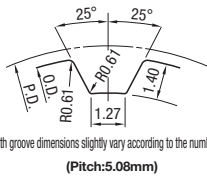


# Keyless Timing Pulleys - XL

For Timing Belts, see **P.1463**.



Tooth Profile (ISO Standard Rack Dimensions)



Tooth groove dimensions slightly vary according to the number of teeth.

(Pitch:5.08mm)

\* For quantity and size of tightening screws with flange installed, see **P.1425**.

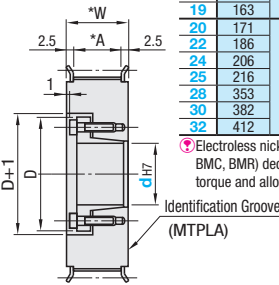
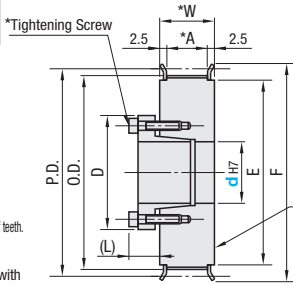
Type	Part Number Belt Width 12.7mm (1/2inch) A:14 W:19	Material *1			Surface Treatment		
		Pulley	Flange	Bushing	Pulley	Flange	Bushing
MTPLA	XL050	A7075	A5052	S45C	Clear Anodize	-	-
MTPL		S45C Equivalent	SPCC	S45C	Black Oxide	-	-

\*1. The above material and accessory might be changed to the ones equivalent to the originals.

• Pulley Shape

**E** Shape

**F** Shape



☞ 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**.

**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	10.5
11	43	20	31	30	
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	-	14
22	186	-	48	-	
24	206	-	50	-	
25	216	-	52	-	15.5
28	353	-	54	-	
30	382	-	57	-	16.5
32	412	-	59	-	

☞ Electroless nickel plated bushing (Alterations BMC, BMR) decreases maximum allowable torque and allowable thrust load by 20 ~ 30%.

Number of Teeth	20	21	22	24	25	26	28	30	32	34	36	38	40	42	44	46	48	50	60	72
P.D.	32.34	33.96	35.57	38.81	40.43	42.04	45.28	48.51	51.74	54.98	58.21	61.45	64.68	67.91	71.15	74.38	77.62	80.85	97.02	116.43
O.D.	31.83	33.45	35.07	38.30	39.92	41.53	44.77	48.00	51.24	54.47	57.70	60.94	64.17	67.41	70.64	73.87	77.11	80.34	96.51	115.92
F	40	40	45	45	48	48	55	55	61	61	67	74	74	74	80	80	87	87	104	123
E	27	27	30	30	35	35	40	40	45	45	50	50	58	58	60	60	67	67	84	102

Type	Part Number		Pulley Shape	Unit Price				
	Number of Teeth	Type, Nominal Width		MTPLA				
				Shape E	Shape F			
MTPLA MTPL	20	XL050 *A:14 *W:19	E	8	-	-	-	
	21			8	-	-	-	
	22			8	8	-	-	-
	24			8	8	-	-	-
	25			8, 10-12	8, 10, 11	-	-	-
	26			8, 10-12	8, 10, 11	-	-	-
	28			8, 10-12, 14-17	8, 10-12	-	-	-
	30			10-12, 14-17	10-12	-	-	-
	32			10-12, 14-18	10-12	-	-	-
	34			10-12, 14-18	10-12	-	-	-
	36			10-12, 14-20, 22	10-12	-	-	-
	38			10-12, 14-20, 22	10-12	-	-	-
	40			10-12, 14-20, 22, 24, 25, 28, 30	10-12	-	-	-
	42			10-12, 14-20, 22, 24, 25, 28, 30	10-12	-	-	-
	44			10-12, 14-20, 22, 24, 25, 28, 30, 32	10-12	-	-	-
	46			10-12, 14-20, 22, 24, 25, 28, 30, 32	10-12	-	-	-
	48			10-12, 14-20, 22, 24, 25, 28, 30, 32	10-12	-	-	-
	50			10-12, 14-20, 22, 24, 25, 28, 30, 32	10-12	-	-	-
60	10-12, 14-20, 22, 24, 25, 28, 30, 32	10-12	-	-	-			
72	10-12, 14-20, 22, 24, 25, 28, 30, 32	10-12	-	-	-			

Ordering Example: Part Number - Pulley Shape - Shaft Bore Dia.  
MTPL30XL050 - E - 17

Alterations: Part Number - Pulley Shape - Shaft Bore Dia. (FC, NFC, LFC, RFC, BMC, BMR)  
MTPL30XL050 - E - 17 - FC52.5

Alterations	Flange Cut	Flange Not Swaged	Flange Swaged on One Side	Surface Treatment
Code	FC	NFC	LFC, RFC	BMC, BMR
Spec.	<p>Lowers flange by cutting. FC: 0.5mm Increment ☞ No surface treatment is applied on flange circumference.</p> <p>☞ FC ≥ (O.D.) + 1 ☞ FC ≤ F-2 (Ordering Code) FC35</p>	<p>Flange is not installed. (Flange Included)</p>	<p>Flange is installed on either the bushing side (LFC) or the opposite side (RFC) prior to shipping. (Flange 1 pc. Included)</p>	<p>Applies electroless nickel plating on a bushing. (Antrusting 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)</p>