

BUSHING FASTENERS SERIES

JX-SF-1 Self-lubricating multilayer composite bearing

Product Introduction:

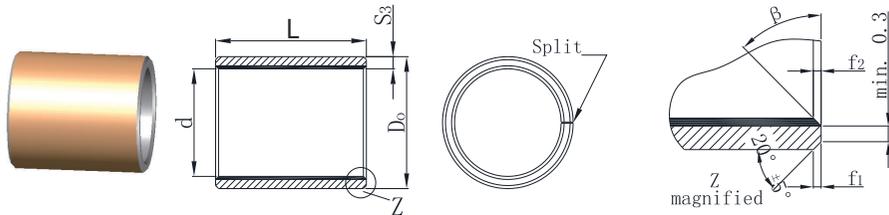
JX-SF-1 self-lubricating bearing, backed on mild steel sintered with bronze powder and coated with PTFE/Fibre mixture. Characteristics:

1. PTFE/Fibre mixture 0.01~0.03mm provides an excellent initial transfer film, which effectively coats the mating surface of the bearing assembly, forming an oxide-type solid lubricant film.
 2. Sintered bronze powder 0.20~0.30 mm, provides good thermal conductivity away from the bearing surface, also serves as a reservoir for the PTFE-lead mixture.
 3. Low-carbon steel, gives high load-carrying capacity, and excellent heat dissipation.
- Application: textile machines, lift, tobacco machines, fitness equipment, hydraulic systems, automobiles, agricultural and forest machines and so on.

The use of parameters

Parameters	SF-1W	SF-1W	SF-1P	SF-1B	SF-1D	SF-1S
	Lead-Free Bushing	Gear Pump Bushing	Reciprocating Motion Bushing	Bronze-Based Bushing	Hydraulic Bushing	Stainless Steel Bushing
Load capacity(Dynamic)	140 N/mm ²	140 N/mm ²	140 N/mm ²	140 N/mm ²	140 N/mm ²	140 N/mm ²
Load capacity(Static)	250 N/mm ²	250 N/mm ²	250 N/mm ²	250 N/mm ²	250 N/mm ²	250 N/mm ²
Oscillating	60 N/mm ²	60 N/mm ²	60 N/mm ²	60 N/mm ²	60 N/mm ²	60 N/mm ²
Speed limit(Oil)	5 m/s	10 m/s	2.5 m/s	5 m/s	3 m/s	4.5 m/s
Friction Coef.	0.04-0.20	0.04-0.20	0.04-0.20	0.03-0.18	0.04-0.20	0.04-0.20
PV limit(Dry)	3.6N/mm ² .m/s	4.3N/mm ² .m/s	3.6N/mm ² .m/s	4.3N/mm ² .m/s	3.8N/mm ² .m/s	3.6N/mm ² .m/s
PV limit(Oil)	50N/mm ² .m/s	60N/mm ² .m/s	50N/mm ² .m/s	60N/mm ² .m/s	50N/mm ² .m/s	50N/mm ² .m/s
Temp. Limit	-295°C~+280°C	-195°C~+280°C	-195°C~+280°C	-295°C~+300°C	-195°C~+280°C	-295°C~+270°C
Thermal conductivity	13 W/m.k	13 W/m.k	13 W/m.k	18 W/m.k	16 W/m.k	16 W/m.k
Linear expansion	11x10 ⁻⁶ /K	11x10 ⁻⁶ /K	11x10 ⁻⁶ /K	21x10 ⁻⁶ /K	15x10 ⁻⁶ /K	15x10 ⁻⁶ /K

JX-SF-1 Oilless Bushing



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ID and OD chamfers

S ₁	f ₁	f ₂	β
0.75	0.5±0.3	0.25±0.2	30°±5°
1.00	0.6±0.3	0.3±0.2	30°±5°
1.00	0.7±0.3	0.5±0.3	30°±5°

