



Self-lubricating And Maintenance-free Sliding Bearings 自润滑和免维护滑动轴承

为所有工业提供自润滑优质解决方案
Provide self-lubricating quality
solutions for all industries



浙江双诺轴承科技股份有限公司
ZHEJIANG SHUANGNUO BEARING TECHNOLOGY CO., LTD

www.zjsn.cc

企业简介

Company Introduction



ABOUT SHUANGNUO BEARING TECHNOLOGY >

双诺轴承科技介绍

浙江双诺轴承科技股份有限公司是一家用离心铸造、连续铸造、金属型铸造等工艺专业生产各类自润滑铜合金产品的厂家，主要产品有按各国标准牌号生产的黄铜、铝青铜、锡青铜等各类产品，并在此基础上加工生产各类固体镶嵌自润滑轴承产品，同时采用烧结工艺生产双金属产品以及其他多种类型产品。公司成立近10年来，专注于研发和生产各类新型自润滑轴承。

在产品生产过程中，我公司一直坚持原材料自主浇铸生产，从源头开始保证产品的质量；在浇铸过程中全程监控，实施炉前、炉中以及炉后成品3次光谱仪检测以便确认产品材质成分；且定期委托国家检测机构对材料成分及产品机械性能进行检测，可以为有需要的客户提供权威检测报告；公司实行材料到成品加工一体化生产，拥有先进的数控机床，数控车床，加工中心等各类主要设备80余套，强大的生产能力保证第一时间为客户组织材料生产，缩短生产周期。

公司成立至今，一直秉承“中庸和谐，诚信为本”的经营理念，始终坚持以客户满意为宗旨，努力建立优秀的品牌，提供一流的产品和服务。致力于为客户提供专业的产品应用解决方案，根据客户的产品特点及应用特性，进行个性化量身设计和定制，选择并打造适合客户产品的自润滑轴承。经过多年的经验累积和发展，现已成为自润滑轴承行业内具有独特经营模式的公司，并已取得巨大成功，现已成为国内自润滑轴承行业的一枝新秀！

ZHEJIANG SNB BEARING TECHNOLOGY CO., LTD is a domestic centrifugal casting, continuous casting, metal mold casting process such as the professional production of various kinds of self-lubricating copper alloy products manufacturers, the main products are in accordance with the national standards of production of brass, tin bronze, aluminum bronze and other kinds of products, based on the processing and production of various kinds of solid inlaid self-lubricating bearing products, at the same time USES sintering process production double metal products and other various types of products. The company was established nearly 10 years, focusing on the development and production of all kinds of new self-lubricating bearings.

In the process of product production, our company always adhere to the independent casting production of raw materials, from the beginning to ensure the quality of products; In the casting process, the whole process of monitoring, the implementation of pre furnace, furnace and after the finished product 3 times of spectrometer detection in order to confirm the product material composition; And regularly entrust national testing institutions to test the material composition and mechanical properties of products, can provide authoritative testing reports for

Self-lubricating And Maintenance-free Sliding Bearings 自润滑和免维护滑动轴承

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FB090 青铜卷制轴套 Bronze Wrapped Bearing	63
FZ 钢球保持架 Steel Ball Retainer Parameters	70

customers in need; The company implements the integrated production of material to finished product processing, with more than 80 sets of advanced CNC machine tools, CNC lathes, machining centers and other kinds of main equipment, strong production capacity to ensure the first time for customers to organize material production, shorten the production cycle.

Since its establishment, the company has been adhering to the "mean of harmony, integrity-based" business philosophy, always adhere to customer satisfaction as the purpose, and strive to establish an excellent brand, to provide first-class products and services. Committed to providing customers with professional product application solutions, according to customer's product characteristics and application characteristics, personalized tailored design and customization, select and create self-lubricating bearings suitable for customer products. After years of experience accumulation and development, has become a self-lubricating bearing industry with a unique business model of the company, and has achieved great success, has become a new star in the domestic self-lubricating bearing industry!

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JDB 固体镶嵌自润滑轴承 Solid-lubricating Bearing

JDB650 P8	JFB650 P12	JFBB P14	JTW P16	JGB P17
				
JGBF P18	DIN9834 P19	JOST P20	GB71 P22	GB61 P23
				
JEGB/JEGBK P24	JOSG P25	JEFW P26	JPBW,JPBF P26	JFFB P27
				
JDBS P28	JESW P29	JTWP P30	JSOL P31	铜片 P32
				
JOCU-S P33	SCZA P34	SCZNP SCZAP P35	JDB-5 P36	JDB-600 P40
				

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SF-2 边界润滑轴套 Boundary Lubricating Bearing

SF-2	P51	SF-2Y	P51	SF-2WC	P54	SF-2SP	P54
							

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JF-800 双金属轴套 Bi-metal Bearing



JF-800F P62



FB090 青铜卷制轴套 Bronze Wrapped Bearing



FB08G P66 FB090F P69 FZ P70



JDB 固体镶嵌自润滑轴承 JDB Solid-lubricating Bearing



材料种类：金属基体 Material Kinds: Metal Basement

材料对应表 Base Material Interchange

材料代号 Material Codes	中国 China Brands GB1176-87	国际 Intenational ISO 1338	德国 Germany DIN	日本 Japan JIS	美国 America ASTM(UNS)	英国 England BS	法国 France NF	适用情况 Applicable conditions
JDB650 高力合金铜	ZCuZn25Al6 Fe3Mn3	GCuZn25Al6 Fe3Mn3	DIN1709 G-CuZn25Al5	H5102 CAC304	B30-92 C86300	HTB2		高载荷，低速，一般用 High-load, low speed Commonly used
JDB650 S1 高力合金铜	ZCuZn25Al6 Fe3Mn3	GCuZn25Al6 Fe3Mn3	DIN1709 G-CuZn25Al5	H5102 CAC304	B30-92 C86300	HTB2		超高载荷，低速，高承载用 Over high load, low speed, High load used
JDB650 S2 铸造锡青铜	ZCuSn5 Pb5Zn5	GCuPb5 Sn5Zn5	DIN1705 G-CuSn5ZnPb	H5111 BC6	B30-92 C83600	LG2	CuPb5 Sn5Zn5	中载荷，低速 Mid-load, low speed
JDB650 S3 铸造铝青铜	ZCuAl9Fe4 Ni4Mn2	GCuAl10 FeNi5	DIN17656 G-CuAl10Ni	H5114 AIBC3	B30-92 C95500	AB2	CuAl10 Fe5Ni5	中载荷，中速，一般用 Mid-load, mid-speed, Commonly used
JDB(HT250) 铸铁	GB5675-85 HT250			FC250	ASTM Class40			中载荷，低速 Mid-load, low speed

JDB 固体镶嵌自润滑轴承 JDB Solid-lubricating Bearing

自润滑轴承的基体材料

Selection of Matrix Materials for Self-lubricated Bearings

材料成份和性能 Material Composition and Properties							
Code	JDB650	JDB650 S1	JDB650 S2	JDB650 S3	JDB650 S4	JDB (HT250)	JDB (Gcr15)
材料牌号 Code	CuZn25Al6Fe3Mn3	CuZn25Al6Fe3Mn3	CuAl9Fe4Ni4Mn2	CuSn5Pb5Zn5	CuSn12	HT250	Gcr15
密度 Density	8.0	8.0	8.5	8.9	9.05	7.3	7.8
硬度 Hardness HB	>210	>250	>150	>70	>80	>190	HRC>58
抗拉强度 N/mm ² Tensile strength	>750	>800	>800	>200	>260	>250	>1500
伸长率 Elongation%	>12	>8	>15	>10	>8	>5	>15
热胀系数 Coefficient of linear expansion 10 ⁻⁵ /°C	1.9	1.9	1.9	1.8	1.8	1.0	1.1
温度 Limit Temp °C	-40~+300	-40~+150	-40~+400	-40~+400	-40~+400	-40~+400	-40~+400
最大动承载 Max.load N/mm ²	100	120	150	60	70	80	200
最大线速度 m/min Max.speed (Dry)	15	15	20	10	10	8	5
Max.PV最大PV N/mm ² *m/min	200	200	60	60	80	40	150
压缩永久变形量 300N/mm ²	<0.01	<0.005	<0.04	<0.05	<0.05	<0.015	<0.002

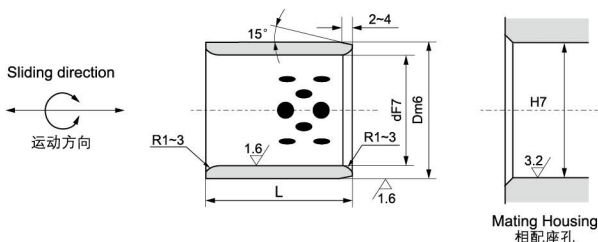
固体润滑剂 Solid Lubricant		
固体润滑剂 Lubricant	特性 Features	典型用途 Typical application
SL1 高纯石墨+添加剂 Graphite+add	很好的耐磨性和化学稳定性, 使用温度<400°C Excellent resistance against chemical attacks and low friction, Temp limit 400°C	应用于一般机械, 在大气中使用 Suit for general machines and under atmosphere
SL4 PTFE+添加剂 PTFE+add	极低的摩擦系数和很好的水润性, 使用温度<300°C Lowest in friction and good of water Lubrication,Temp limit 300°C	应用于水、海水润滑、如船舶, 水工弧 门, 水轮机, 制药饮料机械等。 Ship, hydraulic turbine, gas turbine etc.

JDB 固体镶嵌自润滑轴承
JDB Solid-lubricating Bearing



JDB 固体镶嵌自润滑轴承
JDB Solid-lubricating Bearing

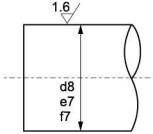
JDB650 固体镶嵌自润滑轴承 JDB650 Solid-lubricating Bearing



内径 F7 I.D. Ø d		外径 m6 O.D. Ø D		长度 L ^{-0.1} _{-0.3}								
				8	10	12	15	16	19	20	25	
6	+0.022 +0.010	10	+0.015 +0.006	061008	061010	061012						
8	+0.028 +0.013	12		081208	081210	081212	081215					
10		14	+0.018 +0.007	101408	101410	101412	101415			101420		
12		18		121808	121810	121812	121815	121816	121819	121820	121825	
13		19			131910	131912	131915			131920	131925	
14		20			142010	142012	142015			142020	142025	
15	+0.034 +0.016	21			152110	152112	152115	152116		152120	152125	
16		22			162210	162212	162215	162216	162219	162220	162225	
17		23	+0.021 +0.008				172315					
18		24			182410	182412	182415	182416		182420	182425	
19		26					192615			192620		
20		28			202810	202812	202815	202816	202819	202820	202825	
20		30			203010	203012	203015	203016		203020	203025	
22		32				223212	223215			223220	223225	
25	+0.041 +0.020	33				253312	253315	253316		253320	253325	
25		35				253512	253515	253516		253520	253525	
28		38								283820	283825	
30		40	+0.025 +0.009			303812	303815			303820	303825	
30		40				304012	304015			304020	304025	
32		42								324220		
35		44								354420	354425	
35		45								354520	354525	
38		48										
40		50					405015			405020	405025	
40		50					405515					
45		55	+0.030 +0.011									
45		56										
45		60										

JDB650 固体镶嵌自润滑轴承 JDB650 Solid-lubricating Bearing

Material	650 #+Graphite
材质	高力黄铜+石墨



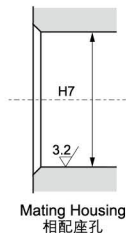
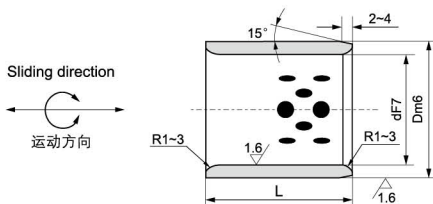
d8: High load 高负荷
e7: Light load 轻负荷
f7: High precision 高精度

Mating Shaft
相配轴

单位unit:mm

长度 L ^{-0.1} _{L-0.3}							压装后内孔	适用垫圈	内径
30	35	40	50	60	70	80	I.D. After Press-Fitting	JTW	I.D. Ø d
							+0.019 +0.007	—	6
							+0.025 +0.010	—	8
							+0.031 +0.013	10	10
121830								12	12
131930								13	13
142030								14	14
152130	152135	152140					+0.030 +0.012	15	15
162230	162235	162240						16	16
								18	17
182430	182435	182440						18	18
								20	19
202830	202835	202840	202850					20	20
203030	203035	203040	203050					20	20
								25	22
253330	253335	253340	253350	253360				25	25
253530	253535	253540	253550	253560				25	25
283830		283840					+0.037 +0.016	30	28
303830	303835	303840	303850	303860				30	30
304030	304035	304040	304050	304060				30	30
324230		324240						35	32
354430	354435	354440	354450	354460				35	35
354530	354535	354540	354550	354560				35	35
		384840						40	38
405030	405035	405040	405050	405060	405070	405080		40	40
405530	405535	405540	405550	405560				40	40
455530	455535	455540	455550	455560			+0.045 +0.020	45	45
455630	455635	455640	455650	455660				45	45
456030	456035	456040	456050	456060	456070	456080		45	45

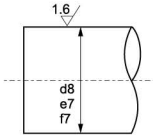
JDB650 固体镶嵌自润滑轴承 JDB650 Solid-lubricating Bearing



内径 F7 I.D. Ød		外径 m6 O.D. ØD		长度 L ^{+0.1} _{-0.3}							
				20	30	35	40	50	60	70	80
50	+0.050 +0.025	60	+0.030 +0.011	506020	506030	506035	506040	506050	506060	506070	506080
50		62		506230	506235	506240	506250	506260	506270	506280	
50		65		506530	506540	506550	506560	506570	506580		
55	70	557030		557035	557040	557050	557060	557070			
60	74	607430		607435	607440	607450	607460	607470	607480		
60	75	607530		607535	607540	607550	607560	607570	607580		
63	75						637560	637570	637580		
65	80				658040	658050	658060	658070	658080		
70	+0.060 +0.030	85		708530	708535	708540	708550	708560	708570	708580	
70		90					709050	709060	709070	709080	
75	90					759050	759060	759070	759080		
75	95					759550	759560	759570	759580		
80	+0.035 +0.013	96			809640	809650	809660	809670	809680		
80		100			8010040		8010060	8010070	8010080		
85	100					8510060		8510080			
90	+0.071 +0.036	110				9011050	9011060		9011080		
100		120				10012050	10012060	10012070	10012080		
110		130				11013050		11013070	11013080		
120	140						12014070	12014080			
125	145										
130	+0.040 +0.015	150							13015080		
140		160									
150		170							15017080		
160	+0.083 +0.043	180							16018080		
170		190									
180	200										
190	+0.096 +0.050	210									
200		230									

JDB650 固体镶嵌自润滑轴承 JDB650 Solid-lubricating Bearing

Material	650 #+Graphite
材质	高力黄铜+石墨



d8: High load 高负荷
e7: Light load 轻负荷
f7: High precision 高精度

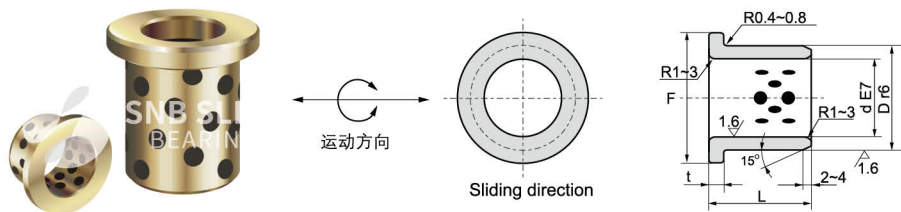
Mating Shaft
相配轴

单位unit:mm

长度 L ^{-0.1} _{-0.3}							压装后内孔 I.D. After Press-Fitting	适用垫圈 JTW	内径 I.D. Ø d
90	100	120	130	140	150	200			
							+0.045 +0.020	50	50
	5065100							55	55
							+0.055 +0.025	60	60
	6075100							65	63
								65	65
	7085100							70	70
								70	70
	7590100						+0.054 +0.024	75	75
	7595100							75	75
	8096100	8096120						80	80
	80100100	80100120		80100140				80	80
									85
9011090	90110100	90110120					+0.065 +0.030	90	90
10012090	100120100	100120120		100120140				100	100
	110130100	110130120							110
12014090	120140100	120140120		120140140			+0.064 +0.029	120	120
	125145100	125145120							125
	130150100		130150130						130
	140160100			140160140					140
	150170100				150170150		+0.076 +0.036		150
	160180100				160180150				160
	170190100				170190150			—	170
	180200100				180200150				180
	190210100				190210150		+0.088 +0.042		190
					200230150	200230200			200

JFB650 自润滑翻边轴套

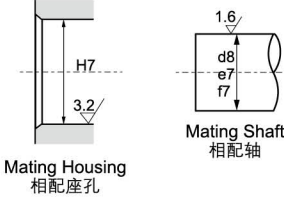
JFB650 Metric Flanged Bearing



内径 E7 I.D. Ø d	外径 r6 O.D. Ø D	翻边 Flange		长度 L ^{-0.1} _{-0.3}										
		Ø F	t	10	12	15	17	18	20	23	25			
6	^{+0.032} _{+0.020}	10	^{+0.028} _{+0.019}	16	2	0610	0612							
8	^{+0.040} _{+0.025}	12	20	22		0810	0812	0815						
10		14	^{+0.034} _{+0.023}	20	3	1010	1012	1015	1017		1020			
12		18	25			1210	1212	1215			1220		1225	
13		19		26	5	1310	1312	1315			1320		1325	
14	^{+0.050} _{+0.032}	20		27					1415		1420		1425	
15		21	^{+0.041} _{+0.028}	28	0	1510	1512	1515		1520		1525		
16		22		29			1612	1615		1618	1620	1623	1625	
18		24		32	-0.1			1815		1820		1825		
20		30		40				2015		2020		2025		
25	^{+0.061} _{+0.040}	35		45	7.5			2515		2520		2525		
30		40		50						3020		3025		
31.5		40	^{+0.050} _{+0.034}	50	10					3120				
35		45		60						3520		3525		
40	^{+0.075} _{+0.050}	50		65	10					4020		4025		
45		55		70										
50		60	^{+0.060} _{+0.041}	75	10									
55		65		80										
60		75		90	10									
63		75	^{+0.062} _{+0.043}	85										
65	^{+0.090} _{+0.060}	80		95	10									
70		85		105										
75		90	^{+0.073} _{+0.051}	110	10									
80		100		120										
90		110	^{+0.076} _{+0.054}	130	10									
100	^{+0.107} _{+0.072}	120		150										
120		140	^{+0.088} _{+0.063}	170	10									
130		150	^{+0.090} _{+0.065}	180										
140	^{+0.125} _{+0.085}	160		190	10									
150		170	^{+0.093} _{+0.068}	200										
160		180		210										

JFB650 自润滑翻边轴套 JFB650 Metric Flanged Bearing

Material	650 #+Graphite
材质	高力黄铜+石墨

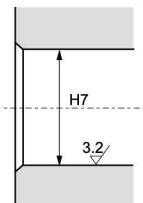
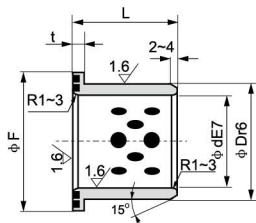
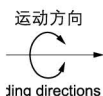


d8: High load 高负荷
e7: Light load 轻负荷
f7: High precision 高精度

单位unitmm

长度 L ^{0.1} / _{0.3}									压装后内孔 I.D. After Press- Fitting	内径 I.D. Ø d
30	35	40	50	60	67.5	80	100	120	+0.016 +0.004	6
									+0.021 +0.006	8
									+0.031 +0.013	10
1230										12
1330										13
										14
1530									+0.026 +0.008	15
1630	1635	1640								16
1830	1835	1840								18
2030	2035	2040							+0.037 +0.016	20
2530	2535	2540	2550						+0.032 +0.011	25
3030	3035	3040	3050							30
3130	3135	3140								31.5
3530	3535	3540	3550						+0.046 +0.021	35
4030	4035	4040	4050							40
4530	4535	4540	4550	4560					+0.040 +0.015	45
5030	5035	5040	5050	5060					+0.055 +0.025	50
		5540		5560						55
		6040	6050	6060		6080			+0.053 +0.023	60
					6367					63
				6560						65
			7050			7080			+0.046 +0.016	70
				7560						75
				8060		8080	80100			80
				9060		9080			+0.060 +0.025	90
						10080	100100			100
						12080	120100		+0.052 +0.017	120
						13080	130100		+0.068 +0.028	130
						14080	140100			140
							150100	150120	+0.065 +0.025	150
							160100	160120		160

