Think threads with YAMAWA

PM SERIES

Reliable and high performance tapping for the mould&die industry

09. 2024

▪ HSSP series for mould&die industry ▪

PM-SP PM-PO (M-MF)
PMSP OX PMST OX (Rc-BSPT)

PM-SP - PM-PO (M-MF)

HSSP series for mould&die industry

- PM series can cover a wide range of materials from high carbon steels to a high tensile strength steel up to 45 HRC.
- Thanks to toughness and wear resistance (as combination of HSSP material + suitable geometry), PM shows best performance in the application area of 25-45 HRC steel.
- PM combined with already existing red ring taps (PH and EH) improves the Yamawa product range for tough materials widely used in the mould&die industry.

ISO	Materials	Hardness	Lower tapping speed is recommended (~5m/min)
P6	High tensile strength steel	40~45 HRC	EH (HSS-Co)
P5	Tool steel (100MnCrW4-1.2510 40CrMnMo7-1.2311)	30~40 HRC	PM (HSS-P)
P4	High alloy steel (CrMo, NiCrMo)	25~30 HRC	PH (HSS-E)

5m/min

Most Suitable — Suitable

LOW

PMSP OX - PMST OX (Rc-BSPT)

Z-PRO Series

HSSP series for mould&die industry

- Oxidation surfate treatment enables flutes to retain more oil during tapping helping to avoid welding problems on the thread portion of the tap, resulting in excellent internal surface
- Material specific taps for blind hole application (PMSP) and for blind and through application (PMST)
- Specific design and premium grade HSP for stable and long life on alloy steel and tool steel (25 ÷ 45 HRC) application
- Reliable and high performance tapping for the mould&die industry

ISO	Materials	Hardness	Lower tapping speed is recommended (~5m/min)
P6	High tensile strength steel	40~45 HRC	
P5	Tool steel (100MnCrW4-1.2510 40CrMnMo7-1.2311)	30~40 HRC	PM (HSS-P)
P4	High alloy steel (CrMo, NiCrMo)	25~30 HRC	

5m/min

Most Suitable — Suitable

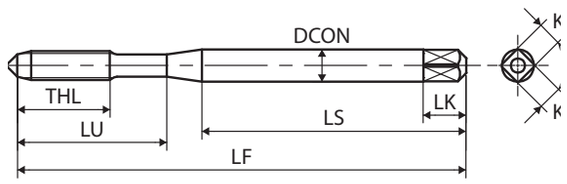
LOW

PM-SP

HSS-P

2.75P THCHT

TYPE: EU_057



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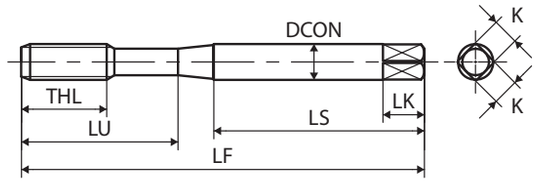

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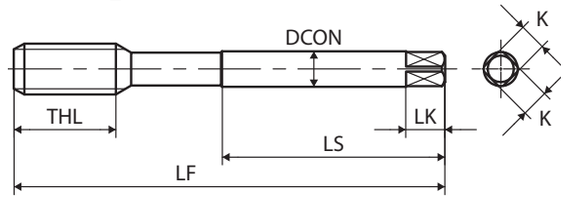


M	TCTR (tolerance)	Ø (mm)	Hole Ø (mm)	Code	THCHT (chamfer)	LF (mm)	LT (mm)	THL (mm)	LU (mm)	LS (mm)	DCON (mm)	K (mm)	LK (mm)	NOF	Type	Stock
DIN 371																
M3X0.5	IS02X(6HX)	2.5	2.56	SD3.0GBDPB	2.75P	56	-	9	18	34	3.5	2.7	6	3	057	●
M4X0.7	IS02X(6HX)	3.3	3.38	SD4.0IBDPB	2.75P	63	-	13	21	38	4.5	3.4	6	3	057	●
M5X0.8	IS02X(6HX)	4.2	4.28	SD5.0KBDPB	2.75P	70	-	14	25	39	6	4.9	8	3	057	●
M6X1	IS02X(6HX)	5	5.09	SD6.0MBDPB	2.75P	80	-	15	30	45	6	4.9	8	3	057	●
M8X1.25	IS02X(6HX)	6.8	6.85	SD8.0NBDPB	2.75P	90	-	19	35	47	8	6.2	9	3	004	●
M10X1.5	IS02X(6HX)	8.5	8.6	SD010OBDPB	2.75P	100	-	23	39	52	10	8	11	3	004	●

