

# Keyless Timing Pulleys

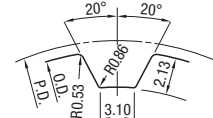
## L Type – Keyless Bushing with Centering Function

**Feature:** MechaLock Standard Type (P.1456) Incorporated Timing Pulleys. It tolerates an average of 1.2 times and 2.5 times greater torque compared to the conventional ST bushing and SH bushing respectively.

### Keyless Timing Pulleys – L Type – Keyless Bushing with Centering Function



#### Tooth Profile (ISO Standard Rack Dimensions)

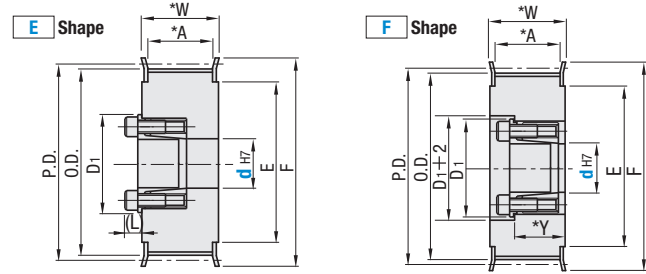


Tooth groove dimensions slightly change according to No. of teeth. (Pitch: 9.525 mm)

- The shaft bore may not have surface treatment.
- Cut Flange for 60 and 72 toothed pulleys.

Catalog No.				Material			Surface Treatment		
Belt Width 12.7 mm (1/2")	Belt Width 19.1 mm (3/4")	Belt Width 25.4 mm (1")	Belt Width 38.1 mm (1.5")	Pulley	Flange	Bushing	Pulley	Flange	Bushing
A: 14 W: 19 Y: 13	A: 21 W: 26 Y: 14 (18)	A: 27 W: 32 Y: 14 (22, 23.5)	A: 40 W: 45 Y: 19 (28, 32)	Ultra Duralumin-Based Aluminum Alloy	Aluminum Alloy	1045 Carbon Steel or Equivalent	Clear Anodize	—	—
<b>HPLA</b> _L050	<b>HPLA</b> _L075	<b>HPLA</b> _L100	<b>HPLA</b> _L150	Ultra Duralumin-Based Aluminum Alloy	Aluminum Alloy	1045 Carbon Steel or Equivalent	Hard Clear Anodize*	—	—
<b>HPLK</b> _L050	<b>HPLK</b> _L075	<b>HPLK</b> _L100	<b>HPLK</b> _L150				Electroless Nickel Plating	—	—
<b>HPLN</b> _L050	<b>HPLN</b> _L075	<b>HPLN</b> _L100	<b>HPLN</b> _L150	1045 Carbon Steel or Equivalent	Low Carbon Steel	1045 Carbon Steel or Equivalent	—	—	
<b>HPLT</b> _L050	<b>HPLT</b> _L075	<b>HPLT</b> _L100	<b>HPLT</b> _L150				Black Oxide	—	—
<b>HPLM</b> _L050	<b>HPLM</b> _L075	<b>HPLM</b> _L100	<b>HPLM</b> _L150				Electroless Nickel Plating	—	—
<b>HPLP</b> _L050	<b>HPLP</b> _L075	<b>HPLP</b> _L100	<b>HPLP</b> _L150					—	—

#### Pulley Shape



- Flange attached
- For installation, refer to P.1452, for details of keyless bushing, refer to P.1456.
- Y dimensions in ( ) require the shaft bore diameter of 12 and above.

