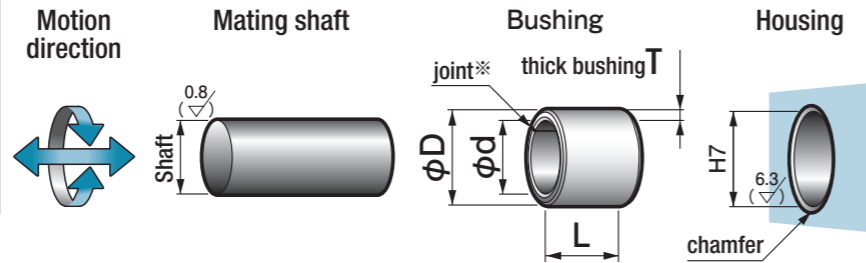


LFB Oiles Drymet LF Bushings (I.D. $\phi 3 \sim \phi 28$)

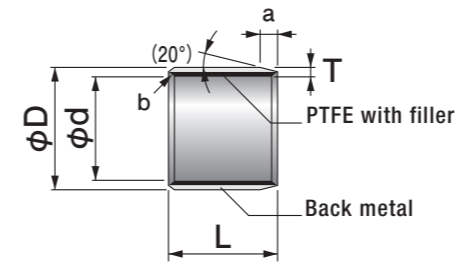


Specify Part No. by required I.D. and length.
(e.g.) I.D. is 15mm and length is 8mm.

LFB - 1508
Part No.



※The joint causes no influences upon rotation of the shaft. Be careful when press-fitting so that the joint is not at the position to which the maximum load is applied.



a: O.D. chamfering for the bushing I.D. of $\phi 10$ or more

T	1.0	1.5	2.0
a	0.5	0.8	1.0

(mm)

b: I.D. chamfering for the bushing I.D. of $\phi 10$ or more

T	1.0	1.5	2.0
b	C0.3	C0.5	C0.5

(mm)

※Chamfering of inner or outer diameters less than $\phi 10$ mm is done only to remove burrs.

