

High Torque Timing Pulleys - S5M

Compatible with S2M type from Mitsubishi Belting Ltd. as well as Bando Chemical Industries Ltd.

For e-Catalog non-standard products, see P.131.

For High Torque Timing Belts, see P.1499. For Keyless High Torque Timing Pulleys, see P.1467, 1468. For Idlers with Teeth, see P.1485.

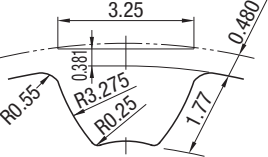


RoHS 10

Type	Belt Width			Material ¹⁾		Surface Treatment	Accessory ¹⁾ Set Screws
	10mm	15mm	25mm	Pulley	Flange		
HTPA	●	●	●	Aluminum Alloy	Aluminum Alloy	Clear Anodize Black Anodize Hard Clear Anodize ²⁾ Electroless Nickel Plating	SUS304
HTPB	●	●	●				
HTPK	●	●	●				
HTPN	●	●	●				
HTPT	●	●	●	S45C Equivalent	SPCC	-	SCM435 (Black Oxide)
HTPM	●	●	●				
HTPP	●	●	●				
HTPS	●	●	●	SUS304	SUS304	-	SUS304

¹⁾ Flange is already swaged, and set screws are included with for Shaft Bore P, N and C. ²⁾ The above material and accessory might be changed to the ones equivalent to the originals. ³⁾ Hard Clear Anodize: Film Hardness 300HV ~

Standard Tooth Profile



Tooth groove dimensions slightly vary according to the number of teeth. (Pitch: 5.0mm)

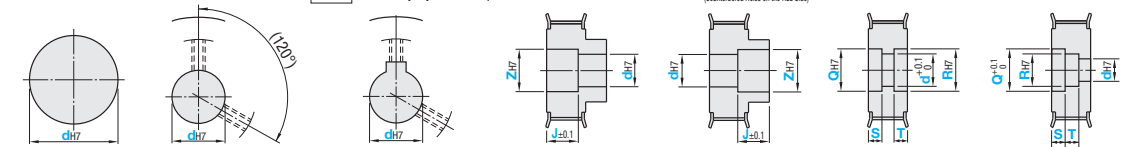
Aluminum and stainless steel flanges will have a thickness of 1.5. Shaft Bore Specs. H (Round hole), V or F (Stepped Hole), Y (Both Sides Stepped Hole) and WB (Two-stepped Hole) do not have tapped holes.

Number of Teeth / Dimension

mm	Number of Teeth																				
	14	15	16	18	19	20	22	24	25	26	28	30	32	34	36	40	44	48	50	60	72
P.D.	22.28	23.87	25.46	28.65	30.24	31.83	35.01	38.20	39.79	41.38	44.56	47.75	50.93	54.11	57.30	63.66	70.03	76.39	79.58	95.49	114.59
O.D.	21.32	22.91	24.50	27.69	29.28	30.87	34.05	37.24	38.83	40.42	43.60	46.79	49.97	53.15	56.34	62.70	69.07	75.43	78.62	94.53	113.63
D	14	15	17	19	19	24	27	27	31	32	33	37	40	40	47	50	60	63	75	90	
F	26	28	32	33	36	36	40	45	45	48	48	52	55	61	61	67	74	83	87	99	119
E	16	18	20	22	24	24	27	30	30	35	35	36	40	45	45	50	58	63	67	80	100

Shaft Bore Specs. Select shaft bore spec mark and each dim. from the table below. Surface treatment may not be applied to shaft bores.

H Round Hole, P Round Hole + Tap, N New JIS Keyway Bore + Tap, V Stepped Hole, F Stepped Hole (Counterbored Holes on the Hub Side), Y Both Ends Stepped Hole, WB Two-stepped Hole, C Old JIS Keyway Bore + Tap.



No tapped holes or set screws. For A-Shape pulley, the screw holes are set at around 120° to keep away from peaks. Shaft Bore Dia. 6.35 is selectable when the shaft bore dim. d is within the selection range. For A-Shape pulley, the screw holes are set at around 120° to keep away from peaks. Shaft Bore Dia. 6.35 is selectable when the shaft bore dim. d is within the selection range. For Keyway Dimension Details, see P.1413. Specify NK10 when selecting "New JIS Keyway Bore" + "Shaft Bore Dia. 10" + "Keyway Width 4.0mm (Height 1.8mm)". No tapped holes or set screws. Shaft Bore Dia. 6.35 is selectable when the shaft bore dim. d is within the selection range. Applicable to Shape B only. No tapped holes or set screws. Shaft Bore Dia. 6.35 is selectable when the shaft bore dim. d is within the selection range. Applicable to Shape A only. No tapped holes or set screws. Applicable to Shape A only. No tapped holes or set screws. No tapped holes or set screws. No tapped holes or set screws.

