SF-1

无油润滑轴承
OILLESS BUSHING

产品介绍
Product introduction

是以钢板为基体，中间烧结球形青铜粉，表面轧制聚四氟乙烯和混合物卷制而成。它具有摩擦系数小、耐磨、抗腐蚀性好和无油润滑的特点。能降低成本、缩小机械体积、避免咬轴现象和降低噪音等优点。产品已广泛应用于各种机械的滑动部位，例如：印刷机、纺织机、烟草机械、汽车、摩托车与农林机械等。

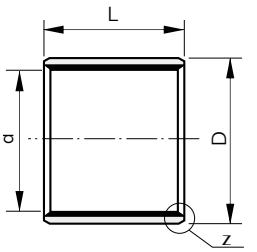
It is wall wrapped bushing made of triple layer composites material which be consisted of a steel backing, a sintered porous bronze particles interlayer and calendared and mixture as surface layer, It is of low friction coefficient, anti–wear, anti–corrosion and can be used without oil, or only a trace of oil if needed. Moreover, it is of low cost, low vibration and low noise, compacted and light. It is widely applied in various sliding articles of different kind of machines, such as textile machines, tobacoo machines, hydraulic vechicles, antomobiles, agriculture and forests machinese and soon.

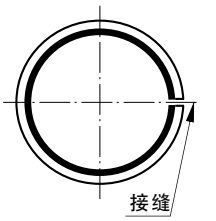
使用参数
The use of parameters

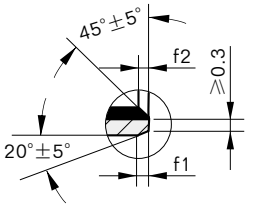
参数 Parameters	**SF-1W** 无铅轴承 Lead–Free Bushing	**SF-1W** 齿轮泵专用轴承 Gear Pump Bushing	**SF-1P** 往复运动轴承 Reciprocating Motion Bushing	**SF-1B** 青铜基轴承 Bronze–Based Bushing	**SF-1D** 液压专用轴承 Hydraulic Bushing	**SF-1S** 不锈钢耐蚀轴承 Stainless Steel Bushing
最大承载压力 (动) Load capacity(Dynamic)	140 N/mm^2	140 N/mm^2	140 N/mm^2	140 N/mm^2	140 N/mm^2	140 N/mm^2
最大承载压力 (静) 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
摇摆运动 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
最高滑动速度 (油润滑) Speed limit(Oil)	5 m/s	10 m/s	2.5 m/s	5 m/s	3 m/s	4.5 m/s
摩擦系数 μ 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
最高PV值 (干) PV limit(Dry)	3.6 N/ mm^2.m/s	4.3 N/ mm^2.m/s	3.6 N/ mm^2.m/s	4.3 N/ mm^2.m/s	3.8 N/ mm^2.m/s	3.6 N/ mm^2.m/s
最高PV值 (油) PV limit(Oil)	50 N/ mm^2.m/s	60 N/ mm^2.m/s	50 N/ mm^2.m/s	60 N/ mm^2.m/s	50 N/ mm^2.m/s	50 N/ mm^2.m/s
工作温度 Temp. Limit	–295℃ ~ +280℃	–195℃ ~ +280℃	–195℃ ~ +280℃	–195℃ ~ +300℃	–195℃ ~ +280℃	–295℃ ~ +270℃
导热系数 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
线膨胀系数 Linear expansion	11×10^{-6}/K	11×10^{-6}/K	11×10^{-6}/K	21×10^{-6}/K	15×10^{-6}/K	15×10^{-6}/K