Shaft Size	Shaft Tolerance	Housing Size	Housing H7 Tolerance	I.D.		O.D.		Wall thickness		Length L Tolerance $^{-0.3}$					
				ϕd	ϕD	T	Tolerance	3	4	5	6	7	8		
3	$^{-0.025}_{-0.034}$	5	$^{+0.012}_0$	3	5	$^{+0.047}_{+0.017}$	1.0	$^0_{-0.025}$	0303	0304	0305	0306			
4	$^{-0.025}_{-0.037}$	6	$^{+0.012}_0$	4	6	$^{+0.047}_{+0.017}$	1.0	$^0_{-0.025}$	0403	0404	0405	0406		0408	
5	$^{-0.025}_{-0.037}$	7	$^{+0.015}_0$	5	7	$^{+0.055}_{+0.025}$	1.0	$^0_{-0.025}$	0503	0504	0505	0506		0508	
6	$^{-0.025}_{-0.037}$	8	$^{+0.015}_0$	6	8	$^{+0.055}_{+0.025}$	1.0	$^0_{-0.025}$	0603	0604	0605	0606	0607	0608	
7	$^{-0.025}_{-0.040}$	9	$^{+0.015}_0$	7	9	$^{+0.055}_{+0.025}$	1.0	$^0_{-0.025}$			0705	0706	0707	0708	
8	$^{-0.025}_{-0.040}$	10	$^{+0.015}_0$	8	10	$^{+0.055}_{+0.025}$	1.0	$^0_{-0.025}$			0805	0806	0807	0808	
9	$^{-0.025}_{-0.040}$	11	$^{+0.018}_0$	9	11	$^{+0.060}_{+0.030}$	1.0	$^0_{-0.025}$				0906			
10	$^{-0.025}_{-0.040}$	12	$^{+0.018}_0$	10	12	$^{+0.060}_{+0.030}$	1.0	$^0_{-0.025}$				1006	1007	1008	
12	$^{-0.025}_{-0.043}$	14	$^{+0.018}_0$	12	14	$^{+0.060}_{+0.030}$	1.0	$^0_{-0.025}$				1206		1208	
13	$^{-0.025}_{-0.043}$	15	$^{+0.018}_0$	13	15	$^{+0.060}_{+0.030}$	1.0	$^0_{-0.025}$						1308	
14	$^{-0.025}_{-0.043}$	16	$^{+0.018}_0$	14	16	$^{+0.065}_{+0.035}$	1.0	$^0_{-0.025}$						1408	
15	$^{-0.025}_{-0.043}$	17	$^{+0.018}_0$	15	17	$^{+0.065}_{+0.035}$	1.0	$^0_{-0.025}$						1508	
16	$^{-0.025}_{-0.043}$	18	$^{+0.018}_0$	16	18	$^{+0.070}_{+0.035}$	1.0	$^0_{-0.025}$							
17	$^{-0.025}_{-0.043}$	19	$^{+0.021}_0$	17	19	$^{+0.070}_{+0.035}$	1.0	$^0_{-0.025}$							
18	$^{-0.025}_{-0.043}$	20	$^{+0.021}_0$	18	20	$^{+0.075}_{+0.040}$	1.0	$^0_{-0.025}$							
19	$^{-0.025}_{-0.046}$	22	$^{+0.021}_0$	19	22	$^{+0.075}_{+0.040}$	1.5	$^0_{-0.030}$							
20	$^{-0.025}_{-0.046}$	23	$^{+0.021}_0$	20	23	$^{+0.080}_{+0.045}$	1.5	$^0_{-0.030}$							
22	$^{-0.025}_{-0.046}$	25	$^{+0.021}_0$	22	25	$^{+0.080}_{+0.045}$	1.5	$^0_{-0.030}$							
24	$^{-0.025}_{-0.046}$	27	$^{+0.021}_0$	24	27	$^{+0.080}_{+0.045}$	1.5	$^0_{-0.030}$							
25	$^{-0.025}_{-0.046}$	28	$^{+0.021}_0$	25	28	$^{+0.085}_{+0.050}$	1.5	$^0_{-0.030}$							
26	$^{-0.025}_{-0.046}$	30	$^{+0.021}_0$	26	30	$^{+0.085}_{+0.050}$	2.0	$^0_{-0.030}$							
28	$^{-0.025}_{-0.046}$	32	$^{+0.025}_0$	28	32	$^{+0.090}_{+0.050}$	2.0	$^0_{-0.030}$							

※Outer diameter is measured by exclusive gauge.
 ※The I.D. tolerance after press fitting is for reference only.
 ※I.D. $\phi 30 \sim \phi 160$ are shown on pages 157 to 158.

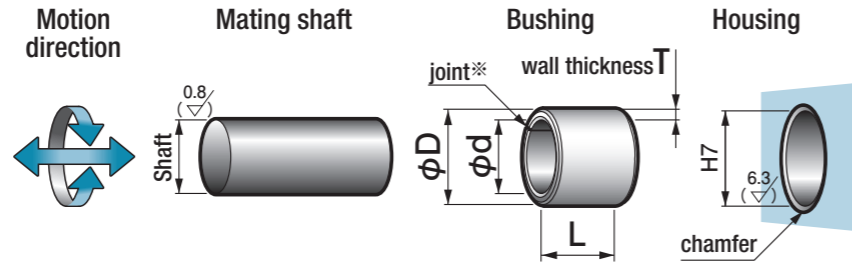
Length L Tolerance $^{-0.3}$									I.D. tolerance after press fitting (reference)	I.D. ϕd
10	12	14	15	16	20	25	30	35		
									$^{+0.062}_0$	3
									$^{+0.062}_0$	4
									$^{+0.065}_0$	5
0610	0612								$^{+0.065}_0$	6
0710	0712								$^{+0.065}_0$	7
0810	0812		0815						$^{+0.065}_0$	8
0910									$^{+0.068}_0$	9
1010	1012		1015		1020				$^{+0.068}_0$	10
1210	1212		1215		1220				$^{+0.068}_0$	12
1310	1312		1315		1320				$^{+0.068}_0$	13
1410	1412	1414	1415	1416	1420				$^{+0.068}_0$	14
1510	1512		1515		1520	1525			$^{+0.068}_0$	15
1610	1612		1615		1620	1625			$^{+0.068}_0$	16
1710			1715						$^{+0.071}_0$	17
1810	1812		1815		1820	1825	1830		$^{+0.071}_0$	18
1910			1915		1920				$^{+0.081}_0$	19
2010	2012		2015		2020	2025	2030		$^{+0.081}_0$	20
2210	2212		2215		2220	2225	2230		$^{+0.081}_0$	22
			2415		2420	2425	2430		$^{+0.081}_0$	24
2510	2512		2515		2520	2525	2530	2535	$^{+0.081}_0$	25
			2615		2620	2625	2630		$^{+0.081}_0$	26
	2812		2815		2820	2825	2830		$^{+0.085}_0$	28

