

C/Escorialbou, 41 - 08041 Barcelona - Tlf. 93 455 94 07  
[www.arroyos.com](http://www.arroyos.com) - [arroyos@arroyos.com](mailto:arroyos@arroyos.com)

# Catálogo Junio 2023



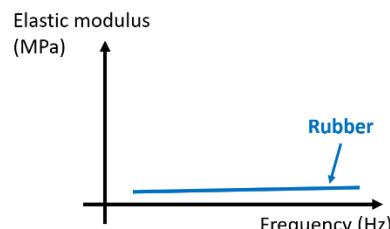
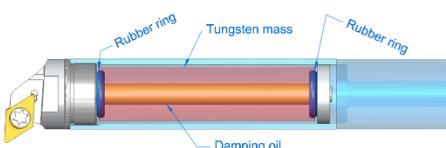
¡Bienvenido al mundo MAQ!

La visión de MAQ es "Simplificar el Mecanizado" a través de una tecnología plug and play simple y disruptiva que elimina las vibraciones de los procesos de fabricación para reducir el tiempo y el coste de producción y al mismo tiempo mejorar la calidad.

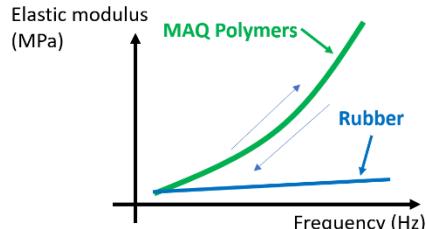
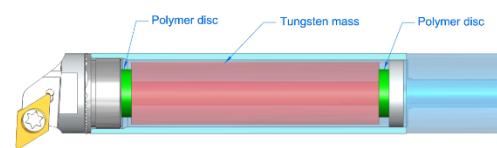
La vibración en el mecanizado significa piezas y superficies dañadas, insertos de corte destruidos y costes de producción dramáticamente aumentados. Las operaciones de mecanizado que utilizan herramientas con una relación longitud/diámetro alta (L/D) tienen los problemas de vibración más destacados, y no olvidemos que las herramientas con voladizo corto también tienen el mismo problema, pero un poco menos evidente. MAQ integra un nuevo enfoque de amortiguación de masa en el cuerpo de la herramienta para extraer la energía de vibración del cuerpo de la herramienta de corte para minimizar el movimiento y neutralizar el problema de la vibración.

El problema complejo es el cambio de frecuencia de vibración en las herramientas de corte debido a los cambios en las condiciones de corte (desgaste de la herramienta, desgaste de las juntas, variación de los materiales de la pieza de trabajo, cambios en la configuración del mecanizado, etc.). Por estas razones, hasta ahora ha sido necesario ajustar la afinación para una determinada condición para optimizar su rendimiento. Esto funciona bien si la frecuencia de vibración no cambia. Pero lo hace, y cuando usa una barra antivibratoria tradicional y la vibración sale de la ventana operativa, la herramienta puede empeorar aún más el problema de la vibración, en lugar de mejorar.

*4<sup>th</sup> Generation –*  
Rubber rings with damping oil



*5<sup>th</sup> Generation – from MAQ*  
Polymers with frequency dependent stiffness



Lo que hace que los productos MAQ sean únicos e imbatibles es la propiedad de ajuste automático. Vea la ilustración anterior, los elementos de resorte de polímero MAQ ajustan su rigidez de acuerdo con la frecuencia de vibración y superan el problema de los cambios de frecuencia. Con su exclusiva propiedad de ajuste automático, las herramientas MAQ superan a las soluciones del mercado y brindan el beneficio a los clientes con un mejor acabado superficial, una mejor tolerancia y una mayor confiabilidad del proceso. ¡Las herramientas MAQ aumentan la productividad simplemente mecanizando!

Lo simple es lo ingenioso y con STMD™, MAQ ha creado una alternativa que es mucho más fácil de aplicar, tiene un mejor rendimiento que sus competidores y reducirá sus costos de herramientas en comparación con las alternativas. Las herramientas también reducen el tiempo de configuración, la necesidad de operaciones secundarias, eliminan el ajuste y reducen significativamente los costos generales de mecanizado.

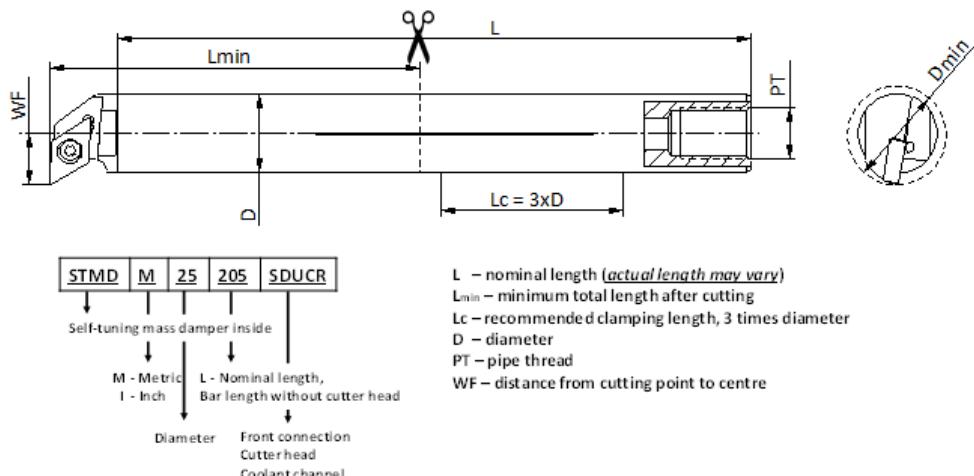
## Table of Contents

<b>Turning 3-6xD .....</b>	<b>5</b>
Straight holder (3-6xD) with fixed cutter heads (Metric) .....	5
Straight holder (3-6xD) with fixed cutter heads (Inch) .....	7
<b>Turning 6-9xD .....</b>	<b>8</b>
Straight holder (6-9xD) with SL (Serration Lock) interface (Metric) .....	8
Straight holder (6-9xD) with SL (Serration Lock) interface (Inch) .....	9
<b>Turning 8-12xD .....</b>	<b>10</b>
Straight holder (8-12xD) with fixed cutter heads (Metric) .....	10
Straight holder (8-12xD) with fixed cutter heads (Inch) .....	11
Straight holder (8-12xD) with SL (Serration Lock) interface (Metric) .....	12
Straight holder (8-12xD) with SL (Serration Lock) interface (Inch) .....	13
<b>Turning 11-15xD.....</b>	<b>14</b>
Straight holder (11-15xD) with SL (Serration Lock) interface (Metric) .....	14
Straight holder (11-15xD) with SL (Serration Lock) interface (Inch) .....	15
<b>Turning – Multitask with modular backends.....</b>	<b>16</b>
Standard: PSC32 (with SL interface and exchangeable heads).....	16
Standard: PSC40 (with SL interface and exchangeable heads).....	16
Standard: PSC50 (with SL interface and exchangeable heads).....	16
Standard: PSC63 (with SL interface and exchangeable heads).....	17
Standard: PSC80 (with SL interface and exchangeable heads).....	18
Standard: HSK63T (with SL interface and exchangeable heads) .....	18
<b>Tools with KL interface.....</b>	<b>19</b>
<b>End effectors – Burnishing.....</b>	<b>20</b>
Diamond burnishing Right hand .....	20
SDUCR, SDUCL for DCMT Inserts .....	21
SDQCR for DCMT Inserts.....	22
SDXCR for DCMT Inserts .....	22
Back boring - SDUCR-X for DCMT Inserts.....	23
STFCR, STFCL for TCMT Inserts .....	24
STFPR for TPMT Inserts.....	25
SCLCR, SCLCL for CCMT Inserts .....	26
SVUCR, SVUCL for VCMT Inserts .....	27
PDUNR, PDUNL for DNMG Inserts .....	28
PTFNR, PTFNL for TNMG Inserts .....	28
PCLNR, PCLNL for CNMG Inserts .....	29
PWLNR, PWLNL for WNMG Inserts .....	29
<b>End effectors - Threading .....</b>	<b>30</b>
SXFNL for threading Left hand.....	30
SXFNR for threading Right hand .....	31
<b>End effectors – SL blanks .....</b>	<b>32</b>
SL Blanks Left Hand Side:.....	32
SL Blanks Right Hand Side:.....	33

<b>Accessories .....</b>	<b>34</b>
Modular fixtures .....	34
Reduction sleeves .....	35
Level Indicator/Digital protractor (angle inclinometer).....	37
Insert screws:.....	38
Cutter head screws .....	38
Shims .....	39
Service kit for P clamp heads (includes level, shim, slot screw, spring) .....	39
Coolant adapters for steel bars .....	40
Coolant adapters for carbide bars .....	40
<b>MAQ Master Inserts.....</b>	<b>41</b>
<b>MAQ Master Threading Inserts.....</b>	<b>42</b>
<b>Clamping of Turning tools .....</b>	<b>43</b>

## Turning 3-6xD

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



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

Standard: Metric (with fixed head SCLCR for CCMT insert)											
Part number	Type	Dmin (mm)	Workable length <sup>b</sup> (mm)	Lmin (mm)	Lc (mm)	WF (mm)	Coolant	Master insert	Insert screw	PTI	KG
300206	STMD M12-108 SCLCR	16	36-72	72	36	8,5	Yes	CCMT 060204	IS M2.5x6.0	G ¼	0.1 kg
300186	STMD M16-138 SCLCR	20	48-96	96	48	11	Yes	CCMT 060204	IS M2.5x6.0	G ¼	0.2 kg
300188	STMD M20-160 SCLCR	25	60-120	120	60	13	Yes	CCMT 09T304	IS M3.5x10.0	G ¼	0.4 kg
300184	STMD M25-205 SCLCR	32	75-150	155	75	17	Yes	CCMT 09T304	IS M3.5x10.0	G ¼	0.6 kg
300183	STMD M32-256 SCLCR	40	96-192	192	96	22	Yes	CCMT 09T304	IS M3.5x10.0	G ½	1.2 kg
300181	STMD M40-320 SCLCR	50	120-240	240	120	27	Yes	CCMT 09T304	IS M3.5x10.0	G ½	2.4 kg

Standard: Metric (with fixed head STFCR for TCMT insert)											
Part number	Type	Dmin (mm)	Workable length <sup>b</sup> (mm)	Lmin (mm)	Lc (mm)	WF (mm)	Coolant	Master insert	Insert screw	PTI	KG
300207	STMD M12-108 STFCR 0902	16	36-72	72	36	9	Yes	TCMT 090204	IS M2.2x5.0	G ¼	0.1 kg
300587	STMD M12-108 STFCR 1102	16	36-72	72	36	9	Yes	TCMT 110204	IS M2.5x6.0	G ¼	0.1 kg
300187	STMD M16-138 STFCR 0902	20	48-96	96	48	11	Yes	TCMT 090204	IS M2.2x5.0	G ¼	0.2 kg
300588	STMD M16-138 STFCR 1102	20	48-96	96	48	11	Yes	TCMT 110204	IS M2.5x6.0	G ¼	0.2 kg
300589	STMD M20-160 STFCR 1102	25	60-120	120	60	13	Yes	TCMT 110204	IS M2.5x8.0	G ¼	0.4 kg
300189	STMD M20-160 STFCR 1103	25	60-120	120	60	13	Yes	TCMT 110304	IS M2.5x8.0	G ¼	0.4 kg
300590	STMD M25-205 STFCR 1102	32	75-150	155	75	17	Yes	TCMT 110204	IS M2.5x8.0	G ¼	0.6 kg
300185	STMD M25-205 STFCR 1103	32	75-150	155	75	17	Yes	TCMT 110304	IS M2.5x8.0	G ¼	0.6 kg
300180	STMD M32-256 STFCR 16T3	40	96-192	192	96	22	Yes	TCMT 16T304	IS M3.5x10.0	G ½	1.2 kg
300182	STMD M40-320 STFCR 16T3	50	120-240	240	120	27	Yes	TCMT 16T304	IS M3.5x10.0	G ½	2.4 kg

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

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

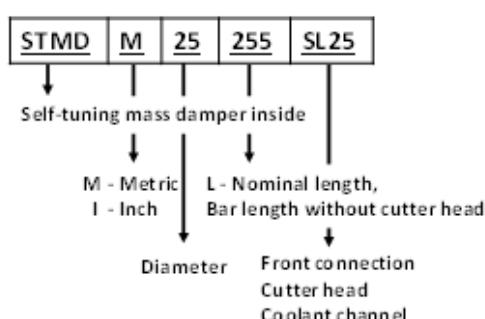
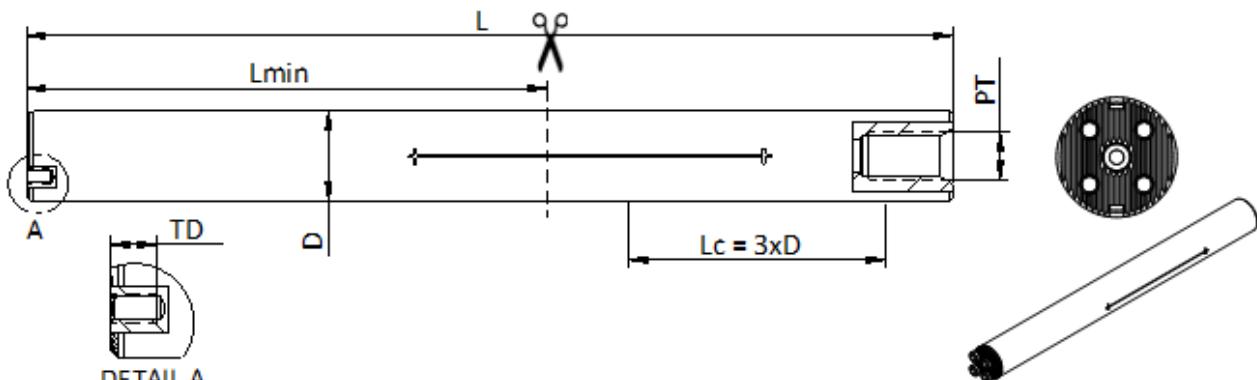
Standard: Metric (with fixed head SCLCL for CCMT insert)											
300411	STMD M12-108 SCLCL	16	36-72	72	36	8,5	Yes	CCMT 060204	IS M2.5x6.0	G ¼	0.1 kg
300412	STMD M16-138 SCLCL	20	48-96	96	48	11	Yes	CCMT 060204	IS M2.5x6.0	G ¼	0.2 kg
300413	STMD M20-160 SCLCL	25	60-120	120	60	13	Yes	CCMT 09T304	IS M3.5x10.0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

