

Timing Pulleys - T5

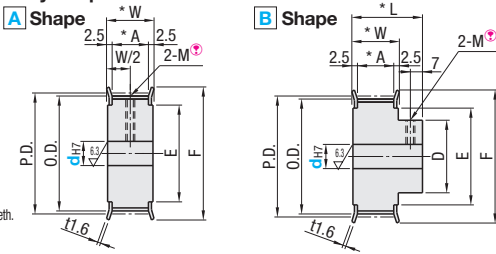
For Timing Belts, see P.1504. For Long Timing Belts, see P.1507. For Keyless High Torque Timing Pulleys, see P.1473, 1474. For Idlers with Teeth, see P.1489.



Type	Belt Width				Material ¹		Surface Treatment	Accessory ¹ Set Screws
	10mm	15mm	20mm	25mm	Pulley	Flange		
TTPA	●	●	●	●	Aluminum Alloy	Aluminum Alloy	Clear Anodize	SUS304
TTPB	●	●	●	●			Black Anodize	
TTPK	●	●	●	●			Hard Clear Anodize ²	
TTPN	●	●	●	●			Electroless Nickel Plating	
TTPT	●	●	●	●	S45C Equivalent	SPCC	-	SCM435 (Black Oxide)
TTPM	●	●	●	●			Black Oxide	
TTPP	●	●	●	●			Electroless Nickel Plating	

Flange is already swaged, and set screws are included with for Shaft Bore P, N and C. ¹The above material and accessory might be changed to the ones equivalent to the originals. ²Hard Clear Anodize: Film Hardness 300HV ~

Pulley Shape



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

dh7 Shaft Bore I.D.	M (Coarse)	Accessory: Set Screw
5	M3	M3x3
6~12	M4	M4x3
13~17	M5	M5x4
18~30	M6	M6x5
31~50	M8	M8x6

Belt Nominal Width / Dimension

mm	Nominal		
	T5100	T5150	T5200
A	11	17	22
W	16	22	27
L	28	34	39

Number of Teeth / Dimension

mm	Number of Teeth															
P.D.	19.10	22.28	23.87	25.46	28.65	31.83	35.01	38.20	39.79	41.38	44.56	47.75	50.93	54.11	57.30	63.66
O.D.	18.25	21.45	23.05	24.60	27.80	31.00	34.25	37.40	39.00	40.60	43.75	46.95	50.10	53.25	56.45	62.85
D	-	14	15	17	19	19	24	27	27	31	32	33	37	40	40	47
F	24	26	28	32	33	36	40	45	45	48	48	52	55	61	61	67
E	12	16	18	20	22	24	27	30	30	35	35	36	40	45	45	58

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 Keywayed Bore + Tap, C Old JIS Keywayed Bore + Tap, V Stepped Hole, F Stepped Hole, Y Both Ends Stepped Hole, WB Two-stepped Hole

Diagrams show various shaft bore profiles with dimensions like dH7, dH9, and keyway details.

Notes: No tapped holes or set screws. For A-Shape pulley, the screw holes are set at around 120° to keep away from peaks. Shaft Bore Dia. 6.35 is selectable when the shaft bore dim. d is within the selection range.

Part Number		Pulley Shape															
Type	Number of Teeth	Type Nominal Width	Pulley Shape	Shaft Bore Specs. "A": 1mm Increments "V": Selectable								Shaft Bore Specs. "B": 1mm Increments "Y": Selectable					
				H(d) Round Hole	P(d) Round Hole + Tapped	N(d), C(d) Keyway + Tapped	V(d) Stepped Hole	Z Z-ds2 (0.1mm Increment)	J J (0.1mm Increment)	Both Ends Stepped Hole Y(d), WB(d)	Two-stepped Hole Q, R Q(R)-ds2 (0.1mm Increment)	H(d) Round Hole	P(d) Round Hole + Tapped	N(d), C(d) Keyway + Tapped	V(d) Stepped Hole	Z Z-ds2 (0.1mm Increment)	J J (0.1mm Increment)
Aluminum	12	T5100	A	5-8	5-8	8	5-6	7-8	-	5-6	7-8	5-10	5-8	-	5-8	7-10	-
	14			5-12	5-10	8, 10, NK10	5-10	7-12	-	5-10	7-12	5-11	5-8	-	5-9	7-11	-
	15			5-14	5-10	8, 10, NK10	5-12	7-14	-	5-12	7-14	6-13	6-10	8	6-11	8-13	-
	16			6-16	6-12	8-12	6-14	8-16	-	6-14	8-16	6-15	6-11	8, 10, NK10	6-13	8-15	-
	18			6-18	6-12	8-12	6-16	8-18	-	6-16	8-18	6-15	6-12	8, 10, NK10	6-13	8-15	-
	20	T5150	A	6-20	6-16	8-16	6-18	8-20	-	6-18	8-20	7-20	7-15	8-12	7-18	9-20	-
	22			7-23	7-18	8-18	7-21	9-23	-	7-21	9-23	7-23	7-17	8-13	7-21	9-23	-
	24			7-26	7-20	8-20	7-24	9-26	-	7-24	9-26	7-23	7-18	8-15	7-21	9-23	-
	25			7-26	7-20	8-20	7-24	9-26	-	7-24	9-26	8-27	8-21	8-17	8-25	10-27	-
	26			8-31	8-23	8-22	8-29	10-31	-	8-29	10-31	8-28	8-22	8-18	8-26	10-28	-
Steel	28	T5200	B	8-31	8-24	8-24	8-29	10-31	-	8-29	10-31	10-29	10-23	10-18	10-27	12-29	-
	30			10-32	10-26	10-26	10-30	12-32	-	10-30	12-32	10-33	10-27	10-22	10-31	12-33	-
	32			10-36	10-28	10-28	10-34	12-36	-	10-34	12-36	10-36	10-30	10-25	10-34	12-36	-
	34			10-41	10-30	10-30	10-39	12-41	-	10-39	12-41	10-36	10-30	10-25	10-34	12-36	-
	36			10-41	10-30	10-30	10-39	12-41	-	10-39	12-41	10-43	10-37	10-30	10-41	12-43	-
	40	T5250	B	10-46	10-38	10-38	10-44	12-46	-	10-44	12-46	12-46	12-40	12-32	12-44	14-46	-
	44			12-54	12-42	12-40	12-52	14-54	-	12-52	14-54	12-56	12-45	12-40	12-54	14-56	-
	48			12-59	12-47	12-40	12-57	14-59	-	12-57	14-59	12-59	12-47	12-45	12-57	14-59	-
	50			12-63	12-50	12-45	12-61	14-63	-	12-61	14-63	12-71	12-50	12-50	12-69	14-71	-
	60			12-76	12-50	12-50	12-74	14-76	-	12-74	14-76						

