

Bushings for Locating Pins

Retaining, Oval

Retaining

Material	Surface Treatment	Hardness	Type	
			p6	m6
SKS3 Equivalent	-	56~60HRC	JBAFPG	JBAFG
SKS3 Equivalent	Black Oxide	56~60HRC	JBAFBPG	JBAFBG
SKS3 Equivalent	Electroless Nickel Plating	56~60HRC	JBAFMFG	JBAFMG
SUS304	-	-	JBAFSPG	JBAFSG
SUS400 or 13Cr stainless	-	50~55HRC	JBAFCPG	JBAFCG

For hole machining, please note that inner diameter shrinkage of p6 Type is more than that of m6 Type. (See "Variance of I.D. after Press-fitting Bushings for Locating Pins" on P.1566)

Type	Part Number	D	D Tol.		P	L	R	Unit Price								
			p6	m6				0.01mm Increment	0.1mm Increment	JBAFPG	JBAFBPG	JBAFMFG	JBAFSPG	JBAFCPG		
(p6) JBAFPG JBAFBPG JBAFMFG JBAFSPG JBAFCPG	8	8	+0.024	+0.015	4.00~4.50	10.0~13.0	1.0									
	10	10	+0.015	+0.006	4.00~6.50	10.0~20.0										
	12	12	+0.029	+0.018	6.00~8.50											
	15	15	+0.018	+0.007	8.00~10.50											
	18	18	+0.029	+0.018	10.00~12.50											
(m6) JBAFG JBAFBG JBAFMG JBAFSG JBAFCG	20	20			12.00~13.50	10.0~40.0	2.0									
	22	22	+0.035	+0.021	12.00~13.50											
	25	25	+0.022	+0.008	13.00~15.50											
	26	26			15.00~16.50											
	30	30			16.00~20.50											
35	35	+0.042	+0.025	20.00~25.00	12.0~60.0	3.0										

LS-Px3.0

Shouldered, Retaining

Material	Surface Treatment	Hardness	Type		
			p6	m6	h6
SKS3 Equivalent	-	56~60HRC	JBHFPG	JBHFG	JBHG
SKS3 Equivalent	Electroless Nickel Plating	56~60HRC	JBHFMPG	JBHFMG	JBHMG
SUS400 or 13Cr stainless	-	50~55HRC	JBHFCPG	JBHFCG	-

The insertion guide is not available for D dimension tolerance h6 at D shaft tip.

For hole machining, please note that inner diameter shrinkage of p6 Type is more than that of m6 Type. (See "Variance of I.D. after Press-fitting Bushings for Locating Pins" on P.1566)

Type	Part Number	D	P		L		Thickness (N)	R	H	T	Unit Price		
			0.01mm Increment	0.1mm Increment	JBHFPG	JBHFMFG					JBHFCPG		
(p6) JBHFPG JBHFMPG JBHFMPG JBHFMPG	8	8	4.00~4.50	8.0~10.0	1.75~2.50	1.0	12	3					
	10	10	4.00~6.50	8.0~15.0	1.75~3.00		14						
	12	12	6.00~8.50				16						
	15	15	8.00~10.50				19		4				
	18	18	10.00~12.50				22						
(m6) JBHFG JBHFMPG JBHFMPG JBHFMPG	20	20	12.00~13.50	10.0~35.0	2.25~3.50	2.0	26	5					
	22	22	12.00~13.50		2.75~4.00		30						
	25	25	13.00~15.50		3.25~4.00		35						
	26	26	15.00~16.50		4.25~5.00		40		6				
	30	30	16.00~20.50	12.0~50.0	4.75~6.00		40						
(h6) JBHG JBHMG	35	35	20.00~25.00		5.00~7.50	3.0	40						

L+T≤Px3.0

Notched, Retaining

JBHFG

Attachment Screw Position

Included Screw

D1	L1	A	E	MxP (Coarse)	F	ℓ	B	h1	C
6	3	10	4	4x0.7	8	1.2	3	3	0.5
8	4	12	4.5	5x0.8	10	1.4	4	3.5	0.5

Material: SKS3 Equivalent
Hardness: 56 ~ 60HRC
Accessory: Special Hex Socket Head Cap Screw 1 pc.

