

浙江创诺汽车零部件有限公司

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CHANNOV**

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浙江创诺汽车零部件有限公司

COMPANY PROFILE

企业简介

浙江创诺汽车零部件有限公司是一家专业生产滑动轴承,金属塑料复合轴承的企业,秉承于精益求精、为客户不断创造价值的理念,致力于滑动轴承、复合新材料的研究、开发、推广和应用。公司现有主要产品为金属塑料复合系列滑动轴承、双金属系列轴承、单金属系列滑动轴承等,被广泛应用于汽车工业、冶金、工程机械、建筑机械、塑料机械、机床工业、水利水电等30多个领域。

公司以不断满足顾客对产品多样化、高品质的需求为导向,运用现代技术和设备对产品进行持续改进、提升,从而为客户提供更多产品、更高质量的滑动轴承。

Zhejiang channov auto parts Co,Ltd. is a professional manufacturer of plain bearings and wear plates bimetal bushing, and has grown rapidly to a point where now all types of plain bearings can be supplied. Standard catalogue sizes, special sizes and designs can be produced at competitive prices and a high quality standard. .



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产品应用

product application

主要应用在汽车和工业产品中

The main applications are in Automotive and Industrial products

汽车行业:麦克弗森撑杆和减震器,门,车身和后挡板铰链,转向柱,方向盘,变速箱选档叉导板,雨刮器臂,动力转向泵,踏板衬套,ABS设备等。

工业试验:航空航天,农业设备,建筑设备,物料搬运设备,金属,塑料和橡胶成型机,办公设备,医疗和科学设备,包装设备,气动和液压缸,泵和马达,铁路和有轨电车,纺织机械,阀门等...

Automotive: McPherson struts and shock absorbers, doors, bonnets and taigate hinges, steering columns, clutches, gearbox selectorfork guide,wiper arms,power steering pumps,pedal bushes,ABS equipment, etc.

Industrial:Aerospace, agricultural equipment,construction equipment, material handling equipment,foming machines-metal, plastic and rubbe,office equipment, medical and scientific equipment,packaging equipment pneumatic and hydraulic cylinders, pumps and motors, railroad andtramways, textile machinery, valves, etc.

双金属衬套的应用>>

主销, 弹簧眼, Trunion, 活塞销, 摇臂, 连杆, 传动系统, 分电器, 离合器, 先导装置, 启动器, 发电机, 油泵, 齿轮泵, 水泵, 凸轮轴, 中间轴, 平衡轴。



Bimetal Bushings ' applications for

King pin, Spring eyes,Trunion, Piston pin, Rocker arm, Connecting rod,Transmission system, Distributor,Clutch, pilot, Starter, Generator, Oilpump, gear pump, Water pump, Cam shaft, Intermediate shaft, Balanceshaft.



发动机轴承的应用>>

凸轮轴,曲柄(主)连杆(大端)及其他应用于发动机轴承。

Engine Bearings ' application for

Cam shaft, Crank (main),Con.Rod (big end) and other applications ofengine bearing.



双金属的应用>>

主轴承、凸轮轴、曲柄轴、分配器、传动系统、油泵、柱塞泵、叶片泵等应用

Bimetal Washers ' applications for

Main bearing, Cam shaft, Crank shaft, Distributor, Transmissionsystem, Oil pump, Ram pump, vane pump and other applications

轴套材质

Bushing Material



CNB-MT产品介绍 Product Description

CNB-MT双金属系列产品是用碳钢为基材,表面烧结青铜粉或轧制锡铝合金。工作表面可以设计排布油槽或者油穴以适应有油条件下润滑工作。

适用于高负荷、低速振荡运动。

CNB-MT bi-metallic bushing is from steel strips with alloy lining material. The alloy lined surface can be machined oil grooves, holes, formed indentations etc according to different application. It is suitable for high load, lower speed oscillation movement.

