

Bushings for Locating Pins

Shouldered, Standard / Thin Wall

Bushings for Locating Pins

Configurable, Shouldered, Standard / Thin Wall

Standard

Material	Surface Treatment	Hardness	Type	
			p6	m6
SKS3 Equivalent	-	60HRC~	JBH	JBHM
SKS3 Equivalent	Electroless Nickel Plating	60HRC~	JBHN	JBHMN
SUS440C Equivalent	-	50HRC~	JBHC	JBHMC

RoHS10

Tolerance of d dimension 2 ~ 6 of electroless nickel plated products is H7.
 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	d	D Tolerance		L Selection	Thickness (N)	R	H	T	D	D Tolerance		Unit Price		
		No Surface Treatment	Electroless Nickel Plating							p6	m6	JBH	JBHN	JBHM
(p6) JBH JBHN JBHC	2	+0.008 +0.002	H7	5 6 8 10 12	1.5	0.8	9	2.5	5	+0.020	+0.012			
	3			5 6 8 *10 12	2					+0.012	+0.004			
	4			*5 6 8 10 12 15 *16 20	2					+0.024	+0.015			
	5	+0.012 +0.004	H7	5 6 8 10 12 15 16 20	2.5	1	3	8	8	+0.024	+0.015			
	6			*5 6 8 10 12 15 16 20 25	2					+0.024	+0.015			
	8	+0.014 +0.005	G6	5 6 8 10 12 15 16 20 25	2	2	16	12	15	+0.029	+0.018			
	10			6 8 10 12 15 16 20 25	2.5					+0.029	+0.018			
	12			8 10 12 15 16 20 25 30	3					+0.029	+0.018			
	13			10 12 15 16 20 25 30	3					+0.029	+0.018			
	15	+0.017 +0.006	G6	10 *12 *15 *16 *20 *25 *30	4.5	2	26	22	25	+0.035	+0.021			
16	10 12 15 16 20 25 30			5	+0.022					+0.008				
20	+0.020 +0.007	G6	12 15 16 20 25 30	5	3	35	30	35	+0.042	+0.025				
25			12 15 16 20 25 30	5					+0.042	+0.025				

* L dimension with * is not applicable to JBHMC.

Thin Wall

Material	Surface Treatment	Hardness	Type	
			p6	m6
SUJ2 or SKS3 Equivalent	-	58HRC~	JBHUP	JBHU
SUJ2 or SKS3 Equivalent	Electroless Nickel Plating	58HRC~	JBHUNP	JBHUN
SUS440C Equivalent	-	50HRC~	JBHUCP	JBHUC

RoHS10

Tolerance of d dimension 3 ~ 6 of electroless nickel plated products is H7.
 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	d	D Tolerance		L Selection	Thickness (N)	R	H	T	D	D Tolerance		Unit Price		
		No Surface Treatment	Electroless Nickel Plating							p6	m6	JBHU	JBHUN	JBHUC
(p6) JBHUP JBHUNP JBHUCP	3	+0.008 +0.002	H7	6 8 10 12	1	0.5	9	2.5	5	+0.020	+0.012			
	4			6 8 10 12 15 16	1					+0.012	+0.004			
	5			*6 8 10 12 *15 *16 20	1					+0.024	+0.015			
	6	+0.012 +0.004	H7	6 8 10 12 *15 16 20	1	1	8	8	8	+0.024	+0.015			
	8			*6 8 10 12 *15 16 20	1					+0.024	+0.015			
	10	+0.014 +0.005	G6	6 8 10 12 *15 16 20	1.5	2	17	4	13	+0.029	+0.018			
12	6 8 10 12 15 16 20			1.5	+0.029					+0.018				
13	8 10 12 15 16 *20			1.5	+0.029					+0.018				
15	10 12 15 16 20			1.5	+0.029					+0.018				
16	+0.017 +0.006	G6	12 15 16 20 *25	2	1	24	5	19	+0.035	+0.021				
20			12 15 16 20 25	2					+0.022	+0.008				
25	+0.020 +0.007	G6	12 15 16 20 25	2.5	2	31	26	26	+0.042	+0.025				
25			12 15 16 20 25	2.5					+0.042	+0.025				

* L dimension with * is not applicable to JBHUC.