Standard: Metric (with fixed head STFCL for TCMT insert)											
300591	STMD M12-108 STFCL 1102	16	36-72	72	36	9	Yes	TCMT 110204	IS M2.5x6.0	G ¼	0.1 kg
300592	STMD M16-138 STFCL 1102	20	48-96	96	48	11	Yes	TCMT 110204	IS M2.5x6.0	G ¼	0.2 kg
300593	STMD M20-160 STFCL 1102	25	60-120	120	60	13	Yes	TCMT 110204	IS M2.5x8.0	G ¼	0.4 kg
300594	STMD M25-205 STFCL 1102	32	75-150	155	75	17	Yes	TCMT 110204	IS M2.5x8.0	G ¼	0.6 kg
300595	STMD M32-256 STFCL 16T3	40	96-192	192	96	22	Yes	TCMT 16T304	IS M3.5x10.0	G ½	1.2 kg
300596	STMD M40-320 STFCL 16T3	50	120-240	240	120	27	Yes	TCMT 16T304	IS M3.5x10.0	G ½	2.4 kg

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

## Turning 6-9xD

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



**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)											
Part number	Type	Workable length <sup>b</sup> (mm)	D min (mm) <sup>g</sup>	L <sub>min</sub> (mm)	L <sub>c</sub> (mm)	Screws	TD (mm)	PT	Adapter	Material	
300001	STMD M12-144	72-96	16	144	36	M2X8 or 14	5.5	NA	SL12	S+C <sup>d</sup>	0.18
300004	STMD M16-170	96-128	20	117	48	M3X8	5.5	G 1/4	SL16	Steel	0.25
300005	STMD M20-200	120-160	25	137	60	M3X8	5.5	G 1/4	SL20	Steel	0.50
300006	STMD M25-255	150-200	32	180	75	M4X9	6.5	G 1/4	SL25	Steel	1.10
300008	STMD M32-320	192-256	40	213	96	M5X12	10	G 1/2	SL32	Steel	2.10
300010	STMD M40-408 1C <sup>e,f</sup>	240-320	50	260	120	M6X14	10	G 1/2	SL40	Steel	3,9
300240	STMD M40-408 3C <sup>f</sup>	240-320	50	260	120	M6X14	10	G 1/2	SL40	Steel	3,9
300012	STMD M50-518-SL40	300-400	60	324	150	M6X14	10	G 3/8	SL40	Steel	8
300013	STMD M50-518-SL50 <sup>e</sup>	300-400	NA	322	150	M8X14	12	G 3/8	SL50	Steel	8
300015	STMD M60-628-SL40	360-480	70	424	180	M6X14	10	G 3/8	SL40	Steel	13.6
300016	STMD M60-628-SL60 <sup>e</sup>	360-480	NA	422	180	M8X14	12	G 3/8	SL60	Steel	13.6
300585	STMD M80-880-SL40 <sup>e</sup>	480-640	90	546	240	M6X14	10	G 1 1/4	SL40	Steel	30

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

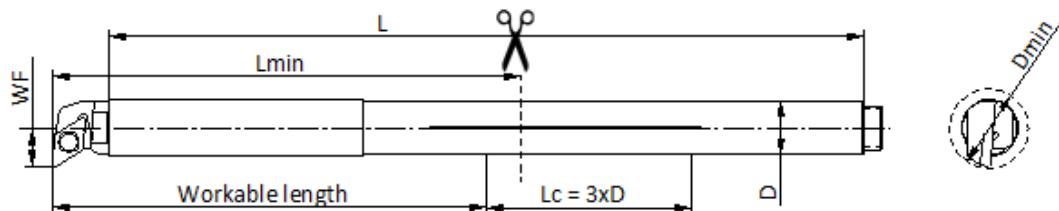
e – only on order and with a longer lead-time,

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

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

## Turning 8-12xD

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



**STMD M 12 180 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

WF – distance from cutting point to centre

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)	PT	Master insert	Insert screw	Material	KG
300565	STMD M08-120 C SDQCR	56-88	11	120	24	6	M7x0.5	DCMT 070204	IS M2.5x4.0	S+C <sup>d</sup>	0.15
300567	STMD M08-120 C SDQCL <sup>e</sup>	56-88	11	120	24	6	M7x0.5	DCMT 070204	IS M2.5x4.0	S+C <sup>d</sup>	0.15
300310	STMD M08-120 C SCLCR	56-88	10	120	24	5	M7x0.5	CCMT 060204	IS M2.5x4.0	S+C <sup>d</sup>	0.15
300568	STMD M08-120 C SCLCL <sup>e</sup>	56-88	10	120	24	5	M7x0.5	CCMT 060204	IS M2.5x4.0	S+C <sup>d</sup>	0.15
300386	STMD M08-120 C STUBR	56-88	10	120	24	5	M7x0.5	TBGT 060104	IS M2.0x4.0	S+C <sup>d</sup>	0.15
300569	STMD M08-120 C STUBL <sup>e</sup>	56-88	10	120	24	5	M7x0.5	TBGT 060104	IS M2.0x4.0	S+C <sup>d</sup>	0.15
300389	STMD M10-150 C SDUCR	70-110	15	150	30	9	M9x0.75	DCMT 070204	IS M2.5x6.0	S+C <sup>d</sup>	0.20
300570	STMD M10-150 C SDUCL <sup>e</sup>	70-110	15	150	30	9	M9x0.75	DCMT 070204	IS M2.5x6.0	S+C <sup>d</sup>	0.20
300390	STMD M10-150 C SCLCR	70-110	12	150	30	6,1	M9x0.75	CCMT 060204	IS M2.5x6.0	S+C <sup>d</sup>	0.20
300571	STMD M10-150 C SCLCL <sup>e</sup>	70-110	12	150	30	6,1	M9x0.75	CCMT 060204	IS M2.5x6.0	S+C <sup>d</sup>	0.20
300391	STMD M10-150 C STFCR	70-110	13	150	30	6,8	M9x0.75	TCMT 090204	IS M2.2x5.0	S+C <sup>d</sup>	0.20
300572	STMD M10-150 C STFCL <sup>e</sup>	70-110	13	150	30	6,8	M9x0.75	TCMT 090204	IS M2.2x5.0	S+C <sup>d</sup>	0.20
300098	STMD M12-180 C SDUCR	84-132	16	180	36	8,9	G ½	DCMT 070204	IS M2.5x6.0	S+C <sup>d</sup>	0.30
300573	STMD M12-180 C SDUCL <sup>e</sup>	84-132	16	180	36	8,9	G ½	DCMT 070204	IS M2.5x6.0	S+C <sup>d</sup>	0.30
300099	STMD M12-180 C SCLCR	84-132	16	180	36	8,5	G ½	CCMT 060204	IS M2.5x6.0	S+C <sup>d</sup>	0.30
300574	STMD M12-180 C SCLCL <sup>e</sup>	84-132	16	180	36	8,5	G ½	CCMT 060204	IS M2.5x6.0	S+C <sup>d</sup>	0.30
300100	STMD M12-180 C STFCR	84-132	16	180	36	9	G ½	TCMT 090204	IS M2.2x5.0	S+C <sup>d</sup>	0.30
300575	STMD M12-180 C STFCL <sup>e</sup>	84-132	16	180	36	9	G ½	TCMT 090204	IS M2.2x5.0	S+C <sup>d</sup>	0.30

a – total length to the cutting point

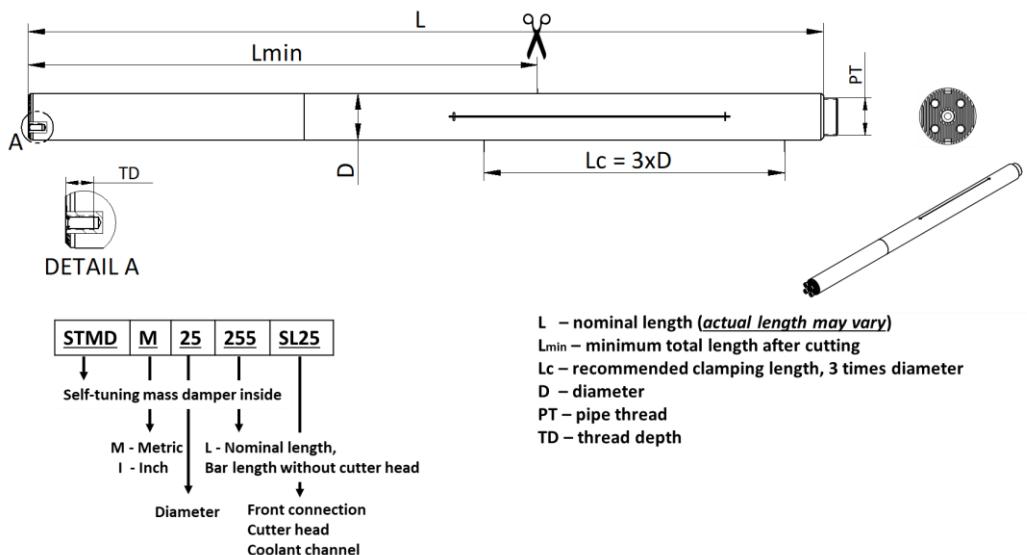
b – measured from the cutting edge to the clamping end.

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

d – Carbide back end joined with steel

e – available after Aug 2023.

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

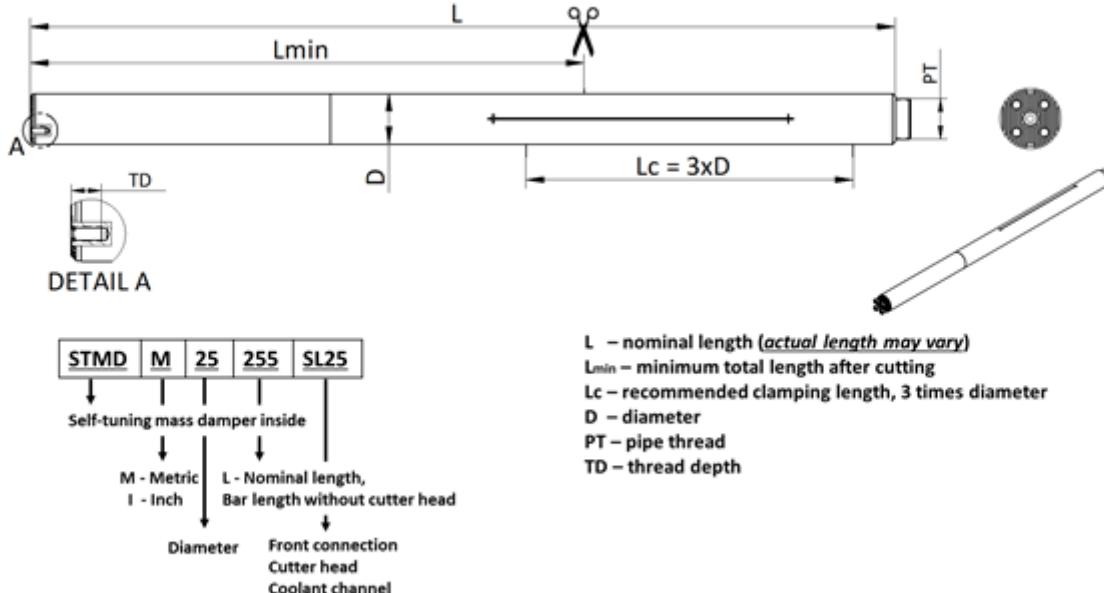


Standard: Metric (with SL interface and exchangeable heads)											
Part number	Type	Workable length <sup>b</sup> (mm)	D min (mm) <sup>g</sup>	Lmin (mm)	Lc (mm)	Screws	TD (mm)	PT	Adapter	Material	<sup>a</sup> KG
300017	STMD M16-204	128-176	20	204	48	M3X8	5.5	G 1/8	SL16	S+C <sup>d</sup>	0.50
300018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