S ₁	f ₁	f ₂	β
2.00	1.2±0.4	0.5±0.3	30°±5°
2.50	1.8±0.6	0.6±0.3	45°±5°

Size	Shaft D _s	Housing D _h	(OD) Tolerance D _o	(ID) After fixed D _{1a}	Clearance D _o	Wall thickness S ₁	L (d≤φ28 L=0.30) (d>φ30 L=0.40)													
							6	8	10	12	15	20	25	30	40	50				
JX-SF-1-6	6 ^{+0.010} _{-0.022}	8 ^{+0.015}	8 ^{+0.055} _{-0.005}	6.055	0.077	0.900	0606	0608	0610	0812	0815									
JX-SF-1-8	8 ^{+0.013} _{-0.028}	10 ^{+0.015}	10 ^{+0.055} _{-0.005}	8.055	0.083	0.900	0806	0808	0810	0812	0815									
JX-SF-1-10	10 ^{+0.013} _{-0.028}	12 ^{+0.018}	12 ^{+0.055} _{-0.005}	10.058	0.086	0.900	1006	1008	1010	1012	1015	1020								
JX-SF-1-12	12 ^{+0.015} _{-0.034}	14 ^{+0.018}	14 ^{+0.065} _{-0.010}	12.058	0.086	0.900	1206	1208	1210	1212	1215	1220	1225							
JX-SF-1-13	13 ^{+0.015} _{-0.034}	15 ^{+0.018}	15 ^{+0.065} _{-0.010}	13.058	0.092	0.900			1310	1312	1315	1320	1325							
JX-SF-1-14	14 ^{+0.016} _{-0.034}	16 ^{+0.018}	16 ^{+0.065} _{-0.010}	14.058	0.092	0.900			1410	1412	1415	1420	1425							
JX-SF-1-15	15 ^{+0.016} _{-0.034}	17 ^{+0.018}	17 ^{+0.065} _{-0.010}	15.058	0.092	0.900			1510	1512	1515	1520	1525							
JX-SF-1-16	16 ^{+0.016} _{-0.034}	18 ^{+0.018}	18 ^{+0.065} _{-0.010}	16.058	0.092	0.900			1610	1612	1615	1620	1625							
JX-SF-1-17	17 ^{+0.016} _{-0.034}	19 ^{+0.021}	19 ^{+0.065} _{-0.010}	16.990	0.095	0.900			1710	1712	1715	1720	1725							
JX-SF-1-18	18 ^{+0.016} _{-0.034}	20 ^{+0.021}	20 ^{+0.075} _{-0.015}	18.061	0.096	0.900			1810	1812	1815	1820	1825							
JX-SF-1-20	20 ^{+0.020} _{-0.041}	23 ^{+0.021}	23 ^{+0.075} _{-0.015}	20.071	0.112	0.900			2010	2012	2015	2020	2025	2030						
JX-SF-1-22	22 ^{+0.020} _{-0.041}	25 ^{+0.021}	25 ^{+0.075} _{-0.015}	21.990	0.112	0.900			2210	2212	2215	2220	2225	2230						
JX-SF-1-24	24 ^{+0.020} _{-0.041}	27 ^{+0.021}	27 ^{+0.075} _{-0.015}	24.071	0.112	0.900			2410	2412	2415	2420	2425	2430						
JX-SF-1-25	25 ^{+0.020} _{-0.041}	28 ^{+0.021}	28 ^{+0.075} _{-0.015}	25.071	0.112	0.900			2510	2512	2515	2520	2525	2530	2540	2550				
JX-SF-1-28	28 ^{+0.020} _{-0.041}	32 ^{+0.023}	32 ^{+0.085} _{-0.020}	28.990	0.126	0.900				2812	2815	2820	2825	2830	2840	2850				
JX-SF-1-30	30 ^{+0.020} _{-0.041}	34 ^{+0.025}	34 ^{+0.085} _{-0.020}	30.085	0.126	0.900				3012	3015	3020	3025	3030	3040	3050				
JX-SF-1-32	32 ^{+0.020} _{-0.041}	36 ^{+0.025}	36 ^{+0.085} _{-0.020}	32.085	0.126	0.900				3212	3215	3220	3225	3230	3240	3250				
JX-SF-1-35	35 ^{+0.020} _{-0.041}	39 ^{+0.025}	39 ^{+0.085} _{-0.020}	34.990	0.135	0.900					3512	3515	3520	3525	3530	3540	3550			
JX-SF-1-38	38 ^{+0.020} _{-0.041}	42 ^{+0.025}	42 ^{+0.085} _{-0.020}	38.085	0.135	0.900					3812	3815	3820	3825	3830	3840	3850			
JX-SF-1-40	40 ^{+0.020} _{-0.041}	44 ^{+0.025}	44 ^{+0.085} _{-0.020}	40.085	0.135	0.900					4012	4015	4020	4025	4030	4040	4050			

