

Timing Pulleys AT5 / AT10 Type

Features: AT type for heavy conveyance with allowable tension 1.3 times greater than T type.
 For Long Timing Belts, refer to P.1187, for Open End Belts, refer to P.1188, for Idlers with Teeth, refer to P.1169

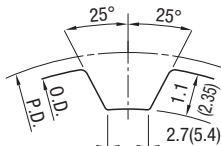
AT5 Type		Part Number					Material		Surface Treatment
Belt Width 10mm	Belt Width 15mm	Belt Width 15mm	Belt Width 20mm	Belt Width 25mm			Pulley	Flange	
A:11.6 W:16.5 L:25 (27/29)	A:16.6 W:21.5 L:30 (32/34)	A:16.5 W:22.5 L:38(40)	A:21.5 W:27.5 L:43(45)	A:26.5 W:32.5 L:48(50)			2017 Aluminum Alloy (Duralumin)	5052 Aluminum Alloy	Clear Anodize Black Anodize Hard Clear Anodize* Electroless Nickel Plating
TPPA_AT5100	TPPA_AT5150	TPPA_AT10150	TPPA_AT10200	TPPA_AT10250					
TPPB_AT5100	TPPB_AT5150	TPPB_AT10150	TPPB_AT10200	TPPB_AT10250					
TPPK_AT5100	TPPK_AT5150	TPPK_AT10150	TPPK_AT10200	TPPK_AT10250					
TPPN_AT5100	TPPN_AT5150	TPPN_AT10150	TPPN_AT10200	TPPN_AT10250					

*Flanges are installed. Set screws are included with P, N & C bore hole specification.
 *L dimension varies depending on the number of teeth. Refer to the Specification Table.

Hard Anodize Treatment: Film Hardness 300HV~
 AT5 Type
 ℓ=4 (No. of Teeth 15, 16)
 ℓ=5 (No. of Teeth 18~28)
 ℓ=6 (No. of Teeth 30~60)
 AT10 Type
 ℓ=8 (No. of Teeth 14~48)

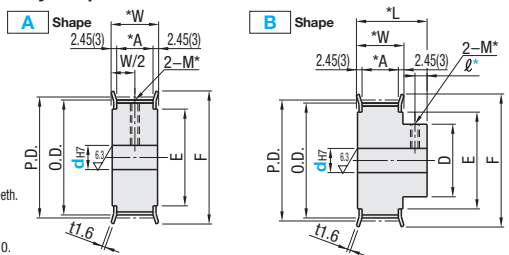
Tapped Hole Dimensions (Shaft Bore: P / N / C)		
Shaft Bore Inner Dia.	M (Coarse)	Accessory Set Screw
5	M3	M3x3
6~12	M4	M4x3
13~17	M5	M5x4
18~30	M6	M6x5
31~45	M8	M8x6
46~65	M10	M10x8

Standard Tooth Profile

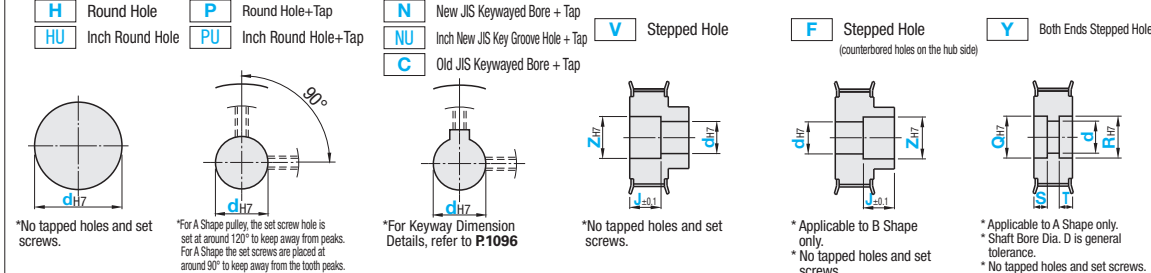


Tooth groove dimensions slightly change according to No. of teeth.
 (AT5 Pitch:5.0mm/AT10 Pitch:10.0mm)

Pulley Shape



Shaft Bore Specs.



*No tapped holes and set screws.
 *For A Shape pulley, the set screw hole is set at around 120° to keep away from peaks. For A Shape the set screws are placed at around 90° to keep away from the tooth peaks.
 *For Keyway Dimension Details, refer to P.1096
 *No tapped holes and set screws.
 *Applicable to B Shape only.
 *No tapped holes and set screws.
 *Applicable to A Shape only.
 *Shaft Bore Dia. D is general tolerance.
 *No tapped holes and set screws.