Type	Part Number	D	D Tolerance	P		L		Thickness (N)	R	H	T	h	a	r	Screw Position Y	Accessory Special Material Screw	Tightening Torque N·cm	Unit Price
				0.01mm Increment	0.1mm Increment	0.01mm Increment	0.1mm Increment											
JBHFG	10	10	-0.019	4.00~6.50	3.0~12.0	1.75~3.00	1	18										
	12	12		6.00~8.50	10.0~18.0		20	7.5	3									
	15	15	-0.023	8.00~10.50		2.25~3.50	23											
	18	18		10.00~12.50	10.0~30.0	2.75~4.00	26											
	20	20		12.00~13.50		3.25~4.00	28	3										
	22	22		12.00~13.50		4.25~5.00	30											
	25	25	-0.027	13.00~15.50	12.0~35.0	4.75~6.00	33	9	4	7						M5	461	
26	26		15.00~16.50		4.75~5.50	34												
30	30		16.00~20.50	12.0~50.0	4.75~7.00	3	38											

1-1683 L+T≤Px3.0

Features: Economy type is priced up to 74% lower than Standard Type with the tolerance of $+0.3$ for P Dimension/W Dimension and -0.2 for D Dimension.

Oval - Compact Flange

Compact Flange

Material	Surface Treatment	Hardness	Type
SKS3	-	56~60HRC	JBEH
Equivalent	Electroless Nickel Plating	56~60HRC	JBEMH

Compact Flange Economy

Material	Surface Treatment	Hardness	Type
S45C Equivalent	Electroless Nickel Plating	-	JBFR
			JBFM
		45~50HRC	JBFK
	Electroless Nickel Plating		JBFN

When thickness is 2mm or less and (D-P)/2≤2, R is 0.5.

Compact Flange

Type	Part Number	D	D Tolerance	PH7	WH7	L	T	H	A	B	d	d1	h	Unit Price		
														JBEH	JBEMH	
JBEH JBEMH	10	10	-0.005	4.00~8.00	3.00≤W<P	8~40 L+T≤Px3	5	25	17	12	3.3	6.5	3.5			
	12	12	-0.014	4.00~10.00				28	20	15						
	16	16	-0.006	8.00~14.00				36	26	22						
	20	20	-0.017	10.00~18.00				44	34	30						
	25	25	-0.007	13.00~22.00				56	42	35						
30	30	-0.020	16.00~25.00				6	40	30	25	4.5	8	4.5			
35	35	-0.009	18.0~25.00				8	60	46	40	6.6	11	6.5			

Compact Flange Economy

Type	Part Number	D	P	W	L	T	H	A	B	d	Unit Price						
											JBFR	JBFM	JBFK	JBFN			
JBFR JBFM JBFK JBFN	10	10	4.0~8.0	4.0≤W<P	5~40 L+T≤Px3	3	25	17	12	5	≤20	21≤L	≤20	21≤L	≤20	21≤L	
	12	12	4.0~10.0								28	20	15				
	15	15	8.0~13.0								17						
	16	16	8.0~14.0														
	18	18	10.0~16.0								40	30	20				
	20	20	10.0~18.0								22						
	25	25	13.0~22.0								4	44	34	30			
	30	30	16.0~25.0								5	56	42	35			
	35	35	18.0~25.0								60	46	40	8			

Oval - Shouldered (Dowel Pin)

Material	Surface Treatment	Hardness	Type	
			p6	m6
SKS3	-	56~60HRC	JBPE	JBE
Equivalent	Electroless Nickel Plating	56~60HRC	JBPEM	JBEM

When thickness is 2mm or less and (D-P)/2≤2, R is 0.5.

Type	Part Number	D	D Tolerance		PH7	WH7	L	T	H	Unit Price		
			p6	m6						JBPE, JBE	JBPEM, JBEM	
(p6) JBPE JBPEM	10	10	+0.024	+0.015	4.00~8.00	3.00≤W<P	8~40 L+T≤Px3	3	14			
	12	12	+0.015	+0.006	4.00~10.00					16		
	16	16	+0.029	+0.018	8.00~14.00					20		
	20	20	+0.018	+0.007	10.00~18.00					26		
	25	25	+0.035	+0.021	13.00~22.00					30		
(m6) JBE JBEM	30	30	+0.022	+0.008	16.00~25.00	35						
	35	35	+0.042	+0.025	18.0~25.00	40						
			+0.026	+0.009								

Ordering Example: Part Number - P - W - L

JBAFG8 - P4.1 - W - L11
 JBHG20 - P13.0 - W - L20
 JBHFY18 - P12.00 - W - L18.0
 JBFY10 - P6.0 - W4.5 - L10
 JBPE10 - P6.8 - W4.8 - L15

Alterations: Part Number - P - W - L - (HC, RH)
 JBAPG18 - P8.00 - W - L15.0 - HC
 JBFY10 - P6.0 - W4.5 - L10 - RH

Example: Notched, Retaining

Alterations	Code	Spec.
Set Screw Groove Depth	HC	Changes the depth of set screw groove depth from 0.5mm to 1.0mm. Ordering Code HC Applicable to Retaining Straight only. Applicable to D dimension 18 or more.
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≥1.7

1-1684