

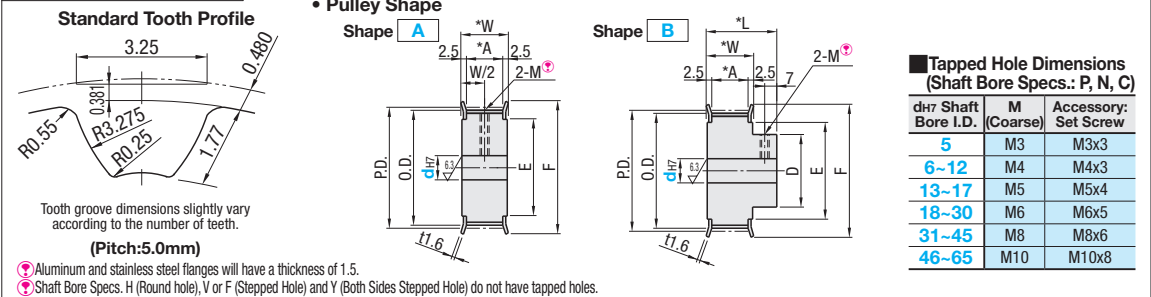
High Torque Timing Pulleys - S5M

Compatible with S2M type from Mitsubishi Belting Ltd. as well as Bando Chemical Industries Ltd.
Compatible with S5M type from Mitsubishi Belting Ltd. as well as Bando Chemical Industries Ltd.

For High Torque Timing Belts, see **P.1465** and for Idlers with Teeth, see **P.1433**. For High Torque Timing Belts, see **P.1451**.

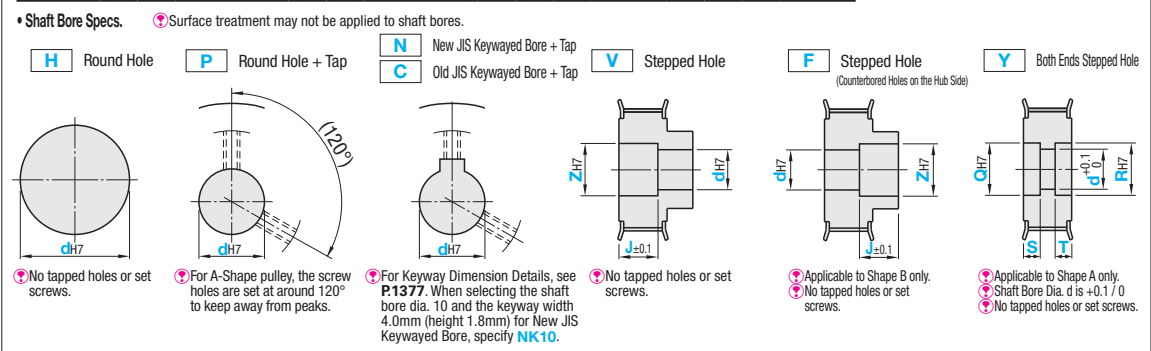
Type	Belt Width			Material *1		Surface Treatment	Accessory *1 Set Screws
	10mm S5M100	15mm S5M150	25mm S5M250	Pulley	Flange		
HTPA	●	●	●	A2000 Series Aluminum Alloy	Aluminum Alloy	Clear Anodize	EN 1.4301 Equiv.
HTPB	●	●	●			Black Anodize	
HTPK	●	●	●			Hard Clear Anodize *2	
HTPN	●	●	●			Electroless Nickel Plating	
HTPT	●	●	●	EN 1.1191 Equiv.	EN 1.0330 Equiv.	-	EN 1.7220 Equiv. (Black Oxide)
HTPM	●	●	●			Black Oxide	
HTPP	●	●	●	EN 1.4301 Equiv.	EN 1.4301 Equiv.	Electroless Nickel Plating	EN 1.4301 Equiv.
HTPS	●	●	●			-	

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



Number of Teeth / Dimension

mm	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	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



