

DSB



鼎顺轴承

DINGSHUNBEARING

专业生产自润滑无油轴承

公司简介 Introduction

嘉善鼎顺无油轴承厂是一家专业从事无油轴承的生产企业，位于素有“无油轴承之乡”美称的浙江省嘉善县干窑镇泾工业区，东距上海虹桥机场60公里，西距杭州100公里，北临苏州80公里。地理位置优越，交通极其便捷。我们的产品畅销海内外，在客户中因我们的优质产品和周到的服务，已有很好的声誉。

主要产品：FB 青铜卷制轴承、JDB 固体润滑轴承、JF 双金属轴承、SF-1无油润滑轴承、SF-2边界润滑轴承、FR 青铜四氟轴套、FD 填充四氟材料等。产品广泛应用于液压行业、汽车行业、工程机械、冶金设备、矿山机械、注塑、模具、纺织、印刷、灌装、包装、等各个机械制造领域，产品销售江苏、四川、山西、广东、山东、重庆、浙江、上海、福建等全国各地而且部分出口外销，企业将不断引进人才，完善管理机制，诚信、开拓、创新，争创一流品牌。

自开办以来，我们始终坚持管理和技术的创新，坚持以科技为先导，以质量求发展，建立了严格的质量保证体系，企业的技术水平和产品质量不断提升，公司的SF系列无油轴承以质量过关，服务到位得到了客户的高度信赖。我们本着以市场为导向，以质量求生存，开拓创新的原则，竭诚欢迎社会各界同仁亲临指导，同时接受客户的来料加工。



JDB

镶嵌式固体 润滑轴承

Solid Lubricant Inlaid Bearing



基材特性 Material Features

JDB固体润滑轴承是在轴承基体的金属摩擦面上开出大小适当、排列有序的孔穴，然后在孔穴中嵌入具有独特自润滑性能的成型固体润滑剂（固体润滑剂面积一般为摩擦面积的25%—35%）而制成的自润滑轴承。该轴承综合了金属基体和特殊配方润滑材料的各自优点，突破了一般轴承依靠油膜润滑的局限性。JDB固体润滑轴承特别适用于无油、高温、高负载、低速度、防污、防蚀、防辐射、以及在水中或真空溶液浸润而根本无法加润滑油膜的特殊工况条件下使用。该产品广泛应用于冶金轧钢设备、灌装设备、水轮机、气轮机、仪器仪表以及矿山机械、船舶机械、纺织机械、船舶工业、航天航海等领域。同时也越来越广泛的使用在其它工农业机械中。JDB固体润滑轴承的基体应根据轴承自身的工况条件而定。比较常用的材料有高力黄铜、锡青铜、铸件等。根据轴承自身工况条件，通过不同金属基体和嵌入固体润滑剂的组合，可保证产品能满足各种温度、负荷、运动和介质等工况条件下的特殊需要，同时保证稳定可靠地工作。

JDB material is made of strong cast bronze based metal with special solid lubricants embedded. The base metal withstands high load and the solid lubricants provide for self-lubrication. The bearing shows excellent performance without pre-lubrication under conditions of extreme high/low temperature with low speed.

This material provides a maintenance-free bearing solution, particularly for high load, intermittent of oscillating motion.

This kind of bearing can be applied under dry, high temperature, high pressure, corrosive, water or other chemical environments when no oil can be introduced.

Now is widely be used in automotive products line, water engineering, dam gate, plastic industries, successive casting machines, steel rollers in metallurgy industry, mineral machines, ships, turbo generators, hydraulic turbines and injection molding machines...

➔ 主要材料推荐 MAIN MATERIALS RECOMMENDATION

合金材质 Metal type

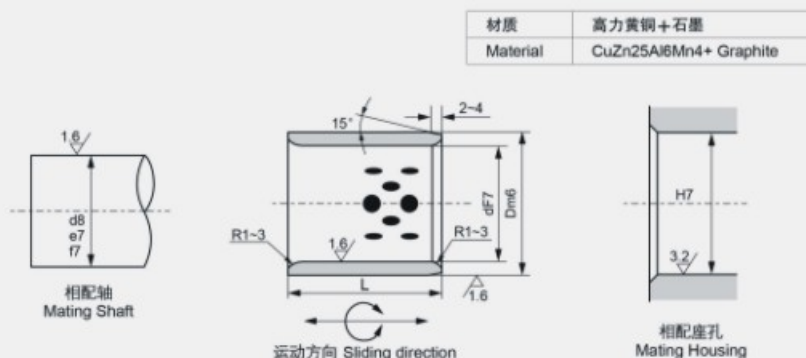
LSB Standard LSB标准	Cast bronze 高力黄铜	Copper alloy 铜合金	Copper alloy 铜合金	Copper alloy 铜合金	Strong cast bronze 特硬高力黄铜	Cast iron 铸铁
Base material基本材质	CuZn24Al6	CuSn5Zn5Pb5	CuAl10Ni5	CuSn12	CuZn24Al6	HT250
Hardness HB 硬度	>210	>70	>150	>80	>250	>160
Tensile strength 抗拉强度 N/mm ²	>750	>200	>500	>360	>800	>250
Elongation% 伸长率	>12	15	>10	>8	>4	
Coefficient of linear expansion 热胀系数	$1.9 \times 10^{-5}/^{\circ}\text{C}$	$1.8 \times 10^{-5}/^{\circ}\text{C}$	$1.6 \times 10^{-5}/^{\circ}\text{C}$	$1.8 \times 10^{-5}/^{\circ}\text{C}$	$1.9 \times 10^{-5}/^{\circ}\text{C}$	$1.0 \times 10^{-5}/^{\circ}\text{C}$
Limit Temp. 温度	300 [°] C	400 [°] C	400 [°] C	400 [°] C	300 [°] C	400 [°] C
Max. Load N/mm ² 最大动承载	100	60	50	70	150	10
Max. Speed m/min最大线速度	15	10	20	10	10	15
Max. PV 最大PV N/mm ² *m/min	200	200	200	200	200	40
压缩永久变形量400N/mm ²	<0.01	<0.05	<0.04	<0.05	<0.005	<0.015

同时DSB可以根据客户的特别要求提供HB>270及HB>300的特高硬铜材料

As special request YTB also can supply the strong cast bronze of special high hardness HB>270, HB>300

JDB 自润轴套

JDB Oilless Cylindrical Bushes



单位unit:mm

IDF7 (内径)		ODm6 (外径)		L -0.10 -0.30													
				8	10	12	15	16	20	25	30	35	40	50	60	70	80
8	+0.028 +0.013	12	+0.018 +0.007	081208	081210	081212	081215										
10		14		101408	101410	101412	101415		101420								
12	+0.034 +0.016	18			121810	121812	121815	121816	121820	121825	121830						
13		19		131910		131915	131916										
14		20		142010	142012	142015		142020	142025	142030							
15		21	+0.021 +0.008		152110	152112	152115	152116	152120	152125	152130						
16		22			162210	162212	162215	162216	162220	162225	162230	162235	162240				
18		24				182412	182415	182416	182420	182425	182430	182435	182440				
20	+0.041 +0.020	28		202810	202812	202815	202816	202820	202825	202830	202835	202840	202850				
22		32			223212	223215		223220	223225								
25		33			253312	253315	253316	253320	253325	253330	253335	253340	253350	253360			
30		38	+0.025 +0.009			303812	303815		303820	303825	303830	303835	303840	303850	303860		
35	45							354520	354525	354530	354535	354540	354550	354560			
40	50							405020	405025	405030	405035	405040	405050	405060	405070	405080	
45	+0.050 +0.025	55	+0.030 +0.011							455530	455535	455540	455550	455560			
50		60									506030	506035	506040	506050	506060	506070	506080

