

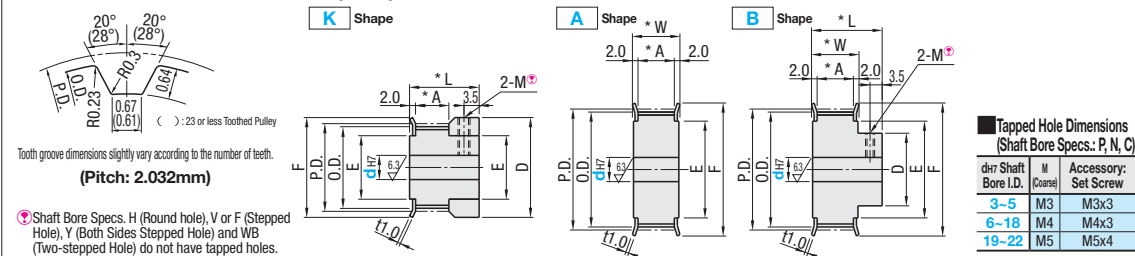
Timing Pulleys - MXL

For Timing Belts, see **P.1497**. For Idlers with Teeth, see **P.1479**.

Type	Belt Width				Material ^{*1}		Surface Treatment	Accessory ^{*1} Set Screws
	4.8mm (3/16inch) MXL019	6.4mm (1/4inch) MXL025	9.5mm (3/8inch) MXL037	12.7mm (1/2inch) MXL050	Pulley	Flange		
ATP	●	●	●	●	Aluminum Alloy	Aluminum Alloy	Clear Anodize	SUS304
BTP	●	●	●	●			Black Anodize	
KTP	●	●	●	●			Hard Clear Anodize ^{*2}	
NTP	●	●	●	●			Electroless Nickel Plating	
MTP	-	●	●	-	S45C Equivalent	SPCC	-	SCM435 (Black Oxide)
MTPB	-	●	●	-			Black Oxide	
MTPP	-	●	●	-	SUS304	SUS304	Electroless Nickel Plating	SUS304
STP	-	●	●	-			-	

*1. Flange is already swaged, and set screws are included with for Shaft Bore P, N and C. *2. The above material and accessory might be changed to the ones equivalent to the originals. *3. Hard Clear Anodize: Film Hardness 300HV -

Tooth Profile (ISO Standard Rack Dimensions) • Pulley Shape

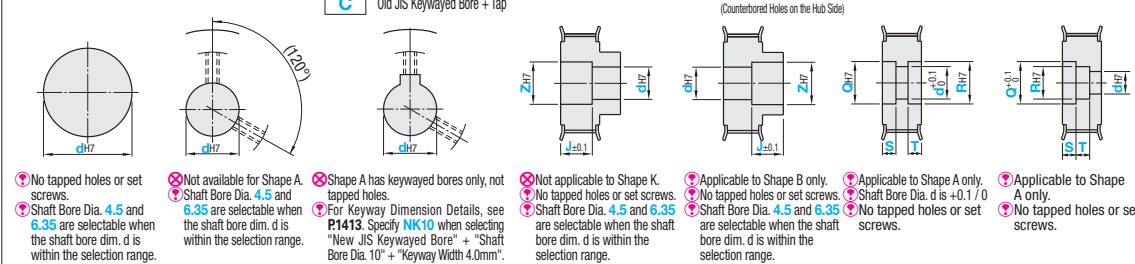


Shaft Bore Specs. H (Round hole), V or F (Stepped Hole), Y (Both Sides Stepped Hole) and WB (Two-stepped Hole) do not have tapped holes.

mm		Number of Teeth																mm	
		14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	30		
P.D.	9.06	9.70	10.35	11.00	11.64	12.29	12.94	13.58	14.23	14.88	15.52	16.17	16.82	17.46	18.11	18.76	19.40	20.70	21.99
O.D.	8.55	9.19	9.84	10.49	11.14	11.78	12.43	13.07	13.72	14.37	15.02	15.66	16.31	16.96	17.60	18.25	18.90	20.19	21.48
D	12	12	14	14	14	14	9	9	9	11	11	11	12	12	12	14	14	14	16
F	12	12	14	14	14	14	18	18	18	20	20	20	22	22	22	25	25	28	28
E	6	6	8	8	8	8	11	11	11	13	13	13	14	14	14	16	16	18	18