JFBB 自润滑翻边轴套
JFBB Metric Flange Bearing

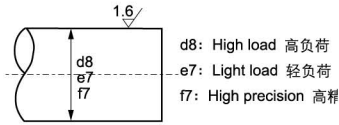


Mating Housing
相配座孔

内径 E7 I.D. Ø d		外径 r6 O.D. Ø D		翻边 Flange		长度 L ^{-0.1} _{-0.3}															
				Ø F	t	10	11	12	13	15	18	20	23	25							
6	+0.032 +0.020	10	+0.028 +0.019	20	3	0610	0611	0612													
8	+0.040 +0.025	12	+0.034 +0.023	25				0812	0813	0815											
10		14		25					1013	1018											
12	+0.050 +0.032	18	+0.041 +0.028	30			1211			1218	1223										
13		19		30				1313	1318	1323											
15		21		35				1513	1518	1523											
16		22		35		0			1613	1618	1623	1625									
18		24		40		0 -0.03				1818	1823										
20	+0.061 +0.040	28	+0.050 +0.034	45									2020	2025							
25		33		50			5						2520	2525							
30		38		55								3020	3025								
35		44		65							3520	3525									
40	+0.075 +0.050	50		70	7																
50		62	+0.060 +0.041	90	8																
60	+0.090 +0.060	74	+0.062 +0.043	110																	
70		85	+0.073 +0.051	120	10																
80		96		140																	

JFBB 自润滑翻边轴套
JFBB Metric Flange Bearing

Material	650 #+Graphite
材质	高力黄铜+石墨



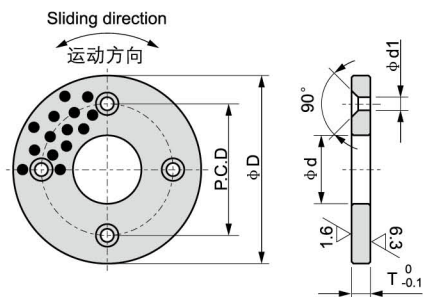
Mating Shaft
相配轴

单位unit:mm

长度 L $\begin{smallmatrix} -0.1 \\ -0.3 \end{smallmatrix}$												压装后内孔 I.D. After Press- Fitting	内径 d
27	35	37	38	47	48	50	58	60	68	80	90	+0.016 +0.004	6
												+0.021 +0.006	8
												+0.031 +0.013	10
												+0.031 +0.013	12
												+0.026 +0.008	13
											15		
											16		
											18		
												+0.037 +0.016	20
												+0.032 +0.011	25
	3035											+0.032 +0.011	30
	3535											+0.046 +0.021	35
4027		4037		4047								+0.046 +0.021	40
			5038		5048		5058					+0.040 +0.015	50
			6038		6048		6058		6068			+0.053 +0.023	60
						7050				7080		+0.046 +0.016	70
								8060			8090	+0.046 +0.016	80

JTW 标准止推垫片 JTW Oilless Thrust Washer

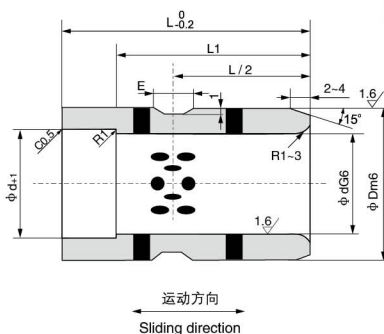
Material	650 #+Graphite
材质	高力青铜+石墨



单位unit:mm

型号规格 Standard No.	I.D. 内径 ϕd	O.D. 外径 ϕD	厚度 Thickness	螺丝孔 Screw Holes			
				P.C.D	数量 Number of Holes	规格 Flat Head Screw	d1
JTW-0603	6.2	25	3	15	2	M3	3.5
JTW-0803	8.2	28		18			
JTW-1003	10.2	30		20			
JTW-1203	12.2	32		28			
JTW-1203N	12.2	40		Without flat head screw hole 无定位孔			
JTW-1303	13.2	40		28	2	M3	3.5
JTW-1403	14.2	40		35			
JTW-1503	15.2	50		Without flat head screw hole 无定位孔			
JTW-1603	16.2	50		35	2	M3	3.5
JTW-1603N	16.2	50		Without flat head screw hole 无定位孔			
JTW-1803	18.2	55	5	35	2	M3	3.5
JTW-2005	20.2	55		40			
JTW-2505	25.2	60		45			
JTW-3005	30.2	60		50			
JTW-3505	35.2	70	7	60	2	M5	6
JTW-4007	40.2	70		70			
JTW-4507	45.2	80	8	70	4	M6	7
JTW-5008	50.3	80		75			
JTW-5508	55.3	90		85			
JTW-6008	60.3	90		90			
JTW-6508	65.3	100	10	95	4	M8	9
JTW-7010	70.3	100		100			
JTW-7510	75.3	110		110			
JTW-8010	80.3	120		120			
JTW-9010	90.5	140	10	140	4	M8	9
JTW-10010	100.5	160		160			
JTW-12010	120.5	175		175			

JGB 射出座导套 JGB Oilless Ejector Guide Bearings



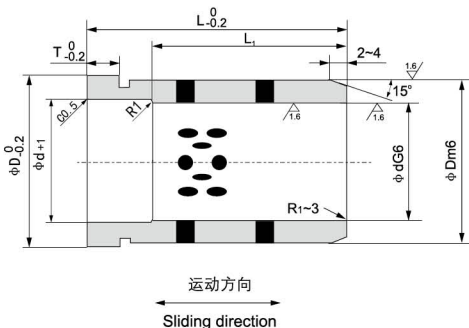
Material	650 #+Graphite
材质	高力黄铜+石墨

单位unit:mm

型号规格 Standard No.	d	L	d G6	D m6	L1	E	型号规格 Standard No.	d	L	d G6	D m6	L1	E
JGB-12×9		9			9		JGB-35×29	29				29	
JGB-12×14	12	14		18	14	4	JGB-35×39	34				34	
JGB-12×19	19	19			19		JGB-35×39	39				39	
JGB-12×24	24	24			24		JGB-35×49	35	49	35	48	+0.025 +0.009	49
JGB-16×14	14	14	+0.017 +0.006		14		JGB-35×59	59				59	
JGB-16×19	19	19			19		JGB-35×69	69				69	
JGB-16×24	24	24		25	24		JGB-35×79	79				70	
JGB-16×29	29	29			29		JGB-40×39	39				39	
JGB-16×34	34	34			34		JGB-40×49	49				49	
JGB-16×39	39	39			35		JGB-40×59	59	40	+0.025 +0.009	55	59	
JGB-20×14	14	14			14		JGB-40×69	69	40			69	
JGB-20×19	19	19		+0.021 +0.008	19		JGB-40×79	79				79	
JGB-20×24	24	24			24		JGB-40×89	89				80	
JGB-20×29	20	29	20		29		JGB-50×49	49				49	
JGB-20×34	34	34			34		JGB-50×59	59				59	
JGB-20×39	39	39			39		JGB-50×69	69	50		70	+0.030 +0.011	69
JGB-20×49	49	49			40	6	JGB-50×79	79	50			79	
JGB-25×24	24	24			24		JGB-50×89	89				89	
JGB-25×29	29	29			29		JGB-50×99	99				90	
JGB-25×34	25	34	25		34		JGB-60×59	59				59	10
JGB-25×39	39	39	+0.020 +0.007	35	39		JGB-60×69	69				69	
JGB-25×49	49	49			49		JGB-60×79	79	60		80	79	
JGB-25×59	59	59			50		JGB-60×89	89				89	
JGB-30×29	29	29			29		JGB-60×99	99				90	
JGB-30×34	34	34			34		JGB-60×109	109		+0.029 +0.010		90	
JGB-30×39	39	39			39		JGB-80×69	69				69	
JGB-30×49	30	49	30	42	49		JGB-80×79	79				79	
JGB-30×59	59	59			59		JGB-80×89	89	80		100	+0.035 +0.013	89
JGB-30×69	69	69			60		JGB-80×99	99	80			99	
JGB-30×79	79	79			60		JGB-80×109	109				100	
							JGB-80×119	119				100	

JGBF 自润滑翻边导向套 JGBF Oilless Ejector Guide Bearings

Material	650 #+Graphite
材质	高力黄铜+石墨

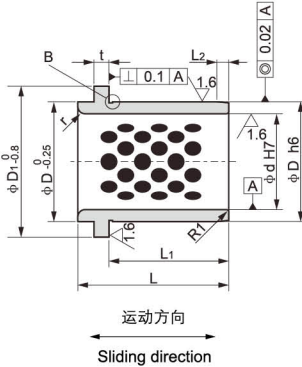


单位:unit:mm

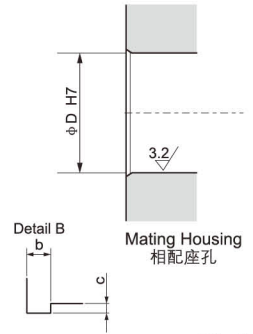
型号规格 Standard No.	d	L	d G6	D m6	D ₁	T	L ₁
JGBF-12×19	12	19	12	18	25	4	19
JGBF-12×24	24	24					
JGBF-12×29	29	29					
JGBF-12×34	34						34
JGBF-16×19	16	19	16	25	30	6	19
JGBF-16×24	24	24					
JGBF-16×29	29	29					
JGBF-16×34	34						30
JGBF-16×39	39						30
JGBF-16×49	49						30
JGBF-20×24	20	24	20	30	35		24
JGBF-20×29	29	29					
JGBF-20×34	34	34					
JGBF-20×39	39						39
JGBF-20×49	49						40
JGBF-20×59	59						40
JGBF-25×24	25	24	25	35	40	8	24
JGBF-25×29	29	29					
JGBF-25×34	34	34					
JGBF-25×39	39						39
JGBF-25×49	49						49
JGBF-25×59	59						50
JGBF-25×69	69						50
JGBF-30×29	30	29	30	42	47	10	29
JGBF-30×34	34	34					
JGBF-30×39	39	39					
JGBF-30×49	49						49
JGBF-30×59	59						59
JGBF-30×69	69						60
JGBF-30×79	79						60

型号规格 Standard No.	d	L	d G6	D m6	D ₁	T	L ₁
JGBF-35×39	35	39	35	48	54		39
JGBF-35×49	49	49					
JGBF-35×59	59	59					
JGBF-35×69	69						69
JGBF-35×79	79						70
JGBF-35×89	89						70
JGBF-35×99	99						70
JGBF-40×39	40	39	40	55	61	10	39
JGBF-40×49	49	49					
JGBF-40×59	59	59					
JGBF-40×69	69						69
JGBF-40×79	79						79
JGBF-40×89	89						80
JGBF-40×99	99						80
JGBF-40×109	109						80
JGBF-50×49	50	49	50	70	76	12	49
JGBF-50×59	59	59					
JGBF-50×69	69	69					
JGBF-50×79	79						79
JGBF-50×89	89						89
JGBF-50×99	99						90
JGBF-50×109	109						90
JGBF-50×119	119						90
JGBF-60×99	60	99	60	80	86	15	99
JGBF-60×109	109	109					
JGBF-60×119	119	119					
JGBF-60×129	129						110
JGBF-60×149	149						110

DIN9834 自润导套 DIN9834 Oilless Guide Bearing



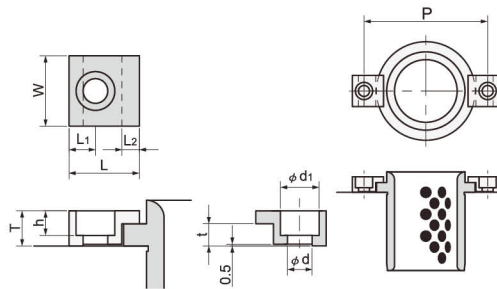
Material	650 # + Graphite
材质	高力黄铜 + 石墨



单位unitmm

型号规格 Standard No.	d H7		D h6		L	D ₁	L ₁	L ₂	t	r	bxc	P
DIN9834-025	25	^{+0.021} / ₀	32		40	40	30	3	6.3	3	0.6x0.3	58
DIN9834-032	32		40	⁰ / _{-0.016}	50	50	40	4				66
DIN9834-040	40	^{+0.025} / ₀	50		63	63	50	5				79
DIN9834-050	50		63	⁰ / _{-0.019}	71	71	56	6.3				89
DIN9834-063	63		80		80	90	63	8	10	6	1.0x0.4	123
DIN9834-080	80	^{+0.030} / ₀	100	⁰ / _{-0.022}	100	112	80	10				143
DIN9834-100	100		125		125	140	106	12.5	10	10	1.0x0.4	168
DIN9834-125	125	^{+0.040} / ₀	160	⁰ / _{-0.025}	160	180	132	16				203
DIN9834-160	160		200	⁰ / _{-0.029}	200	220	170	16				243

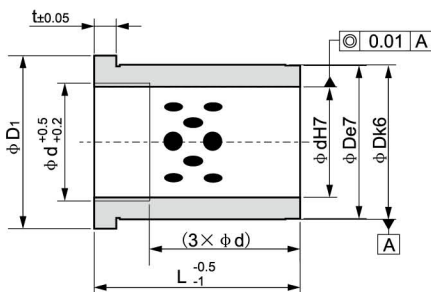
Clamp VDI-KL(DIN9834)



单位unitmm

型号规格 Standard No.	W	L	T	L ₁	L ₂	t	d	d ₁	h	适用的轴套内孔尺寸 Applicable bushes ID
VDI-KL-6	20	20	10	7.5	5	6.3	7	11	7	Ø25~Ø50
VDI-KL-10	32	32	16	11	10	10	11.5	17.5	11.5	Ø63~Ø160

JOST 自润滑翻边导向套 JOST Oilless Flanged Guide Bearing



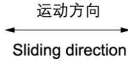
单位unit:mm

型号规格 Standard No.	d	L	t	D	公差 Tolerance		D ₁	d H7
					e7	k6		
JOST-9x12	12							
JOST-9x17	17							
JOST-9x22	9	22					9	
JOST-9x27	27							
JOST-9x36	36							
JOST-10x12	12		3	14			16	+0.015 0
JOST-10x17	17				-0.032 -0.050	+0.012 +0.001	10	
JOST-10x22	10	22						
JOST-10x27	27							
JOST-10x36	36							
JOST-12x17	17							
JOST-12x22	12	22		18			23	12
JOST-12x27	27							
JOST-12x36	36							
JOST-14x17	17							
JOST-14x22	22							
JOST-14x27	14	27					14	
JOST-14x36	36		6					+0.018 0
JOST-14x46	46							
JOST-14x56	56							
JOST-17x17	17			20	-0.040 -0.061	+0.015 +0.002	25	
JOST-17x22	22							
JOST-17x27	17	27					25	
JOST-17x36	36							
JOST-17x46	46							
JOST-17x56	56							

型号规格 Standard No.	d	L	t	D	公差 Tolerance		D ₁	d H7
					e7	k6		
JOST-16x17	17							
JOST-16x22	22							
JOST-16x27	16	27					27	16
JOST-16x36	36							
JOST-16x46	46							
JOST-16x56	56							
JOST-18x17	17							+0.018 0
JOST-18x22	22							
JOST-18x27	27							
JOST-18x36	18	36			-0.040 -0.061	+0.015 +0.002	18	
JOST-18x46	46		6					
JOST-18x56	56							
JOST-18x66	66							
JOST-20x17	17			26			31	
JOST-20x22	22							
JOST-20x27	27							
JOST-20x36	20	36					20	+0.021 0
JOST-20x46	46							
JOST-20x56	56							
JOST-20x66	66							

JOST 自润滑翻边导向套 JOST Oilless Flanged Guide Bearing

Material	650 #+Graphite
材质	高力黄铜+石墨



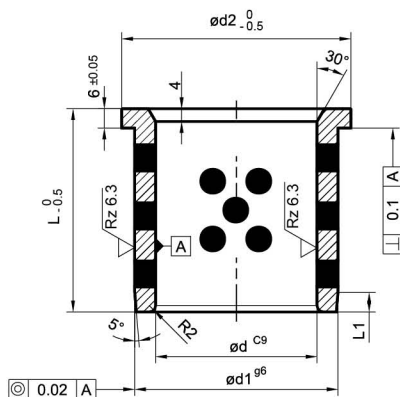
单位unit:mm

型号规格 Standard No.	d	L	t	D	公差 Tolerance		D ₁	d H7
					e7	k6		
JOST-22x22	22							
JOST-22x27	27							
JOST-22x36	36							
JOST-22x46	22	46					22	
JOST-22x56	22	56						
JOST-22x66	22	66						
JOST-22x76	22	76						
JOST-22x86	22	86						
JOST-24x17	17			30	-0.040 -0.061	+0.015 +0.002	35	
JOST-24x22	22							
JOST-24x27	27							
JOST-24x36	24	36					24	
JOST-24x46	24	46						+0.021 0
JOST-24x56	24	56						
JOST-24x66	24	66						
JOST-24x76	24	76						
JOST-24x86	24	86						
JOST-30x27	27		6					
JOST-30x36	30	36						
JOST-30x46	30	46						
JOST-30x56	30	56						
JOST-30x66	30	66					30	
JOST-30x76	30	76						
JOST-30x86	30	86						
JOST-30x96	30	96						
JOST-30x116	30	116						
JOST-32x27	27			42	-0.050 -0.075	+0.018 +0.002	47	
JOST-32x36	32	36						
JOST-32x46	32	46						
JOST-32x56	32	56						
JOST-32x66	32	66					32	+0.025 0
JOST-32x76	32	76						
JOST-32x86	32	86						
JOST-32x96	32	96						
JOST-32x116	32	116						

型号规格 Standard No.	d	L	t	D	公差 Tolerance		D ₁	d H7
					e7	k6		
JOST-40x56	40	56						
JOST-40x66	40	66						
JOST-40x76	40	76						
JOST-40x86	40	86						
JOST-40x96	40	96						40
JOST-40x116	40	116						
JOST-40x136	40	136						
JOST-40x156	40	156						
JOST-42x56	42	56		54			60	
JOST-42x66	42	66						
JOST-42x76	42	76						
JOST-42x86	42	86	10					+0.025 0
JOST-42x96	42	96					42	
JOST-42x116	42	116			-0.060 -0.090	+0.021 +0.002		
JOST-42x136	42	136						
JOST-42x156	42	156						
JOST-50x76	50	76						
JOST-50x86	50	86						
JOST-50x96	50	96						
JOST-50x116	50	116		66			72	50
JOST-50x136	50	136						
JOST-50x156	50	156						
JOST-50x196	50	196						
JOST-60x96	60	96						
JOST-60x116	60	116						
JOST-60x136	60	136	20	80			86	+0.030 0
JOST-60x156	60	156						
JOST-60x196	60	196						

GB71 日系汽车模具标准导套
GB71 NAAMS Standard Guide Bearing

Material	650 #+Graphite
材质	高力黄铜+石墨



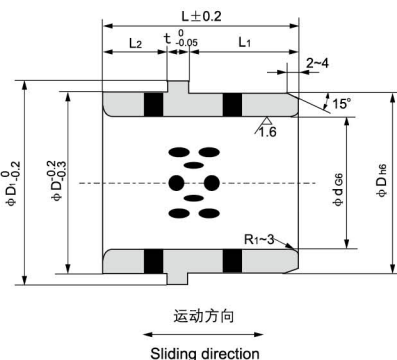
单位unit:mm

产品代号 Standard No.	NAAMS Code	d	d1	d2	L	L1
GB71 2540	G712540	25	32	40	40	4
GB71 3250	G713250	32	40	50	50	4
GB71 4055	G714055	40	50	63	55	5
GB71 5063	G715063	50	63	71	63	6
GB71 6375	G716375	63	80	90	75	8
GB71 8090	G718090	80	100	112	90	10
GB71 100115	G711011	100	125	140	115	12
GB71 125138	G711213	125	160	180	138	12

