Keyless Timing Pulleys - T10

MechaLock Standard Type Incorporated (With Centering Function)

Features: MechaLock Standard Type (P.1491) 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.

Type	Part Number: Belt Width: 15mm A:17 W:22 T10150	Belt Width 20mm A:22 W:27 Y:18 T10200	Belt Width 25mm A:27 W:32 Y:22(23.5) T10250	Belt Width 30mm A:32 W:37 Y:24(25•27) T10300	Belt Width 40mm A:43 W:48 Y:30(31•34) T10400	Belt Width 50mm A:53 W:58 Y:35(36•39) T10500	M Material *1: Pulley	Flange	MechaLock	S Surface Treatment: Pulley	Flange	MechaLock
HTTA	●	●	●	●	●	●	EN AW-7075 Equiv.	EN AW-5052 Equiv.	EN 1.1191 Equiv.	Clear Anodize		-
HTTK	●	●	●	●	-	-				Hard Clear Anodize *2		-
HTTT	●	●	●	●	●	●	EN 1.1191 Equiv.	EN 1.0330 Equiv.	EN 1.1191 Equiv.	-		

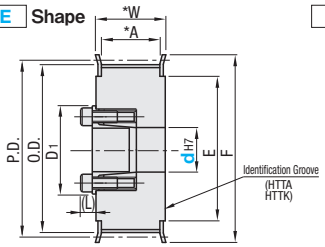
*1. The above material and accessory might be changed to the ones equivalent to the originals. *2. Hard Anodize Treatment: Film Hardness 300HV ~

Table 1: Select Shaft Bore Dia.

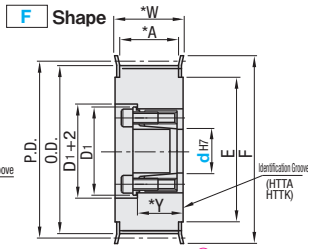
dH7	Max. Allowable Torque (N・m)	D1	(L)
12	44.1	28.5	6.5
14	63.7	30.5	
15	80.4	31.5	
16	83.3	33	
17	92.2	33.5	
18	95.1	34.5	
19	98.1	35.5	
20	216.0	42	8
22	255.0	44	
24	363.0	46	
25	392.0	47	
28	441.0	50	8.5
30	500.0	52	
32	530.0	54	
35	883.0	62	10
40	1079.0	67	
45	1285.0	72	
50	1706.0	77	10.5

• Pulley Shape

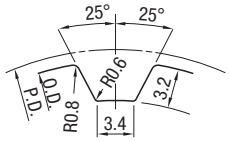
E Shape



F Shape



Standard Tooth Profile



Tooth groove dimensions slightly vary according to the number of teeth.

(Pitch:10.0mm)

Number of Teeth	16	18	20	22	24	25	26	28	30	32	34	36	40	44	48	50	60
P.D.	50.93	57.30	63.66	70.03	76.39	79.58	82.76	89.13	95.49	101.86	108.22	114.59	127.32	140.06	152.79	159.15	190.99
O.D.	49.05	55.45	61.80	68.15	74.55	77.70	80.90	87.25	93.65	100.00	106.40	112.75	125.45	138.20	150.95	157.30	189.10
F	58	61	67	80	87	87	87	95	104	111	115	123	135	152	160	170	200
E	40	45	50	60	67	67	67	75	84	90	95	102	115	130	140	150	175

- Surface treatment may not be applied to shaft bores.
- Machined Flange for 34, 50 and 60 Toothed Pulleys.
- Flange is installed.
- Y dimensions in ( ) require the shaft bore diameter of 24 or more.
- For installation, see P.1489. For details of MechaLock, see P.1491.

