

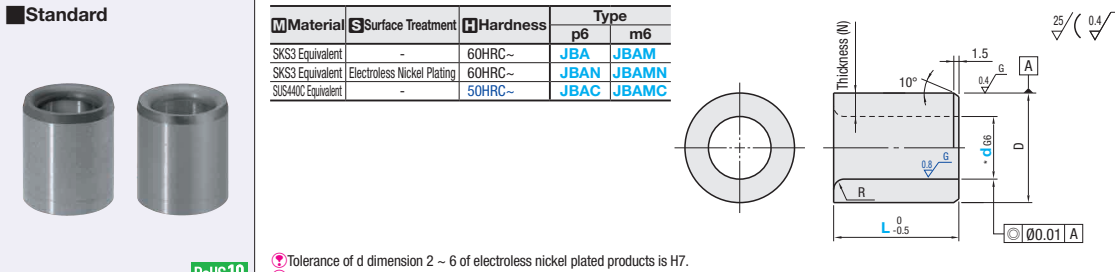
Bushings for Locating Pins

Straight, Standard / Thin Wall

Bushings for Locating Pins

Configurable, Straight, Standard / Thin Wall

Standard



Material	Surface Treatment	Hardness	Type	
			p6	m6
SKS3 Equivalent	-	60HRC~	JBA	JBAM
SKS3 Equivalent	Electroless Nickel Plating	60HRC~	JBAN	JBAMN
SUS40C Equivalent	-	50HRC~	JBAC	JBAMC

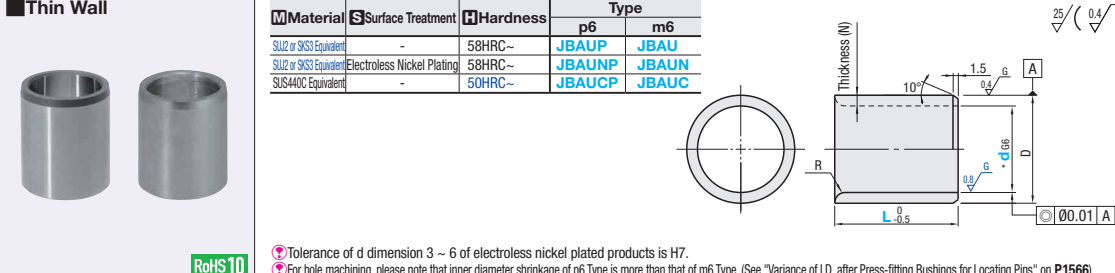
RoHS10

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 P1566)

Type	Part Number	d	D Tolerance		L Selection	Thickness (N)	R	D	D Tolerance		Unit Price									
			No Surface Treatment	Electroless Nickel Plating					p6	m6	JBA	JBAN	JBAC	JBAM	JBAMN	JBAMC				
(p6) JBA JBAN JBAC	G6	2	+0.008 +0.002	+0.010 0	5 6 7 8 10 12	1.5	0.8	5	+0.020 +0.012	+0.012 +0.004										
		3				2	7													
		4				5 6 7 8 10 12 15 *16 20	2	8		+0.024 +0.015	+0.015 +0.006									
		5	+0.012 +0.004	+0.012 0	5 6 7 8 10 12 15 16 20	2.5	10													
		6				5 6 7 8 10 12 15 16 20 25	2	12												
		8	+0.014 +0.005	+0.014 +0.005	6 7 8 10 12 15 16 20 25 30	2.5	15		+0.029 +0.018	+0.018 +0.007										
(m6) JBAM JBAMN JBAMC	G6	10			8 10 12 15 16 20 25 30	3	18													
		12			10 12 *15 16 20 *25 30	4.5	22													
		13	+0.017 +0.006	+0.017 +0.006	12 15 16 20 *25 30	5	25		+0.035 +0.022	+0.021 +0.008										
		15			12 15 16 20 25 30	5	26													
		16				12 15 16 20 25 30	5	30												
		20	+0.020 +0.007	+0.020 +0.007	16 20 25 30 *35	5	35		+0.042 +0.026	+0.025 +0.009										
		25																		

*L dimension with * is not applicable to JBAMC.

