Order guide

C (Major category) BT (Category) J (Series) - A (1 Pulley type) H1 (2 Surface treatment) - S5M100 (3 Pulley type) - 14 (4 Number of teeth) - A (5 Pulley shape) - H (6 Shaft hole specifications) - d6 (7 Shaft hole inner diameter) - FC (8 Optional processing)

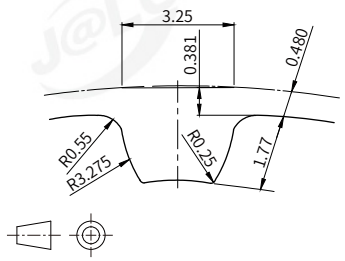
Please refer to the series code to select the type and parameters for ordering.

Code	Belt width	Tooth pitch	Material ① Pulley	Material ① Flange	Surface treatment ②
CBTJ-AH1-S5M100	10		Aluminum alloy		Natural color anodizing
CBTJ-AH2-S5M100					Black anodized
CBTJ-AN1-S5M100					Electroless nickel plating
CBTJ-C2E1-S5M100			S45C	SPCC	darken
CBTJ-C2N1-S5M100					Electroless Nickel Plating
CBTJ-A-S5M100			Aluminum alloy		—
CBTJ-AH1-S5M150	15	5.0			Natural color anodizing
CBTJ-AH2-S5M150					Black anodized
CBTJ-AN1-S5M150					Electroless nickel plating
CBTJ-C2E1-S5M150			S45C	SPCC	darken
CBTJ-C2N1-S5M150					Electroless Nickel Plating
CBTJ-A-S5M150			Aluminum alloy		—
CBTJ-AH1-S5M250	25				Natural color anodizing
CBTJ-AH2-S5M250					Black anodized
CBTJ-AN1-S5M250					Electroless nickel plating
CBTJ-C2E1-S5M250			S45C	SPCC	darken
CBTJ-C2N1-S5M250					Electroless Nickel Plating
CBTJ-A-S5M250			Aluminum alloy		—

Shaft hole P·N·C screw hole size table

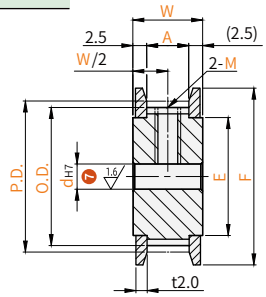
Shaft hole inner diameter dH7	M	Accessory set screw
5	M3	M3 × 3
6~12	M4	M4 × 3
13~17	M5	M5 × 4
18~30	M6	M6 × 5
31~45	M8	M8 × 6
46~65	M10	M10 × 8

Standard tooth shape

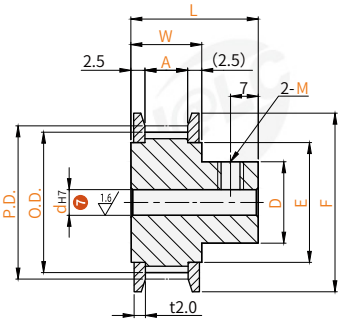


Perspective standard: FPV

Pulley shape A type



Pulley shape B type

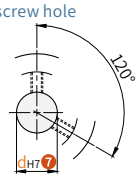


Remaining 3.2

Shaft hole specifications

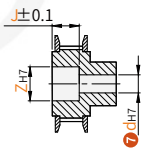
H round hole

P round hole + screw hole

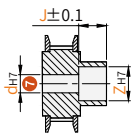


N New JIS keyway hole + screw hole
C Old JIS keyway hole + screw hole

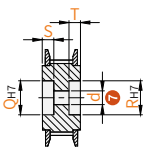
V-step hole



F step hole (wheel hub side countersunk hole)



Y-end stepped holes



For keyway dimensions, please refer to the timing pulley product introduction.

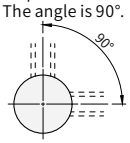
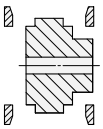
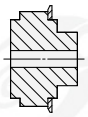
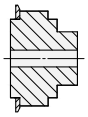
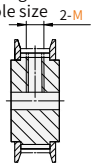
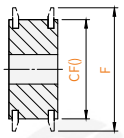
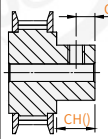
Only available for B type.

