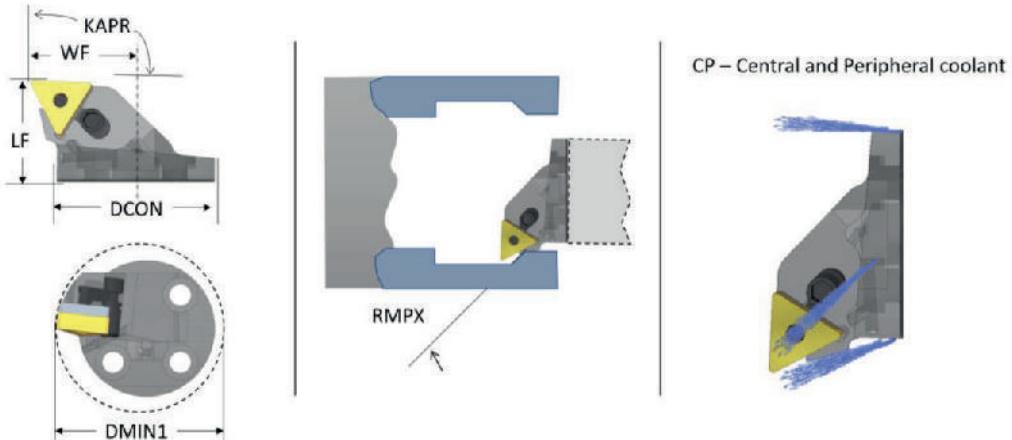
## PDUNR, PDUNL for DNMG Inserts



Part Number	Type	DMIN1 (mm)	LF (mm)	WF (mm)	KAPR (°)	RMPX (°)	Insert	Slot screw	Level	Shim	
300661	SL25 PDUNL CP <sup>a</sup>	34	23	19	93	27	DNMG 1104XX	M5x0.8x15	LV3 G0310	NA	0.05
300660	SL25 PDUNR CP <sup>a</sup>	34	23	19	93	27	DNMG 1104XX	M5x0.8x15	LV3 G0310	NA	0.05
300562	SL32 PDUNL CP <sup>a</sup>	40	26	22	93	27	DNMG 1104XX	M6x1x17	LV3 G0312	PS DNMG 1104	0.09
300427	SL32 PDUNR CP <sup>a</sup>	40	26	22	93	27	DNMG 1104XX	M6x1x17	LV3 G0312	PS DNMG 1104	0.09
300402	SL40 PDUNL CP <sup>a</sup> 1506	50	26	30	93	27	DNMG 1506XX	M8x1x21	LV4 G0516	PS DNMG 1506	0.14
300086	SL40 PDUNR CP <sup>a</sup> 1506	50	26	30	93	27	DNMG 1506XX	M8x1x21	LV4 G0516	PS DNMG 1506	0.14
300107	SL40 PDUNL CP <sup>a</sup> 1504	50	26	30	93	27	DNMG 1504XX	M8x1x21	LV4 G0516	PS DNMG 1504	0.14
300106	SL40 PDUNR CP <sup>a</sup> 1504	50	26	30	93	27	DNMG 1504XX	M8x1x21	LV4 G0516	PS DNMG 1504	0.14

All cutter heads are delivered with the insert clamp screw and torx key  
a - CP -Central and Peripheral coolant works with SL connection with both 1C and 3C

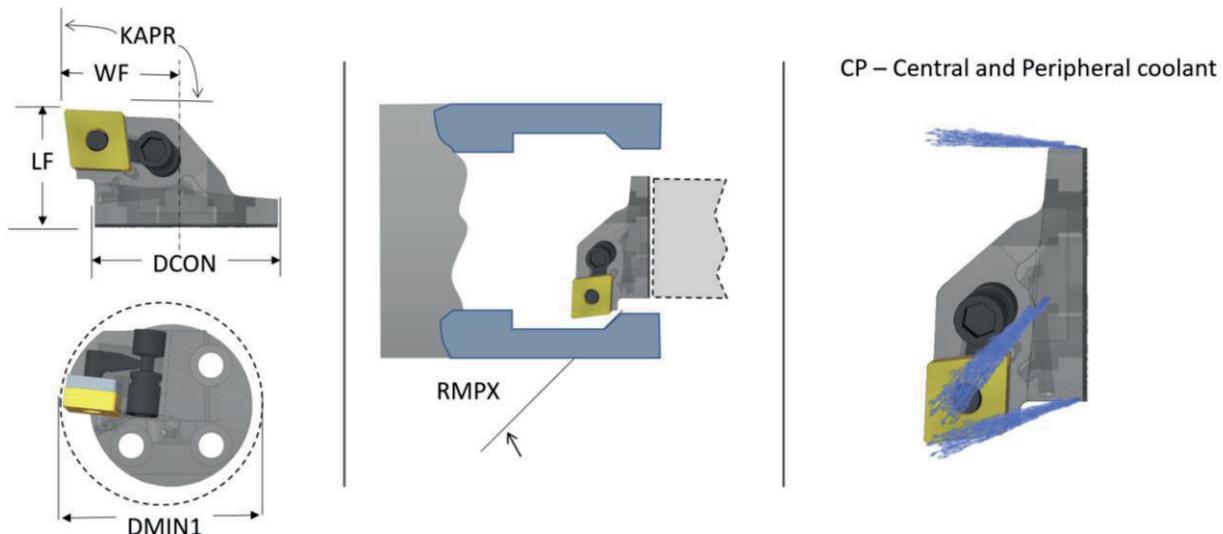
## PTFNR, PTFNL for TNMG Inserts



Part Number	Type	DMIN1 (mm)	LF (mm)	WF (mm)	KAPR (°)	RMPX (°)	Insert	Slot screw	Level	Shim	
300429	SL32 PTFNR CP <sup>a</sup>	40	27	22	91	NA	TNMG 1604XX	M6x1x17	LV3 G0310	PS TNMG 1604	0.09
300563	SL32 PTFNL CP <sup>a</sup>	40	27	22	91	NA	TNMG 1604XX	M6x1x17	LV3 G0310	PS TNMG 1604	0.09
300088	SL40 PTFNR CP <sup>a</sup>	50	26	27	91	NA	TNMG 1604XX	M6x1x17	LV3 G0310	PS TNMG 1604	0.14
300403	SL40 PTFNL CP <sup>a</sup>	50	26	27	91	NA	TNMG 1604XX	M6x1x17	LV3 G0310	PS TNMG 1604	0.14

All cutter heads are delivered with the insert clamp screw and torx key  
a - CP -Central and Peripheral coolant works with SL connection with both 1C and 3C

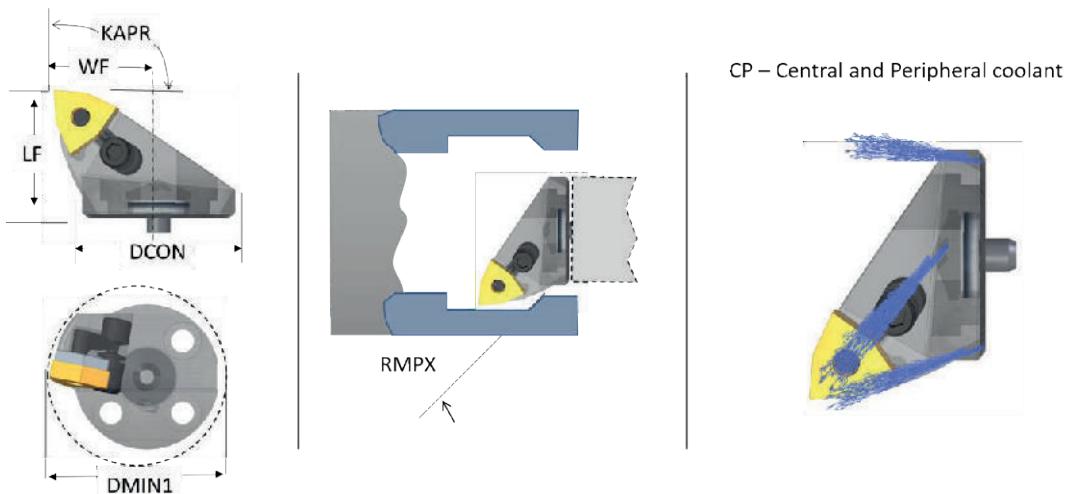
## PCLNR, PCLNL for CNMG Inserts



Part Number	Type	DMIN1 (mm)	LF (mm)	WF (mm)	KAPR (°)	RMPX (°)	Insert	Slot screw	Level	Shim	
300428	SL32 PCLNR CP <sup>a</sup>	40	26	22	95	NA	CNMG 1204XX	M6x1x17	LV4 G0513	PS CNMG 1204	0.09
300564	SL32 PCLNL CP <sup>a</sup>	40	26	22	95	NA	CNMG 1204XX	M6x1x17	LV4 G0513	PS CNMG 1204	0.09
300087	SL40PCLNR CP <sup>a</sup>	50	26	27	95	NA	CNMG 1204XX	M8x1x21	LV4 G0513	PS CNMG 1204	0.14
300404	SL40 PCLNL CP <sup>a</sup>	50	26	27	95	NA	CNMG 1204XX	M8x1x21	LV4 G0513	PS CNMG 1204	0.14

