

# Keyless Timing Pulleys - H

# Keyless Timing Pulleys - H

MechaLock Standard Type Incorporated (With Centering Function)

For Timing Belts **P.1219**, for Open End Belt **P.1231**

**RoHS**

Part Number				Material			Surface Treatment		
Belt Width 19.1mm (3/4 inch)	Belt Width 25.4mm (1 inch)	Belt Width 38.1mm (1.5 inch)	Belt Width 50.8mm (2 inch)	Pulley	Flange	Bushing	Pulley	Flange	Bushing
A: 21 W: 26	A: 27 W: 32	A: 40 W: 45	A: 54 W: 59	7075 Aluminum Alloy	6062 Aluminum Alloy	1045 Carbon Steel	7075 Aluminum Alloy	6062 Aluminum Alloy	1045 Carbon Steel
MTPLA_H075	MTPLA_H100	MTPLA_H150	MTPLA_H200	1045 Carbon Steel	Low Carbon Steel	1045 Carbon Steel	1045 Carbon Steel	Low Carbon Steel	1045 Carbon Steel
MTPL_H075	MTPL_H100	MTPL_H150	MTPL_H200	1045 Carbon Steel	Low Carbon Steel	1045 Carbon Steel	1045 Carbon Steel	Low Carbon Steel	1045 Carbon Steel
MTPLP_H075	MTPLP_H100	MTPLP_H150	MTPLP_H200	1045 Carbon Steel	Low Carbon Steel	1045 Carbon Steel	1045 Carbon Steel	Low Carbon Steel	1045 Carbon Steel

**Pulley Shape**

**E Shape**

**F Shape**

Tooth Profile (ISO Standard Rack Dimensions)

20° 20°

R1.42 (R1.04)

2.69

4.24

P.D.

( ): 19 teeth or less

Tooth groove dimensions slightly vary according to the number of teeth. (Pitch: 12.7mm)

\*Tightening Screw

2.5

\*A

2.5

1

D

D+1

dH7

\*For quantity and size of tightening screws with flange installed, see **P.1179**

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.1179**

Cut Flange for 38 and 50 Toothed Pulleys.

Part Number	Type	Number of Teeth	Type / Nominal Width	Pulley Shape	dh7 Range (Select Shaft Bore Dia. from Table 1)								P.D.	O.D.	F	E
					H075	H100	H150	H200	H075	H100	H150	H200				
14	H075	14	*A: 21 *W: 26	E	12-17	12-17	12-17	12-17	15-17	15-17	16-17	16-17	56.60	55.22	61	45
15	H075	15	*A: 21 *W: 26	E	14-20	14-20	14-20	14-20	15-20	15-20	16-20	16-20	60.64	59.27	67	50
16	H075	16	*A: 21 *W: 26	E	14-25	14-25	14-25	14-25	15-25	15-25	16-25	16-25	64.68	63.31	70	56
17	H075	17	*A: 21 *W: 26	E	14-25	14-25	14-25	14-25	15-25	15-25	16-25	16-25	68.72	67.35	80	60
18	H075	18	*A: 21 *W: 26	E	14-25	14-25	14-25	14-25	15-25	15-25	16-25	16-25	72.77	71.39	80	60
19	H075	19	*A: 21 *W: 26	E	14-32	14-32	14-32	14-32	15-32	15-32	16-32	16-32	76.81	75.44	87	67
20	H075	20	*A: 21 *W: 26	E	14-32	14-32	14-32	14-32	15-32	15-32	16-32	16-32	80.85	79.48	87	67
21	H075	21	*A: 21 *W: 26	E	14-35	14-32	14-35	14-32	15-35	15-35	16-35	16-35	84.89	83.52	95	75
22	H100	22	*A: 27 *W: 32	E	14-35	14-32	14-35	14-32	15-35	15-35	16-35	16-35	88.94	87.56	95	75
24	H100	24	*A: 27 *W: 32	E	19-35	19-32	19-35	19-32	19-35	19-35	19-35	19-35	97.02	95.65	104	84
25	H100	25	*A: 27 *W: 32	E	19-42	19-32	19-42	19-32	19-42	19-42	19-42	19-42	101.06	99.69	111	90
26	H100	26	*A: 27 *W: 32	E	20-42	20-32	20-42	20-32	20-42	20-42	20-42	20-42	105.11	103.73	111	90
28	H150	28	*A: 40 *W: 45	F	20-42	20-32	20-42	20-32	20-42	20-42	20-42	20-42	113.19	111.82	123	102
30	H150	30	*A: 40 *W: 45	F	20-42	20-32	20-42	20-32	20-42	20-42	20-42	20-42	121.28	119.90	127	105
32	H200	32	*A: 54 *W: 59	F	20-42	20-32	20-42	20-32	20-42	20-42	20-42	20-42	129.36	127.99	135	115
34	H200	34	*A: 54 *W: 59	F	20-42	20-32	20-50	20-32	20-50	20-42	20-50	20-50	137.45	136.07	144	125
36	H200	36	*A: 54 *W: 59	F	20-42	20-32	20-50	20-32	20-50	20-42	20-50	20-50	145.53	144.16	152	130
38	H200	38	*A: 54 *W: 59	F		25-50	25-32	25-50	25-42				153.62	152.24	165	140
40	H200	40	*A: 54 *W: 59	F		25-50	25-32	25-50	25-42				161.70	160.33	170	150
42	H200	42	*A: 54 *W: 59	F		25-50	25-32	25-50	25-42				169.79	168.41	180	155
44	H200	44	*A: 54 *W: 59	F		25-50	25-32	25-50	25-42				177.87	176.50	190	170
48	H200	48	*A: 54 *W: 59	F		25-50	25-32	25-50	25-42				194.04	192.67	205	180
50	H200	50	*A: 54 *W: 59	F		25-50	25-32	25-50	25-42				202.13	200.76	210	185