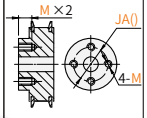
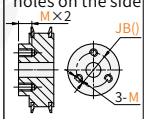
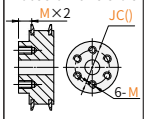
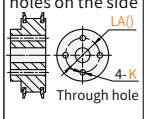
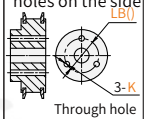
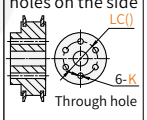
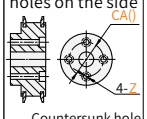
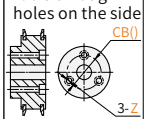
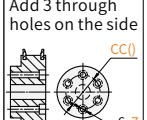
Only available for A-type.

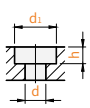
Model Code	Number of teeth ④	Pulley shape ⑤	Shaft hole specifications ⑥	Shaft hole specification dH7 (minimum unit 1) ⑦ A-type H	P	N·C	V	Y	B·D type H	P	N·C	V·F	Shaft hole V, F Z (minimum unit 1) A-type	B-type	J (Minimum unit 0.1)	Shaft hole Y (minimum unit 1) Q·R	S·T	P.D.	O.D.	D	F	E	Nominal pulley width A	W	L
Aluminum alloy	14	A B	H P N C V F Y	6~10	6~10	8·10	5·6	5·6	6~10	6~8	—	5·6	7·8	7·8	A-type 2.0≤J≤W-2.0 B-type 2.0≤J≤L-2.0	7·8	3~14 S+T≤W-3	22.28	21.32	14	25.9	16	Belt width10 S5M100 A:11 W:16 L:28		
	15						6~8	6~8				5~8	9·10	7~10		9·10		23.87	22.91	15	27.9	18			
CBTJ-AH1-S5M100	16			7~12	7~12	8~12	7~10	7~10	7~12	7~10	8	5~10	10~12	7~12		10~12		25.46	24.50	17	31.9	20			
CBTJ-AH2-S5M100	18			7~14			7~12	7~12	7~14	7~11	8·10	7~12	10~14	10~14		12~14		28.65	27.69	19	32.9	22			
CBTJ-AN1-S5M100	19			6~16	6~16	8~16	6~14	6~14	6~15	6~11		6~13	8~16	8~15		8~16		30.24	29.28		35.9	24			
CBTJ-A-S5M100	20			7~16	7~16		7~14	7~14	7~15	7~11		7~13	10~16	10~15		10~16		31.83	30.87						
CBTJ-AH1-S5M150	22			7~19	7~18	8~18	7~17	7~17	7~19	7~15	8~12	7~17	10~19	10~19		10~19		35.01	34.05	24	39.9	27			
CBTJ-AH2-S5M150	24			7~22	7~20	8~20	7~20	7~20	7~22	7~17	8~13	7~20	10~23	10~23		10~22		38.20	37.24	27	44.9	30			
CBTJ-AN1-S5M150	25										8~15							39.79	38.83				Belt width15 S5M150 A:17 W:22 L:34		
CBTJ-A-S5M150	26			8~27	8~22	8~22	8~25	8~25	8~27	8~21	8~17	8~25	11~27	11~27		11~27		41.38	40.42	31	47.9	35			
CBTJ-AH1-S5M250	28				8~24	8~24	8~24	8~24		8~22	8~18							44.56	43.60	32					
CBTJ-AH2-S5M250	30			10~28	10~26	10~26	10~26	10~26	10~28	10~23	10~18	10~26	13~28	13~28		15~28		47.75	46.79	33	51.9	36			
CBTJ-AN1-S5M250	32			10~32	10~28	10~28	10~30	10~30	10~32	10~27	10~22	10~30	13~32	13~32		15~32		50.93	49.97	37	54.9	40			
CBTJ-A-S5M250	34			10~37	10~30	10~30	10~35	10~35	10~36	10~30	10~25	10~34	13~37	13~36		15~37		54.11	53.15	40	60.9	45			
S45C	36																	57.30	56.34				Belt width25 S5M250 A:27 W:32 L:44		
CBTJ-C2E1-S5M100	40			10~42	10~38	10~38	10~40	10~40	10~42	10~35	10~28	10~40	13~42	13~42		15~42		63.66	62.70	47	66.9	50			
CBTJ-C2N1-S5M100	44			12~50	12~42	12~40	12~48	12~48	12~46	12~38	12~32	12~44	15~50	15~46		18~50		70.03	69.07	50	73.9	58			
CBTJ-C2E1-S5M150	48			12~55			12~53	12~53	12~55		12~40	12~53	15~55	15~55		18~55		76.39	75.43	60	82.9	63			
CBTJ-C2N1-S5M150	50			12~59	12~45	12~43	12~57	12~57	12~59	12~45	12~43	12~57	15~59	15~59		18~59		79.58	78.62	63	86.9	67			
CBTJ-C2E1-S5M250	60			12~72		12~45	12~70	12~70	12~71		12~45	12~69	15~72	15~72		18~72		95.49	94.53	75	98.9	80			
CBTJ-C2N1-S5M250	72			12~80	12~65	12~50	12~80	12~75	12~80	12~65	12~50	12~80	14~92	14~86		12~75		114.59	113.63	90	118.9	100			

