

# Catalog



MAQ AB  
Stenhuggarvagen 1  
SE-132 38 Saltsjö-boo  
Sweden  
[www.maqab.com](http://www.maqab.com)

## Welcome to the MAQ-World!

MAQ's vision is to "Simplify Machining" through a disruptive and simple plug and play technology that removes vibrations from manufacturing processes to reduce production time and cost and at the same time improve the quality.

Vibration in machining means damaged parts and surface, destroyed cutting inserts, and dramatically increased production costs. Machining operations using high length to diameter ratio tools (L/D) have the most prominent vibration issues, and let's not forget that short overhang tools also have the same problem but a bit less prominent. MAQ integrates a new approach to mass dampening in the tool body to extract the vibration energy from the cutting tool body to minimize the movement and neutralize the vibration problem.

The complex problem is the change of vibration frequency on cutting tools due to the cutting condition changes (tool wear, wearing joints, variation of work piece materials, changes of machining set up, etc.). For these reasons, it has so far been necessary to optimize the tuning for a certain condition to optimize its performance. This works well if the vibration frequency doesn't change. But it does, and when you use a traditional damped bar and the vibration goes outside the operational window the tool can make the vibration problem even worse, instead of improving.

What makes the MAQ products unique and unbeatable is the self-tuning property. The spring elements adjust its stiffness according to the vibration frequency and overcome the problem of frequency changes. With its unique self-tuning property, MAQ tools outperform the solutions on the market and deliver the benefit to customers with better surface finish, better tolerance, and higher process reliability. MAQ tools boost productivity through simply machining!

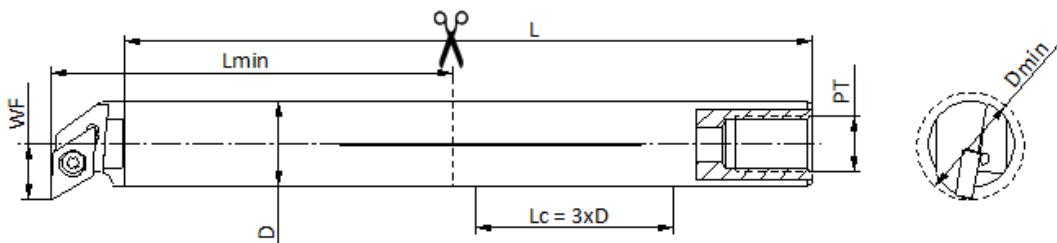
The simple is the ingenious and with the STMD™, MAQ has created an alternative that is much easier to apply, has better performance than the leading competitor and will reduce your tooling costs compared to the alternatives. The tools also reduce set up time, the need for secondary operations, eliminate tuning and will reduce the overall machining costs significantly.

## Table of Contents

<b>Turning 3-6xD .....</b>	<b>4</b>
Straight holder (3-6xD) with fixed cutter heads (Metric) .....	4
Straight holder (3-6xD) with fixed cutter heads (Inch) .....	6
<b>Turning 6-9xD .....</b>	<b>7</b>
Straight holder (6-9xD) with SL (Serration Lock) interface (Metric) .....	7
Straight holder (6-9xD) with SL (Serration Lock) interface (Inch) .....	8
<b>Turning 8-12xD .....</b>	<b>9</b>
Straight holder (8-12xD) with fixed cutter heads (Metric) .....	9
Straight holder (8-12xD) with fixed cutter heads (Inch) .....	10
Straight holder (8-12xD) with SL (Serration Lock) interface (Metric) .....	11
Straight holder (8-12xD) with SL (Serration Lock) interface (Inch) .....	12
<b>Turning 11-15xD.....</b>	<b>13</b>
Straight holder (11-15xD) with SL (Serration Lock) interface (Metric) .....	13
Straight holder (11-15xD) with SL (Serration Lock) interface (Inch) .....	14
<b>Turning – Multitask with modular backends.....</b>	<b>15</b>
<b>End effectors.....</b>	<b>16</b>
SDUCR, SDUCL for DCMT Inserts .....	16
STFCR, STFCL for TCMT Inserts .....	17
SCLCR, SCLCL for CCMT Inserts .....	18
SVUCR, SVUCL for VCMT Inserts .....	19
PDUNR for DNMG Inserts .....	20
PTFNR for TNMG Inserts .....	20
PCLNR for CNMG Inserts .....	21
SXFNL for threading Left hand .....	22
SXFNR for threading Right hand .....	23
SL Blanks Left Hand Side:.....	24
SL Blanks Right Hand Side:.....	25
<b>Accessories .....</b>	<b>26</b>
Modular fixtures .....	26
Reduction sleeves .....	27
Level Indicator/Digital protractor (angle inclinometer).....	28
Coolant adapters for steel bars .....	29
Insert screws:.....	29
Cutter head screws .....	30
Shims .....	30
P clamp levels .....	31
Slotted screws.....	31
Coolant adapters for carbide bars .....	32
<b>MAQ Master Inserts.....</b>	<b>33</b>
<b>MAQ Master Threading Inserts.....</b>	<b>34</b>
<b>Clamping of Turning tools .....</b>	<b>35</b>

## Turning 3-6xD

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



**STMD M 25 205 SDUCR**

Self-tuning mass damper inside  
 M - Metric      L - Nominal length,  
 I - Inch           Bar length without cutter head  
 Diameter        Front connection  
                 Cutterhead  
                 Coolant channel

L – nominal length (*actual length may vary*)  
 L<sub>min</sub> – minimum total length after cutting  
 L<sub>c</sub> – recommended clamping length, 3 times diameter  
 D – diameter  
 PT – pipe thread  
 WF – distance from cutting point to centre

#### Standard: Metric (with fixed head SDUCR for DCMT insert)

Type	Dmin (mm)	Workable length <sup>b</sup> (mm)	Lmin (mm)	Lc (mm)	WF (mm)	Coolant	Master insert	Insert screw	PTI		Part number
STMD M12-108	16	36-72	72	36	9	Yes	DCMT 070204	IS M2.5x6.0	G ¼	0.1 kg	300205
STMD M16-138	20	48-96	96	48	11	Yes	DCMT 070204	IS M2.5x6.0	G ¼	0.2 kg	300176
STMD M20-160	25	60-120	120	60	13	Yes	DCMT 11T304	IS M3.5x10.0	G ¼	0.4 kg	300177
STMD M25-205	32	75-150	155	75	17	Yes	DCMT 11T304	IS M3.5x10.0	G ¼	0.6 kg	300110
STMD M32-256	40	96-192	192	96	22	Yes	DCMT 11T304	IS M3.5x10.0	G ½	1.2 kg	300178
STMD M40-320	50	120-240	240	120	27	Yes	DCMT 11T304	IS M3.5x10.0	G ½	2.4 kg	300179

#### Standard: Metric (with fixed head SCLCR for CCMT insert)

STMD M12-108	16	36-72	72	36	8,5	Yes	CCMT 060204	IS M2.5x6.0	G ¼	0.1 kg	300206
STMD M16-138	20	48-96	96	48	11	Yes	CCMT 060204	IS M2.5x6.0	G ¼	0.2 kg	300186
STMD M20-160	25	60-120	120	60	13	Yes	CCMT 09T304	IS M3.5x10.0	G ¼	0.4 kg	300188
STMD M25-205	32	75-150	155	75	17	Yes	CCMT 09T304	IS M3.5x10.0	G ¼	0.6 kg	300184
STMD M32-256	40	96-192	192	96	22	Yes	CCMT 09T304	IS M3.5x10.0	G ½	1.2 kg	300183
STMD M40-320	50	120-240	240	120	27	Yes	CCMT 09T304	IS M3.5x10.0	G ½	2.4 kg	300181

#### Standard: Metric (with fixed head STFCR for TCMT insert)

STMD M12-108	16	36-72	72	36	9	Yes	TCMT 090204	IS M2.2x5.0	G ¼	0.1 kg	300207
STMD M16-138	20	48-96	96	48	11	Yes	TCMT 090204	IS M2.2x5.0	G ¼	0.2 kg	300187
STMD M20-160	25	60-120	120	60	13	Yes	TCMT 110304	IS M2.5x8.0	G ¼	0.4 kg	300189
STMD M25-205	32	75-150	155	75	17	Yes	TCMT 110304	IS M2.5x8.0	G ¼	0.6 kg	300185
STMD M32-256	40	96-192	192	96	22	Yes	TCMT 16T304	IS M3.5x10.0	G ½	1.2 kg	300180
STMD M40-320	50	120-240	240	120	27	Yes	TCMT 16T304	IS M3.5x10.0	G ½	2.4 kg	300182

b – measured from the cutting edge to the clamping end.

**Standard: Metric (with fixed head SDUCL for DCMT insert)**

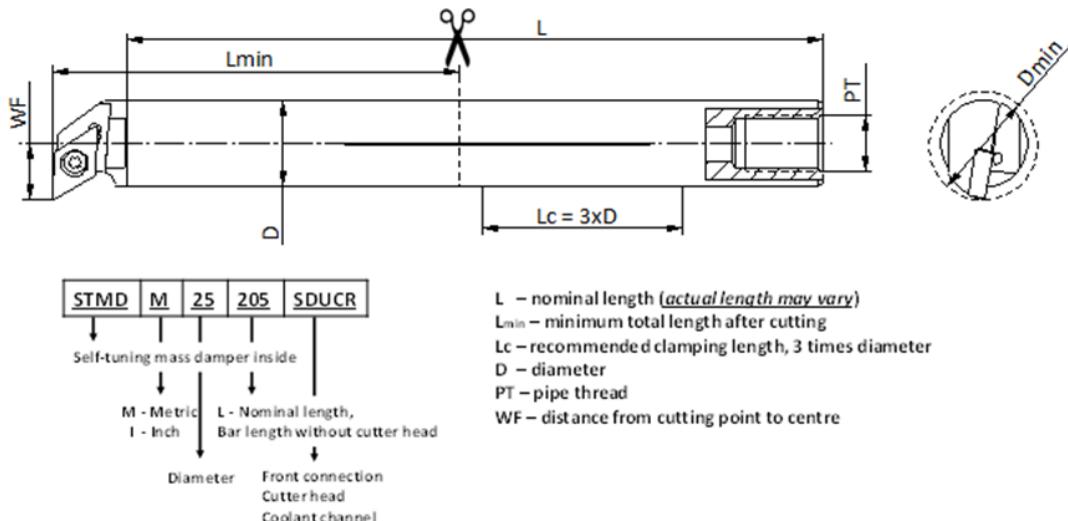
Type	Dmin (mm)	Workable length <sup>b</sup> (mm)	Lmin (mm)	Lc (mm)	WF (mm)	Coolant	Master insert	Insert screw	PTI	kg	Part number
STMD M12-108	16	36-72	72	36	9	Yes	DCMT 070204	IS M2.5x6.0	G ¼	0.1 kg	300405
STMD M16-138	20	48-96	96	48	11	Yes	DCMT 070204	IS M2.5x6.0	G ¼	0.2 kg	300406
STMD M20-160	25	60-120	120	60	13	Yes	DCMT 11T304	IS M3.5x10.0	G ¼	0.4 kg	300407
STMD M25-205	32	75-150	155	75	17	Yes	DCMT 11T304	IS M3.5x10.0	G ¼	0.6 kg	300408
STMD M32-256	40	96-192	192	96	22	Yes	DCMT 11T304	IS M3.5x10.0	G ½	1.2 kg	300409
STMD M40-320	50	120-240	240	120	27	Yes	DCMT 11T304	IS M3.5x10.0	G ½	2.4 kg	300410

**Standard: Metric (with fixed head SCLCL for CCMT insert)**

STMD M12-108	16	36-72	72	36	8,5	Yes	CCMT 060204	IS M2.5x6.0	G ¼	0.1 kg	300411
STMD M16-138	20	48-96	96	48	11	Yes	CCMT 060204	IS M2.5x6.0	G ¼	0.2 kg	300412
STMD M20-160	25	60-120	120	60	13	Yes	CCMT 09T304	IS M3.5x10.0	G ¼	0.4 kg	300413
STMD M25-205	32	75-150	155	75	17	Yes	CCMT 09T304	IS M3.5x10.0	G ¼	0.6 kg	300414
STMD M32-256	40	96-192	192	96	22	Yes	CCMT 09T304	IS M3.5x10.0	G ½	1.2 kg	300415
STMD M40-320	50	120-240	240	120	27	Yes	CCMT 09T304	IS M3.5x10.0	G ½	2.4 kg	300416

b – measured from the cutting edge to the clamping end.

