



LS-PTFE-Triple layer bearing with PTFE slide layer

Material:

LS-PTFE is a triple layer bearing with copper plated steel backing, thin bronze layer in the middle and the sliding layer of PTFE. These bearings are suitable for the bearing conditions with oscillating movements where the additional lubrication is not possible. The friction of the bearing material is very low. These bearings are suitable to many normal bearing conditions where the additional lubrication is difficult to arrange.

Technical data:

Load:

Static 250 N/mm²

Dynamic 140 N/mm²

Oscillating 60 N/mm²

Maximum speed:

Lubricated >2,5 m/s

No lubrication 2,5 m/s

Friction:

0,03 - 0,20 μ

Temperature range:

-200/ +280 °C

Tolerances:

Housing H6/H7

Recommended shaft tolerance f7 or h8

Lubrication:

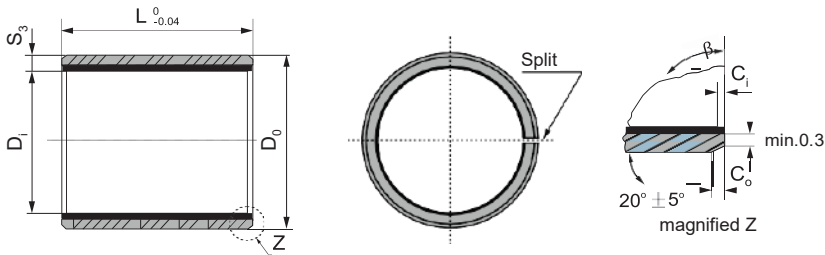
LS-PTFE bearings are mainly to be used without additional lubrication. Lubricants with additives of molybdenum disulphide or graphite should be avoided.

Delivery possibilities:

-Cylindrical bearings, flanged bearings, thrust washers, plates, rails, drawing details, sliding layer outside

-Alternative materials: Steel backing, bronze backing, stainless steel backing

LS-PTFE-Triple layer bearing with PTFE slide layer



ID and OD chamfers

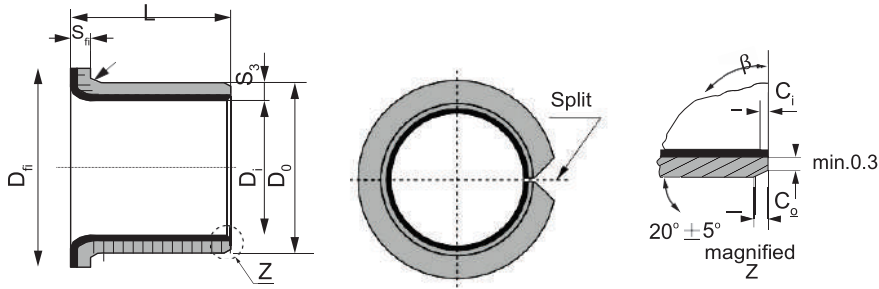
S ₃	C _o	C _i	β
0.75	0.5 ± 0.3	0.25 ± 0.2	30° ± 5°
1.00	0.6 ± 0.3	0.30 ± 0.2	30° ± 5°
1.50	0.7 ± 0.3	0.50 ± 0.3	30° ± 5°

S ₃	C _o	C _i	β
2.00	1.2 ± 0.4	0.50 ± 0.3	30° ± 5°
2.50	1.8 ± 0.6	0.60 ± 0.3	45° ± 5°