JEGB / JEGBK 塑胶模射出座导套 JEGB / JEGBK Oilless Ejector Guide Bearing



Material	650 #+Graphite
材质	高力黄铜+石墨

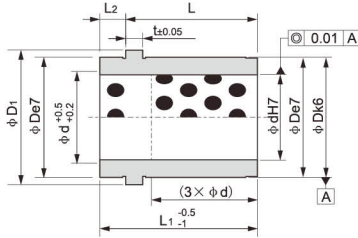


单位unit:mm

型号规格 Standard No.	d	L	d G6	D h6	D ₁	L ₁	L ₂	t
JEGB-16×26	16	26				12		
JEGB-16×28	16	28	+0.017 +0.006	25	30	14		
JEGB-16×33	16	33				19		
JEGB-16×38	16	38				24		
JEGB-20×26	20	26		0 -0.013		12		
JEGB-20×28	20	28			35	14		10
JEGB-20×33	20	33				19		
JEGB-20×38	20	38				24		
JEGB-25×26	25	26	+0.020 +0.007			12		
JEGB-25×28	25	28			40	14		
JEGB-25×33	25	33		35		19		4
JEGB-25×38	25	38				24		
JEGB-30×33	30	33		0 -0.016		14		
JEGB-30×38	30	38			45	19		
JEGB-30×46	30	43				24		15
JEGB-35×38	35	38		46		19		
JEGB-35×43	35	43			50	24		
JEGB-35×48	35	48	+0.025 +0.009			29		
JEGB-40×48	40	48	40	52		24		
JEGB-40×53	40	53		0 -0.019		29		20
JEGB-50×48	50	48		62	67	24		
JEGB-50×53	50	53				29		

型号规格 Standard No.	d	L	d G6	D h6	D ₁	L ₁	L ₂	t
JEGBK-25×33	25	33	25	35	40	19	6	
JEGBK-25×38	25	38				24	6	
JEGBK-30×48	30	48	+0.020 +0.006	40	45	29	11	
JEGBK-30×47	30	47	30			24	15	
JEGBK-30×52	30	52		42	47	29	15	
JEGBK-35×63	35	63	35	45	50	39	16	
JEGBK-40×60	40	60				32	20	
JEGBK-40×70	40	70		50	55	42	20	
JEGBK-40×78	40	78	40			49	21	8
JEGBK-40×57	40	57				24	25	
JEGBK-40×67	40	67	+0.017 +0.006	55	60	29	30	
JEGBK-45×88	45	88	45			59	21	
JEGBK-45×95	45	98				69	21	
JEGBK-50×67	50	67	50	62	67	29	30	
JEGBK-50×87	50	87				39	40	
JEGBK-60×67	60	67	60	74	82	29	30	
JEGBK-60×87	60	87	+0.017 +0.006			39	40	

JOSG 射出头自润导套 JOSG Ejector Guide Bearing



Material	650 #+Graphite
材质	高力黄铜+石墨

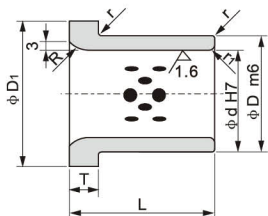
运动方向
Sliding direction

单位unit:mm

型号规格 Standard No.	d	L	L ₁	L ₂	t	D	公差 Tolerance		D ₁	L ₁
							e7	k6		
JOSG-9×15	12	15								
JOSG-9×20	17	20								
JOSG-9×25	9	22	25					9		
JOSG-9×30	27	30								
JOSG-9×39	36	39								
JOSG-10×15	12	15	3	3	14		-0.032 -0.050	+0.012 +0.001	16	+0.015 0
JOSG-10×20	17	20							10	
JOSG-10×25	22	25								
JOSG-10×30	27	30								
JOSG-10×39	36	39								
JOSG-14×26	17	26								
JOSG-14×31	22	31								
JOSG-14×36	27	36								
JOSG-14×45	14	36	45						14	
JOSG-14×55	46	55								
JOSG-14×65	56	65								
JOSG-15×26	17	26			20				25	
JOSG-15×31	22	31								
JOSG-15×36	27	36								
JOSG-15×45	15	36	45						15	+0.018 0
JOSG-15×55	46	55								
JOSG-15×65	56	65								
JOSG-18×26	17	26								
JOSG-18×31	22	31								
JOSG-18×36	27	36								
JOSG-18×45	18	36	45						18	
JOSG-18×55	46	55								
JOSG-18×65	56	65	9	6			-0.040 -0.061	+0.015 +0.002		
JOSG-18×75	66	75			26				31	
JOSG-20×26	17	26								
JOSG-20×31	22	31								
JOSG-20×36	27	36								
JOSG-20×45	20	36	45						20	
JOSG-20×55	46	55								
JOSG-20×65	56	65								
JOSG-20×75	66	75								
JOSG-22×26	17	26								
JOSG-22×31	22	31								
JOSG-22×36	27	36								
JOSG-22×45	36	45								
JOSG-22×55	22	46	55		30				35	+0.021 0
JOSG-22×65	56	65								
JOSG-22×75	66	75								
JOSG-22×85	76	85								
JOSG-22×95	86	95								

型号规格 Standard No.	d	L	L ₁	L ₂	t	D	公差 Tolerance		D ₁	L ₁
							e7	k6		
JOSG-24×26	17	26								
JOSG-24×31	22	31								
JOSG-24×36	27	36								
JOSG-24×45	36	45								
JOSG-24×55	24	46	55			30	-0.040 -0.061	+0.015 +0.002	35	24
JOSG-24×65	56	65								
JOSG-24×75	66	75								
JOSG-24×85	76	85								
JOSG-24×95	86	95								+0.021 0
JOSG-30×36	27	36								
JOSG-30×45	36	45								
JOSG-30×55	46	55								
JOSG-30×65	56	65								
JOSG-30×75	30	66	75	9	6					30
JOSG-30×85	76	85								
JOSG-30×95	86	95								
JOSG-30×105	96	105								
JOSG-30×125	116	125								
JOSG-32×36	27	36			42	-0.050 -0.075	+0.018 +0.002	47		
JOSG-32×45	36	45								
JOSG-32×55	46	55								
JOSG-32×65	56	65								
JOSG-32×75	32	66	75							32
JOSG-32×85	76	85								
JOSG-32×95	86	95								
JOSG-32×105	96	105								
JOSG-32×125	116	125								
JOSG-40×68	56	68								
JOSG-40×78	66	78								
JOSG-40×88	76	88								
JOSG-40×98	86	98								+0.025 0
JOSG-40×108	96	108								
JOSG-40×128	116	128								
JOSG-40×148	136	148								
JOSG-40×168	156	168								
JOSG-42×68	56	68			12	10	-0.060 -0.090	+0.021 +0.002	60	
JOSG-42×78	66	78								
JOSG-42×88	76	88								
JOSG-42×98	86	98								
JOSG-42×108	96	108			42					42
JOSG-42×128	116	128								
JOSG-42×148	136	148								
JOSG-42×168	156	168								

JEFW 自润导套 JEFW Guide Bearing



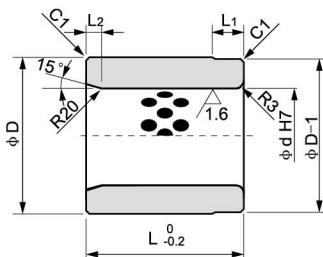
Material	650 #+Graphite
材质	高力黄铜+石墨



单位unit:mm

型号规格 Standard No.	d	L	d	h7	D	m_6	D_1	T	R	r1	r_1
JEFW-25×40	25	40	25	+0.021	35	+0.025	45	7	10	1	2
JEFW-30×50	30	50	30	0	40	+0.009	50				
JEFW-40×70	40	70	40	+0.025	55	+0.030 +0.011	65	20	2		
JEFW-50×80	50	80	50	0	65		75				
JEFW-60×80	60	80	60	+0.030 0	75	85	2				
JEFW-65×80	65	80	65		80	90					
JEFW-65×120	65	120	65	80	90	110					
JEFW-80×100	80	100	80	100	110						
JEFW-80×140	80	140	80	100	+0.035					110	
JEFW-100×100	100	100	100	+0.035	120					+0.013	
JEFW-100×140	100	140	100	0	120					130	

JPBW,JPBF 自润滑轴套 JPBW,JPBF Oilless Wear Plate



JPBF	FC250 #+Graphite 铸铁+石墨
JPBW	650 #+Graphite 高力黄铜+石墨

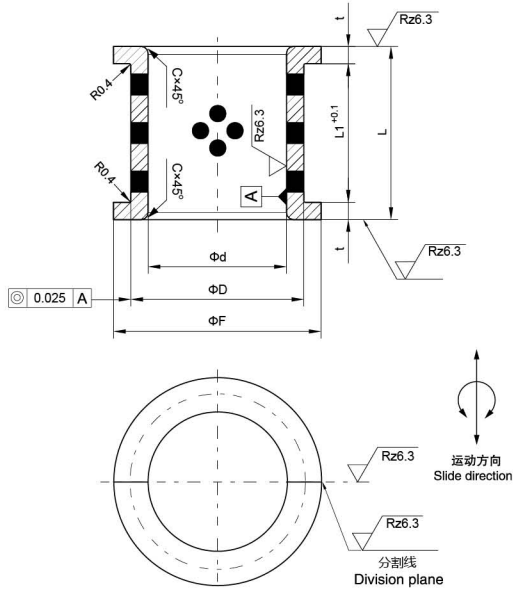


单位unit:mm

型号规格 Standard No.	d	d H7	D	公差 Tolerance	L	L_1	L_2
JPBW JPBF	25	25	40	± 0.008	40	10	5
	30	30	50		50	50	
	35	35	60		55	15	
	40	40	60	± 0.0095	60	10	
	50	50	70		75	15	
	60	60	80	± 0.011	90	20	10
	80	80	100		120	25	
	100	100	120		150	25	
	120	120	140	± 0.0125	180	25	

JFFB 自润导套
JFFB Guide Bearing

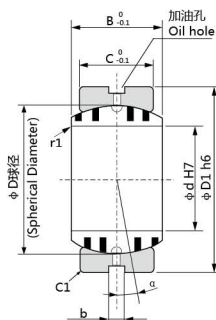
Material	650 #+Graphite
材质	高力黄铜+石墨



单位unit:mm

产品代号 Standard No.	内径 H7 I.D. Φd	外径 O.D. ΦD	ΦF d_{11}	L h_{12}	$L_1^{+0.1}$ 0	t	C
JFFB-030	30	38	48	34	22	6	1
JFFB-035	35	45	55	45	32	6.5	
JFFB-040	40	50	60	50	35	7.5	
JFFB-045	45	55	65	55	40	7.5	
JFFB-050	50	60	70	60	45	7.5	
JFFB-060	60	70	80	70	50	10	
JFFB-070	70	85	95	80	60	10	
JFFB-080	80	95	110	95	70	12.5	
JFFB-090	90	105	120	105	80	12.5	2
JFFB-100	100	115	130	115	90	12.5	
JFFB-110	110	125	140	125	100	12.5	
JFFB-120	120	135	150	140	110	15	
JFFB-140	140	160	175	160	120	20	
JFFB-160	160	180	200	180	140	20	

JDBS 自润滑板
JDBS Oilless Wear Plate



Material	650 # + Graphite
材质	高力黄铜 + 石墨

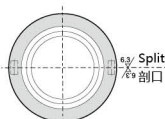
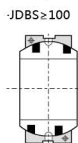
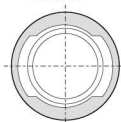
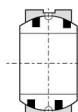
Spherical bushing assembly

关节轴承的装配

JDBS 015~090

Fixing direction

安装方向

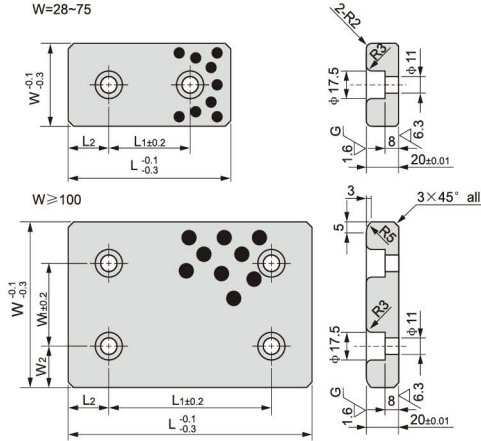


单位:mm

型号规格 Standard No.	d	H7	D1	h6	B	C	D	b	调整角度 Alignment Angle α°	径向承载 Allowable Radial Load (kN)	径向承载 Allowable Thrust Load (kN)
JDBS-015	15	$^{+0.018}_0$	26	$^0_{-0.013}$	12	9	22	4	8	6.5	0.5
JDBS-020	20	$^{+0.021}_0$	32	$^0_{-0.016}$	16	14	28		4	12.6	1.4
JDBS-025	25	$^{+0.021}_0$	42	$^0_{-0.016}$	21	18	36		5	21.8	2.5
JDBS-030	30	$^{+0.025}_0$	50	$^0_{-0.019}$	27	23	44		6	32.0	3.5
JDBS-035	35	$^{+0.025}_0$	55	$^0_{-0.019}$	30	26	49		5	43.7	4.8
JDBS-040	40	$^{+0.025}_0$	62	$^0_{-0.019}$	33	28	55		6	54.7	5.7
JDBS-045	45	$^{+0.025}_0$	72	$^0_{-0.019}$	36	31	62		5	69.7	7.2
JDBS-050	50	$^{+0.030}_0$	80	$^0_{-0.022}$	42	36	70		5	92.4	10
JDBS-060	60	$^{+0.030}_0$	100	$^0_{-0.022}$	53	45	90		6	143	16
JDBS-070	70	$^{+0.030}_0$	110	$^0_{-0.022}$	58	50	99		5	181	20
JDBS-080	80	$^{+0.035}_0$	130	$^0_{-0.025}$	70	60	115	6	254	30	
JDBS-090	90	$^{+0.035}_0$	140	$^0_{-0.025}$	76	65	125	6	313	36	
JDBS-100	100	$^{+0.035}_0$	160	$^0_{-0.025}$	88	75	145	6	6	544	64
JDBS-110	110	$^{+0.035}_0$	170	$^0_{-0.025}$	93	80	155		5	642	73
JDBS-120	120	$^{+0.040}_0$	190	$^0_{-0.029}$	105	90	17		6	797	94
JDBS-130	130	$^{+0.040}_0$	200	$^0_{-0.029}$	110	95	180		5	880	105
JDBS-140	140	$^{+0.040}_0$	210	$^0_{-0.029}$	90	70	180		7	668	56
JDBS-150	150	$^{+0.040}_0$	220	$^0_{-0.029}$	120	105	200		5	1135	129
JDBS-160	160	$^{+0.046}_0$	230	$^0_{-0.032}$	105	80	200		8	891	73
JDBS-180	180	$^{+0.046}_0$	260	$^0_{-0.032}$	105	80	225		6	1002	74
JDBS-200	200	$^{+0.046}_0$	290	$^0_{-0.032}$	130	100	250		7	1434	117
JDBS-220	220	$^{+0.046}_0$	320	$^0_{-0.036}$	135	100	275		8	1577	118
JDBS-240	240	$^{+0.052}_0$	340	$^0_{-0.036}$	140	100	300	9	8	1720	118
JDBS-260	260	$^{+0.052}_0$	370	$^0_{-0.036}$	150	110	325		7	2072	143
JDBS-280	280	$^{+0.052}_0$	400	$^0_{-0.040}$	155	120	350		6	2455	172
JDBS-300	300	$^{+0.052}_0$	430	$^0_{-0.040}$	165	120	375		7	2630	

JESW 自润滑板
JESW Oilless Wear Plate

Material	650 #+Graphite
材质	高力黄铜+石墨



单位unit:mm

型号规格 Standard No.	W	L	W ₁	W ₂	L ₁	L ₂
JESW-28×75		75			45	15
JESW-28×100	28	100			50	25
JESW-28×150		150			100	
JESW-38×75		75			45	15
JESW-38×100	38	100			50	25
JESW-38×150		150			100	
JESW-48×75		75			45	15
JESW-48×100		100			50	
JESW-48×125	48	125			75	25
JESW-48×150		150	-	-	100	
JESW-48×200		200			150	
JESW-58×75		75			45	15
JESW-58×100	58	100			50	
JESW-58×150		150			100	25
JESW-75×75		75			25	
JESW-75×100		100			50	25
JESW-75×125	75	125			75	
JESW-75×150		150			100	
JESW-75×200		200			150	

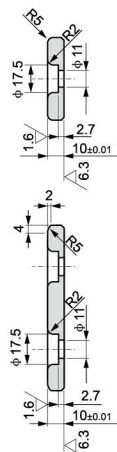
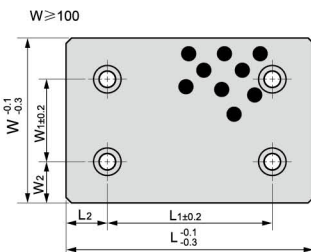
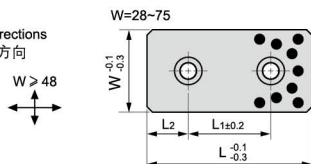
型号规格 Standard No.	W	L	W ₁	W ₂	L ₁	L ₂
JESW-100×100		100			50	
JESW-100×125		125			75	
JESW-100×150		150		25	100	25
JESW-100×200		200			150	
JESW-100×250		250			200	
JESW-100×300		300			200	50
JESW-125×125		125		50	75	
JESW-125×150		150			100	
JESW-125×200		200		37.5	150	25
JESW-125×250		250			200	
JESW-125×300		300			200	50
JESW-125×350		350			200	75
JESW-150×150		150			100	
JESW-150×200	150	200	100	25	150	25
JESW-150×250		250			200	

JTWP 自润滑板
JTWP Oilless Wear Plate



Sliding directions
运动方向

$W=28 \cdot 38$ $W > 48$



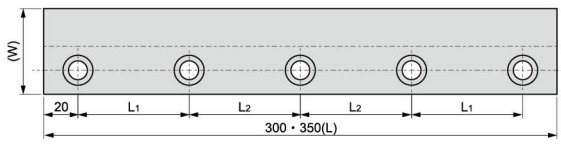
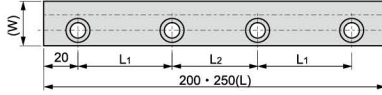
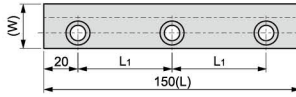
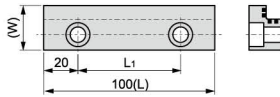
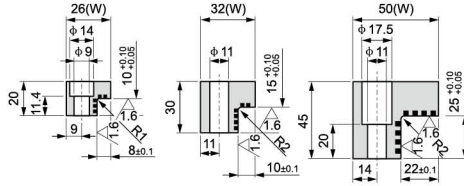
单位unit:mm

型号规格 Standard No.	W	L	W ₁	W ₂	L ₁	L ₂
JTWP-28×75	28	75			45	15
JTWP-28×100		100			50	
JTWP-28×125		125			75	25
JTWP-28×150		150			100	
JTWP-38×75	38	75			45	15
JTWP-38×100		100			50	
JTWP-38×125		125			75	25
JTWP-38×150		150			100	
JTWP-48×75	48	75			45	15
JTWP-48×100		100			50	
JTWP-48×125		125			75	25
JTWP-48×150		150			100	
JTWP-48×200		200			150	
JTWP-58×75		58	75			45
JTWP-58×100	100				50	25
JTWP-58×150	150				100	

型号规格 Standard No.	W	L	W ₁	W ₂	L ₁	L ₂
JTWP-75×75	75	75			25	
JTWP-75×100		100			50	
JTWP-75×125		125	-	-	75	
JTWP-75×150		150			100	
JTWP-75×200	200			150		
JTWP-100×100	100	100			50	
JTWP-100×125		125			75	
JTWP-100×150		150		25	100	25
JTWP-100×200		200			150	
JTWP-100×250	250		50		200	
JTWP-125×150	150	150			100	
JTWP-125×200		200		37.5	150	
JTWP-125×250		250			200	
JTWP-150×150		150		100	25	100
JTWP-150×200	200				150	

JSOL 自润滑板
JSOL Oilless Wear Plate

Material	650 # + Graphite
材质	高力黄铜 + 石墨



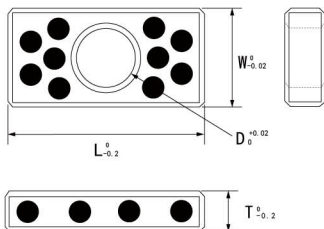
Sliding directions
运动方向

单位unit:mm

型号规格 Standard No.	W	L	螺栓孔位置 Bolt Position		螺栓孔 Mounting Bolt	
			L1	L1	尺寸 Size	数量 Quantity
JSOL-26 × 100	26	100	60	-	M8	2
JSOL-26 × 150		150	55	-		3
JSOL-26 × 200		200	55	50		4
JSOL-32 × 100	32	100	60	-	M10	2
JSOL-32 × 150		150	55	-		3
JSOL-32 × 200		200	55	50		4
JSOL-32 × 250	250	70	70			
JSOL-50 × 200	50	200	55	50	M10	
JSOL-50 × 250		250	70	70		
JSOL-50 × 300		300	65	65		
JSOL-50 × 350		350	80	75		5

铜片
Copper

Material	650 #+ Graphite
材质	高力黄铜+石墨

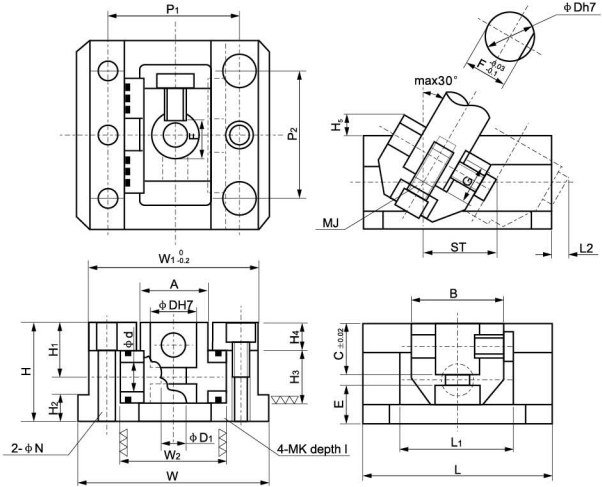


技术要求:
1、四周倒角 C1, 中心孔倒角 C1.