All cutter heads are delivered with the insert clamp screw and torx key a - CP -Central and Peripheral coolant works with SL connection with both 1C and 3C
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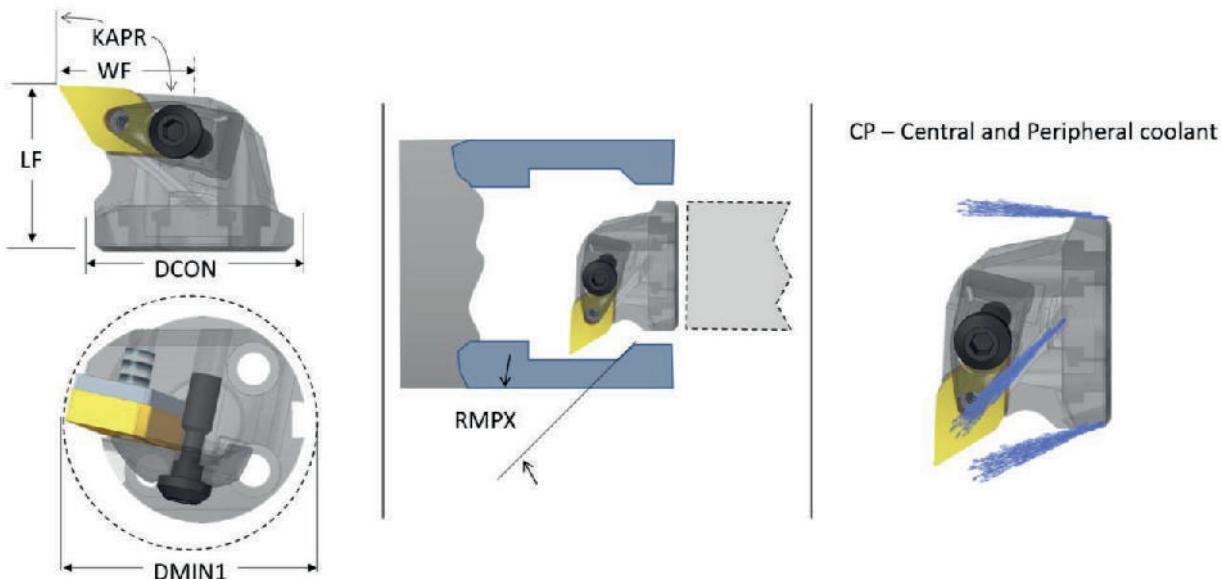
## PWLNR, PWLNL for WNMG Inserts



Part Number	Type	DCON (mm)	DMIN1 (mm)	LF (mm)	WF (mm)	KAPR (°)	RMPX (°)	Insert	Slot screw	Level	Shim	
300474	SL40 PWLNR CP <sup>a</sup>	SL 40	50	26	27	95	NA	WNMG 0804XX	M8x1x21	LV4 G0513	PS WNMG 0804	0.14
300475	SL40 PWLNL CP <sup>a</sup>	SL 40	50	26	27	95	NA	WNMG 0804XX	M8x1x21	LV4 G0513	PS WNMG 0804	0.14

All cutter heads are delivered with the insert clamp screw and torx key a - CP -Central and Peripheral coolant works with SL connection with both 1C and 3C
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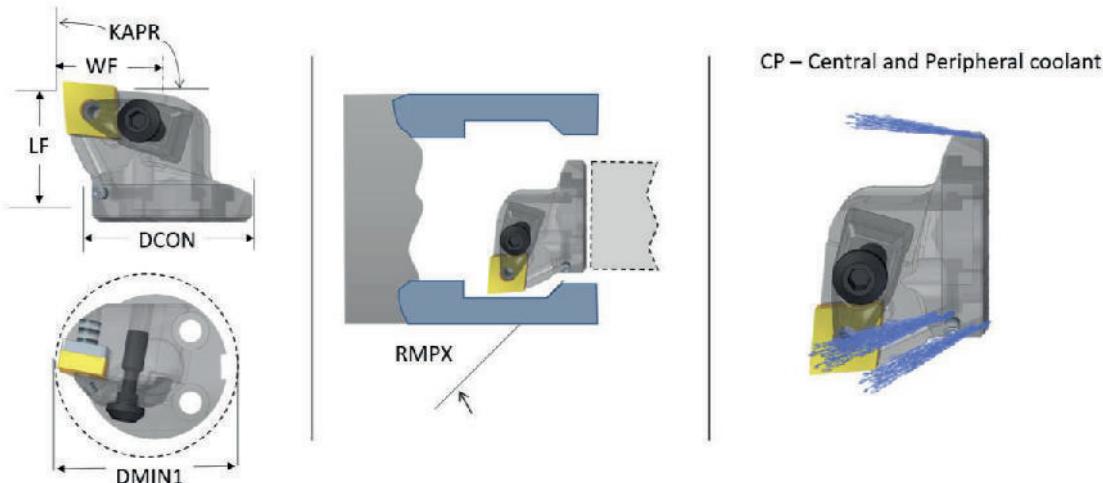
## DDUNR, DDUNL for DNMG Inserts



Part Number	Type	DMIN1 (mm)	LF (mm)	WF (mm)	KAPR (°)	RMPX (°)	Insert	Clamp	Clamp screw	Shim	Shim screw	
301238	SL40 DDUNR CP <sup>a</sup> 1506	50	33	27	93	27	DNMG 1506XX	C2RA	CM6X25C	D1503	Sleeve M6x0.75	0.14
301239	SL40 DDUNL CP <sup>a</sup> 1506	50	33	27	93	27	DNMG 1506XX	C2RA	CM6X25C	D1503	Sleeve M6x0.75	0.14
301240	SL40 DDUNR CP <sup>a</sup> 1504	50	33	27	93	27	DNMG 1506XX	C2RA	CM6X25C	D15BM	Sleeve M6x0.75	0.14
301241	SL40 DDUNL CP <sup>a</sup> 1504	50	33	27	93	27	DNMG 1504XX	C2RA	CM6X25C	D15BM	Sleeve M6x0.75	0.14

All cutter heads are delivered with the insert clamp screw and torx key  
a - CP -Central and Peripheral coolant works with SL connection with both 1C and 3C

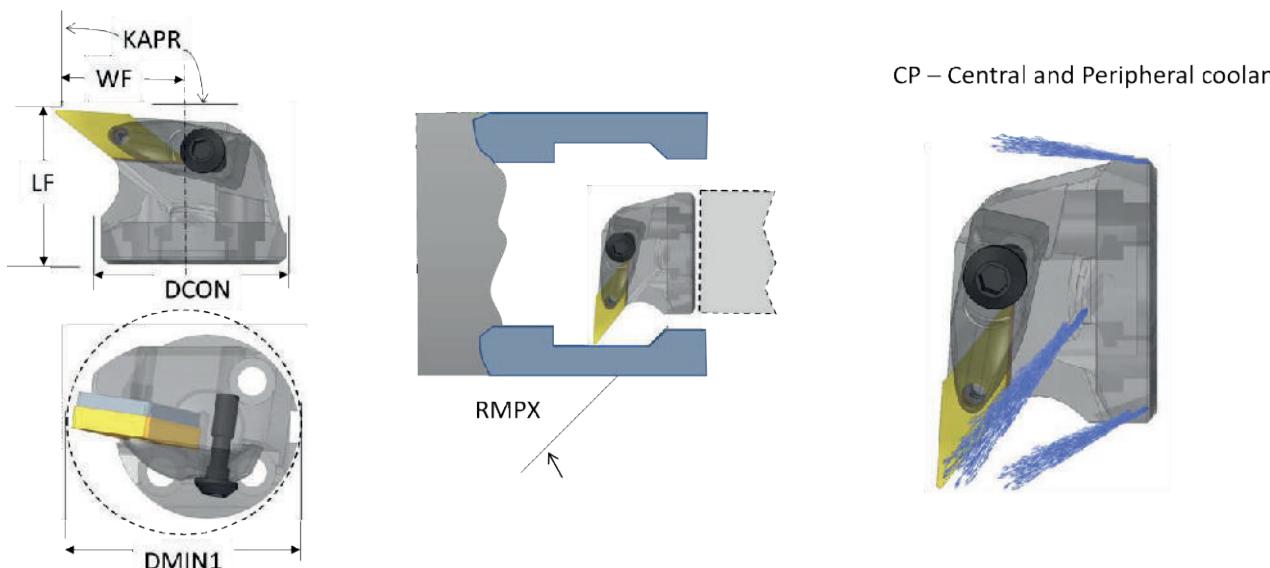
## DCLNR, DCLNL for CNMG Inserts



Part Number	Type	DMIN1 (mm)	LF (mm)	WF (mm)	KAPR (°)	RMPX (°)	Insert	Clamp	Clamp screw	Shim	Shim screw	
301242	SL40 DCLNR CP <sup>a</sup> 1204	50	33	27	93	27	CNMG 1204XX	C2RA	CM6X25C	C12BM	Sleeve M6x0.75	0.14
301243	SL40 DCLNL CP <sup>a</sup> 1204	50	33	27	93	27	CNMG 1204XX	C2RA	CM6X25C	C12BM	Sleeve M6x0.75	0.14

All cutter heads are delivered with the insert clamp screw and torx key  
a - CP -Central and Peripheral coolant works with SL connection with both 1C and 3C