YONGXIN OILLESS BEARING

SF-1 无油润滑轴承
SF-1 Oilless Bushing



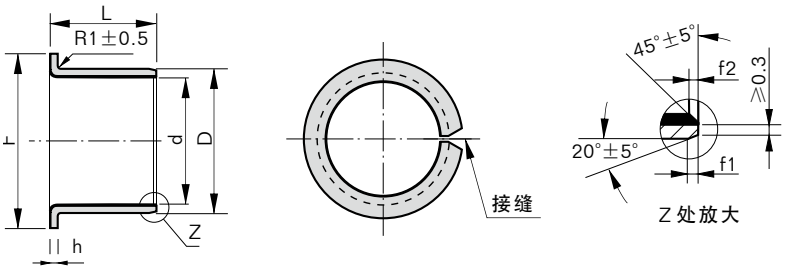




单位unit:mm

压入座孔后的内径 I.D.after fixed	D	轴径 Shaft Dia.	座孔 Bore H7 Housing	壁厚 Wall Thickness	f1	f2	L $^{0}_{-0.40}$ (d ≤ Φ30 L − 0.3 ; d > Φ30 L − 0.4)																
							6	8	10	12	15	20	25	30	40	50	60	70	80	90	100	115
5.990 6.055	8 $^{+0.055}_{+0.025}$	6 $^{-0.013}_{-0.028}$	8 $^{+0.015}$				●	●	●													
7.990 8.055	10 $^{+0.055}_{+0.025}$	8 $^{-0.016}_{-0.034}$	10 $^{+0.015}$				●	●	●	●	●											
9.990 10.058	12 $^{+0.065}_{+0.030}$	10 $^{-0.020}_{-0.041}$	12 $^{+0.018}$					●	●	●	●											
11.990 12.058	14 $^{+0.065}_{+0.030}$	12 $^{-0.020}_{-0.041}$	14 $^{+0.018}$					●	●	●	●	●	●									
13.990 14.058	16 $^{+0.065}_{+0.030}$	14 $^{-0.020}_{-0.041}$	16 $^{+0.018}$	0.890 1.005	0.6	0.3			●	●	●	●	●									
14.990 15.058	17 $^{+0.065}_{+0.030}$	15 $^{-0.020}_{-0.041}$	17 $^{+0.018}$						●	●	●	●	●									
15.990 16.058	18 $^{+0.065}_{+0.030}$	16 $^{-0.020}_{-0.041}$	18 $^{+0.018}$						●	●	●	●	●									
16.990 17.061	19 $^{+0.075}_{+0.035}$	17 $^{-0.020}_{-0.041}$	19 $^{+0.021}$						●	●		●										
17.990 18.061	20 $^{+0.075}_{+0.035}$	18 $^{-0.025}_{-0.050}$	20 $^{+0.021}$						●	●	●	●	●									
19.990 20.071	23 $^{+0.075}_{+0.035}$	20 $^{-0.025}_{-0.050}$	23 $^{+0.021}$						●	●	●	●	●	●								
21.990 22.071	25 $^{+0.075}_{+0.035}$	22 $^{-0.025}_{-0.050}$	25 $^{+0.021}$	1.475 1.505	0.6	0.4				●	●	●	●	●								
23.990 24.071	27 $^{+0.075}_{+0.035}$	24 $^{-0.025}_{-0.050}$	27 $^{+0.021}$								●	●	●	●								
24.990 25.071	28 $^{+0.075}_{+0.035}$	25 $^{-0.013}_{-0.028}$	28 $^{+0.021}$								●	●	●	●	●							
27.990 28.085	32 $^{+0.085}_{+0.045}$	28 $^{-0.016}_{-0.034}$	32 $^{+0.025}$								●	●	●	●	●							
29.990 30.085	34 $^{+0.085}_{+0.045}$	30 $^{-0.016}_{-0.034}$	34 $^{+0.025}$							●	●	●	●	●	●	●						
31.990 32.085	36 $^{+0.085}_{+0.045}$	32 $^{-0.016}_{-0.034}$	36 $^{+0.025}$	1.970 2.005	1.2	0.4						●		●	●							
34.990 35.085	39 $^{+0.085}_{+0.045}$	35 $^{-0.016}_{-0.034}$	39 $^{+0.025}$									●	●	●	●	●						
37.990 38.085	42 $^{+0.085}_{+0.045}$	38 $^{-0.016}_{-0.034}$	42 $^{+0.025}$											●	●	●						
39.990 40.085	44 $^{+0.085}_{+0.045}$	40 $^{-0.016}_{-0.034}$	44 $^{+0.025}$									●	●	●	●	●						
44.990 45.105	50 $^{+0.085}_{+0.045}$	45 $^{-0.025}_{-0.050}$	50 $^{+0.025}$									●	●	●	●	●						
49.990 50.110	55 $^{+0.100}_{+0.055}$	50 $^{-0.030}_{-0.060}$	55 $^{+0.030}$									●		●	●	●	●					
54.990 55.110	60 $^{+0.100}_{+0.055}$	55 $^{-0.030}_{-0.060}$	60 $^{+0.030}$											●	●	●	●					
59.990 60.110	65 $^{+0.100}_{+0.055}$	60 $^{-0.030}_{-0.060}$	65 $^{+0.030}$	2.460 2.505	0.8	0.6								●	●	●	●	●				
64.990 65.110	70 $^{+0.100}_{+0.055}$	65 $^{-0.030}_{-0.060}$	70 $^{+0.030}$											●	●	●	●	●				
69.990 70.110	75 $^{+0.100}_{+0.055}$	70 $^{-0.030}_{-0.060}$	75 $^{+0.030}$												●	●	●	●	●			
74.990 75.110	80 $^{+0.100}_{+0.055}$	75 $^{-0.030}_{-0.060}$	80 $^{+0.030}$												●	●	●	●	●			
80.020 80.155	85 $^{+0.120}_{+0.070}$	80 $_{-0.035}$	85 $^{+0.035}$												●	●	●	●	●	●	●	
85.020 85.155	90 $^{+0.120}_{+0.070}$	85 $_{-0.035}$	90 $^{+0.035}$														●		●		●	
90.020 90.155	95 $^{+0.120}_{+0.070}$	90 $_{-0.035}$	95 $^{+0.035}$													●	●		●		●	
95.020 95.155	100 $^{+0.120}_{+0.070}$	95 $_{-0.035}$	100 $^{+0.035}$	2.460 2.505	1.8	0.6										●	●		●	●	●	
100.020 100.155	105 $^{+0.120}_{+0.070}$	100 $_{-0.035}$	105 $^{+0.035}$													●	●		●			●
105.020 105.155	110 $^{+0.120}_{+0.070}$	105 $_{-0.035}$	110 $^{+0.035}$														●		●	●		●
110.020 110.155	115 $^{+0.120}_{+0.070}$	110 $_{-0.035}$	115 $^{+0.035}$														●		●	●		●
120.070 120.210	125 $^{+0.170}_{+0.100}$	120 $_{-0.035}$	125 $^{+0.035}$														●		●	●	●	
125.070 125.210	130 $^{+0.170}_{+0.100}$	125 $_{-0.040}$	130 $^{+0.040}$														●				●	●
130.070 130.210	135 $^{+0.170}_{+0.100}$	130 $_{-0.040}$	135 $^{+0.040}$														●		●	●	●	
140.070 140.210	145 $^{+0.170}_{+0.100}$	140 $_{-0.040}$	145 $^{+0.040}$	2.415 2.465	1.8	0.6											●		●	●	●	
150.070 150.210	155 $^{+0.170}_{+0.100}$	150 $_{-0.040}$	155 $^{+0.040}$														●		●	●	●	
160.070 160.210	165 $^{+0.170}_{+0.100}$	160 $_{-0.040}$	165 $^{+0.040}$														●		●		●	●
180.070 180.216	185 $^{+0.210}_{+0.130}$	180 $_{-0.040}$	185 $^{+0.046}$																●		●	

