

DU oilless dry bearing is wrapped by steel backing, Sinter bronze inter layer and PTFE composite anti-wear inner surface. Also it is name SF-1 bushing in China. It is widely used in hydraulic gear pumps, oil cylinder, oil Damping bushes and piston rings for automobiles and motorcycles and textile, food-stuff machines etc

Technical Data



- 1.PTFE composite 0.01~0.03mm as sliding layer*
 - 2.Porous bronze 0.2~0.3mm
 - 3.Metal backing 0.7~2.3mm**
 - 4.Tin-plating 0.005mm or copper plating 0.008mm
- *Normally it is without lead, customized can add it.
 ** Metal in carbon steel, bronze or stainless steel.

Performance	Data (*According to steel backing)	
Load capacity P (Dry friction)	Static load	250N/mm ²
	Dynamic load	140N/mm ²
Max linear speed V	Dry friction	2.5m/s
	Oil lubrication	5m/s
PV value limit	Dry friction	3.6N/mm ² .m/s
	Oil lubrication	50N/mm ² .m/s
Friction coef u	Dry friction	0.08~0.20
	Oil lubrication	0.02~0.07
Working temperature	-200°C~+280°C	
Thermal conductivity	40W/mk	
Linear expansion	12*10 ⁻⁶ /K	

Basic Models



DU Steel Backing



DP4 Steel + Red PTFE



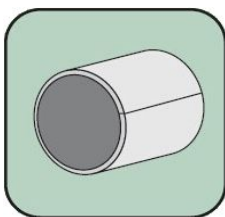
DU-B Bronze Backing



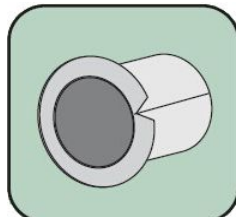
DU-SS Stainless Steel

= ordering code

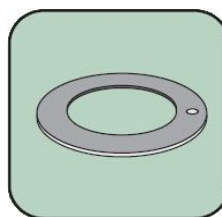
Basic Structures



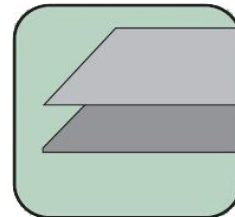
S Sleeve Bushing



F Flanged Bushing

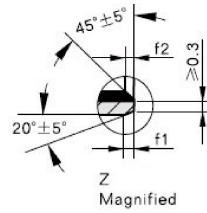
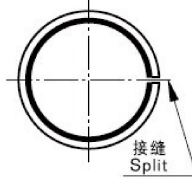
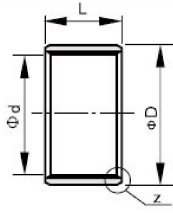
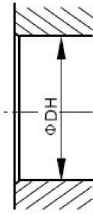


