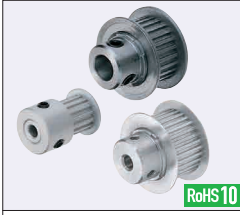


Timing Pulleys - MXL

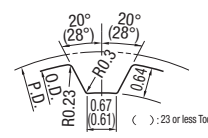
For Timing Belts, see **P.1497**. For Idlers with Teeth, see **P.1479**.



Type	Belt Width				Material*		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 Black Anodize Hard Clear Anodize* ² Electroless Nickel Plating	SUS304
BTP	●	●	●	●				
KTP	●	●	●	●				
NTP	●	●	●	●				
MTP	-	●	●	-	S45C Equivalent	SPCC	- Black Oxide Electroless Nickel Plating	SCM435 (Black Oxide)
MTPB	-	●	●	-				
MTPP	-	●	●	-				
STP	-	●	●	-	SUS304	SUS304	-	SUS304

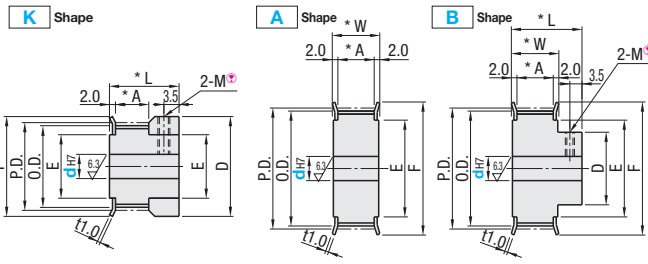
* Flange is already swaged, and set screws are included with for Shaft Bore P, N and C. *1. The above material and accessory might be changed to the ones equivalent to the originals. *2. Hard Clear Anodize: Film Hardness 300HV

Tooth Profile (ISO Standard Rack Dimensions) • Pulley Shape



Tooth groove dimensions slightly vary according to the number of teeth.
(Pitch: 2.032mm)

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.



Tapped Hole Dimensions (Shaft Bore Specs.: P, N, C)		
dH7 Shaft Bore I.D.	M (Coarse)	Accessory: Set Screw
3-5	M3	M3x3
6-18	M4	M4x3
19-22	M5	M5x4

Number of Teeth / Dimension

mm	Number of Teeth																												
	14	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	60	72	
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	19.40	20.70	21.99	23.29	24.58	25.87	27.17	28.46	29.75	31.05	32.34	38.81	46.57	
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	18.90	20.19	21.48	22.78	24.07	25.36	26.66	27.95	29.24	30.54	31.83	38.30	46.06	
D	12	12	14	14	14	14	9	9	9	11	11	11	12	12	12	14	14	14	16	16	18	18	20	20	22	22	28	30	
F	12	12	14	14	14	14	18	18	18	18	20	20	20	22	22	22	25	25	25	28	28	30	30	32	32	35	35	44	52
E	6	6	8	8	8	8	11	11	11	11	13	13	13	14	14	14	16	16	16	18	18	20	20	23	23	25	25	32	40

Belt Nominal Width / Dimension

mm	Nominal			
	MXL019	MXL025	MXL037	MXL050
A	6.0	7.5	11.0	14.0
W	10.0	11.5	15.0	18.0
L	16.5	18.0	22.0	25.0

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

H Round Hole

P Round Hole + Tap

N New JIS Keywayed Bore + Tap

C Old JIS Keywayed Bore + Tap

V Stepped Hole

F Stepped Hole (Counterbored Holes on the Hub Side)