注：除以上规格尺寸外，可按客户图纸制造。

JDB 自润轴套

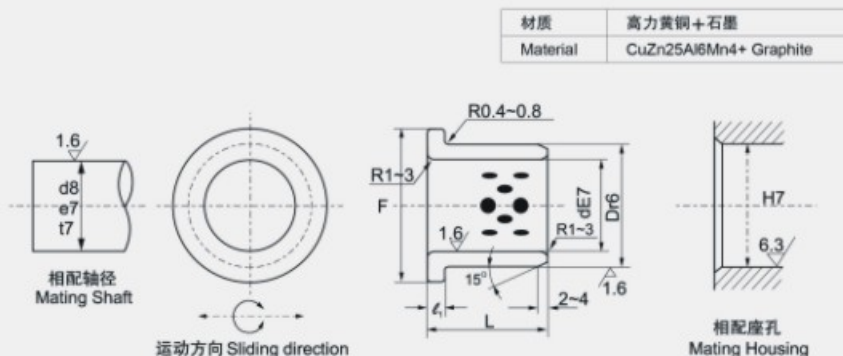
JDB Oilless Cylindrical Bushes

单位unit:mm

IDF7 (内径)	ODm6 (外径)	L ^{-0.10 -0.30}											
		30	35	40	50	60	70	80	100	120	130	140	150
50	+0.050 +0.025	62	506230	506235	506240	506250	506260	506270					
50		65	506530		506540	506550	506560	506570	506580	5065100			
55		70			557040	557050	557060	557070					
60		74	+0.030 +0.011	607430	607435	607440	607450	607460	607470	607480			
60		75		607530	607535	607540	607550	607560	607570	607580	6075100		
63		75						637560	637570	637580			
65		80				658050	658060	658070	658080				
70	+0.060 +0.030	85		708535	708540	708550	708560	708570	708580	7085100			
70		90				709050	709060	709070	709080				
75		90					759060	759070	759080	7590100			
75		95					759560	759570	759580	7595100			
80		96	+0.035 +0.013		809640	809650	809660	809670	809680	8096100	8096120		
80		100			8010040	8010050	8010060	8010070	8010080	80100100	80100120		80100140
90		110		9011030		9011050	9011060	9011070	9011080	90110100	90110120		
100		120	+0.071 +0.036				10012060	10012070	10012080	100120100	100120120		100120140
110		130						11013080	110130100	110130120			
120		140						12014080	120140100	120140120		120140140	
125		145							125145100	125145120			
130		150	+0.040 +0.015						130150100		130150130		
140		160							140160100			140160140	
150		170	+0.083 +0.043						150170100				150170150
160		180							160180100				160180150
170		190							170190100				170190150
180		200							180200100				180200150
190		210							190210100				190210150
190		220	+0.046 +0.017						190220100				200230100
200		230							200230100				210240150
210	+0.096 +0.050	240								210240120			220250150
220		250								220250120			220250150
220		260	+0.052 +0.020							220260120			220260150

JFB 自润翻边轴套

JFB Oilless Flange Bushes

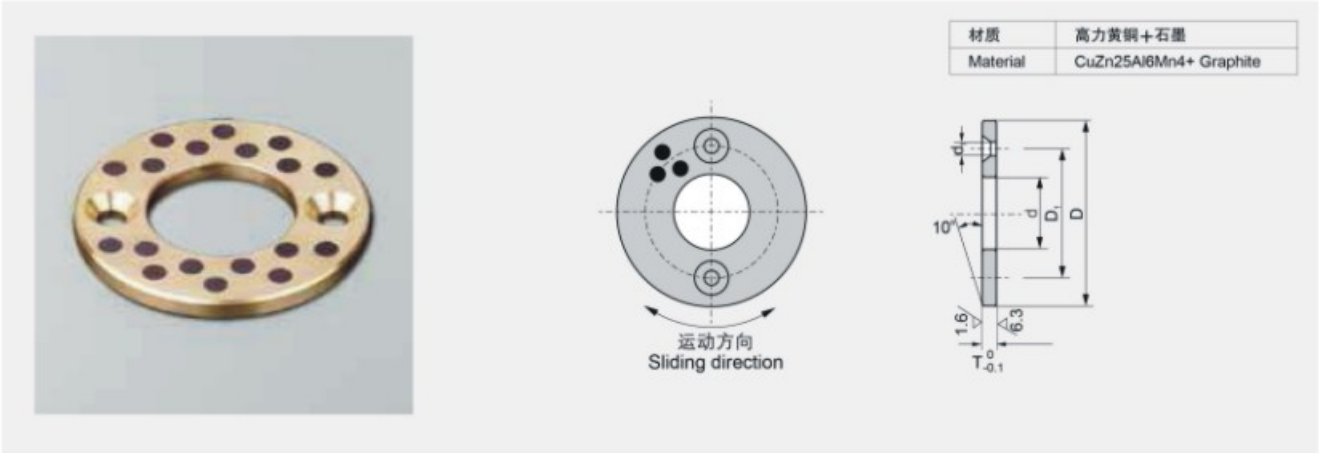


单位unit:mm

IDE7 (内径)	ODr6 (外径)	F	ℓ_1 -0.10	L -0.10 -0.30									
				15	20	25	30	35	40	50	60	80	100
10	+0.040 +0.025	14	+0.034 +0.023	22	2	1015F	1020F						
12		18		25		1215F	1220F						
13		19		26		1315F	1320F						
14	+0.050 +0.032	20		27	3	1415F	1420F						
15		21	+0.041 +0.028	28		1515F	1520F	1525F	1530F				
16		22		29		1615F	1620F	1625F	1630F				
20		30		40		2015F	2020F	2025F	2030F		2040F		
25	+0.061 +0.040	35		45		2515F	2520F	2525F	2530F		2540F		
30		40		50			3020F	3025F	3030F	3035F	3040F	3050F	
31.5		40	+0.050 +0.034				3120F			3135F			
35		45		60	5		3520F		3530F		3540F	3550F	
40	+0.075 +0.050	50		65			4020F		4030F		4040F	4050F	
45		55		70					4530F		4540F	4550F	4560F
50		60	+0.060 +0.041	75					5030F		5040F	5050F	5060F
55		65		80						5540F		5560F	
60		75	+0.062 +0.043	90						6040F	6050F		6080F
63		75		85	7.5								6367F
70	+0.090 +0.060	85		105							7050F		7080F
75		90	+0.073 +0.051	110								7560F	
80		100		120								8060F	8080F 80100F
90		110	+0.076 +0.054	130	10							9060F	9080F
100	+0.107 +0.072	120		150									10080F 100100F
120		140	+0.088 +0.063	170									12080F 120100F

JTW 止推垫片

JTW Oilless Thrust Washers

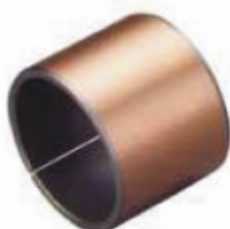


单位unit:mm

规格 Standard No.	d	D	T ⁰ _{-0.1}	螺栓 Bolt			
				D ₁	数量 Q'ty	尺寸 size	d ₁
JTW-10	10.2	30	3	---	---	---	---
JTW-12	12.2	40		28	2	M3	3.5
JTW-13	13.2						
JTW-14	14.2						
JTW-15	15.2	50		35			
JTW-16	16.2			---	---	---	---
JTW-16N							
JTW-18	18.2		35	2	M3	3.5	
JTW-20	20.2	5			M5	6	
JTW-20N			---	---	---	---	
JTW-25	25.2		40	2	M5	6	
JTW-25N			---	---	---	---	
JTW-30	30.2		60	45	2	M5	6
JTW-35	35.2		70	50			
JTW-40	40.2	80	7	60	M6	7	
JTW-45	45.3	90	67.5				
JTW-50	50.3	100	8	75	4	M8	9
JTW-55	55.3	110		85			
JTW-60	60.3	120		90			
JTW-65	65.3	125		95			
JTW-70	70.3	130	10	100	M10	11	
JTW-75	75.3	140		110			
JTW-80	80.3	150		120			
JTW-90	90.5	170		140			
JTW-100	100.5	190		160			
JTW-120	120.5	200		175			

DSB-10

自润滑卷制轴承 Self-Lubricating Bearings



DSB-10 碳钢基无油轴承 Dry Bearings

■ 基材特性 Material Features

低碳钢+铜粉+PTFE/铅 Steel+Bronze Powder+PTFE/Pb

适用于无法加油或较难的工作部位，耐磨性好、摩擦系数小、使用寿命长；走合性能好、低噪音、无污染、耐腐蚀性好；运转中形成的转移膜起到保护对磨轴的作用，无咬轴现象；对磨轴的加工要求低，减轻了用户加工成本。

Suitable for dry running, low coefficient of friction, low wear, good sliding characteristics, forming a transfer film can protect the mating metal surface. Suitable for rotary and oscillating movement. High chemical resistance, lower absorption of water and swelling. Also performs well with lubrication.

■ 技术参数 Tech. Data

最大承载 Max. Load	静承载 Static	250 N/mm ²	使用温度 Temp.	-195℃ ~ 280℃
	动承载 Dynamic	140 N/mm ²	摩擦系数 Friction coefficient	0.03 ~ 0.20
最高线速度 Max. Speed	干 Dry	2m/s	导热系数 Thermal conductivity	42W (m·k) ⁻¹
	流体 Lubrication	>2m/s	热膨胀系数 coefficient of thermal expansion	11 × 10 ⁻⁶ k ⁻¹
最大PV(干) Max. PV(Dry)	短时间 Short-term	3.6 N/mm ² · m/s		
	连续 Continuous	1.8 N/mm ² · m/s		



DSB-11 碳钢基无铅自润滑轴承 Dry Bearings

■ 基材特性 Material Features

低碳钢+铜粉+PTFE/铅 Steel+Bronze Powder+PTFE/Lead free

与DSB-10具有相同使用功能，由于环保的要求，铅将被逐渐禁止使用。DSB-10正是在这种情况下开发出来的新产品，目前已广泛使用在汽车、食品工业机械、制药机械、饮料机械、医疗设备等绿色工业场合。

The features same as DSB-10 but without lead, as the environment request in new century, The lead will be not allowed use again. The DSB-11 can meet this demand and now have been widely used in automotive industry, food industry, medicine machines, drink machines and so on.