Select Shaft Bore Dia. from Table 1.

Electroless nickel plated bushing decreases maximum allowable torque and allowable thrust load by 20-30%.

Ordering Example: Part Number - Pulley Shape - Shaft Bore Dia. **MTPLP20H150 - F - 30**

Price [Configure Online](#)

Days to Ship [Configure Online](#)

Alterations Example: Part Number - Pulley Shape - Shaft Bore Dia. - (BMC --- etc) **MTPLA20H100 - E - 17 - FC84.5**

Unit Price

Number of Teeth	MTPLA				MTPL(x1.0)				MTPLP(x1.1)			
	H075	H100	H150	H200	H075	H100	H150	H200	H075	H100	H150	H200
14												
15												
16												
17												
18												
19												
20												
21												
22												
24												
25												
26												
28												
30												
32												
34												
36												
38												
40												
42												
44												
48												
50												

Alteration Code	Surface Treatment		Flange Cut	
	BMC, BMR	FC	FC	FC
Spec.	Applies electroless nickel plating on a bushing. (Antirusting treatment is applied to screws.) Electroless nickel plated bushing decreases allowable torque by 20-30%. BMC: Not RoHS Compliant (Screw: 4137 Alloy Steel Dacrotized Treatment) BMR: RoHS Compliant (Screw: 4137 Alloy Steel GeoMet Coating)	Lowers flange by cutting. FC: 0.5mm Increment No surface treatment is applied on flange circumference.	FC: (O. D.)+2 FC: F-2 (Ordering Code) FC35	
Price Adder				

Alteration Code	No Flange		Single Flange	
	NFC	LFC, RFC	LFC, RFC	LFC, RFC
Spec.	Flange is not installed. (Flange Included)	Flange is installed on either the bushing side (LFC) or the opposite side (RFC) prior to shipping. (Flange 1 pc. Included).		
Price Adder				

Feature: MechaLock Standard Type **P.1243** 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.