L	W	T	D
30	16	7	10
30	20	6	68
35	20	6.5	10
36	20	7	12
40	20	6.5	10
40	24	6.5	12
40	20	8	12
40	22	8	14
45	24	7.5	12
45	26	7	13
45	26	7.5	14
50	22	9	14
55	26	10	16
55	30	7.5	15
60	30	11	18

JOCU-S 自润滑模架 JOCU-S Self-lubricating die holder

Material	650 #+ Graphite
材质	高力黄铜+石墨



单位unitmm

产品代号 Standard No.	ΦD	Φd	ΦD ₁	A	B	C	E	F	G	MJ	H	H ₁	H ₂	H ₃	H ₄
JOCU-8	8	7	4.5	11	20	8	10	7	8	M4	22	12.5	5	11	7
JOCU-10	10	7	4.5	15	25	10	12.5	9	9	M5	27	15.5	5	15	8
JOCU-12	12	10	7	17	25	12	15	11	10	M6	32	18	7	16	10
JOCU-16	16	12	9	22	30	16	15	14.5	12	M8	36	20	8	20	10
JOCU-20	20	14	11	26	40	20	16	18	16	M10	42	23	11	22	12
JOCU-25	25	16	14	32	45	25	17	22.5	20	M12	50	28	15	26	15
JOCU-30	30	18	14	38	50	30	17	27	25	M12	55	30	15	30	15
JOCU-35	35	20	14	45	60	35	18	32	30	M12	62	35	15	34	18
JOCU-40	40	25	18	55	70	40	19	36	35	M16	70	40	15	44	18
JOCU-45	45	30	18	60	80	45	24	40	40	M16	80	45	15	50	20

产品代号 Standard No.	H ₅	L	L ₁	L ₂	W	W ₁	W ₂	P ₁	P ₂	MK	l	ΦN	ST
JOCU-8	10.5	32	20	3.6	33	30	19	24	20	M3	9.5	3	10
JOCU-10	11.3	45	25	4.5	45	40	25	32	30	M4	14	4	18
JOCU-12	4	50	30	8	57	51	31	39	35	M6	14	6	20
JOCU-16	5	65	40	8	65	58	38	46	40	M6	16	6	25
JOCU-20	8	80	50	8	80	72	44	56	55	M8	19	8	30
JOCU-25	8	90	55	12	93	85	52	66	65	M10	22	10	35
JOCU-30	9	100	60	12	101	93	60	74	70	M10	25	10	40
JOCU-35	10	120	75	8	120	110	70	85	80	M12	27	10	45
JOCU-40	12	135	85	8	130	120	80	95	90	M12	30	10	50
JOCU-45	14	150	95	10	140	130	90	105	110	M12	35	10	55

SCZA 自润滑式活型芯组件 SCZA Self-lubricating Movable Core Assembly



RoHS10

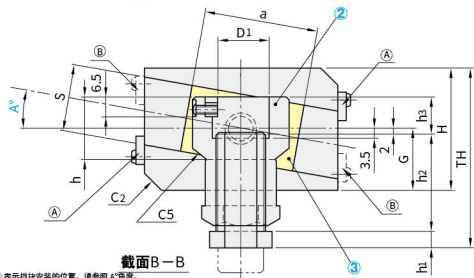
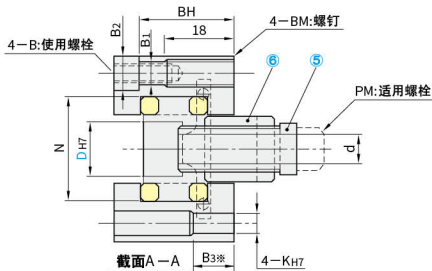
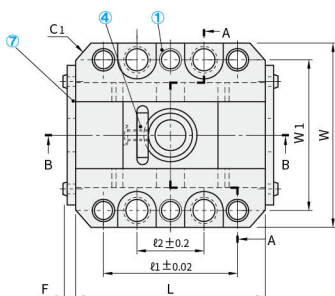
■ 自润滑活型芯组件的特点

- 在倾斜顶出有凹凸形状的型芯（活型芯）时，可使斜导杆顺滑运动。
- 因斜导杆固定座可在 θ 范围内活动，通过自动调整重心可以减少导轨和滑板的磨损、卡伤。

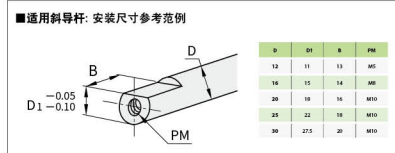
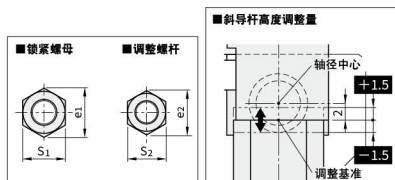
Item	构成零件	Parts Name	□材质	个数
①	导滑座	Slide Base	S55C	2
②	斜导杆固定座	Inclined Pin Holder	S55C	1
③	自润滑板	Slide Plate	*CAC304+ 固体润滑剂	2
④	平键	Key	S45C	1
⑤	调整螺杆	Adjust Rod	S45C	1
⑥	锁紧螺母	Lock Nut	S45C	1
⑦	挡块	Stopper	S5400	2

*4 级高强度黄铜铸件 (旧 JIS 标准: HbS C4)

SCZA



④ 未注: 表示挡块安装的位置, 请参照 A 图面。
⑤ 可根据成形产品的凹凸形状来选择滑板的安装角度。
⑥ D20、25、30 的 B 尺寸为规格变更后的尺寸, 规格变更详情

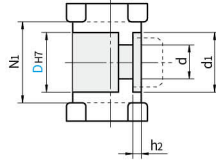
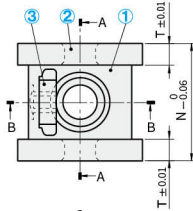


① 导滑座		② 斜导杆固定座					③ 自润滑板					型号			自润滑板 安装角度 A°				
W	L	H	C1	C2	D1	d	h	h1	h2	h3	N	S	a	TH		G	F	Type	D
56	55	35	5	-	11	5.5	16	6	33	10	30	20	35	58.5	17.5	4.65	SCZA	12	0 1 2 3 4 5 6 7 8 9 10
60	65	36	6	-	15	9	18	6	33	11	33	20	40	59	18	4.65		16	
68	70	43	6	5	18	11	22	6	36	13	38	24	40	65.5	21.5	4.65		20	
75	80	45	6	5	22	11	26	6	39	15	45	26	45	69.5	22.5	4.65		25	
81	95	54	6	5	27.5	11	30	6	41	17	51	30	55	76	27	4.65		30	

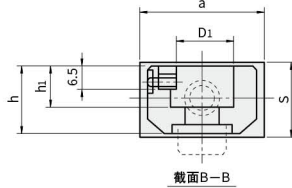
型号		安装孔尺寸						⑥ 锁紧螺母		⑤ 调整螺杆		挡块安装位置				
Type	D	e1	e2	W1	B1	B2	B3	BM	BH	K	S1	e1	S2	e2	(A)	(B)
SCZA	12	42	21	45	6.6	11	15	M8	28.5	6	17	19.6	12	13.9	0°~10°	-
	16	46	25	48	6.6	11		M8	29.5	6	21	24.2	16	18.5	0°~10°	-
	20	50	25	55	8.6	13.5	20	M10	34.5	8	24	27.7	19	21.9	4°~10°	0°~3°
	25	60	35	62	8.6	13.5		M10	36.5	8	24	27.7	19	21.9	4°~10°	0°~3°
	30	75	50	68	8.6	13.5	M10	45.5	8	24	27.7	19	21.9	0°~10°	-	

SCZNP / SCZAP 自润滑式活型芯斜导杆固定座 SCZNP / SCZAP Self-lubricating Movable Core Inclined Guide Rod Fixed Seat

RoHS10 SCZNP (固定型)



截面A-A



截面B-B

Item	构成零件	Parts Name	材料	个数
①	斜导杆固定座	Inclined Pin Holder	S55C	1
②	自润滑板	Slide Plate	*CAC304+ 固体润滑剂	2
③	平键	Key	S45C	1

*4 级高强度黄铜铸件 (旧 JIS 标准: HBc4)

■ 固定型

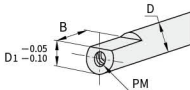
① 斜导杆固定座 与 SCZN 的 2 斜导杆固定座通用							2 自润滑板 与 SCZN 的 3 自润滑板通用				型号	
D1	d	d1	h	h1	h2	N	N1	S	a	T	Type	D
11	5.5	—	16	10	—	30	17	20	35	6.5	SCZNP	12
15	9	16	18	11	3	33	20	20	40	6.5		16
18	11	20	22	13	5.5	38	25	24	40	6.5		20
22	11	20	26	15	5.5	45	31	26	45	7		25
27.5	11	20	30	17	3.5	51	36	30	55	7.5		30

● SCZNP (即 SCZN 组件中的 2 斜导杆固定座、3 自润滑板、4 平键) 以组件形式成套销售。

■ 特点

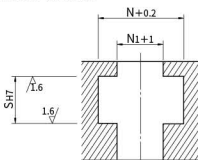
- 若需使用整套活型芯组件, 请参照 SCZN、SCZA、SCY 组件
- 为减少安装空间, 可在模具主体上直接加工斜导杆固定座的导向结构。
- 斜导杆固定座头部的摆摆结构具有自动调心功能, 可减少导轨和滑板的磨损及卡死现象。

■ 适用斜导杆: 安装尺寸参考范例



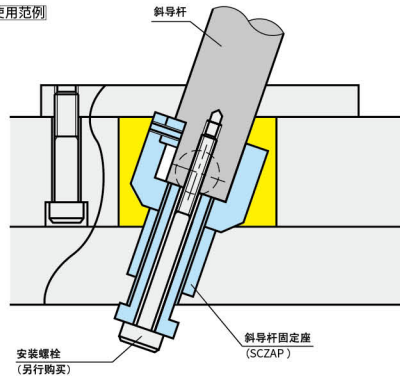
D	D1	B	PM
12	11	13	M8
16	15	14	M8
20	18	16	M10
25	22	18	M10
30	27.5	20	M10

■ 十字槽尺寸 (参考值)



Example
使用范例

SCZNP、SCZAP 使用范例
详见右图



安装螺栓
(另行购买)

斜导杆固定座
(SCZAP)

JDB-5 轴承钢钢套

JDB-5 Steel Embedded Bearing

JDB-5 轴承钢钢套

JDB-5 Steel Embedded Bearing



JDB-5钢基镶嵌轴承，是加强型产品，具有极高的抗压性能，在镶嵌石墨工作时排出润滑颗粒的情况下，使轴与套之间产生一层隔膜，起到了比单体油润滑抗咬合的优点。在起重机械的支撑部位特别适应。例：卷土机支撑、吊车支撑等，但不宜在水中或酸碱场合使用。

JDB-5 is reinforced product of JDB series. It is based steel GCr15 and embedded with solid lubricant. It is of high compress strength and particularly suitable of supporting position in hoisting machines, e.g. This support or stand of windlass and of crane. But it should not be applied in water or in acid/alkali circumstance. Can be used under low, middle and high load. Due to its superb high hardness, when under high load, it overperforms than other JDB type. Not suitable for water, acid, alkali circumstances. Most suitable for the supporting position of hoisting machine, e.g. bulldozer supporter, hoister supporter, reeling machine supporter etc.

※技术参数：Technical Data

性能指标 Performance index		数据 Data	
基体硬度 Bass Hardness	HRC58-60	使用极限PV值 PV limit	2.5N/mm ² ·m/s
摩擦系数 Friction coef (μ)	<0.17	极限动载荷 Dynamic load limit	250N/mm ²
最高使用温度 Temperature limit	350°C	最高滑动速度 Speed limit	0.1m/s
合金材质 Code	Gcr15	可根据客户制定材质生产	

JDB 固体镶嵌自润滑轴承 JDB Solid-lubricating Bearing

固体镶嵌自润滑轴承 Solid-lubricating bearing

JDB650 	JFB650 	JFBB 	JFFB 	JTW 
JGB 	JGBF 	DIN9834 	JOST 	GB71 
GB61 	JEGB, JEGBK 	JOSG 	JEFW 	JPBW, JPBF 
JUWP 	JOLP 	JOML 	JTLP 	JGLDW 
JTGLW 	JGLXS 	JGLX 	JFRP 	JESF 

JDB 固体镶嵌自润滑轴承 JDB Solid-lubricating Bearing

固体镶嵌自润滑轴承 Solid-lubricating bearing

JSP	JOVL	JGBX	JGL	JCGBF, JCGBW
				
JVSOL	JCUW, JUCF, JCUS	JCSRG, JCSRW	JVG2	JSOD
				
JSOVP	JOCU	JGBZ	JOPF, JOPS, JOPW	JCSDP
				
JCBS, JCBSP	JSPW, JSPS	JSPQ, JSPQS	JPWS, JPSS	JPGPB
				
JPGPC	JPRP	JESW	JTWP	JDBS
				

JDB-600 铜基精加工轴承 JDB-600 Casting Bronze Bearing

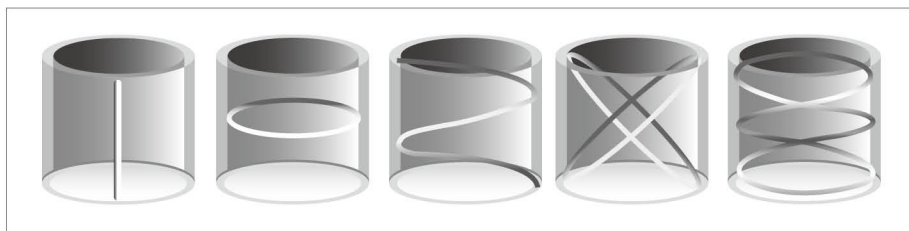
基材特征 Structure

JDB-600精加工铜合金轴套提供了简单、经济的轴承运用方式，具有承载高，耐腐蚀性好，尺寸加工任意性等特点。同时本公司可以根据不同的使用工况提供不同牌号的铜合金，并按照要求加工出不同的形式，它比卷制类铜轴承具有更高尺寸精度。

Machined cast bronze bearings offer technically and economically favorable bearings solutions. It is with high load capability, low weight and good corrosion resistance. We can offer different types of bronze alloys according to the required life time, service etc. The tolerance is much tighter than wrapped bronze bushes.



油槽 Oil Groove



技术参数 Technical Data

材料牌号	JDB-600U1	JDB-600U2	JDB-600U3	JDB-600U4	JDB-600U5	JDB-600U6
	CuZn25Al6Mn4Fe3	CuSn5Pb5Zn5	CuAl10Ni5Fe5	CuSn12	CuSn10Pb10	CuZn25Al6Mn4Fe3
密度	8.0	8.9	7.8	8.9	8.9	8.0
屈服强度N/mm ²	>450	>90	>260	>150	>100	>450
抗拉强度N/mm ²	>750	>200	>600	>260	>210	>800
延伸率%	>12	>15	>10	>8	>8	>8
硬度 HB	>210	>70	>150	>95	>75	>250

SF-1 无油润滑轴承
SF-1 Oilless Bearing



SF-1 无油润滑轴承
SF-1 Oilless Bearing

SF-1 无油润滑轴承

SF-1 Oilless Bearing



SF-1 无油润滑轴承

SF-1 Oilless Bearing

钢 + 球形青铜粉 + 聚四氟乙烯 (PTFE)
 Steel+Porous bronze sinter+PTFE

SF-1 无油润滑轴承，是以钢板为基体，中间烧结球形青铜粉，表面轧制聚四氟乙烯和混合物卷制而成。它具有摩擦系数小、耐磨、抗腐蚀性好和无油润滑的特点。能降低成本、缩小机械体积、避免咬轴现象和降低噪音等优点。产品已广泛应用于各种机械的滑动部位，例如：印刷机、纺织机、烟草机械、汽车、摩托车与农林机械等。

SF-1 is wall wrapped bearing made of triple layer composites material which consisted of a steel backing, a sintered porous bronze particles interlayer and calendared and mixture as surface layer. It is of low friction coefficient, anti-wear, anti-corrosion and can be used without oil, or only a trace of oil if needed. Moreover, it is of low cost, low vibration and low noise, compacted and light. It is widely applied in various sliding articles of different kind of machines, such as textile machines, tobacco machines, hydraulic vehicles, automobiles, agriculture and forests machines and so on.

最大承载 Max.load	静承载 Static	250N/mm ²
	低速运转 Very low speed	140N/mm ²
	旋转、摇摆运动 Roatating oscillating	60N/mm ²
最大PV值 (干摩擦)	间断性运作 Short-term operation	3.6N/mm ² .m/s
	长期运作 Continuous operation	1.8N/mm ² .m/s
Max. PV (dry running)		
使用温度 Temp. limit		-195°C~+280°C
摩擦系数 Friction coefficient		0.05~0.20μ
最大线速度 Max. speed	干摩擦 Dry running	2m/s
	流体润滑 Hydrodynamic operation	>2m/s
导热系数 Thermal conductivity		42 W/(m.k) ⁻¹
线胀系数 Coefficient of thermal expansion		11 × 10 ⁻⁶ .K ⁻¹

SF-1T 齿轮泵专用轴承

SF-1T Gear Pump Bearing



钢 + 球形青铜粉 + 聚四氟乙烯 (PTFE)
 Steel+Porous bronze sinter+PTFE

SF-1T 齿轮泵的高 PV 值工况条件而设计推出的特殊配方产品。产品具有特殊的抗疲劳冲击优点。适应的油泵压力：16-25Mpa，线速度为度 3.5-5m/s。产品具有特殊的抗疲劳、抗冲击的优点，在流体润滑境界下 PV 值可达到 120N/mm².m/s 是各种齿轮油泵、柱塞泵、叶片泵的最佳选择。

SF-1T is composed of a specially designed surface layer of PTFE formulations and is specifically applied for the high PV bushes of gear oil pumps. It is to be used in hydrodynamic or boundary lubricating condition of medium or high pressure gear oil pumps such as P=16-25 Mpa, V=3.5-5m/s. It shows the benefits of low friction coefficient, wear resistant and anti-impact properties. At hydrodynamic lubrication, the PV limit reaches to 120N/mm².m/s. It is a best choice for the bushes of various kinds of gear pumps as well as plunger pumps, vane pumps and so on.