■ 技术参数 Tech. Data

最大承载 Max. Load	静承载 Static	250 N/mm ²	使用温度 Temp.	-195℃ ~ 280℃
	动承载 Dynamic	140 N/mm ²	摩擦系数 Friction coefficient	0.03 ~ 0.20
最高线速度 Max. Speed	干 Dry	2m/s	导热系数 Thermal conductivity	42W (m·k) ⁻¹
	流体 Lubrication	>2m/s	热膨胀系数 coefficient of thermal expansion	11 × 10 ⁻⁶ k ⁻¹
最大PV(干) Max. PV(Dry)	短时间 Short-term	3.6 N/mm ² · m/s		
	连续 Continuous	1.8 N/mm ² · m/s		



DSB-1B 铜基无油轴承 Dry Bearings

■ 基材特性 Material Features

青铜基板+铜粉+PTFE/纤维 Bronze backing+Bronze Powder+PTFE/fibre

适用于无法加油或较难的工作部位，耐磨性好、摩擦系数小、使用寿命长；走合性能好、低噪音、无污染、耐腐蚀性好；运转中形成的转移膜起到保护对磨轴的作用，无咬轴现象；对磨轴的加工要求低，减轻了用户加工成本；由于基板是青铜，因此比DSB-10具有更好的耐腐蚀性。

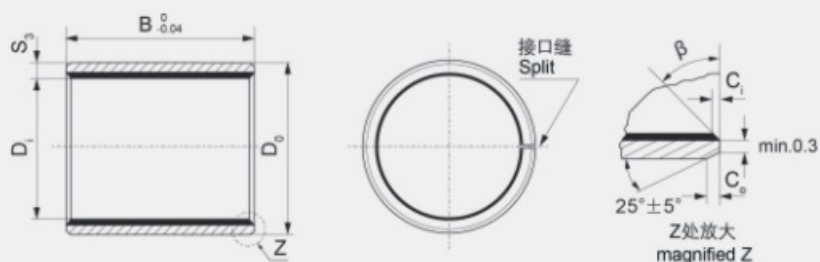
Suitable for dry running, low coefficient of friction, low wear, good sliding characteristics, forming a transfer film can protect the mating metal surface, suitable for rotary and oscillating movement. Very high chemical resistance, lower absorption of water and swelling. Also performs well with lubrication. Bronze backing provides improved corrosion resistance compared with DSB-10.

■ 技术参数 Tech. Data

最大承载 Max. Load	静承载 Static	250 N/mm ²	使用温度 Temp.	-195℃ ~ 280℃
	动承载 Dynamic	140 N/mm ²	摩擦系数 Friction coefficient	0.03 ~ 0.20
最高线速度 Max. Speed	干 Dry	2m/s	导热系数 Thermal conductivity	70W (m·k) ⁻¹
	流体 Lubrication	>2m/s	热膨胀系数 coefficient of thermal expansion	17 × 10 ⁻⁶ k ⁻¹
最大PV(干) Max. PV(Dry)	短时间 Short-term	3.6 N/mm ² · m/s		
	连续 Continuous	1.8 N/mm ² · m/s		

DSB-10 自润滑卷制轴承标准公制尺寸

DSB-10 Self-Lubricating Bearings Standard Metric Size



内外倒角

S_3	C_0	C_1	β	S_3	C_0	C_1	β
0.75	0.5 ± 0.3	0.25 ± 0.2	$30^\circ \pm 5^\circ$	2.00	1.2 ± 0.4	0.50 ± 0.3	$30^\circ \pm 5^\circ$
1.00	0.6 ± 0.3	0.30 ± 0.2	$30^\circ \pm 5^\circ$	2.50	1.8 ± 0.6	0.60 ± 0.3	$45^\circ \pm 5^\circ$
1.50	0.7 ± 0.3	0.50 ± 0.3	$30^\circ \pm 5^\circ$				

单位unit:mm

轴径 D _s	座孔 H7 D _H	外径公差 D _O	压装后 内孔公差 D _{1a}	配合间隙 D _O	壁厚 S ₃	长度B ⁰ _{-0.40} (^{dsΦ28 L-0.30} _{d>Φ30 L-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		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			1320				
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			1710	1712		1720			
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	0.112 0.010	1.505 1.475			2010	2012	2015	2020	2025	2030		
22 ^{-0.020} _{-0.041}	25 ^{+0.021}	25 ^{+0.075} _{+0.035}	22.071 21.990					22010	2212	2215	2220	2225	2230		
24 ^{-0.020} _{-0.041}	27 ^{+0.021}	27 ^{+0.075} _{+0.035}	24.071 23.990							2415	2420	2425	2430		
25 ^{-0.020} _{-0.041}	28 ^{+0.021}	28 ^{+0.075} _{+0.035}	25.071 24.990					25010	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					2815	2820	2825	2830	2840	
30 ^{-0.020} _{-0.041}	34 ^{+0.025}	34 ^{+0.085} _{+0.045}	30.085 29.990						3012	3015	3020	3025	3030	3040	
32 ^{-0.025} _{-0.050}	36 ^{+0.025}	36 ^{+0.085} _{+0.045}	32.085 31.990	0.135 0.015							3220		3230	3240	
35 ^{-0.025} _{-0.050}	39 ^{+0.025}	39 ^{+0.085} _{+0.045}	35.085 34.990						3512	3515	3520	3525	3530	3540	3550
38 ^{-0.025} _{-0.050}	42 ^{+0.025}	42 ^{+0.085} _{+0.045}	38.085 37.990							3815			3830	3840	
40 ^{-0.025} _{-0.050}	44 ^{+0.025}	44 ^{+0.085} _{+0.045}	40.085 39.990						4012		4020	4025	4030	4040	4050

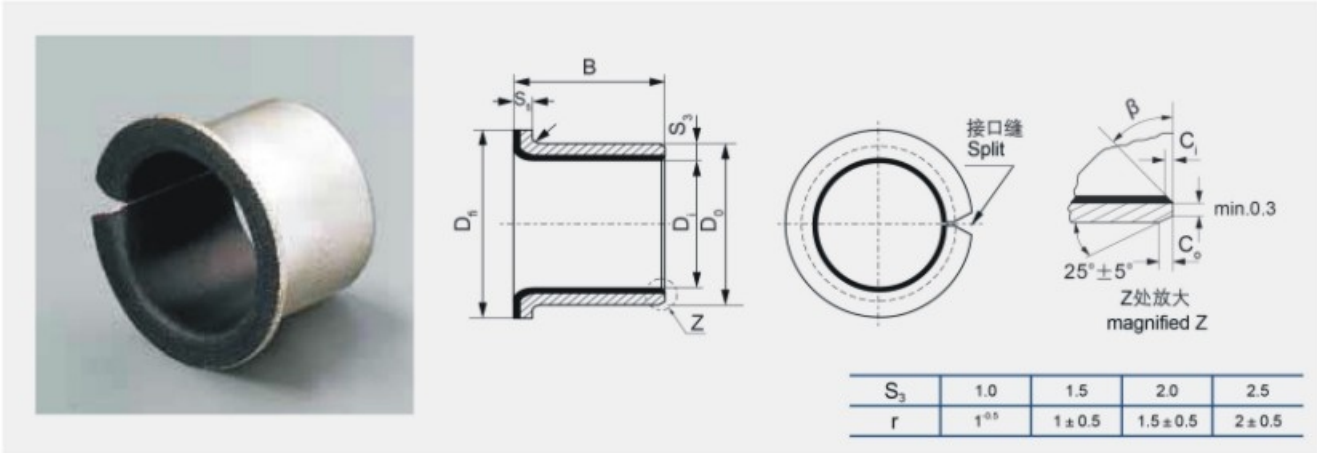
DSB-10 自润滑卷制轴承标准公制尺寸

DSB-10 Self-Lubricating Bearings Standard Metric Size

单位unit:mm

轴径 D _s	座孔 H7 D _H	外径公差 D _O	压装后 内孔公差 D _{is}	配合间隙 C _O	壁厚 S ₃	长度B ⁰ _{-0.40}											
						20	25	30	40	50	60	70	80	100	115		
45 -0.050 -0.025	50 +0.025	50 +0.100 +0.055	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 -0.035	85 +0.035	85 +0.120 +0.070	80.155 80.020	0.201 0.020	2.490 2.440				8040	8050	8060	8070	8080	80100			
85 -0.035	90 +0.035	90 +0.120 +0.070	85.155 85.020	0.209 0.020					8540		8560		8580	85100			
90 -0.035	95 +0.035	95 +0.120 +0.070	90.155 90.020						9040	9050	9060		9080	90100			
95 -0.035	100 +0.035	100 +0.120 +0.070	95.155 95.020							9550	9560		9580	95100			
100 -0.035	105 +0.035	105 +0.120 +0.070	100.155 100.020							10050	10060		10080		100115		
105 -0.035	110 +0.035	110 +0.120 +0.070	105.155 105.020								10560		10580		105115		
110 -0.035	115 +0.035	115 +0.120 +0.070	110.115 110.020								11060		11080		110115		
120 -0.040	125 +0.040	125 +0.170 +0.100	120.210 120.070	0.264 0.070	2.465 2.415						12060		12080	120100			
125 -0.040	130 +0.040	130 +0.170 +0.100	125.210 125.070	0.273 0.070							12560			125100	125115		
130 -0.040	135 +0.040	135 +0.170 +0.100	130.210 130.070								13060		13080	130100			
140 -0.040	145 +0.040	145 +0.170 +0.100	140.210 140.070								14060		14080	140100			
150 -0.040	155 +0.040	155 +0.170 +0.100	150.210 150.070								15060		15080	150100			
160 -0.040	165 +0.040	165 +0.170 +0.100	160.210 160.070								16060		16080	160100	160115		
180 -0.046	185 +0.046	185 +0.210 +0.130	180.216 180.070	0.279 0.070	2.465 2.415								18080	180100			
190 -0.046	195 +0.046	195 +0.210 +0.130	190.216 190.070	0.288 0.070										19080	190100		
200 -0.046	205 +0.046	205 +0.210 +0.130	200.016 200.070											20080	200100		
220 -0.046	225 +0.046	225 +0.210 +0.130	220.216 220.070								20060		22080	220100			
250 -0.052	255 +0.052	255 +0.260 +0.170	250.222 250.070	0.294 0.070	2.465 2.415								25080	250100			
260 -0.052	265 +0.052	265 +0.260 +0.170	260.222 260.070	0.303 0.070										26080	260100		
280 -0.052	285 +0.052	285 +0.260 +0.170	280.222 280.070											28080	280100		
300 -0.052	305 +0.052	305 +0.260 +0.170	300.222 300.070											30080	300100		