Unit: mm

(f7) Shaft D _s	(H7) Housing D _H	(OD) Tolerance D _o	(ID) After fixed D _{i,a}	Clearance D _D	Wall thick- ness S ₃	L																
						L 0/- 0.30 <28mm					L 0/- 0.40											
						6	8	10	12	15	20	25	30	40	50							
6	-0.010 -0.022	8	+0.015	8	+0.055 +0.025	6.055 5.990	0.077 0.000	1.005 0.980	0606	0608	0610											
8	-0.013 -0.028	10	+0.015	10	+0.055 +0.025	8.055 7.990	0.083 0.003		0806	0808	0810	0812	0815									
10	-0.013 -0.028	12	+0.018	12	+0.065 +0.030	10.058 9.990	0.086 0.003		1006	1008	1010	1012	1015	1020								
12	-0.016 -0.034	14	+0.018	14	+0.065 +0.030	12.058 11.990	0.092 0.006	1.005 0.980	1206	1208	1210	1212	1215	1220	1225							
13	-0.016 -0.034	15	+0.018	15	+0.065 +0.030	13.058 12.990						1310	1312	1315	1320	1325						
14	-0.016 -0.034	16	+0.018	16	+0.065 +0.030	14.058 13.990						1410	1412	1415	1420	1425						
15	-0.016 -0.034	17	+0.018	17	+0.065 +0.030	15.058 14.990						1510	1512	1515	1520	1525						
16	-0.016 -0.034	18	+0.018	18	+0.065 +0.030	16.058 15.990						1610	1612	1615	1620	1625						
17	-0.016 -0.034	19	+0.021	19	+0.075 +0.035	17.061 16.990			0.095 0.006	1.505 1.475			1710	1712	1715	1720	1725					
18	-0.016 -0.034	20	+0.021	20	+0.075 +0.035	18.061 17.990							1810	1812	1815	1820	1825					
20	-0.020 -0.041	23	+0.021	23	+0.075 +0.035	20.071 19.990						2010	2012	2015	2020	2025	2030					
22	-0.020 -0.041	25	+0.021	25	+0.075 +0.035	22.071 21.990	0.112 0.010	1.505 1.475				2210	2212	2215	2220	2225	2230					
24	-0.020 -0.041	27	+0.021	27	+0.075 +0.035	24.071 23.990						2410	2412	2415	2420	2425	2430					
25	-0.020 -0.041	28	+0.021	28	+0.075 +0.035	25.071 24.990						2510	2512	2515	2520	2525	2530	2540	2550			
28	-0.020 -0.041	32	+0.025	32	+0.085 +0.045	28.085 27.990			0.126 0.010	2.005 1.970				2810	2812	2815	2820	2825	2830	2840	2850	
30	-0.020 -0.041	34	+0.025	34	+0.085 +0.045	30.085 29.990							3010	3012	3015	3020	3025	3030	3040	3050		
32	-0.025 -0.050	36	+0.025	36	+0.085 +0.045	32.085 31.990							3210	3212	3215	3220	3225	3230	3240	3250		
35	-0.025 -0.050	39	+0.025	39	+0.085 +0.045	35.085 34.990	0.135 0.015	2.005 1.970						3510	3512	3515	3520	3525	3530	3540	3550	
38	-0.025 -0.050	42	+0.025	42	+0.085 +0.045	38.085 37.990									3810	3812	3815	3820	3825	3830	3840	3850
40	-0.025 -0.050	44	+0.025	44	+0.085 +0.045	40.085 39.990									4010	4012	4015	4020	4025	4030	4040	4050