最大承载 Max.load	静承载 Static	250N/mm ²
	低速运转 Very low speed	140N/mm ²
	旋转、摇摆运动 Roatating oscillating	60N/mm ²
最大PV值 (干摩擦)	间断性运作 Short-term operation	60N/mm ² .m/s
	长期运作 Continuous operation	4.3N/mm ² .m/s
Max. PV (dry running)		
使用温度 Temp. limit		-195°C~+280°C
摩擦系数 Friction coefficient		0.05~0.20μ
最大线速度 Max. speed	干摩擦 Dry running	2m/s
	流体润滑 Hydrodynamic operation	>2m/s
导热系数 Thermal conductivity		42 W/(m.k) ⁻¹
线胀系数 Coefficient of thermal expansion		11 × 10 ⁻⁶ .K ⁻¹

SF-1 无油润滑轴承 SF-1 Oilless Bearing

SF-1W 无铅轴承 SF-1W Lead-Free Bearing

钢 + 球形青铜粉 + 聚四氟乙烯 (PTFE)
Steel+Porous bronze+PTFE



SF-1W 无铅轴承,是以钢板为基体,中间烧结球形青铜粉,表面轧制聚四氟乙烯 (PTFE) 和其它的混合物,是卷制而成的滑动轴承。它具有摩擦系数小、耐磨、抗腐蚀性良好和无油润滑的特点。使用该产品能降低成本、缩小机械体积、避免咬轴现象和降低噪音等优点。钢背面可电镀多种金属,可在腐蚀介质中使用;目前已广泛应用于各种机械的滑动部位,例如:印刷机、纺织机、烟草机械、微电机、汽车、摩托车与农林机械等。

SF-1W is wall wrapped bearing made of triple layer composites material which be consisted of a steel backing, a sintered porous bronze particles interlayer and calendared with PTFE and mixture as surface layer, It is of low friction coefficient, anti-wear, anti-corrosion and can be used without oil, or only a trace of oil if needed. Moreover, it is of low cost, low vibration and low noise, compacted and light, SF-1 is widely applied in various sliding articles of different kind of machines, such as textile machines, tobacco machines, hydraulic vehicles, automobiles, agriculture and forests machines and so on.

最大承载 Max.load	静承载 Static	250N/mm ²
	低速运转 Very low speed	140N/mm ²
最大PV值 (干摩擦) Max. PV (dry running)	旋转、摇摆运动 Roatating oscillating	60N/mm ²
	间断性运作 Short-term operation	3.6N/mm ² ·m/s
使用温度 Temp. limit	长期运作 Continuous operation	1.8N/mm ² ·m/s
摩擦系数 Friction coefficient		-195°C~+280°C
最大线速度 Max. speed	干摩擦 Dry running	0.05~0.20μ
	流体润滑 Hydrodynamic operation	2m/s
导热系数 Thermal conductivity		>2m/s
线胀系数 Coefficient of thermal expansion		42 W(m·k) ⁻¹
		11 × 10 ⁻⁶ ·K ⁻¹

SF-1P 往复运动轴承 SF-1P Reciprocating Motion Bearing

钢 + 球形青铜粉 + 聚四氟乙烯 (PTFE)
Steel+Porous bronze+PTFE



SF-1P 往复运动轴承,是在 SF-1 材料的结构基础上,根据往复运动的特殊工况条件而设计的新颖配方产品,其性能与国外 DD2 相似。因其不含铅,故符合了环保要求。

SF-1P Reciprocating motion bearings, is based on the structure of the SF-1 material, according to the special conditions a total of reciprocation and design novel formulations, its performance and foreign DD2 similar. Because it does not lead, it is in line with the environmental requirements.

最大承载 Max.load	静承载 Static	250N/mm ²
	低速运转 Very low speed	140N/mm ²
最大PV值 (干摩擦) Max. PV (dry running)	旋转、摇摆运动 Roatating oscillating	60N/mm ²
	间断性运作 Short-term operation	3.6N/mm ² ·m/s
使用温度 Temp. limit	长期运作 Continuous operation	1.8N/mm ² ·m/s
摩擦系数 Friction coefficient		-195°C~+280°C
最大线速度 Max. speed	干摩擦 Dry running	0.05~0.20μ
	流体润滑 Hydrodynamic operation	2m/s
导热系数 Thermal conductivity		>2m/s
线胀系数 Coefficient of thermal expansion		42 W(m·k) ⁻¹
		11 × 10 ⁻⁶ ·K ⁻¹

SF-1 无油润滑轴承
SF-1 Oilless Bearing
SF-1D 液压专用轴承
SF-1D Hydraulic Bearing

 钢 + 球形青铜粉 + 聚四氟乙烯和亲油性纤维混合物 (PTFE)
 Steel + Porous bronze + PTFE with fibre


SF-1D 液压专用轴承, 是在 SF-1P 的基础上结合油缸及减震器工作原理而设计的一种新型材料, 在无油的条件下显得更耐磨, 该产品除具有 SF-1P 的优点外, 特别适用于往复频繁的大侧向力场合。其性能与国外 DP4 相似, 目前该产品逐步替代 SF-1P 产品, 适用于汽车、摩托车减震器以及各种液压缸等领域。

SF-1D Hydraulic bearing is developed on the basis of SF-1P and meanwhile considering the motion way of oil pump and damper. It is the substitute of and parallels in performance with abroad DP4. In addition to covering the same usage of SF-1P, SF-1D in particular fits frequently reciprocating motion with a high side force. It is a tendency to gradually replace SF-1P with SF-1D, the latter will cover a wide application in auto mobile, motor damper and oilpumps, etc.

最大承载 Max.load	静承载 Static	250N/mm ²
	低速运转 Very low speed	140N/mm ²
	旋转、摇摆运动 Roatating oscillating	60N/mm ²
最大PV值 (干摩擦) Max. PV (dry running)	间断性运作 Short-term operation	3.6N/mm ² ·m/s
	长期运作 Continuous operation	1.8N/mm ² ·m/s
使用温度 Temp. limit		-195°C~+280°C
摩擦系数 Friction coefficient		0.05~0.20μ
	干摩擦 Dry running	2m/s
最大线速度 Max. speed	流体润滑 Hydrodynamic operation	>2m/s
导热系数 Thermal conductivity		42 W/(m·k) ⁻¹
线胀系数 Coefficient of thermal expansion		11 × 10 ⁻⁶ ·K ⁻¹

SF-1B 青铜基轴承
SF-1B Bronze-Based Bearing

 铜 + 铜粉 + PTFE
 Bronze+sintered bronze+PTFE


SF-1B 青铜基轴承, 是以锡青铜为基体, 中间烧结青铜球形粉, 表面轧制 PTFE 和耐高温填充材料而成。它具有很高的安全系数, 在连续工作不能停机修理的场所和高温不能加油的场所特别适用。广泛应用在冶金钢铁工业, 连铸机方坯滚道、高温出炉前设备, 水泥灌浆泵和螺旋式输送机上。它可以在外部组合钢套, 也可以制成翻边, 达到端面、内孔同时摩擦使用的效果。

SF-1B is of high safety factor, and is particularly appropriate for high temperature environment where no oil is efficient and where the machine must be under successive long period working condition. This is widely used in steel metallurgy industry such as bushes for roller grooves of successive casting machines, cement grouting pumps and screw conveyers for cement. It can also be composed in steel housing or fabricated into flanged bushes which can move both in radial and in axial directions.

最大承载 Max.load	静承载 Static	250N/mm ²
	低速运转 Very low speed	140N/mm ²
	旋转、摇摆运动 Roatating oscillating	60N/mm ²
最大PV值 (干摩擦) Max. PV (dry running)	间断性运作 Short-term operation	3.6N/mm ² ·m/s
	长期运作 Continuous operation	1.8N/mm ² ·m/s
使用温度 Temp. limit		-195°C~+280°C
摩擦系数 Friction coefficient		0.05~0.20μ
	干摩擦 Dry running	2m/s
最大线速度 Max. speed	流体润滑 Hydrodynamic operation	>2m/s
导热系数 Thermal conductivity		42 W/(m·k) ⁻¹
线胀系数 Coefficient of thermal expansion		11 × 10 ⁻⁶ ·K ⁻¹

SF-1 无油润滑轴承 SF-1 Oilless Bearing

SF-1S 不锈钢耐腐蚀轴承 SF-1S Stainless Steel Bearing

不锈钢 + 球形青铜粉 + 聚四氟乙烯 (PTFE)
Stainless steel+Porous bronze+PTFE



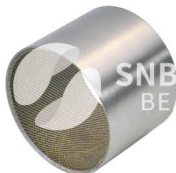
SF-1S 不锈钢耐腐蚀轴承, 是以不锈钢材料为基体, 中间烧结耐腐蚀合金粉末, 表面轧制以聚四氟乙烯为主的低摩擦材料, 经过卷制成型的一种十分有效的耐腐蚀材料。它具有耐油、耐酸、耐碱、耐海水和耐磨损的特点, 表面的 PTFE 材料不含铅成份。在食品饮料机械、印染机械、化工机械、海洋工业耐腐蚀滑动部位最适合使用。

SF-1S is of oil resistant, acid resistant, alkali resistant and seawater resistant. more over, there is no lead in the PTFE surface layer and so is particularly fit for bearings in food stuff machines, alkali flow meters, pumps motion elements in pharmaceutical machines, printing machines chemical engineering machines and other ocean industry.

最大承载 Max.load	静承载 Static	250N/mm ²
	低速运转 Very low speed	140N/mm ²
	旋转、摇摆运动 Roatating oscillating	60N/mm ²
最大PV值 (干摩擦) Max. PV (dry running)	间断性运作 Short-term operation	3.6N/mm ² ·m/s
	长期运作 Continuous operation	1.8N/mm ² ·m/s
使用温度 Temp. limit		-195°C~+280°C
摩擦系数 Friction coefficient		0.05~0.20μ
	干摩擦 Dry running	2m/s
最大线速度 Max. speed	流体润滑 Hydrodynamic operation	>2m/s
		42 W/(m·k) ⁻¹
导热系数 Thermal conductivity		11×10 ⁻⁶ ·k ⁻¹
线胀系数 Coefficient of thermal expansion		11×10 ⁻⁶ ·k ⁻¹

SF-TEX 弹钢基PTFE织物自润滑轴承 SF-TEX Stainless Steel Textile Bearing

不锈钢 + 聚四氟乙烯 (PTFE) 和耐磨织物
Stainless steel + PTFE fibre fabric

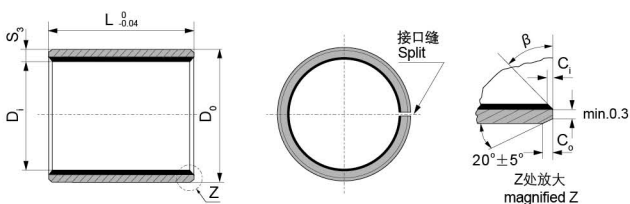


该材料以各种优质金属为基体, 表面覆着以 PTFE 和其它添加剂为主的低摩擦耐磨织物材料。这种材料结构相比一般三层复合材料具有更高的承载能力和更长的使用寿命。基材为低碳钢 (SF-TEX)、不锈钢 (SF-TEX3)、铜 (SF-TEXB) 等。主要运用于农业机械、建筑机械、汽机车底盘零部件、球阀、蝶阀各种阀门, 水泵及化工工业等重载低速而无法加油的场合。

Steel with PTFE fibre fabric. This new material use the PTFE fibres fabric overlay on metal backings, the fabric have very high load capcity and much longer operating life compare with conventional 3-layer bushes. the metal can be carbon steel(SF-TEX), stainless steel(SF-TEX3), bronze(SF-TEXB) etc. 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. much long service life under lower speed with high load.

最大承载 Max.load	静承载 Static	250N/mm ²
	低速运转 Very low speed	140N/mm ²
	旋转、摇摆运动 Roatating oscillating	60N/mm ²
最大PV值 (干摩擦) Max. PV (dry running)	间断性运作 Short-term operation	3.6N/mm ² ·m/s
	长期运作 Continuous operation	1.8N/mm ² ·m/s
使用温度 Temp. limit		-195°C~+280°C
摩擦系数 Friction coefficient		0.05~0.20μ
	干摩擦 Dry running	2m/s
最大线速度 Max. speed	流体润滑 Hydrodynamic operation	>2m/s
		42 W/(m·k) ⁻¹
导热系数 Thermal conductivity		11×10 ⁻⁶ ·k ⁻¹
线胀系数 Coefficient of thermal expansion		11×10 ⁻⁶ ·k ⁻¹

SF-1 标准公制轴套 SF-1 Standard Metric Bearing



内外倒角 ID and OD chamfers

S_3	C_0	C_1	β
0.75	0.5 ± 0.3	0.25 ± 0.2	$30^\circ \pm 5^\circ$
1.00	0.6 ± 0.3	0.30 ± 0.2	$30^\circ \pm 5^\circ$
1.50	0.7 ± 0.3	0.50 ± 0.3	$30^\circ \pm 5^\circ$

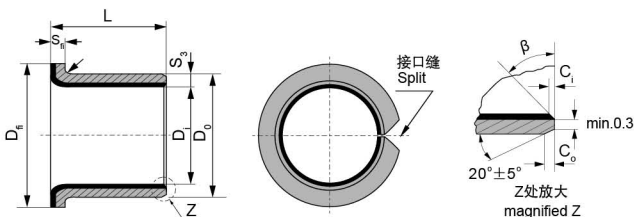
S_3	C_0	C_1	β
2.00	1.2 ± 0.4	0.50 ± 0.3	$30^\circ \pm 5^\circ$
2.50	1.8 ± 0.6	0.60 ± 0.3	$45^\circ \pm 5^\circ$

单位 unit:mm

轴径(f7) Shaft D_s	座孔(H7) Housing D_H	(OD) 外径公差 Tolerance D_0	(ID)压装后 内孔公差 After fixed $D_{i,a}$	配合间隙 Clearance D_D	壁厚 Wall thick-ness S_3	长度 L $\begin{matrix} 0 \\ -0.40 \end{matrix}$ ($d \leq \Phi 28$ L-0.30 $d > \Phi 30$ 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			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	0.092 0.006				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	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		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	0.112 0.010					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				2812	2815	2820	2825	2830	2840	2850				
30	-0.020 -0.041	34 +0.025	34 +0.085 +0.045	30.085 29.990							3012	3015	3020	3025	3030	3040	3050				
32	-0.025 -0.050	36 +0.025	36 +0.085 +0.045	32.085 31.990		2.005 1.970					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							3512	3515	3520	3525	3530	3540	3550			
38	-0.025 -0.050	42 +0.025	42 +0.085 +0.045	38.085 37.990							3812	3815	3820	3825	3830	3840	3850				
40	-0.025 -0.050	44 +0.025	44 +0.085 +0.045	40.085 39.990							4012	4015	4020	4025	4030	4040	4050				

SF-1 标准公制轴套 SF-1 Standard Metric Bearing

轴径(f7) Shaft D _s	座孔(H7) Housing D _H	(OD) 外径公差 Tolerance D _O	(ID)压装后 内孔公差 After fixed D _{1a}	配合间隙 Clearance D _D	壁厚 Wall thick- ness S ₃	长度 L 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															
50	-0.050 -0.025	55	+0.030	55	+0.100 +0.055	50.110 49.990	0.160 0.015															
55	-0.060 -0.030	60	+0.030	60	+0.100 +0.055	55.110 54.990																
60	-0.060 -0.030	65	+0.030	65	+0.100 +0.055	60.110 59.990																
65	-0.060 -0.030	70	+0.030	70	+0.100 +0.055	65.110 64.990	0.170 0.020															
70	-0.060 -0.030	75	+0.030	75	+0.100 +0.055	70.110 69.990																
75	-0.060 -0.030	80	+0.030	80	+0.100 +0.055	75.110 74.990																
80	-0.045	85	+0.035	85	+0.120 +0.070	80.155 80.020	0.201 0.020															
85	-0.054	90	+0.035	90	+0.120 +0.070	85.155 85.020																
90	-0.054	95	+0.035	95	+0.120 +0.070	90.155 90.020																
95	-0.054	100	+0.035	100	+0.120 +0.070	95.155 95.020	0.209 0.020															
100	-0.054	105	+0.035	105	+0.120 +0.070	100.155 100.020																
105	-0.054	110	+0.035	110	+0.120 +0.070	105.155 105.020																
110	-0.054	115	+0.035	115	+0.120 +0.070	110.115 110.020																
120	-0.054	125	+0.040	125	+0.170 +0.100	120.210 120.070	0.264 0.070															
125	-0.063	130	+0.040	130	+0.170 +0.100	125.210 125.070																
130	-0.063	135	+0.040	135	+0.170 +0.100	130.210 130.070																
140	-0.063	145	+0.040	145	+0.170 +0.100	140.210 140.070	0.273 0.070															
150	-0.063	155	+0.040	155	+0.170 +0.100	150.210 150.070																
160	-0.063	165	+0.040	165	+0.170 +0.100	160.210 160.070																
180	-0.063	185	+0.046	185	+0.210 +0.130	180.216 180.070	0.279 0.070															
190	-0.072	195	+0.046	195	+0.210 +0.130	190.216 190.070																
200	-0.072	205	+0.046	205	+0.210 +0.130	200.016 200.070	0.288 0.070															
220	-0.072	225	+0.046	225	+0.210 +0.130	220.216 220.070																
250	-0.072	255	+0.052	255	+0.260 +0.170	250.222 250.070	0.294 0.070															
260	-0.081	265	+0.052	265	+0.260 +0.170	260.222 260.070																
280	-0.081	285	+0.052	285	+0.260 +0.170	280.222 280.070	0.303 0.070															
300	-0.081	305	+0.052	305	+0.260 +0.170	300.222 300.070																

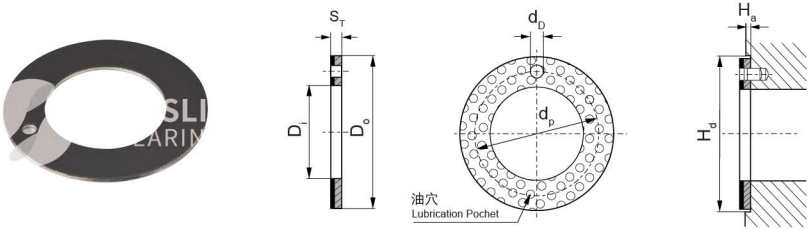
SF-1F 标准公制翻边轴承
 SF-1F Standard Metric Flange Bearing


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

型号规格 Designation	轴径(φ) Shaft D _s	座孔(H7) Housing D _H	(OD) 外径公差 Tolerance D ₀	(ID)压装后 内孔公差 After fixed D _{is}	配合间隙 Clearance C ₀	Wall thickness 壁厚 S ₃	尺寸 Dimension				
							D _I	D _O	D _H ±0.5	L±0.25	S _H -0.2
SF-1F 06040	6	8	8	6.055 5.990	0.077 0.000	1.005 0.980	6	8	12	4	1
SF-1F 06070										7	
SF-1F 08055	8	10	10	8.055 7.990	0.083 0.003		8	10	15	5.5	
SF-1F 08075										7.5	
SF-1F 10070	10	12	12	10.058 9.990	0.086 0.003		10	12	18	7	
SF-1F 10090										9	
SF-1F 10120										12	
SF-1F 12070	12	14	14	12.058 11.990	0.092 0.006		12	14	20	7	
SF-1F 12090										9	
SF-1F 12120										12	
SF-1F 14120	14	16	16	14.058 13.990	0.092 0.006		14	16	22	12	
SF-1F 14170										17	
SF-1F 15090	15	17	17	15.058 14.990	0.095 0.006	15	17	23	9		
SF-1F 15120									12		
SF-1F 15170									17		
SF-1F 16120	16	18	18	16.058 15.990	0.095 0.006	16	18	24	12		
SF-1F 16170									17		
SF-1F 18120	18	20	20	18.061 17.990	0.112 0.010	18	20	26	12		
SF-1F 18170									17		
SF-1F 18200									20		
SF-1F 20115	20	23	23	20.071 19.990	0.112 0.010	20	23	30	11.5		
SF-1F 20165									16.5		
SF-1F 20215									21.5		
SF-1F 22150	22	25	25	22.071 21.990	0.126 0.010	22	25	32	15		
SF-1F 22200									20		
SF-1F 25115	25	28	28	25.071 24.990	0.126 0.010	25	28	35	11.5		
SF-1F 25165									16.5		
SF-1F 25215									21.5		
SF-1F 30160	30	34	34	30.285 29.990	0.135 0.015	30	34	42	16		
SF-1F 30260									26		
SF-1F 35160	35	39	39	35.085 34.990	0.135 0.015	35	39	47	16		
SF-1F 35260									26		
SF-1F 40260									26		
SF-1F 40400	40	44	44	40.085 39.990	0.135 0.015	40	44	53	40		