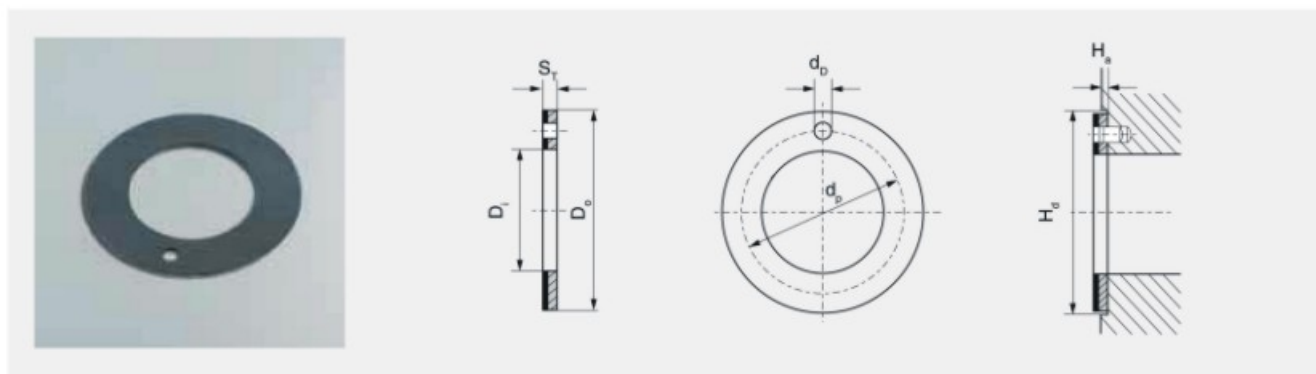
DSB-10F 翻边轴承标准公制尺寸
DSB-10F Flanged Bearings Standard Metric Size



单位unit:mm

轴径 D _i	座孔 H7 D _{h1}	外径公差 D _o	压装后 内孔公差 D _{i,a}	配合间隙 C _o	型号规格	壁厚 S ₃	尺寸				
							D _i	D _o	D _i ±0.5	B±0.25	S ₁ -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	
					10120					12	
12 -0.016 -0.034	14 +0.018	14 +0.065 +0.030	12.058 11.990	0.092 0.006	12070		12	14	20	7	
					12090					9	
					12120					12	
14 -0.016 -0.043	16 +0.018	16 +0.065 +0.030	14.058 13.990		14120		14	16	22	12	
					14170					17	
15 -0.016 -0.034	17 +0.018	17 +0.065 +0.030	15.058 14.990		15090		15	17	23	9	
					15120					12	
					15170					17	
16 -0.016 -0.034	18 +0.018	18 +0.065 +0.030	16.058 15.990		16120		16	18	24	12	
					16170					17	
18 -0.016 -0.034	20 +0.021	20 +0.075 +0.035	18.061 17.990	0.095 0.006	18120		18	20	26	12	
					18170					17	
					18200					20	
20 -0.020 -0.041	23 +0.021	23 +0.075 +0.035	20.071 19.990	0.112 0.010	20115	1.505 1.475	20	23	30	11.5	1.5
					20165					16.5	
					20215					21.5	
22 -0.020 -0.041	25 +0.021	25 +0.075 +0.035	22.071 21.990		22150		22	25	32	15	
					22200					20	
25 -0.020 -0.041	28 +0.021	28 +0.075 +0.035	25.071 24.990		25115		25	28	35	11.5	
					25165					16.5	
					25215					21.5	
30 -0.025 -0.050	34 +0.025	34 +0.075 +0.035	30.285 29.990	0.126 0.010	30160	2.005 1.970	30	34	42	16	2
					30260					26	
35 -0.025 -0.050	39 +0.025	39 +0.085 +0.045	35.085 34.990	0.135 0.015	35160		35	39	47	16	
					35260					26	
40 -0.025 -0.050	44 +0.025	44 +0.085 +0.045	40.085 39.990		40260		40	44	53	26	
					40400					40	

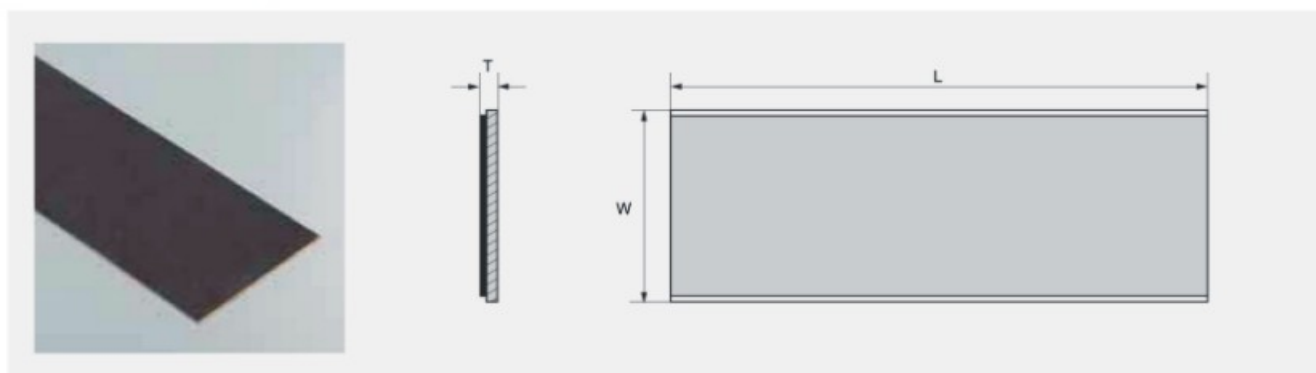
DSB -10WC 止推垫片标准尺寸 DSB -10WC Thrust Washer Standard Metric Size



单位unit:mm

轴径 D _s	型号规格	垫片尺寸 Washer size				安装尺寸		
		D _i +0.25	D _o -0.25	S _r -0.05	d _p ±0.125	d _D ^{+0.4} _{+0.1}	H _s ±0.2	H _g +0.12
8	WC10	10	20	1.5	15	1.5	1	20
10	WC12	12	24		18			24
12	WC14	14	26		20	2		26
14	WC16	16	30		23			30
16	WC18	18	32		25	3		32
18	WC20	20	36		28			36
20	WC22	22	38		30			38
22	WC24	24	42		33			42
24	WC26	26	44		35			44
26	WC28	28	48		38	4		48
30	WC32	32	54		43			54
36	WC38	38	62		50			62
40	WC42	42	66		54			66
46	WC48	48	74	2	61	1.5	74	
50	WC52	52	78		65		78	
60	WC62	62	90		76		90	

DSB -10SP 板材标准尺寸 DSB -10SP Strip Standard Metric Size



单位unit:mm

型号规格	长度(L) ± 1	宽度(W) ± 1	厚壁(S_e) -0.05
SP	500	150	1.0
SP	500	150	1.5
SP	500	150	2.0
SP	500	150	2.5

DSB-20

边界润滑轴承 Boundary Lubricated Bearings



DSB -20 边界润滑轴承 Marginal Lubrication Bearings

■ 基材特性 Material Features

碳钢基板+铜粉+POM Steel+Bronze Powder+POM

适用于高载低速下的旋转、摇摆运动以及在重载下经常启闭而无法加油的部位，在边界润滑条件下可长期使用而不用加油，过程加油将会大大提高轴承的使用寿命。耐磨层表面有规格的油穴可以作为储油孔使用。目前已广泛用于冶金机械、矿山机械、水利机械、汽机车、建筑机械、农用机械、轧钢机械等。

Suitable for rotary and oscillating movement, lower maintenance requirements due to the long re-lubrication intervals, lower wear, lower susceptibility to edge loading, no absorption of water and therefore no swelling, good damping behaviours, good resistance to shock loads.