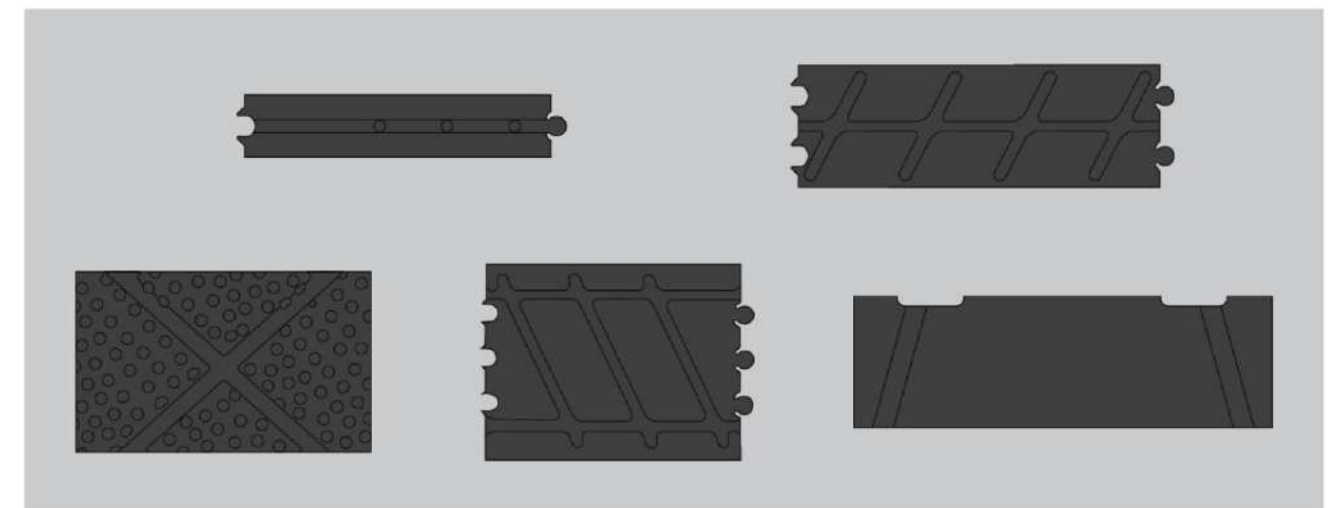
双金属轴承

Bimetallic Material Characteristics

技术参数 Data	型号 Part No	CNB-MT-1	CNB-MT-2	CNB-MT-3	CNB-MT-4
CNB-MT 产品结构 CNB-MT Structure					
		钢 Steel+CuPb ₁₀ Sn ₁₀	钢 Steel+CuPb ₂₀ Sn ₄	钢 Steel+CuPb ₃₀	钢 Steel+AlSn ₂₀ Cu
相应代号	Corresponding Code	SAE-792(SAE797) JIS-LBC3 Clevite F100.GGB-SY Daido L10.Federal Mogul HF -2F.Glyco 66	SAE-799.JIS-LBC6. Daido L23. Glyco 68	SAE-48.JIS-KJ3	SAE-783.JIS-AJL Federal Mogul TR-20.Glyco 74.
最大承载压力P	Max Load Capacity P	150N/mm ²	130N/mm ²	120N/mm ²	100N/mm ²
脂润滑	Greases Lubrication				
最大线速度V	Max Speed	2.5m/s	2.5m/s		
最高PV值	Maximum PV Value	2.8N/mm ² ·m/s	2.8N/mm ² ·m/s	2.5N/mm ² ·m/s	
摩擦系数u	Coefficient of friction	0.05~0.15	0.06~0.16		
流体(油)润滑	(Oil)Lubrication				
最大线速度V	(Max Speed	10m/s	10m/s	15m/s	25m/s
最高PV值	Maximum PV Value	10N/mm ² ·m/s	10N/mm ² ·m/s	8N/mm ² ·m/s	6N/mm ² ·m/s
摩擦系数u	Coefficient of friction	0.05~0.12	0.05~0.15	0.06~0.17	0.06~0.17
最高温度	Max Working Temperature				
脂润滑	Greases Lubrication	150°C	150°C	170°C	150°C
流体润滑	Lubrication	250°C	250°C	250°C	250°C
合金硬度	Alloy Hardness	60~100HB	45~70HB	30~45HB	30~40HB