Tapped Hole Dimensions (Shaft Bore Specs.: P, N, C)

dH7 Shaft Bore I.D.	M (Coarse)	Accessory: Set Screw
5	M3	M3x3
6~12	M4	M4x3
13~17	M5	M5x4
18~30	M6	M6x5
31~45	M8	M8x6
46~70	M10	M10x8

Belt Nominal Width / Dimension

mm	Nominal		
	S5M100	S5M150	S5M250
A	11	17	27
W	16	22	32
L	28	34	44

Number of Teeth	Body Price														Shaft Bore Machining Charge (Body Price ×)					
	HTPA (x1.0)		HTPB, HTPK (x1.1)		HTPN (x1.2)		HTPT (x1.0)		HTPM (x1.05)		HTPP (x1.15)		HTPS (x1.0)		HTPA, HTPB, HTPK, HTPN, HTP, HTPM, HTPP		HTPS			
	S5M100	S5M150	S5M150	S5M250	S5M100	S5M150	S5M250	S5M100	S5M150	S5M250	S5M100	S5M150	S5M100	S5M150	P Hole	N, C, V, F Hole	Y, WB Hole	P Hole	N, C, V, F Hole	Y, WB Hole
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72																				

Alterations Part Number - Pulley Shape - Shaft Bore Specs., I.D. - Z - J - Q - R - S - T - (KC90... etc.)
HTPM60S5M150 - A - H30 - KSC50

Alterations	Set Screw Angle	Flange Not Swaged	Flange Swaged on One Side	Flange Cut
Code	KC90	NFC	RFC, LFC	FC
Spec.	Changes an angle of set screw to 90°. For A-Shape pulley, the screw holes are set at around 90° to keep away from peaks.	(Flange 2 pcs. Included) Ordering Code: NFC	(Flange 1 pc. Included) Ordering Code: RFC RFC LFC	Cut the flange O.D. in 0.5mm increment. Ordering Code: FC17 Application Notes: FC(0.D.)+1 FCsF-2 No surface treatment is applied on flange circumference.

Alterations	Retaining Ring Groove	Adds taper for retaining bearing	Hub Shortening	Tapped Hole Dimensions
Code	SRG	BTC	BC	TPC, SLH
Spec.	Retaining Ring Groove applicable to the shaft dia. of stepped hole is machined. Retaining Ring Groove Dim. P.1413 SRG+0.1 (Specify SRG) 2.5~24.5mm 0.5mm Increments Application Notes: Minimum Thickness: 2mm Applicable to Shaft Bore Specs. V and F only. Standards of retaining ring groove for Z dim. is applied. n≤J-SRG-m Ordering Code: SRG7	Add taper for retaining bearing inner ring Ordering Code: BTC6-TL1.5 Application Notes: Applicable to Shape A only. Applicable to Shaft Bore Specs. H and P only. TL<L-W	Cuts the hub length in 0.5mm increment. Ordering Code: BC6.5 Application Notes: Shaft Bore Specs. H, V, F: 3-BC-L-W Shaft Bore Specs. P, N, C: M+3-BC-L-W Not available for Shape A.	Changes the length of the included set screws. Ordering Code: TPC5 Application Notes: Applicable to Shaft Bore Specs. P, N, C only. Ordering Code: SLH10 Application Notes: Applicable to Shaft Bore Specs. P, N, C only. Set Screws: SLH M3 M4 M3x3 6 M4 M5 M4x4 5, 8 M5 M4, M6 M5x4 6, 10 M6 M5, M8 M6x5 10 M8 M6, M10 M8x6 10, 12 M10 M8 M10x8 12, 15

Alterations	Side Tapped Hole	Side Through Hole	Side Counterbored
Code	QTC, QFC, QSC	KTC, KFC, KSC	ZTC, ZFC, ZSC
Spec.	Machines tapped hole on the side surface of hub side. Ordering Code: QTC28-M4 Application Notes: Specify the hole position (P, C, D, dim.). M Selection: M3, M4, M5, M6, M8	Machines through hole on the side surface. Ordering Code: KTC28-K4.5 Application Notes: Specify the hole position (P, C, D, dim.). K Selection: K4.0 ~ 13.0 (0.5mm Increments)	Machines counterbored hole on the side surface. Ordering Code: ZTC28-Z4 Application Notes: Specify the hole position (P, C, D, dim.). Z Selection: ZM3, ZM4, ZM5, ZM6, ZM8

Ordering Example (Shaft Bore Specs.: H, P, N, C) HTPA20S5M150 - B - NK10 (Shaft Bore Specs.: V, F) HTPA26S5M150 - A - V10 - Z23 - J16.0 (Shaft Bore Specs.: Y, WB) HTPA40S5M250 - A - Y17 - Q35 - R35 - S10 - T10