

Non-Backlash Timing Pulleys - S8M

Features: Timing pulleys with significantly reduced backlash compared to the conventional pulleys. Special timing belts are not required. Timing Belts **P.1499**, **P.1503**

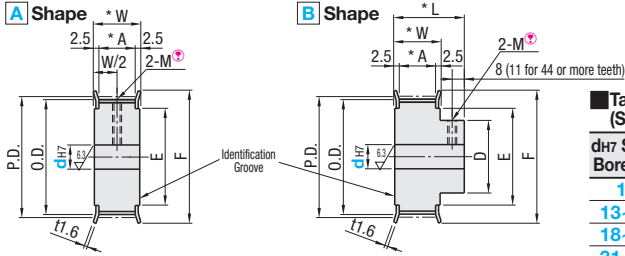


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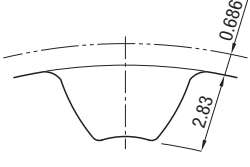
Type	Belt Width				Material ¹		Surface Treatment	Accessory ¹ Set Screws
	15mm S8M150	25mm S8M250	30mm S8M300	40mm S8M400	Pulley	Flange		
BLPA	●	●	●	●	Extra Super Duralumin Aluminum Alloy	Aluminum Alloy	Clear Anodize	SUS304
BLPK	●	●	●	●				
BLPN	●	●	●	●				
BLPT	●	●	●	●	S45C Equivalent	SPCC	Electroless Nickel Plating	SCM435 (Black Oxide)
BLPM	●	●	●	●				
BLPP	●	●	●	●				

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

• Pulley Shape



Standard Tooth Profile



Tooth groove dimensions slightly vary according to the number of teeth.
(Pitch: 8.0mm)

- Aluminum flanges will have a thickness of 1.5.
- Shaft Bore Specs. H (Round hole), V or F (Stepped Hole), Y (Both Sides Stepped Hole) and WB (Two-stepped Hole) do not have tapped holes.

Number of Teeth / Dimension

mm	18	19	20	21	22	24	25	26	28	30	32	34	36	38	40	44	48	50	60
P.D.	45.84	48.38	50.93	53.48	56.02	61.12	63.66	66.21	71.30	76.39	81.49	86.58	91.67	96.77	101.86	112.05	122.23	127.32	152.79
O.D.	44.46	47.01	49.56	52.10	54.65	59.74	62.29	64.84	69.93	75.02	80.12	85.21	90.30	95.39	100.49	110.67	120.86	125.95	151.42
D	32	35	36	40	41	46	48	51	55	60	63	70	75	80	85	90	100	100	100
F	52	55	58	61	61	67	70	74	80	87	87	95	99	104	111	119	127	135	160
E	36	40	40	45	45	50	56	58	60	67	67	75	80	84	90	100	105	115	140

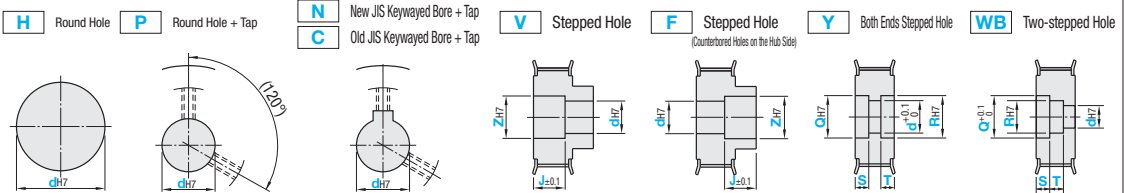
Tapped Hole Dimensions (Shaft Bore Specs.: P, N, C)

dh7 Shaft Bore I.D.	M (Coarse)	Accessory Set Screw
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			
	S8M150	S8M250	S8M300	S8M400
A	17.0	28.0	33.0	44.0
W	22.0	33.0	38.0	49.0
L (Number of Teeth 18~40)	37.0	48.0	53.0	64.0
L (Number of Teeth 44~80)	42.0	53.0	58.0	69.0

• Shaft Bore Specs. Select shaft bore spec mark and each dim. from the table below. ¹ Surface treatment may not be applied to shaft bores.