W Thrust Washer



P Slide Plate

= ordering code



Unit: mm

ID d	Shaft d _s		Housing D _h		OD D		Wall T	L $\begin{matrix} -0.00 \\ -0.40 (d < 28L - 0.30) \end{matrix}$														
								5	6	8	10	12	15	20	25	30	40	50	60	70	80	
4.990 5.055	4	-0.013 -0.028	7.015 8.000	5.5	+0.055 8.000	+0.025	0.730 0.755	●	●													
4.990 5.055	5	-0.013 -0.028	7.015 8.000	7	+0.055 8.000	+0.025		●	●	●												
5.990 6.055	6	-0.013 -0.028	8.015 8.000	8	+0.055 8.000	+0.025			●	●	●											
6.990 7.055	7	-0.013 -0.028	9.015 9.000	9	+0.055 9.000	+0.025			●	●	●											
7.990 8.055	8	-0.013 -0.028	10.015 10.000	10	+0.055 10.000	+0.025			●	●	●	●										
9.990 10.058	10	-0.016 -0.034	12.018 12.000	12	+0.065 12.000	+0.030			●	●	●	●	●									
11.990 12.058	12	-0.016 -0.034	14.018 14.000	14	+0.065 14.000	+0.030	0.980		●	●	●	●	●									
13.990 14.058	14	-0.016 -0.034	16.018 16.000	16	+0.065 16.000	+0.030	1.005			●	●	●	●	●	●							
14.990 15.058	15	-0.016 -0.034	17.018 17.000	17	+0.065 17.000	+0.030				●	●	●	●	●	●							
15.990 16.058	16	-0.016 -0.034	18.018 18.000	18	+0.065 18.000	+0.030					●	●	●	●	●							
16.990 17.061	17	-0.016 -0.034	19.021 19.000	19	+0.075 19.000	+0.035					●	●	●	●	●	●						
17.990 18.061	18	-0.016 -0.034	20.021 20.000	20	+0.075 20.000	+0.035					●	●	●	●	●	●						
19.990 20.071	20	-0.016 -0.034	23.021 23.000	23	+0.075 23.000	+0.035	1.475				●	●	●	●	●	●						
21.990 22.071	22	-0.020 -0.041	25.021 25.000	25	+0.075 25.000	+0.035						●	●	●	●	●	●					
23.990 24.071	24	-0.020 -0.041	27.021 27.000	27	+0.075 27.000	+0.035	1.505					●	●	●	●	●	●					
24.990 25.071	25	-0.020 -0.041	28.021 28.000	28	+0.075 28.000	+0.035						●	●	●	●	●	●					
27.990 28.085	28	-0.020 -0.041	32.025 32.000	32	+0.085 32.000	+0.045							●	●	●	●	●					
29.990 30.085	30	-0.020 -0.041	34.025 34.000	34	+0.085 34.000	+0.045								●	●	●	●					
31.990 32.085	32	-0.025 -0.050	36.025 36.000	36	+0.085 36.000	+0.045									●	●	●	●	●			
34.990 35.085	35	-0.025 -0.050	39.025 39.000	39	+0.085 39.000	+0.045	1.970									●	●	●	●	●		
37.990 38.085	38	-0.025 -0.050	42.025 42.000	42	+0.085 42.000	+0.045	2.005										●	●	●	●	●	
39.990 40.085	40	-0.025 -0.050	44.025 44.000	44	+0.085 44.000	+0.045												●	●	●	●	●
44.990 45.105	45	-0.025 -0.050	50.025 50.000	50	+0.085 50.000	+0.045													●	●	●	●
49.990 50.110	50	-0.030 -0.060	55.030 55.000	55	+0.100 55.000	+0.055	2.460													●	●	●
54.990 55.110	55	-0.030 -0.060	60.030 60.000	60	+0.100 60.000	+0.055															●	●
59.990 60.110	60	-0.030 -0.060	65.030 65.000	65	+0.100 65.000	+0.055	2.505															●
64.990 65.110	65	-0.030 -0.060	70.030 70.000	70	+0.100 70.000	+0.055																

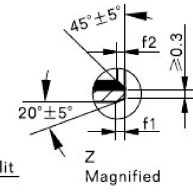
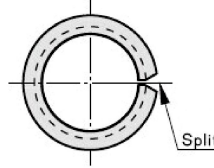
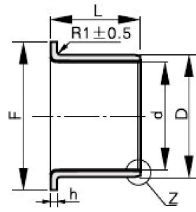
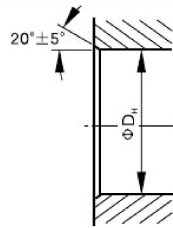
59.990 70.110	70	-0.030 -0.060	75.030 75.000	75	+0.100 +0.055													●	●	●	●	●
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Customized sizes also can be produced