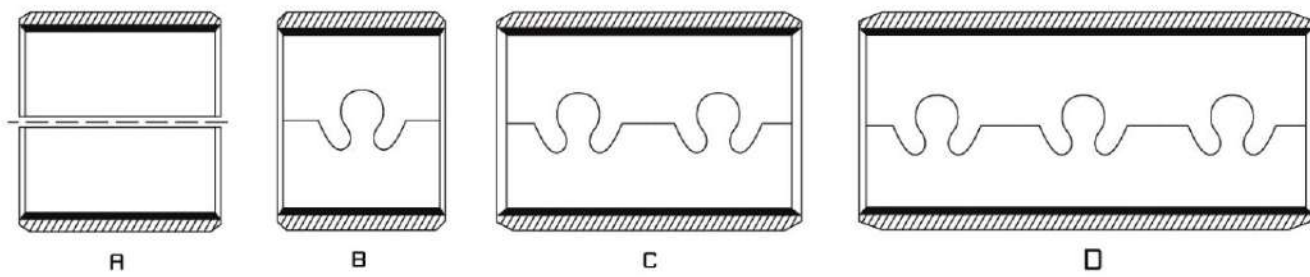
润滑设计

Lubrication Design



搭口形式

Split Gap Design



油孔设计

Oil Hole Design

在产品设计中,如使用以下推荐油孔,能使 CNB-MT 产品在使用中得到充分的油润滑。如无特殊要求,此油孔设计亦可适用。
Oil Hole is necessary to design if CNB-MT have lubricated sufficiently; the following oil hole design is recommended, which is also suitable for CNB-MT series without special requirements.

轴套外径(D) Bushing O.D.(D)	$\phi 14 > D \leq 22$	$\phi 22 > D \leq 40$	$\phi 40 > D \leq 50$	$\phi 50 > D \leq 100$	$\phi 100 > D \leq 180$
油孔直径(mm) Oil Hole Diameter(mm)	3	4	5	6	7

★ 油孔的位置应避免接缝和承载区域,并应有利于进油。

★ Oil hole location should keep away from the split gap & loading area, and in favor of oil-taking.

产品运用

Application

CNB-MT1	有很高的耐疲劳强度,高承载能力,高的抗冲击能力及耐磨损,适用于中载,中到高速的场合如齿轮箱,摇臂轴套,主梢,传动装置,普通轴套等 Advantageous in high load carrying capacity, anti-impact, lower wear. Suitable for Mid-load capacity & Mid-higher Sliding velocity, Bushings for Gearbox, Rocker arm, King Pin, transmission etc.
CNB-MT2	有较高的抗疲劳强度、承载能力及抗冲击力、有较好的表面滑动性能,产品适用于中速、中载。表面被软合金时可用于高速内燃机主轴套和连杆轴套。 Higher fatigue strength & load carrying capacity, good running characteristics at higher sliding velocities. Suitable for Mid-load capacity & Mid-Sliding velocity. Bushings for lubricating oil pumps. After surface specific treatment, Bushings for Main bushes of high speed internal-combustion engine, Connecting Rod etc.
CNB-MT3	有很好的滑动性能,良好的抗咬性。是一种特殊的材料,表面不适宜加工油槽和油穴,一般需电镀软合金。适用于高速中低载荷的内燃机主轴套和连杆轴套,也可用于液压泵,自动齿轮箱等。 Very Good sliding Characteristics, good anti-seizure property, special material, Punched oil grooves & oil pockets are not feasible. Bushings suitable for hydraulic Pump, automatic gearbox. After surface specific treatment, bushings for main bushes of high speed, medium-low load internal-combustion engine, Connecting Rod etc.
CNB-MT4	有中等疲劳强度和承载能力,较好的滑动性能,产品适用于高速低载丙燃机辅瓦、空压机、制冷机、准双曲面齿轮箱、液压泵、齿轮箱等。 Mid fatigue strength & load carrying capacity, very good sliding characteristics. Bushings for half-bearing of high speed, lower load internal-combustion engine, aircompressor, refrigerator, hypoid gearbox, hydraulic pump, gearbox etc.

CNB-MT-1(JF-800)产品介绍

CNB-MT-1(JF-800)Product Description



CNB-MT-1又叫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。

CNB-MT-1, also called JF-800 bimetal bearing, is a steel-copper alloy product with low carbon steel plate as the base material and CuPb10Sn10 or CuSn6Zn6Pb3 sintered on the surface. This product is the one with the strongest load-carrying capacity among the double alloy bearings, and it is used in the balance bridge bushings of heavy vehicles. It is a high-load low-speed motion bearing with a wide range of uses.