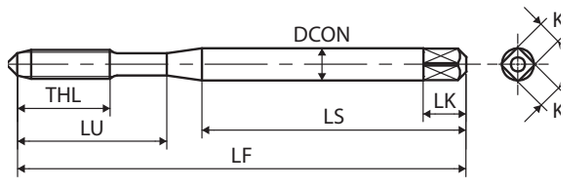
M	TCTR (tolerance)	Ø (mm)	Hole Ø (mm)	Code	THCHT (chamfer)	LF (mm)	LT (mm)	THL (mm)	LU (mm)	LS (mm)	DCON (mm)	K (mm)	LK (mm)	NOF	Type	Stock
DIN 376																
M12X1.75	IS02X(6HX)	10.3	10.36	SG012PBDPB	2.75P	110	-	26	-	56	9	7	10	3	010	●
M14X2	IS02X(6HX)	12	12.12	SG014QBDPB	2.75P	110	-	26	-	56	11	9	12	3	010	●
M16X2	IS02X(6HX)	14	14.12	SG016QBDPB	2.75P	110	-	26	-	56	12	9	12	3	010	●
M18X2.5	IS02X(6HX)	15.5	15.63	SG018RBDPB	2.75P	125	-	33	-	64	14	11	14	4	010	●
M20X2.5	IS02X(6HX)	17.5	17.63	SG020RBDPB	2.75P	140	-	33	-	71	16	12	15	4	010	●
M22X2.5	IS02X(6HX)	19.5	19.63	SG022RBDPB	2.75P	140	-	33	-	71	18	14.5	17	4	010	●
M24X3	IS02X(6HX)	21	21.13	SG024SBDPB	2.75P	160	-	37	-	82	18	14.5	17	4	010	●
M27X3	IS02X(6HX)	24	24.13	SG027SBDPB	2.75P	160	-	37	-	82	20	16	19	4	010	●
M30X3.5	IS02X(6HX)	26.5	26.63	SG030TBDPB	2.75P	180	-	44	-	92	22	18	21	4	010	●

MF	TCTR (tolerance)	Ø (mm)	Hole Ø (mm)	Code	THCHT (chamfer)	LF (mm)	LT (mm)	THL (mm)	LU (mm)	LS (mm)	DCON (mm)	K (mm)	LK (mm)	NOF	Type	Stock
DIN 374																
M8X1	IS02X(6HX)	7	7.09	SM8.0MBDPB	2.75P	100	-	12	-	51	7	5.5	8	3	010	●
M10X1.25	IS02X(6HX)	8.8	8.85	SM010NBDPB	2.75P	100	-	23	-	51	7	5.5	8	3	010	●
M10X1	IS02X(6HX)	9	9.09	SM010MBDPB	2.75P	100	-	13	-	51	7	5.5	8	3	010	●
M12X1.5	IS02X(6HX)	10.5	10.6	SM012OBDPB	2.75P	100	-	21	-	51	9	7	10	3	010	●
M12X1.25	IS02X(6HX)	10.8	10.85	SM012NBDPB	2.75P	100	-	21	-	51	9	7	10	3	010	●
M14X1.5	IS02X(6HX)	12.5	12.6	SM014OBDPB	2.75P	100	-	21	-	51	11	9	12	3	010	●
M16X1.5	IS02X(6HX)	14.5	14.6	SM016OBDPB	2.75P	100	-	21	-	51	12	9	12	3	010	●