LS-PTFE-Size

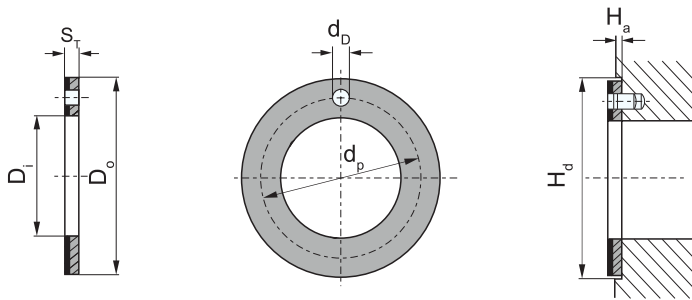


S ₃	1.0	1.5	2.0	2.5
r	1 ^{-0.5}	1 ± 0.5	1.5 ± 0.5	2 ± 0.5

Unit: mm

(f7) Shaft D _S	(H7) Housing D _H	(OD) Tolerance D _O	(ID) After fixed D _{i,a}	Clearance C _O	Designation	Wall thickness S ₃	Dimension				
							D _i	D _O	D _{fi} ± 0.5	L ± 0.25	S _{fi} -0.2
6 -0.013 -0.028	8 +0.015	8 +0.055 +0.025	6.055 5.990	0.077 0.000	LB-010WF06040	1.005 0.980	6	8	12	4	1
					LB-010WF06070						
8 -0.013 -0.028	10 +0.015	10 +0.055 +0.025	8.055 7.990	0.083 0.003	LB-010WF08055	1.005 0.980	8	10	15	5.5	1
					LB-010WF08075					7.5	
10 -0.016 -0.034	12 +0.018	12 +0.055 +0.025	10.058 9.990	0.086 0.003	LB-010WF10070	1.005 0.980	10	12	18	7	1
					LB-010WF10090					9	
					LB-010WF10120					12	
12 -0.016 -0.034	14 +0.018	14 +0.065 +0.030	12.058 11.990	0.092 0.006	LB-010WF12070	1.005 0.980	12	14	20	7	1
					LB-010WF12090					9	
					LB-010WF12120					12	
					LB-010WF14120					12	
14 -0.016 -0.034	16 +0.018	16 +0.065 +0.030	14.058 13.990	0.092 0.006	LB-010WF14170	1.005 0.980	14	16	22	1	
					LB-010WF15090				17		
15 -0.016 -0.034	17 +0.018	17 +0.065 +0.030	15.058 14.990	0.092 0.006	LB-010WF15120	1.005 0.980	15	17	23	1	
					LB-010WF15170				17		
16 -0.016 -0.034	18 +0.018	18 +0.065 +0.030	16.058 15.990	0.092 0.006	LB-010WF16120	1.005 0.980	16	18	24	1	
					LB-010WF16170				17		
18 -0.016 -0.034	20 +0.021	20 +0.075 +0.035	18.061 17.990	0.095 0.006	LB-010WF18120	1.005 0.980	18	20	26	1	
					LB-010WF18170				17		
					LB-010WF18200				20		
20 -0.020 -0.041	23 +0.021	23 +0.075 +0.035	20.071 19.990	0.112 0.010	LB-010WF20115	1.505 1.475	20	23	30	1.5	
					LB-010WF20165				11.5		
					LB-010WF20215				16.5		
22 -0.020 -0.041	25 +0.021	25 +0.075 +0.035	22.071 21.990	0.112 0.010	LB-010WF22150	1.505 1.475	22	25	32	1.5	
					LB-010WF22200				20		
					LB-010WF25115				11.5		
25 -0.020 -0.041	28 +0.021	28 +0.075 +0.035	25.071 24.990	0.126 0.010	LB-010WF25165	1.505 1.475	25	28	35	1.5	
					LB-010WF25215				16.5		
					LB-010WF30160				21.5		
30 -0.025 -0.050	34 +0.025	34 +0.075 +0.035	30.085 29.990	0.135 0.015	LB-010WF30260	2.005 1.970	30	34	42	2	
					LB-010WF35160				16		
35 -0.025 -0.050	39 +0.025	39 +0.085 +0.045	35.085 34.990	0.135 0.015	LB-010WF35260	2.005 1.970	35	39	47	2	
					LB-010WF40260				26		
40 -0.025 -0.050	44 +0.025	44 +0.085 +0.045	40.085 39.990	0.135 0.015	LB-010WF40400	2.005 1.970	40	44	53	2	
					LB-010WF40400				40		

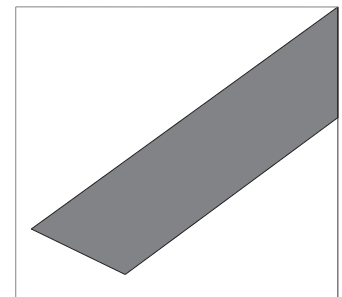
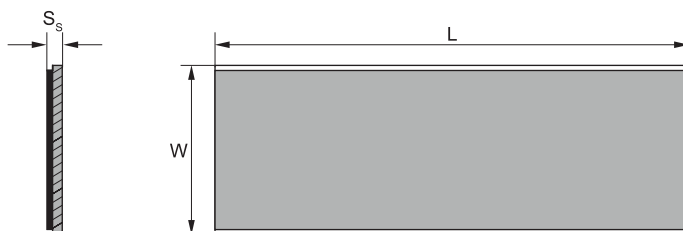
LS-PTFEWF-Size



Unit: mm

Shaft D_s	Standard No.	Washer size				Assemble size		$H_d + 0.12$
		$D_i + 0.25$	$D_o - 0.25$	$S_T - 0.05$	$d_p \pm 0.125$	$d_D^{+0.4/+0.1}$	$H_a \pm 0.2$	
8	W10	10	20	1.5	15	1.5	1	20
10	W12	12	24		18			24
12	W14	14	26		20	26		
14	W16	16	30		23	30		
16	W18	18	32		25	32		
18	W20	20	36		28	36		
20	W22	22	38		30	38		
22	W24	24	42		33	42		
24	W26	26	44		35	44		
26	W28	28	48		38	48		
30	W32	32	54		43	54		
36	W38	38	62		50	62		
40	W42	42	66		54	66		
46	W48	48	74		61	74		
50	W52	52	78	65	78			
60	W62	62	90	76	90			

LS-PTFESP Strip



Unit: mm

Standard No.	$L \pm 1$	$W \pm 1$	Wall thickness $S_s - 0.05$
SP	500	150	1.0
SP	500	150	1.5
SP	500	150	2.0
SP	500	150	2.5