

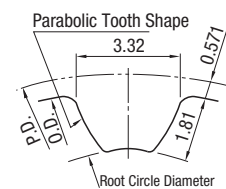
Keyless High Torque Timing Pulleys

P5M Type

For High Torque Timing Belts, refer to P.1438, Open End Belts, refer to P.1445.



Standard Tooth Profile

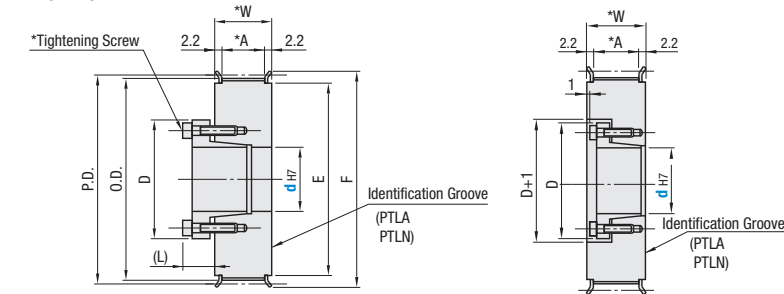


Parabolic Tooth Shape
Tooth groove dimensions slightly change according to No. of teeth.
(Pitch: 5.0 mm)

- The shaft bore may not have surface treatment.
- Two types of bushings are available: Standard Type (ST Bushings) and Short Type (SH Bushings). Refer to P.1388.

Part Number		Material			Surface Treatment		
Belt Width 10 mm	Belt Width 15 mm	Pulley	Flange	Bushing	Pulley	Flange	Bushing
A: 11.6 W: 16	A: 16.6 W: 21	PTLA P5M100	PTLA P5M150	PTLN P5M100	PTLN P5M150	PTLM P5M100	PTLM P5M150
		Ultra Duralumin-Based Aluminum Alloy	Aluminum Alloy	1045 Carbon Steel or Equivalent	Clear Anodize	Electroless Nickel Plating	—
		1045 Carbon Steel or Equivalent	Low Carbon Steel	1045 Carbon Steel or Equivalent	Black Oxide	Electroless Nickel Plating	—

Pulley Shape



*For quantity and size of tightening screws with Flange attached, refer to P.1388.

Part Number	Teeth	Type, Nom. Width	Pulley Shape	d _{HT} Range (Select Shaft Bore Dia. from Table 1)				P.D.	O.D.	F	E		
				P5M100		P5M150							
Type	Teeth	Type, Nom. Width	Pulley Shape	E Shape (ST Bushing)	F Shape (SH Bushing)	E Shape (ST Bushing)	F Shape (SH Bushing)	P.D.	O.D.	F	E		
PTLA PTLN	22	*A: 11.6 *W: 16	E	8	8	8	8	35.01	33.87	40	28		
	24			8 10 11	8	8 10 11	8	38.20	37.06	44	32		
	25			8 10 11	8	8 10 11	8	39.79	38.65	44	32		
	26			8 10-12 14	8	8 10-12 14	8 10-12	41.38	40.24	48	36		
	28			8 10-12 14-16	8	8 10-12 14-16	8 10-12	44.56	43.42	50	38		
	30			10-12 14-17	F	10-12 14-17	10 11 12	10-12 14-17	10 11 12	47.75	46.60	55	40
	32			10-12 14-17		10 11 12	10-12 14-17	10 11 12	50.93	49.79	61	46	
	34			10-12 14-17		10 11 12	10-12 14-17	10 11 12	54.11	52.97	61	46	
	36			10-12 14-20 22		10 11 12	10-12 14-20 22	10 11 12	57.30	56.15	67	50	
	40			10-12 14-20 22		10 11 12	10-12 14-20 22	10 11 12	63.66	62.52	67	50	
	44			12 14-20 22 24 25		12	12 14-20 22 24 25	12	70.03	68.89	74	58	
	48			12 14-20 22 24 25 28		12	12 14-20 22 24 25 28	12	76.39	75.25	83	63	
	50			12 14-20 22 24 25 28 30 32 35		12	12 14-20 22 24 25 28 30 32 35	12	79.58	78.44	87	67	
	60			12 14-20 22 24 25 28 30 32 35 38		12	12 14-20 22 24 25 28 30 32 35 38	12	95.49	94.35	104	84	
72	12 14-20 22 24 25 28 30 32 35 38	12	12 14-20 22 24 25 28 30 32 35 38	12		114.59	113.45	119	100				

