

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

For High Torque Timing Belts, see **P.1501**. For Idlers with Teeth, see **P.1503**.



Standard Tooth Profile
P2M
 (Pitch: 2.0mm)

P3M
(Pitch: 3.0mm)

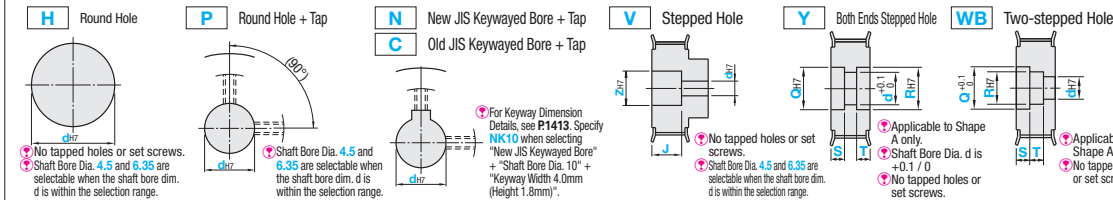
(Tooth groove dimensions slightly vary according to the number of teeth.)

Number of Teeth / Dimension

Standard	mm	Number of Teeth																	
		14	15	16	18	20	22	24	25	28	30	32	36	40	42	44	48	50	60
P2M Type	P.D.	8.91	9.55	10.19	11.46	12.73	14.01	15.28	15.92	17.83	19.10	20.37	22.92	25.46	26.74	28.01	30.56	31.83	36.20
	O.D.	8.40	9.04	9.68	10.95	12.22	13.50	14.77	15.41	17.32	18.59	19.86	22.41	24.96	26.23	27.50	30.05	31.32	37.69
	D	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	F	12	12	14	14	16	16	18	22	22	25	28	28	32	32	35	35	38	42
	F	6	6	8	8	10	10	10	14	14	16	18	18	22	23	25	25	28	32

Standard	mm	Number of Teeth															
		10	12	14	15	16	18	20	22	24	25	26	28	30	32	36	40
P3M Type	P.D.	9.55	11.46	13.37	14.32	15.28	17.19	19.10	21.01	22.92	23.87	24.83	26.74	28.65	30.56	34.38	38.20
	O.D.	8.79	10.70	12.61	13.56	14.52	16.43	18.34	20.25	22.16	23.11	24.07	25.98	27.89	29.80	33.62	37.44
	D	12	15	17	17	17	21	25	12	14	14	16	18	18	24	26	27
	F	12	14	16	16	16	22	25	28	28	30	30	32	35	35	40	44
	E	6	8	10	10	10	10	14	16	18	18	20	20	23	25	25	28

Shaft Bore Specs Select shaft bore spec mark and each dim. from the table below.  Surface treatment may not be applied to shaft bores.



