

LEFT SPIRAL FLUTED TAPS



SL - DIN **196**
SL - ANSI **206**

Selection Chart

Intro

SP

SL

PO

ST

ROLL

CARBIDE

LONG

HAND TAPS

EG (STI)

SPECIAL THREADS, GAUGES

THREAD MILLS

DIES

CENTER DRILLS

Technical info

	Z-PRO		MP Multi Purpose				MS Material Specific				HS High Speed					
	MHSL		AU+SL		AUXSL		SL+VA		ZET-P		ZELX TI LHSP		F-SL		HDISL	
	HSS-Co	COATING	HSS-E	COATING	HSS-E	COATING	HSS-E	OX	HSS-P	NI	HSS-P	NI	HSS-E	COATING	HSS-Co	COATING
		DIN	DIN	DIN	DIN	DIN	DIN	DIN	DIN	ANSI	DIN	DIN				
M		197	199	200	201	203	203	203	203		204	205				
MF		197	199						203		204	205				
UNC/UNF										206						
UNS, 8, 12, 20, 32UN																
UNEF																
G (BSP)																
Rp (BSPP)																
Rc (BSPT)																
NPT																
NPTF																
NPSC, NPSM, NPSF																
BSW																
EG(STI), M, MF, UNC/UNF																
Pg																
Tr																
S miniature																
Special threads																
	Vc (m/min)															
P1			★ 10÷20	★ 10÷25	★ 10÷15						★ 15÷25	★ 20÷50				
P2	★ 10÷30	★ 10÷20	★ 10÷25	★ 10÷15							★ 15÷25	★ 20÷50				
P3	★ 10÷25	★ 10÷20	★ 10÷25	★ ≤10							☆ 15÷25	★ 20÷30				
P4	★ 10÷20	★ 10÷20	★ 10÷25	☆ ≤10	☆ 5÷10	☆ 5÷10	☆ 15÷25	★ 20÷30								
P5	☆ 10÷15					☆ 5÷8	☆ 5÷8									
P6						☆ 3÷6	☆ 3÷6									
P7	☆ 10÷20	★ 5÷12	★ 10÷15	★ 5÷15							☆ 10÷20	☆ 15÷30				
P8						☆ 3÷6	☆ 3÷6									
M1	☆ 10÷20	★ 5÷12	★ 10÷15	★ 5÷15							☆ 10÷20	☆ 15÷30				
M2		★ 5÷10	★ 10÷15	☆ 5÷10							☆ 10÷20	☆ 15÷25				
M3						☆ 3÷6	☆ 3÷6									
K1											☆ 15÷25	★ 20÷40				
K2		☆ 10÷15	☆ 10÷25			☆ 5÷10	☆ 5÷10	☆ 15÷25	★ 20÷40							
K3						☆ 5÷10	☆ 5÷10									
K4																
N1		★ 20÷30	★ 20÷30								★ 15÷30	★ 30÷100				
N2		★ 20÷30	★ 20÷30								★ 15÷30	★ 30÷100				
N3		☆ 15÷25	☆ 15÷25													
N4		☆ 15÷25	☆ 15÷25								☆ 15÷25	☆ 30÷60				
N5																
S1 (<25 HRC)						☆ 5÷10	☆ 5÷10									
S2 (<35 HRC)						☆ 5÷10	☆ 5÷10									
S3 (35 ÷ 45 HRC)						★ 3÷6	☆ 3÷6									
S5						★ 5÷10	★ 5÷10									
H (45 ÷ 55 HRC)																
H (55 ÷ 63 HRC)																

★ 1st choice ☆ suitable

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MHSL

Z-PRO Series

Left Spiral Fluted Taps for Carbon Steel of Medium Hardness, Coated



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DIN



FEATURES

Z-PRO Series for Medium Hardness workpiece materials. Most suitable for high carbon steel (C48 ÷ C55) and alloy steel 20 ÷ 30HRC. Long life thanks to HSSCo substrate and special coating. Left hand spiral design allows smooth chip ejection.

PO

Recommended Tapping Speeds Depending On Materials

ISO	Vc (m/min)	ISO	Vc (m/min)
P2	10÷30 ★	M1	10÷20 ☆
P3	10÷25 ★		
P4	10÷20 ★		
P5	10÷15 ☆		
P7	10÷20 ☆		

★ 1st choice ☆ suitable

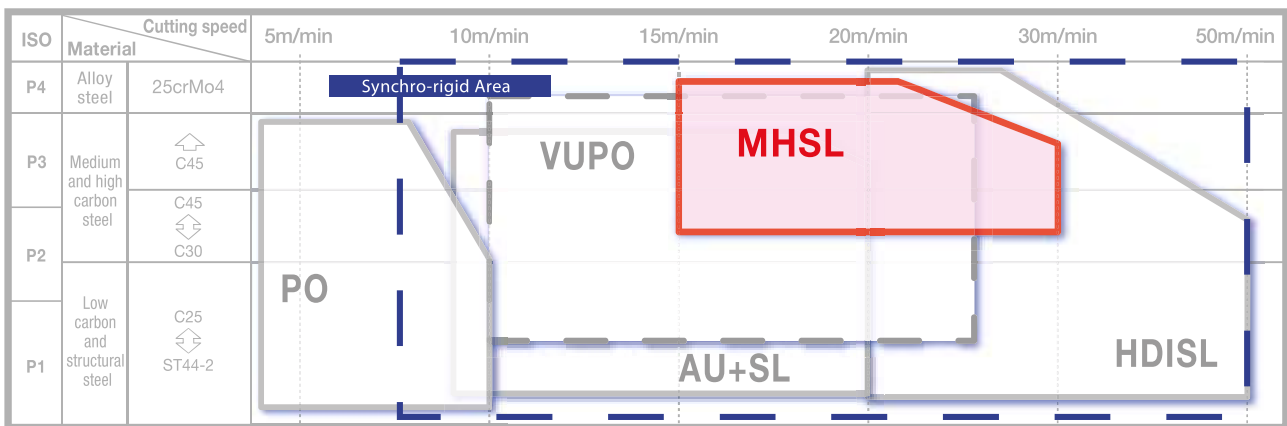
ST



WATCH THE VIDEO

ROLL

Product Features



CARBIDE

LONG

HAND TAPS

EG (STI)