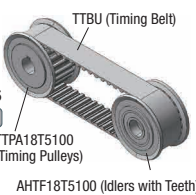
Shaft Bore Dia. 9 is not available for Shaft Bore Specs. N. Shaft Bore Dia. 8, 11, 13, 14, 17, 21~50 are not available for Shaft Bore Spec. C. Shaft Bore Dia. 6.35 is selectable for Shaft Bore Specs. H, P, V and F.

Ordering Example (Shaft Bore Specs.: H, P, N, C) TTPA18T5100 - A - NK10 (Shaft Bore Specs.: V, F) TTPA30T5200 - A - V10 - Z23 - J16.0 (Shaft Bore Specs.: Y, WB) TTPA48T5150 - A - Y25 - Q42 - R37 - S9 - T7

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



Combination of these app. examples can be selected on our website. Details about Selection Procedure P.115 e-Catalog Search Keyword #MA291 Search



Number of Teeth	Body Price																Shaft Bore Machining Charge (Body Price +)
	TTPA(x1.0) T5100	TTPB, TTPK(x1.1) T5150	TTPN(x1.2) T5200	TTPT(x1.0) T5150	TTPM(x1.05) T5200	TTPP(x1.15) T5250	Shape A	Shape B	Shape A	Shape B	Shape A	Shape B	Shape A	Shape B	Shape A	Shape B	
12																	
14																	
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Alterations Part Number Pulley Shape Shaft Bore Specs., I.D. J Q R S T (KC90 ... etc.) TTPA25T5100 - A - H10 - QSC18 - M4

Alterations	Set Screw Angle	No Flange Swaged	Single Flange	Flange Cut
Code	KC90	NFC	RFC, LFC	FC
Spec.	Changes an angle of set screw to 90. For A-Shape pulley, the screw holes are set at around 90° to keep away from peaks.	(Flange 2 pcs. Included) Ordering Code NFC	(Flange 1 pc. Included) Ordering Code RFC LFC	Cut the flange O.D. in 0.5mm increment. Ordering Code FC17

Alterations	Retaining Ring Groove	Adds taper for retaining bearing	Hub Shortening	Tapped Hole Dimensions	Changes the length of the included set screws
Code	SRG	BTC	BC	TPC	SLH
Spec.	Retaining Ring Groove applicable to the shaft dia. of stepped hole is machined. Retaining Ring Groove Dim. P1413 SRG +0.1 0.5mm Increments Minimum Thickness: 2mm Applicable to Shaft Bore Specs. V and F only. Standards of retaining ring groove for Z dim. is applied. Ordering Code SRG7	Add taper for retaining bearing inner ring Ordering Code BTC6-TL2.5 Applicable to Shape A only. Available for Shaft Bore Specs. H, P only. TL<L-W	Cuts the hub length in 0.5mm increment. Ordering Code BC6.5 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 Applicable to Shaft Bore Specs. P, N, C only. M TPC M3 M4 M4 M3 M5 M5 M4 M6 M6 M5 M8 M8 M6	Ordering Code SLH10 Applicable to Shaft Bore Specs. P, N, C only. Set Screws SLH M3x3 6 M4x3 5, 8 M5x4 6, 10 M6x5 10 M8x6 10, 12

Alterations	Add Side Holes Conditions may vary depending on the shaft bore specs. P.1414		
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 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 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 counterbored hole on the side surface. Ordering Code ZTC28-Z4 Specify the hole position (P. C. D. dim.). Code Z M3, ZM4, ZM5, ZM6, ZM8 Minimum Thickness: 2mm Formula P.1414 Conditions may vary depending on the shaft bore specs. P.1414