

Bushings for Locating Pins

Straight, Standard / Thin Wall



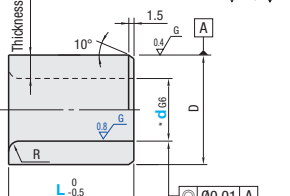
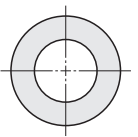
Bushings for Locating Pins

Configurable, Straight, Standard / Thin Wall

Standard



Material	Surface Treatment	Hardness	Type	
			p6	m6
EN 1.2510 Equiv.	-	60HRC~	JBA	JBAM
EN 1.2510 Equiv.	Electroless Nickel Plating	60HRC~	JBAN	JBAMN
EN 1.4125 Equiv.	-	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)

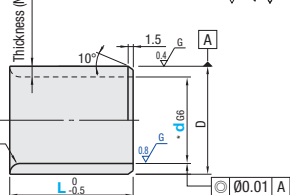
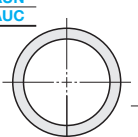
Type	Part Number	D Tolerance		L Selection	Thickness (N)	R	D	D Tolerance		Unit Price			
		No Surface Treatment	Electroless Nickel Plating					p6	m6	JBA JBAM	JBAN JBAMN	JBAC JBAMC	
(p6) JBA JBAN JBAC	2	+0.008 +0.002	H7	5 6 7 8 10 12	1.5	0.8	5	+0.020 +0.012	+0.012 +0.004				
	3				2		7						
	4				2		8						
	5	+0.012 +0.004		5 6 7 8 10 12 15 16 20	2.5	1	10	+0.024 +0.015	+0.015 +0.006				
	6			5 6 7 8 10 12 15 16 20 25	2		12						
	8				2		15						
(m6) JBAM JBAMN JBAMC	10	+0.014 +0.005	G6	6 7 8 10 12 15 16 20 25 30	2.5		15	+0.029 +0.018	+0.018 +0.007				
	12			8 10 12 15 16 20 25 30	3		18						
	13			10 12 *15 16 20 *25 30	4.5	2	22						
	15	+0.017 +0.006		12 15 16 20 *25 30	5		25	+0.035 +0.022	+0.021 +0.008				
	16				5		26						
	20			12 15 16 20 25 30	5		30						
	25	+0.020 +0.007		16 20 25 30 *35	5	3	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
EN 1.3305 Equiv. or EN 1.2510 Equiv.	-	58HRC~	JBAUP	JBAU
EN 1.3305 Equiv. or EN 1.2510 Equiv.	Electroless Nickel Plating	58HRC~	JBAUNP	JBAUN
EN 1.4125 Equiv.	-	50HRC~	JBAUCP	JBAUC



RoHS10

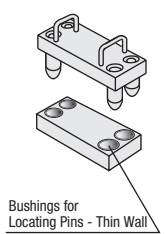
Tolerance of d dimension 3 ~ 6 of electroless nickel plated products is H7.
For hole machining, please note that inner diameter shrinkage of p6 Type is more than that of m6 Type. (See "Variance of I.D. after Press-fitting Bushings for Locating Pins" on P1566)

Type	Part Number	D Tolerance		L Selection	Thickness (N)	R	D	D Tolerance		Unit Price			
		No Surface Treatment	Electroless Nickel Plating					p6	m6	JBAU JBAUP	JBAUNP JBAUN	JBAUCP JBAUC	
(p6) JBAUP JBAUNP JBAUCP	3	+0.008 +0.002	H7	5 6 8 10 12	1		5	+0.020 +0.012	+0.012 +0.004				
	4			5 6 8 10 12 15 16			6						
	5						7						
	6	+0.012 +0.004		5 6 8 10 12 15 16 20			8	+0.024 +0.015	+0.015 +0.006				
	8			6 8 10 12 15 16 20			10						
	10	+0.014 +0.005					13	+0.029 +0.018	+0.018 +0.007				
(m6) JBAU JBAUN JBAUC	12		G6	8 10 12 15 16 20	1.5		15	+0.029 +0.018	+0.018 +0.007				
	13			10 12 *15 16 20			17						
	15	+0.017 +0.006		10 12 15 16 20	2	1	19						
	16			10 12 15 16 20			21	+0.035 +0.022	+0.021 +0.008				
	20			12 15 16 20 25	2.5		26						
	25	+0.020 +0.007		20 25	3	2	31	+0.042 +0.026	+0.025 +0.009				