材料型号 Material type	CuPb10Sn10或 CuSn6Zn6Pb3	对磨轴硬度 Hardness of mating surface	53HRC
合金层硬度 Hardness of alloy layer	70-100HB	最高使用温度 Max temperature	260°C
最大荷载 Max dynamic Load	65N/mm ²	最高静承载压力 Load limit	150N/mm ²
拉伸强度 Tensile strength	150N/mm ²	最高速度 Speed limit V max	5m/s
摩擦系数(油) Friction coef (oil)	0.06-0.14	允许PV值 PV limit	脂 Grease
'蓝宝石'疲劳级 Mpa sapphire Fatigue Calss	125		油 Oil
			2.8N/mm ² .m/s
			10N/mm ² .m/s

CNB-MT-1(JF720)产品介绍

CNB-MT-1(JF720)Product Description



CNB-MT-2又叫JF720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。

CNB-MT-2 is also called JF720 bimetal bearing, based on steel plate as the matrix, surface sintering CuPb24Sn4 material products. The product has good fatigue strength and bearing capacity. It can be used as high speed internal combustion engine bearing and connecting rod bushing to achieve good wear-resisting and fatigue resistance.

材料型号 Material type	CuPb24Sn4	对磨轴硬度 Hardness of mating surface	53HRC
合金层硬度 Hardness of alloy layer	45-70HB	最高使用温度 Max temperature	200°C
最大荷载 Max dynamic Load	38N/mm ²	最高静承载压力 Load limit	130N/mm ²
拉伸强度 Tensile strength	150N/mm ²	最高速度 Speed limit V max	10m/s
摩擦系数(油) Friction coef (oil)	0.06-0.16	允许PV值 PV limit	脂 Grease
'蓝宝石'疲劳级 Mpa sapphire Fatigue Calss	115		油 Oil
			2.8N/mm ² .m/s
			10N/mm ² .m/s

CNB-MT-3(JF-700)产品介绍

CNB-MT-3(JF-700)Product Description



CNB-MT-3又叫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;油泵侧摩擦片。

CNB-MT-3, also known as JF-700 bimetal bearing, is a product with steel plate as the base body and CuPb30 sintered on the surface. Due to its high lead content, this product has good anti-seizure properties and foreign body burying properties. The working surface needs to be plated with soft alloy materials, which can be used as high-speed, medium- and low-load internal combustion engine main bushes, connecting rod bushings, rocker bushings; oil pump side friction plates.

材料型号 Material type	CuPb30	对磨轴硬度 Hardness of mating surface	270HRC
合金层硬度 Hardness of alloy layer	30-45HB	最高使用温度 Max temperature	170°C
最大荷载 Max dynamic Load	25N/mm ²	最高静承载压力 Load limit	120N/mm ²
拉伸强度 Tensile strength	200/mm ²	最高速度 Speed limit V max	15m/s
摩擦系数(油) Friction coef (oill)	0.08-0.16	允许PV值 PV limit	脂 Grease 2.5N/mm ² .m/s
'蓝宝石' 疲劳级 Mpa sapphire Fatigue Calss	105		油 Oil 8N/mm ² .m/s

CNB-MT4(JF-20)产品介绍

CNB-MT4(JF-20)Product Description



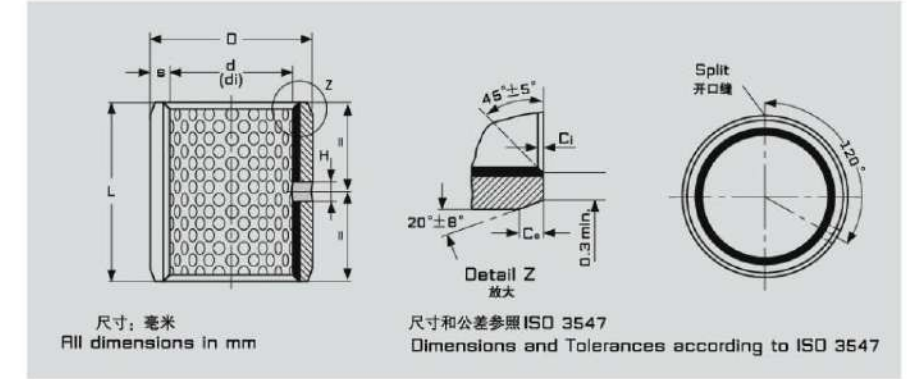
CNB-MT4又叫JF-20高锡铝基轴承,是以钢板为基体,表面辗压AlSn20Cu材料的产品。该产品具有中等疲劳强度和承载能力,良好抗腐蚀性能,较好的轴承滑动性能等特点,常用作中小功率的内燃机轴瓦、火车发动机轴瓦、空气压力机轴套、制冷机轴承,是取代巴氏合金的新颖产品。

CNB-MT4 is also called JF-20 high tin aluminum bearing. It is a product with steel plate as the base body and AlSn20Cu rolled on the surface. This product has the characteristics of medium fatigue strength and load-bearing capacity, good corrosion resistance, and good bearing sliding performance. It is often used as medium and small power internal combustion engine bearing, train engine bearing, air compressor bushing, refrigerating machine bearing, and it is a replacement for Bap Novel products of alloys.