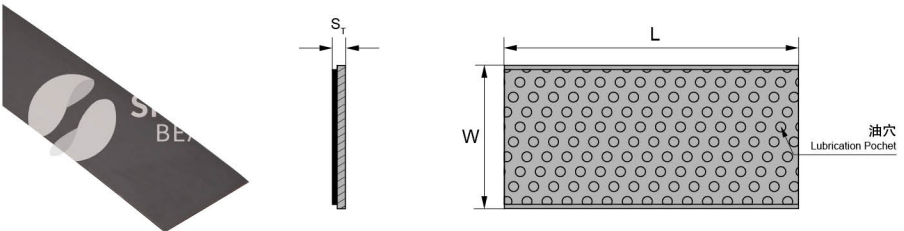
SF-1WC 标准公制垫片 SF-1WC Standard Metric Washer



单位unitmm

型号规格	轴径 D_s	垫片尺寸				安装尺寸			$H_a \pm 0.12$
		$D_i + 0.25$	$D_o - 0.25$	$S_T - 0.05$	$d_p \pm 0.125$	$d_p^{+0.4}_{+0.1}$	$H_a \pm 0.2$		
SF-1WC 10	8	10	20	1.5	15	1.5	1	20	
SF-1WC 12	10	12	24		18			24	
SF-1WC 14	12	14	26		20	26			
SF-1WC 16	14	16	30		23	30			
SF-1WC 18	16	18	32		25	32			
SF-1WC 20	18	20	36		28	36			
SF-1WC 22	20	22	38		30	38			
SF-1WC 24	22	24	42		33	42			
SF-1WC 26	24	26	44		35	44			
SF-1WC 28	26	28	48		38	48			
SF-1WC 32	30	32	54	43	54				
SF-1WC 38	36	38	62	50	62				
SF-1WC 42	40	42	66	54	66				
SF-1WC 48	46	48	74	61	74				
SF-1WC 52	50	52	78	65	78				
SF-1WC 62	60	62	90	76	90				

SF-1SP 板材标准公制尺寸 SF-1SP Strip Standard Metric Size



单位unitmm

型号规格 Standard No.	长度 $L \pm 1$	宽度 $W \pm 1$	厚壁 Wall thickness $S_T - 0.05$
SF-1SP	500	150	1.0
SF-1SP	500	150	1.5
SF-1SP	500	150	2.0
SF-1SP	500	150	2.5

SF-2 边界润滑轴套
SF-2 Boundary Lubricating Bearing



SF-2 边界润滑轴套
SF-2 Boundary Lubricating Bearing

SF-2 边界润滑轴套

SF-2 Boundary Lubricating Bearing

SF-2 碳钢基边界自润滑轴承

SF-2 Boundary self-lubricating bearing

钢 + 球形青铜粉 + 聚甲醛 (POM)
Steel+Porous bronze+POM



SF-2 边界润滑轴承，该产品以优质低碳钢为基体，中间烧结球形青铜层，表面轧制改性聚甲醛 (POM)。在边界润滑条件下可长期使用而不加油，耐磨层表面有储油坑。产品广泛应用于冶金机械、矿山机械、水利机械、汽机车、建筑机械、农用机械、轧钢行业等。

SF-2 Boundary Pb-free self-lubricating bearing is used steel-backing as its structure, sintered porous bronze as its interlayer, surface inlaid the modified POM. Suitable for marginally lubricated and dry operation on the conditions of lubrication indents grease. It has been widely applied to metallurgical machinery, Mine machinery, water conservancy machinery, vapor locomotive, building machinery, agriculture machinery, steel rolling industry etc.

最大承载 Max.load	静承载 Static	250N/mm ²
	动承载 Dynamic	140N/mm ²
	摇摆运动 oscillating	60N/mm ²
最大PV值 PVlimit	油润滑 Oil	22N/mm ² ·m/s
	干摩擦 Dry	2.8N/mm ² ·m/s
最高滑动速度 (油润滑) Max line speed V		2.5m/s
使用温度 Temp. limit		-40~+130°C
摩擦系数 Friction coefficient		0.05~0.25μ
导热系数 Thermal conductivity		13 W(m·k) ⁻¹
线胀系数 Coefficient of thermal expansion		11 × 10 ⁻⁶ ·K ⁻¹

SF-2Y 碳钢基边界自润滑轴承

SF-2Y Boundary self-lubricating Bearing

钢 + 球形青铜粉 + 聚甲醛 (POM)
Steel+Porous bronze+POM

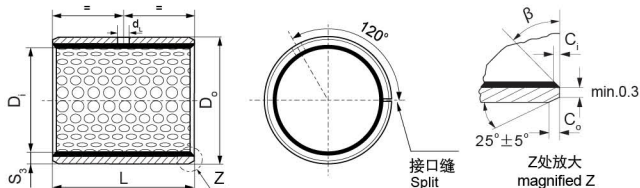


SF-2Y 碳钢基边界无铅自润滑轴承，该产品与 SF-2 具有相同结构和使用性能，在边界润滑条件下可长期使用而不加油，耐磨层表面有储油坑。产品广泛应用于冶金机械、矿山机械、水利机械、汽机车、建筑机械、农用机械、轧钢行业等。

SF-2Y has the same structure and functional performance with SF-2. It can work long time without oil in the condition of prelubricated with lubrication indents. Widely applied to metallurgy machinery, Mining machinery, water conservancy machinery, automobile, building machinery, agriculture machinery, rolling steel industry etc.

最大承载压力 Load capacity p	静承载 Static	250N/mm ²
	动承载 Dynamic	140N/mm ²
	摇摆运动 oscillating	60N/mm ²
最大PV值 PV limit	油润滑 Oil	22N/mm ² ·m/s
	干摩擦 Dry	2.8N/mm ² ·m/s
最高滑动速度 (油润滑) Max line speed V		2.5m/s
使用温度 Temp. limit		-40~+130°C
摩擦系数 Friction coefficient		0.05~0.2μ
导热系数 Thermal conductivity		13 W(m·k) ⁻¹
线胀系数 Coefficient of thermal expansion		11 × 10 ⁻⁶ ·K ⁻¹

SF-2 边界润滑轴套 SF-2 Boundary Lubricating Bearing



内外倒角 ID and OD chamfers

S_3	C_o	C_1	β	S_3	C_o	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

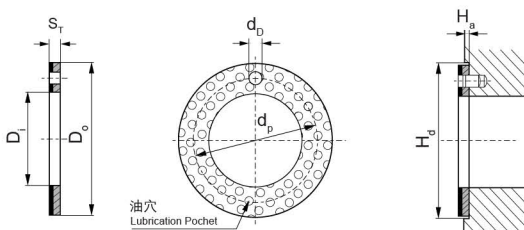
型号规格 Designation	轴径 Shaft D_s h8	座孔 Housing H_7 D_H	(OD) 外径公差 Tolerance D_o	(ID) 压装后 内孔公差 After fixed $D_{i,a}$	配合间隙 Clearance D_o	壁厚 Wall thick- ness S_3	油孔 Oil hole d_L	长度 $B_{-0.40}^0$														
								10	15	20	25	30	35	40	45	50	60					
SF-2	10 ^{-0.022}	12 ^{+0.018}	$+0.065$ $+0.030$	10.108 10.040	0.130 0.040	0.980 0.955	4	1010	1015	1020												
SF-2	12 ^{-0.027}	14 ^{+0.018}	$+0.065$ $+0.030$	12.108 12.040				1210	1215	1220												
SF-2	14 ^{-0.027}	16 ^{+0.018}	$+0.065$ $+0.030$	14.108 14.040	0.135 0.040					1415	1420											
SF-2	15 ^{-0.027}	17 ^{+0.018}	$+0.065$ $+0.030$	15.108 15.040						1515	1520	1525										
SF-2	16 ^{-0.027}	18 ^{+0.018}	$+0.065$ $+0.030$	16.108 16.040						1615	1620	1625										
SF-2	18 ^{-0.027}	20 ^{+0.021}	$+0.075$ $+0.035$	18.111 18.040	0.138 0.040					1815	1820	1825										
SF-2	20 ^{-0.033}	23 ^{+0.021}	$+0.075$ $+0.035$	20.131 20.050						2015	2020	2025	2030									
SF-2	22 ^{-0.033}	25 ^{+0.021}	$+0.075$ $+0.035$	22.131 22.050	0.164 0.050			1.475 1.445		2215	2225											
SF-2	25 ^{-0.033}	28 ^{+0.021}	$+0.075$ $+0.035$	25.131 25.050				2515	2520	2525	2530											
SF-2	28 ^{-0.033}	32 ^{+0.025}	$+0.085$ $+0.045$	28.155 28.060	0.188 0.060				2820	2830												
SF-2	30 ^{-0.033}	34 ^{+0.025}	$+0.085$ $+0.045$	30.155 30.060		1.970 1.935			3020	3025	3030	3040										
SF-2	35 ^{-0.039}	39 ^{+0.025}	$+0.085$ $+0.045$	35.155 35.060	0.194 0.060				3520	3530	3535	3540										
SF-2	40 ^{-0.039}	44 ^{+0.025}	$+0.085$ $+0.045$	40.155 40.060					4020	4030	4040	4050										
SF-2	45 ^{-0.039}	50 ^{+0.025}	$+0.085$ $+0.045$	45.195 45.080	0.234 0.080				4520	4530	4540	4545	4550									
SF-2	50 ^{-0.039}	55 ^{+0.030}	$+0.100$ $+0.055$	50.200 50.080	0.239 0.080						5030	5040	5050	5060								
SF-2	55 ^{-0.046}	60 ^{+0.030}	$+0.100$ $+0.055$	55.200 55.080		2.460 2.415					5530	5540	5550	5560								
SF-2	60 ^{-0.046}	65 ^{+0.030}	$+0.100$ $+0.055$	60.200 60.080	0.246 0.080						6030	6040	6050	6060								

SF-2 边界润滑轴套 SF-2 Boundary Lubricating Bearing

型号规格 Designation	轴径 Shaft D _{h8}	座孔 Housing H7 D _H	(OD) 外径公差 Tolerance D _o	(ID) 压装后 内孔公差 After fixed D _{ia}	配合间隙 Clearance D _b	壁厚 Wall thick- ness S ₃	油孔 Oil hole d _l	长度 L ⁰ _{-0.40}										
								40	50	60	80	90	95	100	110	120		
SF-2	65 ^{-0.046}	70 ^{+0.030}	70 ^{+0.030}	65.200 65.080				6540	6560									
SF-2	70 ^{-0.046}	75 ^{+0.030}	75 ^{+0.030}	70.200 70.080	0.246 0.080	2.460 2.415	8	7040	7050		7080							
SF-2	75 ^{-0.046}	80 ^{+0.030}	80 ^{+0.030}	75.200 75.080				7540	7560	7580								
SF-2	80 ^{-0.046}	85 ^{+0.035}	85 ^{+0.035}	80.265 80.100	0.313 0.100			8040	8060	8080								
SF-2	85 ^{-0.054}	90 ^{+0.035}	90 ^{+0.035}	85.265 85.100				8540	8560	8580								
SF-2	90 ^{-0.054}	95 ^{+0.035}	95 ^{+0.035}	90.265 90.100				9040	9060	9080	9090							
SF-2	100 ^{-0.054}	105 ^{+0.035}	105 ^{+0.035}	100.265 100.100	0.321 0.100				10050		10080		10095					
SF-2	105 ^{-0.054}	110 ^{+0.035}	110 ^{+0.035}	105.265 105.100						10560	10580		10595		105110			
SF-2	110 ^{-0.054}	115 ^{+0.035}	115 ^{+0.035}	110.265 110.110						11060	11080		11095		110110			
SF-2	120 ^{-0.054}	125 ^{+0.040}	125 ^{+0.040}	120.270 120.110						12060	12080				120110			
SF-2	125 ^{-0.063}	130 ^{+0.040}	130 ^{+0.040}	125.270 125.110						12560					125110			
SF-2	130 ^{-0.063}	135 ^{+0.040}	135 ^{+0.040}	130.270 130.110					13050	13060	13080				130100			
SF-2	140 ^{-0.063}	145 ^{+0.040}	145 ^{+0.040}	140.270 140.110	0.324 0.100				14050	14060	14080				140100			
SF-2	150 ^{-0.063}	155 ^{+0.040}	155 ^{+0.040}	150.270 150.110		2.450 2.385	9.5		15050	15060	15080				150100			
SF-2	160 ^{-0.063}	165 ^{+0.040}	165 ^{+0.040}	160.270 160.110					16050	16060	16080				160100			
SF-2	170 ^{-0.063}	175 ^{+0.040}	175 ^{+0.040}	170.270 170.110					17050		17080				170100			
SF-2	180 ^{-0.063}	185 ^{+0.046}	185 ^{+0.046}	180.270 180.110					18050	18060	18080				180100			
SF-2	190 ^{-0.072}	195 ^{+0.046}	195 ^{+0.046}	190.276 190.110					19050	19060	19080				190100		190120	
SF-2	200 ^{-0.072}	205 ^{+0.046}	205 ^{+0.046}	200.276 200.110	0.339 0.110				20050	20060	20080				200100		200120	
SF-2	220 ^{-0.072}	225 ^{+0.046}	225 ^{+0.046}	220.276 220.110					22050	22060	22080				220100		220120	
SF-2	240 ^{-0.072}	245 ^{+0.046}	245 ^{+0.046}	240.276 240.110					24050	24060	24080				240100		240120	
SF-2	250 ^{-0.072}	255 ^{+0.052}	255 ^{+0.052}	250.282 250.110					25050	25060	25080				250100		250120	
SF-2	260 ^{-0.081}	265 ^{+0.052}	265 ^{+0.052}	260.282 260.110	0.354 0.110				26050	26060	26080				260100		260120	
SF-2	280 ^{-0.081}	285 ^{+0.052}	285 ^{+0.052}	280.282 280.110					28050	28060	28080				280100		280120	
SF-2	300 ^{-0.081}	305 ^{+0.052}	305 ^{+0.052}	300.282 300.110					30050	30060	30080				300100		300120	

SF-2WC 标准公制垫片

SF-2WC Standard Metric Washer

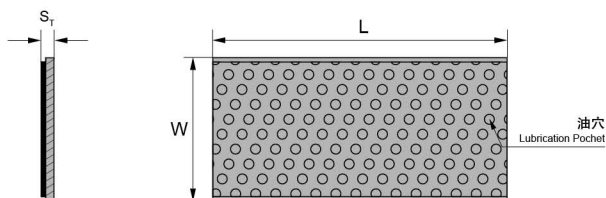


单位unit:mm

型号规格	轴径 D_s	垫片尺寸				安装尺寸			$H_d+0.12$
		$D_i+0.25$	$D_o-0.25$	$S_r-0.05$	$d_b \pm 0.125$	$d_o^{+0.4}_{+0.1}$	$H_a \pm 0.2$	H_b	
SF-2WC 10	8	10	20	1.5	15	1.5	1	20	
SF-2WC 12	10	12	24		18			24	
SF-2WC 14	12	14	26		20			26	
SF-2WC 16	14	16	30		23	30			
SF-2WC 18	16	18	32		25	32			
SF-2WC 20	18	20	36		28	36			
SF-2WC 22	20	22	38		30	38			
SF-2WC 24	22	24	42		33	42			
SF-2WC 26	24	26	44		35	44			
SF-2WC 28	26	28	48		38	48			
SF-2WC 32	30	32	54	43	54				
SF-2WC 38	36	38	62	50	62				
SF-2WC 42	40	42	66	54	66				
SF-2WC 48	46	48	74	61	74				
SF-2WC 52	50	52	78	65	78				
SF-2WC 62	60	62	90	76	90				

SF-2SP 板材标准公制尺寸

SF-2SP Strip Standard Metric Size



单位unit:mm

型号规格 Standard No.	长度 $L \pm 1$	宽度 $W \pm 1$	厚壁 Wall thickness $S_r - 0.05$
SF-2SP	500	150	1.0
SF-2SP	500	150	1.5
SF-2SP	500	150	2.0
SF-2SP	500	150	2.5

JF-800 双金属轴套
JF-800 Bi-metal Bearing



JF-800 双金属轴套
JF-800 Bi-metal Bearing

JF-800 双金属轴套

JF-800 Bi-metel Bearing

JF-800 双金属轴套

JF-800 Bi-metel Bearing

钢 + CuPb10Sn10
 Steel + CuPb10Sn10



JF-800 双金属轴承，是以低碳钢板为基体材料，表面烧结了 CuPb10Sn10 或者 CuSn6Zn6Pb3 材料的钢铜合金产品。该产品是双合金轴承中承载能力最强的一种，重型车的平衡桥衬套，均使用该产品。它是一种用途很广的高载低速运动轴承。

JF-800 bimetal bearing is based on steel and sintered with CuPb10Sn10 or CuSn6Zn6Pb3 as a lining layer. The strongest type of bimetal bearings and widely applied in so many fields. This type has the best performance within the range of Cu-Pb alloy constructed bearing. Therefore it has a wide application and is mostly suitable for where is middle speed and high impact etc.

合金层材质	Alloy layer material	CuPb10Sn10 或 CuSn6Zn6Pb3
最大承载压力	Load capacity	65N/mm ²
最高使用温度	Temperature Max	260°C
合金层硬度	Liner hardness	HB70~100

JF-720 双金属轴套

JF-720 Bi-metel Bearing

钢 + CuPb24Sn4
 Steel + CuPb24Sn4



JF-720 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。

JF-720 is a bimetal bearing 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 over plated certain soft alloy, it can be applied in high-speed internal combustion engine and as connect rod.

合金层材质	Alloy layer material	CuPb24Sn4
最大承载压力	Load capacity	38N/mm ²
最高使用温度	Temperature Max	170°C
合金层硬度	Liner hardness	HB45~70

JF-800 双金属轴套

JF-800 Bi-metal Bearing

JF-700 双金属轴套

JF-700 Bi-metal Bearing

钢 + CuPb30
Steel + CuPb30



JF-700 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瓦、连杆衬套、摇臂衬套; 油泵侧磨擦片。

JF-700 is a bimetal bearing 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 overplated certain soft alloy and mostly applied in internal combustion engine under high speed and middle to low load, e.g. main bearing of inner-combustion engine and connect-rod bearing.

合金层材质	Alloy layer material	CuPb30
最大承载压力	Load capacity	25N/mm ²
最高使用温度	Temperature Max	170°C
合金层硬度	Liner hardness	HB30~45

JF-20 高锡铝基轴承

JF-20 High Percentage Aluminum Alloy Bearing

钢 + AlSn20Cu
Steel + AlSn20Cu



JF-20 高锡铝基轴承, 是以钢板为基体, 表面辊压 AlSn20Cu 材料的产品。该产品具有中等疲劳强度和承载能力, 良好的抗腐蚀性, 较好的滑动性能等特点。该产品常用作中小功率的内燃机轴瓦、火车发动机轴瓦、空气压缩机轴套, 是取代巴氏合金的新颖产品。

JF-20 high percentage of tin with aluminum alloy bearing is backing on low carbon steel, pressed with AlSn20Cu as liner. It has fairly good performance in anti-fatigue and good load capacity, anti-corrosion and smooth sliding movement. It usually used as engine bearing with middle or low power, air compressor bearing. It is a good substitution for Babbitt material.

合金层材质	Alloy layer material	AlSn20Cu
最大承载压力	Load capacity	30N/mm ²
最高使用温度	Temperature Max	150°C
合金层硬度	Liner hardness	HB30~40

JF-800 双金属轴套

JF-800 Bi-metal Bearing

JF-750 无铅双金属轴承

JF-750 Lead Free Bi-metal Bearing

钢 + CuSn6.5P0.1
Steel + CuSn6.5P0.1



JF-750 无铅双金属轴承是一种环保型的双金属轴承，它是以低碳钢板为基体，表面烧结 CuSn6.5P0.1 材料的钢铜合金产品。

产品具有较高的疲劳强度和承载能力，较好的滑动性能，在许多场合能够替代含铅的双金属轴承或铜套。

JF-750 lead free bi-metal bearing is an environmental protection type, it is backing on low carbon steel, sintered with CuSn6.5P0.1 bronze powder.