M12x1.25

Work-material	S53C (25HRC)
Tapping length	13 mm
Tapping speed	30 m/min
Machine	CNC machine
Lubricant	Water soluble oil

SPECIAL THREADS, GAUGES

THREAD MILLS

Flute design

To improve the chip ejection, MHSL series is designed with special flute shape to push out the chips smoothly.

Chip shape

The chips generated by MHSL special flute design, feature regular and narrow shape very easy to be ejected.

Thread finishing

Innovative geometry combined with suitable coating result in excellent thread finishing.

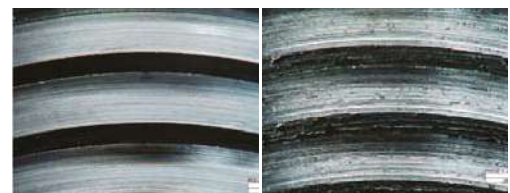
DIES

CENTER DRILLS

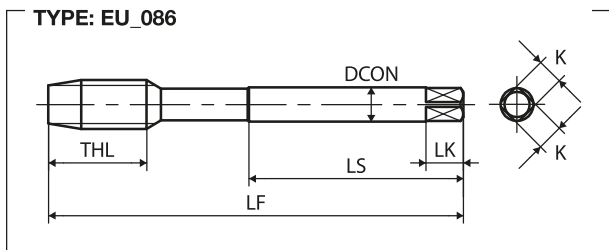
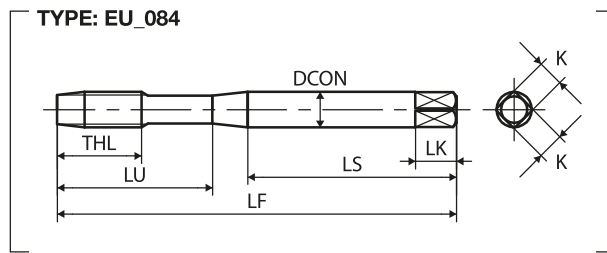
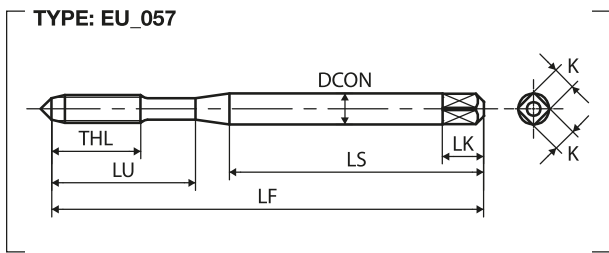


MHSL

Competitor



Technical info



M	TCTR (tolerance)	\varnothing (mm)	Hole \varnothing (mm)	Code	THCHT (chamfer)	LF (mm)	THL (mm)	LU (mm)	LS (mm)	DCON (mm)	K (mm)	LK (mm)	NOF	Type	Stock
DIN 371															
M6X1	IS02X(6HX)	5	5.09	LD6.0MBFCL5	5P	80	15	30	45	6	4.9	8	3	057	●
M8X1.25	IS02X(6HX)	6.8	6.85	LD8.0MBFCL5	5P	90	19	35	47	8	6.2	9	3	084	●
M10X1.5	IS02X(6HX)	8.5	8.6	LD0100BFCL5	5P	100	23	39	52	10	8	11	3	084	●
M	TCTR (tolerance)	\varnothing (mm)	Hole \varnothing (mm)	Code	THCHT (chamfer)	LF (mm)	THL (mm)	LU (mm)	LS (mm)	DCON (mm)	K (mm)	LK (mm)	NOF	Type	Stock
DIN 376															
M12X1.75	IS02X(6HX)	10.3	10.36	LG012PBFCL5	5P	110	26	-	56	9	7	10	4	086	●
MF	TCTR (tolerance)	\varnothing (mm)	Hole \varnothing (mm)	Code	THCHT (chamfer)	LF (mm)	THL (mm)	LU (mm)	LS (mm)	DCON (mm)	K (mm)	LK (mm)	NOF	Type	Stock
DIN 374															
M10X1.25	IS02X(6HX)	8.8	8.85	LM010NBFCL5	5P	100	23	-	51	7	5.5	8	3	086	●
M12X1.5	IS02X(6HX)	10.5	10.6	LM0120BFCL5	5P	100	21	-	51	9	7	10	4	086	●
M12X1.25	IS02X(6HX)	10.8	10.85	LM012NBFCL7	7P	100	21	-	51	9	7	10	4	086	●
M14X1.5	IS02X(6HX)	12.5	12.6	LM0140BFCL7	7P	100	21	-	51	11	9	12	4	086	●
M16X1.5	IS02X(6HX)	14.5	14.6	LM0160BFCL7	7P	100	21	-	51	12	9	12	4	086	●

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