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

## Turning 11-15xD

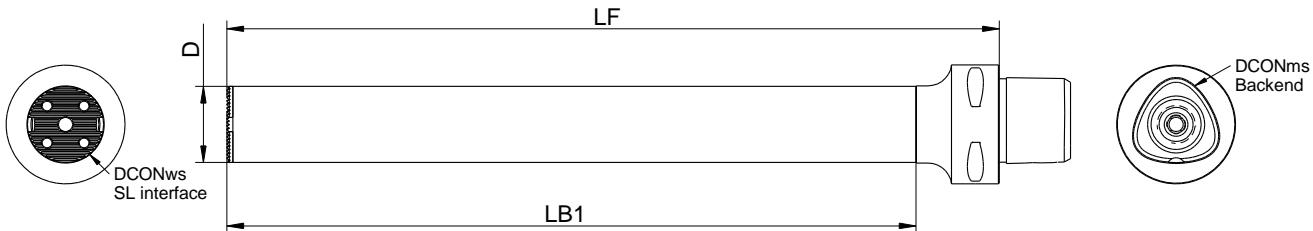
Straight holder (11-15xD) with SL (Serration Lock) interface (Metric)



Standard: Metric (with SL interface and exchangeable heads)											
Part number	Type	Workable length <sup>b</sup> (mm)	D min (mm) <sup>g</sup>	L <sub>min</sub> (mm)	L <sub>c</sub> (mm)	Screws	TD (mm)	PT	Adapter	Material	O KG
300089	STMD M16-268	176-240	20	268	48	M3X8	5.5	G 1/4	SL16	S+C <sup>d</sup>	0.75
300090	STMD M20-340	220-300	25	340	60	M3X8	5.5	G 1/4	SL20	S+C <sup>d</sup>	1.50
300091	STMD M25-430	275-375	32	430	75	M4X9	6.5	G 1/4	SL25	S+C <sup>d</sup>	3.20
300085	STMD M32-544	352-480	40	544	96	M5X12	10	G 1/4	SL32	S+C <sup>d</sup>	6.40
300309	STMD M40-688 1C <sup>f</sup>	440-600	50	688	120	M6x14	10	M36x1	SL40	S+C <sup>d</sup>	9.40
300093	STMD M40-688 3C <sup>f</sup>	440-600	50	688	120	M6x14	10	M36x1	SL40	S+C <sup>d</sup>	9.40
300094	STMD M50-861-SL40	550-750	60	861	150	M6X14	10	M42x1	SL40	S+C <sup>d</sup>	18.6
300095	STMD M50-861-SL50	550-750	NA	861	150	M6X14	10	M42x1	SL50	S+C <sup>d</sup>	18.6
300096	STMD M60-1040-SL40 <sup>e</sup>	660-900	70	1040	180	M6x14	10	M52x1	SL40	S+C <sup>d</sup>	34.4
300097	STMD M60-1040-SL60 <sup>e</sup>	660-900	NA	1040	180	M6x14	10	M52x1	SL60	S+C <sup>d</sup>	34.4

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

## 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	Adapter	Material	KG	
300476	PSC32 16 099/064 SL16 <sup>c</sup>	PSC32	16	20	131	96	M3X8	SL16	Steel	0.3	
300477	PSC32 16 131/096 SL16 <sup>c</sup>	PSC32	16	20	131	96	M3X8	SL16	Steel	0.3	
300478	PSC32 20 125/090 SL20 <sup>c</sup>	PSC32	20	25	125	90	M3X8	SL20	Steel	0.3	
300479	PSC32 20 165/130 SL20 <sup>c</sup>	PSC32	20	25	165	130	M3X8	SL20	Steel	0.4	
300480	PSC32 25 165/130 SL25 <sup>c</sup>	PSC32	25	32	165	130	M4X9	SL25	Steel	0.6	
300481	PSC32 25 215/180 SL25 <sup>c</sup>	PSC32	25	32	215	180	M4X9	SL25	Steel	0.8	
300482	PSC32 25 265/230 SL25 <sup>c</sup>	PSC32	25	32	265	230	M4X9	SL25	Steel	1	
300483	PSC32 32 205/170 SL32 <sup>c</sup>	PSC32	32	40	205	170	M5X12	SL32	Steel	1.8	
300484	PSC32 32 265/230 SL32 <sup>c</sup>	PSC32	32	40	265	230	M5X12	SL32	Steel	2.4	

<sup>c</sup> - available after Sep. 2023

<sup>d</sup> - 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	Adapter	Material	KG	
300485	PSC40 16 100/064 SL16 <sup>c</sup>	PSC40	16	20	100	64	M3X8	SL16	Steel	0.4	
300486	PSC40 16 132/096 SL16 <sup>c</sup>	PSC40	16	20	132	96	M3X8	SL16	Steel	0.5	
300487	PSC40 20 126/090 SL20 <sup>c</sup>	PSC40	20	25	126	90	M3X8	SL20	Steel	0.5	
300488	PSC40 20 166/130 SL20 <sup>c</sup>	PSC40	20	25	166	130	M3X8	SL20	Steel	0.7	
300489	PSC40 25 167/130 SL25 <sup>c</sup>	PSC40	25	32	167	130	M4X9	SL25	Steel	0.8	
300490	PSC40 25 216/180 SL25 <sup>c</sup>	PSC40	25	32	216	180	M4X9	SL25	Steel	0.9	
300491	PSC40 25 266/230 SL25 <sup>c</sup>	PSC40	25	32	266	230	M4X9	SL25	Steel	1.2	
300492	PSC40 32 206/170 SL32 <sup>c</sup>	PSC40	32	40	206	170	M5X12	SL32	Steel	1.5	
300493	PSC40 32 266/230 SL32 <sup>c</sup>	PSC40	32	40	266	230	M5X12	SL32	Steel	2	
300494	PSC40 32 330/294 SL32 <sup>c</sup>	PSC40	32	40	330	294	M5X12	SL32	Steel	2.6	
300495	PSC40 40 246/210 SL40 <sup>c</sup>	PSC40	40	50	246	210	M6X14	SL40	Steel	1.7	
300496	PSC40 40 326/290 SL40 <sup>c</sup>	PSC40	40	50	326	290	M6x14	SL40	Steel	3.4	

<sup>c</sup> - available after Sep. 2023

<sup>d</sup> - 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	Adapter	Material	
300497	PSC50 16 099/064 SL16 <sup>c</sup>	PSC50	16	20	99	64	M3X8	SL16	Steel	0.5
300498	PSC50 16 131/096 SL16 <sup>c</sup>	PSC50	16	20	131	96	M3X8	SL16	Steel	0.7
300499	PSC50 20 125/090 SL16 <sup>c</sup>	PSC50	20	20	131	96	M3X8	SL16	Steel	0.7
300500	PSC50 20 165/130 SL20 <sup>c</sup>	PSC50	20	25	165	130	M3X8	SL20	Steel	0.9
300501	PSC50 25 165/130 SL25 <sup>b</sup>	PSC50	25	32	165	130	M4X9	SL25	Steel	1
300462	PSC50 25 215/180 SL25 <sup>a</sup>	PSC50	25	32	215	180	M4X9	SL25	Steel	1.2
300463	PSC50 25 265/230 SL25 <sup>a</sup>	PSC50	25	32	265	230	M4X9	SL25	Steel	1.4
300502	PSC50 32 205/170 SL32 <sup>b</sup>	PSC50	32	40	205	170	M5X12	SL32	Steel	1.4
300464	PSC50 32 265/230 SL32 <sup>a</sup>	PSC50	32	40	265	230	M5X12	SL32	Steel	1.8
300465	PSC50 32 329/294 SL32 <sup>a</sup>	PSC50	32	40	329	294	M5X12	SL32	Steel	2.4
300503	PSC50 40 245/210 SL40 <sup>c</sup>	PSC50	40	50	245	210	M6X14	SL40	Steel	2.2
300504	PSC50 40 325/290 SL40 <sup>c</sup>	PSC50	40	50	325	290	M6x14	SL40	Steel	3.6
300505	PSC50 40 405/370 SL40 <sup>c</sup>	PSC50	40	50	405	370	M6x14	SL40	Steel	4.2

<sup>a</sup> - available in stock

<sup>b</sup> - available after June 2023

<sup>c</sup> - available after Sep. 2023

<sup>d</sup> - 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	Adapter	Material	
300506	PSC63 16 102/064 SL16 <sup>c</sup>	PSC63	16	20	102	64	M3X8	SL16	Steel	1
300507	PSC63 16 134/096 SL16 <sup>c</sup>	PSC63	16	20	134	96	M3X8	SL16	Steel	1.2
300508	PSC63 20 128/090 SL16 <sup>c</sup>	PSC63	20	20	128	90	M3X8	SL16	Steel	1
300509	PSC63 20 168/130 SL20 <sup>c</sup>	PSC63	20	25	168	130	M3X8	SL20	Steel	1.2
300510	PSC63 25 168/130 SL25 <sup>c</sup>	PSC63	25	32	168	130	M4X9	SL25	Steel	1.5
300511	PSC63 25 218/180 SL25 <sup>c</sup>	PSC63	25	32	218	180	M4X9	SL25	Steel	1.6
300512	PSC63 25 268/230 SL25 <sup>c</sup>	PSC63	25	32	268	230	M4X9	SL25	Steel	1.7
300513	PSC63 32 208/170 SL32 <sup>c</sup>	PSC63	32	40	208	170	M5X12	SL32	Steel	1.8
300514	PSC63 32 268/230 SL32 <sup>c</sup>	PSC63	32	40	268	230	M5X12	SL32	Steel	2.2
300515	PSC63 32 332/294 SL32 <sup>c</sup>	PSC63	32	40	332	294	M5X12	SL32	Steel	2.7
300516	PSC63 40 248/210 SL40 <sup>c</sup>	PSC63	40	50	248	210	M6X14	SL40	Steel	2.6
300517	PSC63 40 328/290 SL40 <sup>c</sup>	PSC63	40	50	328	290	M6x14	SL40	Steel	3.9
300518	PSC63 40 408/370 SL40 <sup>c</sup>	PSC63	40	50	408	370	M6x14	SL40	Steel	4.2

<sup>c</sup> - available after Sep. 2023

<sup>d</sup> - 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	Adapter	Material	
300519	PSC80 16 094/064 SL16 <sup>c</sup>	PSC80	16	20	94	64	M3X8	SL16	Steel	1.1
300520	PSC80 16 126/096 SL16 <sup>c</sup>	PSC80	16	20	126	96	M3X8	SL16	Steel	1.3
300521	PSC80 20 120/090 SL16 <sup>c</sup>	PSC80	20	25	120	90	M3X8	SL16	Steel	1.4
300522	PSC80 20 160/130 SL20 <sup>c</sup>	PSC80	20	25	160	130	M3X8	SL20	Steel	1.6
300523	PSC80 25 160/130 SL25 <sup>c</sup>	PSC80	25	32	160	130	M4X9	SL25	Steel	2
300524	PSC80 25 210/180 SL25 <sup>c</sup>	PSC80	25	32	210	180	M4X9	SL25	Steel	2.5
300525	PSC80 25 260/230 SL25 <sup>c</sup>	PSC80	25	32	260	230	M4X9	SL25	Steel	3
300526	PSC80 32 200/170 SL32 <sup>c</sup>	PSC80	32	40	200	170	M5X12	SL32	Steel	2.8
300527	PSC80 32 260/230 SL32 <sup>c</sup>	PSC80	32	40	260	230	M5X12	SL32	Steel	3.6
300528	PSC80 32 324/294 SL32 <sup>c</sup>	PSC80	32	40	324	294	M5X12	SL32	Steel	4.5
300529	PSC80 40 240/210 SL40 <sup>c</sup>	PSC80	40	50	240	210	M6X14	SL40	Steel	3.7
300530	PSC80 40 320/290 SL40 <sup>c</sup>	PSC80	40	50	320	290	M6x14	SL40	Steel	5.2
300531	PSC80 40 400/370 SL40 <sup>c</sup>	PSC80	40	50	400	370	M6x14	SL40	Steel	5.4

<sup>c</sup> - available after Sep. 2023

<sup>d</sup> - estimated with using standard SDUCR cutter heads from MAQ.