Number of Teeth / Dimension

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



Part Number			Pulley Shape															
			A								B, K							
Type			Shaft Bore Specs. "A": 1mm Increments "B": Selectable								Shaft Bore Specs. "B": 1mm Increments "K": Selectable							
			Number of Teeth	Belt Nominal Width	Pulley Shape	H(d) Round Hole	N(d), C(d) Keyway (Without Tap)	V Stepped Hole			Y Both Sides Stepped Hole, WB Two-stepped Hole			H(d) Round Hole	P(d) Round Hole + Tap	N(d), C(d) Keyway + Tap	V, F Stepped Hole	
V(d)	Z Z-d=2	J (0.1mm Increment)						YB(d)	Q, R Q(R)-Y≥2	S, T (0.1mm Increment)	V, F (d)	Z Z-d=2	J (0.1mm Increment)					
Aluminum ATP BTP KTP NTP	14	MXL019	A	3, 4	-	-	-	-	-	-	3, 4	3, 4	-	-	-	-	-	-
	15			3, 4	-	-	-	-	-	3, 4	3, 4	-	-	-	-	-	-	
	16			3-5	3	5	-	3	5	3-5	3-5	-	-	-	-	-	-	
	17			3-5	3	5	-	3	5	3-5	3-5	-	-	-	-	-	-	
	18			3-5	3	5	-	3	5	3-5	3-5	-	-	-	-	-	-	
	19		3-5	3	5	-	3	5	3-5	3-5	-	-	-	-	-	-	-	
	20		3-7	3-5	5-7	-	3-5	5-7	3-6	3-5	-	-	3-4	5-6	-	-	-	
	21		3-7	3-5	5-7	-	3-5	5-7	3-6	3-5	-	-	3-4	5-6	-	-	-	
	22		3-7	3-5	5-7	-	3-5	5-7	3-6	3-5	-	-	3-4	5-6	-	-	-	
	23		3-9	3-7	5-9	-	3-7	5-9	3-7	5-9	-	-	3-5	5-7	-	-	-	
24	3-9	3-7	5-9	-	3-7	5-9	3-7	5-9	-	-	3-5	5-7	-	-	-			
25	3-9	3-7	5-9	-	3-7	5-9	3-7	5-9	-	-	3-5	5-7	-	-	-			
26	3-10	3-8	5-10	-	3-8	5-10	3-8	5-10	-	-	3-6	5-8	-	-	-			
27	4-10	4-8	6-10	-	4-8	6-10	4-8	6-10	-	-	4-6	6-8	-	-	-			
28	4-10	4-8	6-10	-	4-8	6-10	4-8	6-10	-	-	4-6	6-8	-	-	-			
29	4-12	8	4-10	6-12	-	4-10	6-12	4-10	6-12	-	-	4-8	6-10	-	-	-		
30	4-12	8	4-10	6-12	-	4-10	6-12	4-10	6-12	-	-	4-8	6-10	-	-	-		
31	4-12	8	4-10	6-12	-	4-10	6-12	4-10	6-12	-	-	4-8	6-10	-	-	-		
32	5-14	8-11	5-12	7-14	-	5-12	7-14	5-12	7-14	-	-	5-10	7-12	-	-	-		
33	5-14	8-12	5-12	7-14	-	5-12	7-14	5-12	7-14	-	-	5-10	7-12	-	-	-		
34	5-16	8-13	5-14	7-16	-	5-14	7-16	5-14	7-16	-	-	5-12	7-14	-	-	-		
35	5-16	8-13	5-14	7-16	-	5-14	7-16	5-14	7-16	-	-	5-12	7-14	-	-	-		
36	5-19	8-16	5-17	7-19	-	5-17	7-19	5-16	5-14	-	-	5-14	7-16	-	-	-		
37	5-19	8-16	5-17	7-19	-	5-17	7-19	5-16	5-14	-	-	5-14	7-16	-	-	-		
38	5-21	8-17	5-19	7-21	-	5-19	7-21	5-18	5-16	-	-	5-16	7-18	-	-	-		
39	5-21	8-17	5-19	7-21	-	5-19	7-21	5-18	5-16	-	-	5-16	7-18	-	-	-		
40	5-23	8-19	5-20	7-23	-	5-20	7-23	5-24	5-20	-	-	5-20	7-24	-	-	-		
41	5-23	8-19	5-20	7-23	-	5-20	7-23	5-24	5-20	-	-	5-20	7-24	-	-	-		
42	5-26	8-31	5-34	7-36	-	5-34	7-36	5-34	7-36	-	-	5-26	7-32	-	-	-		
43	5-26	8-31	5-34	7-36	-	5-34	7-36	5-34	7-36	-	-	5-26	7-32	-	-	-		