■ 技术参数 Tech. Data

最大承载 Max. Load	静承载 Static	250 N/mm ²	使用温度 Temp.	-150℃ ~ +250℃
	动承载 Dynamic	140N/mm ²	摩擦系数 Friction coefficient	0.03 ~ 0.20
最高线速度 Max. Speed	干 Dry	2m/s	导热系数	4W (m·k) ⁻¹
	流体 Lubrication	>2m/s	Thermal conductivity	
最大PV(干) Max. PV(Dry)	短时间 Short-term	3.6 N/mm ² · m/s	热膨胀系数 coefficient of thermal expansion	11 × 10 ⁻⁶ k ⁻¹



DSB-2S 耐温型边界润滑轴承 Marginal Lubrication Bearings

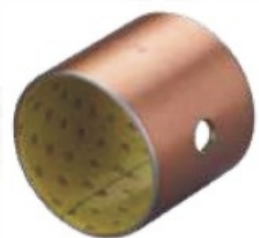
■ 基材特性 Material Features

该产品以优质低碳钢板为基体，中间烧结一层多孔青铜层，表面轧制一层改性的PEEK、PTFE 及其它混合物。产品应用于汽车底盘、锻压机床、冶金机械、矿山机械、水利行业、钢铁行业等。

DSB-2S is a composite bearing material, developed specifically to operate with marginal lubrication and consists of three bonded layers. It is designed for marginally lubricated operation, and is capable of operating continuously within -150℃~+250℃, and short time up to +300℃. Better for high load, high temperature and low speed with heavy load condition.

■ 技术参数 Tech. Data

最大承载 Max. Load	静承载 Static	140 N/mm ²	使用温度 Temp.	-150℃ ~ 250℃
	动承载 Dynamic	140N/mm ²	摩擦系数 Friction coefficient	0.08 ~ 0.12
最高线速度 Max. Speed	干 Dry	2m/s	导热系数	52W (m·k) ⁻¹
	流体 Lubrication	10m/s	Thermal conductivity	
最大PV(干) Max. PV(Dry)	连续 Continuous	2.8 N/mm ² · m/s	热膨胀系数 coefficient of thermal expansion	11 × 10 ⁻⁶ k ⁻¹



DSB -2Y 耐温型边界润滑轴承 Marginal Lubrication Bearings

■ 基材特性 Material Features

DSB-2Y边界润滑无铅轴承，是在DSB-20的基础上改进而成。其性能与DSB-20相同，但表面不含铅，使用领域可以扩展至有环保要求的领域。

目前该产品已应用于进口纺织设备、柱塞泵摆动部位、汽车操纵杆部位等中载、中速、油脂润滑的场合。

DSB-2Y lead free boundary lubrication bearing is improved on the basis of DSB-20. It can be Applied in the field where environment protection is required.

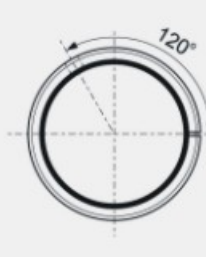
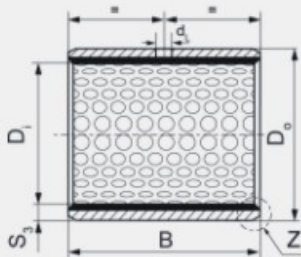
Now it's widely used on textile machines, piston pump, steering system of automobile etc.

■ 技术参数 Tech. Data

最大承载 Max. Load	静承载 Static	140 N/mm ²	使用温度 Temp.	-150℃ ~ 250℃
	动承载 Dynamic	140N/mm ²	摩擦系数 Friction coefficient	0.08 ~ 0.12
最高线速度 Max. Speed	干 Dry	2m/s	导热系数	52W (m·k) ⁻¹
	流体 Lubrication	10m/s	Thermal conductivity	
最大PV(干) Max. PV(Dry)	连续 Continuous	2.8 N/mm ² · m/s	热膨胀系数 coefficient of thermal expansion	11 × 10 ⁻⁶ k ⁻¹

DSB-20 边界润滑轴承标准公制尺寸

DSB-20 Marginal-Lubrication Bearings Standard Metric Size



内外侧角

S_3	C_0	C_1	β	S_3	C_0	C_1	β
1.0	0.6 ± 0.3	0.30 ± 0.2	$30^\circ \pm 5^\circ$	2.00	1.2 ± 0.4	0.50 ± 0.3	$30^\circ \pm 5^\circ$
1.5	0.7 ± 0.3	0.50 ± 0.2	$30^\circ \pm 5^\circ$	2.50	1.8 ± 0.6	0.60 ± 0.3	$45^\circ \pm 5^\circ$

单位unit:mm

轴径 D _h h8	座孔 H7 D _H	外径公差 D _O	压装后 内孔公差 D _{i,a}	配合间隙 C _O	壁厚 S ₃	油孔 d _L	长度B ⁰ _{-0.40}										
							10	15	20	25	30	35	40	45	50	60	
10 _{-0.022}	12 ^{+0.018}	12 ^{+0.065} _{+0.030}	10.108 10.040	0.130 0.040	0.980 0.955	4	1010	1015	1020								
12 _{-0.027}	14 ^{+0.018}	14 ^{+0.065} _{+0.030}	12.108 12.040	0.135 0.040			1210	1215	1220								
14 _{-0.027}	16 ^{+0.018}	16 ^{+0.065} _{+0.030}	14.108 14.040					1415	1420								
15 _{-0.027}	17 ^{+0.018}	17 ^{+0.065} _{+0.030}	15.108 15.040					1515	1520	1525							
16 _{-0.027}	18 ^{+0.018}	18 ^{+0.065} _{+0.030}	16.108 16.040					1615	1620	1625							
18 _{-0.027}	20 ^{+0.021}	20 ^{+0.075} _{+0.035}	18.111 18.040				0.138 0.040	1815	1820	1825							
20 _{-0.033}	23 ^{+0.021}	23 ^{+0.075} _{+0.035}	20.131 20.050	0.164 0.050	1.475 1.445	6		2015	2020	2025	2030						
22 _{-0.033}	25 ^{+0.021}	25 ^{+0.075} _{+0.035}	22.131 22.050					2215		2225							
25 _{-0.033}	28 ^{+0.021}	28 ^{+0.075} _{+0.035}	25.131 25.050					2515	2520	2525	2530						
28 _{-0.033}	32 ^{+0.025}	32 ^{+0.085} _{+0.045}	28.155 28.060	0.188 0.060				2820		2830							
30 _{-0.033}	34 ^{+0.025}	34 ^{+0.085} _{+0.045}	30.155 30.060		1.970 1.935				3020	3025	3030		3040				
35 _{-0.039}	39 ^{+0.025}	39 ^{+0.085} _{+0.045}	35.155 35.060	0.194 0.060					3520		3530	3535	3540				
40 _{-0.039}	44 ^{+0.025}	44 ^{+0.085} _{+0.045}	40.155 40.060	0.234 0.080	2.460 2.415	8			4020		4030		4040		4050		
45 _{-0.039}	50 ^{+0.025}	50 ^{+0.085} _{+0.045}	45.195 45.080				0.239 0.080			4520		4530		4540	4545	4550	
50 _{-0.039}	55 ^{+0.030}	55 ^{+0.100} _{+0.055}	50.200 50.080				0.246 0.080					5030		5040		5050	5060
55 _{-0.046}	60 ^{+0.030}	60 ^{+0.100} _{+0.055}	55.200 55.080									5530		5540		5550	5560
60 _{-0.046}	65 ^{+0.030}	65 ^{+0.100} _{+0.055}	60.200 60.080									6030		6040		6050	6060

