

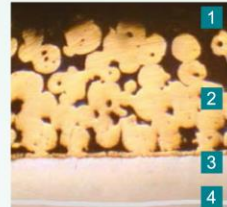
Self-lubricating PTFE Composite Bearing



Product Brief

The solid lubricants produce a lubricant film between the sliding surfaces, which provides low-noise operation with constantly low friction values throughout the entire service life.

Structure



1. PTFE and additives thickness
0.01 ~ 0.03mm
2. Sintered bronze powder thickness
0.20 ~ 0.35mm
3. Lower-carbon steel
4. Copper/Tin plating thickness
0.002mm

Tech. Data

Max. Load	Static	250N/mm ²
	Low speed	140N/mm ²
	Rotating oscillating	60N/mm ²
PV Limit	Short term operation	3.6N/mm ² *m/s
	Continuous operation	1.8N/mm ² *m/s
Temp. Range		- 195°C ~ + 280°C

Friction coefficient		0.03~0.20 μ
Max Speed	Dry running	2m/s
	Hydrodynamic operation	5m/s
Thermal conductivity		42W(m*k) ⁻¹
Coefficient of thermal expansion		11*10 ⁻⁶ *k ⁻¹

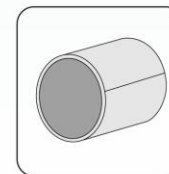
Characteristics and Advantages

1. Long maintenance-free operating life due to low friction.
2. Operated without lubricant and very suited for high load & medium speed applications.
3. Lower vibration, lower noise and non-pollution in operation.
4. Electroplating is to protect the bearings from corrosion.

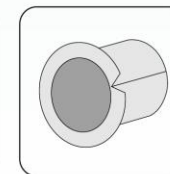
Typical Applications

- Rotary motion, oscillating motion and short stroke linear motion: Automotive, Wiper arms, Door hinges, Compressor, Agricultural equipments, Combines, Tractors, Lawn mowers, Construction equipments, Calipers and pistons, Shock absorbers, Crop sprayers
- Prevention of oil pollution is required: Textile machines, Food industry equipments, Tobacco machinery, printing machines, Electrical appliances, Air conditioners, Vending machines, Microwave ranges
- Where lubricating is difficult or impossible: Copy machines, Facsimiles, printers, type writers, Mail sorters, Tooling machines, industrial robots, dryer, oil pumps, table lifters, elevators