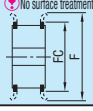
Part Number: Type	Number of Teeth	Type, Nominal Width	Pulley Shape	dH7 Range (,): Select the former or latter, (~): Specify in 1mm Increment — Shape E: T10150	T10200	T10250	T10300	T10400	T10500	Shape F: T10200	T10250	T10300	T10400	T10500
HTTA HTTK HTTT	16	T10150 *A:17 *W:22 T10200 *A:22 *W:27 *Y:18 T10250 *A:27 *W:32 *Y:22 (d24~:Y=23.5) T10300 *A:32 *W:37 *Y:24 (d24~32:Y=25) (d35:Y=27) T10400 *A:43 *W:48 *Y:30 (d24~32:Y=31) (d35:Y=34) T10500 *A:53 *W:58 *Y:35 (d24~32:Y=36) (d35:Y=39)	EF	12, 14	12, 14	12, 14	12, 14	12, 14	12, 14	12, 14	12, 14	12, 14	12, 14	12, 14
	18			12, 14~16	12, 14~16	12, 14~16	12, 14~16	12, 14~16	12, 14~16	12, 14~16	12, 14~16	12, 14~16	12, 14~16	12, 14~16
	20			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	12, 14~19	12, 14~19
	22			14~20, 22	14~20, 22	14~20, 22	14~20, 22	14~20, 22	14~20, 22	14~19	14~20, 22	14~20, 22	14~20, 22	14~20, 22
	24			14~20, 22	14~20, 22, 24, 25, 28	14~20, 22, 24, 25, 28	14~20, 22, 24, 25, 28	14~20, 22, 24, 25, 28	14~20, 22, 24, 25, 28	14~19	14~20, 22, 24, 25, 28	14~20, 22, 24, 25, 28	14~20, 22, 24, 25, 28	14~20, 22, 24, 25, 28
	25													
	26													
	28			16~20, 22	16~20, 22, 24, 25, 28, 30, 32			16~20, 22, 24, 25, 28, 30, 32		16~19	16~20, 22, 24, 25, 28, 30	16~20, 22, 24, 25, 28, 30, 32		
	30													
	32			20, 22	20, 22, 24, 25, 28, 30, 32, 35	20, 22, 24, 25, 28, 30, 32, 35		20, 22, 24, 25, 28, 30, 32, 35		-	20, 22, 24, 25, 28, 30	20, 22, 24, 25, 28, 30, 32, 35		
	34													
	36			20, 22		20, 22, 24, 25, 28, 30, 32, 35, 40				-				
	40			20, 22	20, 22, 24, 25, 28, 30, 32, 35	20, 22, 24, 25, 28, 30, 32, 35, 40, 45, 50				-	20, 22, 24, 25, 28, 30	20, 22, 24, 25, 28, 30, 32, 35		
	44													
	48													
	50													
	60													

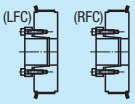
Ordering Example

Part Number	-	Pulley Shape	-	Shaft Bore Dia.
HTTA36T10250	-	F	-	25

Alterations

Part Number	-	Pulley Shape	-	Shaft Bore Dia.	-	(BMC···etc.)
HTTA36T10200	-	E	-	30	-	BMC

Alterations	Surface Treatment	Flange Cut
Code	BMC, BMR	FC
Spec.	Applies electroless nickel plating on a MechaLock. (Antirusting treatment is applied to screws.) Electroless nickel plated bushing decreases allowable torque by 20 ~ 30%. BMC:Not RoHS Compliant (Screw: EN 1.7220 Equiv. Dacrotized Treatment) BMR:RoHS Compliant (Screw: EN 1.7220 Equiv. GeoMet Coating)	Lowers flange by cutting. FC: 0.5mm Increment. No surface treatment is applied on flange circumference.  FC≥(O. D.)+1 FC≤F-2 Ordering Code FC35

Alterations	Flange Not Swaged	Flange Swaged on One Side
Code	NFC	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)  (LFC) (RFC)

Number of Teeth	Body Price 1 ~ 10 pc(s). HTTA (x1.0) T10150	T10200	T10250	T10300	T10400	T10500	HTTK (x1.1) T10150	T10200	T10250	T10300	T10400	T10500	HTTT T10150	T10200	T10250	T10300	T10400	T10500
16																		
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For orders larger than indicated quantity, please request a quotation.

dH7	MechaLock Incorporation Charge (+ Body Price)
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