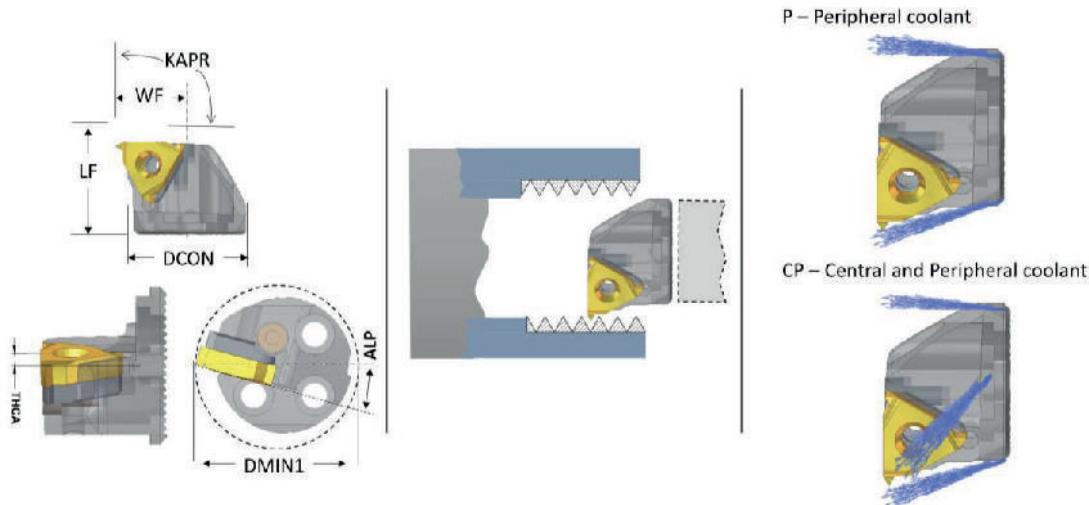
## DVUNR, DVUNL for VNMG Inserts



Part Number	Type	DMIN1 (mm)	LF (mm)	WF (mm)	KAPR (°)	RMPX (°)	Insert	Clamp	Clamp screw	Shim	Shim screw	
301426	SL40 DCLNR CP <sup>a</sup> 1604	52	33	30	93	45	VNMG 1604XX	C6RA	CM5X22C	V16BM	Sleeve M5x0.5	0.21
301243 <sup>b</sup>	SL40 DVUNL CP <sup>a</sup> 1604	52	33	30	93	45	VNMG 1604XX	C6RA	CM5X22C	V16BM	Sleeve M5x0.5	0.21

All cutter heads are delivered with the insert clamp screw and torx key  
a - CP -Central and Peripheral coolant works with SL connection with both 1C and 3C  
b - Available after Jan 2025.

## End effectors - Threading



### Left hand

Part Number	Type	DMIN1 (mm)	LF (mm)	WF (mm)	Master insert	Insert screw	Shim	Shim screw	ALP	THCA	
300268	<b>SL12 SXFNL P<sup>a</sup> 11</b>	16	16	8.9	11 IL A60	IS M2.5x6.0	NA	NA	15 °	2 °	0.01
300269	<b>SL16 SXFNL P<sup>a</sup> 11</b>	20	20	10.4	11 IL A60	IS M2.5x6.0	NA	NA	15 °	1 °	0.01
300270	<b>SL16 SXFNL P<sup>a</sup> 16</b>	20	20	10.4	16 IL AG60	IS M3.5x10.0	NA	NA	15 °	2 °	0.01
300271	<b>SL20 SXFNL P<sup>a</sup> 11</b>	25	20	12.7	11 IL A60	IS M2.5x6.0	NA	NA	15 °	1 °	0.02
300272	<b>SL20 SXFNL P<sup>a</sup> 16</b>	25	23	13.7	16 IL AG60	IS M3.5x11.0	NA	NA	15 °	2 °	0.02
300273	<b>SL25 SXFNL P<sup>a</sup> 16</b>	30	24	16.3	16 IL AG60	IS M3.5x11.0	EA16	HS M3x6	15 °	1 °	0.04
300274	<b>SL25 SXFNL P<sup>a</sup> 22</b>	32	30	18.3	22 IL N60	IS M4.5X12.0	EA22	HS M3x6	15 °	2 °	0.04
300275	<b>SL32 SXFNL P<sup>a</sup> 16</b>	37	28	19.7	16 IL AG60	IS M3.5x10.0	EA16	HS M3x6	15 °	1 °	0.07
300276	<b>SL32 SXFNL CP<sup>b</sup> 22</b>	39	32	21.7	22 IL N60	IS M4.5X12.0	EA22	HS M3x6	15 °	2 °	0.07
300277	<b>SL40 SXFNL CP<sup>b</sup> 16</b>	45	28	23.7	16 IL AG60	IS M3.5x10.0	EA16	HS M3x6	15 °	1 °	0.14
300278	<b>SL40 SXFNL CP<sup>b</sup> 22</b>	47	30	25.7	22 IL N60	IS M4.5X12.0	EA22	HS M3x6	15 °	2 °	0.14
300279	<b>SL40 SXFNL CP<sup>b</sup> 27<sup>c</sup></b>	48	35	26.8	27 IL Q60	IS M5.0x18.0	EA27	HS M4x9	15 °	2.5 °	0.14

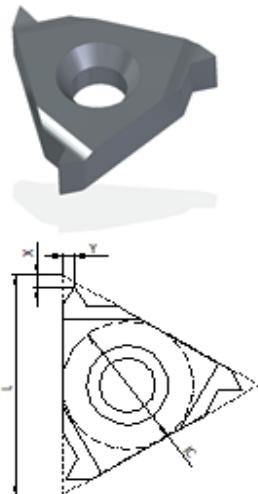
### Right hand

Part Number	Type	DMIN1 (mm)	LF (mm)	WF (mm)	Master insert	Insert screw	Shim	Shim screw	ALP	THCA	
300280	<b>SL12 SXFNR P<sup>a</sup> 11</b>	16	16	8.9	11 IR A60	IS M2.5x6.0	NA	NA	15 °	2 °	0.01
300281	<b>SL16 SXFNR P<sup>a</sup> 11</b>	20	20	10.4	11 IR A60	IS M2.5x6.0	NA	NA	15 °	1 °	0.01
300282	<b>SL16 SXFNR P<sup>a</sup> 16</b>	20	20	10.4	16 IR AG60	IS M3.5x10.0	NA	NA	15 °	2 °	0.01
300283	<b>SL20 SXFNR P<sup>a</sup> 11</b>	25	20	12.7	11 IR A60	IS M2.5x6.0	NA	NA	15 °	1 °	0.02
300284	<b>SL20 SXFNR P<sup>a</sup> 16</b>	25	23	13.7	16 IR AG60	IS M3.5x11.0	NA	NA	15 °	2 °	0.02
300285	<b>SL25 SXFNR P<sup>a</sup> 16</b>	30	24	16.3	16 IR AG60	IS M3.5x11.0	IA16	HS M3x6	15 °	1 °	0.04
300286	<b>SL25 SXFNR P<sup>a</sup> 22</b>	32	30	18.3	22 IR N60	IS M4.5X12.0	IA22	HS M3x6	15 °	2 °	0.04
300287	<b>SL32 SXFNR P<sup>a</sup> 16</b>	37	28	19.7	16 IR AG60	IS M3.5x10.0	IA16	HS M3x6	15 °	1 °	0.07
300288	<b>SL32 SXFNR CP<sup>b</sup> 22</b>	39	32	21.7	22 IR N60	IS M4.5X12.0	IA22	HS M3x6	15 °	2 °	0.07
300289	<b>SL40 SXFNR CP<sup>b</sup> 16</b>	45	28	23.7	16 IR AG60	IS M3.5x10.0	IA16	HS M3x6	15 °	1 °	0.14
300290	<b>SL40 SXFNR CP<sup>b</sup> 22</b>	47	30	25.7	22 IR N60	IS M4.5X12.0	IA22	HS M3x6	15 °	2 °	0.14
300291	<b>SL40 SXFNR CP<sup>b</sup> 27</b>	48	35	26.8	27 IR Q60	IS M5.0x18.0	IA27	HS M4x9	15 °	2.5 °	0.14

a - P - Peripheral coolant works for SL connection with 3C  
b - CP -Central and Peripheral coolant works with SL connection with both 1C and 3C  
c - Product on request.  
All cutter heads are delivered with the insert clamp screw and torx key

Inserts are sold in packages of 10 pcs.

