

Timing Pulleys - XL

For Timing Belts, see **P. 1497**. For Keyless Timing Pulleys, see **P. 1479**.

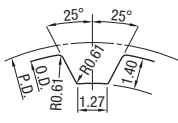


RoHS 10

Type	Belt Width				Material**1		Surface Treatment	Accessory**1 Set Screws
	6.4mm (1/4inch) XL025	7.9mm (5/16inch) XL031	9.5mm (3/8inch) XL037	12.7mm (1/2inch) XL050	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

**1 Materials for pulleys and accessories may be changed to the equivalent ones. *2 Hard Clear Anodize: Film Hardness 300HV ~.
 ● Flange is already swaged, and set screws are included with for Shaft Bore P, N and C.

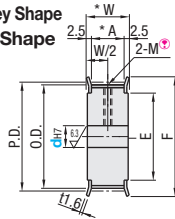
Tooth Profile (ISO Standard Rack Dimensions)



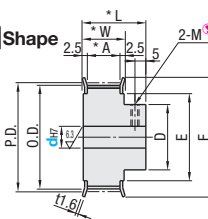
Tooth groove dimensions slightly vary according to the number of teeth.
 (Pitch: 5.08mm)

Pulley Shape

A Shape



B Shape



Tapped Hole Dimensions (Shaft Bore Specs.: P, N, C)

dH7 Shaft Bore I.D.	M (Coarse)	Accessory: Set Screw
4	M3	M3x3
5-12	M4	M4x3
13-17	M5	M5x4
18-35	M6	M6x5

● Aluminum and stainless steel flanges will have a thickness of 1.5.
 ● 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.

Number of Teeth / Dimension

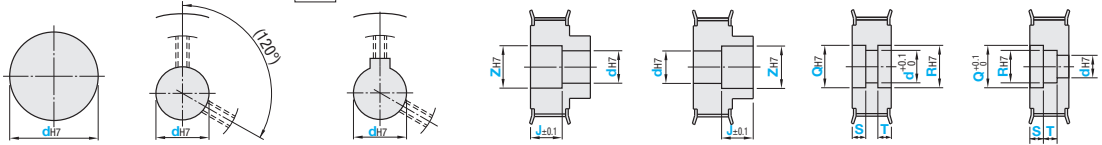
mm	Number of Teeth																											
	10	11	12	14	15	16	18	19	20	21	22	24	25	26	28	30	32	34	36	38	40	42	44	46	48	50	60	72
P.D.	16.17	17.79	19.40	22.64	24.26	25.87	29.11	30.72	32.33	33.96	35.57	38.81	40.43	42.01	45.26	46.81	51.74	54.98	58.21	61.45	64.68	67.91	71.15	74.38	77.62	80.85	97.01	116.43
O.D.	15.66	17.28	18.90	22.13	23.75	25.36	28.60	30.22	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
D	10	10	12	15	17	17	21	21	24	24	26	26	30	30	35	35	40	40	40	40	40	40	40	40	40	40	40	40
F	24	24	25	28	32	32	36	36	40	40	45	45	48	48	55	55	61	61	67	67	74	74	80	80	87	87	104	123
E	12	12	15	18	20	20	24	24	27	27	30	30	35	35	40	40	45	45	50	50	58	58	60	60	67	67	84	102

Belt Nominal Width / Dimension

mm	Nominal			
	XL025	XL031	XL037	XL050
A	7.5	9.0	11.0	14.0
W	12.5	14.0	16.0	19.0
L	21.0	23.0	25.0	28.0

● 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
- V** Stepped Hole
- F** Stepped Hole
- Y** Both Ends Stepped Hole
- WB** Two-stepped Hole
- C** Old JIS Keywayed Bore + Tap
- (Counterbored Holes on the Hub Side)



● No tapped holes or set screws. ● Not applicable to Shape A with 15 or less teeth and nominal width 025. ● For A-Shape pulley, the screw holes are set at around 120° to keep away from peaks when the shaft bore dim. d is within the selection range. ● Shaft Bore Dia. 4.5 and 6.35 are selectable when the shaft bore dim. d is within the selection range. ● Shape A with 15 or less teeth and nominal width 025 has keywayed bores only, not tapped holes. ● For Keyway Dimension Details, see P1413. ● Specify WK10 when selecting "New JIS Keywayed Bore" + "Shaft Bore Dia. 10" + "Keyway Width 4.0mm (Height 1.8mm)". ● 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. ● No tapped holes or set screws. ● No tapped holes or set screws.

