

Keyless High Torque Timing Pulleys - P5M

Compatible with P5M Type from Tsubakimoto Chain Co.

Keyless High Torque Timing Pulleys - P8M

Compatible with P8M Type from Tsubakimoto Chain Co.

For High Torque Timing Belts, see P.1467. For Open End Belts, see P.1476.

Part Number | **Material** | **Surface Treatment**

Type	Belt Width: 10mm A:11.6 W:16	Belt Width: 15mm A:16.6 W:21	Pulley	Flange	Bushing	Pulley	Flange	Bushing
PTLA	●	●	A7075	A5052	S45C	Clear Anodize	-	-
PTLN	●	●	A7075	A5052	S45C	Electroless Nickel Plating	-	-
PTLM	●	●	S45C Equivalent	SPCC	S45C	Black Oxide	-	-
PTLG	●	●	S45C Equivalent	SPCC	S45C	Electroless Nickel Plating	-	-

Table 1: Select Shaft Bore Dia.

dh7	Max. Allowable Torque N·m		D		(L)
	ST Bushing	SH Bushing	ST Bushing	SH Bushing	
8	16	8.5	25.5	24.5	8.5
10	39	18	30	29	
11	43	20	31	30	10.5
12	48	23	32	31	
14	73		35		12
15	78		36		
16	83		37		13
17	88		38		
18	154		43		14
19	163		45		
20	171		46		15.5
22	186		48		
24	206		50		16.5
25	216		52		
28	353		54		19
30	382		57		
32	412		59		
35	451		63		
38	686		70		
40	725		71		
42	757		71		

Standard Tooth Profile

E Shape | **F Shape**

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

Number of Teeth	22	24	25	26	28	30	32	34	36	40	44	48	50	60	72
P.D.	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.	33.87	37.06	38.65	40.24	43.42	46.60	49.79	52.97	56.15	62.52	68.89	75.25	78.44	94.35	113.45
F	40	44	44	48	50	55	61	67	74	83	87	104	104	119	119
E	28	32	32	36	38	40	40	46	50	50	58	63	67	84	100

Surface treatment may not be applied to shaft bores.
Two types of bushings are available: Standard Type (ST Bushings) and Short Type (SH Bushings). See P.1425.
For quantity and size of tightening screws with flange installed, see P.1425.

For High Torque Timing Belts, see P.1467.

Part Number | **Material** | **Surface Treatment**

Type	Belt Width: 15mm A:16.8 W:22	Belt Width: 25mm A:27.8 W:33	Pulley	Flange	Bushing	Pulley	Flange	Bushing
PTLA	●	●	A7075	A5052	S45C	Clear Anodize	-	-
PTLK	●	●	A7075	A5052	S45C	Hard Clear Anodize	-	-
PTLN	●	●	A7075	A5052	S45C	Electroless Nickel Plating	-	-
PTLM	●	●	S45C Equivalent	SPCC	S45C	Black Oxide	-	-
PTLG	●	●	S45C Equivalent	SPCC	S45C	Electroless Nickel Plating	-	-

Table 1: Select Shaft Bore Dia.

dh7	Max. Allowable Torque N·m		D		(L)
	ST Bushing	SH Bushing	ST Bushing	SH Bushing	
12	48	23	32	31	10.5
14	73		35		12
15	78		36		
16	83		37		13
17	88		38		
18	154		43		14
19	163		45		
20	171		46		15.5
22	186		48		
24	206		50		16.5
25	216		52		
28	353		54		19
30	382		57		
32	412		59		
35	451		63		
38	686		70		
40	725		71		
42	757		71		

Standard Tooth Profile

E Shape | **F Shape**

Tooth groove dimensions slightly vary according to the number of teeth. (Pitch: 8.0mm)

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
F	55	61	67	74	80	83	87	95	99	111	119	127	135	160
E	40	45	50	58	60	63	67	75	80	90	100	105	115	140

Surface treatment may not be applied to shaft bores.
Two types of bushings are available: Standard Type (ST Bushings) and Short Type (SH Bushings). See P.1425.
For quantity and size of tightening screws with flange installed, see P.1425.

Part Number	Type	Number of Teeth	Type, Nominal Width	Pulley Shape	dh7 Range (,): Select the former or latter, (-): Specify in 1mm Increment				Unit Price			
					Shape E		Shape F		PTLA (x1.0)		PTLN (x1.2)	
PTLA PTLN	P5M100	22	*A:11.6 *W:16	E	8	8	-	-	-	-	-	-
		24		E	8, 10, 11	8, 10, 11	-	-	-	-	-	-
		25		E	8, 10-12, 14	8, 10-12	-	-	-	-	-	-
		26		E	8, 10-12, 14-16	8, 10-12	-	-	-	-	-	-
		28		E	10-12, 14-17	10-12, 14-17	-	-	-	-	-	-
		30		E	10-12, 14-20, 22	10-12	-	-	-	-	-	-
		32		E	12, 14-20, 22, 24, 25	-	-	-	-	-	-	-
		34		E	12, 14-20, 22, 24, 25, 28	-	-	-	-	-	-	-
		40		E	12, 14-20, 22, 24, 25, 28, 30, 32, 35	-	-	-	-	-	-	-
		44		E	12, 14-20, 22, 24, 25, 28, 30, 32, 35	-	-	-	-	-	-	-
		48		E	12, 14-20, 22, 24, 25, 28, 30, 32, 35	-	-	-	-	-	-	-
		50		E	12, 14-20, 22, 24, 25, 28, 30, 32, 35, 38, 40, 42	-	-	-	-	-	-	-
60		E	12, 14-20, 22, 24, 25, 28, 30, 32, 35, 38, 40, 42	-	-	-	-	-	-	-		
72		E	12, 14-20, 22, 24, 25, 28, 30, 32, 35, 38, 40, 42	-	-	-	-	-	-	-		

