

# High Torque Timing Pulleys - P8M

Compatible with P8M Type  
from Tsubakimoto Chain Co.

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

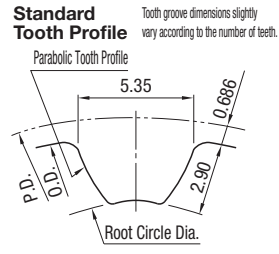
For High Torque Timing Belts, see P.1501. For Keyless High Torque Timing Pulleys, see P.1472. For Idlers with Teeth, see P.1487.



RoHS 10

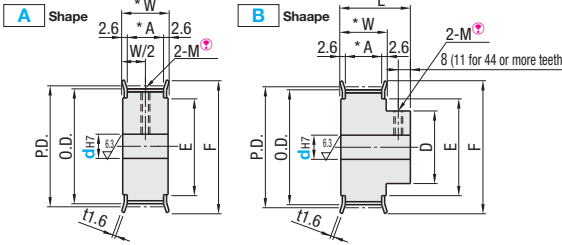
Type	Belt Width		Material <sup>1</sup>		Surface Treatment	Accessory <sup>1</sup> Set Screws
	15mm P8M150	25mm P8M250	Pulley	Flange		
PTPA	●	●	Extra Super Duralumin Aluminum Alloy	Aluminum Alloy	Clear Anodize Hard Clear Anodize <sup>2</sup>	SUS304
PTPK	●	●				
PTPN	●	●	S45C Equivalent	SPCC	Electroless Nickel Plating Black Oxide Electroless Nickel Plating	SCM435 (Black Oxide)
PTPM	●	●				
PTPP	●	●				

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



(Pitch: 8.0mm)  
Aluminum 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. It may have a relief in the tapped hole depending on its size.

### Pulley Shape



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

dH7 Shaft Bore I.D. (Coarse)	M	Accessory: Set Screw
12	M4	M4x3
13-17	M5	M5x4
18-30	M6	M6x5
31-45	M8	M8x6
46-67	M10	M10x8

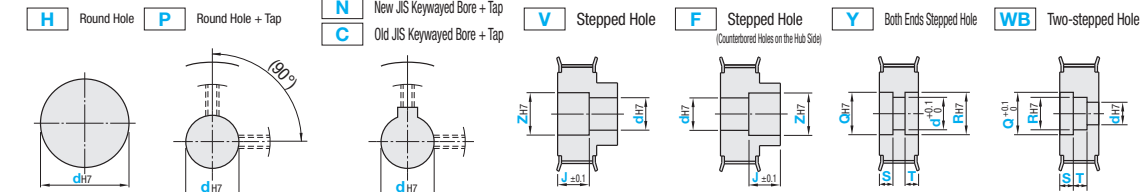
### Number of Teeth / Dimension

mm	Number of Teeth														
	20	22	24	26	28	30	32	34	36	40	44	48	50	60	
P.D.	50.93	56.02	61.12	66.21	71.30	76.39	81.49	86.58	91.67	101.86	112.05	122.23	127.32	152.79	
O.D.	49.56	54.65	59.74	64.84	69.93	75.02	80.12	85.21	90.30	100.49	110.67	120.86	125.95	151.42	
D	36	41	46	51	55	60	65	70	75	85	90	100	100	100	
F	Aluminum	55	61	67	74	80	83	87	95	99	111	119	127	135	160
Steel	55	61	67	74	80	83	87	95	99	111	119	127	135	160	
E	Aluminum	40	45	50	58	60	63	67	75	80	90	100	105	115	140
Steel	40	45	50	58	60	63	67	75	80	90	100	105	115	140	

### Belt Nominal Width / Dimension

mm	Nominal	
	P8M150	P8M250
A	16.8	27.8
W	22.0	33.0
L Number of Teeth 20-40	39.0	50.0
L Number of Teeth 44-60	44.0	55.0

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



No tapped holes or set screws. For A-Shape pulley, the screw holes are set at around 90° to keep away from peaks. For Keyway Dimension Details, see P.1413. No tapped holes or set screws. Applicable to Shape B only. No tapped holes or set screws. Applicable to Shape A only. Shaft Bore Dia. d is +0.1/0. No tapped holes or set screws. Applicable to Shape A only. No tapped holes or set screws.