It has high performance of anti-fatigue and load capacity, and good slide performance. It can act as a substitute as bi-metal bearing with lead or bronze bearing under many working conditions.

合金层材质	Alloy layer material	CuSn6.5P0.1
最大承载压力	Load capacity	65N/mm ²
最高使用温度	Temperature Max	200°C
合金层硬度	Liner hardness	HB70~100

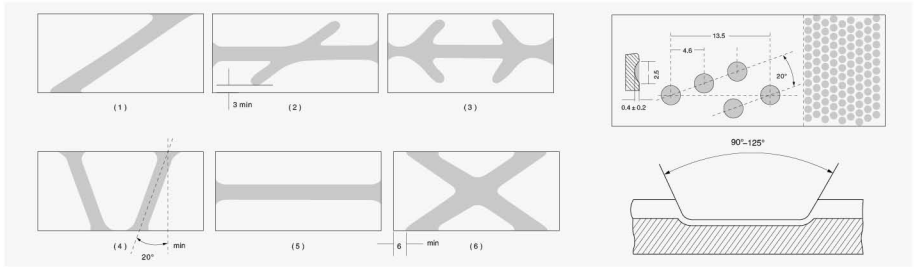
JF-800 双金属轴套合金化学成分

JF-800 Composition Analysis of Alloy

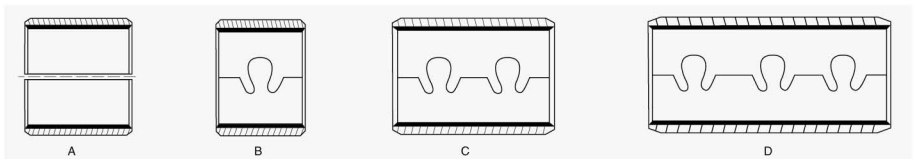
化学元素 chemical elements	JF-800 CuPb10Sn10	JF-720 CuPb24Sn4	JF-700 CuPb30	JF-20 AlSn20Cu
Cu	余量 Remainder	余量 Remainder	余量 Remainder	1.7~1.3
Pb	9.0~11.0	21.0~27.0	26.0~33.0	—
Sn	9.0~11.0	3.0~4.5	0.5	17.5~22.5
Zn	0.5	0.5	0.5	—
P	0.1	0.1	0.1	—
Fe	0.7	0.7	0.7	0.7
Ni	0.5	0.5	0.5	0.1
Sb	0.2	0.2	0.2	—
Al	—	—	—	余量 Remainder
Si	—	—	—	0.7
Mn	—	—	—	0.7
Ti	—	—	—	0.2
其他 Other	0.5	0.5	0.5	0.5

JF-800 双金属轴套 JF-800 Bi-metal Bearing

双金属自润滑轴承的油槽油穴形式 Type for Bi-Metallic Bearing Grooves and Oil pockets



双金属自润滑轴承的搭扣形式 Lock Types for Bi-Metallic Bearing



JF-800 型双金属轴套的油孔设计 The oil hole design

为了使 JF-800 双金属轴套在使用中，能得到充分的油润滑，因此推荐如下尺寸油孔，客户需油孔而无特殊要求的，都按此油孔标准制作。

In order to fully lubricate the bush when in the performance, the oil holes with size as follow are recommended. They should be manufactured according to the standard below if without special requirements.

轴承外径 Bearing O.D	12~23	25~39	42~80	85~155
油孔直径 Lubricating hole	4	6	8	9.5

油孔的位置应避免开接缝处和承载区域，这有利于进油。

The lubricating hole should be away from butt joint and loading area and designed to be easy-oil-feeding as well.

JF-800 双金属板材厚度尺寸及公差 Standard thickness of the JF-800 bimetal and their tolerances

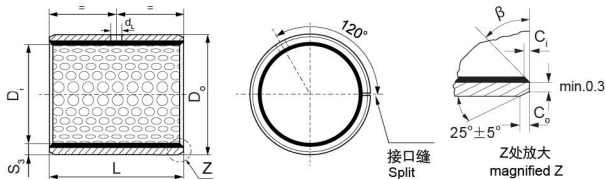
公差厚度 Tolerance Thickness	1	1.5	2	2.5	3	3.5	4	5
钢基厚度 Thickness of steel backing	0.6	1	1.4	1.9	2.3	2.8	3.2	4
有效合金厚度 Thickness of bronze layer	0.4	0.5	0.6	0.6	0.7	0.7	0.8	1.0
可加工轴承壁厚 Manufacturable waa thickness	1 ^{+0.25} _{-0.15}	1.5 ^{+0.25} _{-0.15}	2 ^{+0.25} _{-0.15}	2.5 ^{+0.25} _{-0.15}	3 ^{+0.25} _{-0.15}	1 ^{+0.25} _{-0.15}	1 ^{+0.25} _{-0.15}	1 ^{+0.25} _{-0.15}
已加工轴承壁厚 Manufactured waa thickness	1 ^{-0.025}	1.5 ^{-0.03}	2 ^{-0.035}	2.5 ^{-0.04}	3 ^{-0.045}	3.5 ^{-0.05}	4 ^{-0.055}	5 ^{-0.06}

板材合金厚度可以根据要求定制。

The alloy layer thickness can be produced accordingly to customer's requirement.

JF-800 标准公制轴套

JF-800 Standard Metric Bearing



内外倒角 ID and OD chamfers

S_3	C_0	C_1	β
0.75	0.5 ± 0.3	0.25 ± 0.2	$35^\circ \pm 5^\circ$
1.00	0.6 ± 0.3	0.30 ± 0.2	$35^\circ \pm 5^\circ$
1.50	0.7 ± 0.3	0.50 ± 0.3	$35^\circ \pm 5^\circ$

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

单位unit:mm

内径 D_i φd	外径 D_o φD	轴径(h8) Shaft D_s	座孔(H7) Housing D_H	压装后 内孔公差 Arter fixed D_{fa}	配合间隙 Clearance C_0	壁厚 Wall thickness S_3	油孔 Oil hole d_l	长度 L $^{0}_{-0.40}$						
								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					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
20	23	20 -0.033	23 +0.021	2010	2015	2020	2025							
22	25	22 -0.033	25 +0.021	+0.161 +0.020	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	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	+0.185 +0.040				0.224 0.040	8	3520	3525	3530	3540	3550
38	42	38 -0.039	42 +0.025	3820						3825	3830	3840	3850	
40	44	40 -0.039	44 +0.025	4020	4025	4030	4040			4050				

JF-800 标准公制轴套 JF-800 Standard Metric Bearing

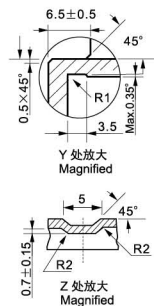
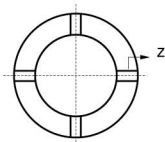
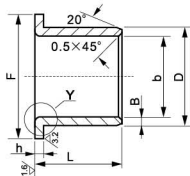
内径 D_i ϕd	外径 D_o ϕD	轴径(h8) Shaft D_s	座孔(H7) Housing D_H	压装后 内孔公差 Arter fixed D_{ia}	配合间隙 Clearance C_D	壁厚 Wall thickness S_3	油孔 Oil hole d_L	长度 L $\begin{smallmatrix} 0 \\ -0.40 \end{smallmatrix}$									
								25	30	40	50	60	80	90	100		
45	50	45 -0.039	50 +0.025	+0.225 +0.080	0.264 0.080	2.460 2.400	8	4525	4530	4540	4550						
50	55	50 -0.039	55 +0.030	+0.230 +0.080	0.276 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	7580					
80	85	80 -0.046	85 +0.035	+0.235 +0.080	0.281 0.080		8030	8040	8050	8060	8080	8090					
85	90	85 -0.054	90 +0.035				8530	8540	8550	8560	8580	8590	85100				
90	95	90 -0.054	95 +0.035					9040	9050	9060	9080	9090	90100				
95	100	95 -0.054	100 +0.035						9550	9560	9580	9590	95100				
100	105	100 -0.054	105 +0.035							10050	10060	10080	10090	100100			
105	110	105 -0.054	110 +0.035								10550	10560	10580	10590	105100		
110	115	110 -0.054	115 +0.035									11050	11060	11080	11090	110100	
115	120	115 -0.054	120 +0.035								11550	11560	11580	11590	115100		
120	125	120 -0.054	125 +0.040	+0.240 +0.080	0.303 0.080				12050	12060	12080	12090	120100				
125	130	125 -0.063	130 +0.040								12560	12580	12590	125100			
130	135	130 -0.063	135 +0.040									13060	13080	13090	130100		
135	140	135 -0.063	140 +0.040									13560	13580	13590	135100		
140	145	140 -0.063	145 +0.040									14060	14080	14090	140100		
150	155	150 -0.063	155 +0.040									15060	15080	15090	150100		

注：内孔公差是轴套压入 0 位座孔时的公差

Note: In addition to the above specifications of size, manufactured according to customer drawings .

JF-800F 标准公制翻边轴套

JF-800F Standard Metric Flange Bearing



单位unit:mm

规格型号 Type	F	D	d	L	h	B
4040	60	46	40	39.5	3.5	3.0
4035	62	47	40	35	3.5	3.5
4055	68	55	45	55	3.5	5.0
5040A	72	57	50	40	3.5	3.5
5040B	70	57	50	40	3.5	3.5
5050	70	57	50	50	3.5	3.5
5460	92	60.6	54	60	3.5	3.3
6053	83	67	60	53	3.5	3.5
6060	87	67	60	60	3.5	3.5
6065	77	67	60	65	3.5	3.5
6060A	88	68	60	60	4.0	4.0
6060B	87	68	60	60	4.0	4.0
6465	102.6	70.4	63.5	65	3.5	3.5
6473	103	70.8	63.8	73	3.5	3.5
6553	85	72	65	53	3.5	3.5
6564	87	72	65	64	3.5	3.5
6575	108	72	65	75	3.5	3.5
7060	93	77	70	60	3.5	3.5
7090	108	80	70	90	5.0	5.0
7560	100	82	75	60	3.5	3.5
8060	105	87	80	68	3.5	3.5
8580	127	92	85	80	3.5	3.5
85103	128	92.6	85	103.5	3.5	3.8
89126	138	97.5	89.2	126.5	4.2	4.2
95127	144	105	95	127	5.0	5.0

FB090 青铜卷制轴套
FB090 Bronze Wrapped Bearing



FB090 青铜卷制轴套
FB090 Bronze Wrapped Bearing

FB090 青铜卷制轴套

FB090 Bronze Wrapped Bearing

FB090 青铜卷制轴套

FB090 Bronze Wrapped Bearing

 青铜
 CuSn8P


FB090 青铜轴承，采用特殊配方的高密度铜合金带材为基体，表面可以按照用户要求轧制菱形或半球形油穴和油槽。具有密度高、承载压力大、耐磨性能好、使用寿命长等优点，以取代传统的铸造铜套，可以缩小机械体积，降低成本。FB090 已广泛应用于起重机械、建筑机械、汽车拖拉机底盘、机床工业及采矿机械中，还可以制成轴瓦、翻边轴套、止推垫片和球碗等形式。

FB090 is a kind of bushes wrapped by bronze strip. The bronze is made as the particular formulation with high specific and gravity, and on its surface may be incorporated with spherical or diamond shaped indentations or/and oil grooves as required by customers. It is of high load capacity and long life, in place of traditional casting bronze bush. It is more cheap and more compact. It is widely applied in hoisting machines and other construction machines, automobiles, tractors, trucks, machine tools and some mineral engines.

密度 Density	8.9 g/cm ³	硬度 Hardness	90~120 HB
抗压强度 Pressure resistance strength	470 N/mm ²	延伸率 Elongation	55%
导热系数 Coefficient of heat conduction	60 W/m.K	材料名称 Alloy material	CuSn8P
线膨胀系数 Linear expansion coefficient	18.5 x 10 ⁻⁶ /K	其它可选材料 Other material	CuSn6.5P

FB091 黄铜卷制轴套

FB091 Copper Wrapped Bearing

 黄铜
 CuZn31Si


FB091 黄铜卷制轴套，是以特殊配方的高密度合金为基体，表面可根据客户要求轧制油穴或油槽等，它有较高的承载压力，很好的耐磨性，产品运用于汽车工业、建筑机械、机床工业等。

FB091 is based in high density copper alloy of special formula. The alloy surface is rolled to oil holes and grooves according to client requires. It has good load capacity and wear-resistant. The product is applied to construction machinery and machine tool, etc.

密度 Density	8.9 g/cm ³	硬度 Hardness	80~110 HB
抗压强度 Pressure resistance strength	440 N/mm ²	延伸率 Elongation	30%
导热系数 Coefficient of heat conduction	71 W/m.K	材料名称 Alloy material	CuZn31Si
线膨胀系数 Linear expansion coefficient	19.2 x 10 ⁻⁶ /K		

FB090 青铜卷制轴套 FB090 Bronze Wrapped Bearing

FB092 青铜布孔轴套 FB092 Bronze Wrapped Bearing

青铜
CuSn8P



FB092 青铜轴承，以青铜材料为基体，加工均匀有序的注油孔，经卷制而成的薄壁轴承，在装配后注入润滑油脂。该轴承具有存油量大、安装方便、设计尺寸小的优点，而且可以取代铜套使用，能大大地降低成本。目前该产品已应用于输送机、升降机、卷扬机、校平机等中载、低速的场合。

FB092 bronze bearing is based on bronze of CuSn8.0P0.3 and evenly distributed drilling oil holes on the body. When in assembly, oil or grease should be stored in the holes before bearing is sealed from both ends. FB092 has the advantages of abundant oil storage, easy-to-assembly, machine compactness etc. It can replace the conventional whole copper sleeves, thus to save much cost. It is mostly applied under middle load, low speed such as in convey machine, hoisting machine, windlass, aligning machine etc.

密度 Density	8.9 g/cm ³	硬度 Hardness	90~120 HB
抗压强度 Pressure resistance strength	470 N/mm ²	延伸率 Elongation	55%
导热系数 Coefficient of heat conduction	60 W/m.K	材料名称 Alloy material	CuSn8P
线膨胀系数 Linear expansion coefficient	18.5 x 10 ⁻⁶ /K	其它可选材料 Other material	CuSn6.5P

FB094 青铜布孔轴套带密封圈 FB094 Bronze Wrapped Bearing with Seals

青铜
CuSn8P



该产品是在 FB092 为基础上，在轴套高度两端配置密封圈而成。它具有防止油脂倒漏，延长润滑时间，防止灰尘、沙等物质的渗透等优点。

The product is improved from FB092. It is configured airproof ring in the bearing height. It can prevent grease leaking and dirt penetrating, so as to delay lubricating time.

密度 Density	8.9 g/cm ³	硬度 Hardness	90~120 HB
抗压强度 Pressure resistance strength	470 N/mm ²	延伸率 Elongation	55%
导热系数 Coefficient of heat conduction	60 W/m.K	材料名称 Alloy material	CuSn8P
线膨胀系数 Linear expansion coefficient	18.5 x 10 ⁻⁶ /K	其它可选材料 Other material	CuSn6.5P

FB09G 青铜嵌石墨卷制轴套 FB09G Bronze Wrapped Bearing

青铜 + 石墨
CuSn8P+Graphite



FB09G 青铜固体润滑轴承，是以青铜材料为基体，表面埋入固体润滑剂制作而成。由于以延伸率较高的铜合金材料作为基体，所以可以制成特薄的卷制轴套，再加上理想的填充材料为耐磨剂，因此适用于汽车传动轴内作为耐磨的轴套使用，也可以在无油润滑的其它场合使用。

FB09G is based bronze material and embedded with solid lubricants in its diamond or round shape pockets which are evenly distributed on its inside layers. Due to the higher elongation of the copper alloy material as the substrate, can be made extra thin wrapped bushes, plus on the ideal filler material for anti-wear agent for automotive transmission as a wear-resistant sleeve use can also be other occasions in the oil-free lubrication.

密度 Density	8.3 g/cm ³	硬度 Hardness	90~120 HB
抗压强度 Pressure resistance strength	470 N/mm ²	延伸率 Elongation	55%
导热系数 Coefficient of heat conduction	58 W/m.K	材料名称 Alloy material	CuSn8P
线膨胀系数 Linear expansion coefficient	18.5 x 10 ⁻⁶ /K	其它可选材料 Other material	CuSn6.5P

FB090 青铜卷制轴套
FB090 Bronze Wrapped Bearing
FB08G 钢基嵌石墨轴套
FB08G Steel+Graphite Wrapped Bearing

 钢 + 烧结铜合金 + 石墨
 Steel+Porous bronze sinter+Graphite


FB08G 固体润滑轴承，是以 JF-800 双金属材料为基体，合金层埋入特殊固体润滑剂制作而成的新颖薄壁固体润滑轴承。由于采用高强度承载的合金材料作基体，理想的填充材料为耐磨剂，合理的菱形块状润滑设计，润滑面积达 25% 以上，因此，能发挥良好的润滑性和抗磨损性能。

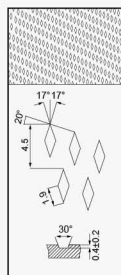
FB08G embedded with solid lubricating bearing, it is based on JF-800 bi-metal material, embedding special solid lubricant in the alloy layer. Owing to the high strength, high load capacity and the spirally distributed diamond embedded with solid lubricant, with a lubrication area of 25% on the bearing surface, the bearing shows good performance in lubricating property and anti-wear.

最大承载压力 P Load capacity P	90N/mm ²
合金硬度 HAlloy hardness	60~90HB
最大线速度 Max line speed V	干摩擦 Dry friction 0.4m/s 脂润滑 Grease lubrication 2m/s
摩擦系数 Friction coef μ	干摩擦 Dry friction <0.22 脂润滑 Grease lubrication <0.08
最高 PV 值 Maximum PV value	干摩擦 Dry friction 1.8N·mm ² .m/s

油穴形式(根据DIN1494/ISO3547)
Type of oil pockets (according to DIN1494/ISO3547)

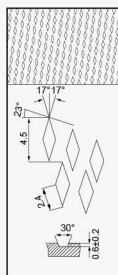
采用高密度青铜卷制成形或球形油袋、油穴特殊合成内部表面以减少磨损延长使用时间并且很好的做到防腐功能。

High-density bronze is rolled into shape or oil bags and oil holes specially integrated into the inner surface to reduce the wearing and prolong the service hours. Besides, it has excellent anti-corrosion functions.