<b>16</b>	<b>I</b>	<b>R</b>	<b>A</b>	<b>60</b>	<b>P25</b>	<b>P</b>
Insert size			Profile/angle		Coating:	
					C- CVD coating	
					P- PVD coating	
					U- Uncoated	
Insert type:						
I - internal						
E - external						
Insert hand:					Workpiece material grade	
R - right hand					P- Steel, M- Stainless steel,	
L - left hand					K- cast iron, N- non ferrous	
					S- super alloys	
			Profile type or pitch			
			A - 0.5 - 1.5 mm			
			AG - 1.0 - 3.0 mm			
			G - 1.75 - 3.0 mm			
			N - 3.5 - 5.0 mm			
			Q - 5.5 - 6.0 mm			



### Left

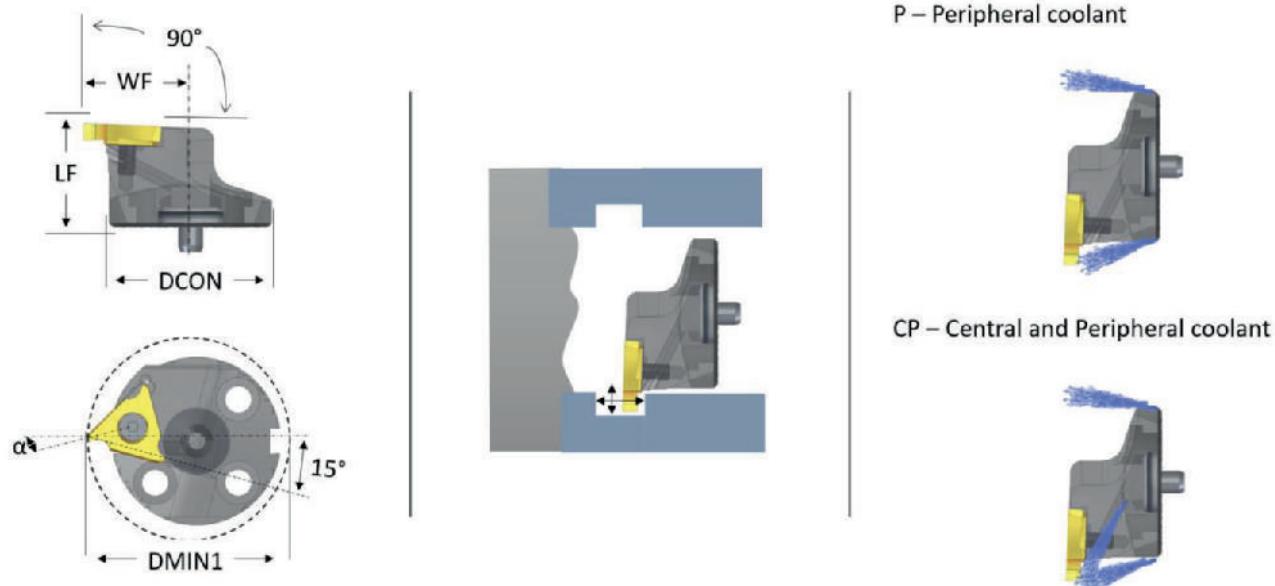
Part Number	Type	Pitch mm (TPI)	IC	L	X	Y
300297	11 IL A60 P25P	0.5-1.5 (48-16)	6.350	11	0.8	0.9
300298	16 IL A60 P25P	0.5-1.5 (48-16)	9.525	16	0.8	0.9
300299	16 IL G60 P25P	1.75-3.0 (14-8)	9.525	16	1.2	1.7
300300	16 IL AG60 P25P	1.0-3.0 (26-8)	9.525	16	1.2	1.7
300301	22 IL N60 P25P	3.5-5.0 (7-5)	12.7	22	1.7	2.5
300302	27 IL Q60 P25P	5.5-6.0 (4.5-4)	15.875	27	2.1	3.1

### Right

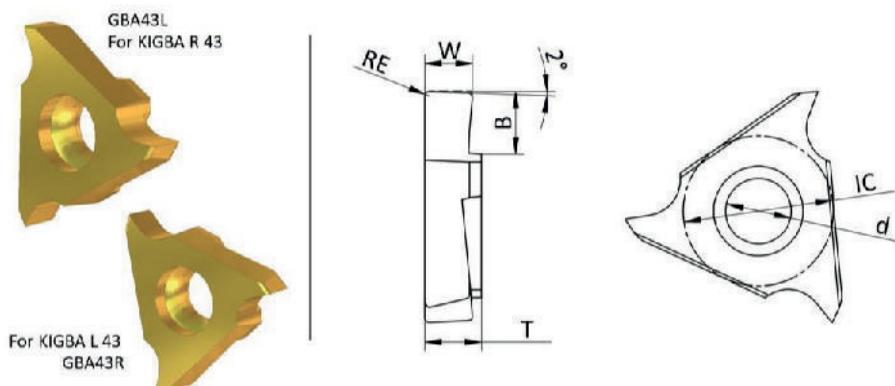
300303	11 IR A60 P25P	0.5-1.5 (48-16)	6.350	11	0.8	0.9
300304	16 IR A60 P25P	0.5-1.5 (48-16)	9.525	16	0.8	0.9
300305	16 IR G60 P25P	1.75-3.0 (14-8)	9.525	16	1.2	1.7
300306	16 IR AG60 P25P	1.0-3.0 (26-8)	9.525	16	1.2	1.7
300307	22 IR N60 P25P	3.5-5.0 (7-5)	12.7	22	1.7	2.5
300308	27 IR Q60 P25P	5.5-6.0 (4.5-4)	15.875	27	2.1	3.1
	Other full profile inserts, with different standards are available upon request.					

## End effectors – Grooving

KIGBA for GBA43 insert



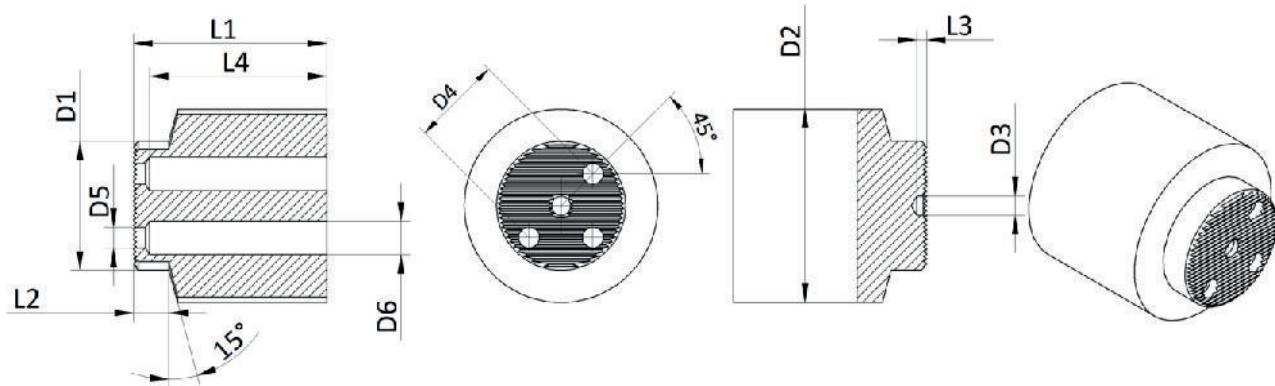
Part Number	Type	DMIN1 (mm)	LF (mm)	WF (mm)	Master insert	Insert screw	
300699	<b>SL40 KIGBA R CP<sup>a</sup> GBA43</b>	50	25	27	GBA43 L	IS M4.5x12	0.12
301169	<b>SL40 KIGBA L CP<sup>a</sup> GBA43<sup>b</sup></b>	50	25	27	GBA43 R	IS M4.5x12	0.12
a - Product available after 2024-April b - CP -Central and Peripheral coolant works with SL connection with both 1C and 3C All cutter heads are delivered with the insert clamp screw and torx key							



Part Number	Insert Type	IC	d	T	W	B	RE
301170	GBA43 R 100-010 P25C <sup>a</sup>	12.7	5.5	4.76	1.00	2.6	0.10
301171	GBA43 R 200-010 P25C <sup>a</sup>	12.7	5.5	4.76	2.00	4.1	0.10
301172	GBA43 R 300-010 P25C <sup>a</sup>	12.7	5.5	4.76	3.00	4.1	0.10
301173	GBA43 R 400-010 P25C <sup>a</sup>	12.7	5.5	4.76	4.00	5.2	0.10
301174	GBA43 L 100-010 P25C <sup>a</sup>	12.7	5.5	4.76	1.00	2.6	0.10
301175	GBA43 L 200-010 P25C <sup>a</sup>	12.7	5.5	4.76	2.00	4.1	0.10
301176	GBA43 L 300-010 P25C <sup>a</sup>	12.7	5.5	4.76	3.00	4.1	0.10
301177	GBA43 L 400-010 P25C <sup>a</sup>	12.7	5.5	4.76	4.00	5.2	0.10
	<sup>a</sup> Order oriented product, 10 pcs/package, 2 weeks delivery time						

## End effectors – SL blanks

### SL blanks Left hand

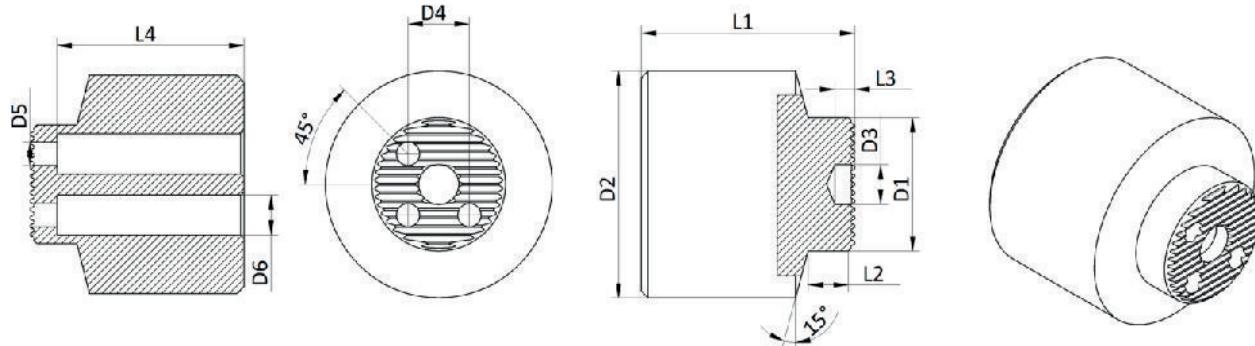


#### Left

Part Number	Type	D1 (mm)	D2 (mm)	D3 (mm)	D4 (mm)	D5 (mm)	D6 (mm)	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)
300140	SL12-20-20 L	12	20	4	7.4	2.5	4	20	7	3	17
300142	SL16-26-25 L	16	26	4	9.5	3.5	6	25	7	3	22
300144	SL20-34-32 L	20	34	6	13	3.5	6	32	7	3	29
300146	SL25-40-40 L	25	40	6	16	4.5	7.5	40	7	3	37
300148	SL32-50-50 L	32	50	6	22	5.5	9	50	11	3	47
300150	SL40-60-60 L	40	60	6	28	6.5	10.5	60	11	3	57
300152	SL50-70-70 L	50	70	8	35	8.5	13.5	70	11	4	67

all SL blank parts will be supplied with a centering pin equivalent to the dimension