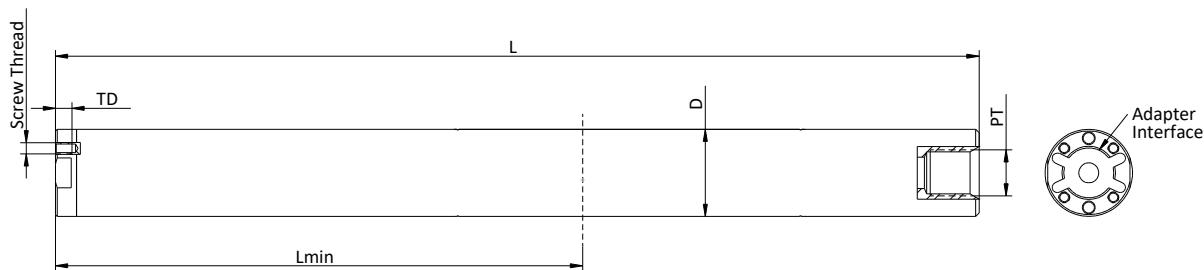
## Standard: HSK63T (with SL interface and exchangeable heads)

Standard: HSK63T (with SL interface and exchangeable heads)										
Part number	Type	Backend	D (mm)	Dmin (mm) <sup>d</sup>	LF (mm)	LB1 (mm)	Screws	Adapter	Material	
300532	HSK63T 16 120/064 SL16 <sup>c</sup>	HSK63	16	20	120	64	M3X8	SL16	Steel	1
300533	HSK63T 16 152/096 SL16 <sup>c</sup>	HSK63	16	20	152	96	M3X8	SL16	Steel	1.2
300534	HSK63T 20 146/090 SL16 <sup>c</sup>	HSK63	20	25	146	90	M3X8	SL16	Steel	1
300535	HSK63T 20 186/130 SL20 <sup>c</sup>	HSK63	20	25	186	130	M3X8	SL20	Steel	1.2
300536	HSK63T 25 186/130 SL25 <sup>c</sup>	HSK63	25	32	186	130	M4X9	SL25	Steel	1.5
300537	HSK63T 25 236/180 SL25 <sup>c</sup>	HSK63	25	32	236	180	M4X9	SL25	Steel	1.6
300538	HSK63T 25 286/230 SL25 <sup>c</sup>	HSK63	25	32	286	230	M4X9	SL25	Steel	1.7
300539	HSK63T 32 226/170 SL32 <sup>c</sup>	HSK63	32	40	226	170	M5X12	SL32	Steel	1.8
300540	HSK63T 32 286/230 SL32 <sup>c</sup>	HSK63	32	40	286	230	M5X12	SL32	Steel	2.2
300541	HSK63T 32 350/294 SL32 <sup>c</sup>	HSK63	32	40	350	294	M5X12	SL32	Steel	2.7
300542	HSK63T 40 266/210 SL40 <sup>c</sup>	HSK63	40	50	266	210	M6X14	SL40	Steel	2.6
300543	HSK63T 40 346/290 SL40 <sup>c</sup>	HSK63	40	50	346	290	M6x14	SL40	Steel	3.9
300544	HSK63T 40 426/370 SL40 <sup>c</sup>	HSK63	40	50	426	370	M6x14	SL40	Steel	4.2

<sup>c</sup> - available after Sep. 2023

<sup>d</sup> - estimated with using standard SDUCR cutter heads from MAQ.

## Tools with KL interface



Standard: Metric (with KL 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	Adapter <sup>b</sup>	Material	
300648	STMD M50-528-KL50 <sup>a</sup>	300-400	60	322	150	1/4-20 x 1/2	9	G ¾	KL50	Steel	8
300649	STMD M60-642-KL60 <sup>a</sup>	360-480	70	422	180	5/16-18 x 1/2	12	G ¾	KL60	Steel	13.6

Standard: Inch (with KL 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	Adapter <sup>b</sup>	Material	
300650	STMD I 2-20.8-KL50 <sup>a</sup>	12.000-16.000	2.362	12.7	5.90	1/4-20 x 1/2	9	G ¾	KL50	Steel	8
300651	STMD I 2 1/2-25.3-KL60 <sup>a</sup>	15.000-20.000	2.756	16.7	7.10	5/16-18 x 1/2	12	G ¾	KL60	Steel	13.6

Standard: Metric (with KL 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	Adapter <sup>b</sup>	Material	
300646	STMD M50-670-KL50 <sup>a</sup>	400-550	60	384	150	1/4-20 x 1/2	9	G ¾	KL50	Steel	9.4
300647	STMD M60-822-KL60 <sup>a</sup>	480-660	70	484	180	5/16-18 x 1/2	12	G ¾	KL60	Steel	16.4

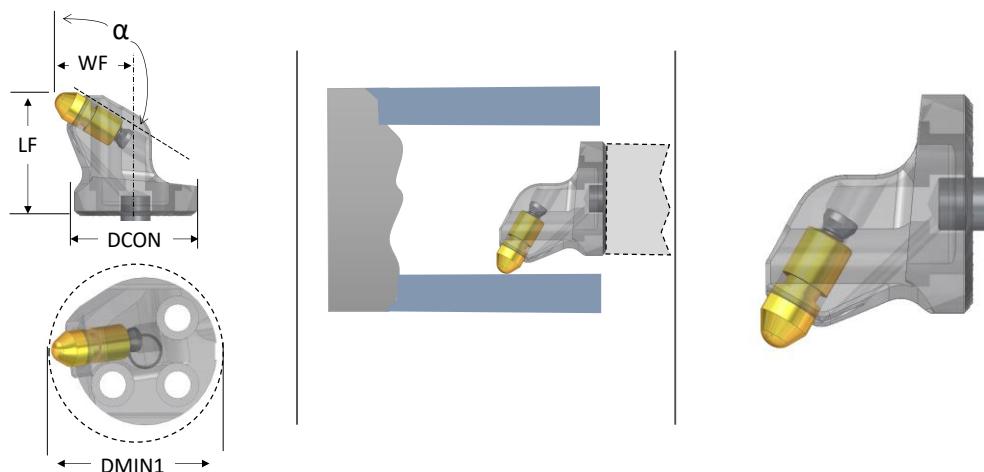
Standard: Inch (with KL interface and exchangeable heads)											
Part number	Type	Workable length <sup>b</sup> (mm)	D min (mm) <sup>g</sup>	Lmin (mm)	Lc (mm)	Screws	TD (mm)	PT	Adapter <sup>b</sup>	Material	
300637	STMD I 2-26.4-KL50 <sup>a</sup>	16.000-22.000	2.362	15.0	5.90	1/4-20 x 1/2	9	G ¾	KL50	Steel	9.4
300638	STMD I 2 1/2-32.4-KL60 <sup>a</sup>	20.000-27.500	2.756	19.1	7.10	5/16-18 x 1/2	12	G ¾	KL60	Steel	16.4

a – delivery time 3 weeks

b – exchangeable to Kenna. Lock interface

## End effecters – Burnishing

### Diamond burnishing Right hand



Part Number	Type	DCON (mm)	DMIN1 (mm)	LF (mm)	WF (mm)	$\alpha$ ( $^{\circ}$ )	Burnishing Nib <sup>1</sup>	Nib screw	KG
300631	SL20 DB WF12 24 R 061402 CP <sup>3</sup>	SL 20	24	21	12	30	R 061402 <sup>1</sup>	IS M3x7	0,02
300632	SL25 DB WF16 30 R 061402 CP	SL 25	30	25	16	30	R 061402 <sup>1</sup>	IS M3x7	0,04
300633	SL32 DB WF20 38 R 061402 CP <sup>3</sup>	SL 32	38	33	20	30	R 061402 <sup>1</sup>	IS M3x7	0,07
300634	SL40 DB WF24 46 R 061402 CP <sup>2</sup>	SL 40	43	34	24	30	R 061402 <sup>1</sup>	IS M3x7	0,14

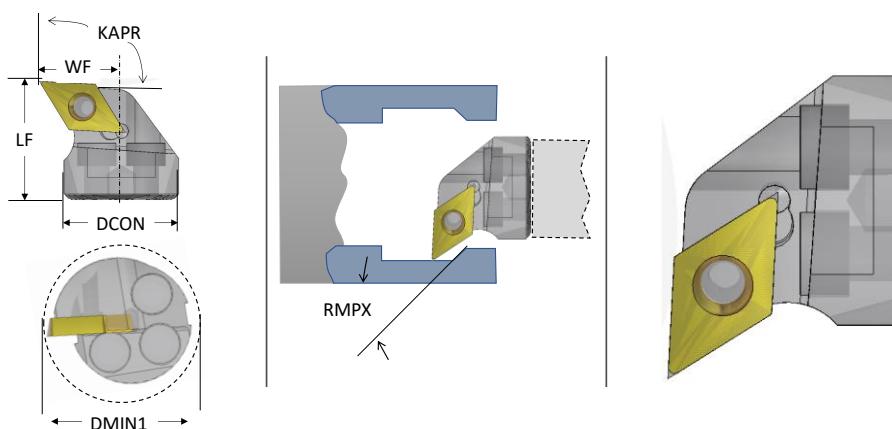
All burnishing heads are delivered with the burnishing nib and nib screw.

<sup>1</sup> included in the burnishing head already at delivery

<sup>2</sup> Available after July 2023

<sup>3</sup> Available after Sep 2023

## SDUCR, SDUCL for DCMT Inserts



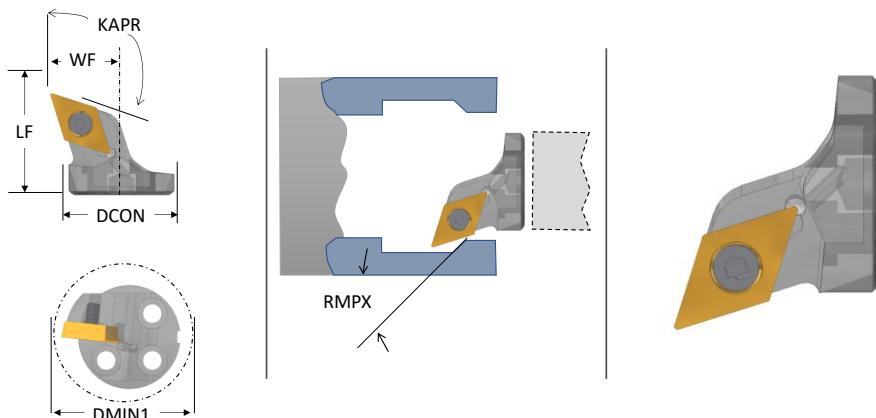
Part Number	Type	DCON (mm)	DMIN1 (mm)	LF (mm)	WF (mm)	KAPR (°)	RMPX (°)	Master insert	Insert screw	
300118	<b>SDUCL-12</b>	SL 12	16	14	9	93	27	DCMT 070204	IS M2.5x6.0	0.01
300059	<b>SDUCR-12</b>	SL 12	16	14	9	93	27	DCMT 070204	IS M2.5x6.0	0.01
300119	<b>SDUCL-16-5/8</b>	SL 16	20	16	11	93	27	DCMT 070204	IS M2.5x6.0	0.01
300060	<b>SDUCR-16-5/8</b>	SL 16	20	16	11	93	27	DCMT 070204	IS M2.5x6.0	0.01
300120	<b>SDUCL-20-3/4</b>	SL 20	25	20	13	93	27	DCMT 11T304	IS M3.5x10.0	0.02
300061	<b>SDUCR-20-3/4</b>	SL 20	25	20	13	93	27	DCMT 11T304	IS M3.5x10.0	0.02
300121	<b>SDUCL-25-1</b>	SL 25	32	22	17	93	27	DCMT 11T304	IS M3.5x10.0	0.04
300062	<b>SDUCR-25-1</b>	SL 25	32	22	17	93	27	DCMT 11T304	IS M3.5x10.0	0.04
300122	<b>SDUCL-32-1 1/4</b>	SL 32	40	27	22	93	27	DCMT 11T304	IS M3.5x10.0	0.07
300063	<b>SDUCR-32-1 1/4</b>	SL 32	40	27	22	93	27	DCMT 11T304	IS M3.5x10.0	0.07
300064	<b>SDUCR-40-1 ½ P<sup>1</sup></b>	SL 40	50	32	27	93	27	DCMT 11T304	IS M3.5x10.0	0.14
300209	<b>SDUCL-40-1 ½ CP<sup>2</sup></b>	SL 40	50	32	27	93	27	DCMT 11T304	IS M3.5x10.0	0.14
300195	<b>SDUCR-40-1 ½ CP<sup>2</sup></b>	SL 40	50	32	27	93	27	DCMT 11T304	IS M3.5x10.0	0.14

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

## SDQCR for DCMT Inserts



Part Number	Type	DCON (mm)	DMIN1 (mm)	LF (mm)	WF (mm)	KAPR (°)	RMPX (°)	Master insert	Insert screw	
300545	SDQCR-16-5/8 P <sup>1</sup> WF11 DC0702 <sup>3</sup>	SL 16	20	18	11	107.5	17	DCMT 070204	IS M2.5x6.0	0.01
300546	SDQCR-20-3/4 CP <sup>2</sup> WF13 DC11T3 <sup>3</sup>	SL 20	25	24	13	107.5	17	DCMT 11T304	IS M3.5x10.0	0.02
300547	SDQCR-25-1 CP <sup>2</sup> WF17 DC11T3 <sup>3</sup>	SL 25	32	24	17	107.5	17	DCMT 11T304	IS M3.5x10.0	0.04
300548	SDQCR-32-1 1/4 CP <sup>2</sup> WF22 DC11T3 <sup>3</sup>	SL 32	40	26	22	107.5	17	DCMT 11T304	IS M3.5x10.0	0.07
300549	SDQCR-40-1 1/2 CP <sup>2</sup> WF27 DC11TC <sup>3</sup>	SL 40	50	26	27	107.5	17	DCMT 11T304	IS M3.5x10.0	0.14

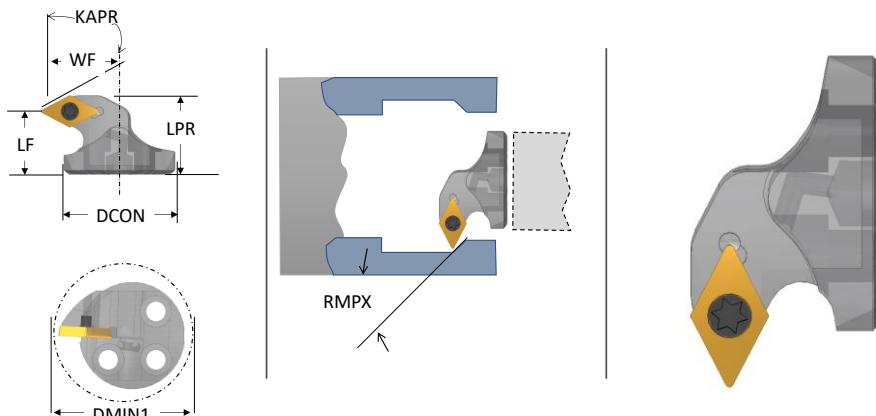
All cutter heads are delivered with the insert clamp screw.