材料型号 Material type	AlSn20Cu	对磨轴硬度 Hardness of mating surface	250HRC
合金层硬度 Hardness of alloy layer	30-40HB	最高使用温度 Max temperature	150°C
最大荷载 Max dynamic Load	30N/mm ²	最高静承载压力 Load limit	100N/mm ²
拉伸强度 Tensile strength	200/mm ²	最高速度 Speed limit V max	25m/s
摩擦系数(油) Friction coef (oill)	0.08-0.17	允许PV值 PV limit	脂 Grease -
'蓝宝石' 疲劳级 Mpa sapphire Fatigue Calss	105		油 Oil 6N/mm ² .m/s

直套规格及公差

Sleeve Bushing Specification & Tolerance



内外倒角尺寸表

Inside & Outside Chamfers

壁厚 Wall thickness S	内倒角 Inside Chamfer C _i	外倒角 Outside Chamfer C _e
1.00	0.30±0.20	0.60±0.40
1.50	0.40±0.30	0.60±0.40
2.00	0.40±0.30	1.20±0.40
2.50	0.60±0.30	1.80±0.60

直套型号标注方式

Bushing Symbol

直套型号标注方式 Bushes Symbol	EMT- □	× ×	× ×
直套型号 Bushing Type			
直套内径 Bushing I.D.			
直套高度 Bushing Length			

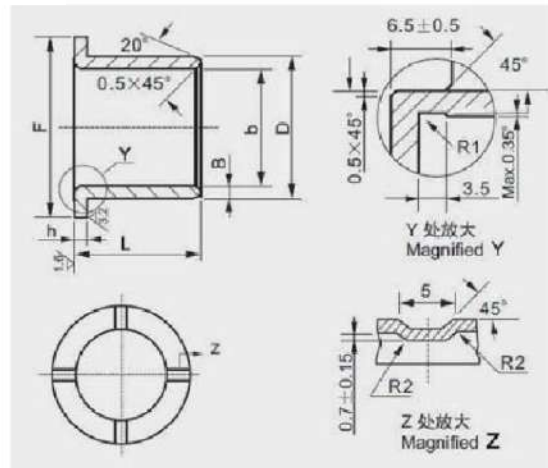
型号 Part No	内径 Internal Diameter			外径 External Diameter			高度 Length	壁厚 Wall thickness s	油孔直径 Oil hole-ΦH	
	内径 d	装配轴径 Shaft-Φd _s	装配后内径 Φd _s	外径 D	装配座孔 Housing-Φ D _H	理论外径 公差 O.D.ΦD _t				
CNB-MT 1510	15	15.000	15.148	17	17.018	+0.065 +0.030	10	0.995 0.935	4	
CNB-MT 1515							15			
CNB-MT 1520							20			
CNB-MT 1610	16	16.000	16.148	18	18.018	+0.075 +0.035	10	1.490 1.430		
CNB-MT 1615							15			
CNB-MT 1620							20			
CNB-MT 1815	18	18.000	18.151	20	20.021	+0.075 +0.035	15			6
CNB-MT 1820							20			
CNB-MT 1825							25			
CNB-MT 2010	20	20.000	20.181	23	23.021	+0.075 +0.035	10			
CNB-MT 2015							15			
CNB-MT 2020							20			
CNB-MT 2025	20	19.967	20.020	25	25.021	+0.075 +0.035	25		6	
CNB-MT 2030							30			
CNB-MT 2210							10			
CNB-MT 2215	22	22.000	22.181	25	25.021	+0.075 +0.035	15	6		
CNB-MT 2220							20			
CNB-MT 2225							25			