Ordering Example: Part Number - P - L
 JBH5 - 8
 JBHUN12 - 12

Standard

Material	Surface Treatment	Hardness	Type	
			p6	m6
SKS3 Equivalent	-	56~60HRC	JBHF	JBHF
SKS3 Equivalent	Black Oxide	56~60HRC	JBHF	JBHF
SKS3 Equivalent	Electroless Nickel Plating	56~60HRC	JBHF	JBHF
SUS304	-	-	JBHF	JBHF
SUS440C Equivalent	-	50~55HRC	JBHF	JBHF

RoHS10

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	D	D Tolerance		P	L	Thickness (N)	R	H	T	Unit Price				
		p6	m6							0.01mm Increment	0.1mm Increment	JBHF	JBHF	JBHF
(p6) JBHF JBHF JBHF JBHF	5	+0.024 +0.015	+0.015	2.20-2.50	3.0-3.5	1.25-1.50	0.8	9	2.5					
	7			2.20-3.50	3.0-6.0									
	8	+0.029 +0.018	+0.018	3.00-4.50	3.0-10.0	1.75-2.50	1.0	12	3					
	10			4.00-6.50	3.0-15.0									
	12			6.00-8.50										
	15			8.00-10.50										
18	+0.035 +0.022	+0.021	10.00-12.50	5.0-35.0	2.25-3.50	2.0	19	4						
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	+0.042 +0.026	+0.025	20.00-25.00	5.0-50.0	2.75-4.00	3.0	35	6						
35			20.00-25.00	5.0-50.0	4.25-5.00									

* L+T≤Px2.5 when P≤3.59 L+T≤Px3.0 when P≥3.60

Thin Wall

Material	Surface Treatment	Hardness	Type	
			p6	m6
SKS3 Equivalent	-	56~60HRC	JBHUF	JBHUF
SKS3 Equivalent	Black Oxide	56~60HRC	JBHUF	JBHUF
SKS3 Equivalent	Electroless Nickel Plating	56~60HRC	JBHUF	JBHUF
SUS440C Equivalent	-	50~55HRC	JBHUF	JBHUF

RoHS10

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	D	D Tolerance		P	L	Thickness (N)	R	H	T	Unit Price				
		p6	m6							0.01mm Increment	0.1mm Increment	JBHUF	JBHUF	JBHUF
(p6) JBHUF JBHUF JBHUF JBHUF	7	+0.024 +0.015	+0.015	3.51-5.00	3.0-6.0	1.00-1.74	0.5	11	2.5					
	8			4.51-6.00	3.0-10.0									
	9	+0.029 +0.018	+0.018	4.51-6.50	3.0-15.0	1.25-2.24	1.0	13	5					
	10			6.51-8.00										
	11			8.00-9.00										
	12			8.51-9.00										
	13	+0.035 +0.022	+0.021	8.51-10.00	5.0-35.0	1.50-1.74	1.5	17	4					
	14			9.00-11.00										
	15			10.51-12.00										
	17			10.51-13.00										
20	12.51-14.00													
22	13.51-15.00													
25	+0.035 +0.022	+0.021	13.51-17.00	5.0-50.0	1.50-2.24	2.0	21	5						
26			15.51-19.00											
26			16.51-20.00											
30			20.51-24.00											
35	+0.042 +0.026	+0.025	25.01-29.00	5.0-50.0	2.00-2.74	3.0	35	6						
35			25.01-29.00	5.0-50.0	2.50-3.24									

* L+T≤Px2.5 when P≤3.59 L+T≤Px3.0 when P≥3.60

Ordering Example: Part Number - P - L
 JBHF25 - P14.00 - L20.0
 JBHF15 - P11.00 - L20.0

Alterations: Part Number - P - L - (RC, TC)
 JBHF12 - P8.00 - L12.0 - RC

Alterations	Code	Spec.
I.D. Radius R	RC	Machines Radius R on both sides. Thickness 1.5mm or more. Size of R will be the same as R on shoulder side with D dimension 10 or more. (Ordering Code) RC
Shoulder Thickness	TC	1mm Increment (Ordering Code) TC4 $3 \leq TC < 4$ 0.A.L. becomes short as much as T-TC. Applicable when D≥12.