<sup>1</sup> P - Peripheral coolant only

<sup>2</sup> CP - Central and Peripheral coolant exits

<sup>3</sup> Available after June 2023

## SDXCR for DCMT Inserts



Part Number	Type	DCON (mm)	DMIN1 (mm)	LF (mm)	LPR	WF (mm)	KAPR (°)	RMPX (°)	Master insert	Insert screw	
300550	SDXCR-16-5/8 P <sup>1</sup> WF13 DC0702 <sup>3</sup>	SL 16	22	12.5	16	13	62.5	60	DCMT 070204	IS M2.5x6.0	0.01
300551	SDXCR-20-3/4 CP <sup>2</sup> WF15 DC0702 <sup>3</sup>	SL 20	27	13	17	15	62.5	60	DCMT 070204	IS M3.5x10.0	0.02
300552	SDXCR-25-1 CP <sup>2</sup> WF18 DC0702 <sup>3</sup>	SL 25	33	14	17.6	18	62.5	60	DCMT 070204	IS M3.5x10.0	0.04
300553	SDXCR-32-1 1/4 CP <sup>2</sup> WF22 DC11T3 <sup>3</sup>	SL 32	40	17	22.5	22	62.5	60	DCMT 11T304	IS M3.5x10.0	0.07
300554	SDXCR-40-1 1/2 CP <sup>2</sup> WF27 DC11TC <sup>3</sup>	SL 40	50	17	22	27	62.5	60	DCMT 11T304	IS M3.5x10.0	0.14

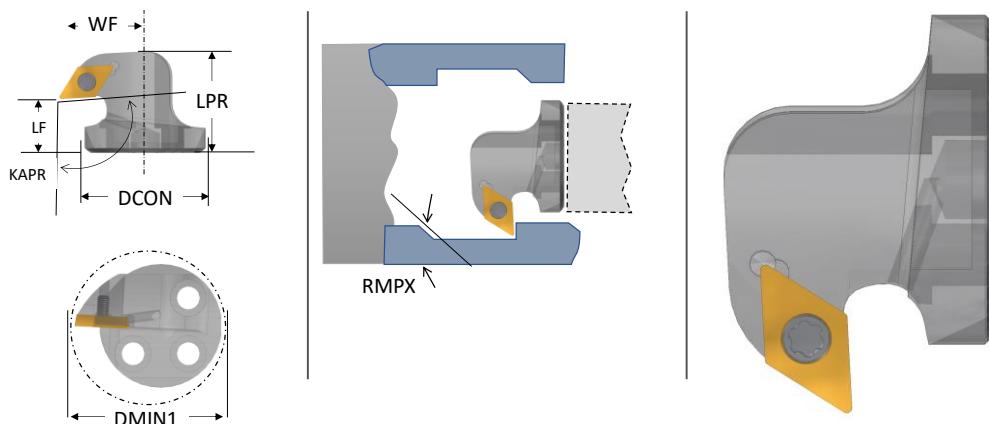
All cutter heads are delivered with the insert clamp screw.

<sup>1</sup> P - Peripheral coolant only

<sup>2</sup> CP - Central and Peripheral coolant exits

<sup>3</sup> Available after June 2023.

## Back boring - SDUCR-X for DCMT Inserts



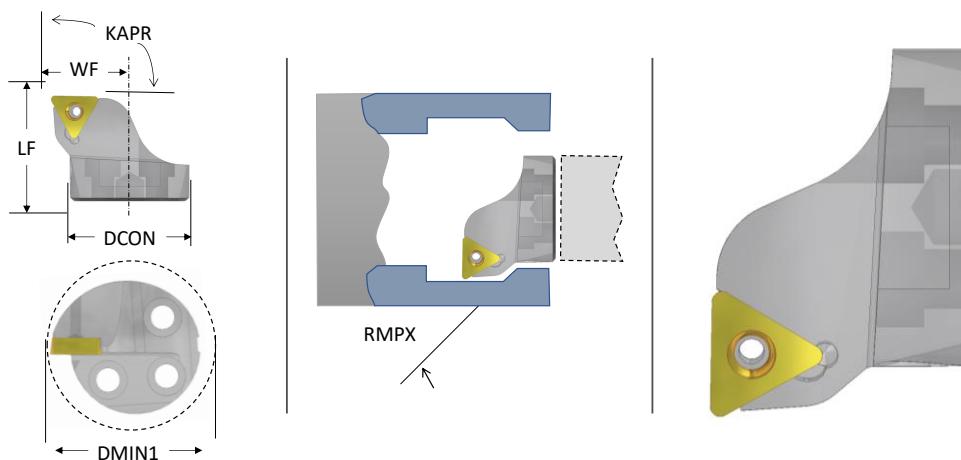
Part Number	Type	DCON (mm)	DMIN1 (mm)	LF (mm)	LPR (mm)	WF (mm)	KAPR (°)	RMPX (°)	Master insert	Insert screw	
300555	B SDUCR-16-5/8 EX CP <sup>1</sup> WF13 DC0702 <sup>2</sup>	SL 16	20	11	20	11	93	27	DCMT 070204	IS M2.5x6.0	0.01
300556	B SDUCR-20-3/4 EX CP <sup>1</sup> WF15 DC0702 <sup>2</sup>	SL 20	25	11	20	15	93	27	DCMT 070204	IS M2.5x6.0	0.02
300557	B SDUCR-25-1 DX CP <sup>1</sup> WF18 DC0702 <sup>2</sup>	SL 25	32	11	21	18	93	27	DCMT 070204	IS M2.5x6.0	0.04
300558	B SDUCR-32-1 1/4 CP <sup>1</sup> WF22 DC11T3 <sup>2</sup>	SL 32	40	13	27	22	93	27	DCMT 11T304	IS M3.5x10.0	0.07
300559	B SDUCR-40-1 1/2 CP <sup>1</sup> WF27 DC11TC <sup>2</sup>	SL 40	50	15	29	27	93	27	DCMT 11T304	IS M3.5x10.0	0.14

All cutter heads are delivered with the insert clamp screw.

<sup>1</sup> CP -Central and Peripheral coolant exits

<sup>2</sup> available after June 2023.

## STFCR, STFCL for TCMT Inserts



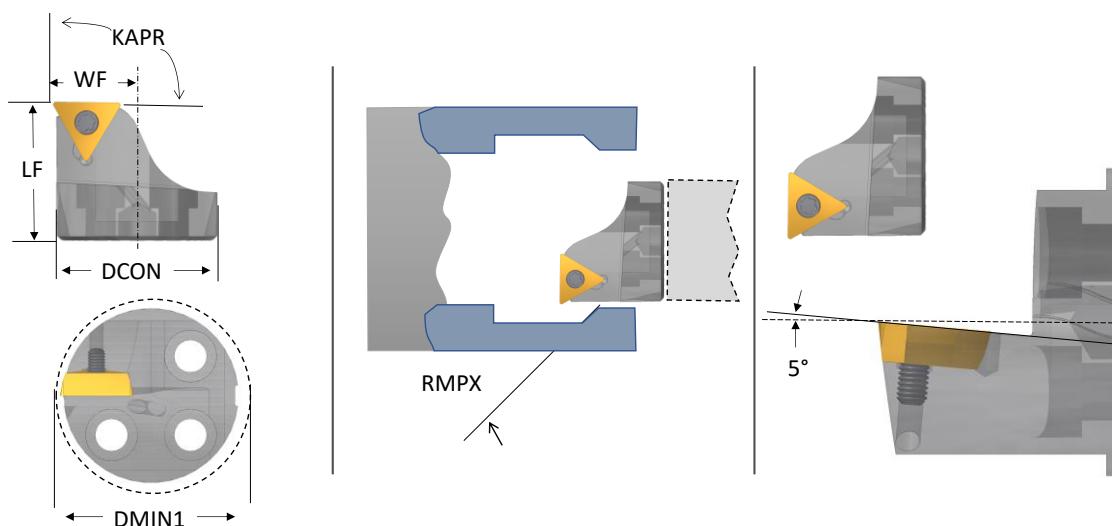
Part Number	Type	DCON (mm)	DMIN1 (mm)	LF (mm)	WF (mm)	KAPR (°)	RMPX (°)	Master insert	Insert screw	
300124	STFCL-12	SL 12	16	14	9	91	NA	TCMT 090204	IS M2.2x5.0	0.01
300065	STFCR-12	SL 12	16	14	9	91	NA	TCMT 090204	IS M2.2x5.0	0.01
300125	STFCL-16-5/8	SL 16	20	16	11	91	NA	TCMT 090204	IS M2.2x5.0	0.01
300066	STFCR-16-5/8	SL 16	20	16	11	91	NA	TCMT 090204	IS M2.2x5.0	0.01
300126	STFCL-20-3/4	SL 20	25	20	13	91	NA	TCMT 110304	IS M2.5x8.0	0.02
300199	STFCR-20-3/4	SL 20	25	20	13	91	NA	TCMT 110304	IS M2.5x8.0	0.02
300127	STFCL-25-1	SL 25	32	22	17	91	NA	TCMT 110304	IS M2.5x8.0	0.04
300201	STFCR-25-1	SL 25	32	22	17	91	NA	TCMT 110304	IS M2.5x8.0	0.04
300128	STFCL-32-1 1/4	SL 32	40	27	22	91	NA	TCMT 16T304	IS M3.5x10.0	0.07
300069	STFCR-32-1 1/4	SL 32	40	27	22	91	NA	TCMT 16T304	IS M3.5x10.0	0.07
300070	STFCR-40-1 1/2 P <sup>1</sup>	SL 40	50	32	27	91	NA	TCMT 16T304	IS M3.5x10.0	0.14
300210	STFCL-40-1 1/2 CP <sup>2</sup>	SL 40	50	32	27	91	NA	TCMT 16T304	IS M3.5x10.0	0.14
300197	STFCR-40-1 1/2 CP <sup>2</sup>	SL 40	50	32	27	91	NA	TCMT 16T304	IS M3.5x10.0	0.14

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

## STFPR for TPMT Inserts

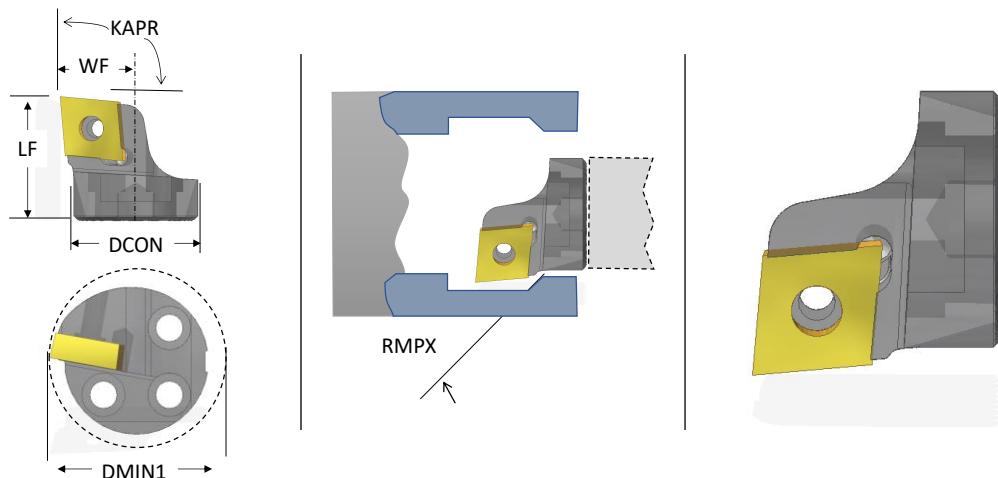


Part Number	Type	DCON (mm)	DMIN1 (mm)	LF (mm)	WF (mm)	KAPR (°)	RMPX (°)	Master insert	Insert screw	
300466	STFPR-16-5/8 CP <sup>1</sup> WF8.8 TP0902	SL 16	17.5	17	8.8	91	NA	TPMT 090204	IS M2.2x5.0	0.01
300467	STFPR-20-3/4 CP <sup>1</sup> WF10.8 TP1103	SL 20	21.5	19	10.8	91	NA	TPMT 110304	IS M2.5x8.0	0.02
300468	STFPR-25-1 CP <sup>1</sup> WF13.3 TP1103	SL 25	26.5	22	13.3	91	NA	TPMT 110304	IS M2.5x8.0	0.04

All cutter heads are delivered with the insert clamp screw.

