

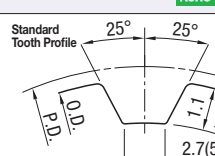
Timing Pulleys AT5 / AT10

■ **Features:** Compatible with AT type with allowable tension 1.3 times greater than T Type.
■ For Long Timing Belts, see **P.1507**. For Open End Belts, see **P.1509**. For Idlers with Teeth, see **P.1489**.

🔗 For e-Catalog non-standard products, see **P.131**.



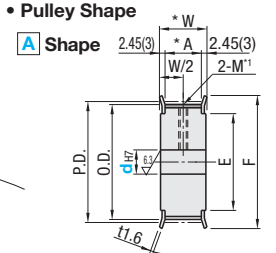
Standard Tooth Profile



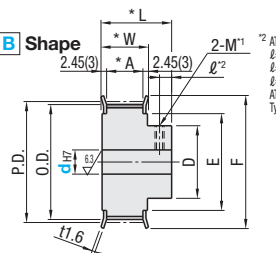
Tooth groove dimensions slightly vary according to the number of teeth.
(AT5 Pitch: 5.0mm / AT10 Pitch: 10.0mm)

■ **Pulley Shape**

A Shape



B Shape



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

Shaft Bore I.D.	M (Coarse)	Accessory: Set Screw
5	M3	M3x3
6-12	M4	M4x3
13-17	M5	M5x4
18-30	M6	M6x5
31-45	M8	M8x6
46-70	M10	M10x8

■ **Belt Nominal Width / Dimension**

mm	Nominal
A	11.6 16.6
W	16.5 21.5
L	25.0 30.0
L	27.0 32.0
L	29.0 34.0

■ **Number of Teeth / Dimensions (AT10)**

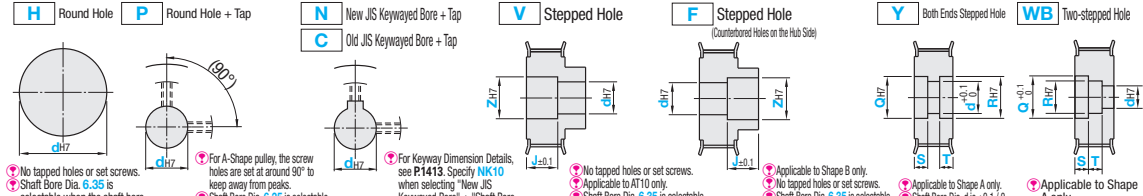
mm	14	15	16	18	20	22	24	25	26	28	30	32	36	40	44	48
P.D.	44.56	47.75	50.93	57.3	63.66	70.03	76.39	79.58	82.76	89.13	95.49	101.86	114.59	127.32	140.05	152.79
O.D.	42.70	45.90	49.05	55.45	61.80	68.15	74.55	77.70	80.90	87.25	93.65	100.00	112.75	125.45	138.20	150.95
D	34	35	35	35	40	40	50	50	50	60	60	60	60	60	60	60
F	52	58	58	61	67	67	80	87	87	95	104	111	123	135	152	160
E	36	40	40	45	50	50	67	67	67	75	84	90	102	115	130	140
T	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8

■ **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 Keyway Bore + Tap **V** Stepped Hole **F** Stepped Hole (Counterbored Holes on the Hub Side) **Y** Both Ends Stepped Hole **WB** Two-stepped Hole

C Old JIS Keyway Bore + Tap



🔗 No tapped holes or set screws.
🔗 Shaft Bore Dia. 6.35 is selectable when the shaft bore dim. d is within the selection range.

🔗 For A-Shape pulley, the screw holes are set at around 90° to keep away from peaks.
🔗 Shaft Bore Dia. 6.35 is selectable when the shaft bore dim. d is within the selection range.

🔗 For Keyway Dimension Details, see P1413. Specify NK10 when selecting "New JIS Keyway Bore" + "Shaft Bore Dia. 10" + "Keyway Width 4.0mm (Height 1.8mm)".

🔗 No tapped holes or set screws.
🔗 Applicable to AT10 only.
🔗 Shaft Bore Dia. 6.35 is 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. d is < 0.1 / 0 A only.
🔗 No tapped holes or set screws.

🔗 Applicable to Shape A only.
🔗 No tapped holes or set screws.

🔗 Applicable to Shape A only.
🔗 No tapped holes or set screws.

🔗 Applicable to Shape A only.
🔗 No tapped holes or set screws.

■ **AT5**

Part Number	Type	Number of Teeth	Type Nominal Width	Pulley Shape	Shaft Bore Specs.
TPPA	Aluminum	15	AT5100	A	5-14
TPPB		16			6-16
TPPK		18			6-18
TPPN		20			6-20
		22			7-23
		24			7-26
		25			7-26
		26			8-31
		28			8-31
		30			8-31
	32	10-31			
	36	10-31			
	40	10-31			
	44	12-54			
	48	12-59			
	50	12-63			
	60	12-77			

🔗 Shaft Bore Dia. 9 is not available for Shaft Bore Specs. N. 🔗 Shaft Bore Dia. 8, 11, 13, 14, 17, 21-50 are not available for Shaft Bore Spec. C. 🔗 Shaft Bore Dia. 6.35 is selectable for Shaft Bore Specs. H, P, V and F.

■ **AT10**

Part Number	Type	Number of Teeth	Type Nominal Width	Pulley Shape	Shaft Bore Specs.
TPPA	Aluminum	14	AT10150	A	10-32
TPPB		15			10-31
TPPK		16			12-36
TPPN		18			12-41
		20			12-46
		22			12-56
		24			12-63
		25			12-63
		26			12-63
		28			12-68
	30	12-76			
	32	20-80			
	36	20-85			
	40	20-85			
	44	20-85			
	48	20-85			

🔗 Shaft Bore Dia. 50-54 are not available for Shaft Bore Specs. N. 🔗 Shaft Bore Dia. 8, 11, 13, 14, 17, 21-55 are not available for Shaft Bore Spec. C.

