


# High Torque Timing Pulleys - S14M

Compatible with S14M type from Mitsubishi Belting Ltd. as well as Bando Chemical Industries Ltd.

For High Torque Timing Belts, see **P.1465** and for Idlers with Teeth, see **P.1451**. On 2014 and later, S14M Type is to be delivered with flange included.



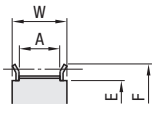
Shipped with flange included. **RoHS10**

Type	Belt Width		Material*		Surface Treatment
	40mm	60mm	Pulley	Flange Accessory	
HTPTNF	●	●	S45C Equivalent	S45C	-
HTPMNF	●	●			

\* The above material might be changed to the one equivalent to the original.

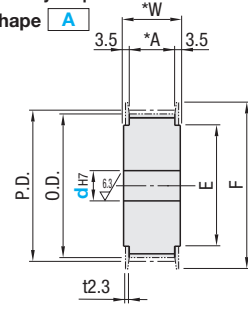
**Flange Shape**

Flanges are normally machined but may be substituted with press formed products in some cases.  
Press formed flange may be shaped as shown below.

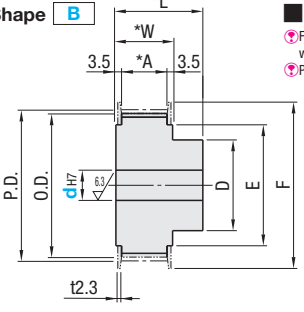


**Pulley Shape**

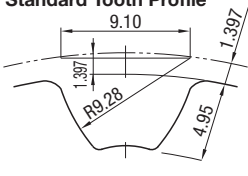
Shape **A**



Shape **B**



**Standard Tooth Profile**



Tooth groove dimensions slightly vary according to the number of teeth.  
(Pitch:14.0mm)

**Number of Teeth / Dimension**

mm	Number of Teeth										
	28	30	32	34	36	40	42	44	48	50	56
P.D.	124.78	133.69	142.60	151.52	160.43	178.25	187.17	196.08	213.90	222.82	249.55
O.D.	121.98	130.90	139.81	148.72	157.63	175.46	184.37	193.28	211.11	220.02	246.76
D	90	100	110	120	120	135	145	155	160	160	160
F	136	144	152	161	172	190	200	208	224	235	260
E	101	111	121	131	141	161	164	173	190	200	224

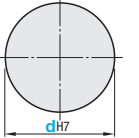
**Belt Nominal Width / Dimension**

mm	Nominal	
	S14M400	S14M600
A	46	67
W	53	74
L Number of Teeth 28-40	73	94
L Number of Teeth 44-56	78	99

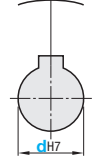
**Shaft Bore Specs**

Surface treatment may not be applied to shaft bores. Upon delivery, Flange is included without being swaged on.


**H** Round Hole



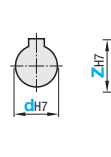
**N** New JIS Keyway Bore



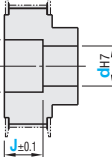
**C** Old JIS Keyway Bore



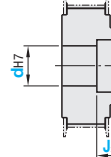
**G** New JIS Keyway Bore + Stepped Hole



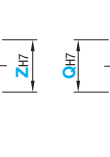
**V** Stepped Hole



**F** Stepped Hole (Counterbored Holes on the Hub Side)



**Y** Both Ends Stepped Hole



No tapped holes or set screws.  
Specify Alteration TP when tapped hole is required.

Part Number	Type	Number of Teeth	Type	Nominal Width	Pulley Shape												
					A					B							
					Shaft Bore Specifications (-): Specify in 1mm Increment, (:): Select the former or latter					Shaft Bore Specifications (-): Specify in 1mm Increment, (:): Select the former or latter							
					<b>H</b> Round Hole	<b>N, C, G</b> Keyway	<b>V</b> Stepped Hole	<b>Y</b> Both Ends Stepped	<b>H</b> Round Hole	<b>N, C, G</b> Keyway	<b>V, F</b> Stepped Hole						

Shaft Bore Dia. 31, 32, 46 ~ 49, 51 ~ 54, or 56 ~ 59 are not available for Shaft Bore Specs. N, C and G.  
When Z=d+ key height for Shaft Bore Specs. G, keyway is added to the Z dimension part.

