

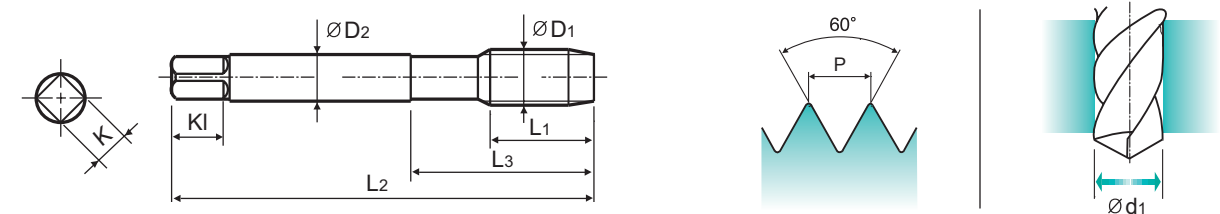


TM293 SERIES

M-Az ISO metric coarse threads DIN 13
 ● Metrisches ISO-Gewinde DIN 13
 ● ISO MÉTRIQUE DIN13
 ● ISO Metrico passo grosso DIN 13

▶ Interrupted tap to reduce contact area and tapping torque, and to give more chip space.

▶ Gewindebohrer mit ausgesetzten Zähnen um die Kontaktzone mit dem Werkstück und das Drehmoment zu minimieren und dem Span mehr Raum zu geben.



Material groups: **Ti**, HSS PM, DIN 371/376, 6H, 60°, B, Bright, p.B276

Recommended ToolHolder: Plain Shank TAPPING ER CHUCK D215-220, TAPPING CHUCK D221-228, ONE STEP TAPPING CHUCK D211-213

Unit : mm

SIZE	Pitch	EDP No.	Thread Length	Overall Length	Neck Length	Shank Diameter	Square Size	Square Length	No. of Flute	Tapping Drill Diameter
ØD1	P	Bright	L1	L2	L3	ØD2	K	KI	Z	Ød1
M2 × 0.4		TM293136	8	45	13	2.8	2.1	5	3	1.6
M2.2 × 0.45		TM293156	8	45	13	2.8	2.1	5	3	1.75
*M2.3 × 0.4		TM293196	8	45	13	2.8	2.1	5	3	1.9
M2.5 × 0.45		TM293176	9	50	15	2.8	2.1	5	3	2.05
*M2.6 × 0.45		TM293496	9	50	15	2.8	2.1	5	3	2.1
M3 × 0.5		TM293206	11	56	18	3.5	2.7	6	3	2.5
M3.5 × 0.6		TM293226	12	56	20	4	3	6	3	2.9
M4 × 0.7		TM293246	13	63	21	4.5	3.4	6	3	3.3
M4.5 × 0.75		TM293266	14	70	25	6	4.9	8	3	3.7
M5 × 0.8		TM293286	15	70	25	6	4.9	8	3	4.2
M6 × 1		TM293316	17	80	30	6	4.9	8	3	5
M7 × 1		TM293346	17	80	30	7	5.5	8	3	6
M8 × 1.25		TM293366	20	90	35	8	6.2	9	3	6.8
M9 × 1.25		TM293396	20	90	35	9	7	10	3	7.8
M10 × 1.5		TM293426	22	100	39	10	8	11	3	8.5
M11 × 1.5		TM293466	22	100	40	8	6.2	9	3	9.5
M12 × 1.75		TM293506	24	110	44	9	7	10	3	10.2
M14 × 2		TM293546	26	110	44	11	9	12	3	12
M16 × 2		TM293606	27	110	44	12	9	12	3	14
M18 × 2.5		TM293656	30	125	50	14	11	14	4	15.5
M20 × 2.5		TM293706	32	140	54	16	12	15	4	17.5
M22 × 2.5		TM293746	32	140	54	18	14.5	17	4	19.5
M24 × 3		TM293786	34	160	60	18	14.5	17	4	21
M27 × 3		TM293866	36	160	60	20	16	19	4	24
M30 × 3.5		TM293946	40	180	70	22	18	21	4	26.5

▶ DIN 371(M2~M10) and DIN 376(M11~M30)

▶ * DIN profile not ISO

◎ : Excellent ○ : Good

ISO Material Description	P										M				K					
	Non-alloy steel					Low alloy steel					High alloyed steel, and tool steel		Stainless steel		Grey cast iron		Nodular cast iron		Malleable cast iron	
VDI 3323	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HRc	13	25	28	32	30	10	29	32	38	15	35	15	23	10	10	26	3	25	21	21
HB	125	190	250	270	300	180	275	300	350	200	325	200	240	180	180	260	160	250	130	230
Recommended							○	○	○											

ISO Material Description	N										S						H				
	Aluminum-wrought alloy		Aluminum-cast, alloyed			Copper and Copper Alloys (Bronze / Brass)					Non Metallic Materials		Heat Resistant Super Alloys				Titanium Alloys		Hardened steel	Chilled Cast Iron	Hardened Cast Iron
VDI 3323	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
HRc											15	30	25	38	34			55	60	42	55
HB	60	100	75	90	130	110	90	100			200	280	250	350	320	400Rm	1050Rm	550	630	400	550
Recommended											○	○	○	○	○	○	◎				○

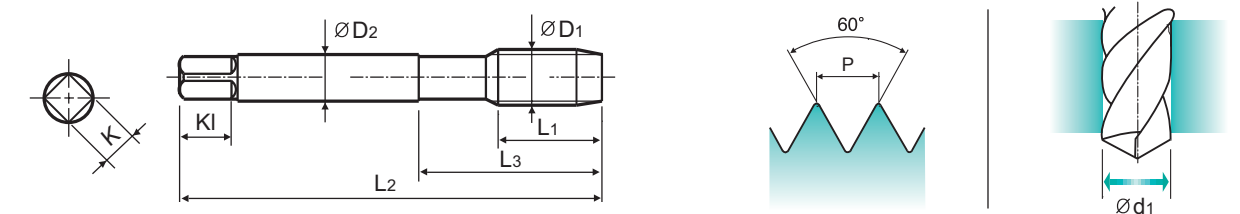


TZ293 SERIES

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