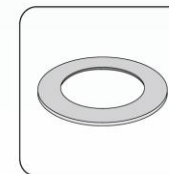
Availability



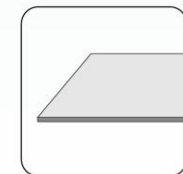
Cylindrical



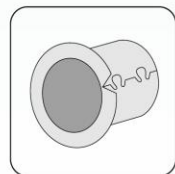
Flanged



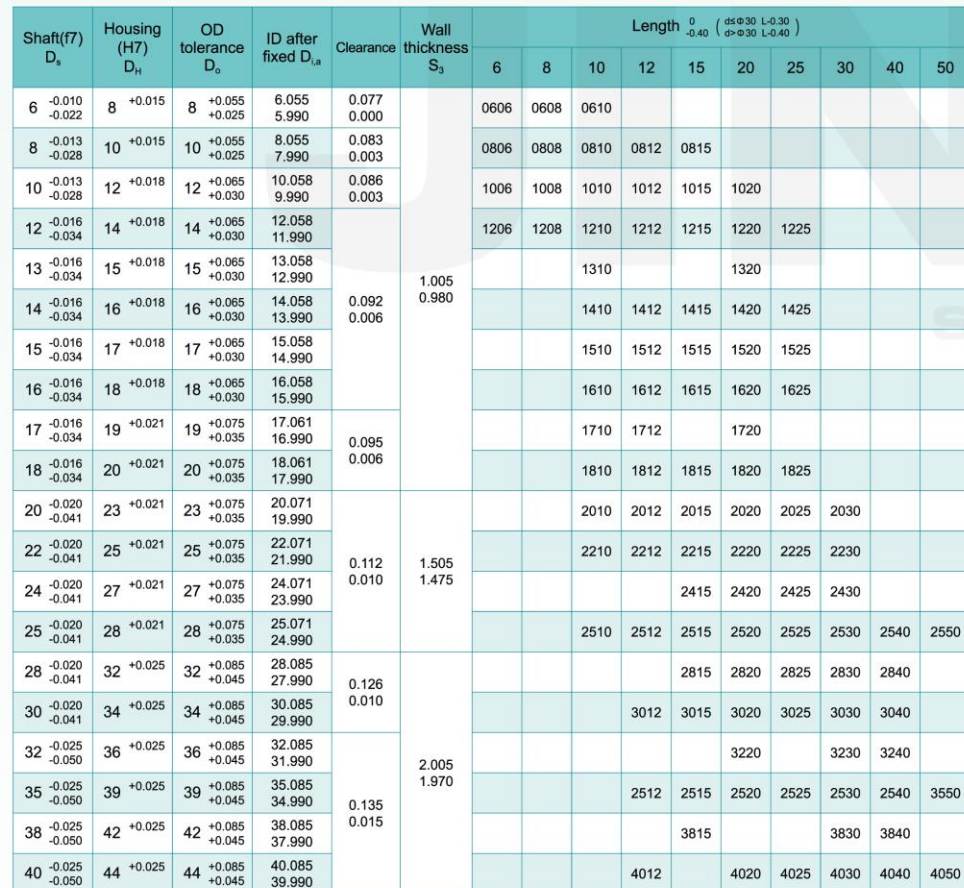
Thrust washer



Strip

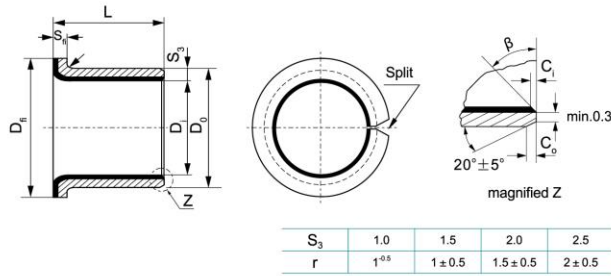


Non-standard parts as design



Shaft (f7) D _s	Housing (H7) D _H	OD tolerance D _o	ID after fixed D _{1a}	Clearance	Wall thickness S ₃	Length ⁰ _{-0.40}										
						20	25	30	40	50	60	70	80	100	115	
45 -0.050 -0.025	50 +0.025	50 +0.085 +0.045	45.105 44.990	0.155 0.015	2.505 2.460	4520	4525	4530	4540	4550						
50 -0.050 -0.025	55 +0.030	55 +0.100 +0.055	50.110 49.990	0.160 0.015		5020		5030	5040	5050	5060					
55 -0.060 -0.030	60 +0.030	60 +0.100 +0.055	55.110 54.990	0.170 0.020				5530	5540	5550	5560					
60 -0.060 -0.030	65 +0.030	65 +0.100 +0.055	60.110 59.990					6030	6040	6050	6060	6070				
65 -0.060 -0.030	70 +0.030	70 +0.100 +0.055	65.110 64.990					6530	6540	6550	6560	6570				
70 -0.060 -0.030	75 +0.030	75 +0.100 +0.055	70.110 69.990						7040	7050	7060	7070	7080			
75 -0.060 -0.030	80 +0.030	80 +0.100 +0.055	75.110 74.990						7530	7540	7550	7560	7570	7580		
80 -0.045	85 +0.035	85 +0.120 +0.070	80.155 80.020			0.201 0.020				8040	8050	8060	8070	8080	80100	
85 -0.054	90 +0.035	90 +0.120 +0.070	85.155 85.020	0.209 0.020	2.490 2.440				8540		8560		8580	85100		
90 -0.054	95 +0.035	95 +0.120 +0.070	90.155 90.020						9040	9050	9060		9080	90100		
95 -0.054	100 +0.035	100 +0.120 +0.070	95.155 95.020							9550	9560		9580	95100		
100 -0.054	105 +0.035	105 +0.120 +0.070	100.155 100.020							10050	10060		10080		100115	
105 -0.054	110 +0.035	110 +0.120 +0.070	105.155 105.020								10560		10580		105115	
110 -0.054	115 +0.035	115 +0.120 +0.070	110.115 110.020								11060		11080		110115	
120 -0.054	125 +0.040	125 +0.170 +0.100	120.210 120.070			0.264 0.070	2.465 2.415					12060		12080	120100	
125 -0.063	130 +0.040	130 +0.170 +0.100	125.210 125.070									12560			125100	125115
130 -0.063	135 +0.040	135 +0.170 +0.100	130.210 130.070	0.273 0.070						13060		13080	130100			
140 -0.063	145 +0.040	145 +0.170 +0.100	140.210 140.070							14060		14080	140100			
150 -0.063	155 +0.040	155 +0.170 +0.100	150.210 150.070							15060		15080	150100			
160 -0.063	165 +0.040	165 +0.170 +0.100	160.210 160.070							16060		16080	160100	160115		
180 -0.063	185 +0.046	185 +0.210 +0.130	180.216 180.070		0.279 0.070							18080	180100			
190 -0.072	195 +0.046	195 +0.210 +0.130	190.216 190.070		0.288 0.070	2.465 2.415							19080	190100		
200 -0.072	205 +0.046	205 +0.210 +0.130	200.016 200.070									20080	200100			
220 -0.072	225 +0.046	225 +0.210 +0.130	220.216 220.070							20060		22080	220100			
250 -0.072	255 +0.052	255 +0.260 +0.170	250.222 250.070	0.294 0.070								25080	250100			
260 -0.081	265 +0.052	265 +0.260 +0.170	260.222 260.070	0.303 0.0												