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



### Standard: Inch (with fixed head SDUCR for DCMT insert)

Art. Nr	Dmin (inch)	Workable length <sup>b</sup> (inch)	Lmin (inch)	Lc (inch)	WF (inch)	Coolant	Master insert	Insert screw	PTI		Part number
STMD I ½-4.3	0.63	1.500-3.000	2.8	1.4	0.35	Yes	DCMT 070204	IS M2.5x6.0	G ¼	0.1 kg	300211
STMD I 5/8-5.4	0.78	1.875-3.750	3.8	1.9	0.43	Yes	DCMT 070204	IS M2.5x6.0	G ¼	0.2 kg	300212
STMD I ¾-6.3	0.98	2.250-4.500	4.7	2.4	0.51	Yes	DCMT 11T304	IS M3.5x10.0	G ¼	0.4 kg	300213
STMD I 1-8.1	1.26	3.000-6.000	6.1	2.9	0.67	Yes	DCMT 11T304	IS M3.5x10.0	G ¼	0.6 kg	300214
STMD I 1 ¼-10.1	1.57	3.750-7.500	7.6	3.8	0.86	Yes	DCMT 11T304	IS M3.5x10.0	G ½	1.2 kg	300215
STMD I 1 ½-12.6	1.96	4.500-9.000	9.4	4.7	1.06	Yes	DCMT 11T304	IS M3.5x10.0	G ½	2.4 kg	300216

### Standard: Inch (with fixed head SCLCR for CCMT insert)

STMD I ½-4.3	0.63	1.500-3.000	2.8	1.4	0.33	Yes	CCMT 060204	IS M2.5x6.0	G ¼	0.1 kg	300217
STMD I 5/8-5.4	0.78	1.875-3.750	3.8	1.9	0.43	Yes	CCMT 060204	IS M2.5x6.0	G ¼	0.2 kg	300218
STMD I ¾-6.3	0.98	2.250-4.500	4.7	2.4	0.51	Yes	CCMT 09T304	IS M3.5x10.0	G ¼	0.4 kg	300219
STMD I 1-8.1	1.26	3.000-6.000	6.1	2.9	0.67	Yes	CCMT 09T304	IS M3.5x10.0	G ¼	0.6 kg	300220
STMD I 1 ¼-10.1	1.57	3.750-7.500	7.6	3.8	0.86	Yes	CCMT 09T304	IS M3.5x10.0	G ½	1.2 kg	300221
STMD I 1 ½-12.6	1.96	4.500-9.000	9.4	4.7	1.06	Yes	CCMT 09T304	IS M3.5x10.0	G ½	2.4 kg	300222

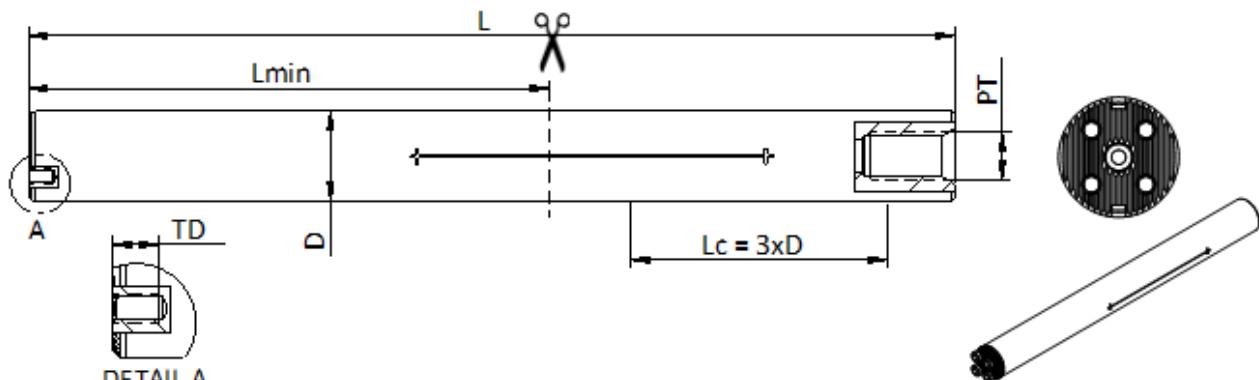
### Standard: Inch (with fixed head STFCR for TCMT insert)

STMD I ½-4.3	0.63	1.500-3.000	2.8	1.4	0.35	Yes	TCMT 090204	IS M2.2x5.0	G ¼	0.1 kg	300223
STMD I 5/8-5.4	0.78	1.875-3.750	3.8	1.9	0.43	Yes	TCMT 090204	IS M2.2x5.0	G ¼	0.2 kg	300224
STMD I ¾-6.3	0.98	2.250-4.500	4.7	2.4	0.51	Yes	TCMT 110304	IS M2.5x8.0	G ¼	0.4 kg	300225
STMD I 1-8.1	1.26	3.000-6.000	6.1	2.9	0.67	Yes	TCMT 110304	IS M2.5x8.0	G ¼	0.6 kg	300226
STMD I 1 ¼-10.1	1.57	3.750-7.500	7.6	3.8	0.86	Yes	TCMT 16T304	IS M3.5x10.0	G ½	1.2 kg	300227
STMD I 1 ½-12.6	1.96	4.500-9.000	9.4	4.7	1.06	Yes	TCMT 16T304	IS M3.5x10.0	G ½	2.4 kg	300228

b – measured from the cutting edge to the clamping end.

## Turning 6-9xD

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



STMD M 25 255 SL25

↓  
 Self-tuning mass damper inside  
 ↓  
 M - Metric      L - Nominal length,  
 I - Inch      Barlength without cutter head  
 ↓  
 Diameter      Front connection  
 Cutter head  
 Coolant channel

L – nominal length (*actual length may vary*)

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

Type	Workable length <sup>b</sup> (mm)	L <sub>min</sub> (mm)	L <sub>c</sub> (mm)	Screws	TD (mm)	PT	Adapter	Material	KG	Part number
STMD M12-144	72-96	144	36	M2X8 or 14	5.5	NA	SL12	S+C <sup>d</sup>	0.18	300001
STMD M16-170	96-128	117	48	M3X8	5.5	G 1/4	SL16	Steel	0.25	300004
STMD M20-200	120-160	137	60	M3X8	5.5	G 1/4	SL20	Steel	0.50	300005
STMD M25-255	150-200	180	75	M4X9	6.5	G 1/4	SL25	Steel	1.10	300006
STMD M32-320	192-256	213	96	M5X12	10	G 1/2	SL32	Steel	2.10	300008
STMD M40-408 1C <sup>e,f</sup>	240-320	260	120	M6X14	10	G 1/2	SL40	Steel	3,9	300010
STMD M40-408 3C <sup>f</sup>	240-320	260	120	M6X14	10	G 1/2	SL40	Steel	3,9	300240
STMD M50-518-SL40	300-400	324	150	M6X14	10	G 1/4	SL40	Steel	8	300012
STMD M50-518-SL50 <sup>e</sup>	300-400	322	150	M8X14	12	G 1/4	SL50	Steel	8	300013
STMD M60-628-SL40	360-480	424	180	M6X14	10	G 1/4	SL40	Steel	13.6	300015
STMD M60-628-SL60 <sup>e</sup>	360-480	422	180	M8X14	12	G 1/4	SL60	Steel	13.6	300016

a – total length to the cutting point

b – measured from the cutting edge to the clamping end.

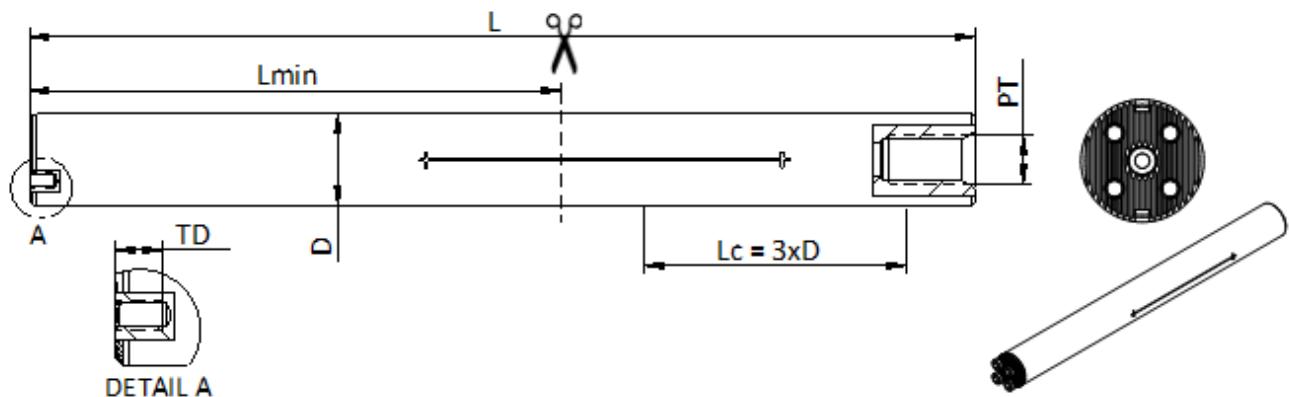
c – distance from cutting point to centre with master insert.

d – Carbide back end joined with steel

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

f - 1C - 1 coolant outlet in central, 3C - 3 coolant outlets - 1 central 2 periphery

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



STMD	M	25	255	SL25
Self-tuning mass damper inside				
M - Metric I - Inch				L - Nominal length, Bar length without cutter head
Diameter	Front connection Cutter head Coolant channel			

L – nominal length (*actual length may vary*)

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

Lc – recommended clamping length, 3 times diameter

D – diameter

PT – pipe thread

TD – thread depth

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

Type	Workable lengthb (inch)	Lmin (inch)	Lc (inch)	Screws	TD (mm)	PT	Adapter	Material	c	Part number
STMD I 1/2-5.7	3.000-4.000	5.7	1.41	M2X8 or 14	5.5	NA	SL12	S+C <sup>d</sup>	0.18	300040
STMD I 5/8-6.7	3.750-5.000	4.6	1.88	M3X8	5.5	G 1/4	SL16	Steel	0.25	300041
STMD I 3/4-7.9	4.500-6.000	5.4	2.25	M3X8	5.5	G 1/4	SL20	Steel	0.50	300042
STMD I 1-10	6.000-8.000	7.1	3.00	M4X9	6.5	G 1/4	SL25	Steel	1.10	300043
STMD I 1 1/4-12.6	7.500-10.000	8.4	3.75	M5X12	10	G 1/2	SL32	Steel	2.10	300044
STMD I 1 1/2-16.0-1C <sup>e,f</sup>	9.000-12.000	10.2	4.72	M6X14	10	G 1/2	SL40	Steel	3.90	300255
STMD I 1 1/2-16.0-3C <sup>f</sup>	9.000-12.000	10.2	4.72	M6X14	10	G 1/2	SL40	Steel	3.90	300045
STMD I 2-20.4-SL40	12.000-16.000	12.7	5.90	M6X14	10	G 3/4	SL40	Steel	8.00	300046
STMD I 2-20.4-SL50 <sup>e</sup>	12.000-16.000	12.7	5.90	M8X14	10	G 3/4	SL50	Steel	8.00	300047
STMD I 2 1/2-24.7-SL40	15.000-20.000	16.7	7.10	M6X14	12	G 3/4	SL40	Steel	13.60	300048
STMD I 2 1/2-24.7-SL60 <sup>e</sup>	15.000-20.000	16.7	7.10	M8X14	10	G 3/4	SL60	Steel	13.60	300049

a – total length to the cutting point

b – measured from the cutting edge to the clamping end.