size	Shaft D _s	Housing D _h	(OD) Tolerance D _o	(ID) After fixed D _{1a}	Clearance D _o	Wall thickness S ₁	L (d≤φ28 L=0.30) (d>φ30 L=0.40)													
							20	25	30	40	50	60	70	80	100	115				
JX-SF-1-45	45 ^{+0.050} _{-0.025}	50 ^{+0.025}	50 ^{+0.085} _{-0.045}	45.105	0.155	0.900	4520	4525	4530	4540	4550									
JX-SF-1-50	50 ^{+0.050} _{-0.025}	55 ^{+0.030}	55 ^{+0.100} _{-0.055}	50.110	0.160	0.900	5020	5025	5030	5040	5050	5060								
JX-SF-1-55	55 ^{+0.060} _{-0.030}	60 ^{+0.030}	60 ^{+0.100} _{-0.055}	55.110	0.160	0.900				5530	5540	5550	5560							
JX-SF-1-60	60 ^{+0.060} _{-0.030}	65 ^{+0.030}	65 ^{+0.100} _{-0.055}	60.110	0.170	0.900				6030	6040	6050	6060	6070						
JX-SF-1-65	65 ^{+0.060} _{-0.030}	70 ^{+0.030}	70 ^{+0.100} _{-0.055}	65.110	0.170	0.900				6530	6540	6550	6560	6570						
JX-SF-1-70	70 ^{+0.060} _{-0.030}	75 ^{+0.030}	75 ^{+0.100} _{-0.055}	70.110	0.170	0.900				7030	7040	7050	7060	7070	7080					
JX-SF-1-75	75 ^{+0.060} _{-0.030}	80 ^{+0.030}	80 ^{+0.100} _{-0.055}	75.110	0.201	0.900				7530	7540	7550	7560	7570	7580					
JX-SF-1-80	80 ^{+0.045}	85 ^{+0.035}	85 ^{+0.120} _{-0.070}	80.155	0.201	0.900				8040	8050	8060	8070	8080	80100					
JX-SF-1-85	85 ^{+0.054}	90 ^{+0.035}	90 ^{+0.120} _{-0.070}	85.155	0.201	0.900					8540	8550	8560	8570	8580	85100				
JX-SF-1-90	90 ^{+0.054}	95 ^{+0.035}	95 ^{+0.120} _{-0.070}	90.200	0.209	0.900					9040	9050	9060	9070	9080	90100				
JX-SF-1-95	95 ^{+0.054}	100 ^{+0.035}	100 ^{+0.120} _{-0.070}	95.200	0.209	0.900					9550	9560	9570	9580	95100					
JX-SF-1-100	100 ^{+0.054}	105 ^{+0.035}	105 ^{+0.120} _{-0.070}	100.155	0.264	0.900						10050	10060	10070	10080	100100	100115			
JX-SF-1-105	105 ^{+0.054}	110 ^{+0.035}	110 ^{+0.120} _{-0.070}	105.115	0.264	0.900							10560	10570	10580	105100	105115			
JX-SF-1-110	110 ^{+0.054}	115 ^{+0.035}	115 ^{+0.120} _{-0.070}	110.115	0.264	0.900							11060	11070	11080	110100	110115			
JX-SF-1-120	120 ^{+0.054}	125 ^{+0.040}	125 ^{+0.170} _{-0.100}	120.210	0.273	0.900								12060	12070	12080	120100	120115		
JX-SF-1-125	125 ^{+0.063}	130 ^{+0.040}	130 ^{+0.170} _{-0.100}	125.210	0.273	0.900									12560	12570	12580	125100	125115	
JX-SF-1-130	130 ^{+0.063}	135 ^{+0.040}	135 ^{+0.170} _{-0.100}	130.210	0.273	0.900									13060	13070	13080	130100	130115	
JX-SF-1-140	140 ^{+0.063}	145 ^{+0.040}	145 ^{+0.170} _{-0.100}	140.210	0.273	0.900									14060	14070	14080	140100	140115	
JX-SF-1-150	150 ^{+0.063}	155 ^{+0.040}	155 ^{+0.170} _{-0.100}	150.210	0.273	0.900									15060	15070	15080	150100	150115	
JX-SF-1-160	160 ^{+0.063}	165 ^{+0.040}	165 ^{+0.170} _{-0.100}	160.210	0.273	0.900									16060	16070	16080	160100	160115	
JX-SF-1-180	180 ^{+0.063}	185 ^{+0.046}	185 ^{+0.210} _{-0.130}	180.216	0.279	0.900									18060	18070	18080	180100		