- For shaft hole specifications H, V, F, and Y, there are no screw holes.
- The hole diameter of 6.35 is only applicable to the shaft hole specifications H, P, V, and F. Aperture 9 is not applicable to shaft hole specification N.
- Apertures 8, 9, 11, 13, 14, 17, 21 to 45 are not suitable for shaft hole specification C.
- For "Optional Processing", please refer to the Timing Wheel Product Introduction.
- When purchasing the new JIS keyway hole + screw hole with a shaft hole diameter of 10, the keyway size can be selected as N-d10 or N-d10K (please refer to the Timing Wheel product introduction).
- Due to process problems, it is impossible to ensure that the tooth tops and keyways of multiple products coincide with each other.

Summary of optional processing of timing wheel

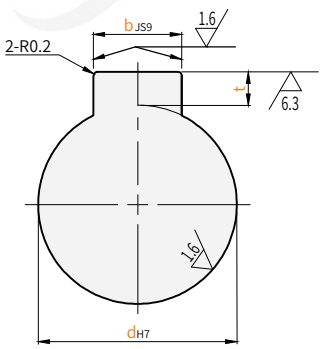
Code ⑧	Optional icons	Selection method	Precautions
AC	Changing the stop screw The angle is 90°. 	AC • Change the set screw angle to 90° The stop screw of the A-type Timing Wheel is located near 90° to avoid the thread teeth.	• This is applicable only when the pulley shape is A, B, or K, and the shaft hole is specified as P or N.
FC	No riveting flange 	FC • The flange is not riveted (only the Timing Wheel body is delivered, without the flange).	—
FD	Rivet flange only on one side 	FD • Riveted FD single-sided flange (delivered with 1 flange). • The pulley shape is A-type, and the shaft hole V is a flange on the opposite side of the countersunk hole.	• When using with FE, please specify FC.
FE	Rivet flange only on one side 	FE • Riveted FE single-sided flange (delivered with 1 flange). • The pulley shape is A-type, and the shaft hole V is a flange on the countersunk side.	• When using with FD, please specify FC.
MC()	Change the screw hole size 	MC5 • Change the threaded hole size. M / MC M3 / M4 M4 / M3、M5 M5 / M4、M6 M6 / M5、M8 M8 / M6	• Only applicable to shaft hole specifications P, N, C.
CF()	Cutting flange 	CF46 • Reduce flange height. • Minimum unit 0.5 • CF value range: (O.D.)+2~F-2。	—
CH()	Cutting wheel hub 	CH10 • Shorten the length of the coupling. • Minimum unit 0.5 • When the shaft hole specifications are H, V, and F, the CH value is: 3~LW. • When the shaft hole specifications are P and N, the CH value is: M+3~LW.	• A-type and K-type Timing Wheels are not applicable. The cut surface of the coupling may not be surface treated.