### SL blanks Right hand



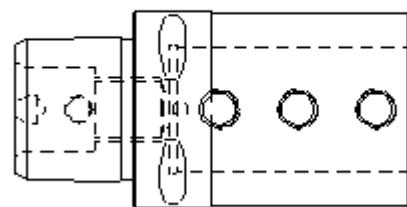
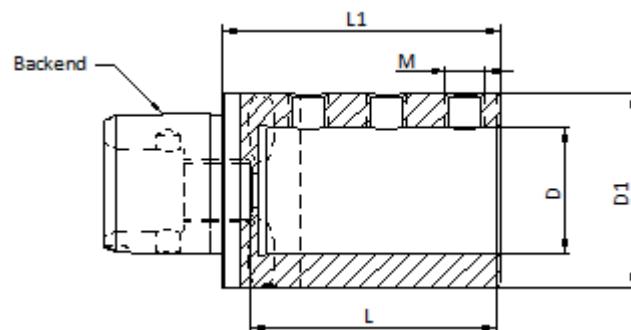
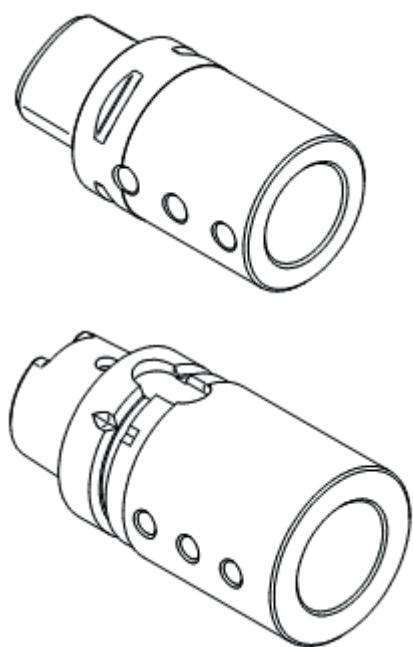
#### Right

Part Number	Type	D1 (mm)	D2 (mm)	D3 (mm)	D4 (mm)	D5 (mm)	D6 (mm)	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)
300139	SL12-20-20 R	12	20	4	7.4	2.5	4	20	7	3	17
300141	SL16-26-25 R	16	26	4	9.5	3.5	6	25	7	3	22
300143	SL20-34-32 R	20	34	6	13	3.5	6	32	7	3	29
300145	SL25-40-40 R	25	40	6	16	4.5	7.5	40	7	3	37
300147	SL32-50-50 R	32	50	6	22	5.5	9	50	11	3	47
300149	SL40-60-60 R	40	60	6	28	6.5	10.5	60	11	3	57
300151	SL50-70-70 R	50	70	8	35	8.5	13.5	70	11	4	67

all SL blank parts will be supplied with a centering pin equivalent to the dimension

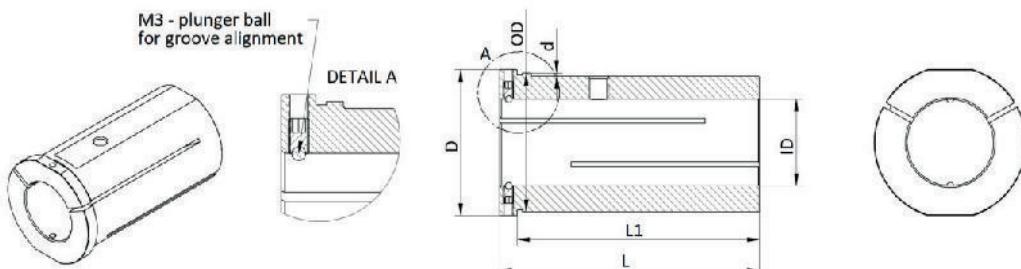
## Accessories

### Modular fixtures



Part Number	Type	Backend	D (mm)	L (mm)	D1 (mm)	L1 (mm)	M thread
300267	PSC50-SLT32x62-71	PSC50	32	62	49.5	71	M10x1.5
300292	PSC63-SLT40x72-86	PSC63	40	72	62.5	86	M12x1.75
300293	HSK63T-SLT32x62-90	HSK63T	32	62	50	80	M10x1.5

## Reduction sleeves



### Metric

Part Number	Type	OD h6 (mm)	ID H7 (mm)	L (mm)	D (mm)	L1 (mm)	d (mm)
301180	RS 16-06	16	6	48	20	43	0.75

300606	RS 20-16	20	16	55	37	50	1
300607	RS 20-12	20	12	55	37	50	1
300608	RS 20-10	20	10	55	37	50	1
300609	RS 20-08	20	8	55	37	50	1
301179	RS 20-06	20	6	55	37	50	1

300601	RS 25-20	25	20	61	30	56	1
300602	RS 25-16	25	16	61	30	56	1
300603	RS 25-12	25	12	61	30	56	1
300604	RS 25-10	25	10	61	30	56	1
300605	RS 25-08	25	8	61	30	56	1
301178	RS 25-06	25	6	61	30	56	1

300190	RS 32-25	32	25	65	37	60	1
300191	RS 32-20	32	20	65	37	60	1
300192	RS 32-16	32	16	65	37	60	1
300193	RS 32-12	32	12	65	37	60	1
300194	RS 32-10	32	10	65	37	60	1
300600	RS 32-08	32	8	65	37	60	1
300683	RS 32-06	32	6	65	37	60	1

300163	RS 40-32	40	32	75	44	70	1.5
300164	RS 40-25	40	25	75	44	70	1.5
300165	RS 40-20	40	20	75	44	70	1.5
300166	RS 40-16	40	16	75	44	70	1.5
300167	RS 40-12	40	12	75	44	70	1.5
300168	RS 40-10	40	10	75	44	70	1.5
300599	RS 40-08	40	8	75	44	70	1.5
300682	RS 40-06	40	6	75	44	70	1.5

300455	RS 50-40	50	40	95	58	90	1
300456	RS 50-32	50	32	95	58	90	1
300457	RS 50-25	50	25	95	58	90	1

300458	RS 60-50	60	50	110	68	105	1
300459	RS 60-40	60	40	110	68	105	1

300460	RS 80-60	80	60	128	88	123	1
300461	RS 80-50	80	50	128	88	123	1

## Inch

Part Number	Type	OD h6 (inch)	ID H7 (inch)	L (inch)	D (inch)	L1 (inch)	d (inch)
300229	RS i 1 ½ - 1 ¼	1.50	1.25	2.95	1.69	2.76	0.06
300230	RS i 1 ½ - 1	1.50	1.00	2.95	1.65	2.76	0.06
300231	RS i 1 ½ - ¾	1.50	0.75	2.95	1.65	2.76	0.06
300232	RS i 1 ½ - ⅜	1.50	0.625	2.95	1.65	2.76	0.06
300233	RS i 1 ½ - ½	1.50	0.50	2.95	1.65	2.76	0.06
300234	RS i 1 ½ - ⅝	1.50	0.375	2.95	1.65	2.76	0.06
300635	RS i 1 ½ - 5/16	1.50	0.3125	2.95	1.65	2.76	0.06
301217	RS i 1 ½ - ¼	1.50	0.25	2.95	1.65	2.76	0.06

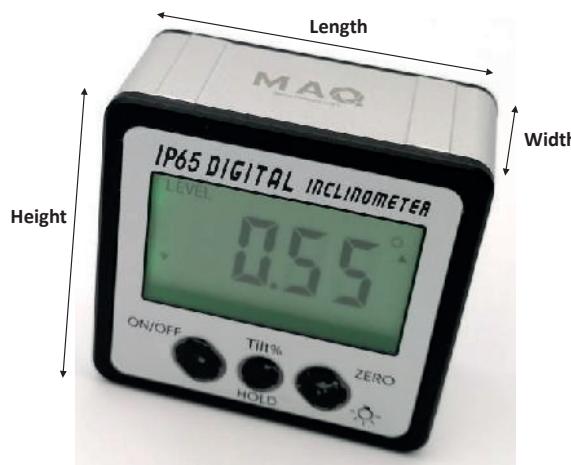
300235	RS i 1 ¼ - 1	1.25	1.00	2.56	1.46	2.36	0.04
300236	RS i 1 ¼ - ¾	1.25	0.75	2.56	1.46	2.36	0.04
300237	RS i 1 ¼ - ⅜	1.25	0.625	2.56	1.46	2.36	0.04
300238	RS i 1 ¼ - ½	1.25	0.50	2.56	1.46	2.36	0.04
300239	RS i 1 ¼ - ⅝	1.25	0.375	2.56	1.46	2.36	0.04
300636	RS i 1 ¼ - 5/16	1.25	0.3125	2.56	1.46	2.36	0.04
301218	RS i 1 ¼ - ¼	1.25	0.25	2.56	1.46	2.36	0.04