**Ordering Example**


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

(Shaft Bore Specs.: H, N, C) HTPTNF32-S14M400 - A - H40

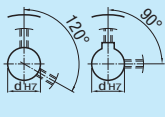
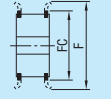
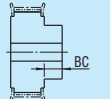
(Shaft Bore Specs.: G, V, F) HTPMNF48-S14M600 - B - G70 - Z90 - J90.0

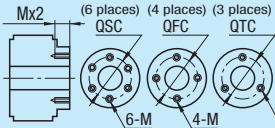
(Shaft Bore Specs.: Y) HTPTNF56-S14M400 - A - Y80 - Q120 - R120 - S20 - T20

Number of Teeth	Body Price								Shaft Bore Machining Charge (Body Price +)	
	HTPTNF				HTPMNF					
	S14M400	S14M600	S14M400	S14M600	S14M400	S14M600	S14M400	S14M600	N, C, V, F Hole	G, Y Hole
28										
30										
32										
34										
36										
40										
42										
44										
48										
50										
56										

Alterations  Part Number - Pulley Shape - Shaft Bore Specs., I.D. - Z - J - Q - R - S - T - (TP...etc.) - NFC

HTPMNF40-S14M400 - A - H65

Alterations	Tapped Hole	Flange Cut	Hub Shortening																																
Code	TP	FC	BC																																
Spec.	<p>Adds a tapped hole.</p>  <table border="1"> <thead> <tr> <th>dh7</th> <th>TP</th> <th>A (Tapped Hole Angle)</th> <th>Accessory Set Screws</th> <th>Counterbore Dia.</th> </tr> </thead> <tbody> <tr> <td>30-45</td> <td>M8</td> <td rowspan="2">90°</td> <td>M8x6</td> <td>9</td> </tr> <tr> <td></td> <td>M10</td> <td>M10x8</td> <td>11</td> </tr> <tr> <td>46-65</td> <td>M10</td> <td rowspan="2">120°</td> <td>M10x8</td> <td>11</td> </tr> <tr> <td></td> <td>M12</td> <td>M12x10</td> <td>14</td> </tr> <tr> <td>66-150</td> <td>M12</td> <td rowspan="2">120°</td> <td>M12x10</td> <td>14</td> </tr> <tr> <td></td> <td>M16</td> <td>M16x15</td> <td>18</td> </tr> </tbody> </table> <p>Applicable to Shaft Bore Specs. H, N, C and G only. Adds a tapped hole at tooth (A/2) for Shape A, at hub ((L-W)/2) for Shape B. For Shape A, the tapped holes are set at around 90° or 120° to keep away from peaks. Depth of tapped hole is Mx2, and the rest is counterbore.</p>	dh7	TP	A (Tapped Hole Angle)	Accessory Set Screws	Counterbore Dia.	30-45	M8	90°	M8x6	9		M10	M10x8	11	46-65	M10	120°	M10x8	11		M12	M12x10	14	66-150	M12	120°	M12x10	14		M16	M16x15	18	<p>Lowers flange by cutting. FC: 0.5mm Increment FC≥(0. D.)+2 FC≤F-2 [Ordering Code] FC185</p> 	<p>Cuts the hub length in 0.5mm increment. 3≤BC≤L-W When combined with Alteration TP, M+3≤BC≤L-W [Ordering Code] BC6.5 Not available for Shape A.</p> 
dh7	TP	A (Tapped Hole Angle)	Accessory Set Screws	Counterbore Dia.																															
30-45	M8	90°	M8x6	9																															
	M10		M10x8	11																															
46-65	M10	120°	M10x8	11																															
	M12		M12x10	14																															
66-150	M12	120°	M12x10	14																															
	M16		M16x15	18																															

Alterations	Side Tapped Hole	Side Through Hole
Code	QSC, QFC, QTC	KSC, KFC, KTC
Spec.	<p>Machines tapped hole on the side surface of hub side. (QSC, QFC, QTC: 1mm Increment)</p> <p>Minimum Thickness: 4mm Shape A: d+M+8≤QSC (QFC, QTC)≤E-(M+8) Shape B: d+M+8≤QSC (QFC, QTC)≤D-(M+8) * d=Z when the Shaft Bore Specs. is G or V.</p> <p>The pilot hole for tapping may go through. Side holes and tooth side tapped holes might interfere with each other. For details, see the relevant CAD data.</p> <p>When Shaft Bore Specs. is V, the pilot holes for tapping may break through the step part. Not applicable to Shaft Bore Specs. F or Y.</p> 	<p>Machines tapped hole on the side surface of hub side. (KSC, KFC, KTC: 1mm Increment)</p> <p>Minimum Thickness: 4mm Shape A: d+K+8≤KSC (KFC, KTC)≤E-(K+8) Shape B: d+K+8≤KSC (KFC, KTC)≤D-(K+8) * d=Z when the Shaft Bore Specs. is G or V.</p> <p>When Shaft Bore Specs. is V, through holes may break through the step part. Side holes and tooth side tapped holes might interfere with each other. For details, see the relevant CAD data.</p> <p>Not applicable to Shaft Bore Specs. F or Y.</p> 