

# Pulleys for Flat Belts


Flanged, Crowned, Press-Fit Urethane

Width T=6 ~ 32

# Idlers for Flat Belts

Flanged, Crowned

Width T=6 ~ 32



Type	Material	Surface Treatment
Flanged	EN 1.1191 Equiv.	Black Oxide
Crowned	EN 1.1191 Equiv.	Electroless Nickel Plating
Press-Fit Urethane	Aluminum Alloy 2000 series	Clear Anodize
	EN 1.4301 Equiv.	Urethane Shore A70

**Flanged Type** **Crowned**  $6.3 / (1.6 / )$

**Shaft Hole Specifications**  
 Round Hole + Tap (P)    New JIS Keyway + Tap (N)

**Press-Fit Urethane Type**

**Keyway Dimensions**  
 N: New JIS (B1301) Keyway Dimensions

Symbol	dH7	bJS9	tTolerance
N8	8	3	±0.0125 1.4
N10	10	4	±0.0150 1.8
N12	12	5	±0.0180 2.3
N15	15	6	±0.0215 2.8
N20	20	8	±0.0280 3.3
N30	30	12	±0.0375 4.0
N40	40	16	±0.0500 5.0

Shore A70 (Blue) Urethane is press-fit on Roller surface. D dimension does not change. Urethane Thickness 1mm

RoHS 10

Part Number Type	D	dh7			T Selection	D1	l	l1	M	L
		P (Round Hole + Tap) Selection	N (Keyway + Tap) Selection							
Flanged Type	15	5	6		12					
HBPG	18	5	6	8						
HBPM	20	5	6	8						
HBPA	28	6	8	10	8					
HBPS	30	6	8	10 12	8 10 12					
Crowned	35	8	10	12	10 12					
HBPCG	40	8	10	12	10 12					
HBPCM	45	10	12		10 12					
HBPCA	50	10	12		10 12					
HBPCS	60	10	12	15	10 12 15					
Press-Fit Urethane Type	80		15	20 30		16	8	8		T+2
HBPUS	100		20 30 40			50	16	8	8	


\*T=6 is not available for Crowned. Specify NK10 when Keyway + Tap with shaft bore dia. 10 and keyway width 4.0mm (height 1.8mm) is desired.

Ordering Example: Part Number - P - N - T  
 HBPM30 - P6 - NK10 - 11  
 HBPCG35 - P6 - NK10 - 32

D	Unit Price						
	Flanged Type			Crowned			Press-Fit Urethane Type
	HBPG	HBPM	HBPA	HBPCG	HBPCM	HBPCA	HBPCS
15							
18							
20							
28							
30							
35							
40							
45							
50							
60							
80							
100							

Alterations: Part Number - P, N - T - (BC, HRC, FC, TC)  
 HBPM18 - P8 - 11 - BC6.5

Alterations Code	Boss Cut	Knurl Flat Thread	Flange Cut	Flange Thickness
BC	<b>BC</b> Cuts the hub length in 0.5mm increment. M+3≤BC≤l	<b>HRC</b> Machines knurling flat pattern on the roller section.	<b>FC</b> Lowers the flange by cutting. FC: 0.5mm Increment	<b>TC</b> Machines flange thickness to 0.5mm. L dimension becomes 1mm shorter.
Spec.	BC/2 BC Ordering Code BC6.5	Applicable to HBPG, HBPM, HBPA and HBPS.	D≤FC<D+4 Ordering Code FC42 Not applicable to Crowned.	Not applicable to Crowned.



Type	Material	Surface Treatment	Material Bearing	Accessory
Flanged	EN 1.1191 Equiv.	Black Oxide		
Crowned	EN 1.1191 Equiv.	Electroless Nickel Plating	Steel	Retaining Ring (EN 1.4301 Equiv.)
HBG	EN AW-2017 Equiv.	Clear Anodize		
HBGM	EN 1.4301 Equiv.		Stainless Steel	
HBGA			Steel	
HBGCA				
HBGS				
HBGCS				

\* Bearing Accuracy: JIS B1514 Class 0  
 Bearings are press-fit.  
 Bearings cannot be disassembled.

$6.3 / (1.6 / )$

**Flanged Type** T=6, 11    **Crowned** T=11

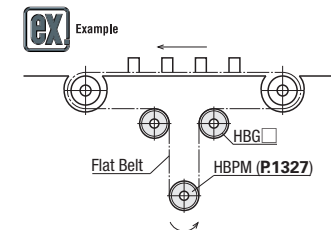
**T=16, 21, 27, 32**    **T=16, 21, 27, 32**

RoHS 10

Part Number Type	D	T	P	dh	l	l1	L	Bearing No.	d	B	Unit Price							
											HBG	HBGM	HBGA	HBGS	HBGP	HBGC	HBGCM	HBGCA
15	11	9	2				8	694ZZx1	4	4								
20	16	13	1.5				8	625ZZx1	5	5								
25	16	13	4	3			13	625ZZx1	5	5								
30	19	17	3.5	2.5			13	625ZZx1	6	6								
35	19	17					13	698ZZx1	8	6								
40	26	23					18	685ZZx2	5	5								
45	26	23					18	625ZZx2	6	6								
50	26	23					18	625ZZx2	6	6								
55	26	23					18	698ZZx2	8	6								
60	26	23					18	698ZZx2	8	6								
65	26	23					18	698ZZx2	8	6								
70	26	23					18	698ZZx2	8	6								
75	26	23					18	698ZZx2	8	6								
80	26	23					18	698ZZx2	8	6								
85	26	23					18	698ZZx2	8	6								
90	26	23					18	698ZZx2	8	6								
95	26	23					18	698ZZx2	8	6								
100	26	23					18	698ZZx2	8	6								

For detailed bearing dimensions, see P989, 991. HBGP is only applicable to sizes marked with \*. \*1 T=6 is not available for Crowned. \*2 Values in ( ) are Bearing Dimensions when T=16 and D=35 or 40 for Crowned.

Ordering Example: Part Number - T  
 HBG15 - 6  
 HBGCS50 - 21



Alterations: Part Number - T - (FC, KLC, KFC, TC)  
 HBG15 - 6 - KFC

Alterations Code	Flange Cut	One Side Low Flange	One Flange Type	Flange Thickness
FC	<b>FC</b> Lowers the flange by cutting. FC: 0.5mm Increment	<b>KLC</b> Lowers the flange on one side. Not applicable to Crowned. Cannot be combined with Alteration KFC.	<b>KFC</b> Cuts off the flange on the right side of the drawing. Not applicable to Crowned. Cannot be combined with Alteration KLC. Combine FC and KFC when Flange Cut + One Flange is desired.	<b>TC</b> Machines flange thickness to 0.5mm. L dimension becomes 1mm shorter. Dimensions are changed in the following models.
Spec.	D≤FC<D+4 Ordering Code FC30.5 Not applicable to Crowned.	D-1	Not applicable to HBGP. Not applicable to Crowned.	Part Number HBG15-6 HBG15-6 HBG20-6 HBG20-6 d2 d3 1 2 0.4 1.6