300639	RS i 2 - 1 ½	2.00	1.25	3.74	2.28	3.54	0.04
300640	RS i 2 - 1 ¼	2.00	1.50	3.74	2.28	3.54	0.04
300641	RS i 2 - 1	2.00	1.00	3.74	2.28	3.54	0.04

300642	RS i 2 ½- 2	2.50	2.00	4.33	2.67	4.13	0.04
300643	RS i 2 ½ - 1 ½	2.50	1.50	4.33	2.67	4.13	0.04

300644	RS i 3 - 2 ½	3.00	2.50	5.04	3.46	4.84	0.04
300645	RS i 3 - 2	3.00	2.00	5.04	3.46	4.84	0.04

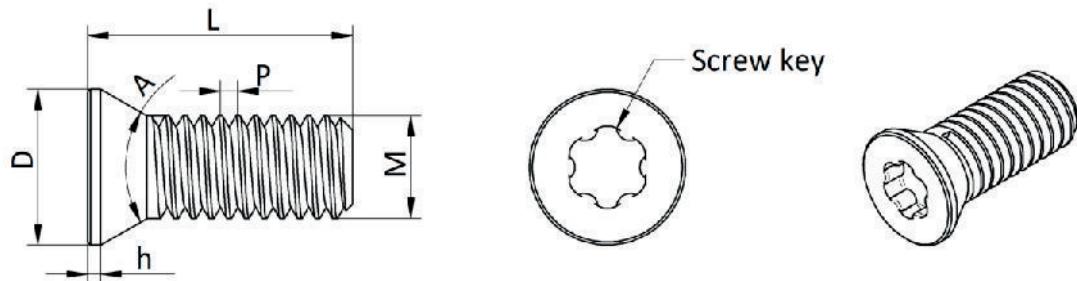
## Level Indicator/Digital protractor (angle inclinometer)



Part Number	Product	Width (mm)	Length (mm)	Height (mm)	Weight (g)	Battery	Lightning
300175	Digital protractor - Level Indicator	26	57	55	85	AA. 2 pcs	Yes

	Delivered with a magnet with power of 4.8 kg for easier alignment of machining tools.
--	---

### Insert screws

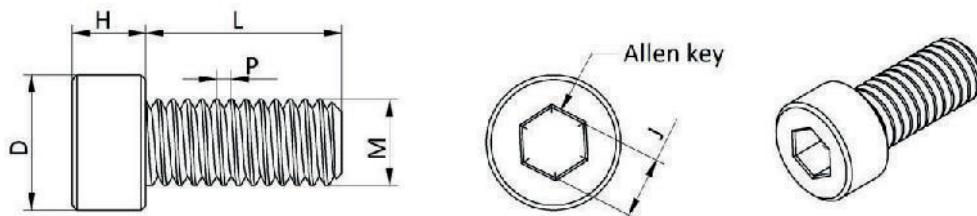


### Insert screws

Part Number	Type - Torx	Quantity	Designation	Thread M	D (mm)	L (mm)	A (°)	P (mm)	h (mm)	Torx Key
300659	IS M2.0x4.0	10 pcs/bag	M2.0x4xD2.8xP0.4	M2.0	2.8	4	60	0.40	0.3	T6
300257	IS M2.2x5.0	10 pcs/bag	M2.2x5.0xD3.0xP0.45	M2.2	3.0	5.0	60	0.45	0.8	T7
300701	IS M2.5x4.5	10 pcs/bag	M2.5x4.5xD3.6xP0.45	M2.5	3.6	4.5	55	0.45	0.6	T8
300258	IS M2.5x6.0	10 pcs/bag	M2.5x6.0xD3.6xP0.45	M2.5	3.6	6.0	55	0.45	0.6	T8
300620	IS M2.5x8.0	10 pcs/bag	M2.5x8.0xD3.6xP0.45	M2.5	3.6	8.0	55	0.45	0.6	T8
300617	IS M3.5x11.0	10 pcs/bag	M3.5x11.0xD5.3xP0.60	M3.5	5.3	10.0	60	0.60	1.2	T15
300618	IS M4.0x15.0	10 pcs/bag	M4.0x15.0xD7.0xP0.70	M4.0	7.0	15.0	60	0.70	NA	T15
300619	IS M4.5x12.0	10 pcs/bag	M4.5x12.0xD6.8xP0.75	M4.5	6,8	12	60	0.75	NA	T20
300425	IS M5.0x18.0	10 pcs/bag	M5.0x18.0xD8.2xP0.8	M5.0	8,2	18	60	0.80	NA	T20

## Cutter head screws

Standard: DIN 912



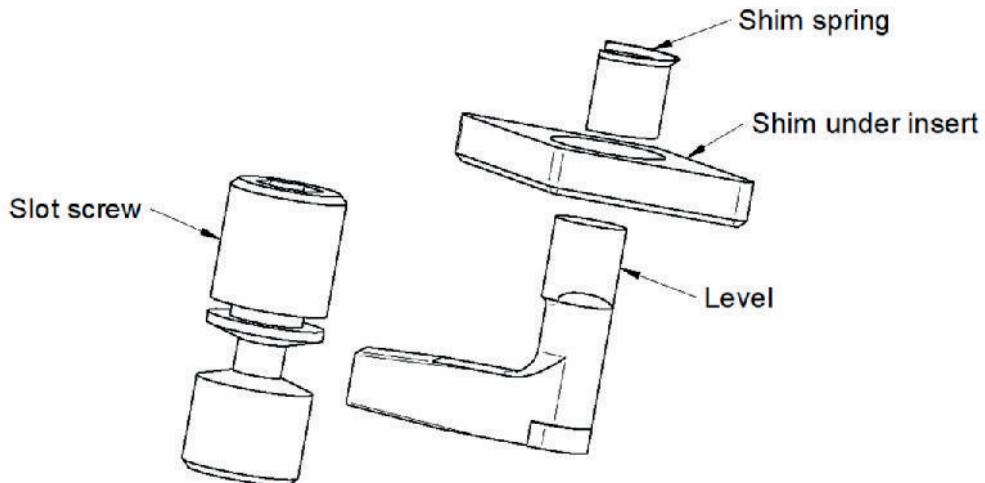
### Cutter head screws

Part Number	Type (DIN912)	Quantity	Thread M	D (mm)	L (mm)	H (mm)	P (mm)	Key (mm)	Suitable for
300260	HS M2x8	10 pcs/bag	M2	3.8	8	2	0.4	Allen key A/F 1.5	SL12
300261	HS M2x14	10 pcs/bag	M2	3.8	14	2	0.4	Allen key A/F 1.5	SL12
300673	HS M3x6	10 pcs/bag	M3	5.5	6	3	0.5	Allen key A/F 2.5	EA16, IA16, EA22, IA22
300169	HS M3x8	10 pcs/bag	M3	5.5	8	3	0.5	Allen key A/F 2.5	SL16, SL20
300170	HS M4x9	10 pcs/bag	M4	7	9	4	0.7	Allen key A/F 3	SL25
300171	HS M5x12	10 pcs/bag	M5	8.5	12	5	0.8	Allen key A/F 4	SL32
300262	HS M6x14	10 pcs/bag	M6	10	14	6	1	Allen key A/F 5	SL40
300263	HS M8x14	10 pcs/bag	M8	13	14	8	1.25	Allen key A/F 6	SL50, SL60

## Shims

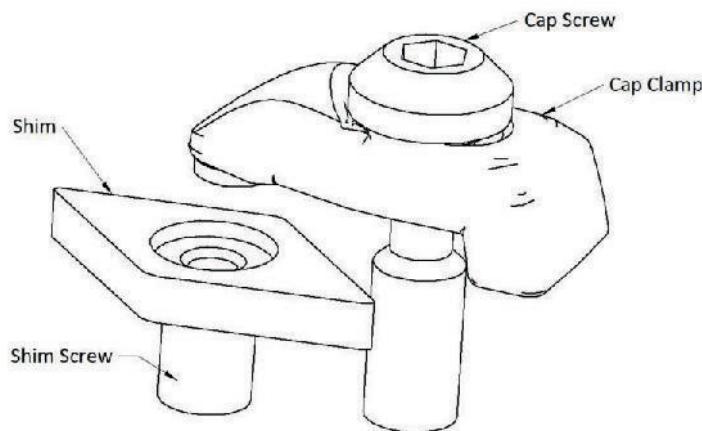
Part Number	Type	Fits
300433	Shim CCMT 09T3	STMD M32-256 SCLCL/R C, STMD M40-320 SCLCL/R C
300430	Shim CCMT 1204	SL40 SCLCL/R CP
300431	Shim DCMT 11T3	SL40 SDUCL/R CP
300432	Shim TCMT 16T3	SL40 STFCL/R CP
300669	Shim VCMT 1604	SL40 SVUCL/R CP, SL32 SVUCL/R CP
300435	Shim EA16 - IL16	SL25 SXFNL P 16, SL32 SXFNL P 16, SL40 SXFNL CP 16
300436	Shim IA16 - IR16	SL25 SXFNR P 16, SL32 SXFNR P 16, SL40 SXFNR CP 16
300437	Shim EA22 - IL22	SL25 SXFNL P 22, SL32 SXFNL CP 22, SL40 SXFNL CP 22
300438	Shim IA22 - IR22	SL25 SXFNR P 22, SL32 SXFNR CP 22, SL40 SXFNR CP 22
300439	Shim EA27 - IL27	SL40 SXFNL CP 27
300440	Shim IA27 - IR27	SL40 SXFNR CP 27

