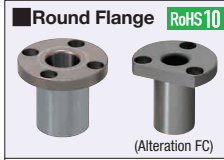


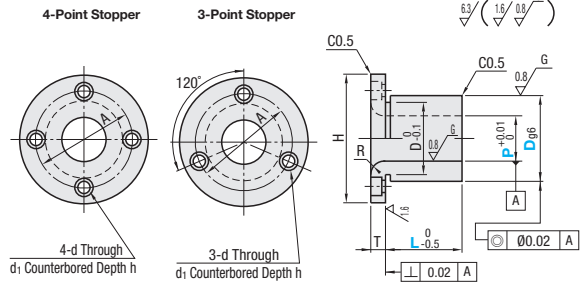
# Bushings for Locating Pins

## Flanged



Material	Surface Treatment	Hardness	Type			
			P Fixed and L Selectable	P, L Configurable		
SKS3 Equivalent	Black Oxide	* Treated Hardness: 56 ~ 60HRC	JBY	JBT	JBYF	JBTf
	Electroless Nickel Plating		JBYM	JBTM	JBYFM	JBTfM
SUS304	-	-	-	-	JBYFS	JBTfS
SUS440C or 13Cr stainless	-	Treated Hardness: 50 ~ 55HRC	-	-	JBYFC	JBTfC

\* P Fixed Type is 60 to 63HRC.



**P Fixed and L Selectable** JBT is available for P dimension with \* 1 mark only. L dimensions marked with \*2 are not available for JBYM.

Part Number	Type	P	L Selection				R	H	T	Dg6	A	d	d1	h	Unit Price		
			8	10	12	16									JBY	JBYM	JBT
5	JBY	8	10	12	16	1	25	5	10	-0.005 -0.014	17	3.3	6.5	3.5			
*1 6		8	10	12	16												
*1 8	JBYM	10	12	16	20	2	36	6	12	-0.006 -0.017	20	4.5	8	4.5			
*1 10		10	12	16	20												
*1 12	JBT	12	16	20	25	3	44	6	18	-0.007 -0.020	30	6.6	11	6.5			
*1 13		12	16	20	25												
*1 15	JBTf	12	16	20	25	3	56	8	22	-0.009 -0.025	42	6.6	11	6.5			
*1 16		12	16	20	25												
*1 20	JBTfM	16	20	25	30	3	60	8	26	-0.009 -0.025	46	6.6	11	6.5			
*1 25		16	20	25	30												

**P and L Configurable** L+T ≤ Px3.0

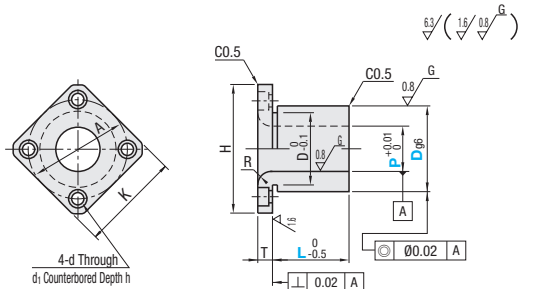
Part Number	Type	Dg6	P 0.01mm Increment	L 0.1mm Increment	R	H	T	A	d	d1	h	Unit Price			
												JBYF	JBYFB	JBYFM	JBYFS
10	JBYF	10	4.00-6.50	5.0-15.0	1	25	5	17	3.3	6.5	3.5				
12		6.00-8.50	10.0-35.0												
15		8.00-10.50													
18		10.00-12.50													
20	JBYFB	20	12.00-13.50	10.0-35.0	2	40	6	30	4.5	8	4.5				
22		12.00-13.50													
25	JBYFM	25	13.00-15.50	12.0-50.0	3	56	8	42	6.6	11	6.5				
26		15.00-16.50													
30	JBYFS	30	16.00-20.50	12.0-50.0	3	60	8	46	6.6	11	6.5				
35		20.00-25.00													

## Square Flange



Material	Surface Treatment	Hardness	Type	
			P Fixed and L Selectable	P, L Configurable
SKS3 Equivalent	Black Oxide	* Treated Hardness: 56 ~ 60HRC	JBS	JBSF
	Electroless Nickel Plating		JBSM	JBSFM
SUS304	-	-	-	JBSFS
SUS440C or 13Cr stainless	-	Treated Hardness: 50 ~ 55HRC	-	JBSFC

\* P Fixed Type is 60 to 63HRC.