MF	TCTR (tolerance)	Ø (mm)	Hole Ø (mm)	Code	THCHT (chamfer)	LF (mm)	LT (mm)	THL (mm)	LU (mm)	LS (mm)	DCON (mm)	K (mm)	LK (mm)	NOF	Type	Stock
DIN 374																
M18X1.5	IS02X(6HX)	16.5	16.6	SM0180BDPB	2.75P	110	-	24	-	56	14	11	14	4	010	●
M20X1.5	IS02X(6HX)	18.5	18.6	SM0200BDPB	2.75P	125	-	24	-	64	16	12	15	4	010	●
M22X1.5	IS02X(6HX)	20.5	20.6	SM0220BDPB	2.75P	125	-	24	-	64	18	14.5	17	4	010	●
M24X2	IS02X(6HX)	22	22.12	SM024QBDPB	2.75P	140	-	27	-	71	18	14.5	17	4	010	●
M24X1.5	IS02X(6HX)	22.5	22.6	SM0240BDPB	2.75P	140	-	27	-	71	18	14.5	17	4	010	●
M27X2	IS02X(6HX)	25	25.12	SM027QBDPB	2.75P	140	-	20	-	71	20	16	19	4	010	●
M27X1.5	IS02X(6HX)	25.5	25.6	SM0270BDPB	2.75P	140	-	27	-	71	20	16	19	4	010	●
M30X2	IS02X(6HX)	28	28.12	SM030QBDPB	2.75P	150	-	20	-	77	22	18	21	4	010	●
M30X1.5	IS02X(6HX)	28.5	28.6	SM0300BDPB	2.75P	150	-	27	-	77	22	18	21	4	010	●

PM-PO

TYPE: EU_057



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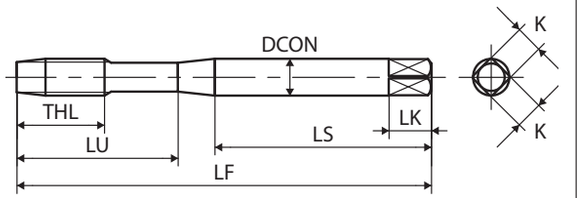

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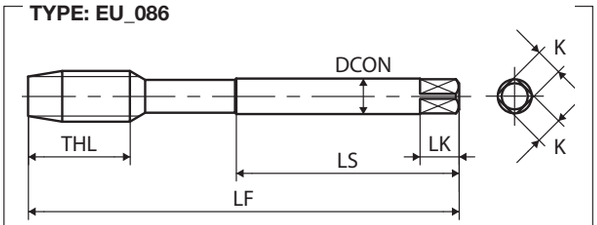


M	TCTR (tolerance)	Ø (mm)	Hole Ø (mm)	Code	THCHT (chamfer)	LF (mm)	THL (mm)	LU (mm)	LS (mm)	DCON (mm)	K (mm)	LK (mm)	NOF	Type	Stock
DIN 371															
M3X0.5	IS02X(6HX)	2.5	2.56	PD3.0GBDPB	5.5P	56	9	18	34	3.5	2.7	6	3	057	●
M4X0.7	IS02X(6HX)	3.3	3.38	PD4.0IBDPB	5.5P	63	13	21	38	4.5	3.4	6	3	057	●
M5X0.8	IS02X(6HX)	4.2	4.28	PD5.0KBDPB	5.5P	70	14	25	39	6	4.9	8	3	057	●
M6X1	IS02X(6HX)	5	5.09	PD6.0MBDPB	5.5P	80	15	30	45	6	4.9	8	3	057	●
M8X1.25	IS02X(6HX)	6.8	6.85	PD8.0NBDPB	5.5P	90	19	35	47	8	6.2	9	3	084	●
M10X1.5	IS02X(6HX)	8.5	8.6	PD010OBDPB	5.5P	100	23	39	52	10	8	11	3	084	●