ID	Shaft d _s	Housing D _h	OD D	Wall T	L 0.00 0.40 (d<28L-0.30)																		
					40	45	50	55	60	65	70	75	80	90	100	110	120						
74.990 75.110	75	-0.030 -0.060	80.030 80.000	80	+0.100 +0.055	●	●	●	●	●	●	●	●										
80.020 80.155	80	-0.000 -0.035	85.035 85.000	85	+0.120 +0.070		●	●	●	●	●	●	●	●	●								
85.020 85.155	85	-0.000 -0.035	90.035 90.000	90	+0.120 +0.070		●	●	●	●	●	●	●	●	●	●							
90.020 90.155	90	-0.000 -0.035	95.035 95.000	95	+0.120 +0.070			●	●	●	●	●	●	●	●	●							
95.020 95.155	95	-0.000 -0.035	100.035 100.000	100	+0.120 +0.070			●	●	●	●	●	●	●	●	●							
100.020 100.155	100	-0.000 -0.035	105.035 105.000	105	+0.120 +0.070			●	●	●	●	●	●	●	●	●	●						
105.020 105.155	105	-0.000 -0.035	110.035 110.000	110	+0.120 +0.070				●	●	●	●	●	●	●	●	●	●					
110.020 110.155	110	-0.000 -0.035	115.035 115.000	115	+0.120 +0.070				●	●	●	●	●	●	●	●	●	●	●				
115.020 115.210	115	-0.000 -0.040	120.035 120.000	120	+0.170 +0.100				●	●	●	●	●	●	●	●	●	●	●	●			
120.070 120.210	120	-0.000 -0.040	125.035 125.000	125	+0.170 +0.100				●	●	●	●	●	●	●	●	●	●	●	●	●		
125.070 125.210	125	-0.000 -0.040	130.040 130.000	130	+0.170 +0.100					●	●	●	●	●	●	●	●	●	●	●	●	●	
130.070 130.210	130	-0.000 -0.040	135.040 135.000	135	+0.170 +0.100					●	●	●	●	●	●	●	●	●	●	●	●	●	●
135.070 135.210	135	-0.000 -0.040	140.040 140.000	140	+0.170 +0.100						●	●	●	●	●	●	●	●	●	●	●	●	●
140.070 140.210	140	-0.000 -0.040	145.040 145.000	145	+0.170 +0.100						●	●	●	●	●	●	●	●	●	●	●	●	●
145.070 145.210	145	-0.000 -0.040	150.040 150.000	150	+0.170 +0.100							●	●	●	●	●	●	●	●	●	●	●	●
150.070 150.210	150	-0.000 -0.040	155.040 155.000	155	+0.170 +0.100								●	●	●	●	●	●	●	●	●	●	●
155.070 155.210	155	-0.000 -0.040	160.040 160.000	160	+0.170 +0.100									●	●	●	●	●	●	●	●	●	●
160.070 160.210	160	-0.000 -0.040	165.040 165.000	165	+0.170 +0.100										●	●	●	●	●	●	●	●	●
165.070 165.210	165	-0.000 -0.040	170.040 170.000	170	+0.170 +0.100											●	●	●	●	●	●	●	●
170.070 170.210	170	-0.000 -0.040	175.040 175.000	175	+0.170 +0.100												●	●	●	●	●	●	●
175.070 175.210	175	-0.000 -0.040	180.040 180.000	180	+0.170 +0.100													●	●	●	●	●	●
180.070 180.210	180	-0.000 -0.046	185.046 185.000	185	+0.210 +0.130														●	●	●	●	●
185.070 185.210	185	-0.000 -0.046	190.046 190.000	190	+0.210 +0.130															●	●	●	●
190.070 190.210	190	-0.000 -0.046	195.046 195.000	195	+0.210 +0.130																●	●	●
195.070 195.210	195	-0.000 -0.046	200.046 200.000	200	+0.210 +0.130																	●	●
200.070 200.210	200	-0.000 -0.046	205.046 205.000	205	+0.210 +0.130																		●
205.070 205.210	205	-0.000 -0.046	210.046 210.000	210	+0.210 +0.130																		●
210.070 210.210	210	-0.000 -0.046	215.046 215.000	215	+0.210 +0.130																		●
215.070 215.210	215	-0.000 -0.046	220.046 220.000	220	+0.210 +0.130																		●
220.070 220.210	220	-0.000 -0.046	225.046 225.000	225	+0.210 +0.130																		●