■P2M

Part Number			Pulley Shape																				
Type	Number of Teeth	Type Nominal Width	Pulley Shape	Shaft Bore Specs. "A" "-": 1mm Increments " " Selectable										Shaft Bore Specs. "B, K" "-": 1mm Increments " " Selectable									
				H(Ø) Round Hole		P(Ø) Round Hole + Tap		N(Ø), C(Ø) Keyway + Tap		V Stepped Hole		Y Both Sides Stepped Hole, W6 Two-stepped Hole				H(Ø) Round Hole		P(Ø) Round Hole + Tap		N(Ø), C(Ø) Keyway + Tap		V Stepped Hole	
				Round Hole	Round Hole + Tap	Keyway + Tap	V(Ø)	Z-d=2	(Ø,1mm Increment)	J (Ø) W6(Ø)	Q(R)-d=2	(Ø,1mm Increment)	Round Hole	Round Hole + Tap	Keyway + Tap	V(Ø)	Z-d=2	(Ø,1mm Increment)	J (Ø)				
Aluminum FTPA	14	P2M060	A	K	3																		
	15				3																		
	16				3-4																		
	18				3-4																		
	20			4-6	4			4	6		4	6		4-6,35									
	22			4-6	4			4	6		4	6		4-6,35									
	24			4-6	4			4	6		4	6		4-6,35									
	25			4-10	4-6			4-8	6-10		4-8	6-10		4-6,35									
	28		5-10	5-6			5-8	7-10		5-8	7-10		5-8	5-8,35			5-6	7-8					
	32		5-12	5-9			5-10	7-12		5-10	7-12		5-8	5-8			5-6	7-8					
	36		5-14	5-10	8		5-12	7-14		5-12	7-14		5-8	5-8			5-6	7-8					
	40		5-14	5-10	8	5-12	7-14		5-12	7-14		5-10	5-8			5-8	7-10						
	42		5-19	5-13	8-10	5-17	7-19		5-17	7-19		5-12	5-10		8	5-10	7-12						
	44		5-19	5-13	8-10	5-17	7-19		5-17	7-19		5-14	5-12		8, 10, NK10	5-12	7-14						
	46		5-21	5-15	8-13	5-19	7-21		5-19	7-21		5-14	5-12		8, 10, NK10	5-12	7-14						
	48		5-21	5-15	8-13	5-19	7-21		5-19	7-21		5-18	5-12		8, 10, NK10	5-12	7-14						
50	5-24	5-18	8-15	5-22	7-24		5-22	7-24		5-18	5-15		8-13	5-14	7-16								
60	5-28	5-22	8-20	5-26	7-28		5-26	7-28		5-24	5-19		8-18	5-17	7-19								

⊗ Shaft Bore Dia. 9 is not available for Shaft Bore Specs. N. ⊗ Shaft Bore Dia. 8, 11, 13, 14, 17 are not available for Shaft Bore Specs. C. ⊕ Shaft Bore Dia. 4.5 and 6.35 are selectable for Shaft Bore Specs. H, P, V

■ P3M

Part Number			Pulley Shape	Pulley Shape														
Type	Number of Teeth	Type Nominal Width		A										B, K				
				Shaft Bore Specs. "A": 1mm Increments "K": Selectable										Shaft Bore Specs. "A": 1mm Increments "K": Selectable				
				V Stopped Hole										V Stopped Hole				
				Y Both Sides Stopped Hole, WB Two-stopped Hole										Y Both Sides Stopped Hole, WB Two-stopped Hole				
				H(c) Round Hole	P(c) Round Hole + Tap	N(c), C(c) Keyway + Tap	V(d)	Z Z-ds2	J (0.1mm Increment)	Y(d) WB(d)	Q, R QR(-ds2)	S, T (0.1mm Increment)	H(c) Round Hole	P(c) Round Hole + Tap	N(c), C(c) Keyway + Tap	V(d)	Z Z-ds2	J (0.1mm Increment)
Steel PTPM PTPP	10	P3M100	A	3	-	-	-	-	-	-	-	-	-	-	-	-		
	12			4	-	-	-	-	-	-	-	-	-	-	-	-	-	
	14			4-6	4	-	-	-	4	6	-	-	-	-	-	-	-	-
	15			4-6	4	-	-	-	4	6	-	-	-	-	-	-	-	-
	16			4-6	4	-	-	-	4	6	-	-	-	-	-	-	-	-
18	4-10		4-8	-	-	-	4-8	6-10	-	-	-	-	-	-	-	-	-	
20	4-12		4-10	-	-	-	4-10	6-12	-	-	-	-	-	-	-	-	-	
22	5-14		5-10	8	5-12	7-14	5-12	7-14	-	-	-	-	-	-	-	-	-	
Aluminum PTPA	22		P3M150	A	5-14	5-10	8	5-12	7-14	2sJsW-2	5-12	7-14	3-S-W-3	5-8	5-8	-	-	-
	24				5-16	5-10	8	5-14	7-16		5-14	7-16		5-10	5-9	-	6	9
	26	6-16			6-10	8	6-14	8-16	6-14		8-16	5-12		5-9	8	7	10	-
	28	6-19			6-13	8, 10, NK10	6-17	8-19	6-17		8-19	6-14		6-12	8, 10, NK10	7, 8, 9	10-12	-
	30	6-21			6-15	8-13	6-19	8-21	6-19		8-21	6-14		6-12	8, 10, NK10	7, 8, 9	10-12	2sJsL-2
32	6-21	6-15		8-13	6-19	8-21	6-19	8-21	6-14	6-12	8, 10, NK10	7, 8, 9	10-12					
Aluminum PTPA	36	P3M150		B	6-24	6-18	8-15	6-22	8-24	6-22	8-24	6-20	6-16	8-15	7-13	10-16	-	
	40				6-28	6-22	8-20	6-26	8-28	6-26	8-28	6-23	6-18	8-16	7-14	10-18	-	