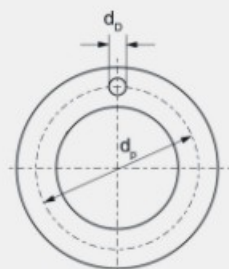
DSB-20 边界润滑轴承标准公制尺寸

DSB-20 Marginal-Lubrication Bearings Standard Metric Size

单位unit:mm

轴径 D _s h8	座孔 H7 D _H	外径公差 D _O	压装后 内孔公差 D _{i,a}	配合间隙 C _D	壁厚 S ₃	油孔 d _L	长度B ⁰ _{-0.40}								
							40	50	60	80	90	95	100	110	120
65 -0.046	70 +0.030	70 +0.100 +0.055	65.200 65.080	0.246 0.080	2.460 2.415	8	6540		6560						
70 -0.046	75 +0.030	75 +0.100 +0.055	70.200 70.080				7040	7050		7080					
75 -0.046	80 +0.030	80 +0.100 +0.055	75.200 75.080				7540		7560	7580					
80 -0.046	85 +0.035	85 +0.120 +0.070	80.265 80.100	0.313 0.100	2.450 2.385	9.5	8040		8060	8080					
85 -0.054	90 +0.035	90 +0.120 +0.070	85.265 85.100	8540				8560	8580						
90 -0.054	95 +0.035	95 +0.120 +0.070	90.265 90.100	9040				9060	9080	9090					
100 -0.054	105 +0.035	105 +0.120 +0.070	100.265 100.100				10050		10080		10095				
105 -0.054	110 +0.035	110 +0.120 +0.070	105.265 105.100					10560	10580		10595		105110		
110 -0.054	115 +0.035	115 +0.120 +0.070	110.265 110.110					11060	11080		11095		110110		
120 -0.054	125 +0.040	125 +0.170 +0.100	120.270 120.110						12060	12080			120110		
125 -0.063	130 +0.040	130 +0.170 +0.100	125.270 125.110						12560				125110		
130 -0.063	135 +0.040	135 +0.170 +0.100	130.270 130.110	0.324 0.100				13050	13060	13080		130100			
140 -0.063	145 +0.040	145 +0.170 +0.100	140.270 140.110					14050	14060	14080		140100			
150 -0.063	155 +0.040	155 +0.170 +0.100	150.270 150.110					15050	15060	15080		150100			
160 -0.063	165 +0.040	165 +0.170 +0.100	160.270 160.110				9.5		16050	16060	16080		160100		
170 -0.063	175 +0.040	175 +0.170 +0.100	170.270 170.110					17050		17080		170100			
180 -0.063	185 +0.046	185 +0.210 +0.130	180.270 180.110					18050	18060	18080		180100			
190 -0.072	195 +0.046	195 +0.210 +0.130	190.276 190.110			19050		19060	19080		190100		190120		
200 -0.072	205 +0.046	205 +0.210 +0.130	200.276 200.110	9.5				20050	20060	20080		200100		200120	
220 -0.072	225 +0.046	225 +0.210 +0.130	220.276 220.110					22050	22060	22080		220100		220120	
240 -0.072	245 +0.046	245 +0.210 +0.130	240.276 240.110				24050	24060	24080		240100		240120		
250 -0.072	255 +0.052	255 +0.260 +0.170	250.282 250.110				25050	25060	25080		250100		250120		
260 -0.081	265 +0.052	265 +0.260 +0.170	260.282 260.110			0.354 0.110		26050	26060	26080		260100		260120	
280 -0.081	285 +0.052	285 +0.260 +0.170	280.282 280.110					28050	28060	28080		280100		280120	
300 -0.081	305 +0.052	305 +0.260 +0.170	300.282 300.110				30050	30060	30080		300100		300120		

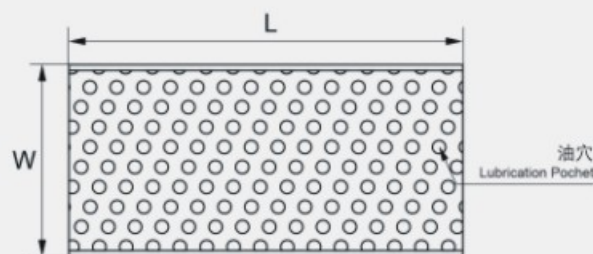
DSB-20WC 止推垫片标准尺寸 DSB-20WC Thrust Washer Standard Metric Size



单位unit:mm

轴径 D _s	型号规格	垫片尺寸 Washer size				安装尺寸		
		D _i +0.25	D _o -0.25	S _r -0.05	d _p ±0.125	d _D ^{+0.4} _{+0.1}	H _a ±0.2	H _g +0.12
8	WC10	10	20	1.5	15	1.5	1	20
10	WC12	12	24		18			24
12	WC14	14	26		20	2		26
14	WC16	16	30		23			30
16	WC18	18	32		25	3		32
18	WC20	20	36		28			36
20	WC22	22	38		30			38
22	WC24	24	42		33			42
24	WC26	26	44		35			44
26	WC28	28	48		38	4		48
30	WC32	32	54		43			54
36	WC38	38	62		50			62
40	WC42	42	66		54			66
46	WC48	48	74	2	61	1.5	74	
50	WC52	52	78		65		78	
60	WC62	62	90		76		90	

DSB-20SP 板材标准尺寸 DSB-20SP Strip Standard Metric Size



单位unit:mm

型号规格	长度(L) ± 1	宽度(W) ± 1	厚壁(S_r) -0.05
SP	500	150	1.0
SP	500	150	1.5
SP	500	150	2.0
SP	500	150	2.5

DSB-80

双金属轴承 Bimetal Bearings



DSB -80 双金属轴承 Bi-metal Self-lubricating Bearings

■ 基材特性 Material Features

碳钢基板 + 铜粉 Steel+Bronze Powder

以碳钢为基体表面烧结铜粉，使用于高载低速下的旋转、摇摆运动，铜粉面可根据要求加工出各种油孔、油槽。目前已广泛用于矿山机械、汽机车、建筑机械、农用机械、轧钢机械等。

Steel backed lead bronze lined bearing material for lubricated applications, high load capacity and good fatigue properties, have been widely used in automotive, common industrial like steering gear, power steering, pedal bushes, king-pin bushes, tailgate pivots, mechanical handling, lifting equipment, hydraulic motors, agricultural machines etc.

■ 技术参数 Tech. Data

最大承载 Max. Load	静承载 Static	120 N/mm ²	屈服强度 Yield point	350 N/mm ²
	动承载 Dynamic	40 N/mm ²	使用温度 Temp.	-40℃ ~ 250℃
最高线速度	Max. Speed	2 m/s	摩擦系数 Friction coefficient	0.08 ~ 0.20
最大PV	Max. PV	2.8 N/mm ² · m/s	导热系数 Thermal conductivity	60W (m·k) ⁻¹
抗剪切强度	Breaking Load	350 N/mm ²	热膨胀系数 Coef. of thermal expansion	40 × 10 ⁻⁶ k ⁻¹



DSB -72 双金属自润滑轴承 Bi-metal Self-lubricating Bearings

■ 基材特性 Material Features

DSB-72双金属轴承，是以钢板为基体，表面烧结CuPb24Sn4材料的产品。该产品具有较好的疲劳强度和承载能力。适用于中速中载，有油润滑的场合，表面镀软合金时，可用作高速内燃机轴承、连杆衬套，达到良好的耐磨、耐疲劳效果。

DSB-72 is a bimetal bushing with steel as backing and sintered CuPb24Sn4 as lining layer. This type has fairly good performance in anti-fatigue and load capacity. It is suitable for middle speed and middle load. When overlaid with certain soft alloy, it can be applied in high-speed internal combustion engine and as connecting rod bushing.

■ 技术参数 Tech. Data

最大承载 Max. Load	130 N/mm ²	最大PV Max. PV	脂润滑 Grease Lubrication	2.8 N/mm ² · m/s
			油润滑 Oil Lubrication	10 N/mm ²
最高线速度 Max. Speed	2 m/s	合金硬度 Alloy Hardness	45~70HB	
		合金材料 Alloy Material	CuPb24Sn4	



DSB -70 双金属自润滑轴承 Bi-metal Self-lubricating Bearings

■ 基材特性 Material Features

DSB-70双金属轴承，是以钢板为基体，表面烧结CuPb30材料的产品。该产品由于含铅量高，所以具有良好的抗咬轴性和异物埋没性。工作表面需镀软合金材料，可用作高速、中低载的内燃机主轴承瓦、连杆衬套、摇臂衬套；油泵侧摩擦片。

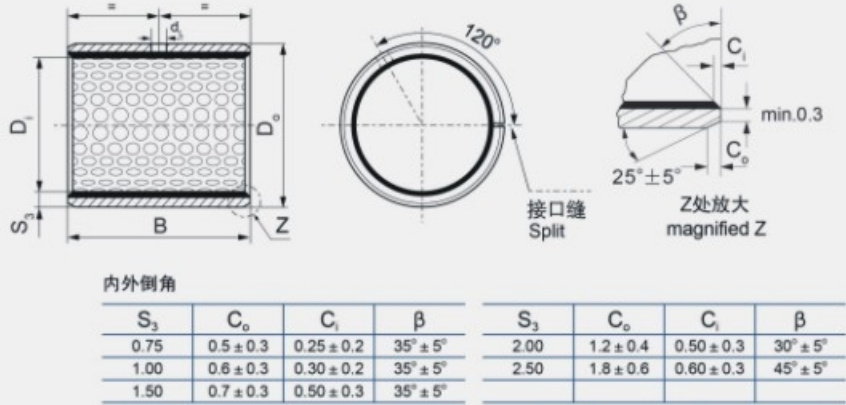
DSB-70 is a bimetal bushing with steel as backing and sintered CuPb30 as lining layer. It has good performance in anti-seizing, alien substance contamination. It is necessary to be overlaid with certain soft alloy and mostly applied in internal combustion engine under high speed and middle to low load, e.g. main bushing and connecting rod bushing.