Y Both Ends Stepped Hole

WB Two-stepped Hole

No tapped holes or set screws.
 Shaft Bore Dia. 4.5 and 6.35 are selectable when the shaft bore dim. d is within the selection range.
 Not available for Shape A.
 Shaft Bore Dia. 4.5 and 6.35 are selectable when the shaft bore dim. d is within the selection range.
 Shape A has keywayed bores only, not tapped holes.
 For Keyway Dimension Details, see P.1413. Specify NK10 when selecting "New JIS Keywayed Bore" + "Shaft Bore Dia. 10" + "Keyway Width 4.0mm".
 Not applicable to Shape K.
 No tapped holes or set screws.
 Shaft Bore Dia. 4.5 and 6.35 are selectable when the shaft bore dim. d is within the selection range.
 Applicable to Shape B only.
 No tapped holes or set screws.
 Shaft Bore Dia. 4.5 and 6.35 are selectable when the shaft bore dim. d is within the selection range.
 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	Pulley Shape																	
	Shaft Bore Specs. "A": 1mm Increments "B, K": Selectable						Shaft Bore Specs. "B, K": 1mm Increments "A": Selectable											
	Type	Number of Teeth	Belt Nominal Width	Pulley Shape	H (d) Round Hole	N (d), C (d) Keyway (Without Tap)	V Stepped Hole V (c) Z Z-ds-2 (0.1mm Increment)	J Both Sides Stepped Hole Y (c) W (d) Q (R) Ys-2 (0.1mm Increment)	S, T 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-ds-2 (0.1mm Increment)	J				
Aluminum	ATP BTP KTP NTP	MXL019	A	14	3-4	-	-	-	-	3-4	3-4	-	-	-				
				15	3-4	-	-	-	-	3-4	3-4	-	-	-	-			
				16	3-5	-	-	-	-	3-5	3-5	-	-	-	-	-		
				17	3-5	-	-	-	-	3-5	3-5	-	-	-	-	-		
				18	3-5	-	-	-	-	3-5	3-5	-	-	-	-	-		
				19	3-5	-	-	-	-	3-5	3-5	-	-	-	-	-		
				20	3-7	3-5	5-7	-	-	3-5	5-7	-	-	3-4	5-6	-	-	
				21	3-7	3-5	5-7	-	-	3-5	5-7	-	-	3-4	5-6	-	-	
				22	3-7	3-5	5-7	-	-	3-5	5-7	-	-	3-4	5-6	-	-	
				23	3-9	3-7	5-9	-	-	3-7	5-9	-	-	3-5	5-7	-	-	
Steel	MTP MTPB MTPP	MXL037	A	24	3-9	3-7	5-9	-	-	3-7	5-9	-	-	3-5	5-7			
				25	3-9	3-7	5-9	-	-	3-7	5-9	-	-	3-5	5-7	-		
				26	3-10	3-8	5-10	-	-	3-8	5-10	-	-	3-6	5-8	-	-	
				27	4-10	4-8	6-10	-	-	4-8	6-10	-	-	4-6	6-8	-	-	
				28	4-10	4-8	6-10	-	-	4-8	6-10	-	-	4-6	6-8	-	-	
				29	4-12	8	4-10	6-12	2.0JsW-2.0	4-10	6-12	3-7	S-T-W-3	4-8	6-10	2.0sJsL-2.0	-	
				30	4-12	8	4-10	6-12	-	4-10	6-12	-	-	4-8	6-10	-	-	
				31	4-12	8	4-10	6-12	-	4-10	6-12	-	-	4-8	6-10	-	-	
				32	5-14	8-11	5-12	7-14	-	5-12	7-14	-	-	4-8	6-10	-	-	
				33	5-14	8-12	5-12	7-14	-	5-12	7-14	-	-	4-8	6-10	-	-	
Stainless Steel	STP	MXL050	B	36	5-16	8-13	5-14	7-16	-	-	5-14	5-10	8-11	5-12	7-14	-		
				37	5-16	8-13	5-14	7-16	-	-	5-14	5-10	8-11	5-12	7-14	-		
				38	5-19	8-16	5-17	7-19	-	-	5-17	7-19	-	-	5-14	7-16	-	
				39	5-19	8-16	5-17	7-19	-	-	5-17	7-19	-	-	5-14	7-16	-	
				40	5-21	8-17	5-19	7-21	-	-	5-19	7-21	-	-	5-16	7-18	-	
				41	5-21	8-17	5-19	7-21	-	-	5-19	7-21	-	-	5-16	7-18	-	
				42	5-23	8-23	5-26	7-28	-	-	5-26	7-28	-	-	5-24	8-19	5-22	7-24
				44	5-36	8-31	5-34	7-36	-	-	5-34	7-36	-	-	5-26	5-22	8-21	5-24

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

Ordering Example: Part Number - Pulley Shape - Shaft Bore Specs., I.D. - Z - J - Q - R - S - T

(Shaft Bore Specs.: H, P, N, C) ATP40MXL025 - B - N10
 (Shaft Bore Specs.: V, F) ATP60MXL037 - B - V8 - Z14 - J13.0
 (Shaft Bore Specs.: Y, WB) ATP48MXL050 - A - Y8 - Q16 - R16 - S5 - T5