Part Number	Type	Number of Teeth	Type Nominal Width	Pulley Shape											
				Shaft Bore Specs. "A": 1mm Increments						Shaft Bore Specs. "B": Selectable					
				H(d) Round Hole	P(d) Round Hole + Tap	N(d), C(d) Keyway + Tap	V(d) Stepped Hole	Y(d), WB(d) Both Ends Stepped Hole	S, T Two-stepped Hole	H(d) Round Hole	P(d) Round Hole + Tap	N(d), C(d) Keyway + Tap	V(d), F(d) Stepped Hole	Z Z-d±2 (0.1mm Increment)	J J (0.1mm Increment)
Aluminum PTPA PTPK PTPN	P8M150	20	A	12-27	12-27	12-22	12-22	12-19	14-23	12-32	12-24	12-22	12-19	14-23	
		22	12-30	12-30	12-25	12-22	14-26	12-37	12-29	12-25	12-22	14-26			
		24	12-33	12-33	12-28	12-23	14-28	12-40	12-30	12-28	12-23	14-28			
		26	16-35	16-35	16-30	16-25	18-30	16-47	16-31	16-30	16-25	18-30			
		28	16-39	16-39	16-34	16-29	18-34	16-51	16-35	16-34	16-29	18-34			
		30	16-40	16-40	16-35	16-30	18-35	16-56	16-40	16-35	16-30	18-35			
	P8M250	32	A	16-43	16-43	16-38	16-33	18-37	16-35	21-50	16-61	16-43	16-38	16-33	18-37
		34	B	16-47	16-47	16-42	16-35	18-40	16-35	26-55	16-66	16-47	16-42	16-35	18-40
		36	16-50	16-50	16-45	16-35	18-43	16-71	16-50	16-45	16-35	18-43			
		40	20-55	20-55	20-50	20-35	22-45	20-80	20-55	20-50	20-35	22-45			
		44	20-60	20-60	20-50	20-35	22-48	20-80	20-60	20-50	20-35	22-48			
		48	20-67	20-67	20-50	20-40	22-55	20-85	20-67	20-50	20-40	22-55			
60	20-67	20-67	20-50	20-40	22-55	20-85	20-67	20-50	20-40	22-55					

Shaft Bore Dia. 13, 14, 17 or 21-50 are not available for Shaft Bore Specs. C.

**Ordering Example** (Shaft Bore Specs.: H, P, N, C) PTPA50P8M250 - A - H50  
 (Shaft Bore Specs.: V, F) PTPA48P8M250 - B - V25 - Z43 - J25  
 (Shaft Bore Specs.: Y, WB) PTPA36P8M150 - A - Y20 - Q32 - R37 - S7 - T9

Number of Teeth	Body Price				Shaft Bore Machining Charge (Body Price +)										
	PTPA (x1.0)		PTPK (x1.1)		PTPN, PTPP (+ Additional Price)		PTPA, PTPK, PTPN				PTPM, PTPP				
	Shape A	Shape B	Shape A	Shape B	Shape A	Shape B	Shape A	Shape B	Shape A	Shape B	Shape A	Shape B	Shape A	Shape B	
20															
22															
24															
26															
28															
30															
32															
34															
36															
40															
44															
48															
50															
60															

Alterations Part Number - Pulley Shape - Shaft Bore Specs., I.D. - Z - J - Q - R - S - T - (KC90... etc.)  
 PTPA50P8M250 - A - H60 - QSC80 - M8

Alterations	Set Screw Angle	Flange Not Swaged	Flange Swaged on One Side	Flange Cut
Code	KC120	NFC	RFC, LFC	FC
Spec.	Changes angle layout of set screws to 120°. For A-Shape pulley, the screw holes are set at around 120° to keep away from peaks.	(Flange 2 pcs. Included) (Ordering Code) NFC	(Flange 1 pc. Included) (Ordering Code) RFC LFC	Cut the flange O.D. in 0.5mm increment. (Ordering Code) FC17 FC±(O.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 (Specify SRG) 2.5-25.5mm 0.5mm Increments (Ordering Code) SRG7	Add taper for retaining bearing inner ring (Ordering Code) BTC12-TL3 (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 (Applicable to Shaft Bore Specs. H, V, F: 3:BC<L-W M+3:BC<L-W Not available for Shape A.)	Applicable to Shaft Bore Specs. P, N, C only. (Ordering Code) TPC5 M TPC M4 M5 M5 M4, M6 M6 M5, M8 M8 M6, M10 M10 M8	Applicable to Shaft Bore Specs. P, N, C only. (Ordering Code) SLH10 Set Screws SLH M4x3 5, 8 M5x4 6, 10 M6x5 10 M8x6 10, 12 M10x8 12, 15

For details, see Shaft Alteration Overview. P.1414

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 (C Selection) Specify the hole position (P, C, D, dim.). (M Selection) M3, M4, M5, M6, M8 (Minimum Thickness: 2mm Formula P.1414 Conditions may vary depending on the shaft bore specs. P.1414)	Machines through hole on the side surface. (Ordering Code) KTC28-K4.5 (C Selection) Specify the hole position (P, C, D, dim.). (Z Selection) K4.0 ~ 13.0 (0.5mm increments) (Minimum Thickness: 2mm Formula P.1414 Conditions may vary depending on the shaft bore specs. P.1414)	Machines counterbored hole on the side surface. (Ordering Code) ZTC28-Z4 (Z Selection) Specify the hole position (P, C, D, dim.). (Z Selection) ZM3, ZM4, ZM5, ZM6, ZM8 (Minimum Thickness: 2mm Formula P.1414 Conditions may vary depending on the shaft bore specs. P.1414)

For details, see Shaft Alteration Overview. P.1414