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

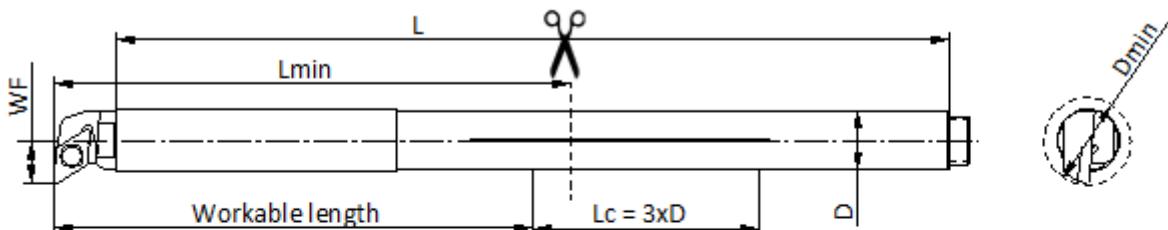
d – Carbide back end joined with steel

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

f - 1C - 1 coolant outlet in central, 3C- 3 coolant outlets - 1 central 2 periphery

## Turning 8-12xD

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



**STMD M 12 180 SDUCR**

Self-tuning mass damper inside  
 M - Metric      I - Inch  
 Diameter      L - Nominal length,  
 Front connection      Bar length without cutter head  
 Cutterhead      Coolant channel

L – nominal length (*actual length may vary*)

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

Standard: Metric (with fixed head)											
Type	Dmin (mm)	Workable length <sup>b</sup> (mm)	Lmin <sup>a</sup> (mm)	Lc (mm)	WF <sup>c</sup> (mm)	PT	Master insert	Insert screw	Material		Part number
STMD M08-120 SCLCR	10	56-88	n.a.	24	5	M7x0.5	CCMT 060204	IS M2.5x4.0	S+C <sup>d</sup>	0.15	300310
STMD M08-120 STUBR	10	56-88	n.a.	24	5	M7x0.5	TBGT 060104	IS M2.0x4.0	S+C <sup>d</sup>	0.15	300386
STMD M10-150 SDUCR	15	70-110	n.a.	30	9	No internal coolant	DCMT 070204	IS M2.5x6.0	S+C <sup>d</sup>	0.20	300103
STMD M10-150 SCLCR	12	70-110	n.a.	30	6,1	No internal coolant	CCMT 060204	IS M2.5x6.0	S+C <sup>d</sup>	0.20	300102
STMD M10-150 STFCR	13	70-110	n.a.	30	6,8	No internal coolant	TCMT 090204	IS M2.2x5.0	S+C <sup>d</sup>	0.20	300101
STMD M10-150 C SDUCR	15	70-110	n.a.	30	9	M9x0.75	DCMT 070204	IS M2.5x6.0	S+C <sup>d</sup>	0.20	300389
STMD M10-150 C SCLCR	12	70-110	n.a.	30	6,1	M9x0.75	CCMT 060204	IS M2.5x6.0	S+C <sup>d</sup>	0.20	300390
STMD M10-150 C STFCR	13	70-110	n.a.	30	6,8	M9x0.75	TCMT 090204	IS M2.2x5.0	S+C <sup>d</sup>	0.20	300391
STMD M12-180 SDUCR	16	84-132	n.a.	36	8,9	G ½	DCMT 070204	IS M2.5x6.0	S+C <sup>d</sup>	0.30	300098
STMD M12-180 SCLCR	16	84-132	n.a.	36	8,5	G ½	CCMT 060204	IS M2.5x6.0	S+C <sup>d</sup>	0.30	300099
STMD M12-180 STFCR	16	84-132	n.a.	36	9	G ½	TCMT 090204	IS M2.2x5.0	S+C <sup>d</sup>	0.30	300100

a – total length to the cutting point

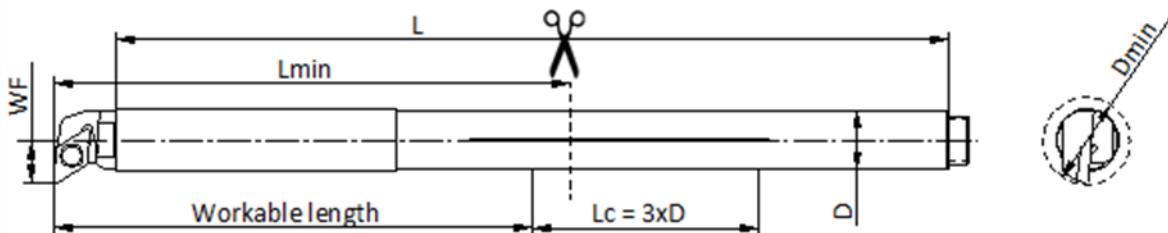
b – measured from the cutting edge to the clamping end.

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

d – Carbide back end joined with steel

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

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



**STMD M 12 180 SDUCR**

Self-tuning mass damper inside  
 M - Metric      I - Inch  
 L - Nominal length,  
 Bar length without cutter head  
 Diameter      Front connection  
 Cutterhead  
 Coolant channel

L – nominal length (*actual length may vary*)

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

Standard: Inch (with fixed head)											
Type	Dmin (inch)	Workable length <sup>b</sup> (inch)	Lmin <sup>a</sup> (inch)	Lc (inch)	WF <sup>c</sup> (inch)	PT	Master insert	Insert screw	Material		Part number
STMD I 5/16-4.7 SCLCR	0.39	2.204-3.464	n.a.	0.94	0.20	M7x0.5	CCMT 060204	IS M2.5x4.0	S+C <sup>d</sup>	0.15	300387
STMD I 5/16-4.7 STUBR	0.39	2.204-3.464	n.a.	0.94	0.20	M7x0.5	TBGT 060104	IS M2.0x4.0	S+C <sup>d</sup>	0.15	300388
STMD I 3/8-5.9 SDUCR	0.59	2.625-4.125	5.9	1.18	0.35	No internal coolant	DCMT 070204	IS M2.5x6.0	S+C <sup>d</sup>	0.20	300157
STMD I 3/8-5.9 SCLCR	0.47	2.625-4.125	5.9	1.18	0.24	No internal coolant	CCMT 060204	IS M2.5x6.0	S+C <sup>d</sup>	0.20	300158
STMD I 3/8-5.9 STFCR	0.51	2.625-4.125	5.9	1.18	0.27	No internal coolant	TCMT 090204	IS M2.2x5.0	S+C <sup>d</sup>	0.20	300156
STMD I 3/8-5.9 C SDUCR	0.59	2.625-4.125	5.9	1.18	0.35	M9x0.75	DCMT 070204	IS M2.5x6.0	S+C <sup>d</sup>	0.20	300392
STMD I 3/8-5.9 C SCLCR	0.47	2.625-4.125	5.9	1.18	0.24	M9x0.75	CCMT 060204	IS M2.5x6.0	S+C <sup>d</sup>	0.20	300393
STMD I 3/8-5.9 C STFCR	0.51	2.625-4.125	5.9	1.18	0.27	M9x0.75	TCMT 090204	IS M2.2x5.0	S+C <sup>d</sup>	0.20	300394
STMD I 1/2-7.1 SDUCR	0.63	3.500-5.500	7.1	1.42	0.35	G 1/2	DCMT 070204	IS M2.5x6.0	S+C <sup>d</sup>	0.30	300153
STMD I 1/2-7.1 SCLCR	0.63	3.500-5.500	7.1	1.42	0.33	G 1/2	CCMT 060204	IS M2.5x6.0	S+C <sup>d</sup>	0.30	300154
STMD I 1/2-7.1 STFCR	0.63	3.500-5.500	7.1	1.42	0.35	G 1/2	TCMT 090204	IS M2.2x5.0	S+C <sup>d</sup>	0.30	300155

a – total length to the cutting point

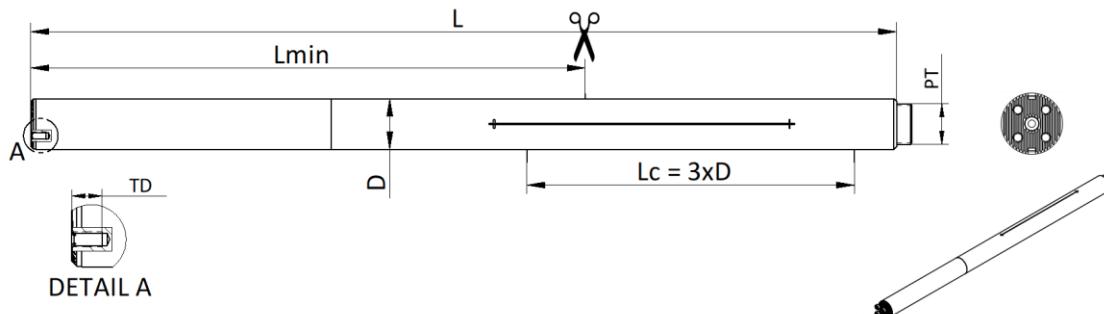
b – measured from the cutting edge to the clamping end.

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

d – Carbide back end joined with steel

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

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



**STMD M 25 255 SL25**

Self-tuning mass damper inside  
 M - Metric      I - Inch  
 L - Nominal length,  
 Bar length without cutter head  
 Diameter      Front connection  
 Cutter head  
 Coolant channel

L – nominal length (*actual length may vary*)

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

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

Type	Workable length <sup>b</sup> (mm)	L <sub>min</sub> (mm)	L <sub>c</sub> (mm)	Screws	TD (mm)	PT	Adapter	Material	Part number	
STMD M16-204	128-176	204	48	M3X8	5.5	G 1/8	SL16	S+C <sup>d</sup>	0.50	300017
STMD M20-260	160-220	260	60	M3X8	5.5	G 1/4	SL20	S+C <sup>d</sup>	1.00	300018
STMD M25-330	200-275	255	75	M4X9	6.5	G 1/4	SL25	Steel	1.70	300019
STMD M32-416	256-352	309	96	M5X12	10	G 1/2	SL32	Steel	3.50	300020
STMD M40-528 1C <sup>e,f</sup>	320-440	312	120	M6X14	10	G 1/2	SL40	Steel	5.00	300241
STMD M40-528 3C <sup>f</sup>	320-440	312	120	M6X14	10	G 1/2	SL40	Steel	5.00	300021
STMD M50-660-SL40	400-550	384	150	M6X14	10	G 3/4	SL40	Steel	9.40	300022
STMD M50-660-SL50 <sup>e</sup>	400-550	382	150	M8X14	12	G 3/4	SL50	Steel	9.40	300023
STMD M60-808-SL40	480-660	484	180	M6X14	10	G 3/4	SL40	Steel	16,4	300024
STMD M60-808-SL60 <sup>e</sup>	480-660	482	180	M8X14	12	G 3/4	SL60	Steel	16,4	300025

a – total length to the cutting point

b – measured from the cutting edge to the clamping end.

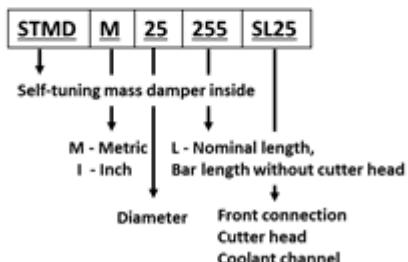
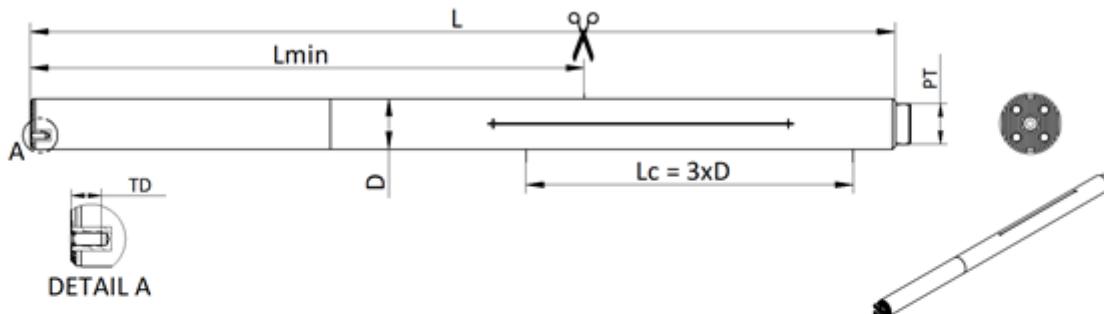
c – distance from cutting point to centre with master insert.

d – Carbide back end joined with steel

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

f - 1C - 1 coolant outlet in central, 3C- 3 coolant outlets - 1 central 2 periphery

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



**L** – nominal length (*actual length may vary*)  
**Lmin** – minimum total length after cutting  
**Lc** – recommended clamping length, 3 times diameter  
**D** – diameter  
**PT** – pipe thread  
**TD** – thread depth

Type	Workable length <sup>b</sup> (inch)	Lmin <sup>a</sup> (inch)	Lc (inch)	Screws	PT	TD (mm)	Adapter	Material	KG	Part number
STMD I 5/8-8.0	5.000-6.875	8.0	1.88	M3X8	G 1/8	5.5	SL16	S+C <sup>d</sup>	0.50	300050
STMD I 3/4-10.3	6.000-8.250	10.2	2.25	M3X8	G 1/4	5.5	SL20	S+C <sup>d</sup>	1.00	300051
STMD I 1-13	8.000-11.000	8.1	3.00	M4X9	G 1/4	6.5	SL25	Steel	1.70	300052
STMD I 1 1/4-16.4	10.000-13.750	12.2	3.75	M5X14	G 1/2	10	SL32	Steel	3.50	300053
STMD I 1 1/2-20.8-1C <sup>e,f</sup>	12.000-16.500	12.3	4.72	M6X14	G 1/2	10	SL40	Steel	5.00	300256
STMD I 1 1/2-20.8-3C <sup>f</sup>	12.000-16.500	12.3	4.72	M6X14	G 1/2	10	SL40	Steel	5.00	300054
STMD I 2-26.0-SL40	16.000-22.000	15.0	5.90	M6X14	G 3/8	10	SL40	Steel	9.40	300055
STMD I 2-26.0-SL50 <sup>e</sup>	16.000-22.000	15.0	5.90	M8X14	G 3/8	10	SL50	Steel	9.40	300056
STMD I 2 1/2-31.8-SL40	20.000-27.500	19.1	7.10	M6X14	G 3/8	12	SL40	Steel	16.40	300057
STMD I 2 1/2-31.8-SL60 <sup>e</sup>	20.000-27.500	19.1	7.10	M8X14	G 3/8	10	SL60	Steel	16.40	300058

a – total length to the cutting point

b – measured from the cutting edge to the clamping end.