Part Number	Type	Number of Teeth	Type Nominal Width	Pulley Shape															
				A						B									
				Shaft Bore Specs. "A": 1mm Increments "N": Selectable						Shaft Bore Specs. "B": 1mm Increments "V, F": Selectable									
Round Hole		Round Hole + Tap		Keyway + Tap		Stepped Hole		Both Ends Stepped Hole		Two-stepped Hole		Round Hole		Round Hole + Tap		Keyway + Tap		Stepped Hole	
H(d)	P(d)	N(d), C(d)	V(d)	Y(d)	WB	H(d)	P(d)	N(d), C(d)	V(d)	F(d)	Z-ds-2	H(d)	P(d)	N(d), C(d)	V(d)	F(d)	Z-ds-2	Z	J
10	Aluminum	4-8	4-8	4-6	6-8	4-6	6-8	4-6	6-8	4-6	6-8	4-6	4-6	4	6				
11	ATP	4-8	4-8	4-6	6-8	4-6	6-8	4-6	6-8	4-6	6-8	4-6	4-6	4	6				
12	BTP	4-11	4-8	4-9	6-11	4-9	6-11	4-9	6-11	4-9	6-11	4-8	4-8	4	6	6-8			
14	KTP	5-14	5-11	8	5-12	7-14	5-12	7-14	5-12	7-14	5-12	7-14	5-11	5-8	8	5-9	7-11		
15	NTP	5-16	5-12	8, 10, NK10	5-14	7-16	5-14	7-16	5-14	7-16	5-14	7-16	5-13	5-10	8, 10, NK10	5-11	7-13		
16		5-16	5-13	8-13	5-14	7-16	5-14	7-16	5-14	7-16	5-14	7-16	5-13	5-10	8, 10, NK10	5-11	7-13		
18		6-20	6-16	8-15	6-18	8-20	6-18	8-20	6-18	8-20	6-18	8-20	6-17	5-13	8-13	6-15	8-17		
19		6-20	6-16	8-15	6-18	8-20	6-18	8-20	6-18	8-20	6-18	8-20	6-17	5-13	8-13	6-15	8-17		
20		8-23	8-18	8-16	8-21	10-23	8-21	10-23	8-21	10-23	8-21	10-23	8-20	8-16	8-16	8-18	10-20		
21		8-23	8-18	8-18	8-21	10-23	8-21	10-23	8-21	10-23	8-21	10-23	8-20	8-16	8-16	8-18	10-20		
22		8-26	8-22	8-20	8-24	10-26	8-24	10-26	8-24	10-26	8-24	10-26	8-22	8-17	8-16	8-20	10-23		
24		8-26	8-22	8-22	8-24	10-26	8-24	10-26	8-24	10-26	8-24	10-26	8-22	8-17	8-16	8-20	10-23		
25		8-31	8-25	8-22	8-29	10-31	8-29	10-31	8-29	10-31	8-29	10-31	8-26	8-20	8-19	8-24	10-26		
26		8-31	8-25	8-23	8-29	10-31	8-29	10-31	8-29	10-31	8-29	10-31	8-26	8-20	8-20	8-24	10-26		
28		8-36	8-31	8-25	8-34	10-36	8-34	10-36	8-34	10-36	8-34	10-36	8-31	8-25	8-20	8-29	10-31		
30		10-36	10-31	10-30	10-34	12-36	10-34	12-36	10-34	12-36	10-34	12-36	8-31	8-25	8-20	8-29	10-31		
32		10-41	10-35	10-32	10-39	12-41	10-39	12-41	10-39	12-41	10-39	12-41	10-36	10-30	10-25	10-34	12-36		
34		10-41	10-35	10-32	10-39	12-41	10-39	12-41	10-39	12-41	10-39	12-41	10-36	10-30	10-25	10-34	12-36		
36		10-46	10-35	10-35	10-44	12-46	10-44	12-46	10-44	12-46	10-44	12-46	10-36	10-30	10-25	10-34	12-36		
38		10-46	10-35	10-35	10-44	12-46	10-44	12-46	10-44	12-46	10-44	12-46	10-36	10-30	10-25	10-34	12-36		
40		10-54	10-35	10-35	10-52	12-54	10-52	12-54	10-52	12-54	10-52	12-54	10-36	10-30	10-25	10-34	12-36		
42		10-54	10-35	10-35	10-52	12-54	10-52	12-54	10-52	12-54	10-52	12-54	10-36	10-30	10-25	10-34	12-36		
44		10-56	10-35	10-35	10-54	12-56	10-54	12-56	10-54	12-56	10-54	12-56	10-36	10-30	10-25	10-34	12-36		
46		10-56	10-35	10-35	10-54	12-56	10-54	12-56	10-54	12-56	10-54	12-56	10-36	10-30	10-25	10-34	12-36		
48		10-63	10-35	10-35	10-61	12-63	10-61	12-63	10-61	12-63	10-61	12-63	10-36	10-30	10-25	10-34	12-36		
50		10-63	10-35	10-35	10-61	12-63	10-61	12-63	10-61	12-63	10-61	12-63	10-36	10-30	10-25	10-34	12-36		
60		10-77	10-35	10-35	10-75	12-77	10-75	12-77	10-75	12-77	10-75	12-77	10-36	10-30	10-25	10-34	12-36		
72		10-85	10-35	10-35	10-83	12-94	10-83	12-94	10-83	12-94	10-83	12-94	10-36	10-30	10-25	10-34	12-36		

● Shaft Bore Dia. 9 is not available for Shaft Bore Specs. N. ● Shape A with 15 or less teeth and nominal width XL025 is not available for Shaft Bore Specs. P and no tapped holes is not added for Shaft Bore Specs. N and C. ● Shaft Bore Dia. 8, 11, 13, 14, 17, 21-35 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.

Ordering Example (Shaft Bore Specs.: H, P, N, C) **ATP24XL037** - B - N10
 (Shaft Bore Specs.: V, F) **ATP60XL050** - A - V20 - Z28 - J16.0
 (Shaft Bore Specs.: Y, WB) **ATP40XL050** - A - Y20 - Q32 - R32 - S7 - T7