Type	Teeth	Type, Nom. Width	Pulley Shape	$d_{17}$ Range (Select Shaft Bore Dia. from Table 1)										P.D.	O.D.	F	E
				E Shape					F Shape								
				L050	L075	L100	L150	L050	L075	L100	L150						
HPLA HPLK HPLN HPLT HPLM HPLP	14	L050 *A: 14 *W: 19 *Y: 13	E	8 10	8 10	8 10	8 10	8 10	8 10	8 10	8 10	8 10	8 10	42.45	41.68	48	35
	15			10 12	10 12	10 12	10 12	10	10 12	10 12	10 12	10 12	10 12	45.48	44.72	55	40
	16			10 12 14	10 12 14	10 12 14	10 12 14	10	10 12 14	10 12 14	10 12 14	10 12 14	10 12 14	48.51	47.75	61	45
	17			10 12 14	10 12 14	10 12 14	10 12 14	10	10 12 14	10 12 14	10 12 14	10 12 14	10 12 14	51.54	50.78	67	50
	18	L075 *A: 21 *W: 26 *Y: 14	E	10 12 14-16	10 12 14-16	10 12 14-16	10 12 14-16	10	10 12 14-16	10 12 14-16	10 12 14-16	10 12 14-16	10 12 14-16	54.57	53.81	70	56
	19			12 14-19	12 14-19	12 14-19	12 14-19	—	12 14-19	12 14-19	12 14-19	12 14-19	12 14-19	57.61	56.84	80	60
	20			12 14-19	12 14-20	12 14-20	12 14-20	—	12 14-19	12 14-20	12 14-20	12 14-20	12 14-20	60.64	59.88	87	67
	21			12 14-19	12 14-20	12 14-20	12 14-20	—	12 14-19	12 14-20	12 14-20	12 14-20	12 14-20	63.67	62.91	95	75
	22	L100 *A: 27 *W: 32 *Y: 14	E	12 14-19	12 14-20	12 14-20	12 14-20	—	12 14-19	12 14-20	12 14-20	12 14-20	12 14-20	66.70	65.94	102	80
	23			12 14-19	12 14-20	12 14-20	12 14-20	—	12 14-19	12 14-20	12 14-20	12 14-20	12 14-20	69.73	68.97	110	90
	24			12 14-19	12 14-20	12 14-20	12 14-20	—	12 14-19	12 14-20	12 14-20	12 14-20	12 14-20	72.77	72.00	115	95
	25			12 14-19	12 14-20	12 14-20	12 14-20	—	12 14-19	12 14-20	12 14-20	12 14-20	12 14-20	75.80	75.04	123	102
	26	L150 *A: 40 *W: 45 *Y: 19	E	12 14-19	12 14-20	12 14-20	12 14-20	—	12 14-19	12 14-20	12 14-20	12 14-20	12 14-20	78.83	78.07	131	110
	27			12 14-19	12 14-20	12 14-20	12 14-20	—	12 14-19	12 14-20	12 14-20	12 14-20	12 14-20	81.86	81.10	140	120
	28			12 14-19	12 14-20	12 14-20	12 14-20	—	12 14-19	12 14-20	12 14-20	12 14-20	12 14-20	84.89	84.13	152	130
	29			12 14-19	12 14-20	12 14-20	12 14-20	—	12 14-19	12 14-20	12 14-20	12 14-20	12 14-20	87.92	87.16	160	140
	30	L150 *A: 40 *W: 45 *Y: 19	E	15-19	15-20 22 24	15-20 22 24 25 28 30 32	15-20 22 24 25 28 30 32	—	15-19	15-20 22 24	15-20 22 24 25 28 30 32	15-20 22 24 25 28 30 32	15-20 22 24 25 28 30 32	103.08	102.32	170	150
	31			15-19	15-20 22 24	15-20 22 24 25 28 30 32	15-20 22 24 25 28 30 32	—	15-19	15-20 22 24	15-20 22 24 25 28 30 32	15-20 22 24 25 28 30 32	106.11	105.35	180	160	
	32			15-19	15-20 22 24	15-20 22 24 25 28 30 32	15-20 22 24 25 28 30 32	—	15-19	15-20 22 24	15-20 22 24 25 28 30 32	15-20 22 24 25 28 30 32	109.14	108.38	190	170	
	33			15-19	15-20 22 24	15-20 22 24 25 28 30 32	15-20 22 24 25 28 30 32	—	15-19	15-20 22 24	15-20 22 24 25 28 30 32	15-20 22 24 25 28 30 32	112.17	111.41	200	180	
	34	L150 *A: 40 *W: 45 *Y: 19	E	16-19	16-20 22 24	16-20 22 24 25 28 30 32	16-20 22 24 25 28 30 32	—	16-19	16-20 22	16-20 22 24 25 28 30 32	16-20 22 24 25 28 30 32	115.20	114.44	210	190	
35	16-19			16-20 22 24	16-20 22 24 25 28 30 32	16-20 22 24 25 28 30 32	—	16-19	16-20 22	16-20 22 24 25 28 30 32	16-20 22 24 25 28 30 32	118.23	117.47	220	200		
36	16-19			16-20 22 24	16-20 22 24 25 28 30 32	16-20 22 24 25 28 30 32	—	16-19	16-20 22	16-20 22 24 25 28 30 32	16-20 22 24 25 28 30 32	121.26	120.50	230	210		
37	16-19			16-20 22 24	16-20 22 24 25 28 30 32	16-20 22 24 25 28 30 32	—	16-19	16-20 22	16-20 22 24 25 28 30 32	16-20 22 24 25 28 30 32	124.29	123.53	240	220		