Customized sizes also can be produced

Ordering : DU / S / ds x D x L = pcs

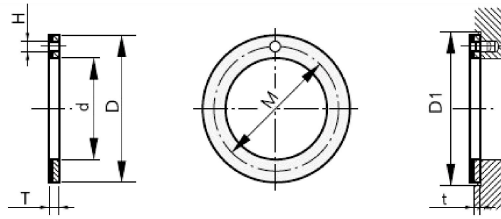


Unit: mm

ID d	Shaft ds		Housing Dh		OD D		F	Wall T	L -0.00 -0.40 (d<28L -0.30)																
									4	5	6	7	8	9	10	15	20	25	30	35	40				
5.990 6.055	6	-0.013 -0.028	8.015 8.000	8	+0.055 +0.025	12	1.475	•	•	•	•														
6.990 7.055	7	-0.013 -0.028	9.015 9.000	9	+0.055 +0.025	14			•	•	•	•													
7.990 8.055	8	-0.013 -0.028	10.015 10.000	10	+0.055 +0.025	15			•	•	•	•	•	•											
9.990 10.058	10	-0.016 -0.034	12.018 12.000	12	+0.065 +0.030	18			•	•	•	•	•	•	•										
11.990 12.058	12	-0.016 -0.034	14.018 14.000	14	+0.065 +0.030	20				•	•	•	•	•	•										
13.990 14.058	14	-0.016 -0.034	16.018 16.000	16	+0.065 +0.030	22				•	•	•	•	•	•										
14.990 15.058	15	-0.016 -0.034	17.018 17.000	17	+0.065 +0.030	23					•	•	•	•	•										
15.990 16.058	16	-0.016 -0.034	18.018 18.000	18	+0.065 +0.030	24						•	•	•	•										
16.990 17.061	17	-0.016 -0.034	19.021 19.000	19	+0.075 +0.035	25							•	•	•										
17.990 18.061	18	-0.016 -0.034	20.021 20.000	20	+0.075 +0.035	26								•	•	•									
19.990 20.071	20	-0.016 -0.034	23.021 23.000	23	+0.075 +0.035	30								•	•	•	•								
21.990 22.071	22	-0.020 -0.041	25.021 25.000	25	+0.075 +0.035	32								•	•	•	•								
23.990 24.071	24	-0.020 -0.041	27.021 27.000	27	+0.075 +0.035	34									•	•	•								
24.990 25.071	25	-0.020 -0.041	28.021 28.000	28	+0.075 +0.035	35								•	•	•									
27.990 28.085	28	-0.020 -0.041	32.025 32.000	32	+0.085 +0.045	38								•	•	•									
29.990 30.085	30	-0.020 -0.041	34.025 34.000	34	+0.085 +0.045	42								•	•	•									
31.990 32.085	32	-0.025 -0.050	36.025 36.000	36	+0.085 +0.045	45								•	•	•	•								
34.990 35.085	35	-0.025 -0.050	39.025 39.000	39	+0.085 +0.045	50								•	•	•	•								
39.990 40.085	40	-0.025 -0.050	44.025 44.000	44	+0.085 +0.045	55										•	•	•	•						
44.990 45.105	45	-0.025 -0.050	50.025 50.000	50	+0.085 +0.045	60											•	•	•	•					

Customized sizes also can be produced

Ordering : DU / F / ds x D x F x L = pcs



Unit: mm

Shaft d _s	ID d ^{+0.25} _{+0.00}		Center M	OD D ^{-0.25} _{-0.00/-0.25}		Thickness T ^{-0.05}	Size for Installation		
	Hole(H)	t		D ₁					
8	10	+0.25 +0.00	15	20	-0.00 -0.25	1.5	1.5	1	20
10	12	+0.25 +0.00	18	24	-0.00 -0.25	1.5	1.5	1	24
12	14	+0.25 +0.00	20	26	-0.00 -0.25	1.5	2	1	26
14	16	+0.25 +0.00	23	30	-0.00 -0.25	1.5	2	1	30
16	18	+0.25 +0.00	25	32	-0.00 -0.25	1.5	2	1	32
18	20	+0.25 +0.00	28	36	-0.00 -0.25	1.5	3	1	36
20	22	+0.25 +0.00	30	38	-0.00 -0.25	1.5	3	1	38
22	24	+0.25 +0.00	33	42	-0.00 -0.25	1.5	3	1	42
24	26	+0.25 +0.00	35	44	-0.00 -0.25	1.5	3	1	44
25	28	+0.25 +0.00	38	48	-0.00 -0.25	1.5	4	1	48
30	32	+0.25 +0.00	43	54	-0.00 -0.25	1.5	4	1	54
35	38	+0.25 +0.00	50	62	-0.00 -0.25	1.5	4	1	62
40	42	+0.25 +0.00	54	66	-0.00 -0.25	1.5	4	1	66
45	48	+0.25 +0.00	61	74	-0.00 -0.25	1.5	4	1.5	74
50	52	+0.25 +0.00	65	78	-0.00 -0.25	2.0	4	1.5	78
60	62	+0.25 +0.00	76	90	-0.00 -0.25	2.0	4	1.5	90

Customized sizes also can be produced

Ordering : / / x x = pcs