Part Number			Pulley Shape	Pulley Shape																
Type	Number of Teeth	Type Nominal Width		A								B								
				Shaft Bore Specifications (-): Specify in 1mm Increment, (,): Select the former or latter								Shaft Bore Specifications (-): Specify in 1mm Increment, (,): Select the former or latter								
				H Round Hole	P Round Hole + Tap	N, C Keyway + Tap	V Stepped Hole			Y Both Ends Stepped		H Round Hole	P Round Hole + Tap	N, C Keyway + Tap	V, F Stepped Hole					
						V	Z	d=2	(0.1mm Increment)	Y	Q, R	Q(R)-d=2	S, T				V, F	Z	d=2	(0.1mm Increment)
Aluminum HTPA HTPB HTPK HTPN	14		5, 6, 6.35, 7-10	5, 6, 6.35, 7-10	8, 10, NK10	5, 6	7	8		5, 6	7, 8			5, 6, 6.35, 7-10	5, 6, 6.35, 7, 8	-	5, 6	7, 8		
	15		5, 6, 6.35, 7-10	5, 6, 6.35, 7-10	8, 10, NK10	5-8	7-10			5-8	7-10			5, 6, 6.35, 7-10	5, 6, 6.35, 7, 8	-	5-8	7-10		
	16		5, 6, 6.35, 7-12	5, 6, 6.35, 7-12	8, 10, NK10, 11, 12	5-10	7-12			5-10	7-12			5, 6, 6.35, 7-12	5, 6, 6.35, 7-10	8	5-10	7-12		
	18		6, 6.35, 7-14	6, 6.35, 7-12	8, 10, NK10, 11, 12	6-12	8-14			6-12	8-14			6, 6.35, 7-14	6, 6.35, 7-11	8, 10, NK10	6-12	8-14		
	19		6, 6.35, 7-16	6, 6.35, 7-16	8, 10, NK10, 11-16	6-14	8-16			6-14	8-16			6, 6.35, 7-15	6, 6.35, 7-11	8, 10, NK10	6-13	8-15		
	20		6, 6.35, 7-16	6, 6.35, 7-16	8, 10, NK10, 11-16	6-14	8-16			6-14	8-16			6, 6.35, 7-15	6, 6.35, 7-11	8, 10, NK10	6-13	8-15		
	22		7-19	7-18	8, 10, NK10, 11-18	7-17	9-19			7-19	9-19			7-19	7-15	8, 10, NK10, 11, 12	7-17	9-19		
	24		7-22	7-20	8, 10, NK10, 11-20	7-20	9-23			7-20	9-22			7-22	7-17	8, 10, NK10, 11-13	7-20	9-23		
	25		7-22	7-20	8, 10, NK10, 11-20	7-20	9-23			7-20	9-22			7-22	7-17	8, 10, NK10, 11-15	7-20	9-23		
	26		8-27	8-22	8, 10, NK10, 11-22	8-25	10-27			8-25	10-27			8-27	8-21	8, 10, NK10, 11-17	8-25	10-27		
Steel HTPT HTPM HTPP	28	S5M150	8-27	8-24	8, 10, NK10, 11-24	8-25	10-27		2.0≤Js≤W-2.0	8-25	10-27		3~14 S+Ts≤W-3	8-27	8-22	8, 10, NK10, 11-18	8-25	10-27		2.0≤Js≤L-2.0
	30		10-28	10-26	10, NK10, 11-26	10-26	12-28			10-26	12-28			10-28	10-23	10, NK10, 11-18	10-26	12-28		
	32	S5M250	10-32	10-28	10, NK10, 11-28	10-30	12-32			10-30	12-32			10-32	10-27	10, NK10, 11-22	10-30	12-32		
	34		10-37	10-30	10, NK10, 11-30	10-35	12-37			10-35	12-37			10-36	10-30	10, NK10, 11-25	10-34	12-36		
	36		10-37	10-30	10, NK10, 11-30	10-35	12-37			10-35	12-37			10-36	10-30	10, NK10, 11-25	10-34	12-36		
	40		10-42	10-38	10, NK10, 11-38	10-40	12-42			10-40	12-42			10-42	10-35	10, NK10, 11-28	10-40	12-42		
	44		12-50	12-42	12-40	12-48	14-50			12-48	14-50			12-46	12-38	12-32	12-44	14-46		
	48		12-55	12-45	12-40	12-53	14-55			12-53	14-55			12-55	12-45	12-42	12-53	14-55		
	50		12-59	12-45	12-43	12-57	14-59			12-57	14-59			12-59	12-45	12-43	12-57	14-59		
	60		12-72	12-45	12-45	12-70	14-72			12-70	14-72			12-71	12-45	12-45	12-69	14-71		
Stainless Steel HTPS	72		12-80	12-65	12-50	12-80	14-92			12-75	14-92			12-80	12-65	12-50	12-80	14-86		