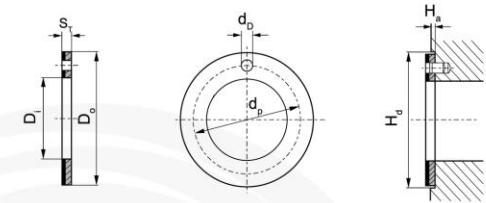
Metric Standard Flanged Bearings Size



Unit:mm

Shaft D _s	Housing D _H	OD Tolerance D _O	ID After fixed D _{Ia}	Clearance	Designation	Wall thickness S ₃	Dimension				
							D _i	D _O	D _i ± 0.5	L ± 0.25	S _r ±0.2
6 -0.013 -0.028	8 +0.015	8 +0.055 +0.025	6.055 5.990	0.077 0.000	06040	1.005 0.980	6	8	12	4	1
					06070					7	
8 -0.013 -0.028	10 +0.015	10 +0.055 +0.025	8.055 7.990	0.083 0.003	08055		8	10	15	5.5	
					08075					7.5	
10 -0.016 -0.034	12 +0.018	12 +0.055 +0.025	10.058 9.990	0.086 0.003	10070		10	12	18	7	
					10090					9	
12 -0.016 -0.034	14 +0.018	14 +0.065 +0.030	12.058 11.990	0.092 0.006	10120		12	14	20	12	
					12070					7	
14 -0.016 -0.034	16 +0.018	16 +0.065 +0.030	14.058 13.990	0.092 0.006	12090		12	14	22	9	
					12120					12	
15 -0.016 -0.034	17 +0.018	17 +0.065 +0.030	15.058 14.990	0.095 0.006	14120		14	16	24	12	
					14170					17	
16 -0.016 -0.034	18 +0.018	18 +0.065 +0.030	16.058 15.990	0.095 0.006	15090		15	17	26	9	
					15120					12	
18 -0.016 -0.034	20 +0.021	20 +0.075 +0.035	18.061 17.990	0.112 0.010	15170		16	18	28	17	
					16120					12	
20 -0.020 -0.041	23 +0.021	23 +0.075 +0.035	20.071 19.990	0.126 0.010	16170	18	20	30	17		
					18120				20		
22 -0.020 -0.041	25 +0.021	25 +0.075 +0.035	22.071 21.990	0.135 0.015	18170	20	23	32	11.5		
					18200				16.5		
25 -0.020 -0.041	28 +0.021	28 +0.075 +0.035	25.071 24.990	0.135 0.015	20115	22	25	35	21.5		
					20165				15		
30 -0.025 -0.050	34 +0.025	34 +0.075 +0.035	30.085 29.990	0.135 0.015	20215	25	28	40	20		
					22150				11.5		
35 -0.025 -0.050	39 +0.025	39 +0.085 +0.045	35.085 34.990	0.135 0.015	25115	30	34	45	16.5		
					25165				21.5		
40 -0.025 -0.050	44 +0.025	44 +0.085 +0.045	40.085 39.990	0.135 0.015	25215	35	39	50	16		
					30160				26		
					30260				26		
					35160				16		
					35260				26		
					40260				26		
					40400				40		