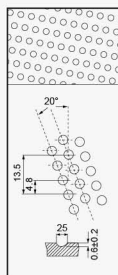
轴衬套内
Inside the bush of the shaft
菱形油穴 r ≤ φ22
Rhomb oil holes r ≤ φ22

FB090 油穴
FB09G 油穴
FB08G 油穴



轴衬套内
Inside the bush of the shaft
菱形油穴 r > φ22
Rhomb oil holes r > φ22

FB090 油穴



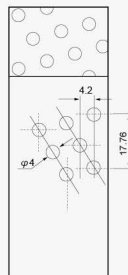
形成圆形
Forming a circle

FB090 油穴



轴承内径 r ≤ φ25
Inside Dia r ≤ φ25

FB090 油穴



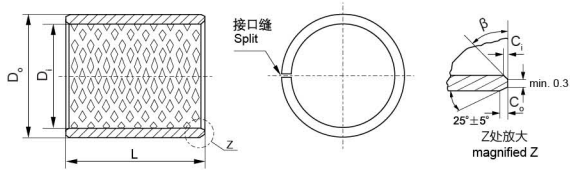
轴承内径 r > φ25
Inside Dia r > φ25

FB090 油穴

化学成分 Chemical composition

材料 Material	Cu	Sn	P	Pb	Zn
CuSn8	91.3%	8.0%	0.3%		

FB090 标准公制轴套
FB090 Standard Metric Bearing



ID and OD chamfers

S_3	C_o	C_1	β
0.75	0.5 ± 0.3	0.25 ± 0.2	$35^\circ \pm 5^\circ$
1.00	0.6 ± 0.3	0.30 ± 0.2	$35^\circ \pm 5^\circ$
1.50	0.7 ± 0.3	0.50 ± 0.3	$35^\circ \pm 5^\circ$

S_3	C_o	C_1	β
2.00	1.2 ± 0.4	0.50 ± 0.3	$30^\circ \pm 5^\circ$
2.50	1.8 ± 0.6	0.60 ± 0.3	$45^\circ \pm 5^\circ$

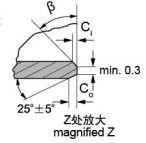
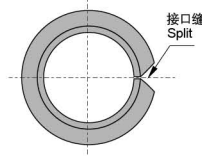
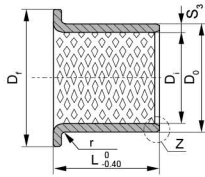
单位unit:mm

压入H7座孔内径 Installed Bearing I.D.		外径 O.D.	f_1	f_2	$L_{-0.40}^0$																
					10	15	20	25	30	35	40	50	60	70	80						
10	$+0.060$ -0.005	12	$+0.065$ $+0.030$	0.5	0.3	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	$+0.070$ -0.005	23	$+0.075$ $+0.035$	0.8	0.4	2010	2015	2020	2025												
22		25				2210	2215	2220	2225	2230											
24		27					2415	2420	2425	2430											
25		28					2515	2520	2525	2530											
28		32					2815	2820	2825	2830											
30		34					3015	3020	3025	3030	3035	3040									
32	$+0.070$ -0.010	36	$+0.085$ $+0.045$	1.0	0.6	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	$+0.090$ -0.015	65	$+0.100$ $+0.055$	1.2	0.8				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		$+0.130$ 0				85	$+0.120$ $+0.070$	1.4					8030	8035	8040	8050	8060	8070	8080		

FB090 标准公制轴套 FB090 Standard Metric Bearing

压入H7座孔内径 Installed Bearing I.D.		外径 O.D.		f ₁	f ₂	L _{-0.40} ⁰									
						30	35	40	50	60	70	80	90	100	
85	+0.130 0	90	+0.120 +0.070	1.4	0.8	8530	8535	8540	8550	8560	8570	8580	8590	85100	
90		9030				9035	9040	9050	9060	9070	9080	9090	90100		
95							9540	9550	9560	9570	9580	9590	95100		
100								10050	10060	10070	10080	10090	100100		
105								10550	10560	10570	10580	10590	105100		
110								11050	11060	11070	11080	11090	110100		
115								11550	11560	11570	11580	11590	115100		
120	+0.140 0	125	+0.170 +0.070							12060	12070	12080	12090	120100	
125		130							12560	12570	12580	12590	125100		
130		135								13060	13070	13080	13090	130100	
135		140								13560	13570	13580	13590	135100	
140		145								14060	14070	14080	14090	140100	
145		150								14560	14570	14580	14590	145100	
150		155								15060	15070	15080	15090	150100	
155		160								15560	15570	15580	15590	155100	
160		165								16060	16070	16080	16090	160100	
165		170								16560	16570	16580	16590	165100	
170		175								17060	17070	17080	17090	170100	
175		180								17560	17570	17580	17590	175100	
180		185								18060	18070	18080	18090	180100	
185	190							18560	18570	18580	18590	185100			
190	195							19060	19070	19080	19090	190100			
195	200							19560	19570	19580	19590	195100			
200	205							20060	20070	20080	20090	200100			
205	210							20560	20570	20580	20590	205100			
215	220							21560	21570	21580	21590	215100			
225	230							22560	22570	22580	22590	225100			
230	235							23060	23070	23080	23090	230100			
240	245							24060	24070	24080	24090	240100			
250	255							25060	25070	25080	25090	250100			
260	265					26060	26070	26080	26090	260100					
270	275					27060	27070	27080	27090	270100					
280	285					28060	28070	28080	28090	280100					
290	395					29060	29070	29080	29090	290100					
300	305							30060	30070	30080	30090	300100			

FB090F 标准公制翻边轴套 FB090F Standard Metric Flange Bearing



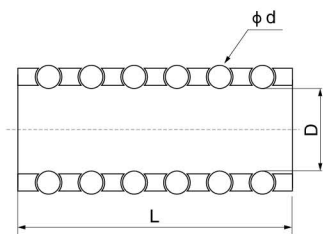
S_3	1.0	1.5	2.0	2.5
r	$1^{+0.5}$	1 ± 0.5	1.5 ± 0.5	2 ± 0.5

单位unit:mm

内径 D_1 ϕd	外径 D_2 ϕD	法兰外径 D_n	长度 L ${}^0_{-0.40}$												
			15	20	25	30	35	40	50	60	70	80	90		
25	28	35	2515	2520	2525										
30	34	45		3020	3025	3030									
35	39	50		3520	3525	3530	3535								
40	44	55			4025	4030	4035	4040							
45	50	60				4530	4535	4540	4550						
50	55	65				5030	5035	5040	5050						
55	60	70				5530	5535	5540	5550						
60	65	75				6030	6035	6040	6050	6060					
65	70	80				6530	6535	6540	6550	6560					
70	75	85					7035	7040	7050	7060	7070				
75	80	90					7535	7540	7550	7560	7570				
80	85	100					8035	8040	8050	8060	8070	8080			
90	95	110							9050	9060	9070	9080	9090		
100	105	120							10050	10060	10070	10080	10090		
110	115	130							11050	11060	11070	11080	11090		
120	125	140							12050	12060	12070	12080	12090		
130	135	155								13060	13070	13080	13090		
140	145	165								14060	14070	14080	14090		
150	155	180								15060	15070	15080	15090		
160	165	190								16060	16070	16080	16090		
170	175	200								17060	17070	17080	17090		
180	185	215								18060	18070	18080	18090		
190	195	225								19060	19070	19080	19090		
200	205	235								20060	20070	20080	20090		
225	230	260								22560	22570	22580	22590		
250	255	290								25060	25070	25580	25590		
265	270	305								26560	26570	26580	26590		
285	290	325								28560	28570	28580	28590		
300	305	340								30060	30070	30080	30090		

FZ 钢球保持架参数 (密珠型)

FZ Steel Ball Retainer Parameters



球径 d	轴径 D	长度 L	钢球数量	球径 d	轴径 D	长度 L	钢球数量	球径 d	轴径 D	长度 L	钢球数量
2	10	15	32	4	28	50	110	4	40	70	224
		20	48			60	130			80	252
	12	15	36			75	170			90	294
		25	64			50	121			70	256
	14	15	45			60	143			80	288
		25	72			75	187			90	336
16	18	54	80	198	60	110					
	30	90	50	132	38	70	132				
3	18	30	72	4	32	60	156	5	50	90	176
		45	117			75	204			60	120
		60	162			80	216			40	90
	19	45	117			90	252			110	240
		60	162			60	156			60	140
		90	252			75	204			90	224
	20	45	117			90	252			110	280
		60	162			60	156			70	192
		90	252			75	204			110	320
	22	50	150			90	252			80	252
		60	180			60	169			120	396
		90	270			75	221			100	360
25	50	165	90	273	160	600					
	75	253									
	60	216									
28	75	276									

注: FZ(*)为: FZH(铜基)、FZL(铝基)、FZP(树脂基)

Notes: FZ(*) : FZH (Bronze based) FZL (Aluminum based) FZP (Resin based)

FZH(铜基); FZL(铝基); FZP(树脂基)钢球保持圈, 分别以铜合金、硬铝合金、POM树脂为基体, 并在其外圆表面上, 加工出排列有序、大小适当, 形状特殊的孔穴, 在其孔穴中镶入滚动轴承钢球。孔口采用最新的沟槽周锁球工艺, 有效地解决了传统点锁球和压痕锁球不能完全防止钢球脱落的难题。孔底加工出90°止口使钢球在孔内自由转动而不脱落。由于钢球的直径大于保持圈的壁厚, 所以在使用时钢球高出保持圈内、外圆表面, 直接与相配的孔与轴接触, 使基体(保持圈)浮于中间, 并且相配的孔与轴半径之差小于钢球直径, 即钢球与之配合为过盈配合, 配合精度高, 轴与孔相对运动灵活。是保持圈的更新换代产品。

FZH, FZL and FZP ball retainer use bronze, aluminum, POM colophony as its base. They are machined some regular holes and embedded the steel-ball into. The new work-craft will prevent the ball getting out of as old. As the ball diameter is larger than the retainer's thickness, so it will face to face directly with guide bearing, this will bring high precision match. Now the ball retainer series items are designed to rotate on the post, as well as maintain its vertical motion. We believe this will give you the benefit of increasing accuracy.

铜合金牌号以及对照列表 Examples of Application

ALLOY TYPE	BS STANDARD	EN STANDARD	SYMBOL	ASTM/ (NEAREST EQUIVALENT)	OTHER COMPAT ABLE ALLOYS
Aluminium Bronze	Ca104	CW307G	CuAl10Ni	C63200/C63000	NES833BSB23(DTD197A)
Aluminium Bronze	Ca105	-	CuAl10Fe3Ni7Mn2	C63000	-
Aluminium Bronze	AB1-C	CC331G	CuAl10Fe2-C	C95400	SAE68
Aluminium Bronze	AB2-C	CC333G	CuAl10Fe5Ni5-C	C95500	SAE68B
Leaded Bronze	LB1-C	CC496K	CuSn7Pb15-c	C93800	SAE67
Leaded Bronze	LB2-C	CC495K	CuSn10Pb10-C	C93700	SAE64/SAE794/8SAE792
Leaded Bronze	LB4-C	CC494K	CuSn5Pb9-c	C93500	SAE66
Leaded Bronze	LB5-C	CC497K	CuSn5Pb20-C	C94100	SAE94/SAE794/8SAE799
Leaded Bronze	-	-	CuSn7ZnPb	C93200	SAE660
Leaded Gunmetal	LG2-C	CC491K	CuSn5Zn5Pb5-C	C83600	SAE40
Leaded Gunmetal	LG4-C	CC492K	CuSn7Zn2Pb3-C	C93400	-
Leaded phosphor bronze	LPB1	-	CuSn8Pb4Zn1	C93100	-
Leaded phosphor bronze	PB4-C	CC480K	CuSn10-C	C92700	-
Nickel Gunmetal	G3	-	CuSn7Ni5Zn3	B292-56	-
Phosphor Bronze	PB101	CW450K	CuSn4	C50900 C51100	-
Phosphor Bronze	PB102	CW451K	CuSn5	C51000	NES83B
Phosphor Bronze	PB103	CW452K	CuSn6	C51900	-
Phosphor Bronze	PB104	CW459K	CuSn8	C52100	BSB24 DTD265A
Phosphor Bronze	DTD265A	-	-	-	BSB24,PB104
Tin Phosphor Bronze	PB1-C	CC481K	CuSn11P-C	B143	SAE65
Tin Phosphor Bronze	PB2-C	CC483K	CuSn12-C	CC483K	SAE65

材料化学成分 Materials Chemical Composition

BAKIR ALAEMLARI UNS	BAKIR ALAEMLARI DIGER	Cu(1)	Al	Sb	Fe	Pb	Ni(2)	P(3)	Si	S	Sn	Zn	Mn
C86100	CuZn25Al5	66,0-68,0	4,5-5,5	-	2,0-4,0	.10	-	-	-	-	.10	Rest	2,5-5,0
C86200	CuZn34Al2	60,0-66,0	3,0-4,9	-	2,0-4,0	.20	1,0	-	-	-	.20	22,0-28,0	2,5-5,0
C86300	CuZn25Al5	60,0-66,0	5,0-7,5	-	2,0-4,0	.20	1,0	-	-	-	.20	22,0-28,0	2,5-5,0
SAE 4308	60-0-66-0	5-0-7-5	-	2,0-4-0	-	1-0	-	-	-	.20	22,0-28,0	2,5-5,0	-
C86500	CuZn35Al1	55,0-60,0	0,5-1,5	-	0,4-2,0	.40	1,0	-	-	-	1,0	36,0-42,0	1,0-1,5
C87800	CuZn15Si4	80,0	.15	.05	.15	.15	.20	.01	3,8-4,2	-	.25	12,0-16,0	0,15
C90500	CuSn10Zn Rg10	86,0-89,0	.005	.20	.20	.30	1	.05	.005	.05	9,0-11,0	1,0-3,0	-
C90700	CuSn10	88,0-90,0	.005	.20	.15	.50	.50	.30	.005	.05	10,0-12,0	.05	-
C90800	CuSn12	Rest	.005	.20	.15	.25	.50	.30	.005	.05	11,0-13,0	.25	-
C91700	CuSn12Ni	84,0-87,0	.005	.20	.20	.25	1,2-2,0	.30	.005	.05	11,3-12,5	.25	-
C92200	CuSn6Zn4Pb2	86,0-90,0	.005	.25	.25	1,0-2,0	1,0	.05	.005	.05	5,5-6,5	3,0-5,0	-
C92500	CuSn12Pb	85,0-88,0	.005	.25	.30	1,0-1,5	8-1,5	.30	.005	.05	10,0-12,0	.50	-
C92600	CuSn10Zn	86,0-88,5	.005	.25	.20	8-1,5	.7	.03	.005	.05	9,3-10,5	1,3-2,5	-
C92700	CuSn12Pb	86,0-89,0	.005	.25	.20	1,0-2,5	1,0	.25	.005	.05	9,0-11,0	.7	-
C92710	CuPb55Sn10	Rest	.002	0,5	0,5	4,0-6,0	1,5	0,1	0,02	-	9,0-11,0	2,0	0,2
C92800	Rest	78,0-82,0	.005	.25	.20	4,0-6,0	.8	.05	.005	.05	15,0-17,0	.8	-
C92900	Rest	82,0-86,0	.005	.25	.20	2,0-3,2	2,8-4,0	.50	.005	.05	9,0-11,0	.25	-
C93100	CuSn7Pb	Rest	.005	.25	.25	2,0-5,0	1,0	-	.005	.05	6,3-8,5	2,0	-
C93200	CuSn7ZnPb/RG-7	81,0-85,0	.005	.35	.20	6,0-8,0	1,0	.15	.005	.08	6,8-7,5	1,0-4,0	-
C33400	Rest	82,0-85,0	.005	.50	.20	7,0-9,0	1,0	.50	.005	.08	7,0-9,0	.08	-
C93500	CuSn5Pb9	83,0-86,0	.005	.30	.20	8,0-10,0	1,0	.05	.005	.08	4,3-6,0	2,0	-
C93600	Rest	79,0-83,0	.005	.55	.20	11,0-13,0	1,0	.15	.005	.08	6,0-8,0	1,0	-
C93700	CuPb10Sn	78,0-82,0	.005	.50	7	8,0-11,0	.50	.10	.005	.08	9,0-11,0	.8	-
C93800	CuPb15Sn	75,0-79,0	.005	.8	.15	13,0-16,0	1,0	.05	.005	.08	6,3-7,5	.8	-
C93900	CuPb15Sn	76,5-79,5	.005	.50	.40	14,0-18,0	.80	1,5	.005	.08	5,0-7,0	1,5	-
C94000	Rest	72,0-79,0	.005	.8	.25	18,0-22,0	1,0	.50	.005	.08	4,5-6,5	1,0	-
C94100	CuPb20Sn	72,0-79,0	.005	.8	.25	18,0-22,0	1,0	.50	.005	.08	4,5-6,5	1,0	-
C94300	Rest	67,0-72,0	.005	.8	.15	23,0-27,0	1,0	.08	.005	.08	4,5-6,0	.8	-
C94400	Rest	Rest	.005	.80	.15	9,0-12,0	1,0	.05	.005	.08	7,0-9,0	.80	-
C94500	Rem.	Rest	.005	.8	.15	16,0-12,0	1,0	.05	.005	.08	6,0-8,0	1,2	-
C94700	Rest	85,0-90,0	.005	.15	.25	.10	4,5-6,0	.05	.005	.05	4,5-6,0	1,0-2,5	.20
C94800	Rest	84,0-89,0	.005	.15	.25	3,0-1,0	4,5-6,0	.05	.005	.05	4,5-6,0	1,0-2,5	.20
C94900	CuAl10Fe	79,0-81,0	.005	.25	.30	4,0-6,0	4,0-6,0	.05	.005	.08	4,0-6,0	4,0-6,0	.10
C95200	CuAl10Fe	86	8,5-9,5	-	2,5-4,0	-	-	-	-	-	-	-	-
C95300	Rest	86	9,0-11,0	-	0,8-1,5	-	-	-	-	-	-	-	-
C95400	CuAl11Fe4	83,0min	10,0-11,5	-	3,0-5,0	-	1,5	-	-	-	-	-	.50
C95500	CuAl11Ni	78,0min	10,0-11,5	-	3,0-5,0	-	3,0-5,5	-	-	-	-	-	3,5
C95600	Rest	88	6,0-8,0	-	-	-	.25	-	1,8-3,2	-	-	-	-
C95700	CuMn11Al8Fe3Ni3	71	7,0-8,5	-	2,0-4,0	.03	1,5-3,0	-	-	-	.10	-	11,0-14,0
C95800	CuAl10Ni	79,0min	8,5-9,5	-	3,5-4,5	.03	4,0-5,0	-	.10	-	-	-	0,8-1,5
-	CuAl10Ni3Fe2	80,0-86,0	8,5-10,5	-	1,0-3,0	0,1	1,5-4,0	-	0,2	-	0,2	0,5	2,0
-	CuAl11Fe6Ni6	72,0-77,0	10,3-12,0	-	4,2-7,0	0,04	4,3-7,5	-	0,1	-	0,2	0,4	2,5
C95900	Rest	Rest	12,0-13,5	-	3,0-5,0	-	.50	-	-	-	-	-	1,5
C83300	Rest	92,0-94,0	-	-	-	1,0-2,0	-	-	-	-	1,0-2,0	2,0-6,0	-
C83400	Rest	88,0-92,0	.005	.25	0,25	0,50	1,0	0,03	.005	0,08	0,20	8,0-12,0	-
C83500	CuSn6ZnNi	86,0-88,0	.005	0,25	0,25	3,5-5,5	0,50-1,0	0,03	.005	0,08	5,5-6,5	1,0-2,5	-
C83600	CuSn5ZnPb/Rg5	84,0-86,0	.005	0,25	0,3	4,0-6,0	1,0	0,05	.005	0,08	4,0-6,0	4,0-6,0	-
C83800	Rest	82,0-83,8	.005	0,25	0,3	0,05	1,0	0,03	.005	0,08	3,3-4,2	5,0-8,0	-
C84200	Rest	78,0-82,0	.005	0,25	0,4	2,0-3,0	0,8	1,5	.005	0,08	4,0-6,0	10,0-16,0	-
C84400	Rest	78,0-82,0	.005	0,25	0,4	6,0-8,0	1,0	0,02	.005	0,08	2,3-3,5	7,0-10,0	-
C84500	Rest	77,0-79,0	.005	0,25	0,4	6,0-7,5	1,0	0,02	.005	0,08	2,0-4,0	10,0-14,0	-
C84800	Rest	75,0-77,0	.005	0,25	0,4	5,5-7,0	1,0	0,02	.005	0,08	2,0-3,0	13,0-17,0	-
C85200	Rest	70,0-74,0	.007	0,2	0,6	1,5-3,8	1,0	0,02	0,05	0,05	0,7-2,0	20,0-27,0	-
C85400	Rest	65,0-70,0	0,35	-	0,8	1,5-3,8	1,0	-	0,05	-	0,5-1,5	24,0-32,0	-
C85500	Rest	59,0-63,0	-	-	0,2	0,2	0,2	-	-	-	-	Rest	0,2
C85700	Rest	58,0-64,0	0,55	-	0,7	0,8-1,5	1,0	-	0,05	-	0,5-1,5	32,0-40,0	-
C85800	Rest	57,0	0,55	0,05	0,5	1,5	0,5	0,01	0,25	0,05	1,5	31,0-41,0	0,25
-	CuZn40Fe	56,0-62,0	0,1	-	0,2-1,2	1,0	2,0	.05	0,1	-	1,0	Rest	Rest
-	CuZn35Mn2Al1Fe1	57,0-65,0	0,5-2,5	-	0,5-2,0	0,5	3,0	-	0,1	-	1,0	Rest	0,5-3,0
-	CuZn34Mn3Al2Fe1	55,0-66,0	1,0-3,0	0,05	0,5-2,5	0,3	3,0	0,03	0,1	-	0,3	Rest	1,0-4,0



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