※ Shaft Bore Dia. 8, 11, 13, 14, 17, 21~50 are not available for Shaft Bore Spec. C.

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) **HTPA40S5M250** - **A** - **Y17** - **Q35** - **R35** - **S10** - **T10**

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 (x1.0)	HTPT, HTPM, HTPP (x1.0)	HTPS (x1.0)	HTPA, HTPB, HTPK, HTPN (x1.0)	HTPT, HTPM, HTPP (x1.0)	HTPS (x1.0)	HTPA, HTPB, HTPK, HTPN (x1.0)	HTPT, HTPM, HTPP (x1.0)
14															
15															
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36															
40															
44															
48															
50															
60															
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	Cut the flange O.D. in 0.5mm increment. [Ordering Code] FC17 [Application Notes] FC2 (O.D.) +1 FC3F-2 No surface treatment is applied on flange circumference. Not available for Stainless Steel Type.

Alterations	Adds taper for retaining bearing	Hub Shortening	Tapped Hole Dimensions	Changes the length of the included set screws
Code	BTC	BC	TPC	SLH
Spec.	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: 3-8C/L-W Shaft Bore Specs. P, N, C: M-3-8C/L-W Not available for Shape A.	[Ordering Code] TPC5 [Application Notes] Applicable to Shaft Bore Specs. P, N, C only. M TPC M3 M4 M4 M3, M5 M5 M4, M6 M6 M5, M8 M8 M6	[Ordering Code] SLH10 [Application Notes] Applicable to Shaft Bore Specs. P, N, C only. Set Screws SLH M3x3 6 M4x3 5, 8 M5x4 6, 10 M6x5 10 M8x6 10, 12 M10x8 12, 15

Alterations	Side Through Hole / Side Tapped Hole, 3 places	Side Through Hole / Side Tapped Hole, 4 places	Side Through Hole / Side Tapped Hole, 6 places
Code	KTC, QTC	KFC, QFC	KSC, QSC
Spec.	Machine Through Hole / Tapped Hole on the side surface of hub side [Ordering Code (Through Hole)] KTC20-K5.0 [Ordering Code (Tapped Hole)] QTC28-M4 Selection (Through Hole) K Selection K4.0~K13.0 (0.5mm Increment) Selection (Tapped Hole) M Selection M3, M4, M5, M6, M8 [Application Notes] Not applicable to Shaft Bore Specs. F or Y. When KTC/QTC is selected for Shaft Bore Specs. P, N and C, KC90 is not available.	Machine Through Hole / Tapped Hole on the side surface of hub side [Ordering Code (Through Hole)] KFC20-K5.0 [Ordering Code (Tapped Hole)] QFC28-M4 Selection (Through Hole) K Selection K4.0~K13.0 (0.5mm Increment) Selection (Tapped Hole) M Selection M3, M4, M5, M6, M8 [Application Notes] Not applicable to Shaft Bore Specs. F or Y. Specify KC90 when selecting KFC/QFC for Shaft Bore Specs. P, N and C. Side holes and tooth side tapped holes might interfere with each other. For details, see the relevant CAD data.	Machine Through Hole / Tapped Hole on the side surface of hub side [Ordering Code (Through Hole)] KSC20-K5.0 [Ordering Code (Tapped Hole)] QSC28-M4 Selection (Through Hole) K Selection K4.0~K13.0 (0.5mm Increment) Selection (Tapped Hole) M Selection M3, M4, M5, M6, M8 [Application Notes] Not applicable to Shaft Bore Specs. F or Y. KSC/QSC is not applicable to the Shaft Bore Specs. P, N and C.