

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 or 13Cr stainless	-	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 Tolerance		L Selection	Thickness (N)	R	D	D Tolerance		Unit Price		
		No Surface Treatment	Electroless Nickel Plating					p6	m6	JBA	JBAN	JBAC
(p6) JBA JBAN JBAC	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				2	8						
	5	+0.012 +0.004	+0.012 0	5 6 7 8 10 12 15 16 20	2.5	1	10	+0.024 +0.015	+0.015 +0.006			
	6				2	12						
	8					2	15					
(m6) JBAM JBAMN JBAMC	10	+0.014 +0.005	+0.014 +0.005	5 6 7 8 10 12 15 16 20 25	2	12		+0.029 +0.018	+0.018 +0.007			
	12			6 7 8 10 12 15 16 20 25 30	2.5	15						
	13			8 10 12 15 16 20 25 30	3	18						
	15	+0.017 +0.006	+0.017 +0.006	10 12 *15 16 20 *25 30	4.5	22						
	16			12 15 16 20 *25 30	5	25		+0.035 +0.022	+0.021 +0.008			
	20			12 15 16 20 25 30	5	30						
	25	+0.020 +0.007	+0.020 +0.007	16 20 25 30 *35	5	35		+0.042 +0.026	+0.025 +0.009			

L dimension with * is not applicable to JBAMC.

Thin Wall

Material	Surface Treatment	Hardness	Type	
			p6	m6
SLU2 or SKS3 Equivalent	-	58HRC-	JBAUP	JBAU
SLU2 or SKS3 Equivalent	Electroless Nickel Plating	58HRC-	JBAUNP	JBAUN
SUS40C or 13Cr stainless	-	50HRC-	JBAUCP	JBAUC

RoHS10

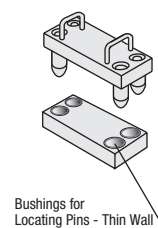
Tolerance of d dimension 3 ~ 6 of electroless nickel plated products is H7.
For hole machining, please note that inner diameter shrinkage of p6 Type is more than that of m6 Type. (See "Variance of I.D. after Press-fitting Bushings for Locating Pins" on P1566)

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

L dimension with * is not applicable to JBAUN.

Ordering Example: Part Number - L
 Example: JBAC12 - 10
 JBAUN8 - 8

EX Example



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 or 13Cr stainless	-	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 Tolerance		P	L	Thickness (N)	R	Unit Price			
		p6	m6					0.01mm Increment	0.1mm Increment	JBAF	JBAFBP
(p6) JBAFP JBAFBP JBAFMP JBAFSP JBAFCP	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						
	10			4.00-6.50							
	12			6.00-8.50	5.0-20.0	1.75-3.00					
	15	+0.029 +0.018	+0.018 +0.007	8.00-10.50		2.25-3.50					
(m6) JBAF JBAFB JBAFM JBAFS JBAFC	18			10.00-12.50		2.75-4.00	1.0				
	20			12.00-13.50	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	5.0-60.0	5.00-7.50	3.0				

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 or 13Cr stainless	-	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 Tolerance		P	L	Thickness (N)	R	Unit Price			
		p6	m6					0.01mm Increment	0.1mm Increment	JBAUFP	JBAUFBP
(p6) JBAUFP JBAUFBP JBAUFMP JBAUFCP	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		1.00-1.50					
	11			8.00-9.00	5.0-20.0	1.50-1.74					
	12			8.51-9.00		1.50-2.24					
(m6) JBAUF JBAUFB JBAUFM JBAUFC	13			8.51-10.00		1.50-2.24	1.0				
	14	+0.029 +0.018	+0.018 +0.007	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	5.0-40.0	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		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	1.5					

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

Alteration	Code	Spec.
Locite Adhesive Groove Machining 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.
Locite Adhesive Groove Machining When L > 13.0 		