**P Fixed and L Selectable** L dimensions marked with \* are not available for JBSM.

Part Number	Type	P	L Selection				R	H	K	T	Dg6	A	d	d1	h	Unit Price	
			10	12	16	20										JBS	JBSM
8	JBS	10	12	16	20	2	28	22	5	12	-0.006 -0.017	20	3.3	6.5	3.5		
10		10	12	16	20												
12	JBSM	12	16	20	30	3	36	28	6	18	-0.007 -0.020	34	4.5	8	4.5		
15		12	16	20	30												
16	JBSF	16	20	25	35	3	44	34	8	25	-0.007 -0.020	42	6.6	11	6.5		
20		16	20	25	35												
25	JBSFM	25	20	25	40	3	56	44	8	35	-0.009 -0.025	46	6.6	11	6.5		
26		20	25	30	40												

**P and L Configurable** L+T ≤ Px3.0

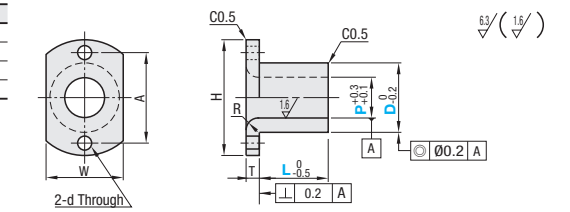
Part Number	Type	Dg6	P 0.01mm Increment	L 0.1mm Increment	R	H	K	T	A	d	d1	h	Unit Price			
													JBSF	JBSFB	JBSFM	JBSFS
10	JBSF	10	4.00-6.50	5.0-15.0	1	25	20	5	17	3.3	6.5	3.5				
12		6.00-8.50														
15		8.00-10.50														
18		10.00-12.50														
20	JBSFB	20	12.00-13.50	10.0-35.0	2	36	28	6	30	4.5	8	4.5				
22		12.00-13.50														
25	JBSFM	25	13.00-15.50	12.0-50.0	3	56	44	8	42	6.6	11	6.5				
26		15.00-16.50														
30	JBSFS	30	16.00-20.50	12.0-50.0	3	60	47	8	46	6.6	11	6.5				
35		20.00-25.00														

**Features:** Economy type is priced up to 49% lower without D/P Dimensions grinding and with the tolerance of P Dimension  $+0.3$ / $-0.1$  and D Dimension  $0$ / $-0.2$ .

## Compact Flange Economy



Material	Surface Treatment	Hardness	Type
S45C Equivalent	-	-	JBOR
	Electroless Nickel Plating	-	JBOM
	Electroless Nickel Plating	45-50HRC	JBOK JBON



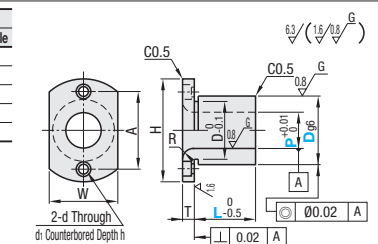
Part Number	Type	D	P 0.1mm Increment	L 1mm Increment	R	H	W	T	A	d	Unit Price			
											JBOR	JBOM	JBOK	JBON
10	JBOR JBOM JBOK JBON	10	4.0-6.5	5-15	1	25	12	17	17	5				
12		6.0-8.5												
15		8.0-10.5												
16		9.0-11.5												
18		10.0-12.5												
20		12.0-13.5												
22		12.0-13.5												
25		13.0-15.5												
26		15.0-16.5												
30		16.0-20.5												
35	20.0-25.0	5-50	3	56	35	5	42	46						
12	6.0-8.5													
15	8.0-10.5													
16	9.0-11.5													
18	10.0-12.5													
20	12.0-13.5													
22	12.0-13.5													
25	13.0-15.5													
26	15.0-16.5													
30	16.0-20.5													