## Service kit for P clamp heads (includes level, shim, slot screw, spring)



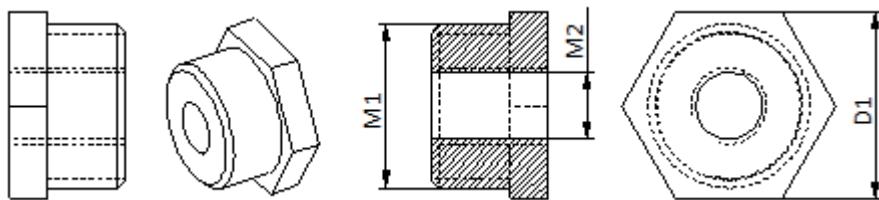
Part number	Service kit for	Cutter head	Level, 1 pcs	Shim, 1 pcs	Slot screw, 1 pcs	Spring, 1 pcs
300434	300086	SL40 PDUNR CP	LV4 G0516	Shim DNMG 1506	M8x1x21	T2-6
	300402	SL40 PDUNL CP				
300426	300427	SL32 PDUNR CP	LV3 G0312	Shim DNMG 1104	M6x1x17	T1-5
	300562	SL32 PDUNL CP				
301165	300661	SL25 PDUNR CP	LV3 G0310	Shim DNMG 1104	M5x0.8x15	T1-5
	300660	SL25 PDUNL CP				
300471	300088	SL40 PTFNR CP	LV3 G0310	Shim TNMG 1604	M6x1x17	T1-5
	300403	SL40 PTFNL CP				
	300429	SL32 PTFNR CP				
	300563	SL32 PTFNL CP				
300472	300087	SL40 PCLNR CP	LV4 G0513	Shim CNMG 1204	M8x1x21	T2-6
	300404	SL40 PCLNL CP				
300473	300428	SL32 PCLNR CP	LV4 G0513	Shim CNMG 1204	M6x1x17	T2-6
	300564	SL32 PCLNL CP				
300668	300474	SL40 PWLNR CP	LV4 G0513	Shim WNMG 0804	M8x1x21	T2-6
	300475	SL40 PWLNL CP				

## Service kit for D clamp heads (includes Cap, Cap screw, shim, shim screw and spring)



Part number	Service kit for	Cutter head	Cap Clamp 1 pcs	Cap screw 1 pcs	Spring 1 pcs	Shim 1 pcs	Shim screw 1 pcs
301423	301238 301239	SL40 DDUNR CP 1506 SL40 DDUNL CP 1506	C2RA	CM6X25C	SPR4 7x11	D1503	Sleeve M6x0.75
301425	301240 301241	SL40 DDUNR CP 1504 SL40 DDUNL CP 1504	C2RA	CM6X25C	SPR4 7x11	D15BM	Sleeve M6x0.75
301424	301242 301243	SL40 DCLNR CP 1204 SL40 DCLNL CP 1204	C2RA	CM6X25C	SPR4 7x11	C12BM	Sleeve M6x0.75

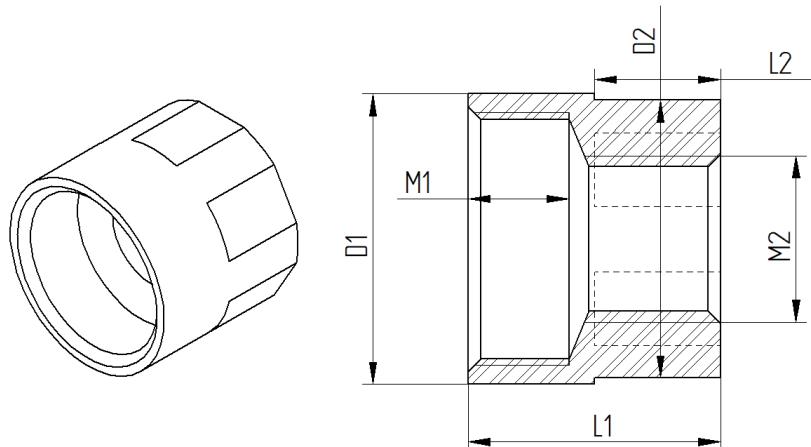
## Coolant adapters for steel bars



**Steel bars**

Part Number	Type	M1	M2	D1
300610	<b>CA G 1/4 - G 1/8</b>	G 1/4	G 1/8	17
300611	<b>CA G 1/2 - G 1/4</b>	G 1/2	G 1/4	24
300612	<b>CA G 3/4 - G 1/4</b>	G 3/4	G 1/4	30

## Coolant adapters for carbide bars

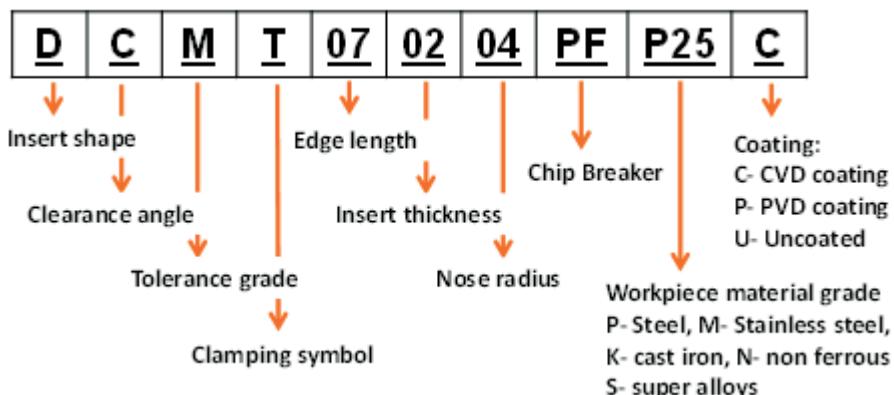


**Carbide bars**

Part Number	Type	M1	M2	L1	L2	D1	D2	Works for
300613	<b>CA M12x1 G 1/8</b>	M12x1	G 1/8	16	8	14	13	STMD M16-204 SL16, STMD M16-268 SL16 STMD I 5/8-8.0 SL16, STMD I 5/8-10.6 SL16
300614	<b>CA M16x1 G 1/4</b>	M16x1	G 1/4	20	10	18	16	STMD M20-260 SL20, STMD M20-340 SL20 STMD I 3/4-10.3 SL20, STMD I 3/4-13.4 SL20
300615	<b>CA M20x1 G 1/4</b>	M20x1	G 1/4	20	10	23	22	STMD M25-340 SL25, STMD I 1-16.9 SL25
300616	<b>CA M24x1 G 1/4</b>	M24x1	G 1/4	30	15	30	28	STMD M32-544 SL32, STMD I 1 1/4 -21.4 SL32

## MAQ Master Inserts

Inserts are sold in packages of 10 pcs.



### Positive insert

Part Number	Article	DCMT
300244	DCMT 070204-FP P25C	
300245	DCMT 11T304-FP P25C	

Part Number	Article	TCMT
300246	TCMT 090204-FP P25C	
300247	TCMT 110304-FP P25C	
300248	TCMT 16T304-FP P25C	

Part Number	Article	CCMT
300249	CCMT 060204-FP P25C	
300250	CCMT 09T304-FP P25C	
300251	CCMT 120404-FP P25C	

### Negative insert

Part Number	Article	DNMG
300294	DNMG 150604-LC P25C	

Part Number	Article	TNMG
300295	TNMG 160404-LC P25C	

Part Number	Article	CNMG
300296	CNMG 120404 LC P25C	

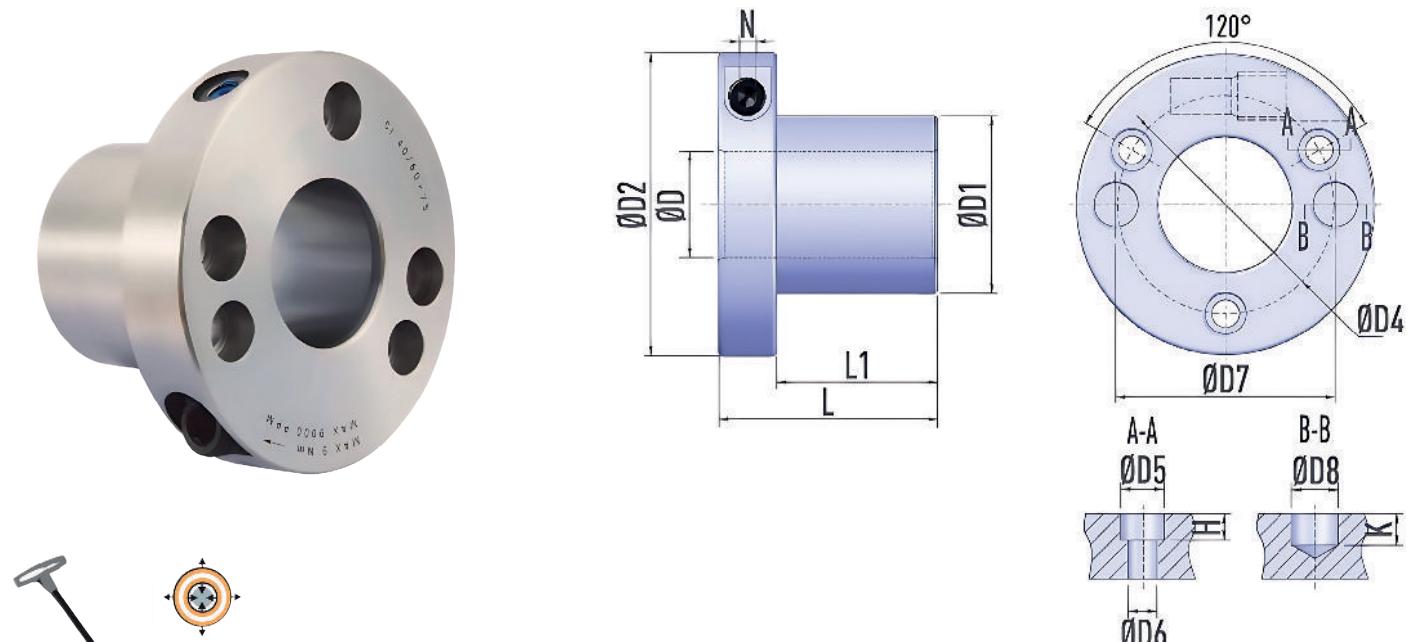
## BUSSOLE IDRAULICHE 'SERIE CI' A DOPPIA ESPANSIONE