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

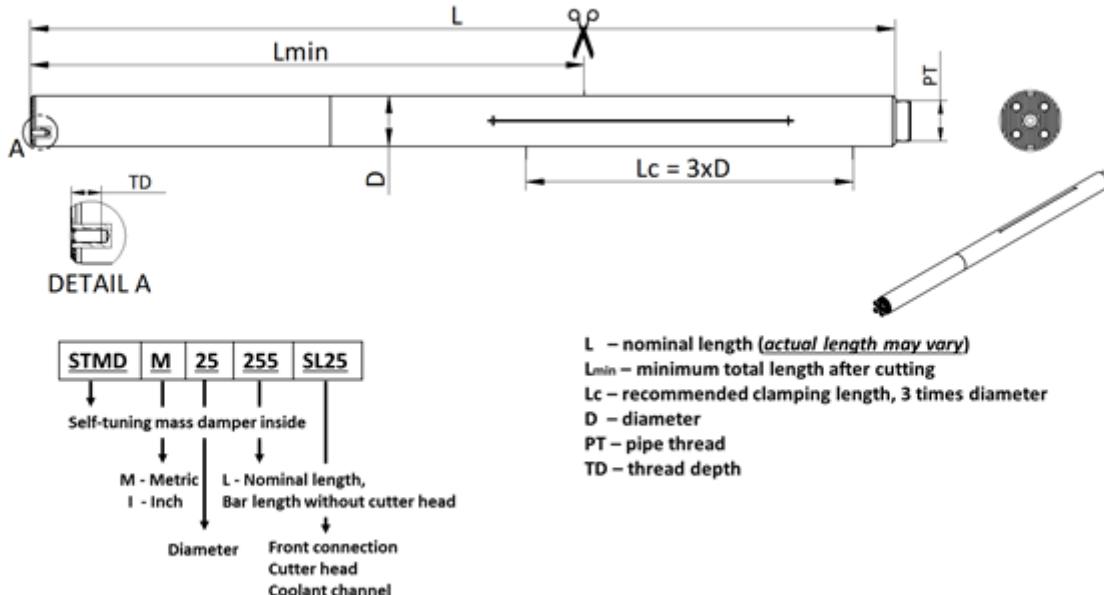
d – Carbide back end joined with steel

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

f - 1C - 1 coolant outlet in central, 3C- 3 coolant outlets - 1 central 2 periphery

## Turning 11-15xD

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



Standard: Metric (with SL interface and exchangeable heads)										
Type	Workable length <sup>b</sup> (mm)	L <sub>min</sub> (mm)	L <sub>c</sub> (mm)	Screws	TD (mm)	PT	Adapter	Material		Part number
STMD M16-268	176-240	268	48	M3X8	5.5	G 1/8	SL16	S+C <sup>d</sup>	0.75	300089
STMD M20-340	220-300	340	60	M3X8	5.5	G 1/4	SL20	S+C <sup>d</sup>	1.50	300090
STMD M25-430	275-375	430	75	M4X9	6.5	G 1/4	SL25	S+C <sup>d</sup>	3.20	300091
STMD M32-544	352-480	544	96	M5X12	10	G 1/4	SL32	S+C <sup>d</sup>	6.40	300085
STMD M40-668 1C <sup>f</sup>	440-600	668	120	M6x14	10	M36x1	SL40	S+C <sup>d</sup>	9.40	300309
STMD M40-668 3C <sup>f</sup>	440-600	668	120	M6x14	10	M36x1	SL40	S+C <sup>d</sup>	9.40	300093
STMD M50-861-SL40	550-750	861	150	M6X14	10	M42x1	SL40	S+C <sup>d</sup>	18.6	300094
STMD M50-861-SL50	550-750	861	150	M6X14	10	M42x1	SL40	S+C <sup>d</sup>	18.6	300095
STMD M60-1040-SL40 <sup>e</sup>	660-900	1040	180	M6x14	10	M52x1	SL40	S+C <sup>d</sup>	34.4	300096
STMD M60-1040-SL60 <sup>e</sup>	660-900	1040	180	M6x14	10	M52x1	SL40	S+C <sup>d</sup>	34.4	300097

a – total length to the cutting point

b – measured from the cutting edge to the clamping end.

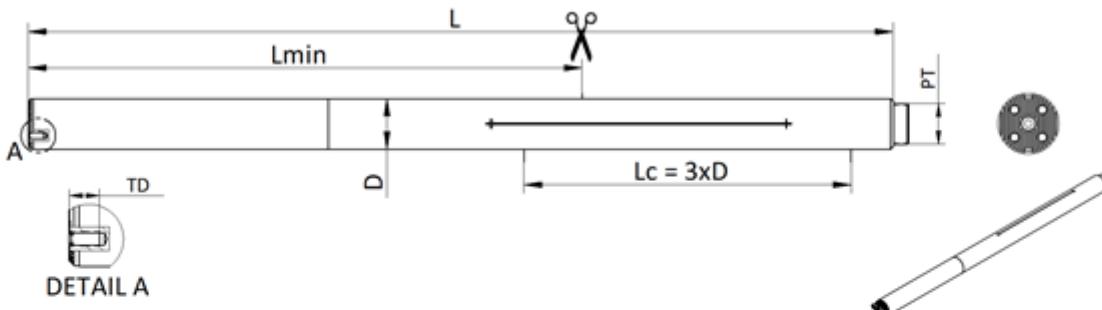
c – distance from cutting point to centre with master insert.

d – Carbide back end joined with steel

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

f - 1C - 1 coolant outlet in central, 3C- 3 coolant outlets - 1 central 2 periphery

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



L – nominal length (*actual length may vary*)

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

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

Type	Workable length <sup>b</sup> (inch)	L <sub>min</sub> (inch)	L <sub>c</sub> (inch)	Screws	PT	TD (mm)	Adapter	Material		Part number
STMD I 5/8-10.6	6.875-9.375	10.6	1.88	M3X8	G $\frac{1}{8}$	5.5	SL16	S+C <sup>d</sup>	0.75	300159
STMD I 3/4-13.4	8.250-11.250	13.4	2.25	M3X8	G $\frac{1}{4}$ <sup>2</sup>	5.5	SL20	S+C <sup>d</sup>	1.50	300160
STMD I 1-16.9	11.000-15.000	16.9	3.00	M4X9	G $\frac{1}{4}$ <sup>3</sup>	6.5	SL25	S+C <sup>d</sup>	3.20	300161
STMD I 1 1/4-21.4	13.750-18.750	21.4	3.75	M5X14	G $\frac{1}{4}$ <sup>4</sup>	10	SL32	S+C <sup>d</sup>	6.40	300162
STMD I 1 1/2 - 27.1 1C <sup>e,f</sup>	16.500-22.500	27.1	4.50	M6x14	M36x1	10	SL40	S+C <sup>d</sup>	9.40	300397
STMD I 1 1/2 - 27.1 3C <sup>e,f</sup>	16.500-22.500	27.1	4.50	M6x14	M36x1	10	SL40	S+C <sup>d</sup>	9.40	300396
STMD I 2-33.9-SL40 <sup>e</sup>	22.000-30.000	33.9	6.00	M6X14	M42x1	10	SL40	S+C <sup>d</sup>	18.6	300398
STMD I 2-33.9-SL50 <sup>e</sup>	22.000-30.000	33.9	6.00	M6X14	M42x1	10	SL40	S+C <sup>d</sup>	18.6	300400
STMD I 2 1/2-40.9-SL40 <sup>e</sup>	27.500-37.500	40.9	7.50	M6x14	M52x1	10	SL40	S+C <sup>d</sup>	34.4	300399
STMD I 2 1/2-40.9-SL60 <sup>e</sup>	27.500-37.500	40.9	7.50	M6x14	M52x1	10	SL40	S+C <sup>d</sup>	34.4	300401

a – total length to the cutting point

b – measured from the cutting edge to the clamping end.

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

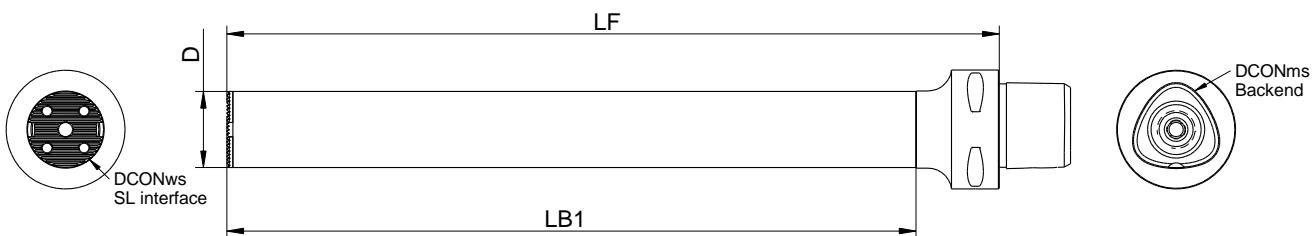
d – Carbide back end joined with steel

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

f - 1C - 1 coolant outlet in central, 3C- 3 coolant outlets - 1 central 2 periphery

## Turning – Multitask with modular backends.

Standard: PSC50 (with SL interface and exchangeable heads)

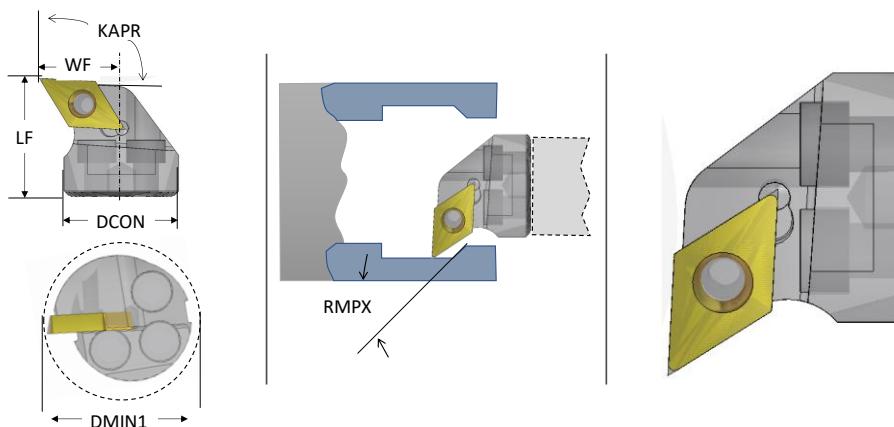


**Standard: PSC50 (with SL interface and exchangeable heads)**

Type	Backend	D (mm)	LF (mm)	LB1 (mm)	Screws	Adapter	Material		Part number
STMD PSC50 25 214/180	PSC50	25	214	180	M4X9	SL25	Steel	1.30	300462
STMD PSC50 25 264/230	PSC50	25	264	230	M4X9	SL25	Steel	1.50	300463
STMD PSC50 32 261/230	PSC50	32	261	230	M5X12	SL32	Steel	2.00	300464
STMD PSC50 32 324/294	PSC50	32	324	294	M5X12	SL32	Steel	2.50	300465