<sup>1</sup> CP - Central and Peripheral coolant exits

## SCLCR, SCLCL for CCMT Inserts



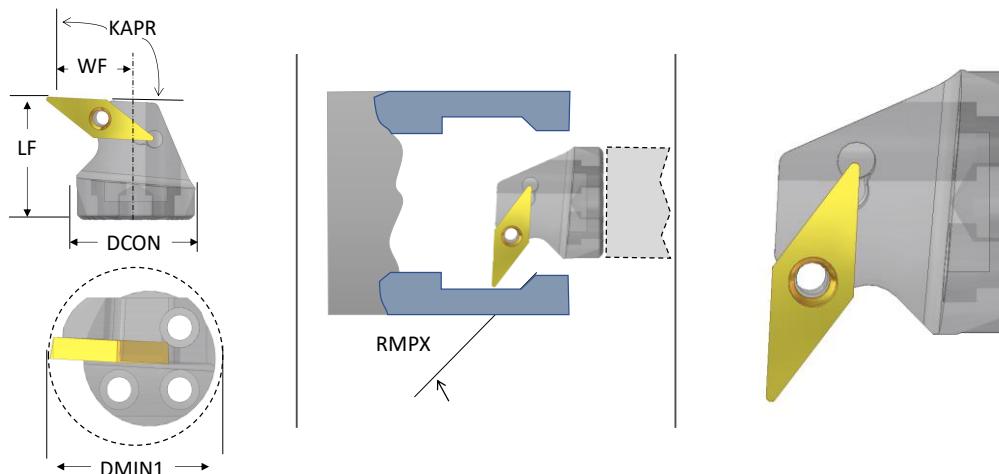
Part Number	Type	DCON (mm)	DMIN1 (mm)	LF (mm)	WF (mm)	KAPR (°)	RMPX (°)	Master Insert	Insert screw	KG
300112	<b>SCLCL-12-1/2</b>	SL 12	16	14.4	10	95	NA	CCMT 060204	IS M2.5x6.0	0.01
300071	<b>SCLCR-12-1/2</b>	SL 12	16	14.4	10	95	NA	CCMT 060204	IS M2.5x6.0	0.01
300113	<b>SCLCL-16-5/8</b>	SL 16	20	15.4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

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



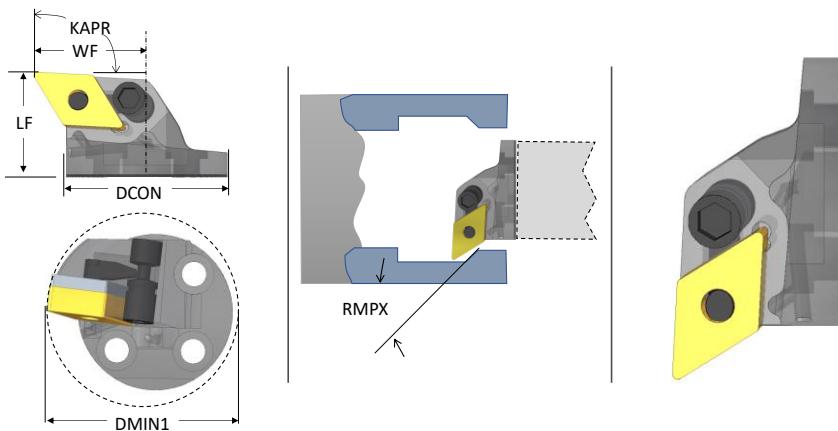
Part Number	Type	DCON (mm)	DMIN1 (mm)	LF (mm)	WF (mm)	KAPR (°)	RMPX (°)	Master Insert	Insert screw	
300199	SVUCL-20-3/4	SL 20	27	20.5	15	93	45	VCMT 110304	IS M2.5x8.0	0.02
300198	SVUCR-20-3/4	SL 20	27	20.5	15	93	45	VCMT 110304	IS M2.5x8.0	0.02
300201	SVUCL-25-1	SL 25	33	20.5	18	93	45	VCMT 110304	IS M2.5x8.0	0.04
300200	SVUCR-25-1	SL 25	33	20.5	18	93	45	VCMT 110304	IS M2.5x8.0	0.04
300598	SVUCL-32-1 1/2 CP <sup>1,2</sup>	SL 32	40	25	22	93	45	VCMT 160404	IS M3.5x10.0	0.08
300597	SVUCR-32-1 1/2 CP <sup>1,2</sup>	SL 32	40	25	22	93	45	VCMT 160404	IS M3.5x10.0	0.08
300560	SVUCL-40-1 1/2 CP <sup>1</sup>	SL40	50	28	27	93	45	VCMT 160404	IS M3.5x10.0	0.12
300561	SVUCR-40-1 1/2 CP <sup>1</sup>	SL40	50	28	27	93	45	VCMT 160404	IS M3.5x10.0	0.12

All cutter heads are delivered with the insert clamp screw.

<sup>1</sup> Central and Peripheral coolant exits.

<sup>2</sup> Available after Aug 2023.

## PDUNR, PDUNL for DNMG Inserts

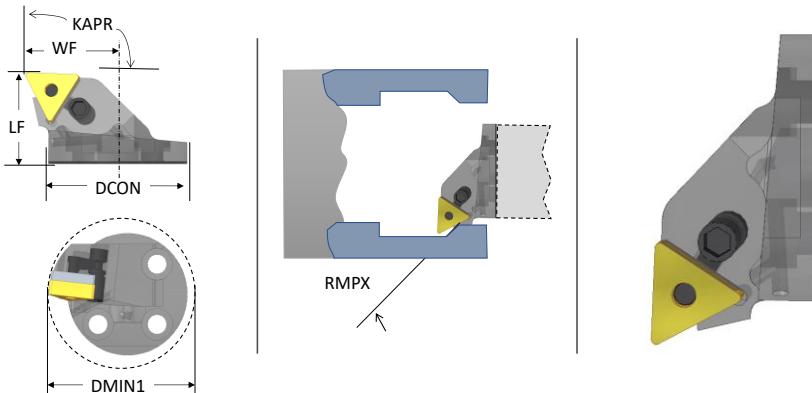


Part Number	Type	DCON (mm)	DMIN1 (mm)	LF (mm)	WF (mm)	KAPR (°)	RMPX (°)	Insert	Slot screw	Level	Shim	
300427	PDUNR 32-1 1/4 CP <sup>1</sup>	SL 32	40	26	22	93	27	DNMG 1104XX	M6x1x17	LV3 G0312	PS DNMG 1104	0.09
300562	PDUNL 32-1 1/4 CP <sup>1</sup>	SL 32	40	26	22	93	27	DNMG 1104XX	M6x1x17	LV3 G0312	PS DNMG 1104	0.09
300086	PDUNR 40-1 1/2 CP <sup>1</sup>	SL 40	50	26	30	93	27	DNMG 1506XX	M8x1x21	LV4 G0516	PS DNMG 1506	0.14
300402	PDUNL 40-1 1/2 CP <sup>1</sup>	SL 40	50	26	30	93	27	DNMG 1506XX	M8x1x21	LV4 G0516	PS DNMG 1506	0.14

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, PTFNL for TNMG Inserts

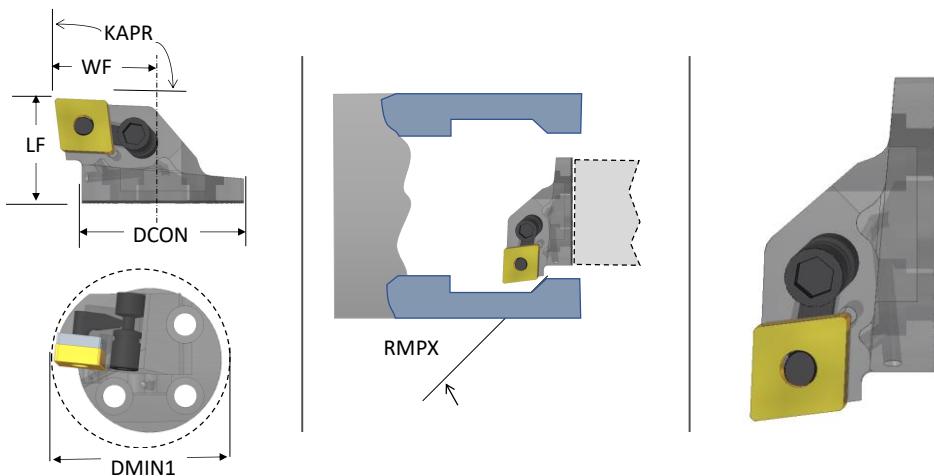


Part Number	Type	DCON (mm)	DMIN1 (mm)	LF (mm)	WF (mm)	KAPR (°)	RMPX (°)	Insert	Slot screw	Level	Shim	
300429	PTFNR 32-1 1/4 CP <sup>1</sup>	SL 32	40	27	22	91	NA	TNMG 1604XX	M6x1x17	LV3 G0310	PS TNMG 1604	0.09
300563	PTFNL 32-1 1/4 CP <sup>1</sup>	SL 32	40	27	22	91	NA	TNMG 1604XX	M6x1x17	LV3 G0310	PS TNMG 1604	0.09
300088	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
300403	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

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, PCLNL for CNMG Inserts

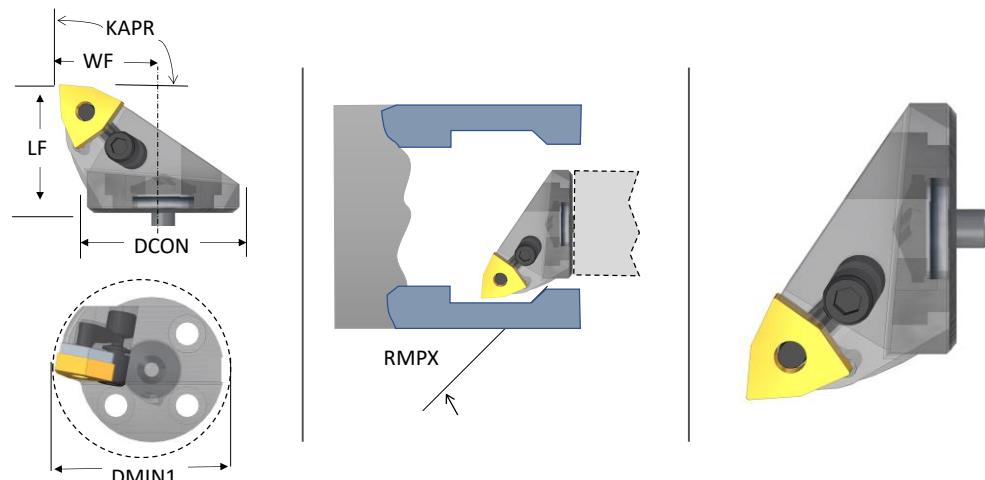


Part Number	Type	DCON (mm)	DMIN1 (mm)	LF (mm)	WF (mm)	KAPR (°)	RMPX (°)	Insert	Slot screw	Level	Shim	
300428	PCLNR 32-1 1/4 CP <sup>1</sup>	SL 32	40	26	22	95	NA	CNMG 1204XX	M6x1x17	LV4 G0513	PS CNMG 1204	0.09
300564	PCLNL 32-1 1/4 CP <sup>1</sup>	SL 32	40	26	22	95	NA	CNMG 1204XX	M6x1x17	LV4 G0513	PS CNMG 1204	0.09
300087	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
300404	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

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

## PWLNR, PWLNL for WNMG Inserts



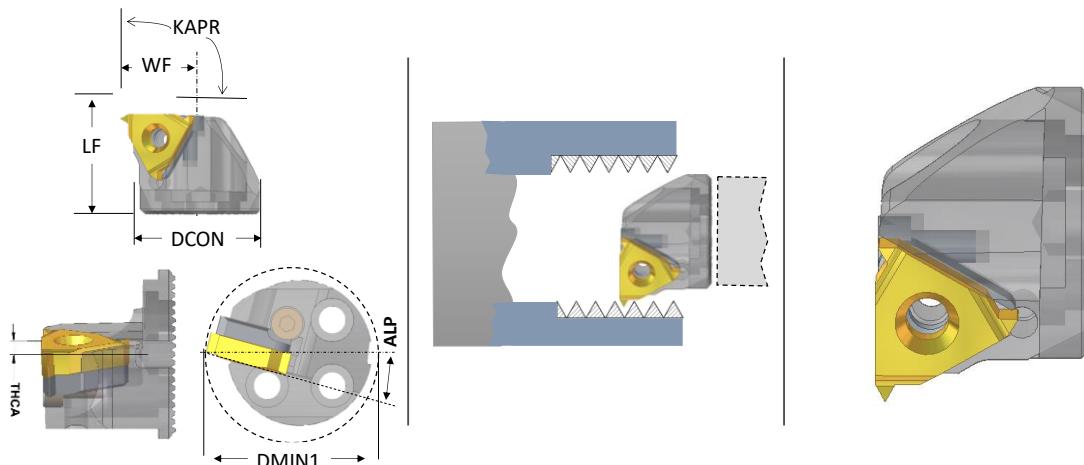
Part Number	Type	DCON (mm)	DMIN1 (mm)	LF (mm)	WF (mm)	KAPR (°)	RMPX (°)	Insert	Slot screw	Level	Shim	
300474	PWLNR 40-1 1/2 CP <sup>1</sup>	SL 40	50	26	27	95	NA	WNMG 0804XX	M8x1x21	LV4 G0513	PS WNMG 0804	0.14
300475	PWLNL 40-1 1/2 CP <sup>1</sup>	SL 40	50	26	27	95	NA	WNMG 0804XX	M8x1x21	LV4 G0513	PS WNMG 0804	0.14

All cutter heads are delivered with the insert clamp screw.

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

## End effectors - Threading

SXFNL for threading Left hand.