■ 技术参数 Tech. Data

最大承载 Max. Load	130 N/mm ²	最大PV Max. PV	脂润滑 Grease	2.8 N/mm ² · m/s
			油润滑 Oil Lubrication	10 N/mm ² · m/s
最高线速度 Max. Speed	油润滑 Oil Lubrication	10 m/s	合金材料 Alloy Material	CuPb30
			合金硬度 Alloy Hardness	40~60HB

DSB-80 双金属轴承标准公制尺寸

DSB-80 Bimetal Bearings Standard Metric Size



单位unit:mm

D _i	D _o	轴径 D _s h8	座孔 H7 D _H	压装后 内孔公差 D _{i,a}	配合间隙 C _o	壁厚 S ₃	油孔 d _L	B ⁰ _{-0.40}						
								10	15	20	25	30	40	50
10	12	10 _{-0.022}	12 ^{+0.018}	+0.148 +0.010	0.170 0.010	0.995 0.935	4	1010	1015	1020				
12	14	12 _{-0.027}	14 ^{+0.018}		0.175 0.010			1210	1215	1220				
14	16	14 _{-0.027}	16 ^{+0.018}					1410	1415	1420				
15	17	15 _{-0.027}	17 ^{+0.018}					1510	1515	1520				
16	18	16 _{-0.027}	18 ^{+0.018}					1610	1615	1620				
18	20	18 _{-0.027}	20 ^{+0.021}	+0.151 +0.010	0.178 0.010	1.490 1.430	6	1810	1815	1820	1825			
20	23	20 _{-0.033}	23 ^{+0.021}	+0.161 +0.020	0.194 0.020			2010	2015	2020	2025			
22	25	22 _{-0.033}	25 ^{+0.021}					2210	2215	2220	2225			
24	27	24 _{-0.033}	27 ^{+0.021}					2410	2415	2420	2425	2430		
25	28	25 _{-0.033}	28 ^{+0.021}						2515	2520	2525	2530		
26	30	26 _{-0.033}	30 ^{+0.021}	+0.181 +0.040	0.214 0.040	1.980 1.920	8		2615	2620	2625	2630		
28	32	28 _{-0.033}	32 ^{+0.025}	+0.185 +0.040	0.218 0.040				2815	2820	2825	2830	2840	
30	34	30 _{-0.033}	34 ^{+0.025}						3015	3020	3025	3030	3040	
32	36	32 _{-0.039}	36 ^{+0.025}						3215	3220	3225	3230	3240	
35	39	35 _{-0.039}	39 ^{+0.025}							3520	3525	3530	3540	3550
38	42	38 _{-0.039}	42 ^{+0.025}				8			3820	3825	3830	3840	3850
40	44	40 _{-0.039}	44 ^{+0.025}							4020	4025	4030	4040	4050

DSB-80 双金属轴承标准公制尺寸 DSB-80 Bimetal Bearings Standard Metric Size

单位unit:mm

D _i	D _o	轴径 D _s h8	座孔 H7 D _H	压装后 内孔公差 D _{i,a}	配合间隙 C _D	壁厚 S ₃	油孔 d _L	B ⁰ _{-0.40}							
								25	30	40	50	60	80	90	100
45	50	45 _{-0.039}	50 ^{+0.025}	+0.225 +0.080	0.264 0.080	2.460 2.400	8	4525	4530	4540	4550				
50	55	50 _{-0.039}	55 ^{+0.030}	+0.230 +0.080	0.269 0.080				5030	5040	5050	5060			
55	60	55 _{-0.046}	60 ^{+0.030}					5530	5540	5550	5560				
60	65	60 _{-0.046}	65 ^{+0.030}					6030	6040	6050	6060				
65	70	65 _{-0.046}	70 ^{+0.030}					6530	6540	6550	6560				
70	75	70 _{-0.046}	75 ^{+0.030}					7030	7040	7050	7060	7080			
75	80	75 _{-0.046}	80 ^{+0.030}						7530	7540	7550	7560			
80	85	80 _{-0.046}	85 ^{+0.035}	+0.235 +0.080	0.281 0.080				8040	8050	8060	8080			
85	90	85 _{-0.054}	90 ^{+0.035}				8530		8550	8560	8580		85100		
90	95	90 _{-0.054}	95 ^{+0.035}						9050	9060	9080		90100		
95	100	95 _{-0.054}	100 ^{+0.035}							9560	9580	9590	95100		
100	105	100 _{-0.054}	105 ^{+0.035}							10060	10080	10090	100100		
105	110	105 _{-0.054}	110 ^{+0.035}							10560	10580		105100		
110	115	110 _{-0.054}	115 ^{+0.035}							11060	11080		110100		
115	120	115 _{-0.054}	120 ^{+0.035}	+0.240 +0.080	0.303 0.080					11550		11580			
120	125	120 _{-0.054}	125 ^{+0.040}							12050	12030			120100	
125	130	125 _{-0.063}	130 ^{+0.040}											125100	
130	135	130 _{-0.063}	135 ^{+0.040}								13060			130100	
135	140	135 _{-0.063}	140 ^{+0.040}								13560	13580			
140	145	140 _{-0.063}	145 ^{+0.040}								14060	14080		140100	
150	155	150 _{-0.063}	155 ^{+0.040}									15060	15080		150100

DSB-90

青铜卷制轴承 Bronze Bolling Bearing



DSB-90 铜基卷制轴承 Bronze Wrapped Bearings

■ 基材特性 Material Features

该轴承以CuSn8青铜为基材卷制而成的一种具有承载高，耐磨性能好的经济型轴承。标准的ZYB-90产品工作表面不满规则的菱形油穴，起到储油的作用，在起始运动时能较容易的形成油膜从而降低起始摩擦系数。主要运用农用机械、建筑机械等高载低速场合。

The bearings are wrapped of a cold formable homogenous bronze (CuSn8), which will obtain exceptional material properties. The standard size are fitted with diamond shaped lubrication indents on the bearing surface. These indents serve as lubricant reservoirs to rapidly build up a lubrication film in the start movement and therewith reduce the start friction. The material suitable for constructions, agriculture etc where high load and slow movement are occurring.

■ 技术参数 Tech. Data

最大承载 Max. Load	静承载 Static	120 N/mm ²	延伸率 Elongation	40%
	动承载 Dynamic	40N/mm ²	使用温度 Temp.	-100°C ~ 200°C
最高线速度(润滑)	Max. Speed (Lubrication)	2m/s	摩擦系数 Friction coefficient	0.08 ~ 0.25
最大PV	Max. PV	2.8 N/mm ² · m/s	导热系数 Thermal conductivity	58W (m·k) ⁻¹
抗拉强度	Tensile strength	450 N/mm ²	热膨胀系数	18.5 × 10 ⁻⁶ k ⁻¹
硬度	Hardness	HB 110-150	Coef. of thermal expansion	



DSB-92 铜基冲孔卷制轴承 Bronze With Through Holes Wrapped Bearings

■ 基材特性 Material Features

该轴承以CuSn8青铜为基材卷制而成的一种具有承载高，耐磨性能好的经济型轴承。标准的起到储油的作用，在起始运动时能较容易的形成油膜从而降低起始摩擦系数。主要运用农用机械、建筑机械等高载低速场合。

The bearings are wrapped of a cold formable homogenous bronze (CuSn8), which will obtain exceptional material properties. The standard size is fitted with holes, which are dispersed in a special way over the whole bearing surface. These indents serve as lubricant reservoirs to rapidly build up a lubrication film in the start movement and therewith reduce the start friction. The material suitable for construction machine, agriculture machine etc where high load and slow movement are occurring.

■ 技术参数 Tech. Data

最大承载 Max. Load	静承载 Static	120 N/mm ²	硬度 Hardness	HB 110-150
	动承载 Dynamic	40N/mm ²	延伸率 Elongation	40%
最高线速度(润滑)	Max. Speed (Lubrication)	2.5m/s	使用温度 Temp.	-100°C ~ 200°C
最大PV	Max. PV	2.8 N/mm ² · m/s	摩擦系数 Friction coefficient	0.08 ~ 0.25
抗拉强度	Tensile strength	450 N/mm ²	导热系数 Thermal conductivity	60W (m·k) ⁻¹
屈服强度	Yield point	250 N/mm ²	热膨胀系数 Coef. of thermal expansion	15 × 10 ⁻⁶ k ⁻¹



DSB-9G铜基含固体润滑剂卷制轴承 Bronze With Graphite Wrapped Bearings

■ 基材特性 Material Features

与DSB-90具有相同生产工艺及使用场合，到在其菱形油穴内填充了以石墨为主的固体润滑剂，使产品在起始运用阶段及过程中能有更低的摩擦系数，在短时间断油的情况下仍能保持良好的工作状态。因此被广泛使用在工程机械、齿轮箱传动部件、汽机车离合器等高载中速部位。

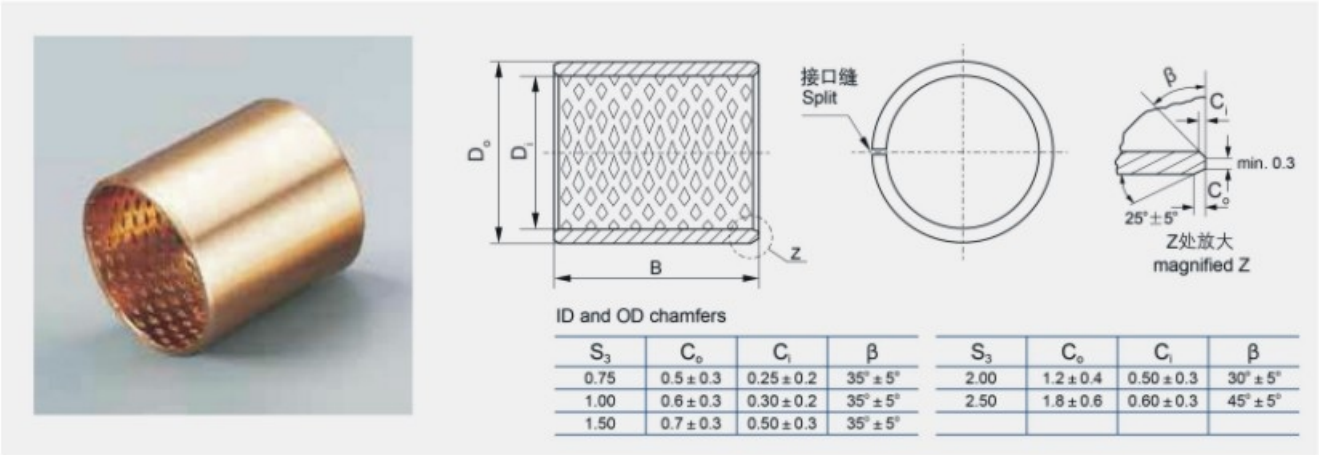
The same produce process and application as DSB-90 type material except overlay the solid lubricants into the diamond shaped lubrication indents on the bearing surface, which will offer good friction at the start and process works and keep good condition even no oil giving at short time. So can be used in construction machines, gears, automotive clutch parts etc.