## End effectors

### SDUCR, SDUCL for DCMT Inserts



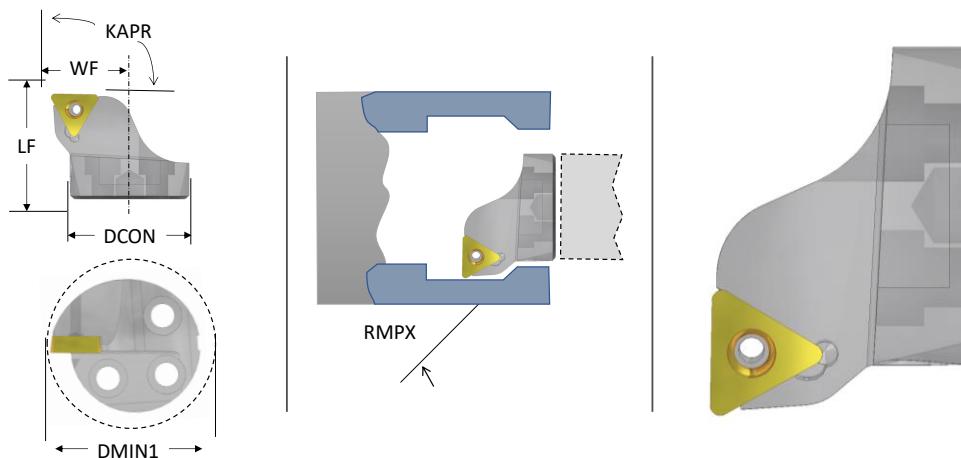
Type	DCON (mm)	DMIN1 (mm)	LF (mm)	WF (mm)	KAPR (°)	RMPX (°)	Master insert	Insert screw	KG	Part Number
SDUCL-12	SL 12	16	14	9	93	27	DCMT 070204	IS M2.5x6.0	0.01	300118
SDUCR-12	SL 12	16	14	9	93	27	DCMT 070204	IS M2.5x6.0	0.01	300059
SDUCL-16-5/8	SL 16	20	16	11	93	27	DCMT 070204	IS M2.5x6.0	0.01	300119
SDUCR-16-5/8	SL 16	20	16	11	93	27	DCMT 070204	IS M2.5x6.0	0.01	300060
SDUCL-20-3/4	SL 20	25	20	13	93	27	DCMT 11T304	IS M3.5x10.0	0.02	300120
SDUCR-20-3/4	SL 20	25	20	13	93	27	DCMT 11T304	IS M3.5x10.0	0.02	300061
SDUCL-25-1	SL 25	32	22	17	93	27	DCMT 11T304	IS M3.5x10.0	0.04	300121
SDUCR-25-1	SL 25	32	22	17	93	27	DCMT 11T304	IS M3.5x10.0	0.04	300062
SDUCL-32-1 1/4	SL 32	40	27	22	93	27	DCMT 11T304	IS M3.5x10.0	0.07	300122
SDUCR-32-1 1/4	SL 32	40	27	22	93	27	DCMT 11T304	IS M3.5x10.0	0.07	300063
SDUCR-40-1 1/2 P <sup>1</sup>	SL 40	50	32	27	93	27	DCMT 11T304	IS M3.5x10.0	0,14	300064
SDUCL-40-1 1/2 CP <sup>2</sup>	SL 40	50	32	27	93	27	DCMT 11T304	IS M3.5x10.0	0,14	300209
SDUCR-40-1 1/2 CP <sup>2</sup>	SL 40	50	32	27	93	27	DCMT 11T304	IS M3.5x10.0	0,14	300195

All cutter heads are delivered with the insert clamp screw.

<sup>1</sup> P - Peripheral coolant only, works for SL40 connection with 3C

<sup>2</sup> CP -Central and Peripheral coolant exits, works with SL40 connection with both 1C and 3C

## STFCR, STFCL for TCMT Inserts



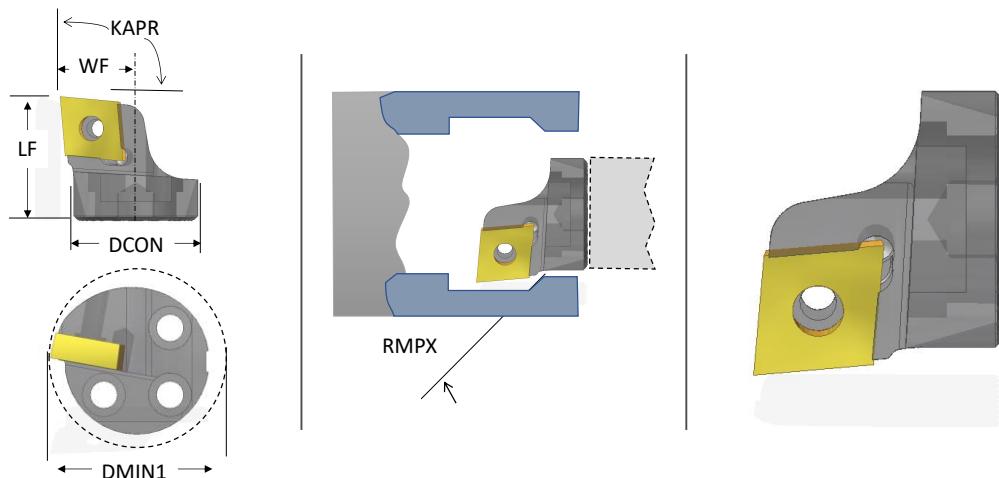
Type	DCON (mm)	DMIN1 (mm)	LF (mm)	WF (mm)	KAPR (°)	RMPX (°)	Master insert	Insert screw		Part Number
STFCL-12	SL 12	16	14	9	91	NA	TCMT 090204	IS M2.2x5.0	0.01	300124
STFCR-12	SL 12	16	14	9	91	NA	TCMT 090204	IS M2.2x5.0	0.01	300065
STFCL-16-5/8	SL 16	20	16	11	91	NA	TCMT 090204	IS M2.2x5.0	0.01	300125
STFCR-16-5/8	SL 16	20	16	11	91	NA	TCMT 090204	IS M2.2x5.0	0.01	300066
STFCL-20-3/4	SL 20	25	20	13	91	NA	TCMT 110304	IS M2.5x8.0	0.02	300126
STFCR-20-3/4	SL 20	25	20	13	91	NA	TCMT 110304	IS M2.5x8.0	0.02	300199
STFCL-25-1	SL 25	32	22	17	91	NA	TCMT 110304	IS M2.5x8.0	0.04	300127
STFCR-25-1	SL 25	32	22	17	91	NA	TCMT 110304	IS M2.5x8.0	0.04	300201
STFCL-32-1 1/4	SL 32	40	27	22	91	NA	TCMT 16T304	IS M3.5x10.0	0.07	300128
STFCR-32-1 1/4	SL 32	40	27	22	91	NA	TCMT 16T304	IS M3.5x10.0	0.07	300069
STFCR-40-1 1/2 P <sup>1</sup>	SL 40	50	32	27	91	NA	TCMT 16T304	IS M3.5x10.0	0,14	300070
STFCL-40-1 1/2 CP <sup>2</sup>	SL 40	50	32	27	91	NA	TCMT 16T304	IS M3.5x10.0	0,14	300210
STFCR-40-1 1/2 CP <sup>2</sup>	SL 40	50	32	27	91	NA	TCMT 16T304	IS M3.5x10.0	0,14	300197

All cutter heads are delivered with the insert clamp screw.

<sup>1</sup> P - Peripheral coolant only, works for SL40 connection with 3C

<sup>2</sup> CP - Central and Peripheral coolant exits, works with SL40 connection with both 1C and 3C

## SCLCR, SCLCL for CCMT Inserts



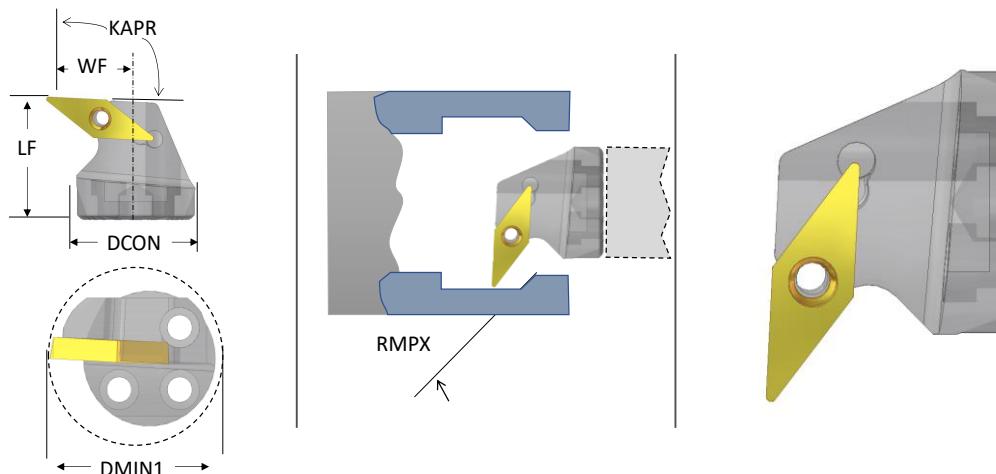
Type	DCON (mm)	DMIN1 (mm)	LF (mm)	WF (mm)	KAPR (°)	RMPX (°)	Master Insert	Insert screw		Part Number
SCLCL-12-1/2	SL 12	16	14.4	10	95	NA	CCMT 060204	IS M2.5x6.0	0.01	300112
SCLCR-12-1/2	SL 12	16	14.4	10	95	NA	CCMT 060204	IS M2.5x6.0	0.01	300071
SCLCL-16-5/8	SL 16	20	15.4	11	95	NA	CCMT 060204	IS M2.5x6.0	0.01	300113
SCLCR-16-5/8	SL 16	20	15.4	11	95	NA	CCMT 060204	IS M2.5x6.0	0.01	300072
SCLCL-20-3/4	SL 20	25	19.1	13	95	NA	CCMT 09T304	IS M3.5x10.0	0.02	300114
SCLCR-20-3/4	SL 20	25	19.1	13	95	NA	CCMT 09T304	IS M3.5x10.0	0.02	300073
SCLCL-25-1	SL 25	32	21.1	17	95	NA	CCMT 09T304	IS M3.5x10.0	0.04	300115
SCLCR-25-1	SL 25	32	21.1	17	95	NA	CCMT 09T304	IS M3.5x10.0	0.04	300074
SCLCL-32-1 1/4	SL 32	40	24.1	22	95	NA	CCMT 09T304	IS M3.5x10.0	0.07	300116
SCLCR-32-1 1/4	SL 32	40	24.1	22	95	NA	CCMT 09T304	IS M3.5x10.0	0.07	300075
SCLCR-40-1 1/2 P <sup>1</sup>	SL 40	50	25.1	27	95	NA	CCMT 09T304	IS M3.5x10.0	0.14	300076
SCLCL-40-1 1/2 CP <sup>2</sup>	SL 40	50	25.1	27	95	NA	CCMT 120404	IS M4.0x15.0	0.14	300208
SCLCR-40-1 1/2 CP <sup>2</sup>	SL 40	50	25.1	27	95	NA	CCMT 120404	IS M4.0x15.0	0.14	300196

All cutter heads are delivered with the insert clamp screw.

<sup>1</sup> P - Peripheral coolant only, works for SL40 connection with 3C

<sup>2</sup> CP -Central and Peripheral coolant exits, works with SL40 connection with both 1C and 3C

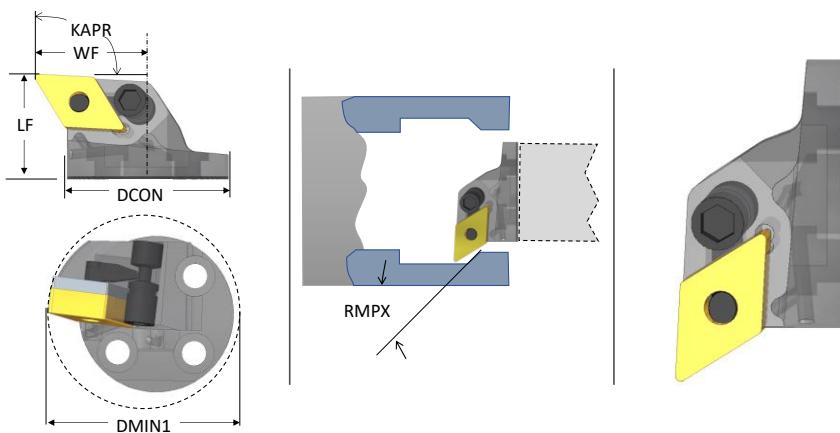
## SVUCR, SVUCL for VCMT Inserts



Type	DCON (mm)	DMIN1 (mm)	LF (mm)	WF (mm)	KAPR (°)	RMPX (°)	Master Insert	Insert screw		Part Number
SVUCL-20-3/4	SL 20	27	20.5	15	93	45	VCMT 110304	IS M2.5x8.0	0.02	300199
SVUCR-20-3/4	SL 20	27	20.5	15	93	45	VCMT 110304	IS M2.5x8.0	0.02	300198
SVUCL-25-1	SL 25	33	20.5	18	93	45	VCMT 110304	IS M2.5x8.0	0.04	300201
SVUCR-25-1	SL 25	33	20.5	18	93	45	VCMT 110304	IS M2.5x8.0	0.04	300200

All cutter heads are delivered with the insert clamp screw.