### Funzionamento:

agendo sulla vite di comando si comprime il fluido idraulico all'interno di una speciale camicia d'acciaio creando una espansione doppia, sia verso l'attacco macchina che verso l'utensile.

### Vantaggi:

- chiusura uniforme lungo tutte le superfici di contatto con grande precisione di serraggio, ripetibilità e basso runout
- utilizzo in applicazioni statiche e dinamiche (bilanciatura standard per rotazioni fino a 9000 giri/min)
- grande assorbimento delle vibrazioni generate durante le lavorazioni meccaniche con migliore finitura delle superfici, maggiore produttività e minor consumo utensile
- montaggio/smontaggio rapido e facile con diminuzione dei tempi di set up



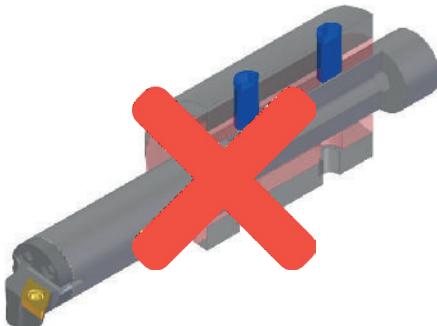
CODICE	DIMENSIONI					FISSAGGIO				VITE		RUNOUT
	D	D1	L	D2	L1	D4	D5	D6	H	N	Nm	
CI 12/16X36-43,5	12	16	36	43,5	24	SENZA VITI				5	8	0,006
CI 16/20X44-47	16	20	44	47	30	SENZA VITI				5	8	0,006
CI 20/25x49-52	20	25	49	52	30	SENZA VITI				5	8	0,006
CI 20/40x49-69,5	20	40	49	69,5	29	SENZA VITI				6	10	0,010
CI 25/32X54-59	25	32	54	59	34	SENZA VITI				6	10	0,010
CI 32/40x59-69,5	32	40	59	69,5	39	SENZA VITI				6	10	0,010
CI 32/50x59-79	32	50	59	79	39	SENZA VITI				8	12	0,010
CI 32/60x59-98,5	32	60	59	98,5	39	SENZA VITI				8	12	0,010
CI 40/50x75-102	40	50	75	102	55	64	14	9,5	8,5	8	12	0,015
CI 40/60x75-102	40	60	75	102	56	74	14	9,5	8,5	8	12	0,015
CI 40/60x95-108	40	60	95	108	75	74	14	9,5	8,5	8	12	0,015
CI 40/60x115-108	40	60	115	108	95	74	14	9,5	8,5	8	12	0,015
CI 50/60x95-108	50	60	95	108	75	74	14	9,5	8,5	8	12	0,015
CI 60/80x90-115,5	60	80	90	115,5	70	SENZA VITI				8	12	0,015

Tutte le misure sono espresse in millimetri

DISPONIBILI SU RICHIESTA BUSSOLE CON MISURE SPECIALI

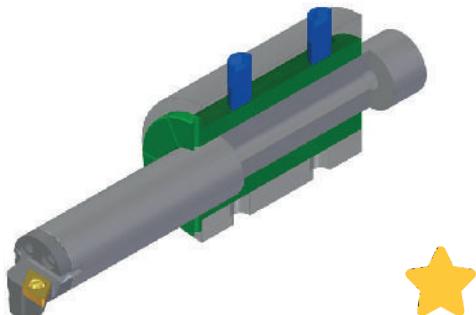
## FISSAGGIO DELLE BARRE ANTIVIBRANTI

Un bloccaggio inadeguato con una bassa rigidità alla flessione avrà un impatto negativo sulle prestazioni.



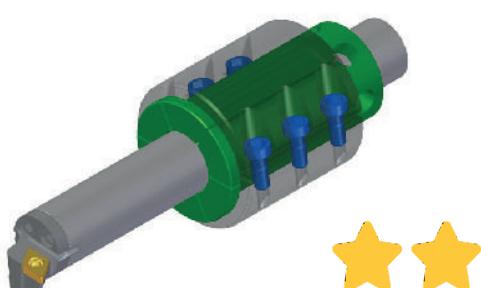
### SERRAGGIO DIRETTO A VITE

- Rigidità finale inaccettabile
- Lunghezza di serraggio = NON APPLICABILE
- Non utilizzare su barre MAQ



### SERRAGGIO VITE + BUSSOLA

- Rigidità finale accettabile per basse sporgenze
- Lunghezza di serraggio consigliata minimo 3XD



### SERRAGGIO ELASTICO+BUSSOLA

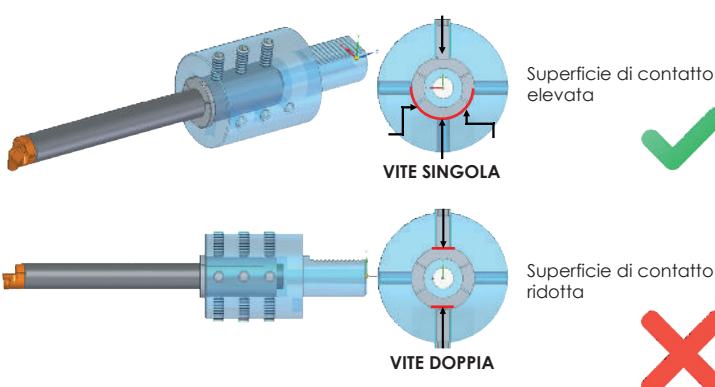
- Buona rigidità alla flessione
- Lunghezza di serraggio consigliata minimo 3XD



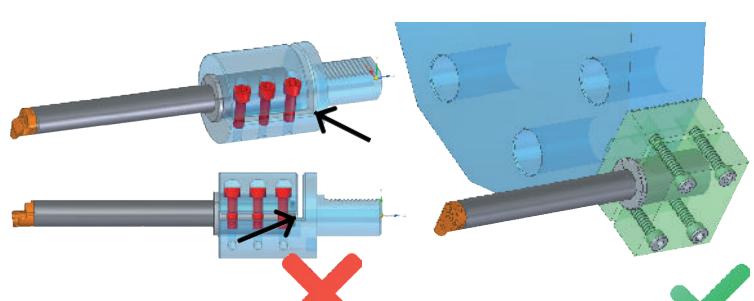
### SERRAGGIO IDRAULICO

- Ottima rigidità alla flessione consigliato per elevate sporgenze
- Lunghezza di serraggio consigliata minimo 2XD

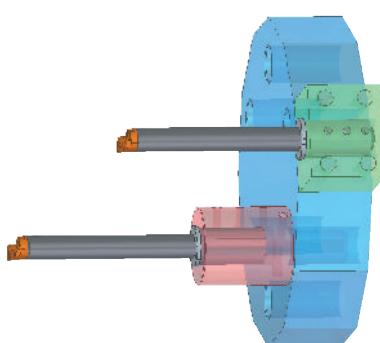
## BUSSOLA DI RIDUZIONE



## PREFERIRE PORTAUTENSILI CON SEZIONI ELEVATE



## ATTACCHI MACCHINA



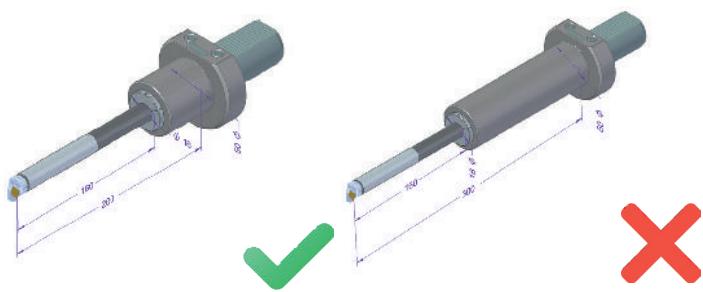
### Esterne (es. BMT)

- ✓ Maggiore rigidità
- ✓ Raccomandato per elevati rapporti L/D

### Interni (es. VDI)

- ✗ Minore rigidità
- ✗ Non raccomandato per elevati rapporti L/D

## RIDURRE GLI SBALZI



# MAQ

**apm-trade**

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