L dimension with * is not applicable to JBAUN.

Ordering Example

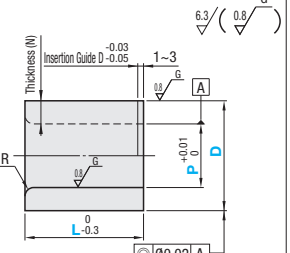
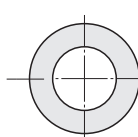
Part Number	-	L
JBAC12	-	10
JBAUN8	-	8



Standard



Material	Surface Treatment	Hardness	Type	
			p6	m6
EN 1.2510 Equiv.	-	56~60HRC	JBAFP	JBAF
EN 1.2510 Equiv.	Black Oxide	56~60HRC	JBAFBP	JBAFB
EN 1.2510 Equiv.	Electroless Nickel Plating	56~60HRC	JBAFMP	JBAFM
EN 1.4301 Equiv.	-	-	JBAFSP	JBAFS
EN 1.4125 Equiv.	-	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)

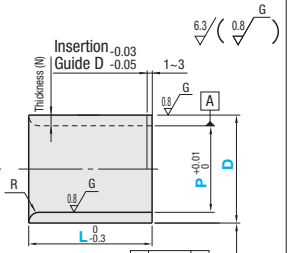
Type	Part Number	D Tolerance		P	L	Thickness (N)	R	Unit Price				
		p6	m6					JBAF JBAFP	JBAFBP JBAFB	JBAFMP JBAFM	JBAFSP JBAFS	JBAFCP JBAFC
(p6) JBAFP JBAFBP JBAFMP JBAFSP JBAFCP	5	+0.022 +0.012	+0.012 +0.004	2.00~2.50	5.0~6.0	1.25~1.50	0.8					
	7			2.00~3.50	5.0~8.0	1.75~2.50						
	8	+0.024 +0.015	+0.015 +0.006	3.00~4.50	5.0~13.0		1.0					
	10			4.00~6.50	5.0~20.0	1.75~3.00						
	12			6.00~8.50								
	15	+0.029 +0.018	+0.018 +0.007	8.00~10.50		2.25~3.50						
	18			10.00~12.50		2.75~4.00						
	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						
(m6) JBAF JBAFB JBAFM JBAFS JBAFC	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
EN 1.2510 Equiv.	-	56~60HRC	JBAUPF	JBAUF
EN 1.2510 Equiv.	Black Oxide	56~60HRC	JBAUFBP	JBAUFB
EN 1.2510 Equiv.	Electroless Nickel Plating	56~60HRC	JBAUFMP	JBAUFM
EN 1.4125 Equiv.	-	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					JBAUF JBAUPF	JBAUFBP JBAUFB	JBAUFMP JBAUFM	JBAUFCP JBAUFC	
(p6) JBAUPF 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		1.00~1.74						
	11			8.00~9.00	5.0~20.0	1.00~1.50						
	12			8.51~9.00		1.50~1.74						
	13			8.51~10.00		1.50~2.24						
	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						
(m6) JBAUF JBAUFB JBAUFM JBAUFC	18			12.51~14.00	5.0~40.0	2.00~2.74	1.0					
	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		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
JBAFP10	-	P4.00	-	L8.5
JBAUFC10	-	P8.00	-	L15.0

Alterations

Part Number	-	P	-	L	-	(RS)
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.