### Left hand

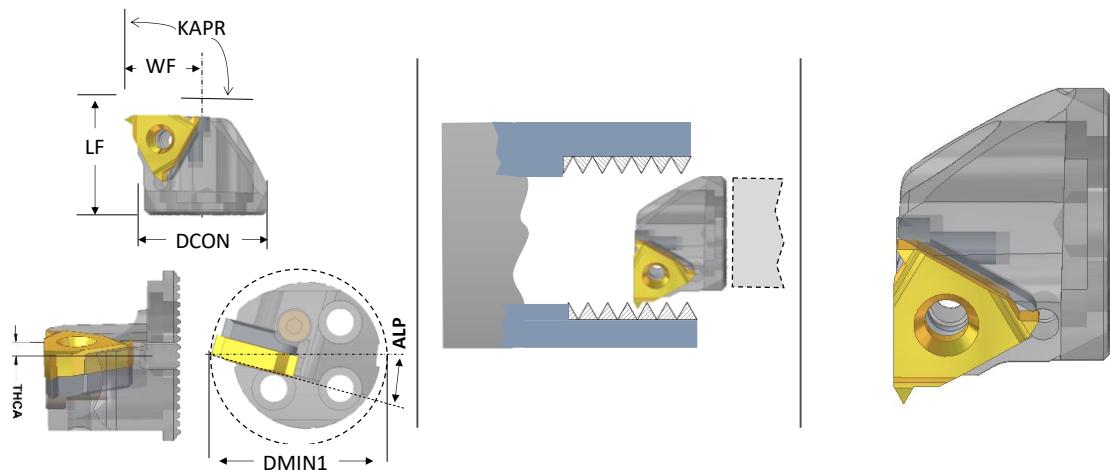
Part Number	Type	DCON (mm)	DMIN1 (mm)	LF	WF	Master insert	Insert screw	Anvil	Anvil screw	ALP	THCA
300268	<b>SXFNL 12 11<sup>1</sup></b>	12	16	16	8.9 <sup>2</sup>	11 IL A60	IS M2.5x5.5xD4.2	NA	NA	15 °	2 °
300269	<b>SXFNL 16 11<sup>1</sup></b>	16	20	20	10.4 <sup>2</sup>	11 IL A60	IS M2.5x5.5xD4.2	NA	NA	15 °	1 °
300270	<b>SXFNL 16 16</b>	16	20	20	10.4 <sup>2</sup>	16 IL AG60	IS M3.5x11xD5.5	NA	NA	15 °	2 °
300271	<b>SXFNL 20 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 °
300272	<b>SXFNL 20 16</b>	20	25	23	13.7 <sup>2</sup>	16 IL AG60	IS M3.5x11xD5.5	NA	M3x6xD5.5	15 °	2 °
300273	<b>SXFNL 25 16</b>	25	30	24	16.3 <sup>2</sup>	16 IL AG60	IS M3.5x11xD5.5	EA16	M3x6 xD5.5	15 °	1 °
300274	<b>SXFNL 25 22</b>	25	32	30	18.3 <sup>2</sup>	22 IL N60	IS M4.5X12XD6.8	EA22	M3x6 xD5.5	15 °	2 °
300275	<b>SXFNL 32 16</b>	32	37	28	19.7 <sup>2</sup>	16 IL AG60	IS M3.5x11xD5.5	EA16	M3x6 xD5.5	15 °	1 °
300276	<b>SXFNL 32 CP 22</b>	32	39	32	21.7 <sup>2</sup>	22 IL N60	IS M4.5X12XD6.8	EA22	M3x6 xD5.5	15 °	2 °
300277	<b>SXFNL 40 CP 16</b>	40	45	28	23.7 <sup>2</sup>	16 IL AG60	IS M3.5x11xD5.5	EA16	M3x6 xD5.5	15 °	1 °
300278	<b>SXFNL 40 CP 22</b>	40	47	30	25.7 <sup>2</sup>	22 IL N60	IS M4.5X12XD6.8	EA22	M3x6 xD5.5	15 °	2 °
300279	<b>SXFNL 40 CP 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 °

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

<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

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

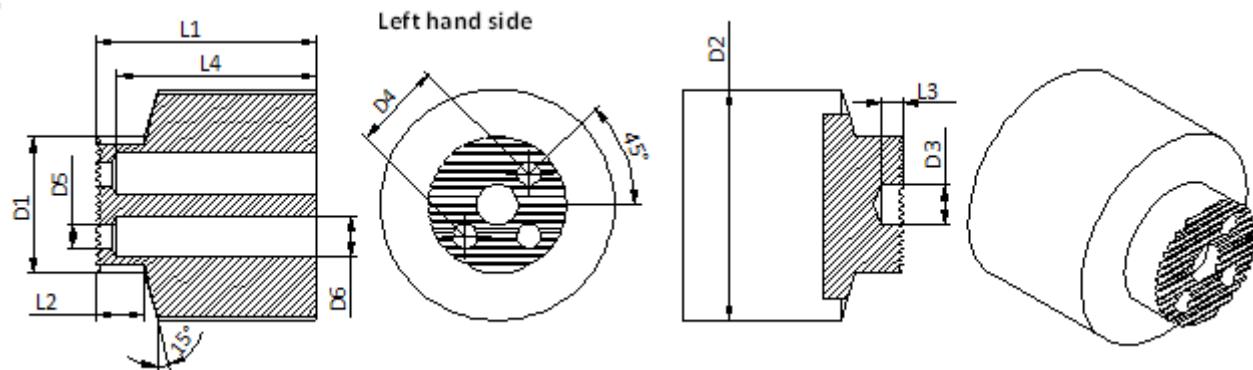
<sup>1</sup> Product available after 2023-Aug.

<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.

## End effectors – SL blanks

SL Blanks Left Hand Side:

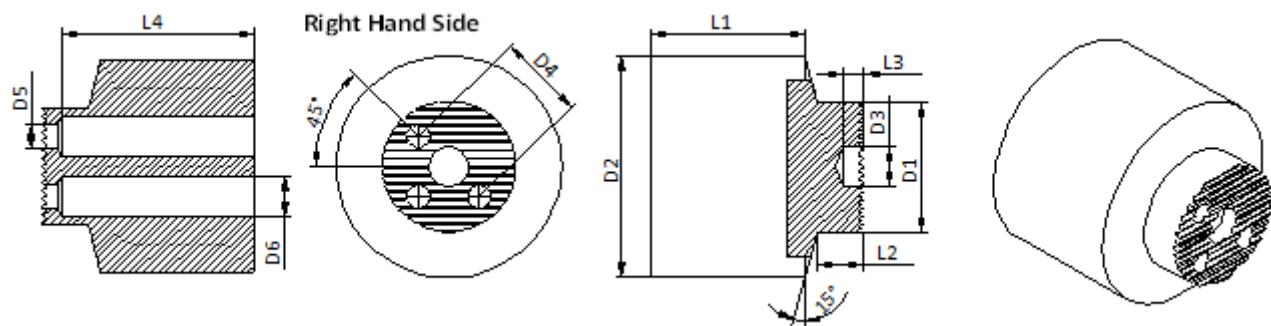


### Left

Part Number	Type	D1 (mm)	D2 (mm)	D3 N8** (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 Side:



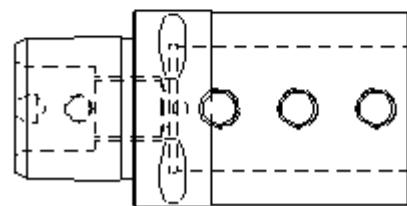
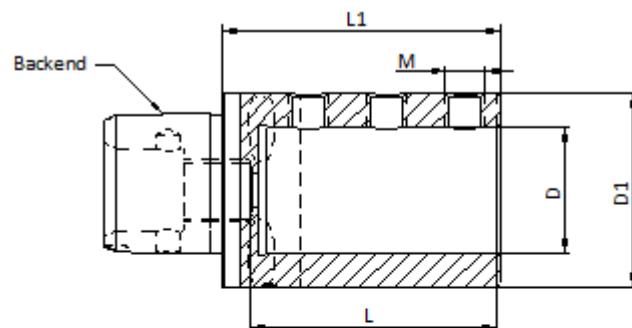
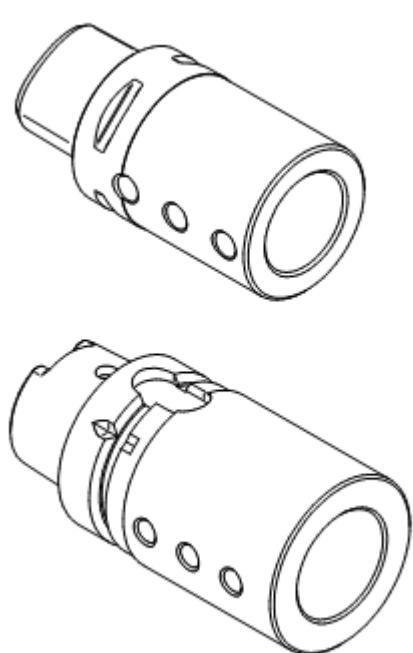
### Right

Part Number	Type	D1 (mm)	D2 (mm)	D3 N8** (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

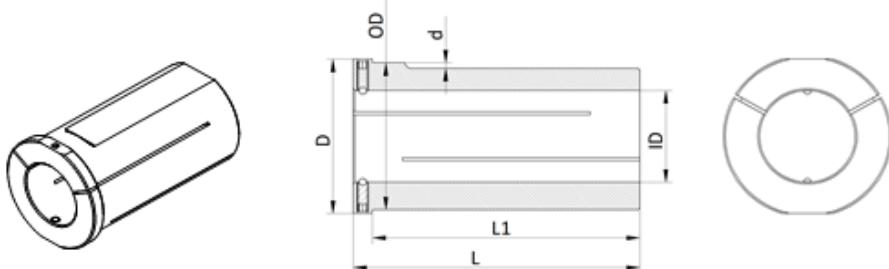
## Accessories

### 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)
-------------	------	------------	------------	--------	--------	---------	--------

300606	RS 20-16 <sup>c</sup>	32	25	55	37	50	1
300607	RS 20-12 <sup>c</sup>	32	20	55	37	50	1
300608	RS 20-10 <sup>c</sup>	32	16	55	37	50	1
300609	RS 20-08 <sup>c</sup>	32	12	55	37	50	1

300601	RS 25-20 <sup>b</sup>	32	20	61	30	56	1
300602	RS 25-16 <sup>b</sup>	32	16	61	30	56	1
300603	RS 25-12 <sup>b</sup>	32	12	61	30	56	1
300604	RS 25-10 <sup>b</sup>	32	10	61	30	56	1
300605	RS 25-08 <sup>b</sup>	32	8	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 <sup>a</sup>	32	10	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 <sup>a</sup>	40	8	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

<sup>a</sup> available after Aug 2023.
<sup>b</sup> available after Sep 2023
<sup>c</sup> available after Oct 2023

## Inch

Part Number	Type	OD g6 (inch)	ID H7 (inch)	L (inch)	D (inch)	L1 (inch)	d (inch)
300229	RS i 1 1/2 - 1 1/4	1 1/2	1 1/4	2.95	1.69	2.76	0.06
300230	RS i 1 1/2 - 1	1 1/2	1	2.95	1.65	2.76	0.06
300231	RS i 1 1/2 - 3/4	1 1/2	3/4	2.95	1.65	2.76	0.06
300232	RS i 1 1/2 - 5/8	1 1/2	5/8	2.95	1.65	2.76	0.06
300233	RS i 1 1/2 - 1/2	1 1/2	1/2	2.95	1.65	2.76	0.06
300234	RS i 1 1/2 - 3/8	1 1/2	3/8	2.95	1.65	2.76	0.06
300635	RS i 1 1/2 - 5/16 <sup>b</sup>	1 1/2	5/16	2.95	1.65	2.76	0.06

300235	RS i 1 1/4 - 1	1 1/4	1	2.56	1.46	2.36	0.04
300236	RS i 1 1/4 - 3/4	1 1/4	3/4	2.56	1.46	2.36	0.04
300237	RS i 1 1/4 - 5/8	1 1/4	5/8	2.56	1.46	2.36	0.04
300238	RS i 1 1/4 - 1/2	1 1/4	1/2	2.56	1.46	2.36	0.04
300239	RS i 1 1/4 - 3/8	1 1/4	3/8	2.56	1.46	2.36	0.04
300636	RS i 1 1/4 - 5/16 <sup>b</sup>	1 1/4	5/16	2.56	1.46	2.36	0.04

300639	RS i 2- 1 1/2 <sup>b</sup>	2	1 1/4	3.74	2.28	3.54	0.04
300640	RS i 2- 1 1/4 <sup>b</sup>	2	1 1/2	3.74	2.28	3.54	0.04
300641	RS i 2- 1 <sup>b</sup>	2	1	3.74	2.28	3.54	0.04

300642	RS i 2 1/2 - 2 <sup>b</sup>	2 1/2	2	4.33	2.67	4.13	0.04
300643	RS i 2 1/2 - 1 1/2 <sup>b</sup>	2 1/2	1 1/2	4.33	2.67	4.13	0.04