Thin Wall



Material	Surface Treatment	Hardness	Type	
			p6	m6
SU2 or SKS3 Equivalent	-	58HRC~	JBAUP	JBAU
SU2 or SKS3 Equivalent	Electroless Nickel Plating	58HRC~	JBAUNP	JBAUN
SUS40C Equivalent	-	50HRC~	JBAUCP	JBAUC

RoHS10

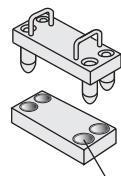
Tolerance of d dimension 3 ~ 6 of electroless nickel plated products is H7.
For hole machining, please note that inner diameter shrinkage of p6 Type is more than that of m6 Type. (See "Variance of I.D. after Press-fitting Bushings for Locating Pins" on P1566)

Type	Part Number	d	D Tolerance		L Selection	Thickness (N)	R	D	D Tolerance		Unit Price									
			No Surface Treatment	Electroless Nickel Plating					p6	m6	JBAUP	JBAUNP	JBAUCP	JBAU	JBAUN	JBAUC				
(p6) JBAUP JBAUNP JBAUCP	G6	3	+0.008 +0.002	+0.010 0	5 6 8 10 12	1	0.5	5	+0.020 +0.012	+0.012 +0.004										
		4			5 6 8 10 12 15 16	1	6													
		5	+0.012 +0.004	+0.012 0	5 6 8 10 12 15 16 20	1	8		+0.024 +0.015	+0.015 +0.006										
		6				5 6 8 10 12 15 16 20	1	10												
		8	+0.014 +0.005	+0.014 +0.005	6 8 10 12 15 16 20	1.5	13		+0.029 +0.018	+0.018 +0.007										
		10			8 10 12 15 16 20	2	15													
(m6) JBAU JBAUN JBAUC	G6	12			10 12 *15 16 20	2	17													
		13	+0.017 +0.006	+0.017 +0.006	10 12 15 16 20	2	19		+0.035 +0.022	+0.021 +0.008										
		15			10 12 15 16 20	2.5	21													
		16			10 12 15 16 20 25	2.5	26													
		20	+0.020 +0.007	+0.020 +0.007	12 15 16 20 25	3	31		+0.042 +0.026	+0.025 +0.009										
		25			20 25															

*L dimension with * is not applicable to JBAUN.

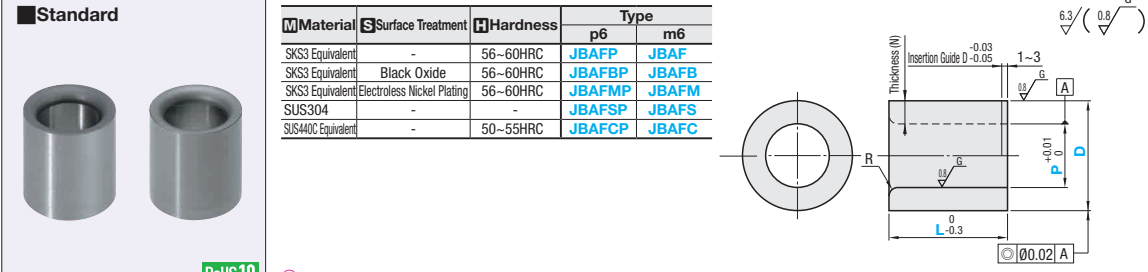
Ordering Example
Part Number - L
Example JBA12 - 10
JBAUN8 - 8

EX Example



Bushings for Locating Pins - Thin Wall

Standard



Material	Surface Treatment	Hardness	Type	
			p6	m6
SKS3 Equivalent	-	56-60HRC	JBAFP	JBAF
SKS3 Equivalent	Black Oxide	56-60HRC	JBAFBP	JBAFB
SKS3 Equivalent	Electroless Nickel Plating	56-60HRC	JBAFMP	JBAFM
SUS304	-	-	JBAFSP	JBAFS
SUS40C Equivalent	-	50-55HRC	JBAFCP	JBAFC

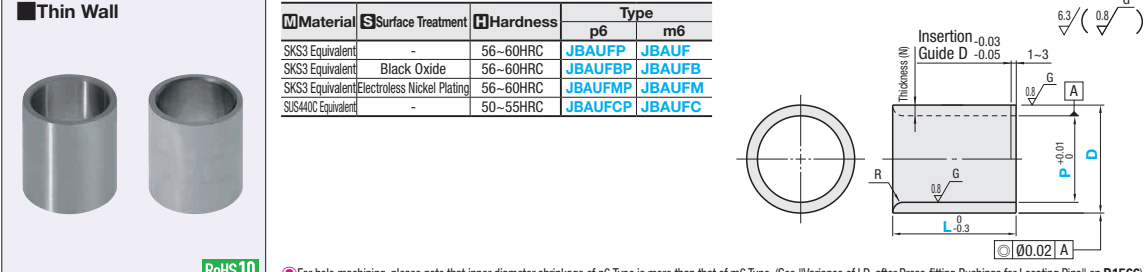
RoHS10

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 P1566)