⚠ Shaft Bore Dia. 9 is not available for Shaft Bore Specs. N.

⚠ Shaft Bore Dia. 8, 11, 13, 14, 17, 21-31 are not available for Shaft Bore Spec. C.

⚠ Shaft Bore Dia. 4.5 and 6.35 are selectable for Shaft Bore Specs. H, P, V and F.

⚠ NK10 is selectable for Shaft Bore Specs. N. See **Fig. P.1413**

Shaft Bore Dia. 9 is not available for Shaft Bore Specs. N. Shaft Bore Dia. 4.5 and 6.35 are selectable for Shaft Bore Specs. H, P, V and F. Shaft Bore Dia. 8, 11, 13, 14, 17, 21-31 are not available for Shaft Bore Spec. C. NK10 is selectable for Shaft Bore Specs. N. See P. 1413

Ordering Example	Part Number	Pulley Shape	Shaft Bore Specs. (H, P, N, C)	Shaft Bore Specs. (V, F)	Shaft Bore Specs. (Y, WB)
ATP40MXL025	-	B	N10	-	-
ATP60MXL037	-	B	V8	-	Z14 - J13.0
ATP48MXL050	-	A	Y8	-	-

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

Number of Teeth	Body Price																Shaft Bore Machining Charge (Body Price +)			
	MXL019	MXL025	MXL037	MXL050	MXL025	MXL037	MXL025	MXL037	MXL025	MXL037	MXL025	MXL037	MXL025	MXL037	MXL025	MXL037	ATP, BTP, KTP, NTP	MTP, MTPB, MTPP	STP	STP
14	Shape A	Shape A	Shape A	Shape A	Shape A	Shape A	Shape A	Shape A	Shape A	Shape A	Shape A	Shape A	Shape A	Shape A	Shape A	Shape A	P Hole	N, C Hole	V, F Hole	Y, WB Hole
15																				
16																				
17																				
18																				
19																				
20																				
21																				
22																				
23																				
24																				
25																				
26																				
27																				
28																				
30																				
32																				
34																				
36																				
38																				
40																				
42																				
44																				
46																				
48																				
50																				
52																				

Alterations Part Number - Pulley Shape - Shaft Bore Specs. (H, P, N, C) - Z - J - Q - R - S - T - (KC90-etc.) - KSC20 - K4

Alterations	Set Screw Angle	No Flange Swaged	Single Flange	Flange Cut
Code	KC90	NFC	RFC, LFC	FC
Spec.	Changes an angle of set screw to 90. (Flange 2 pcs. included) Ordering Code NFC	(Flange 1 pc. included) Ordering Code RFC, LFC	Cuts the flange O.D. in 0.5mm increment. Ordering Code FC17	

Alterations	Retaining Ring Groove	Adds taper for retaining bearing	Hub Shortening	Tapped Hole Dimensions	Changes the length of the included set screws
Code	SRG	BTC	BC	TPC	SLH10
Spec.	Retaining Ring Groove applicable to the shaft dia. of stepped hole is machined. Retaining Ring Groove Dim. P.1413 (Specify SRG) 2.5-12mm 0.5mm Increments	Add taper for retaining bearing inner ring. Ordering Code BTC4-TL1.5	Cuts the hub length in 0.5mm increment. Ordering Code BC6.5	Applicable to Shaft Bore Specs. P, N, C only. Not applicable to Shape A.	Applicable to Shaft Bore Specs. P, N, C only. Set Screws SLH10

Alterations	Add Side Holes	Side Tapped Hole	Side Through Hole	Side Counterbored
-------------	----------------	------------------	-------------------	-------------------