## PDUNR for DNMG Inserts

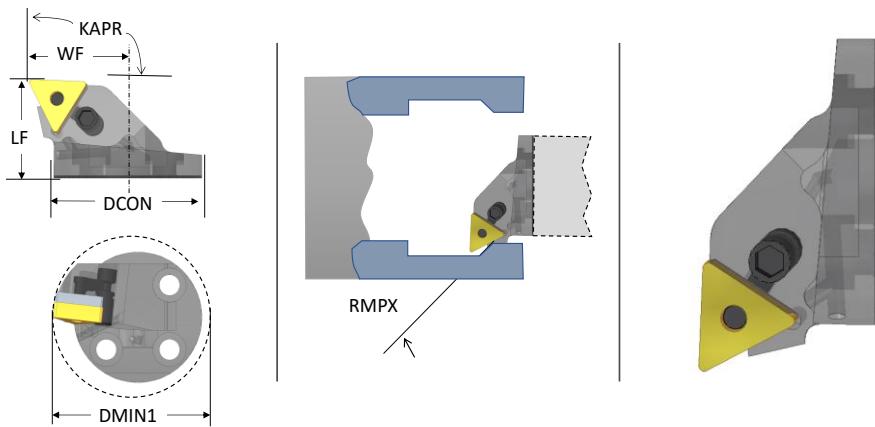


Type	DCON (mm)	DMIN1 (mm)	LF (mm)	WF (mm)	KAPR (°)	RMPX (°)	Insert	Slot screw	Level	Shim	KG	Part Number
PDUNR 32-1 1/4	SL 32	40	26	22	93	27	DNMG 1104XX	M6x1x17	LV3 G0312	PS DNMG 1104	0,09	300427
PDUNR 40-1 1/2 CP <sup>1</sup>	SL 40	50	26	27	93	27	DNMG 1506XX	M8x1x21	LV4 G0516	PS DNMG 1506	0,14	300086
PDUNL 40-1 1/2 CP <sup>1</sup>	SL 40	50	26	27	93	27	DNMG 1506XX	M8x1x21	LV4 G0516	PS DNMG 1506	0,14	300402

All cutter heads are delivered with the insert clamp screw.

<sup>1</sup> CP - Central and Peripheral coolant exits, works with SL40 connection with both 1C and 3C

## PTFNR for TNMG Inserts

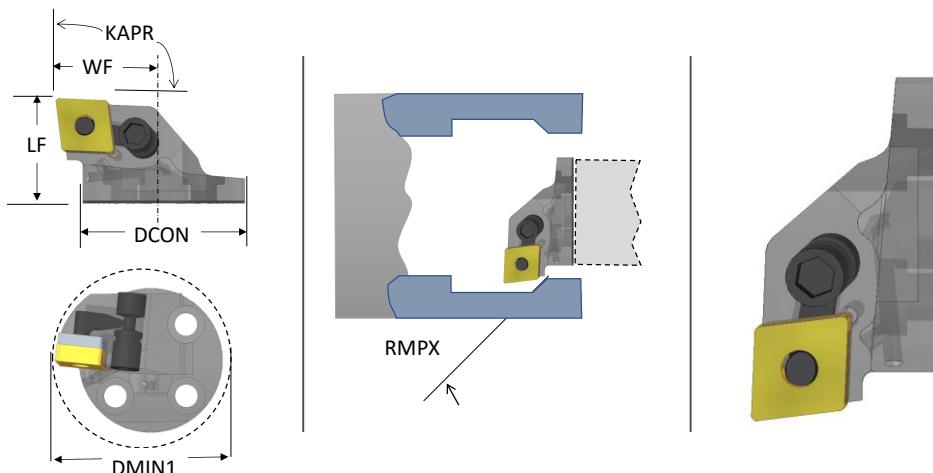


Type	DCON (mm)	DMIN1 (mm)	LF (mm)	WF (mm)	KAPR (°)	RMPX (°)	Insert	Slot screw	Level	Shim	KG	Part Number
PTFNR 32-1 1/4	SL 32	40	27	22	91	NA	TNMG 1604XX	M6x1x17	LV3 G0310	PS TNMG 1604	0,09	300429
PTFNR 40-1 1/2 CP <sup>1</sup>	SL 40	50	26	27	91	NA	TNMG 1604XX	M6x1x17	LV3 G0310	PS TNMG 1604	0,14	300088
PTFNL 40-1 1/2 CP <sup>1</sup>	SL 40	50	26	27	91	NA	TNMG 1604XX	M6x1x17	LV3 G0310	PS TNMG 1604	0,14	300403

All cutter heads are delivered with the insert clamp screw.

<sup>1</sup> CP - Central and Peripheral coolant exits, works with SL40 connection with both 1C and 3C

## PCLNR for CNMG Inserts

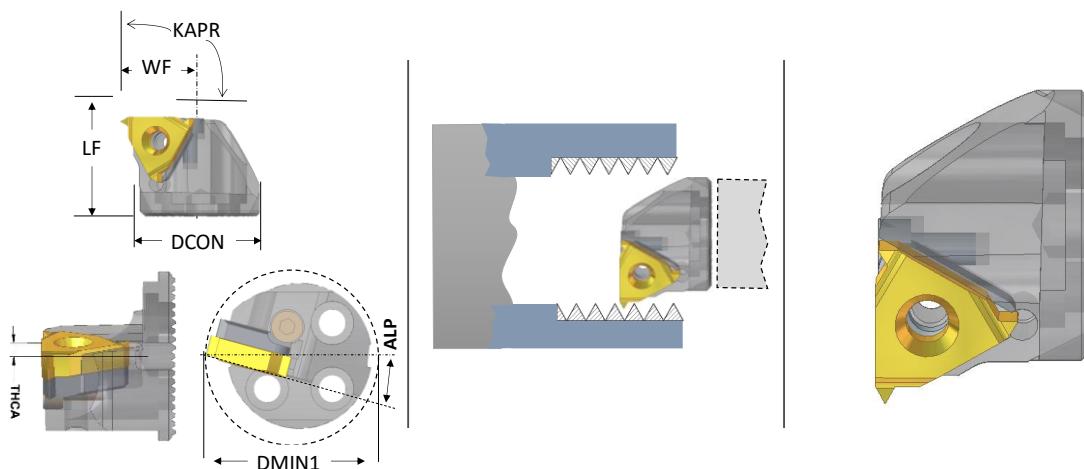


Type	DCON (mm)	DMIN1 (mm)	LF (mm)	WF (mm)	KAPR (°)	RMPX (°)	Insert	Slot screw	Level	Shim		Part Number
PCLNR 32-1 1/4	SL 32	40	26	22	95	NA	CNMG 1204XX	M6x1x17	LV4 G0513	PS CNMG 1204	0,09	300428
PCLNR 40-1 1/2 CP <sup>1</sup>	SL 40	50	26	27	95	NA	CNMG 1204XX	M8x1x21	LV4 G0513	PS CNMG 1204	0.14	300087
PCLNL 40-1 1/2 CP <sup>1</sup>	SL 40	50	26	27	95	NA	CNMG 1204XX	M8x1x21	LV4 G0513	PS CNMG 1204	0.14	300404

All cutter heads are delivered with the insert clamp screw.

<sup>1</sup> CP - Central and Peripheral coolant exits, works with SL40 connection with both 1C and 3C

## SXFNL for threading Left hand



### Left hand

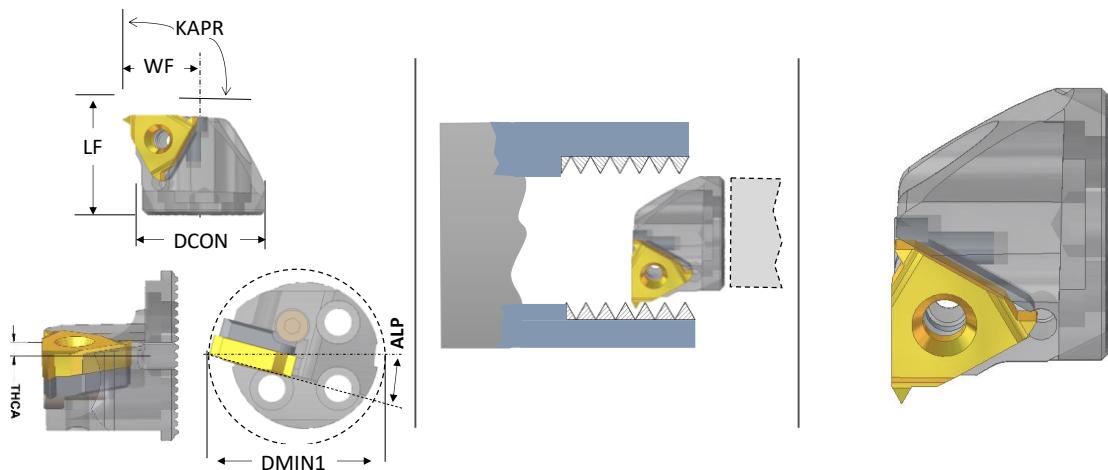
Type	DCON (mm)	DMIN1 (mm)	LF	WF	Master insert	Insert screw	Anvil	Anvil screw	ALP	THCA	Part Number
<b>SXFNL 120916 11<sup>1</sup></b>	12	16	16	8.9 <sup>2</sup>	11 IL A60	IS M2.5x5.5xD4.2	NA	NA	15 °	2 °	300268
<b>SXFNL 161120 11<sup>1</sup></b>	16	20	20	10.4 <sup>2</sup>	11 IL A60	IS M2.5x5.5xD4.2	NA	NA	15 °	1 °	300269
<b>SXFNL 161120 16</b>	16	20	20	10.4 <sup>2</sup>	16 IL AG60	IS M3.5x11xD5.5	NA	NA	15 °	2 °	300270
<b>SXFNL 201420 11<sup>1</sup></b>	20	25	20	13.7 <sup>2</sup>	11 IL A60	IS M2.5x5.5xD4.2	NA	NA	15 °	1 °	300271
<b>SXFNL 201423 16</b>	20	25	23	13.7 <sup>2</sup>	16 IL AG60	IS M3.5x11xD5.5	NA	M3x6xD5.5	15 °	2 °	300272
<b>SXFNL 251724 16</b>	25	30	24	16.3 <sup>2</sup>	16 IL AG60	IS M3.5x11xD5.5	EA16	M3x6xD5.5	15 °	1 °	300273
<b>SXFNL 251930 22<sup>1</sup></b>	25	32	30	18.3 <sup>2</sup>	22 IL N60	IS M4.5X12xD6.8	EA22	M3x6xD5.5	15 °	2 °	300274
<b>SXFNL 322028 16</b>	32	37	28	19.7 <sup>2</sup>	16 IL AG60	IS M3.5x11xD5.5	EA16	M3x6xD5.5	15 °	1 °	300275
<b>SXFNL 322232 22<sup>1</sup></b>	32	39	32	21.7 <sup>2</sup>	22 IL N60	IS M4.5X12xD6.8	EA22	M3x6xD5.5	15 °	2 °	300276
<b>SXFNL 402428 16</b>	40	45	28	23.7 <sup>2</sup>	16 IL AG60	IS M3.5x11xD5.5	EA16	M3x6xD5.5	15 °	1 °	300277
<b>SXFNL 402630 22<sup>1</sup></b>	40	47	30	25.7 <sup>2</sup>	22 IL N60	IS M4.5X12xD6.8	EA22	M3x6xD5.5	15 °	2 °	300278
<b>SXFNL 402735 27<sup>1</sup></b>	40	48	35	26.8 <sup>2</sup>	27 IL Q60	IS M5.0x18xD8.2	EA27	M4x8xD7	15 °	2.5 °	300279

<sup>1</sup> Product available after 2023-April.

<sup>2</sup> Dimension of the actual part may differ slightly than the given value.