- No tapped holes or set screws.
- For A-Shape pulley, the screw holes are set at around 120° to keep away from peaks.
- For Keyway Dimension Details, see P.1413.
- No tapped holes or set screws.
- Applicable to Shape B only. No tapped holes or set screws.
- Applicable to Shape A only. No tapped holes or set screws.
- No tapped holes or set screws.
- Applicable to Shape A only. No tapped holes or set screws.

Part Number			Pulley Shape																	
Type	Number of Teeth	Type Nominal Width	A								B									
			Shaft Bore Specs. "H": 1mm Increments				"P": Selectable				Shaft Bore Specs. "H": 1mm Increments				"P": Selectable					
			H Round Hole	P Round Hole + Tap	N, C Keyway + Tap	V Stepped Hole	Y Both Ends Stepped Hole	WB Two-stepped Hole	H Round Hole	P Round Hole + Tap	N, C Keyway + Tap	V, F Stepped Hole	J (0.1mm Increment)	J (0.1mm Increment)	J (0.1mm Increment)	J (0.1mm Increment)				
Aluminum BLPA BLPK BLPN	18	S8M150	12-32	12-26	12-26	12-30	14-32			12-30	14-32			12-28	12-22	12-20	12-26	14-28		
	19		12-36	12-28	12-28	12-34	14-36			12-34	14-36			12-31	12-25	12-20	12-29	14-31		
	20		12-36	12-30	12-30	12-34	14-36			12-34	14-36			12-32	12-26	12-22	12-30	14-32		
	21		12-41	12-32	12-32	12-39	14-41			12-39	14-41			12-36	12-30	12-24	12-34	14-36		
	22		12-41	12-34	12-34	12-39	14-41			12-39	14-41			12-37	12-30	12-25	12-35	14-37		
	24		12-46	12-40	12-40	12-44	14-46			12-44	14-46			12-42	12-34	12-28	12-40	14-42		
	25		12-52	12-40	12-40	12-50	14-52			12-50	14-52			12-44	12-36	12-28	12-42	14-44		
	26		14-54	14-45	14-45	14-52	16-54			14-52	16-54			14-47	14-39	14-31	14-45	16-47		
	28		14-56	14-48	14-48	14-54	16-56			14-54	16-56			14-51	14-43	14-35	14-49	16-51		
	30		14-63	14-50	14-50	14-61	16-63	3.0sJsW-3.0		14-61	16-63			14-56	14-46	14-38	14-54	16-56		3.0sJsL-3.0
	32		14-63	14-55	14-55	14-61	16-63			14-61	16-63			14-59	14-49	14-45	14-57	16-59		
	Steel BLPT BLPM BLPP		34	S8M400	16-67	16-60	16-55	16-65	18-67			16-65	18-67			16-66	16-56	16-48	16-64	18-66
36		16-72	16-65		16-55	16-70	18-72			16-70	18-72			16-71	16-61	16-50	16-69	18-71		
38		16-76	16-65		16-55	16-74	18-76			16-74	18-76			16-76	16-65	16-50	16-74	18-76		
40		20-80	20-70		20-55	20-80	22-82			20-80	22-82			20-80	20-65	20-55	20-79	22-81		
44		20-85	20-70		20-55	20-85	22-92			20-85	22-92			20-80	20-70	20-55	20-84	22-86		
48		20-85	20-70		20-55	20-85	22-95			20-85	22-95			20-85	20-70	20-55	20-85	22-95		
50		20-85	20-70		20-55	20-85	22-95			20-85	22-95			20-85	20-70	20-55	20-85	22-95		
60		20-85	20-70		20-55	20-85	22-95			20-85	22-95			20-85	20-70	20-55	20-85	22-95		

¹ Shaft Bore Dia. 51~54 are not available for Shaft Bore Specs. N. ² Shaft Bore Dia. 13, 14, 17 or 21~55 are not available for Shaft Bore Specs. C.



Ordering Example

Part Number - Pulley Shape - Shaft Bore Specs., I.D. - Z - J - Q - R - S - T

(Shaft Bore Specs.: H, P, N, C) BLPA40S8M150 - A - N30

(Shaft Bore Specs.: V, F) BLPK60S8M400 - B - F40 - Z60 - J25.0

(Shaft Bore Specs.: Y, WB) BLPA20S8M250 - A - Y15 - Q20 - R23 - S3 - T15