Type	Part Number	D	D Tolerance		P	L	Thickness (N)	R	Unit Price										
			p6	m6					0.01mm Increment	0.1mm Increment	JBAF	JBAFBP	JBAFMP	JBAFSP	JBAFCP				
(p6) JBAFP JBAFBP JBAFMP JBAFSP JBAFCP	G6	5	+0.024 +0.015	+0.015 +0.006	2.00-2.50	5.0-6.0	1.25-1.50	0.8											
		7			2.00-3.50	5.0-8.0	1.75-2.50												
		8			3.00-4.50	5.0-13.0		1.0											
		12			4.00-6.50	5.0-20.0	1.75-3.00												
		15	+0.029 +0.018	+0.018 +0.007	6.00-8.50		2.25-3.50												
		18			8.00-10.50		2.75-4.00												
(m6) JBAF JBAFB JBAFM JBAFS JBAFC	G6	20			10.00-12.50	5.0-40.0	3.25-4.00	2.0											
		22			12.00-13.50		4.25-5.00												
		25	+0.035 +0.022	+0.021 +0.008	13.00-15.50		4.75-6.00												
		26			15.00-16.50		4.75-5.50												
		30			16.00-20.50		4.75-7.00												
		35	+0.042 +0.026	+0.025 +0.009	20.00-25.00		5.00-7.50												

*L≤Px2.5 when P≤3.59 L≤Px3.0 when P≥3.60 For (D-P)/2≤2, R≤2

Thin Wall



Material	Surface Treatment	Hardness	Type	
			p6	m6
SKS3 Equivalent	-	56-60HRC	JBAUFP	JBAUF
SKS3 Equivalent	Black Oxide	56-60HRC	JBAUFBP	JBAUFB
SKS3 Equivalent	Electroless Nickel Plating	56-60HRC	JBAUFMP	JBAUFM
SUS40C Equivalent	-	50-55HRC	JBAUFCP	JBAUFC

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 P1566)

Type	Part Number	D	D Tolerance		P	L	Thickness (N)	R	Unit Price										
			p6	m6					0.01mm Increment	0.1mm Increment	JBAUFP	JBAUFBP	JBAUFMP	JBAUFCP					
(p6) JBAUFP JBAUFBP JBAUFMP JBAUFCP	G6	7			3.51-5.00	5.0-8.0	1.00-1.74	0.5											
		8	+0.024 +0.015	+0.015 +0.006	4.51-6.00	5.0-13.0	1.25-2.24												
		9			4.51-6.50		1.00-1.74												
		10			6.51-8.00	5.0-20.0	1.00-1.50												
		11			8.00-9.00		1.50-1.74												
		12			8.51-9.00		1.50-2.24												
(m6) JBAUF JBAUFB JBAUFM JBAUFC	G6	13	+0.029 +0.018	+0.018 +0.007	8.51-10.00		1.50-2.24												
		14			9.00-11.00		1.50-2.50												
		15			10.51-12.00		1.50-2.24												
		17			10.51-13.00		2.00-3.24												
		18			12.51-14.00		2.00-2.74												
		20			13.51-15.00		2.50-3.24												
		22			13.51-17.00		2.50-4.24												
		25	+0.035 +0.022	+0.021 +0.008	15.51-19.00	5.0-40.0	3.00-4.74												
		26			16.51-20.00		3.00-4.74												
		30			20.51-24.00		3.00-4.74												
		35	+0.042 +0.026	+0.025 +0.009	25.01-29.00	5.0-60.0	3.00-4.99												

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

Ordering Example
Part Number - P - L
Example JBAF10 - P4.00 - L8.5
JBAFC10 - P8.00 - L15.0

Alterations
Part Number - P - L - (RS)
Example JBAFP20 - P12.00 - L20.0 - RS

Alteration	Code	Spec.
Locite Adhesive Groove Machining When L≤13.0 When L>13.0	RS	Adds a Locite adhesive groove. Number of O.D. Grooves • When L≤13.0 → 2 lines • When L>13.0 → 3 lines [Ordering Code] RS • When D≤13, D-P≥3 When D≥14, D-P≥4 • Not applicable to Thin Wall Type. • Not applicable to L<9.0.