Part Number	Type	Number of Teeth	Type, Nominal Width	Pulley Shape	dh7 Range (-): Specify in 1mm Increment, (,): Select the former or latter				Unit Price			
					Shape E (ST Bushing)		Shape F (SH Bushing)		PTLA (x1.0)		PTLN (x1.2)	
PTLA PTLK PTLN	P8M150	20	*A:16.8 *W:22	E	12, 14-17	12, 14-17	12	12	-	-	-	-
		22		E	12, 14-17	12, 14-17	12	12	-	-	-	-
		24		E	12, 14-20, 22	12, 14-20, 22	12	12	-	-	-	-
		26		E	16-20, 22, 24, 25	16-20, 22, 24, 25	-	-	-	-	-	-
		28		E	16-20, 22, 24, 25	16-20, 22, 24, 25	-	-	-	-	-	-
		30		E	20, 22, 24, 25, 28, 30, 32, 35	16-20, 22, 24, 25, 28, 30, 32, 35	-	-	-	-	-	-
		32		E	20, 22, 24, 25, 28, 30, 32, 35	16-20, 22, 24, 25, 28, 30, 32, 35	-	-	-	-	-	-
		34		E	20, 22, 24, 25, 28, 30, 32, 35	16-20, 22, 24, 25, 28, 30, 32, 35	-	-	-	-	-	-
		36		E	16-20, 22, 24, 25, 28, 30, 32, 35, 38, 40, 42	20, 22, 24, 25, 28, 30, 32, 35	-	-	-	-	-	-
		40		E	20, 22, 24, 25, 28, 30, 32, 35, 38, 40, 42	20, 22, 24, 25, 28, 30, 32, 35	-	-	-	-	-	-
		44		E	20, 22, 24, 25, 28, 30, 32, 35, 38, 40, 42	20, 22, 24, 25, 28, 30, 32, 35	-	-	-	-	-	-
		48		E	20, 22, 24, 25, 28, 30, 32, 35, 38, 40, 42	20, 22, 24, 25, 28, 30, 32, 35, 38, 40, 42	-	-	-	-	-	-
50		E	20, 22, 24, 25, 28, 30, 32, 35, 38, 40, 42, 45, 48, 50	20, 22, 24, 25, 28, 30, 32, 35	-	-	-	-	-	-		
60		E	20, 22, 24, 25, 28, 30, 32, 35, 38, 40, 42, 45, 48, 50	20, 22, 24, 25, 28, 30, 32, 35	-	-	-	-	-	-		

Ordering Example: Part Number - Pulley Shape - Shaft Bore Dia. PTLA40P5M150 - F - 12

Ordering Example: Part Number - Pulley Shape - Shaft Bore Dia. PTLA24P8M250 - F - 16

Alterations	Code	Flange Cut			Surface Treatment		Pulley for Replacement (Pulley only)
		FC	NFC	LFC, RFC	BMC, BMR	OP	
Alterations	Code	FC	NFC	LFC, RFC	BMC, BMR	OP	
Spec.	Code	FC	NFC	LFC, RFC	BMC, BMR	OP	

Lower flange by cutting. FC: 0.5mm increment. No surface treatment is applied on flange circumference.

Flange is not installed. (Flange Included)

Flange is installed on either the bushing side (LFC) or the opposite side (RFC) prior to shipping. (Flange 1 pc. Included)

Applies electroless nickel plating on a bushing. (Antirusting treatment is applied to screws.) Electroless nickel plated bushing decreases allowable torque by 20 ~ 30%. BMC: Not RoHS Compliant (Screw: SCM435 Dacrotized Treatment) BMR: RoHS Compliant (Screw: SCM435 GeoMet Coating) Not applicable to PTLM and PTLG.

Pulleys will be shipped bushings uninstalled.

Alterations	Code	Flange Cut			Surface Treatment		Pulley for Replacement (Pulley only)
		FC	NFC	LFC, RFC	BMC, BMR	OP	
Alterations	Code	FC	NFC	LFC, RFC	BMC, BMR	OP	
Spec.	Code	FC	NFC	LFC, RFC	BMC, BMR	OP	

Lower flange by cutting. FC: 0.5mm increment. No surface treatment is applied on flange circumference.

Flange is not installed. (Flange Included)

Flange is installed on either the bushing side (LFC) or the opposite side (RFC) prior to shipping. (Flange 1 pc. Included)

Applies electroless nickel plating on a bushing. (Antirusting treatment is applied to screws.) Electroless nickel plated bushing decreases allowable torque by 20 ~ 30%. BMC: Not RoHS Compliant (Screw: SCM435 Dacrotized Treatment) BMR: RoHS Compliant (Screw: SCM435 GeoMet Coating) Not applicable to PTLM and PTLG.

Pulleys will be shipped bushings uninstalled.