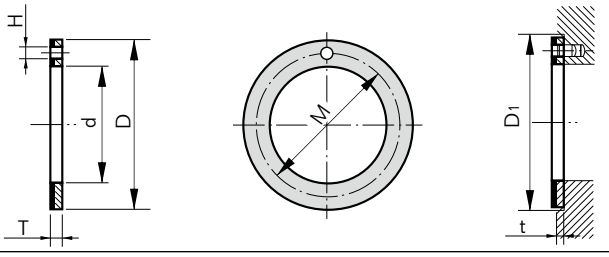
SF-1 无油润滑翻边轴套
SF-1 Oilless Flange Bushing



单位unit:mm

压入座孔后的内径 I.D.afterfixed	D	轴径 Shaft Dia.	座孔 Bore H7 Housing	F±0.5	壁厚 Wall Thickness	f1	f2	L±0.025												
								4	5.5	7	7.5	8	9	10	12	15	16	17	22	26
5.990 6.055	8 +0.055 +0.025	6 −0.013 −0.028	8 +0.015	12	+0.005 −0.020	0.6	0.3	●		●		●								
7.990 8.055	10 +0.055 +0.025	8 −0.016 −0.034	10 +0.015	15					●		●	●		●						
9.990 10.058	12 +0.065 +0.030	10 −0.020 −0.041	12 +0.018	18						●			●		●	●				
11.990 12.058	14 +0.065 +0.030	12 −0.020 −0.041	14 +0.018	20						●			●		●	●		●		
13.990 14.058	16 +0.065 +0.030	14 −0.020 −0.041	16 +0.018	22											●			●		
14.990 15.058	17 +0.065 +0.030	15 −0.020 −0.041	17 +0.018	23									●		●			●		
15.990 16.058	18 +0.065 +0.030	16 −0.020 −0.041	18 +0.018	24											●			●		
17.990 18.061	20 +0.075 +0.035	18 −0.025 −0.050	20 +0.021	26											●	●		●		
19.990 20.071	23 +0.075 +0.035	20 −0.025 −0.050	23 +0.021	30											●	●		●	●	
21.990 22.071	25 +0.075 +0.035	22 −0.025 −0.050	25 +0.021	32	+0.005 −0.025	0.6	0.4									●		●	●	
24.990 25.071	28 +0.075 +0.035	25 −0.013 −0.028	28 +0.021	35											●			●	●	
29.990 30.085	34 +0.085 +0.045	30 −0.016 −0.034	34 +0.025	45	+0.005 −0.030	1.2	0.4										●		●	●
34.990 35.085	39 +0.085 +0.045	35 −0.016 −0.034	39 +0.025	47													●		●	●

SF-1WC 标准公制垫片
SF-1WC Standard Metric Washer



单位unit:mm

规格型号 Type	轴 径 Shaft Dia.	垫片尺寸 Washer dimension				安装尺寸 Installation		
		d +0.25	D −0.25	T −0.05	M +0.12 −0.12	H	t	D_1
WC 10	8	10	20	1.5	15	1.5	1	20
WC 12	10	12	24	1.5	18	1.5	1	24
WC 14	12	14	26	1.5	20	2	1	26
WC 16	14	16	30	1.5	23	2	1	30
WC 18	16	18	32	1.5	25	2	1	32
WC 20	18	20	36	1.5	28	3	1	36
WC 22	20	22	38	1.5	30	3	1	38
WC 24	22	24	42	1.5	33	3	1	42
WC 26	24	26	44	1.5	35	3	1	44
WC 28	25	28	48	1.5	38	4	1	48
WC 32	30	32	54	1.5	43	4	1	54
WC 38	35	38	62	1.5	50	4	1	62
WC 42	40	42	66	1.5	54	4	1	66
WC 48	45	48	74	2	61	4	1.5	74