300644	RS i 3 - 2 1/2 <sup>b</sup>	3	2 1/2	5.04	3.46	4.84	0.04
300645	RS i 3 - 2 <sup>b</sup>	3	2	5.04	3.46	4.84	0.04

	<sup>b</sup> available after Sep 2023
--	---------------------------------------

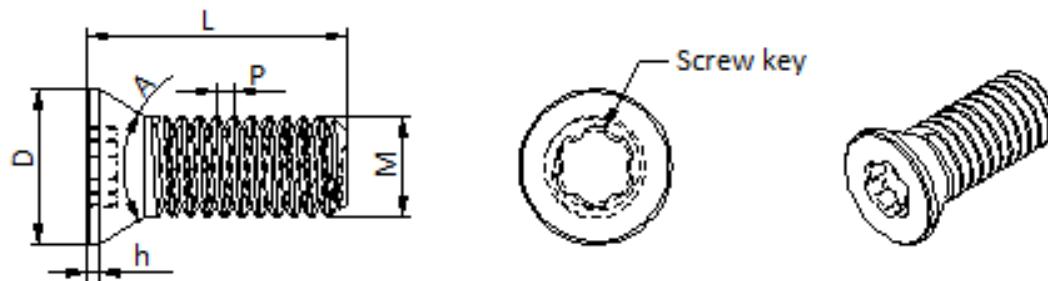
## Level Indicator/Digital protractor (angle inclinometer)



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.
--	---

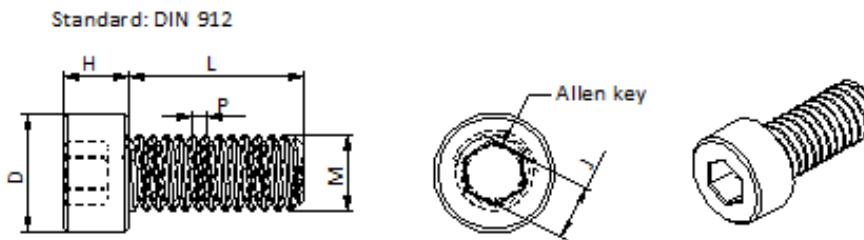
Insert screws:



### Insert screws

Part Number	Type	Designation	Thread M	D (mm)	L (mm)	A (°)	P (mm)	h (mm)	Torx Key
300257	<b>IS M2.2x5.0</b>	M2.2x5.0xD3.0xP0.45	M2.2	3.0	5.0	60	0.45	0.8	T7
300258	<b>IS M2.5x6.0</b>	M2.5x6.0xD3.6xP0.45	M2.5	3.6	6.0	55	0.45	0.6	T8
300620	<b>IS M2.5x8.0</b>	M2.5x8.0xD3.6xP0.45	M2.5	3.6	8.0	55	0.45	0.6	T8
300617	<b>IS M3.5x10.0</b>	M3.5x10.0xD5.3xP0.60	M3.5	5.3	10.0	60	0.60	1.2	T15
300618	<b>IS M4.0x15.0</b>	M4.0x15.0xD7.0xP0.70	M4.0	7.0	15.0	60	0.70	NA	T15
300619	<b>IS M4.5x12.0</b>	M4.5x12.0xD6.8xP0.75	M4.5	6.8	12	60	0.75	NA	T20
300425	<b>IS M5.0x18.0</b>	M5.0x18.0xD8.2xP0.8	M5.0	8.2	18	60	0.80	NA	T20

### Cutter head screws



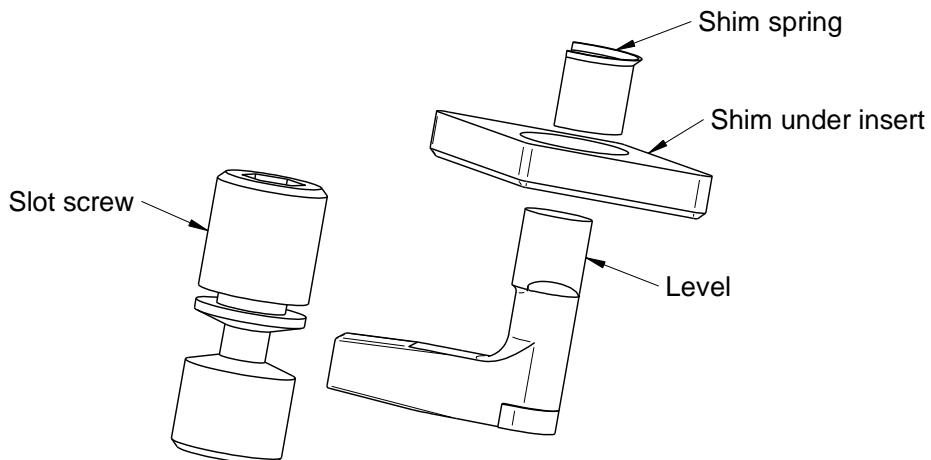
### Cutter head screws

Part Number	Type	Thread M	D (mm)	L (mm)	H (mm)	P (mm)	Key (mm)	Suitable for
300260	<b>HS M2x8</b>	M2	3.8	8	2	0.4	Allen key A/F 1.5	SL12
300261	<b>HS M2x14</b>	M2	3.8	14	2	0.4	Allen key A/F 1.5	SL12
300169	<b>HS M3x8</b>	M3	5.5	8	3	0.5	Allen key A/F 2.5	SL16, SL20
300170	<b>HS M4X9</b>	M4	7	9	4	0.7	Allen key A/F 3	SL25
300171	<b>HS M5X12</b>	M5	8.5	12	5	0.8	Allen key A/F 4	SL32
300262	<b>HS M6X14</b>	M6	10	14	6	1	Allen key A/F 5	SL40
300263	<b>HS M8X14</b>	M8	13	14	8	1.25	Allen key A/F 6	SL50, SL60

## Shims

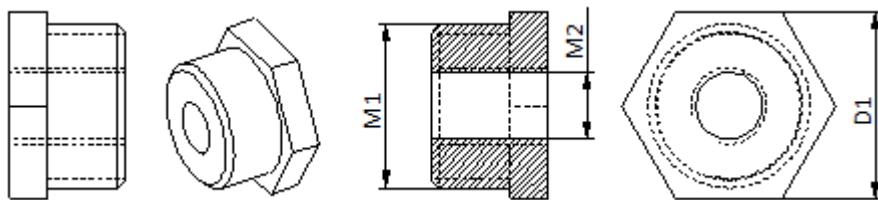
Part Number	Article	Suits for
300433	Shim CCMT 09T3	STMD M32-256 SCLCL/R, STMD M40-320 SCLCL/R
300430	Shim CCMT 1204	SCLCL/R-40-1 ½ CP
300431	Shim DCMT 11T3	SDUCL/R-40-1 ½ CP
300432	Shim TCMT 16T3	STFCL/R-40-1 ½ CP
300435	Shim EA16 - IL16	SXFNL 251724 16, SXFNL 322028 16, SXFNL 402028 16
300436	Shim IA16 - IR16	SXFNR 251724 16, SXFNR 322028 16, SXFNR 402028 16
300437	Shim EA22 - IL22	SXFNL 251932 22, SXFNL 322232 22, SXFNL 402032 22
300438	Shim IA22 - IR22	SXFNR 251932 22, SXFNR 322232 22, SXFNR 402032 22
300439	Shim EA27 - IL27	SXFNL 402035 27
300440	Shim IA27 - IR27	SXFNR 402035 27

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



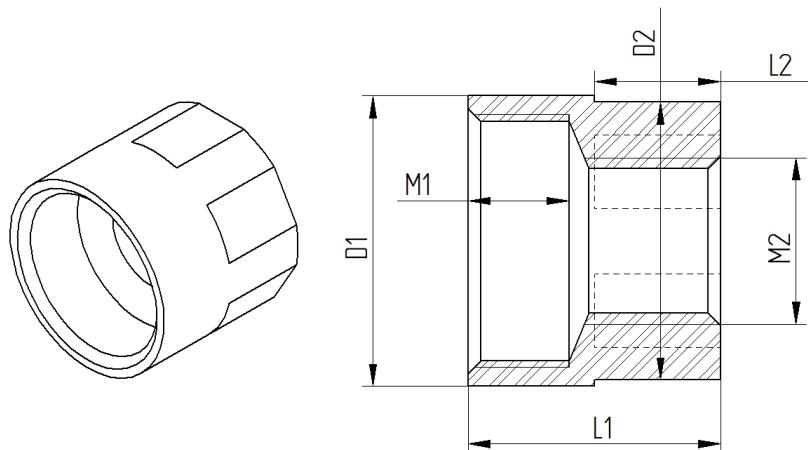
Part number	Service kit for	Cutter head	Level, 1 pcs	Shim, 1 pcs	Slot screw, 1 pcs	Spring, 1 pcs
300434	300086, 300402	PDUNR 40-1 ½ CP, PDUNL 40-1 ½ CP	LV4 G0516	Shim DNMG 1506	M8x1x21	T2-6
300426	300427, 300562	PDUNR 32-1 1/4, PDUNL 32-1/4	LV3 G0312	Shim DNMG 1104	M6x1x17	T1-5
300471	300088, 300403, 300429, 300563	PTFNR 40-1 ½ CP, PTFNL 40-1 ½ CP, PTFNR 32-1 1/4, PTFNL 32-1 1/4	LV3 G0310	Shim TNMG 1604	M6x1x17	T1-5
300472	300087, 300404	PCLNR 40-1 ½ CP, PCLNL 40-1 ½ CP	LV4 G0513	Shim CNMG 1204	M8x1x21	T2-6
300473	300428, 300564	PCLNR 32-1 1/4, PCLNL 32-1 1/4	LV4 G0513	Shim CNMG 1204	M6x1x17	T2-6

## Coolant adapters for steel bars



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

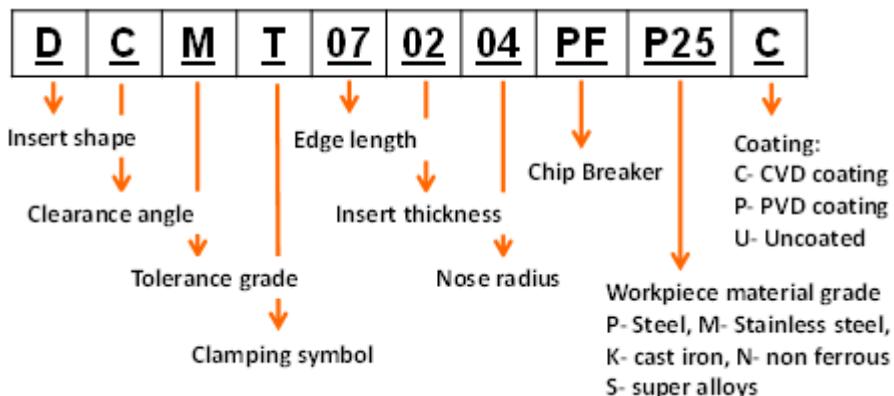
## Coolant adapters for carbide bars



Part Number	Type	M1	M2	L1	L2	D1	D2	Works for
300613	CA M12x1 G 1/8	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
300614	CA M16x1 G 1/4	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
300615	CA M20x1 G 1/4	M20x1	G 1/4	20	10	23	22	STMD M25-340, STMD I 1-16.9
300616	CA M24x1 G 1/4	M24x1	G 1/4	30	15	30	28	STMD M32-544, STMD I 1 1/4 -21.4

## 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	

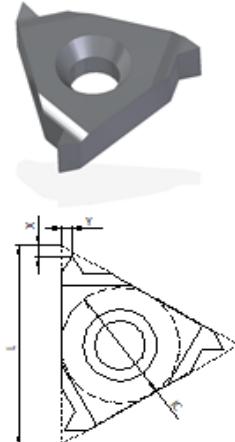
Part Number	Article	TNMG
300295	TNMG 160404-LC P25C	

Part Number	Article	CNMG
300296	CNMG 120404 LC P25C	

## 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

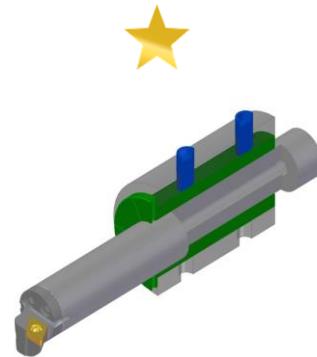
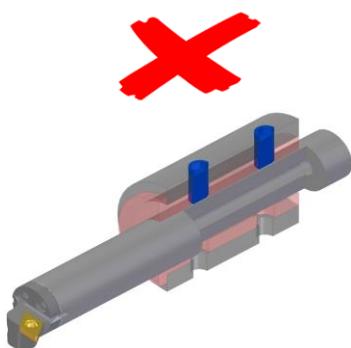
Part Number	Type	Pitch mm (TPI)	IC	L	X	Y
300297	11 IL A60 P25P	0.5-1.5 (48-16)	6.350	11	0.8	0.9
300298	16 IL A60 P25P	0.5-1.5 (48-16)	9.525	16	0.8	0.9
300299	16 IL G60 P25P	1.75-3.0 (14-8)	9.525	16	1.2	1.7
300300	16 IL AG60 P25P	1.0-3.0 (26-8)	9.525	16	1.2	1.7
300301	22 IL N60 P25P	3.5-5.0 (7-5)	12.7	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.					

## Sujeción de herramientas de torneado

La sujeción de la herramienta es muy importante en todas las operaciones, pero más aún cuando el voladizo es largo, es decir, relaciones L/D altas. Tenga en cuenta que una sujeción débil con poca rigidez a la flexión tendrá un impacto negativo en el rendimiento.



### Montaje de tornillo directo:

- Rigidez de flexión inaceptable
- Longitud de sujeción= N/A

### Mango Reductor:

- Rigidez de flexión aceptable para baja L/D
- Longitud de sujeción = 4xD



### Abrazadera:

- Mejor rigidez a la flexión
- Longitud de sujeción= 4xD

### Accesorios hidráulicos:

- Mejor rigidez a la flexión
- (Recomendado para alto L/D)
- Longitud de sujeción = 2xD a 4xD