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

## SXFNR for threading Right hand



### Right hand

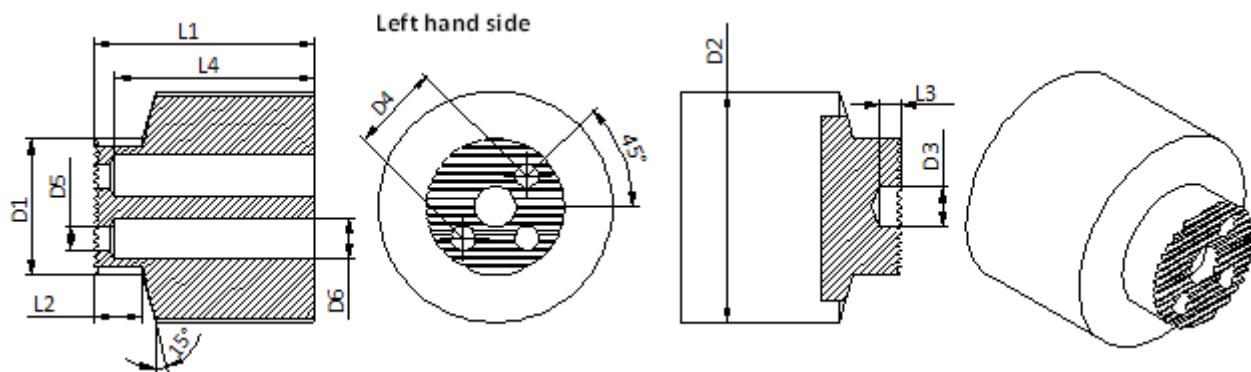
Type	DCON (mm)	DMIN1 (mm)	LF	WF	Master insert	Insert screw	Anvil	Anvil screw	ALP	THCA	Part Number
SXFNR 120916 11 <sup>1</sup>	12	16	16	8.9 <sup>2</sup>	11 IR A60	IS M2.5x5.5xD4.2	NA	NA	15 °	2 °	300280
SXFNR 161120 11 <sup>1</sup>	16	20	20	10.4 <sup>2</sup>	11 IR A60	IS M2.5x5.5xD4.2	NA	NA	15 °	1 °	300281
SXFNR 161120 16	16	20	20	10.4 <sup>2</sup>	16 IR AG60	IS M3.5x11xD5.5	NA	NA	15 °	2 °	300282
SXFNR 201420 11 <sup>1</sup>	20	25	20	13.7 <sup>2</sup>	11 IR A60	IS M2.5x5.5xD4.2	NA	NA	15 °	1 °	300283
SXFNR 201423 16	20	25	23	13.7 <sup>2</sup>	16 IR AG60	IS M3.5x11xD5.5	NA	M3x6xD5.5	15 °	2 °	300284
SXFNR 251724 16	25	30	24	16.3 <sup>2</sup>	16 IR AG60	IS M3.5x11xD5.5	IA16	M3x6 xD5.5	15 °	1 °	300285
SXFNR 251930 22 <sup>1</sup>	25	32	30	18.3 <sup>2</sup>	22 IR N60	IS M4.5X12XD6.8	IA22	M3x6 xD5.5	15 °	2 °	300286
SXFNR 322028 16	32	37	28	19.7 <sup>2</sup>	16 IR AG60	IS M3.5x11xD5.5	IA16	M3x6 xD5.5	15 °	1 °	300287
SXFNR 322232 22 <sup>1</sup>	32	39	32	21.7 <sup>2</sup>	22 IR N60	IS M4.5X12XD6.8	IA22	M3x6 xD5.5	15 °	2 °	300288
SXFNR 402428 16	40	45	28	23.7 <sup>2</sup>	16 IR AG60	IS M3.5x11xD5.5	IA16	M3x6 xD5.5	15 °	1 °	300289
SXFNR 402630 22 <sup>1</sup>	40	47	30	25.7 <sup>2</sup>	22 IR N60	IS M4.5X12XD6.8	IA22	M3x6 xD5.5	15 °	2 °	300290
SXFNR 402735 27 <sup>1</sup>	40	48	35	26.8 <sup>2</sup>	27 IR Q60	IS M6.0x18xD8.7	IA27	M4x8xD7	15 °	2.5 °	300291

<sup>1</sup> Product available after 2023-April.

<sup>2</sup> Dimension of the actual part may differ slightly than the given value.

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

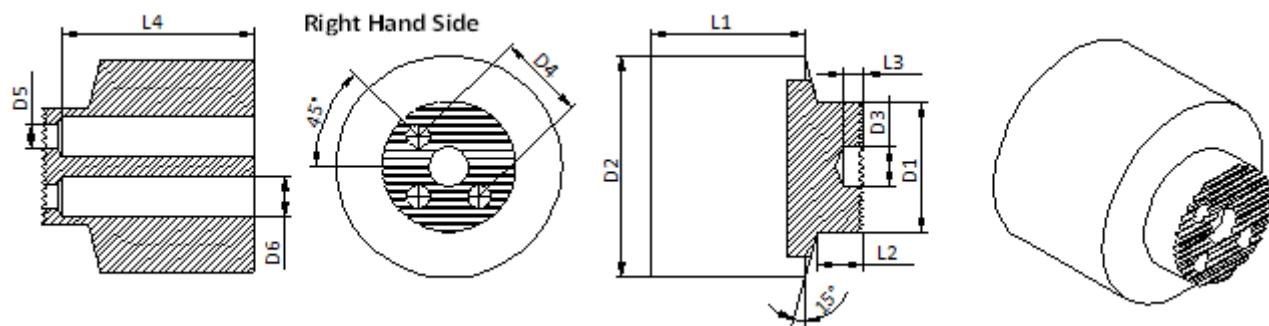
## SL Blanks Left Hand Side:



Type	D1 (mm)	D2 (mm)	D3 N8** (mm)	D4 (mm)	D5 (mm)	D6 (mm)	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	Part Number
SL12-20-20 L	12	20	4	7.4	2.5	4	20	7	3	17	300140
SL16-26-25 L	16	26	4	9.5	3.5	6	25	7	3	22	300142
SL20-34-32 L	20	34	6	13	3.5	6	32	7	3	29	300144
SL25-40-40 L	25	40	6	16	4.5	7.5	40	7	3	37	300146
SL32-50-50 L	32	50	6	22	5.5	9	50	11	3	47	300148
SL40-60-60 L	40	60	6	28	6.5	10.5	60	11	3	57	300150
SL50-70-70 L	50	70	8	35	8.5	13.5	70	11	4	67	300152

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

## SL Blanks Right Hand Side:

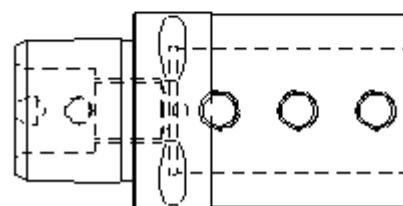
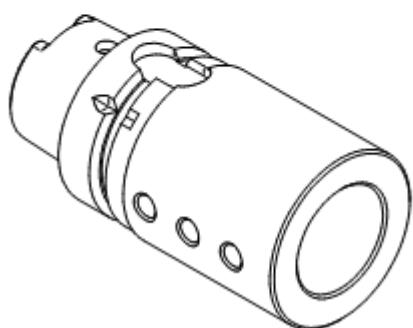
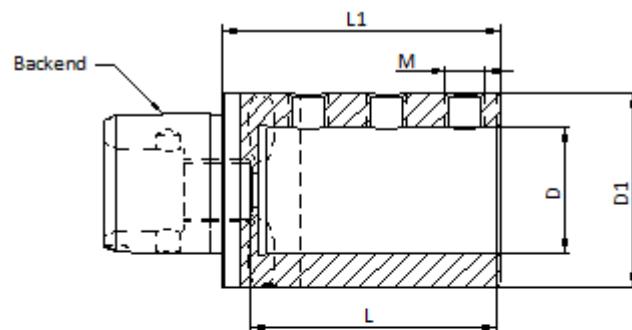
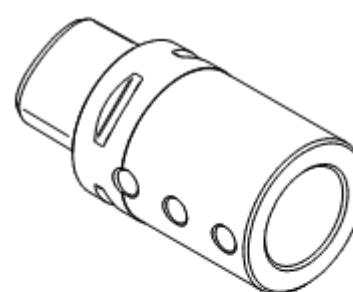


Type	D1 (mm)	D2 (mm)	D3 N8** (mm)	D4 (mm)	D5 (mm)	D6 (mm)	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	Part Number
SL12-20-20 R	12	20	4	7.4	2.5	4	20	7	3	17	300139
SL16-26-25 R	16	26	4	9.5	3.5	6	25	7	3	22	300141
SL20-34-32 R	20	34	6	13	3.5	6	32	7	3	29	300143
SL25-40-40 R	25	40	6	16	4.5	7.5	40	7	3	37	300145
SL32-50-50 R	32	50	6	22	5.5	9	50	11	3	47	300147
SL40-60-60 R	40	60	6	28	6.5	10.5	60	11	3	57	300149
SL50-70-70 R	50	70	8	35	8.5	13.5	70	11	4	67	300151

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

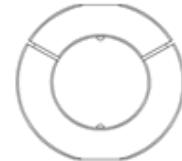
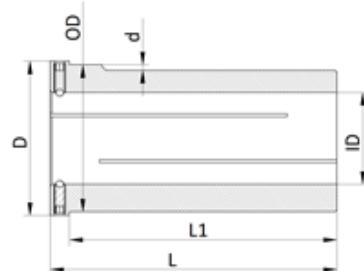
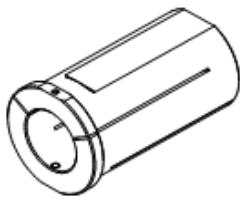
## Accessories

### Modular fixtures



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

## Reduction sleeves



**Metric**

Type	OD h6 (mm)	ID H7 (mm)	L (mm)	D (mm)	L1 (mm)	d (mm)	Part Number
------	---------------	---------------	--------	--------	---------	--------	-------------

RS 32-25	32	25	65	37	60	1	300194
RS 32-20	32	20	65	37	60	1	300193
RS 32-16	32	16	65	37	60	1	300192
RS 32-12	32	12	65	37	60	1	300191
RS 32-10	32	10	65	37	60	1	300190

RS 40-32	40	32	75	43	70	1.5	300163
RS 40-25	40	25	75	42	70	1.5	300164
RS 40-20	40	20	75	42	70	1.5	300165
RS 40-16	40	16	75	42	70	1.5	300166
RS 40-12	40	12	75	42	70	1.5	300167
RS 40-10	40	10	75	42	70	1.5	300168

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

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

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

Inch

Type	OD g6 (inch)	ID H7 (inch)	L (inch)	D (inch)	L1 (inch)	d (inch)	Part Number
RS 1 ½ - 1 ¼	1 ½	1 ¼	2.95	1.69	2.76	0.06	300229
RS 1 ½ - 1	1 ½	1	2.95	1.65	2.76	0.06	300230
RS 1 ½ - ¾	1 ½	3/4	2.95	1.65	2.76	0.06	300231
RS 1 ½ - 5/8	1 ½	5/8	2.95	1.65	2.76	0.06	300232
RS 1 ½ - ½	1 ½	1/2	2.95	1.65	2.76	0.06	300233
RS 1 ½ - 3/8	1 ½	3/8	2.95	1.65	2.76	0.06	300234
RS 1 ¼ - 1	1 ¼	1	2.56	1.46	2.36	0.04	300235
RS 1 ¼ - ¾	1 ¼	3/4	2.56	1.46	2.36	0.04	300236
RS 1 ¼ - 5/8	1 ¼	5/8	2.56	1.46	2.36	0.04	300237
RS 1 ¼ - ½	1 ¼	1/2	2.56	1.46	2.36	0.04	300238
RS 1 ¼ - 3/8	1 ¼	5/8	2.56	1.46	2.36	0.04	300239

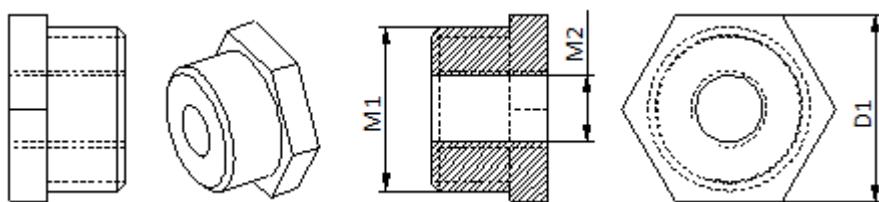
### Level Indicator/Digital protractor (angle inclinometer)



Type	Width (mm)	Length (mm)	Height (mm)	Weight (g)	Battery	Lightning	Part Number
Level Indicator	26	57	55	85	AA, 2 pcs	Yes	300175

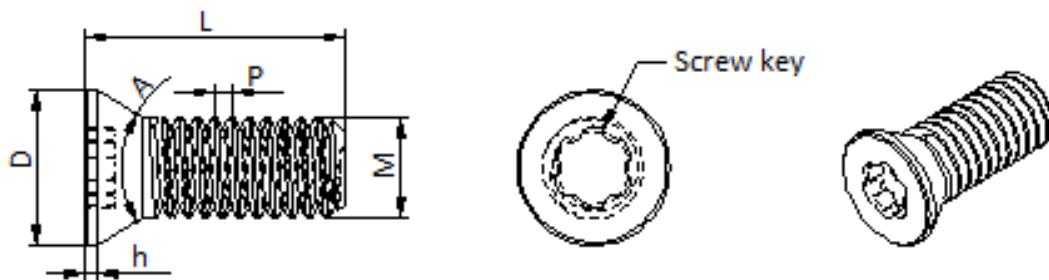
Delivered with a magnet with power of 4.8 kg for easier alignment of machining tools.