38	L150 *A: 40 *W: 45 *Y: 19	E	16-19	16-20 22 24	16-20 22 24 25 28 30 32	16-20 22 24 25 28 30 32	—	16-19	16-20 22	16-20 22 24 25 28 30 32	16-20 22 24 25 28 30 32	127.32	126.56	250	230		
39			16-19	16-20 22 24	16-20 22 24 25 28 30 32	16-20 22 24 25 28 30 32	—	16-19	16-20 22	16-20 22 24 25 28 30 32	16-20 22 24 25 28 30 32	130.35	129.59	260	240		
40			16-19	16-20 22 24	16-20 22 24 25 28 30 32	16-20 22 24 25 28 30 32	—	16-19	16-20 22	16-20 22 24 25 28 30 32	16-20 22 24 25 28 30 32	133.38	132.62	270	250		
41			16-19	16-20 22 24	16-20 22 24 25 28 30 32	16-20 22 24 25 28 30 32	—	16-19	16-20 22	16-20 22 24 25 28 30 32	16-20 22 24 25 28 30 32	136.41	135.65	280	260		
42	L150 *A: 40 *W: 45 *Y: 19	E	16-19	16-20 22 24	16-20 22 24 25 28 30 32	16-20 22 24 25 28 30 32	—	16-19	16-20 22	16-20 22 24 25 28 30 32	16-20 22 24 25 28 30 32	139.44	138.68	290	270		
43			16-19	16-20 22 24	16-20 22 24 25 28 30 32	16-20 22 24 25 28 30 32	—	16-19	16-20 22	16-20 22 24 25 28 30 32	16-20 22 24 25 28 30 32	142.47	141.71	300	280		
44			16-19	16-20 22 24	16-20 22 24 25 28 30 32	16-20 22 24 25 28 30 32	—	16-19	16-20 22	16-20 22 24 25 28 30 32	16-20 22 24 25 28 30 32	145.50	144.74	310	290		
45			16-19	16-20 22 24	16-20 22 24 25 28 30 32	16-20 22 24 25 28 30 32	—	16-19	16-20 22	16-20 22 24 25 28 30 32	16-20 22 24 25 28 30 32	148.53	147.77	320	300		
46	L150 *A: 40 *W: 45 *Y: 19	E	16-19	16-20 22 24	16-20 22 24 25 28 30 32	16-20 22 24 25 28 30 32	—	16-19	16-20 22	16-20 22 24 25 28 30 32	16-20 22 24 25 28 30 32	151.56	150.80	330	310		
47			16-19	16-20 22 24	16-20 22 24 25 28 30 32	16-20 22 24 25 28 30 32	—	16-19	16-20 22	16-20 22 24 25 28 30 32	16-20 22 24 25 28 30 32	154.59	153.83	340	320		
48			16-19	16-20 22 24	16-20 22 24 25 28 30 32	16-20 22 24 25 28 30 32	—	16-19	16-20 22	16-20 22 24 25 28 30 32	16-20 22 24 25 28 30 32	157.62	156.86	350	330		
49			16-19	16-20 22 24	16-20 22 24 25 28 30 32	16-20 22 24 25 28 30 32	—	16-19	16-20 22	16-20 22 24 25 28 30 32	16-20 22 24 25 28 30 32	160.65	159.89	360	340		
50	L150 *A: 40 *W: 45 *Y: 19	E	16-19	16-20 22 24	16-20 22 24 25 28 30 32	16-20 22 24 25 28 30 32	—	16-19	16-20 22	16-20 22 24 25 28 30 32	16-20 22 24 25 28 30 32	163.68	162.92	370	350		
51			16-19	16-20 22 24	16-20 22 24 25 28 30 32	16-20 22 24 25 28 30 32	—	16-19	16-20 22	16-20 22 24 25 28 30 32	16-20 22 24 25 28 30 32	166.71	165.95	380	360		
52			16-19	16-20 22 24	16-20 22 24 25 28 30 32	16-20 22 24 25 28 30 32	—	16-19	16-20 22	16-20 22 24 25 28 30 32	16-20 22 24 25 28 30 32	169.74	168.98	390	370		
53			16-19	16-20 22 24	16-20 22 24 25 28 30 32	16-20 22 24 25 28 30 32	—	16-19	16-20 22	16-20 22 24 25 28 30 32	16-20 22 24 25 28 30 32	172.77	172.01	400	380		
54	L150 *A: 40 *W: 45 *Y: 19	E	16-19	16-20 22 24	16-20 22 24 25 28 30 32	16-20 22 24 25 28 30 32	—	16-19	16-20 22	16-20 22 24 25 28 30 32	16-20 22 24 25 28 30 32	175.80	175.04	410	390		
55			16-19	16-20 22 24	16-20 22 24 25 28 30 32	16-20 22 24 25 28 30 32	—	16-19	16-20 22	16-20 22 24 25 28 30 32	16-20 22 24 25 28 30 32	178.83	178.07	420	400		
56			16-19	16-20 22 24	16-20 22 24 25 28 30 32	16-20 22 24 25 28 30 32	—	16-19	16-20 22	16-20 22 24 25 28 30 32	16-20 22 24 25 28 30 32	181.86	181.10	430	410		
57			16-19	16-20 22 24	16-20 22 24 25 28 30 32	16-20 22 24 25 28 30 32	—	16-19	16-20 22	16-20 22 24 25 28 30 32	16-20 22 24 25 28 30 32	184.89	184.13	440	420		
58	L150 *A: 40 *W: 45 *Y: 19	E	16-19	16-20 22 24	16-20 22 24 25 28 30 32	16-20 22 24 25 28 30 32	—	16-19	16-20								