**RoHS**

Part Number				Material			Surface Treatment		
Belt Width 19.1mm (3/4 inch)	Belt Width 25.4mm (1 inch)	Belt Width 38.1mm (1.5 inch)	Belt Width 50.8mm (2 inch)	Pulley	Flange	MechaLock	Pulley	Flange	MechaLock
A: 21 W: 26 Y: 18 A: 27 W: 32 Y: 22(23.5)	A: 40 W: 45 Y: 28(32)	A: 54 W: 59 Y: 35(39)		7075 Aluminum Alloy	6062 Aluminum Alloy	1045 Carbon Steel	7075 Aluminum Alloy	6062 Aluminum Alloy	1045 Carbon Steel
HPLA_H075	HPLA_H100	HPLA_H150	HPLA_H200	1045 Carbon Steel	Low Carbon Steel	1045 Carbon Steel	1045 Carbon Steel	Low Carbon Steel	1045 Carbon Steel
HPLT_H075	HPLT_H100	HPLT_H150	HPLT_H200	1045 Carbon Steel	Low Carbon Steel	1045 Carbon Steel	1045 Carbon Steel	Low Carbon Steel	1045 Carbon Steel
HPLM_H075	HPLM_H100	HPLM_H150	HPLM_H200	1045 Carbon Steel	Low Carbon Steel	1045 Carbon Steel	1045 Carbon Steel	Low Carbon Steel	1045 Carbon Steel
HPLP_H075	HPLP_H100	HPLP_H150	HPLP_H200	1045 Carbon Steel	Low Carbon Steel	1045 Carbon Steel	1045 Carbon Steel	Low Carbon Steel	1045 Carbon Steel

**Pulley Shape**

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**F Shape**

Tooth Profile (ISO Standard Rack Dimensions)

20° 20°

R1.42 (R1.04)

2.69

4.24

P.D.

( ): 19 teeth or less

Tooth groove dimensions slightly vary according to the number of teeth. (Pitch: 12.7mm)

Surface treatment may not be applied to shaft bores.

Flange is installed.

For installation see **P.1239**

For details of MechaLock see **P.1243**

Cut Flange for 38-50 Toothed Pulleys.

Y dimensions in ( ) are for H100 with shaft bore diameter of 24 or more, and for H150 and 200 with shaft bore diameter of 35 or more.

Part Number	Type	Number of Teeth	Type / Nominal Width	Pulley Shape	dh7 Range (Select Shaft Bore Dia. from Table 1)								P.D.	O.D.	F	E
					H075	H100	H150	H200	H075	H100	H150	H200				
14	H075	14	*A: 21 *W: 26 *Y: 18	E	12-16	12-16	12-16	12-16	12-16	12-16	12-16	12-16	56.60	55.22	61	45
15	H075	15	*A: 21 *W: 26 *Y: 18	E	14-19	14-19	14-19	14-19	14-19	14-19	14-19	14-19	60.64	59.27	67	50
16	H075	16	*A: 21 *W: 26 *Y: 18	E	14-20	14-19	14-20	14-20	14-20	14-20	14-20	14-20	64.68	63.31	70	56
17	H075	17	*A: 21 *W: 26 *Y: 18	E	14-22	14-19	14-22	14-22	14-22	14-22	14-22	14-22	68.72	67.35	80	60
18	H075	18	*A: 21 *W: 26 *Y: 18	E	14-22	14-19	14-22	14-22	14-22	14-22	14-22	14-22	72.77	71.39	80	60
19	H100	19	*A: 27 *W: 32 *Y: 22	E	14-28	14-19	14-28	14-28	14-28	14-28	14-28	14-28	76.81	75.44	87	67
20	H100	20	*A: 27 *W: 32 *Y: 22	E	14-28	14-19	14-28	14-28	14-28	14-28	14-28	14-28	80.85	79.48	87	67
21	H100	21	*A: 27 *W: 32 *Y: 22	E	14-32	14-19	14-32	14-32	14-32	14-32	14-32	14-32	84.89	83.52	95	75
22	H100	22	*A: 27 *W: 32 *Y: 22	E	14-32	14-19	14-32	14-32	14-32	14-32	14-32	14-32	88.94	87.56	95	75
24	H150	24	*A: 40 *W: 45 *Y: 28	F	19-32	19	19-32	19-32	19-32	19-32	19-32	19-32	97.02	95.65	104	84
25	H150	25	*A: 40 *W: 45 *Y: 28	F	19-32	19	19-32	19-32	19-32	19-32	19-32	19-32	101.06	99.69	111	90
26	H150	26	*A: 40 *W: 45 *Y: 28	F	20-32		20-32	20-32	20-32	20-32	20-32	20-32	105.11	103.73	111	90
28	H150	28	*A: 40 *W: 45 *Y: 28	F	20-32		20-42	20-42	20-42	20-42	20-42	20-42	113.19	111.82	123	102
30	H150	30	*A: 40 *W: 45 *Y: 28	F	20-32		20-42	20-42	20-42	20-42	20-42	20-42	121.28	119.90	127	105
32	H200	32	*A: 54 *W: 59 *Y													