Metric Standard Thrust Washers Size



Unit:mm

Shaft D _s	Specification	Washer dimension				Installation size		H _a +0.12
		D _i +0.25	D _o -0.25	S _T -0.05	d _p ± 0.125	d _D ^{+0.4 +0.1}	H _a ± 0.2	
8	A 10 KU	10	20	1.5	15	1.5	1	20
10	A 12 KU	12	24		18			24
12	A 14 KU	14	26		20			26
14	A 16 KU	16	30		23			30
16	A 18 KU	18	32		25	2		32
18	A 20 KU	20	36		28			36
20	A 22 KU	22	38		30			38
22	A 24 KU	24	42		33			42
24	A 26 KU	26	44		35	3		44
26	A 28 KU	28	48		38			48
30	A 32 KU	32	54	43	54			
36	A 38 KU	38	62	50	62			
40	A 42 KU	42	66	2	54	4	1.5	66
46	A 48 KU	48	74		61			74
50	A 52 KU	52	78		65			78
60	A 62 KU	62	90		76			90

KU Slide plates

Metric Standard Strip Size



Type	Length ± 1	Width ± 1	Thickness -0.05
10S	500	150	1.0
10S	500	150	1.5
10S	500	150	2.0
10S	500	150	2.5



KU-Pb Pb-Free self-lubricating bearing

KU-Pb is without Pb, so this bushing has clean lubricating condition and accord with environmental request It has been widely applied to automobile, food-processing machinery, pharmacy machinery, beverage machinery, medical equipment etc.

Pb-free



KU-N Stainless steel self-lubricating bearing

KU-N is based on stainless steel backing with sintered porous bronze layer and its surface is coated of PTFE. It is characterized by acid-resistant, alkaline-resistant, ocean water resistant. It is widely used as fluid valve of measuring acid and alkalinizing flow in chemical industry, and corrosion resisting sliding position in marine industry.



DP4 Hydraulic pump bearing

DP4 improved the friction and better wear resistance over the KU series under lubricated operation. This product is developed for high duty, oil lubricated, hydraulic applications, It is designed mainly for using under lubricated conditions and it performs excellent wear resistance and low static/dynamic friction coefficient. It is suitable for the places of big sides force of frequently reciprocate.

Pb-free

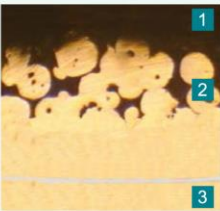
Bronze Backed With Bronze Powder PTFE Plain Bearings



Product Brief

KU-B is developed from KU. Using bronze backing instead of steel backing. The bronze backing provides a high corrosion resistance, anti magnetic properties and a good thermal conductivity. The bearings are particularly appropriate for high temperature environment where no oil is efficient and the machine must be successive long period working condition.

Structure



- 1. PTFE and additives thickness
0.01 ~ 0.03mm
- 2. Sintered bronze powder thickness
0.20 ~ 0.35mm
- 3. Bronze backing

Tech. Data

Max. Load	Static	250N/mm ²
	Low speed	140N/mm ²
	Rotating oscillating	60N/mm ²
PV Limit	Short term operation	3.6N/mm ² *m/s
	Continuous operation	1.8N/mm ² *m/s
Temp. Range		- 195°C ~ + 280°C

Friction coefficient		0.03~0.20 μ
Max Speed	Dry running	2m/s
	Hydrodynamic operation	> 2m/s
Thermal conductivity		60W/(m*k) ⁻¹
Coefficient of thermal expansion		18*10 ⁻⁶ *k ⁻¹

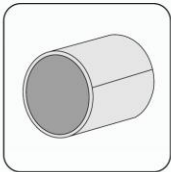
Characteristics and Advantages

- 1. Maintenance-free operation
- 2. Exceptionally high load carrying capacity
- 3. Improved corrosion resistance compared to KU

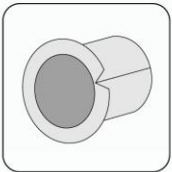
Typical Applications

The typical applications covered are steel metallurgy industry such as bushes for rofter grooves of successive casting machines, cement grouting pumps and screw conveyers for cement and so on.

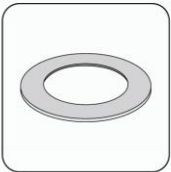
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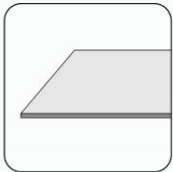
Cylindrical



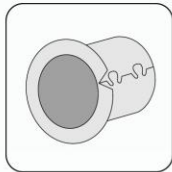
Flanged



Thrust washer



Strip



Non-standard parts as design