

Bushings for Locating Pins

Straight, Standard / Thin Wall



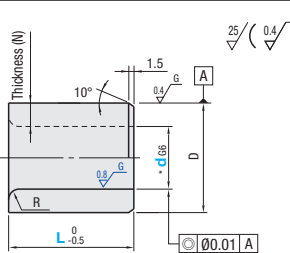
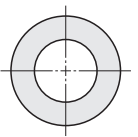
Bushings for Locating Pins

Configurable, Straight, Standard / Thin Wall

Standard



Material	Surface Treatment	Hardness	Type
			p6 m6
EN 1.2510 Equiv.	-	60HRC~	JBA JBA
EN 1.2510 Equiv.	Electroless Nickel Plating	60HRC~	JBAN JBAMN
EN 1.4037 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)

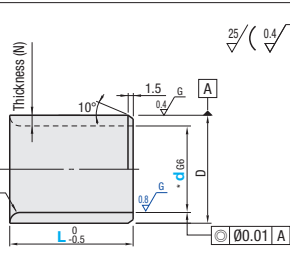
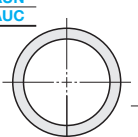
Type	Part Number	D Tolerance		L Selection	Thickness (N)	R	D	D Tolerance		Unit Price			
		No Surface Treatment	Electroless Nickel Plating					p6	m6	JBA JBAM	JBAN JBAMN	JBAC JBAMC	
(p6) JBA JBAN JBAC	2	+0.008 +0.002	H7	5 6 7 8 10 12	1.5	0.8	5	+0.020 +0.012	+0.012 +0.004				
	3				2		7						
	4				2		8						
	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 1.4037 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)

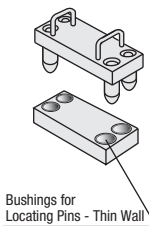
Type	Part Number	D Tolerance		L Selection	Thickness (N)	R	D	D Tolerance		Unit Price			
		No Surface Treatment	Electroless Nickel Plating					p6	m6	JBAU JBAUP	JBAUNP JBAUN	JBAUCP JBAUC	
(p6) JBAUP JBAUNP JBAUCP	3	+0.008 +0.002	H7	5 6 8 10 12	1		5	+0.020 +0.012	+0.012 +0.004				
	4			5 6 8 10 12 15 16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

Example

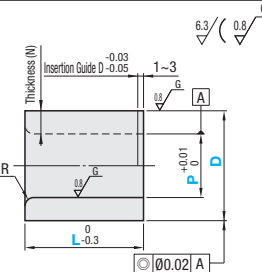
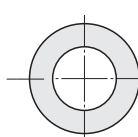


Bushings for Locating Pins - Thin Wall

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 1.4037 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)

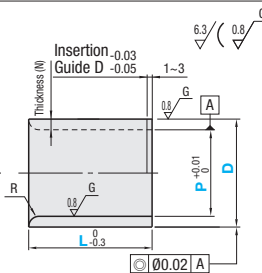
Type	Part Number	D Tolerance		P	L	Thickness (N)	R	Unit Price				
		p6	m6					JBAF JBAFP	JBAFBP JBAFB	JBAFMP JBAFM	JBAFS JBAFC	JBAFCP JBAFC
(p6) JBAFP JBAFBP JBAFMP JBAFSP JBAFCP	5	+0.022 +0.012	+0.012 +0.004	2.00~2.50	5.0~6.0	1.25~1.50	0.8					
	7			2.00~3.50	5.0~8.0	1.75~2.50						
	8	+0.024 +0.015	+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	JBAUPFBP JBAUFB
EN 1.2510 Equiv.	Electroless Nickel Plating	56~60HRC	JBAUPFMP JBAUFM
EN 1.4037 Equiv.	-	50~55HRC	JBAUPFCP 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					JBAUPF JBAUP	JBAUPFBP JBAUFB	JBAUPFMP JBAUFM	JBAUFCP JBAUFC	
(p6) JBAUPF JBAUFBP JBAUPFMP JBAUPFCP	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
JBAFC10	-	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.