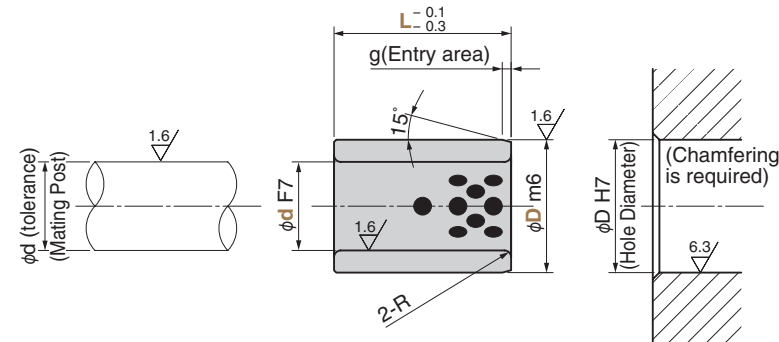


Oilless Bush

Copper Alloy
Straight Type
SO#50SP2



SOB



●Mating post tolerance

d8 : General use (high load)
e7 : General use (light load)
f7 : High precision

●Sliding Direction



Material Base Copper alloy (SO-2)
Solid lubricant (GR-1)

Operation Range

Lubricant Type	Lubricating Condition	Environment Condition	Max. Allowable Load P N/mm ²	Max. Allowable Sliding Speed V m/min	Max. Allowable PV value N/mm ² · m/min	Operation Range Temperature °C
GR-1	No lubrication	Atmosphere	100	15	150	−50 ~ +300
	Regular lubrication (Grease)			30	200	−50 ~ +150

⚠ When the product is used at high temperature (150 °C or more), the embedding specification of solid lubricant is different. Please contact us for details.

Physical Properties

Specific Gravity	Hardness HB	Elongation %	Tensile Strength N/mm ²	Linear Expansion Coefficient × 10 ^{−5} /°C
7.9	210 or more	12 or more	755 or more	1.9

d F7	D m6	R	g	Applicable Washer	Catalog No.	d	D	L
6	+0.022 +0.010	10	+0.015 +0.006			6	10	12
								8
8		12				8	12	10
			0.5					12
								15
	+0.028 +0.013		1					8
10		14		SOBW10		10	14	10
								12
			1					15
		15	+0.018 +0.007				15	20
								10
			0.5		SOB			8
								10
								12
12		18		SOBW12		12	18	15
								16
			1					19
	+0.034 +0.016							20
			2					25
								30
			0.5					10
								12
13		19	+0.021 +0.008	SOBW13		13	19	15
								16
			1					20
								25

d F7	D m6	R	g	Applicable Washer	Catalog No.	d	D	L
			0.5					10
								12
14	20		1	SOBW14		14	20	15
								20
								25
								30
			0.5					10
								12
								15
15	21		1	SOBW15		15	21	16
								20
								25
								30
			0.5					10
								12
								15
	+0.034 +0.016							16
16	22			SOBW16		16	22	19
								20
								25
								30
								35
								40
17	23			—		17	23	15
								10
								12
								15
								16
18	24		1	SOBW18	SOB	18	24	20
								25
								30
								35
								40
19	26			—		19	26	15
								20
								10
								12
								15
								16
								19
	28			SOBW20			28	20
								25
								30
								35
								40
20	+0.041 +0.020		2			20		50
								10
								12
			1					15
								16
								20
	30			—			30	25
								30
			2					35
								40
								70



Order

Catalog No. SOB d 18 — D 24 — L 40

●Other operating conditions and characteristics

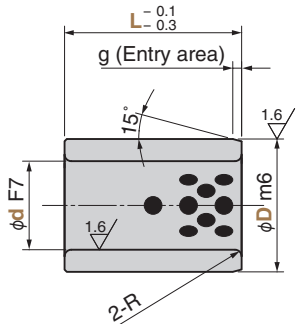
- Can be used in the atmosphere and fresh water (on condition).
- Good performance in operation under high load and at low speed.

Oilless Bush

Copper Alloy
Straight Type
SO#50SP2



SOB



Order

Catalog No.
SOB

d — D — L
30 — 40 — 60

d	F7	D	m6	R	g	Applicable Washer	Catalog No.	d	D	L
22		32				—		22	32	12
										15
										20
										25
										1
25		33		1		SOBW25				12
										15
										16
										20
										25
										30
										35
										40
										50
										60
28		35		2		—				12
										15
										16
										20
										25
										30
										35
										40
										50
										60
30		38		1	2	SOB				12
										15
										20
										25
										30
										35
										40
										50
										60
										1
32		40		2		SOBW28				12
										15
										20
										25
										30
										35
										40
										50
										60
										1
35		42		1		SOBW30				12
										15
										20
										25
										30
										35
										40
										50
										60
										1
38		44		2		—				12
										15
										20
										25
										30
										35
										40
										50
										60
										1
40		45		1.5		SOBW35				12
										15
										20
										25
										30
										35
										40
										50
										60
										1
45		48		2		SOBW40				12
										15
										20
										25
										30
										35
										40
										50
										60
										1
50		50		2		SOBW45				12
										15
										20
										25
										30
										35
										40
										50
										60
										1
55		55		2		—				12
										15
										20
										25
										30
										35
										40
										50
										60
										1
60		60		2		—				12
										15
										20
										25
										30
										35
										40
										50
										60
										1