■ 技术参数 Tech. Data

最大承载 Max. Load	静承载 Static	120 N/mm ²	硬度 Hardness	HB > 110
	动承载 Dynamic	40N/mm ²	延伸率 Elongation	40%
最高线速度(润滑)	Max. Speed (Lubrication)	2.5m/s	使用温度 Temp.	-100°C ~ 200°C
最大PV	Max. PV	2.8 N/mm ² · m/s	摩擦系数 Friction coefficient	0.05 ~ 0.25
抗拉强度	Tensile strength	450 N/mm ²	导热系数 Thermal conductivity	60W (m·k) ⁻¹
屈服强度	Yield point	250 N/mm ²	热膨胀系数 Coef. of thermal expansion	15 × 10 ⁻⁶ k ⁻¹

DSB-90 青铜卷制轴承标准公制尺寸

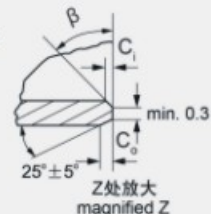
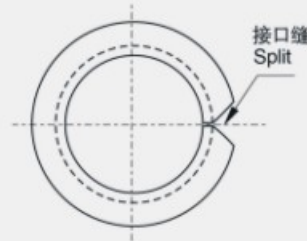
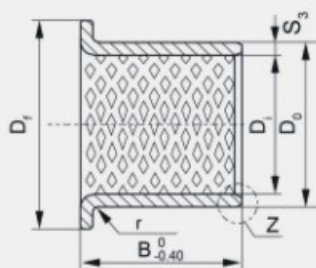
DSB-90 Bronze-Wrapped Bearings Standard Metric Size



单位unit:mm

内径 D _i	外径 D _o	B ⁰ _{-0.40}												
		10	15	20	25	30	35	40	50	60	70	80	90	100
10	12	1010	1015	1020										
12	14	1210	1215	1220										
14	16	1410	1415	1420	1425									
15	17	1510	1515	1520	1525									
16	18	1610	1615	1620	1625									
18	20	1810	1815	1820	1825									
20	23	2010	2015	2020	2025									
22	25	2210	2215	2220	2225	2230								
24	27		2415	2420	2425	2430								
25	28		2515	2520	2525	2530								
28	31		2815	2820	2825	2830								
30	34		3015	3020	3025	3030	3035	3040						
32	36		3215	3220	3225	3230	3235	3240						
35	39		3515	3520	3525	3530	3535	3540						
40	44			4020	4025	4030	4035	4040	4050					
45	50			4520	4525	4530	4535	4540	4550					
50	55			5020	5025	5030	5035	5040	5050	5060				
55	60			5520	5525	5530	5535	5540	5550	5560				
60	65				6025	6030	6035	6040	6050	6060	6070			
65	70					6530	6535	6540	6550	6560	6570			
70	75					7030	7035	7040	7050	7060	7070	7080		
75	80					7530	7535	7540	7550	7560	7570	7580		
80	85					8030	8035	8040	8050	8060	8070	8080		
85	90					8530	8535	8540	8550	8560	8570	8580	8590	
90	95					9030	9035	9040	9050	9060	9070	9080	9090	
95	100							9540	9550	9560	9570	9580	9590	95100

DSB-90F 青铜卷制翻边轴承标准公制尺寸 DSB-90F Bronze-Wrapped Flange Bearing Standard Metric 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

单位unit:mm

内径 D_1	外径 D_0	法兰外径 D_H	$B \begin{smallmatrix} 0 \\ -0.40 \end{smallmatrix}$										
			15	20	25	30	35	40	50	60	70	80	90
25	28	35	25150	25200	25250								
30	34	45		30200	30250	30300							
35	39	50		35200	35250	35300	35350						
40	44	55			40250	40300	40350	40400					
45	50	60				45300	45350	45400	45500				
50	55	65				50300	50350	50400	50500				
55	60	70				55300	55350	55400	55500				
60	65	75				60300	60350	60400	60500	60600			
65	70	80				65300	65350	65400	65500	65600			
70	75	85					70350	70400	70500	70600	70700		
75	80	90					75350	75400	75500	75600	75700		
80	85	100					80350	80400	80500	80600	80700	80800	
90	95	110							90500	90600	90700	90800	90900
100	105	120							100500	100600	100700	100800	100900
110	115	130							110500	110600	110700	110800	110900
120	125	140							120500	120600	120700	120800	120900
130	135	155								130600	130700	130800	130900
140	145	165								140600	140600	140800	140900
150	155	180								150600	150700	150800	150900
160	165	190								160600	160700	160800	160900
170	175	200								170600	170700	170800	170900
180	185	215								180600	180700	180800	180900
190	195	225								190600	190700	190800	190900
200	205	235								200600	200700	200800	200900
225	230	260								225600	225700	225800	225900
250	255	290								250600	250700	250800	250900
265	270	305								265600	265700	265800	265900
285	290	325								285600	285700	285800	285900
300	305	340								300600	300700	300800	300900

轴承选型与安装 Bearings Selection & Installation

轴承选型 Bearings Selection

DSB公司根据不同的工况条件设计了不同的轴承材料。一般来说，用户在使用和设计时应当根据轴承的使用温度、轴承的承载面压、线速度、耐磨性能要求、运动类型、安装情况、轴承成本等各方面因素综合考虑。

DSB have developed different types of bearings and various materials to suit a range of applications. The customer can select the material and type of bearing to suit their specific working environment, installation, load, speed, max and min temperatures, life, and cost.

轴承的使用部位 The use of Bearing Parts

1. 轴承的选型：用户在使用和设计时应当根据轴承的使用温度，轴承的承载面压，线速度，耐磨性能要求，运动类型，安装情况，轴承承载等各方面因素来综合考虑。

2. 轴承的使用部位：须经常保持润滑油供给的部位，汽车，OA机器，食品机械等无给油较合适的部位，摇摆运动，往复运动，起动停止频繁等油膜形成困难的部位，处于长期无法保养的环境下使用，致润滑油易劣化部位，因高温而润滑效果无法发挥处，杂质侵入引起油膜破断处，高处或危险的给油困难地方，在水中或介质中使用的部位。

In most applications, bearings should be a press fit into the housing. Bearings must always be fitted using a fitting mandrel. In the case of a relatively high interference, the housing must be chamfered to assist assembly. Lubricating the bearing OD is also recommended to assist the assembly procedure. For applications using metallic bearings, shrink fitting could also be considered. In most applications, FDB bearings should be a press fit into the housing. Bearings must always be fitted using a fitting mandrel. In the case of a relatively high interference, the housing must be chamfered to assist assembly. Lubricating the bearing OD is also recommended to assist the assembly procedure. For applications using metallic bearings, shrink fitting could also be considered.

轴承的装配 Bearings Installation

装配前应确保座孔内表面光洁无异物以免装配时划伤，同时要求座孔有导向倒角；装配时应采用芯轴慢慢压入，禁止直接敲打轴套以免产生变形；座孔设计时如需采用易变形材料如铝合金或座孔壁厚较薄时，请予以说明，以免压装时使座孔变形；为了使装配更简单且不会破坏耐磨层，轴的端面必须有倒角圆滑过渡，轴的材质建议为轴承钢，表面淬火处理HRC45以上，表面粗糙度为0.4-0.8，表面也可镀硬铬。有可能的话，请在轴表面涂上油脂以缩短轴套走合期。非卷制类厚壁轴承装配时建议使用液氮冷冻。

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P值 / V值 / PV值的概念 P value/V value/PV value Concept

P值：轴承所承载的最大负荷（W）与在轴承上的投影面积（ $\phi d \times L$ ）相除后即为面压P。

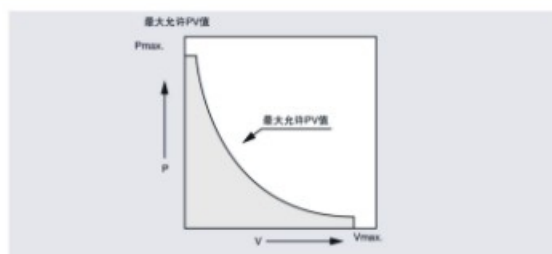
V值：速度V是对偶轴与轴承之间的相对速度。

PV值：轴承面压P与速度V的乘积为PV值。

P值、V值、PV值并不是各自独立的最大允许值，而是相互关联的设计参数。

设计中，请在图表表示的范围内选择参数。

最大允许PV值 < 最大允许面压：Pmax. × 最大允许速度：Vmax.



DSB

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