Number of Teeth	Body Price				Shaft Bore Machining Charge (Body Price +)		
	TPPA (x1.0)	TPPB, TTPK (x1.1)	TPPN (x1.2)				
	AT5100	AT5150					
15	Shape A	Shape B	Shape A	Shape B	P Hole	N, C, V, F Hole	Y, WB Hole
16							
18							
20							
22							
24							
25							
26							
28							
30							
32							
36							
40							
44							
48							
50							
60							

Number of Teeth	Body Price				Shaft Bore Machining Charge (Body Price +)		
	TPPA (x1.0)	TPPB, TTPK (x1.1)	TPPN (x1.2)				
	AT10150	AT10200	AT10250				
14	Shape A	Shape B	Shape A	Shape B	P Hole	N, C, V, F Hole	Y, WB Hole
15							
16							
18							
20							
22							
24							
25							
26							
28							
30							
32							
36							
40							
44							
48							
50							
60							

Alterations

Part Number

TTPA18-AT5100

Pulley Shape

A

Shaft Bore Specs, I.D.

P10

Z

J

Q

R

S

T

(KC90...etc.)

NFC

Alterations	Set Screw Angle	No Flange Swaged	Single Flange	Flange Cut
Code	KC120	NFC	RFC, LFC	FC
Spec.	Changes angle layout of set screws to 120°. 🔗 For A-Shape pulley, the screw holes are set at around 120° to keep away from peaks.	(Flange 2 pcs. Included) Ordering Code NFC	(Flange 1 pc. Included) Ordering Code RFC 🔗 Not applicable to Shape K.	Cut the flange O.D. in 0.5mm increment. Ordering Code FC17 🔗 FC<0. D.)+1 🔗 FC<F-2 🔗 No surface treatment is applied on flange circumference.

Alterations	Retaining Ring Groove	Adds taper for retaining bearing	Hub Shortening	Tapped Hole Dimensions
Code	SRG	BTC	BC	TPC
Spec.	Retaining Ring Groove applicable to the shaft dia. of stepped hole is machined. Retaining Ring Groove Dim. P.1413 (Specify SRG) 2.5-24mm 0.5mm Increments 🔗 Minimum Thickness: 2mm 🔗 Applicable to Shape A only. 🔗 Applicable to Shaft Bore Specs. H and P only. 🔗 Standards of retaining ring groove for Z dim. is applied. 🔗 n<J-SRG-m Ordering Code SRG7	Add taper for retaining bearing inner ring Ordering Code BTC4-TL1.5 (Application Notes) 🔗 Applicable to Shape A only. 🔗 Applicable to Shaft Bore Specs. H and P only. 🔗 LT<L-W	Cuts the hub length in 0.5mm increment. Ordering Code BC6.5 (Application Notes) 🔗 Shaft Bore Specs. H, V, F: 3<BC<L-W 🔗 Shaft Bore Specs. P, N, C: M+3<BC<L-W 🔗 Not available for Shape A.	Ordering Code TPC5 (Application Notes) 🔗 Applicable to Shaft Bore Specs. P, N, C only. 🔗 Not applicable to Shape A. M TPC M3 M4 M4 M3, M5 M5 M4, M6 M6 M5, M8 M8 M6, M10 M10 M8

Alterations	SLH10
Spec.	Ordering Code SLH10 (Application Notes) 🔗 Applicable to Shaft Bore Specs. P, N, C only. Set Screws SLH M3x3 5, 6 M4x3 6, 10 M5x4 10 M6x5 10 M8x6 10, 12 M10x8 12, 15

For details, see Shaft Alteration Overview. **P.1414**

Alterations	Add Side Holes		
Code	Side Tapped Hole	Side Through Hole	Side Counterbored
	QTC, QFC, QSC	KTC, KFC, KSC	ZTC, ZFC, ZSC
Spec.	Machines tapped hole on the side surface of hub side. Ordering Code QTC28-M4 (Application Notes) 🔗 QTC Selection Specify the hole position (P, C, D, dim.). Code K M3, M4, M5, M6, M8 🔗 Minimum Thickness: 2mm Formula P.1414 🔗 Conditions may vary depending on the shaft bore specs. P.1414	Machines through hole on the side surface. Ordering Code KTC28-K4.5 (Application Notes) 🔗 KTC Selection Specify the hole position (P, C, D, dim.). Code K K4.0 ~ 13.0 (0.5mm increments) 🔗 Minimum Thickness: 2mm Formula P.1414 🔗 Conditions may vary depending on the shaft bore specs. P.1414	Machines counterbored hole on the side surface. Ordering Code ZTC28-Z4 (Application Notes) 🔗 ZTC Selection Specify the hole position (P, C, D, dim.). Code K ZM3, ZM4, ZM5, ZM6, ZM8 🔗 Minimum Thickness: 2mm Formula P.1414 🔗 Conditions may vary depending on the shaft bore specs. P.1414

For details, see Shaft Alteration Overview. **P.1414**

Ordering Example

(Shaft Bore Specs.: P, N, C)

Part Number

TTPA30-AT5150

Pulley Shape

A

Shaft Bore Specs, I.D.

NK10

Z

J

Q

R

S

T

(Shaft Bore Specs.: V, F)

TTPA50-AT5150

B

F20

Z30

J20.0

(Shaft Bore Specs.: Y, WB)

TTPA24-AT10250

A

Y25

Q37

R37

S7

T7