M	TCTR (tolerance)	Ø (mm)	Hole Ø (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	PG012PBDPB	5.5P	110	26	-	56	9	7	10	3	086	●
M14X2	IS02X(6HX)	12	12.12	PG014QBDPB	5.5P	110	26	-	56	11	9	12	3	086	●
M16X2	IS02X(6HX)	14	14.12	PG016QBDPB	5.5P	110	26	-	56	12	9	12	3	086	●
M18X2.5	IS02X(6HX)	15.5	15.63	PG018RBDPB	5.5P	125	33	-	64	14	11	14	4	086	●
M20X2.5	IS02X(6HX)	17.5	17.63	PG020RBDPB	5.5P	140	33	-	71	16	12	15	4	086	●
M22X2.5	IS02X(6HX)	19.5	19.63	PG022RBDPB	5.5P	140	33	-	71	18	14.5	17	4	086	●
M24X3	IS02X(6HX)	21	21.13	PG024SBDPB	5.5P	160	37	-	82	18	14.5	17	4	086	●
M27X3	IS02X(6HX)	24	24.13	PG027SBDPB	5.5P	160	37	-	82	20	16	19	4	086	●
M30X3.5	IS02X(6HX)	26.5	26.63	PG030TBDPB	5.5P	180	44	-	92	22	18	21	4	086	●

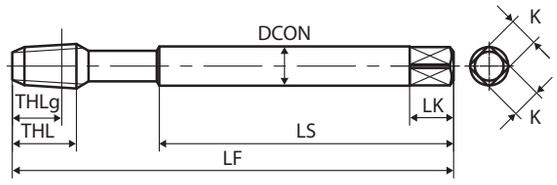
MF	TCTR (tolerance)	Ø (mm)	Hole Ø (mm)	Code	THCHT (chamfer)	LF (mm)	THL (mm)	LU (mm)	LS (mm)	DCON (mm)	K (mm)	LK (mm)	NOF	Type	Stock
DIN 374															
M10X1.25	ISO2X(6HX)	8.8	8.85	PM010NBDPB	5.5P	100	23	-	51	7	5.5	8	3	086	●
M12X1.5	ISO2X(6HX)	10.5	10.6	PM0120BDPB	5.5P	100	21	-	51	9	7	10	3	086	●
M12X1.25	ISO2X(6HX)	10.8	10.85	PM012NBDPB	5.5P	100	21	-	51	9	7	10	3	086	●
M14X1.5	ISO2X(6HX)	12.5	12.6	PM0140BDPB	5.5P	100	21	-	51	11	9	12	3	086	●
M16X1.5	ISO2X(6HX)	14.5	14.6	PM0160BDPB	5.5P	100	21	-	51	12	9	12	3	086	●
M18X1.5	ISO2X(6HX)	16.5	16.6	PM0180BDPB	5.5P	110	24	-	56	14	11	14	4	086	●
M20X1.5	ISO2X(6HX)	18.5	18.6	PM0200BDPB	5.5P	125	24	-	64	16	12	15	4	086	●
M22X1.5	ISO2X(6HX)	20.5	20.6	PM0220BDPB	5.5P	125	24	-	64	18	14.5	17	4	086	●
M24X1.5	ISO2X(6HX)	22.5	22.6	PM0240BDPB	5.5P	140	27	-	71	18	14.5	17	4	086	●
M27X1.5	ISO2X(6HX)	25.5	25.6	PM0270BDPB	5.5P	140	27	-	71	20	16	19	4	086	●
M30X1.5	ISO2X(6HX)	28.5	28.6	PM0300BDPB	5.5P	150	27	-	77	22	18	21	4	086	●