## Compact Flange



Material	Surface Treatment	Hardness	Type	
			P Fixed and L Selectable	P, L Configurable
SKS3 Equivalent	Black Oxide	* Treated Hardness: 56 ~ 60HRC	JBN	JBNF
	Electroless Nickel Plating		JBNM	JBNFM
SUS304	-	-	-	JBNFS
SUS440C or 13Cr stainless	-	Treated Hardness: 50 ~ 55HRC	-	JBNFC

\* P Fixed Type is 60 to 63HRC.



**P Fixed and L Selectable**

Part Number	Type	P	L Selection				R	H	W	T	Dg6	A	d	d1	h	Unit Price	
			8	10	12	16										JBN	JBNM
5	JBN JBNM	8	10	12	16	1	25	12	5	10	-0.005 -0.014	17	3.3	6.5	3.5		
6		10	12	16	20												
8		10	12	16	20												
10		10	12	16	20												
12		12	16	20	30												
13		12	16	20	30												
15		12	16	20	30												
16		16	20	25	30												
20		16	20	25	30												
25		20	25	30	40												
5	JBNF JBNFM JBNFS JBNFC	8	10	12	16	2	40	25	6	22	-0.007 -0.020	30	4.5	8	4.5		
6		10	12	16	20												
8		10	12	16	20												
10		12	16	20	30												
12		12	16	20	30												
13		12	16	20	30												
15		12	16	20	30												
16		16	20	25	30												
20		16	20	25	30												
25		20	25	30	40												

**P and L Configurable** L+T ≤ Px3.0

Part Number	Type	Dg6	P 0.01mm Increment	L 0.1mm Increment	R	H	W	T	A	d	d1	h	Unit Price			
													JBNF	JBNFB	JBNFM	JBNFS
10	JBNF JBNFB JBNFM JBNFS JBNFC	10	4.00-6.50	5.0-15.0	1	25	12	5	17	3.3	6.5	3.5				
12		6.00-8.50														
15		8.00-10.50														
18		10.00-12.50														
20		12.00-13.50														
22		12.00-13.50														
25		13.00-15.50														
26		15.00-16.50														
30		16.00-20.50														
35		20.00-25.00														

Ordering Example	Part Number	P	L
JBY6	-	12	-
JBSF20	-	P13.00	L30.0
JBOR10	-	P5.0	L8
JBN10	-	P5.0	L10

Alterations	Part Number	P	L	(TKC, RC, FC, RH)
JBNF15	-	P10.0	L10.0	TKC
JBTf20	-	P12.0	L12.0	FC

Alteration	Code	Spec.
T Tolerance	TKC	Changes the T tolerance from general tolerance to ±0.01. Ordering Code TKC ⊗ Not applicable to P Fixed Type, L Selectable Type and Compact Flange Economy Type.
I.D. Radius R	RC	Machines Radius R on both sides. D10→R1 D12→R2 D20→R2 D30, 35→R3 Ordering Code RC ⊗ Applicable to JBNF, JBNFB, JBNFM, JBNFS and JBNFC only.
	FC	Cuts one side of flange. Ordering Code FC ⊗ Applicable to JBTf and JBTfM only.
Inner Diameter Radius R	RH	Changes the inner diameter radius R from shoulder side to D dimension end face. Size of R will be the same as R on shoulder side. Ordering Code RH ⊗ Applicable to Compact Flange, Economy Type only. ⊗ (D-P)/2-R≥1.5