Table 1: Select Shaft Bore Diameter

Part Number	Teeth	Type, Nominal Width	Pulley Shape	d _{HT} Range (Select Shaft Bore Dia. from Table 1)		P.D.	O.D.	F	E	Max. Allowable Torque Nm	D		(L)
				P5M100 (ST Bushing)	P5M150 (ST Bushing)						ST Bushing	SH Bushing	
PTLM PTLG	22	*A: 11.6 *W: 16	E	8	—	35.01	33.87	43	30	16	8.5	25.5	8.5
	24			38.20		37.06	44	31	10	18	30	29	
	26			41.38		40.24	47	35.5	11	20	31	30	
	28			44.56		43.42	52	37.5	12	23	32	31	
	30			47.75		46.60	55	42.5	14	23	32	31	
	32			50.93		49.79	55	42.5	15	23	32	31	
	36			57.30		56.15	64	50	16	23	32	31	
	44			70.03		68.89	74	63	17	23	32	31	
	50			79.58		78.44	86	71	18	23	32	31	
	60			95.49		94.35	103	85	19	23	32	31	
	24			206		—	—	—	20	23	32	31	12
	25			216		—	—	—	21	23	32	31	13
	28			353		—	—	—	24	23	32	31	15.5
	30			382		—	—	—	25	23	32	31	16.5
32	412	—	—	—	26	23	32	31	19				
35	451	—	—	—	27	23	32	31	19				
38	686	—	—	—	28	23	32	31	19				
40	725	—	—	—	29	23	32	31	19				
42	757	—	—	—	30	23	32	31	19				

Electroless nickel plated bushing decreases maximum allowable torque and allowable thrust load by 20-30%

Keyless High Torque Timing Pulleys

P5M Type, continued

Part Number Example: PTLA40P5M150 - F - 12

Teeth	Available Types					
	PTLA (x1.0)		PTLN (x1.2)		PTLG	
	P5M100	F Shape	P5M150	F Shape	P5M100	P5M150
22	•	•	•	•	•	•
24	•	•	•	•	•	•
25	•	•	•	•	•	•
26	•	•	•	•	•	•
28	•	•	•	•	•	•
30	•	•	•	•	•	•
32	•	•	•	•	•	•
34	•	•	•	•	•	•
36	•	•	•	•	•	•
40	•	•	•	•	•	•
44	•	•	•	•	•	•
48	•	•	•	•	•	•
50	•	•	•	•	•	•
60	•	•	•	•	•	•
72	•	•	•	•	•	•

Part Number Alterations Example: PTLA30P5M150 - E - 14 - BMC

If alterations for HTLA / HTPL ("E" shape) are specified, 5th Day Shipping will be applied for this product.

Alterations	Flange Cut	Flange Not Swaged	Flange Swaged on One Side	Surface Treatment	Pulley for Replacement (Pulley Only)
Code	FC	NFC	RFC / LFC	BMC / BMR	OP
Spec.	<p>Low flange by cutting. FC: 0.5 mm Increment No surface treatment applied on flange circumference.</p> <p>FC=(O.D.)+2 FC=F-2 Ordering Code: FC35</p>	<p>Flange is not installed. (Flange included)</p>	<p>Flange installed on the hub side (LFC) or the opposite side (RFC) only prior to shipping.</p>	<p>Applies electroless nickel plating on a bushing. (Anti-rusting treatment applied to screws). Electroless nickel plated bushing decreases allowable torque by 20-30%. BMC: Non-RoHS-compliant (Screw: Dacrotized treatment applied 4137 Alloy Steel) BMR: RoHS-compliant (Screw: GeoMet coating applied 4137 Alloy Steel) Not applicable to PTLM / PTLG</p>	<p>Pulleys will be shipped individually (no bushings).</p>