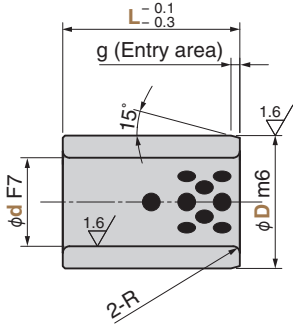
d	F7	D	m6	R	g	Applicable Washer	Catalog No.	d	D	L
31.5		40		2				31.5	40	30
										40
				1		—				15
32		42						32	42	20
				2						30
										40
				1						20
										25
										30
		44		2		SOBW35			44	35
										40
										50
										60
35				1.5				35		15
				1						20
										25
		45	+0.025 +0.009						45	30
						—				35
				2						40
										50
										60
38		48						38	48	30
										40
				1						15
										20
										25
										30
										35
	+0.050 +0.025	50		2	2	SOBW40	SOB		50	40
										50
										60
40								40		70
										80
				1						15
										25
										30
						—			55	35
										40
		55								50
										60
										30
									55	35
										40
										50
			+0.030 +0.011	2		SOBW45				60
										30
		56							56	35
45								45		40
										50
										60
										30
										35
										40
		60				—			60	50
										60
										70
										80

Oilless Bush

Copper Alloy
Straight Type
SO#50SP2



SOB



Order

Catalog No.
SOB

d — D — L
70 — 85 — 100

d	F7	D	m6	R	g	Applicable Washer	Catalog No.	d	D	L					
50	+0.050 +0.025	60		1	2	SOBW50		50	60	20					
				3						3	30				
											3	3	35		
					3								3	40	
				3						3				50	
											3	3		60	
		62			2				2				70		
				2						2			80		
											2	2	30		
					2				2				35		
				2						2			40		
											2	2	50		
55		65	+0.030 +0.011		2	2	SOBW55	SOB	55				65	60	
				3						3				70	
											3	3		80	
					3	3								100	
				3						3				30	
											3	3		35	
		70			2	2							SOBW60		60
				2						2					
											2	2			
					2	2									
				2						2					
											2	2			
60	+0.060 +0.030	74			2	2	SOBW60		60						
				3						3					
											3	3			
					3	3									
				3						3					
											3	3			
		75			2	2							SOBW60		60
				2						2					
											2	2			
					2	2									
				2						2					
											2	2			
		2	2		SOBW60		60		60						
				2					2	70					
										2	2	80			
		2	2									100			
				2					2			30			
										2	2	35			

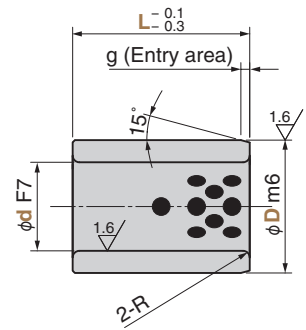
d	F7	D	m6	R	g	Applicable Washer	Catalog No.	d	D	L	
63		75	+0.030 +0.011	3	3	—		63	75	60	
				2	2					70	
										80	
65		80		3	3	SOBW65		65	80	40	
											50
											60
										70	
										80	
				2	2					30	
										35	
70		85				SOBW70		70	85	40	
										50	
										60	
										70	
										80	
										100	
										50	
										60	
						—			90	70	
										80	
		90		3	3					100	
	+0.060 +0.030									50	
									90	60	
									70	80	
75						SOBW75		75		100	
										60	
		95							95	70	
										80	
										100	
				1	2					20	
				2							40
										50	
		96					SOB		96	60	
				3	3					70	
										80	
										100	
80			+0.035 +0.013			SOBW80		80		120	
				2	2		40				
									50		
										60	
										70	
		100		3	3				100	80	
										100	
										120	
										140	
85				2	2	—		85	100	25	
				3	3					60	
										80	
				2	2					30	
										50	
90		110		3	3	SOBW90		90	110	60	
										70	
										80	
										90	
	+0.071 +0.036									100	
									120		
		115							115	100	
				2	2					40	
										50	
100		120		3	3	SOBW100		100	120	60	
										70	
										80	
										90	
										100	
										120	
										140	

A product image of an oilless bush. The bush is a light blue, cylindrical component with a series of small, circular holes along its length. It is shown against a white background. To the right of the bush, there is a green label with the text "RoHS" in white, indicating it is RoHS compliant. The text "Oilless Bush" is written in a large, bold, black font across the middle of the image. Below the bush, the text "Copper Alloy Straight Type" and "SO#50SP2" are displayed in a smaller, black font. The entire image is framed by a thin black border.

Copper Alloy
Straight Type
SO#50SP2



SOB



Order

Catalog No.
SOB

$$\begin{array}{ccc} \boxed{d} & - & \boxed{D} & - & \boxed{L} \\ 120 & - & 140 & - & 80 \end{array}$$

 Products with a d value of 150, 160, 170, 180, 190 or 200 are available on a built-to-order basis.

d F7		D m6		R	g	Applicable Washer	Catalog No.	d	D	L
110	+0.071 +0.036	130				—		110	130	50
										70
										80
										100
120		140			3	SOBW120		120	140	120
										70
										80
										90
125		145	+0.040 +0.015					125	145	100
										120
										80
										100
130		150		3			SOB	130	150	100
										130
										100
										140
140		160						140	160	80
										100
										150
										100
150	+0.083 +0.043	170			4	—		150	170	150
										80
										100
										100
160		180						160	180	100
										150
										100
										150
170		190						170	190	100
										150
										100
										100
180		200	+0.046 +0.017		3			180	200	150
										100
										100
										150
190	+0.096 +0.050	210						190	210	150
										100
										150
										150
200		230						200	230	200
										200
										200
										200

NOTE