LFB Oiles Drymet LF Bushings (I.D. $\phi 30 \sim \phi 160$)

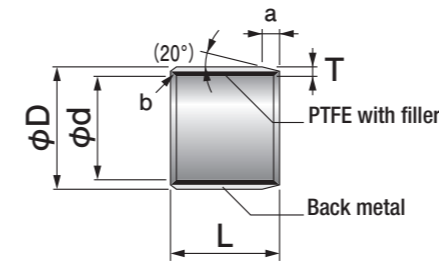


Specify Part No. by required I.D. and length.
(e.g.) I.D. is 70mm and length is 35mm.

LFB - 7035
Part No.



※The joint causes no influences upon rotation of the shaft. Be careful when press-fitting so that the joint is not at the position to which the maximum load is applied.



a: O.D. chamfering

T	2.0	2.5
a	1.0	1.0

(mm)

b: I.D. chamfering

T	2.0	2.5
b	C0.5	C0.5

(mm)

Shaft Size	Shaft Tolerance	Housing H7		I.D.		O.D.		Wall thickness T		Length L Tolerance $_{-0.3}^0$					
		H7	H7 Tolerance	ϕd	ϕD	T	Tolerance	12	15	20	25	30	35		
30	$_{-0.046}^{-0.025}$	34	$_{0}^{+0.025}$	30	34	$_{+0.050}^{+0.090}$	2.0	$_{-0.030}^{0}$	3012	3015	3020	3025	3030	3035	
31	$_{-0.050}^{-0.025}$	35	$_{0}^{+0.025}$	31	35	$_{+0.050}^{+0.090}$	2.0	$_{-0.030}^{0}$		3115		3125	3130		
32	$_{-0.050}^{-0.025}$	36	$_{0}^{+0.025}$	32	36	$_{+0.050}^{+0.090}$	2.0	$_{-0.030}^{0}$		3215	3220	3225	3230		
35	$_{-0.050}^{-0.025}$	39	$_{0}^{+0.025}$	35	39	$_{+0.055}^{+0.095}$	2.0	$_{-0.030}^{0}$	3512	3515	3520	3525	3530	3535	
38	$_{-0.050}^{-0.025}$	42	$_{0}^{+0.025}$	38	42	$_{+0.055}^{+0.095}$	2.0	$_{-0.030}^{0}$			3820	3825	3830	3835	
40	$_{-0.050}^{-0.025}$	44	$_{0}^{+0.025}$	40	44	$_{+0.055}^{+0.095}$	2.0	$_{-0.030}^{0}$	4012	4015	4020	4025	4030	4035	
45	$_{-0.050}^{-0.025}$	50	$_{0}^{+0.025}$	45	50	$_{+0.060}^{+0.100}$	2.5	$_{-0.040}^{0}$			4520	4525	4530	4535	
50	$_{-0.050}^{-0.025}$	55	$_{0}^{+0.030}$	50	55	$_{+0.060}^{+0.105}$	2.5	$_{-0.040}^{0}$			5020	5025	5030	5035	
55	$_{-0.055}^{-0.025}$	60	$_{0}^{+0.030}$	55	60	$_{+0.065}^{+0.110}$	2.5	$_{-0.040}^{0}$				5525	5530	5535	
60	$_{-0.055}^{-0.025}$	65	$_{0}^{+0.030}$	60	65	$_{+0.070}^{+0.120}$	2.5	$_{-0.040}^{0}$					6030	6035	
65	$_{+0.005}^{+0.035}$	70	$_{0}^{+0.030}$	65	70	$_{+0.075}^{+0.125}$	2.5	$_{-0.080}^{-0.030}$					6530		
70	$_{+0.005}^{+0.035}$	75	$_{0}^{+0.030}$	70	75	$_{+0.075}^{+0.125}$	2.5	$_{-0.080}^{-0.030}$					7030	7035	
75	$_{+0.005}^{+0.035}$	80	$_{0}^{+0.030}$	75	80	$_{+0.075}^{+0.130}$	2.5	$_{-0.080}^{-0.030}$					7530	7535	
80	$_{+0.005}^{+0.035}$	85	$_{0}^{+0.035}$	80	85	$_{+0.075}^{+0.130}$	2.5	$_{-0.080}^{-0.030}$							
85	$_{0}^{+0.035}$	90	$_{0}^{+0.035}$	85	90	$_{+0.075}^{+0.130}$	2.5	$_{-0.080}^{-0.030}$							
90	$_{0}^{+0.035}$	95	$_{0}^{+0.035}$	90	95	$_{+0.075}^{+0.130}$	2.5	$_{-0.080}^{-0.030}$							
100	$_{0}^{+0.035}$	105	$_{0}^{+0.035}$	100	105	$_{+0.080}^{+0.140}$	2.5	$_{-0.080}^{-0.030}$							
110	$_{0}^{+0.035}$	115	$_{0}^{+0.035}$	110	115	$_{+0.080}^{+0.140}$	2.5	$_{-0.080}^{-0.030}$							
120	$_{0}^{+0.035}$	125	$_{0}^{+0.040}$	120	125	$_{+0.090}^{+0.145}$	2.5	$_{-0.080}^{-0.030}$							
130	$_{-0.005}^{+0.035}$	135	$_{0}^{+0.040}$	130	135	$_{+0.090}^{+0.145}$	2.5	$_{-0.080}^{-0.030}$							
140	$_{-0.005}^{+0.035}$	145	$_{0}^{+0.040}$	140	145	$_{+0.100}^{+0.165}$	2.5	$_{-0.080}^{-0.030}$							
150	$_{-0.005}^{+0.035}$	155	$_{0}^{+0.040}$	150	155	$_{+0.120}^{+0.185}$	2.5	$_{-0.080}^{-0.030}$							
160	$_{-0.005}^{+0.035}$	165	$_{0}^{+0.040}$	160	165	$_{+0.120}^{+0.185}$	2.5	$_{-0.080}^{-0.030}$							