## Coolant adapters for steel bars



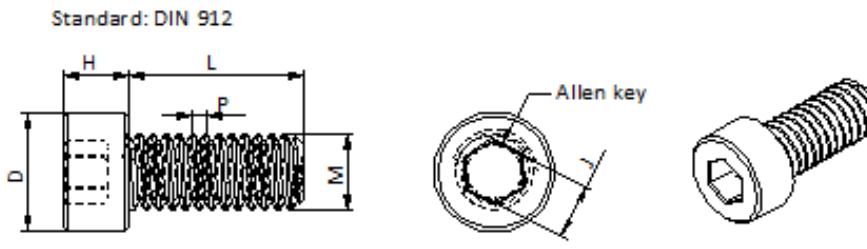
Type	M1	M2	D1	Part Number
CA G 1/4 - G 1/8	G 1/4	G 1/8	17	100213
CA G 1/2 - G 1/4	G 1/2	G 1/4	24	100214
CA G 3/4 - G 1/4	G 3/4	G 1/4	30	100215

Insert screws:



Type	Designation	Thread M	D (mm)	L (mm)	A (°)	P (mm)	h (mm)	Torx Key	Part Number
IS M2.2x5.0	M2.2x5.0xD3.0xP0.45	M2.2	3.0	5.0	60	0.45	0.8	T7	300257
IS M2.5x6.0	M2.5x6.0xD3.6xP0.45	M2.5	3.6	6.0	55	0.45	0.6	T8	300258
IS M2.5x8.0	M2.5x8.0xD3.6xP0.45	M2.5	3.6	8.0	55	0.45	0.6	T8	300172
IS M3.5x10.0	M3.5x10.0xD5.3xP0.60	M3.5	5.3	10.0	60	0.60	1.2	T15	
IS M4.0x15.0	M4.0x15.0xD7.0xP0.70	M4.0	7.0	15.0	60	0.70	NA	T15	
IS M4.5x12.0	M4.5x12.0xD6.8xP0.75	M4.5	6,8	12	60	0.75	NA	T20	
IS M5.0x18.0	M5.0x18.0xD8.2xP0.8	M5.0	8,2	18	60	0.80	NA	T20	300425

## Cutter head screws



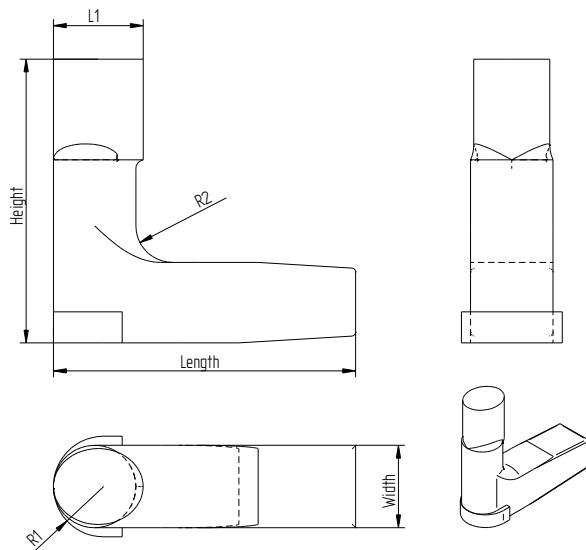
### Cutter head screws

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

## Shims

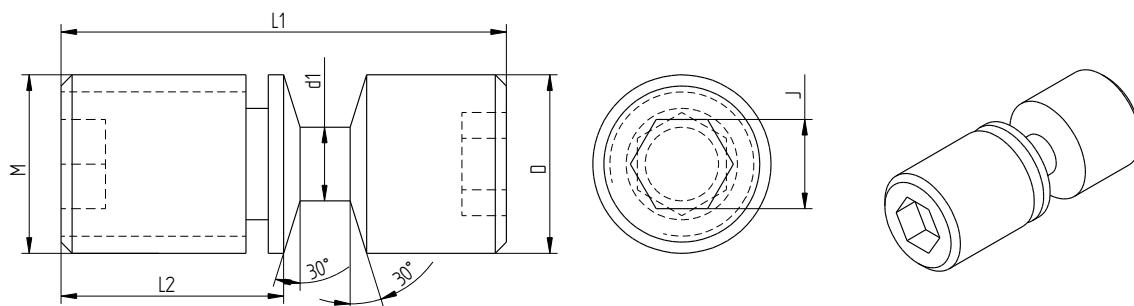
Article	Suits for	Part Number
Shim CCMT 09T3	STMD M32-256 SCLCL/R, STMD M40-320 SCLCL/R	300433
Shim CCMT 1204	SCLCL/R-40-1 1/2 CP	300430
Shim DCMT 11T3	SDUCL/R-40-1 1/2 CP	300431
Shim TCMT 16T3	STFCL/R-40-1 1/2 CP	300432
Shim DNMG 1104	PDUNL/R 32-1 1/4	300434
Shim DNMG 1506	PDUNL/R 40-1 1/2 CP	
Shim TNMG 1604	PTFNL/R 32-1 1/4, PTFNL/R 40-1 1/2 CP	
Shim CNMG 1204	PCLNL/R 32-1 1/4, PCLNL/R 40-1 1/2 CP	
Shim EA16 - IL16	SXFNL 251724 16, SXFNL 322028 16, SXFNL 402028 16	300435
Shim IA16 - IR16	SXFNR 251724 16, SXFNR 322028 16, SXFNR 402028 16	300436
Shim EA22 - IL22	SXFNL 251932 22, SXFNL 322232 22, SXFNL 402032 22	300437
Shim IA22 - IR22	SXFNR 251932 22, SXFNR 322232 22, SXFNR 402032 22	300438
Shim EA27 - IL27	SXFNL 402035 27	300439
Shim IA27 - IR27	SXFNR 402035 27	300440

## P clamp levels



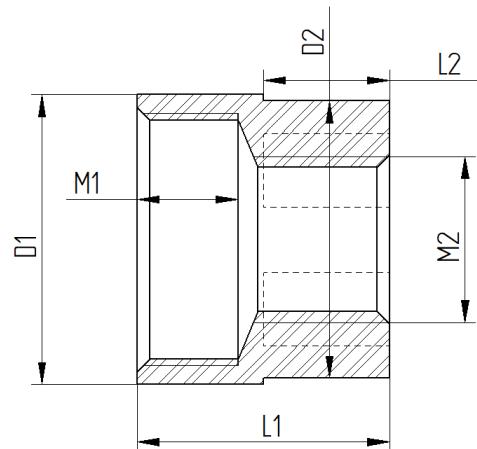
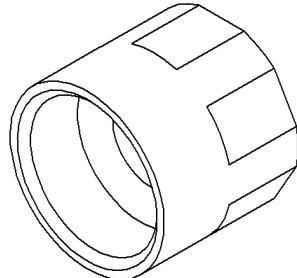
Type	Height	Length	Width	R1	R2	Suitable for	Part Number
LV3 G0310	12	10	3.6	2.4	2.5	PTFNR 40, PTFNL 40	
LV3 G0312	12	12	3.6	2.4	2.5	PDUNR 32, PDUNL 32	
LV4 G0513	13.3	13.3	4.8	3	3	PCLNR 40, PCLNL 40	
LV4 G0516	15.5	16.3	4.8	3	3	PDUNR 40, PDUNL 40	

## Slotted screws



Type	M	L1	D	J	d1	Suitable for	Part Number
M6x1x17	M6x1	17	6	2.5	3.2	PTFNR/L 40	
M8x1x21	M8x1	21	8	3	3.8	PCLNR/L 40, PDUNR/L 40	

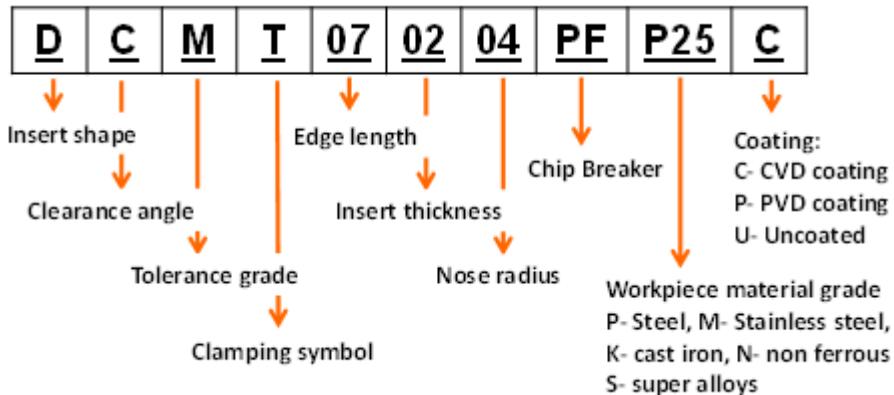
## Coolant adapters for carbide bars



Type	M1	M2	L1	L2	D1	D2	Works for	Part Number
<b>CA M12x1 G 1/8</b>	M12x1	G 1/8	16	8	14	13	STMD M16-204, STMD M16-268 STMD I 5/8-8.0, STMD I 5/8-10.6	100218
<b>CA M16x1 G 1/4</b>	M16x1	G 1/4	20	10	18	16	STMD M20-260, STMD M20-340 STMD I 3/4-10.3, STMD I 3/4-13.4	100219
<b>CA M20x1 G 1/4</b>	M20x1	G 1/4	20	10	23	22	STMD M25-340, STMD I 1-16.9	100220
<b>CA M24x1 G 1/4</b>	M24x1	G 1/4	30	15	30	28	STMD M32-544, STMD I 1 1/4 -21.4	100221

## MAQ Master Inserts

Inserts are sold in packages of 10 pcs.



### Positive insert

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

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

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

### Negative insert

DNMG	Article	Part Number
	DNMG 150604-LC P25C	300294
TNMG	Article	Part Number
	TNMG 160404-LC P25C	300295

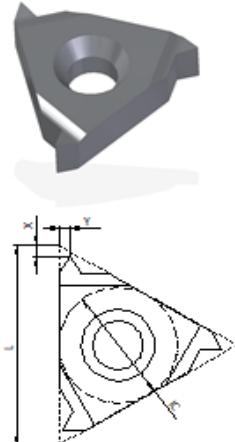
  

CNMG	Article	Part Number
	CNMG 120404 LC P25C	300296

## MAQ Master Threading Inserts

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		
Insert type: I - internal E - external					Coating: C- CVD coating P- PVD coating U- Uncoated	
Insert hand: R - right hand L - left hand					Workpiece material grade P- Steel, M- Stainless steel, 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

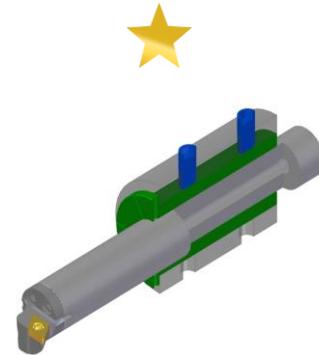
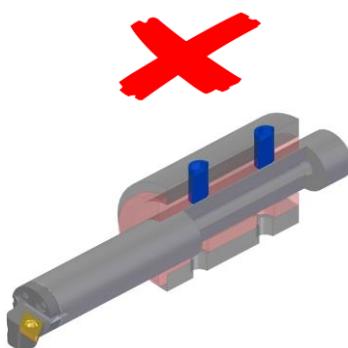
Type	Pitch mm (TPI)	IC	L	X	Y	Part Number
11 IL A60 P25P	0.5-1.5 (48-16)	6.350	11	0.8	0.9	300297
16 IL A60 P25P	0.5-1.5 (48-16)	9.525	16	0.8	0.9	300298
16 IL G60 P25P	1.75-3.0 (14-8)	9.525	16	1.2	1.7	300299
16 IL AG60 P25P	1.0-3.0 (26-8)	9.525	16	1.2	1.7	300300
22 IL N60 P25P	3.5-5.0 (7-5)	12.7	22	1.7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

### Right

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

## Clamping of Turning tools

The clamping of the tool is very important in all operations but even more so when the overhang is long, i.e. high L/D -ratios. Please be aware that a weak clamping with low bending stiffness will have negative impact on the performance.

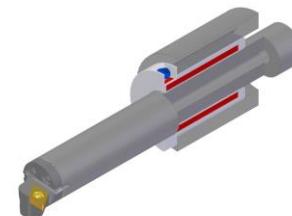
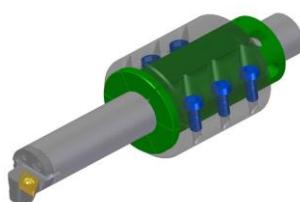


### Direct Screw Mount:

- Unacceptable Bending Stiffness
- Clamping Length = N/A

### Reduction Sleeve:

- Acceptable Bending Stiffness for low L/D
- Clamping Length = 4xD



### All Around Clamp:

- Better Bending Stiffness
- Clamping Length = 4xD

### Hydraulic Fixtures:

- Best Bending Stiffness (Recommended for high L/D)
- Clamping Length = 2xD to 4xD