AT5 Type		Shaft Bore Spec. (1mm Increment)															P.D.	O.D.	D	F	E	ℓ								
Type	Teeth	H	P	N/C	HU	PU	NU	V/F	Y	dH7					d															
15		A	B	C	V	F	Y			5-10	5-10	5-10	5-8	8-10	10-18	F-K	F-K	F-K	F-K	F-K	5-8	5-7	7-10	7-9	23.87	22.65	13	28	18	4
16	AT5100	H	PU							6-12	6-12	6-12	6-10	8-12	10-18	C-E	C-E	C-E	C-E	C-E	6-10	6-10	6-12	6-12	25.46	24.20	16	32	20	4
18	"A :11.6	H	PU							6-14	6-14	6-14	6-12	8-14	10-20	C-E	C-E	C-E	C-E	C-E	6-12	6-12	6-14	6-14	28.65	27.40	16	33	22	4
20	"W :16.5	H	PU							6-16	6-16	6-16	6-14	8-16	10-22	C-E	C-E	C-E	C-E	C-E	6-14	6-14	6-16	6-16	31.83	30.50	20	36	24	4
22	"L :25	H	PU							6-18	6-18	6-18	6-16	8-18	10-24	D-G	D-G	D-G	D-G	D-G	6-16	6-16	6-18	6-18	35.01	33.85	20	40	27	4
24	"L :25	H	PU							7-19	7-19	7-19	7-15	8-18	10-24	D-G	D-G	D-G	D-G	D-G	7-17	7-14	9-19	9-18	38.20	37.00	20	45	30	5
25	AT5150	H	PU							7-22	7-22	7-20	7-17	8-20	8-13	D-H	D-H	D-H	D-H	D-H	7-20	7-19	9-23	9-21	39.79	38.60	25	45	30	5
26	"A :16.6	H	PU							8-27	8-27	8-22	8-21	8-22	8-17	E-K	E-K	E-K	E-K	E-K	8-25	8-25	10-27	10-26	41.38	40.20	30	48	35	6
28	AT5150	H	PU							8-27	8-27	8-24	8-22	8-24	8-18	E-K	E-K	E-K	E-K	E-K	8-25	8-25	10-27	10-26	44.56	43.35	30	48	35	6
30	"W :21.5	H	PU							10-28	10-28	10-26	10-23	10-26	10-18	F-K	F-K	F-K	F-K	F-K	10-26	10-26	12-28	12-28	50.93	49.70	35	55	40	6
32	"L :30	H	PU							10-32	10-32	10-28	10-27	10-28	10-22	F-L	F-L	F-L	F-L	F-L	10-30	10-30	12-32	12-31	57.30	56.05	40	61	45	6
36	"L :21.5	H	PU							10-37	10-37	10-30	10-30	10-30	10-25	F-M	F-M	F-M	F-M	F-M	10-35	10-34	12-37	12-36	63.66	62.45	40	67	50	6
40	"W :27.5	H	PU							10-42	10-42	10-38	10-37	10-38	10-29	F-P	F-P	F-P	F-P	F-P	10-40	10-40	12-42	12-41	70.03	68.80	45	74	58	6
44	"L :48	H	PU							12-50	12-46	12-42	12-40	12-40	12-30	F-R	F-R	F-R	F-R	F-R	12-48	12-44	14-50	14-41	76.39	75.15	45	83	63	6
48	"W :30	H	PU							12-59	12-59	12-45	12-45	12-43	12-43	F-S	F-S	F-S	F-S	F-S	12-57	12-57	14-59	14-41	79.58	78.35	45	87	67	6
60	"L :48	H	PU							12-72	12-71	12-45	12-45	12-45	12-45	F-S	F-S	F-S	F-S	F-S	12-70	12-69	14-72	14-41	95.49	94.25	50	99	80	6