※Outer diameter is measured by exclusive gauge.
 ※The I.D. tolerance after press fitting is for reference only.
 ※I.D. $\phi 3 \sim \phi 28$ are shown on pages 155 to 156.

Length L Tolerance $_{-0.3}^0$								I.D. tolerance after press fitting (reference)	I.D. ϕd
40	50	60	70	80	90	95	100		
3040	3050							$_{0}^{+0.085}$	30
3140								$_{0}^{+0.085}$	31
3240								$_{0}^{+0.085}$	32
3540	3550							$_{0}^{+0.085}$	35
3840								$_{0}^{+0.085}$	38
4040	4050							$_{0}^{+0.085}$	40
4540	4550							$_{0}^{+0.105}$	45
5040	5050	5060						$_{0}^{+0.110}$	50
5540	5550	5560						$_{0}^{+0.110}$	55
6040	6050	6060						$_{0}^{+0.110}$	60
6540	6550	6560			6080			$_{+0.060}^{+0.190}$	65
7040	7050	7060	7070	7080				$_{+0.060}^{+0.190}$	70
7540	7550	7560		7580				$_{+0.060}^{+0.190}$	75
8040	8050	8060		8080				$_{+0.060}^{+0.195}$	80
8540	8550	8560		8580				$_{+0.060}^{+0.195}$	85
9040	9050	9060			9090			$_{+0.060}^{+0.195}$	90
	10050		10070	10080		10095	100100	$_{+0.060}^{+0.195}$	100
	11050		11070			11095	110100	$_{+0.060}^{+0.195}$	110
	12050		12070			12095	120100	$_{+0.060}^{+0.200}$	120
	13050			13080			130100	$_{+0.060}^{+0.200}$	130
	14050			14080			140100	$_{+0.060}^{+0.200}$	140
	15050			15080			150100	$_{+0.060}^{+0.200}$	150
	16050			16080			160100	$_{+0.060}^{+0.200}$	160