⊗ Shaft Bore Dia. 9 is not available for Shaft Bore Specs. N. ⊗ Shaft Bore Dia. 8, 11, 13, 14, 17 are not available for Shaft Bore Specs. C. ⓘ Shaft Bore Dia. 4.5 and 6.35 are selectable for Shaft Bore Specs. H, P, V



Ordering Example

(Shaft Bore Specs.: H, P, N, C)
(Shaft Bore Specs.: V)
(Shaft Bore Specs.: Y, WB)

Part Number	Pulley Shape	Shaft Bore Specs., I.D.	Z	J	Q	R	S	T
PTPA48P2M060	B	NK10						
PTPM32P3M100	B	V7	Z10	J6				
PTPA40P3M150	A	Y10			Q19	R15	S5	T4

■ P2M

Number of Teeth	Body Price		Shaft Bore			
	PTPA		Machining Charge			
	P2M060		(Body Price +)			
	Shape A	Shapes S and K	P Hole	N, C, V Hole	Y, WB Hole	
14						
15						
16					-	-
18						
20						
22						
24						
25						
28						
30						
32						
36						
40						
42						
44						
48						
50						
60						

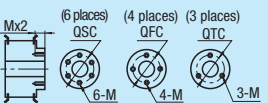
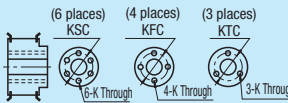
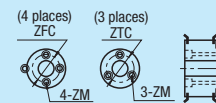


Alterations  **Part Number** - **Pulley Shape** - **Shaft Bore Specs., Hole Dia.** - **Z** - **J** - (KC120...etc.)
PTPA48P2M060 - B - N10 - NFC

■ P3M

[illegible]

Alterations	Set Screw Angle	No Flange Swaged	Single Flange	Flange Cut	Hub Shortening
Code	KC120	NFC	RFC, LFC	FC	BC
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 Application Notes ⚠ Not available for Shape K.  	Cut the flange O.D. in 0.5mm increment. Ordering Code FC17 Application Notes ⚠ $FC \geq (O.D.) + 1$ ⚠ $FC \leq F - 2$ ⚠ No surface treatment is applied on flange circumference. 	Cuts the hub length in 0.5mm increment. Ordering Code BC6.5 Application Notes ⚠ Shaft Bore Specs. H, V, F: $3 \leq BC < L - W$ ⚠ Shaft Bore Specs. P, N, C: $M + 3 \leq BC < L - W$ ⚠ Not available for Shapes K and A. 

Alterations	Add Side Holes  Conditions may vary depending on the shaft bore specs. P.1414		
	Side Tapped Hole	Side Through Hole	Side Counterbored
Code	QTC, QFC	KTC, KFC	ZTC, ZFC
Spec.	Machines tapped hole on the side surface of hub side. Ordering Code: QTC28-M4 Q: C Selection Specify the hole position (P. C. D. dim.). M Selection M3, M4, M5 Application Notes  Not applicable to Shape K.  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 K: C Selection Specify the hole position (P. C. D. dim.). Code K K4.0 ~ 11.0 (0.5mm Increments) Application Notes  Not applicable to Shape K.  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 Z: C Selection Specify the hole position (P. C. D. dim.). Z Selection ZM3, ZM4, ZM5 Application Notes  Not applicable to Shape K.  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		

For details, see Shaft Alteration Overview. P.1414