AT10 Type		Shaft Bore Spec. (1mm Increment)															P.D.	O.D.	D	F	E	ℓ								
Type	Teeth	H	P	N/C	HU	PU	NU	V/F	Y	dH7					d															
14		A	B	C	V	F	Y			10-27	10-30	10-26	10-24	10-26	10-18	F-K	F-K	F-K	F-K	F-K	10-25	10-27	12-27	12-30	44.56	42.70	34	52	36	8
16	AT10150	H	PU							10-28	10-31	10-26	10-25	10-26	10-20	F-K	F-K	F-K	F-K	F-K	10-26	10-29	12-28	12-31	47.75	45.90	35	58	40	8
18	"A :16.5	H	PU							12-32	12-31	12-30	12-25	12-30	12-20	F-L	F-L	F-L	F-L	F-L	12-30	12-29	14-32	14-31	50.93	49.05	35	60	40	8
20	"W :22.5	H	PU							12-37	12-31	12-30	12-25	12-30	12-20	F-M	F-M	F-M	F-M	F-M	12-35	12-29	14-37	14-31	57.30	55.45	40	61	45	8
22	"L :38	H	PU							12-42	12-36	12-40	12-30	12-40	12-25	F-P	F-P	F-P	F-P	F-P	12-40	12-34	14-42	14-36	63.66	61.80	40	67	50	8
24	AT10200	H	PU							12-52	12-36	12-48	12-38	12-48	12-25	F-S	F-S	F-S	F-S	F-S	12-50	12-34	14-52	14-36	70.03	68.15	40	67	50	8
25	"A :21.5	H	PU							12-59	12-46	12-50	12-38	12-50	12-32	F-S	F-S	F-S	F-S	F-S	12-57	12-44	14-59	14-46	76.39	74.55	40	67	50	8
26	"W :27.5	H	PU							12-59	12-46	12-50	12-38	12-50	12-32	F-S	F-S	F-S	F-S	F-S	12-57	12-44	14-59	14-46	79.58	77.70	50	67	67	8
28	"L :43	H	PU							12-59	12-46	12-50	12-38	12-50	12-32	F-S	F-S	F-S	F-S	F-S	12-57	12-44	14-59	14-46	82.76	80.90	50	67	67	8
30	AT10250	H	PU							12-67	12-55	12-57	12-45	12-50	12-40	F-S	F-S	F-S	F-S	F-S	12-65	12-53	14-67	14-55	89.13	87.25	60	95	75	8
32	"A :26.5	H	PU							12-76	12-55	12-65	12-45	12-50	12-40	F-S	F-S	F-S	F-S	F-S	12-74	12-63	14-76	14-55	95.49	93.65	60	94	84	8
36	"W :32.5	H	PU							20-80	20-55	20-65	20-45	20-50	20-40	J-S	J-S	J-S	J-S	J-S	20-80	20-53	22-82	20-55	101.96	100.00	60	111	90	8
40	"L :48	H	PU							20-80	20-55	20-65	20-45	20-50	20-40	J-S	J-S	J-S	J-S	J-S	20-80	20-53	22-82	20-55	114.59	112.75	60	123	102	8
44	"W :48	H	PU							20-80	20-55	20-65	20-45	20-50	20-40	J-S	J-S	J-S	J-S	J-S	20-80	20-53	22-82	20-55	127.32	125.45	60	135	115	8
48	"L :48	H	PU							20-80	20-55	20-65	20-45	20-50	20-40	J-S	J-S	J-S	J-S	J-S	20-80	20-53	22-82	20-55	140.06	138.20	60	132	130	8
48	"L :48	H	PU							20-80	20-55	20-65	20-45	20-50	20-40	J-S	J-S	J-S	J-S	J-S	20-80	20-53	22-82	20-55	152.79	150.95	60	140	140	8

*For inch hole dimensions detail information refer to next page.
 *Z d=2 for shaft bore specification V and F. Q(R)-d=2 for shaft bore specification Y.
 *Shaft Bore Dia. 6.35 is selectable for Shaft Bore specifications H, P, V and F. (AT5 only)
 *Select NK10 when New JIS Keywayed Bore + Tap with shaft bore diameter of 10 and keyway width 4.0mm (height 1.8mm) is requested. P.1096
 *Shaft Bore Dia. 9 is not available for Shaft Bore specification N.
 *Shaft Bore Dia. 8, 9, 11, 13, 14, 17, 21 ~ 50 are not available for Shaft Bore specification C.



Order Example
 (Shaft Bore: H / P / N / C)
 (Shaft Bore: V / F)
 (Shaft Bore: Y)

Part Number	-	Pulley Shape	-	Shaft Bore Spec. / Inner Dia.	-	Z	-	J	-	Q	-	R	-	S	-	T
TPPA30-AT5150	-	A	-	NK10	-		-		-		-		-		-	
TPPA50-AT5150	-	B	-	F20	-	Z30	-	J20.0	-		-		-		-	
TPPA24-AT10250	-	A	-	Y25	-		-		-	Q37	-	R37	-	S7	-	T7

Inch Hole Specifications

No.	Nominal	Dimension(mm)
A	1/8	3.175
B	3/16	4.763
C	1/4	6.350
D	5/16	7.938
E	3/8	9.525
F	1/2	12.700
G	5/8	15.875
H	3/4	19.050