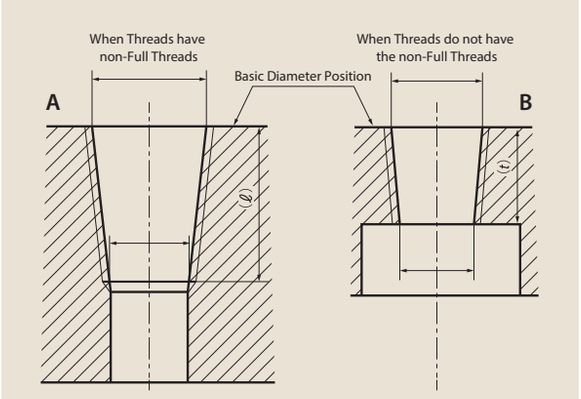
Dimensions and sizes

PMSP OX

HSS-P | OX | 2.5P THCHT

TYPE: EU_002



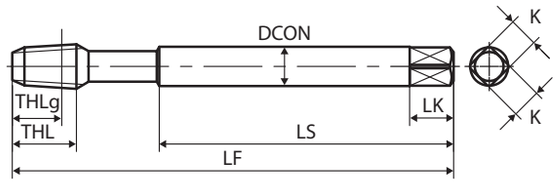


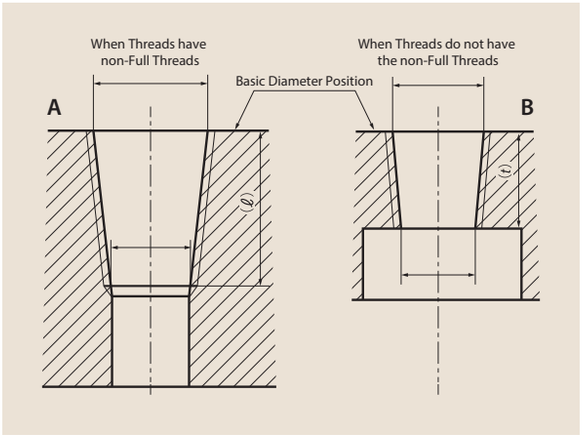
Rc(BSPT)	TCTR (tolerance)	A	B	Code	THCHT (chamfer)	Basic major Ø (mm)	LF (mm)	THL (mm)	THLg (mm)	LS (mm)	DCON (mm)	K (mm)	LK (mm)	NOF	Type	Stock
JIS																
1/8 - 28	-	8.1	8.2	SJRC020DPX	2.5P	9.728	90	15	10.1	46	8	6	9	3	002	●
1/4 - 19	-	10.7	10.9	SJRC040DPX	2.5P	13.157	100	19	15.0	51	11	9	12	3	002	●
3/8 - 19	-	14.2	14.4	SJRC060DPX	2.5P	16.662	100	21	15.4	51	14	11	14	3	002	●
1/2 - 14	-	17.6	17.9	SJRC080DPX	2.5P	20.955	125	26	20.5	64	18	14	17	4	002	●
3/4 - 14	-	23	23.3	SJRC120DPX	2.5P	26.441	140	28	21.8	71	23	17	20	4	002	○
1" - 11	-	29	29.3	SJRC160DPX	2.5P	33.249	160	33	26.0	82	26	21	24	4	002	○

PMST OX Rc

HSS-P | OX | 2.5P THCHT

TYPE: EU_002





Rc(BSPT)	TCTR (tolerance)	A	B	Code	THCHT (chamfer)	Basic major Ø (mm)	LF (mm)	THL (mm)	THLg (mm)	LS (mm)	DCON (mm)	K (mm)	LK (mm)	NOF	Type	Stock
JIS																
1/8 - 28	-	8.1	8.2	TJRC020DPX	2.5P	9.728	90	15	10.1	46	8	6	9	4	002	●
1/4 - 19	-	10.7	10.9	TJRC040DPX	2.5P	13.157	100	19	15.0	51	11	9	12	4	002	●
3/8 - 19	-	14.2	14.4	TJRC060DPX	2.5P	16.662	100	21	15.4	51	14	11	14	4	002	●
1/2 - 14	-	17.6	17.9	TJRC080DPX	2.5P	20.955	125	26	20.5	64	18	14	17	4	002	●
3/4 - 14	-	23	23.3	TJRC120DPX	2.5P	26.441	140	28	21.8	71	23	17	20	4	002	○
1" - 11	-	29	29.3	TJRC160DPX	2.5P	33.249	160	33	26.0	82	26	21	24	5	002	○

NOTES

Think threads with YAMAWA

$YPM

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