Code ⑧	Optional icons	Selection method	Precautions
JA()	Add 4 screw holes on the side 	JA50-M4 JB50-M4 JC50-M4 • A screw hole is added to the side of the coupling part (the pulley shape is A-type, the shaft hole V is a countersunk hole and the opposite side). • Minimum unit 1 • MSelect M3, M4, M5, M6, M8 • The bottom of the threaded hole may extend through the back side. Wall thickness 2 or more. Type A: JA·JB·JC Value range: • Type B: JA·JB·JC Value range: When the shaft hole specification is V: Z+M+4~D-(M+4)。	• When the shaft hole specifications are P or N, AC cannot be specified at the same time. • Not applicable to shaft hole specifications F and Y.
JB()	Add 3 screw holes on the side 		• When the shaft hole specifications are P or N, please specify AC at the same time. • Not applicable to shaft hole specifications F and Y.
JC()	Add 6 screw holes on the side 		• Not applicable to shaft hole specifications P, N, F, and Y.
LA()	Add 4 through holes on the side 	LA50-K4 LB50-K5 LC50-K8 • A through hole is added to the side of the coupling part (the pulley shape is A-type, the shaft hole V is a countersunk hole and the opposite side). • LA, LB, LC minimum unit 1 K minimum unit 0.5 Wall thickness 2 or more. Type A: LA·LB·LC value range: • Type B: LA·LB·LC Value range: B shape, shaft hole specification V: The K value range is 4~13.	• When the shaft hole specifications are P or N, AC cannot be specified at the same time.
LB()	Add 3 through holes on the side 		• When the shaft hole specifications are P or N, AC cannot be specified at the same time. Not applicable to shaft hole specifications F and Y.
LC()	Add 6 through holes on the side 		• Not applicable to shaft hole specifications P, N, F, and Y.
CA()	Add 4 through holes on the side 	CA50-Z4 CB50-Z5 CC50-Z8 • A countersunk hole is added on the side opposite to the coupling. • Wall thickness 2 or more. • Type A: CA·CB·CC value range: d+d1+4~E-(d1+4). Type B: CA·CB·CC value range: d+d+4~D-(d+4). • Shape B, shaft hole specification V: Z+d1+4~D-(d1+4). • CA, CB, CC minimum unit 1 • ZSelect Z3, Z4, Z5, Z6, Z8 • Not applicable if the pulley shape is D or K. • When the shaft hole specifications are P, N, or C and CB is specified, please also specify AC. • When the shaft hole specification is P, N, or C and CC is specified, AC is not applicable. • Not applicable when the shaft hole specifications are F or Y. • When the shaft hole specifications are P, N, or C, CA is not applicable.	
CB()	Add 3 through holes on the side 		
CC()	Add 3 through holes on the side 		



Specification	3	4	5	6	8
d	3.3	4.5	5.5	6.5	9
d_1	6.5	8	9.5	11	14
h	3.5	4.5	5.5	6.5	9

Timing Wheel



C: Old JIS keyway dimension table

dH7 Shaft aperture · Symbol	bF7		t Tolerance	
C-d10	4	+0.022 +0.010	1.5	+0.1 0
C-d12				
C-d15	5		2	
C-d16				
C-d18				
C-d19				
C-d20				
C-d30	7	+0.028 +0.013	3	
C-d33	10			
C-d34				
C-d35				
C-d36				
C-d37				
C-d38			3.5	
C-d39				
C-d40				
C-d41	12	+0.034 +0.016		
C-d42				
C-d43				
C-d44				
C-d45				
C-d50				

N: New JIS (B1301) keyway dimension table

Nominal model	dH7		bJS9		t Tolerance	
N-d8	8	+0.015 0	3	±0.0125	1.4	+0.1 0
N-d10	10					
N-d10K	10					
N-d11	11	+0.018 0	4	±0.015	1.8	
N-d12	12					
N-d13	13		5		2.3	
N-d14	14					
N-d15	15					
N-d16	16					
N-d17	17					
N-d18	18	+0.021 0	6		2.8	
N-d19	19					
N-d20	20					
N-d21	21					
N-d22	22					
N-d23	23	+0.021 0	8	±0.018	3.3	+0.2 0
N-d24	24					
N-d25	25					
N-d26	26					
N-d27	27					
N-d28	28					
N-d29	29					
N-d30	30					
N-d31	31		10			
N-d32	32					
N-d33	33					
N-d34	34					
N-d35	35					
N-d36	36					
N-d37	37					
N-d38	38					
N-d39	39	+0.025 0	12	±0.021	3.3	
N-d40	40					
N-d41	41					
N-d42	42					
N-d43	43					
N-d44	44					
N-d45	45		14		3.8	
N-d46	46					
N-d47	47					
N-d48	48					
N-d49	49					
N-d50	50					