型号 Part No	内径 Internal Diameter			外径 External Diameter			高度 Length	壁厚 Wall thickness	油孔直径 Oil hole-ΦH
	内径 d	装配轴径 Shaft-Φd _s	装配后内径 Φd _a	外径 D	装配座孔 Housing-Φ D _H	理论外径 公差 O.D.ΦD _t	ID<80L±0.25	s	
							ID>80L±0.25		
CNB-MT 2515	25	25.000 24.967	25.181 25.020	28	28.021 28.000	+0.075 +0.035	15	1.490 1.430	6
CNB-MT 2520							20		
CNB-MT 2525							25		
CNB-MT 2530							30		
CNB-MT 2810	28	28.000 27.967	28.205 28.030	32	32.025 32.000		15	1.980 1.920	
CNB-MT 2820							20		
CNB-MT 2825							25		
CNB-MT 2830							30		
CNB-MT 2840							40		
CNB-MT 3015	30	30.000 29.967	30.205 30.030	34	34.025 34.000		15		
CNB-MT 3020							20		
CNB-MT 3025							25		
CNB-MT 3030							30		
CNB-MT 3040	40								
CNB-MT 3220	32	32.000 31.961	32.205 32.030	36	36.025 36.000		20		
CNB-MT 3230							30		
CNB-MT 3240							40		
CNB-MT 3250							50		
CNB-MT 3520	35	35.000 34.961	35.205 35.030	39	39.025 39.000		20		
CNB-MT 3525							25		
CNB-MT 3530							30		
CNB-MT 3540							40		
CNB-MT 4020	40	40.000 39.961	40.205 40.030	44	44.025 44.000		20		
CNB-MT 4025							25		
CNB-MT 4030							30		
CNB-MT 4040							40		
CNB-MT 4050	50								
CNB-MT 4525	45	45.000 44.961	45.205 45.030	50	50.025 50.000		25		
CNB-MT 4530							30		
CNB-MT 4540							40		
CNB-MT 4550							50		
CNB-MT 5050	50	50.000 49.961	50.210 50.030	55	55.030 55.000	+0.100 +0.055	30		
CNB-MT 5030							40		
CNB-MT 5040							50		
CNB-MT 5050							60		

型号 Part No	内径 Internal Diameter			外径 External Diameter			高度 Length	壁厚 Wall thickness	油孔直径 Oil hole-ΦH
	内径 d	装配轴径 Shaft-Φd _s	装配后内径 Φd _a	外径 D	装配座孔 Housing-Φ D _H	理论外径 公差 O.D.ΦD _t	ID<80L±0.25	s	
							ID>80L±0.25		
CNB-MT 5540	55	55.000 54.954	55.210 54.030	60	60.030 60.000		40	2.460 2.400	8
CNB-MT 5550							50		
CNB-MT 5560							60		
CNB-MT 6030	60	60.000 59.954	60.210 60.030	65	65.030 65.000		30		
CNB-MT 6040							40		
CNB-MT 6050							50		
CNB-MT 6060	60								
CNB-MT 6540	65	65.000 59.954	65.210 65.030	70	70.030 75.000	+0.100 +0.055	40		
CNB-MT 6550							50		
CNB-MT 6560							60		
CNB-MT 6570	70								
CNB-MT 7040	70	70.000 69.954	70.210 70.030	75	75.030 75.000		40		
CNB-MT 7050							50		
CNB-MT 7060							60		
CNB-MT 7080	80								
CNB-MT 7540	75	75.000 74.954	75.210 75.030	80	80.030 80.000		40		
CNB-MT 7550							50		
CNB-MT 7560							60		
CNB-MT 7580	80								
CNB-MT 8040	80	80.000 79.954	80.215 80.030	85	85.035 85.000		40		
CNB-MT 8050							50		
CNB-MT 8060							60		
CNB-MT 8080	80								
CNB-MT 8560	85	85.000 84.946	85.215 85.030	90	90.035 90.000	+0.120 +0.070	60		
CNB-MT 8580							80		
CNB-MT 9050							50		
CNB-MT 9060	90	90.000 89.946	90.215 90.030	95	95.035 95.000		60		
CNB-MT 9080							80		
CNB-MT 10060							60		
CNB-MT 10070	100	100.000 99.946	100.220 100.030	105	105.035 105.000		70		
CNB-MT 10080							80		
CNB-MT 12050							50		
CNB-MT 12060	120	120.000 119.946	120.220 120.030	125	125.040 125.000	+0.170 +0.100	60		
CNB-MT 13560							60		
CNB-MT 13580							80		

双金属CNB-MTF法兰衬套

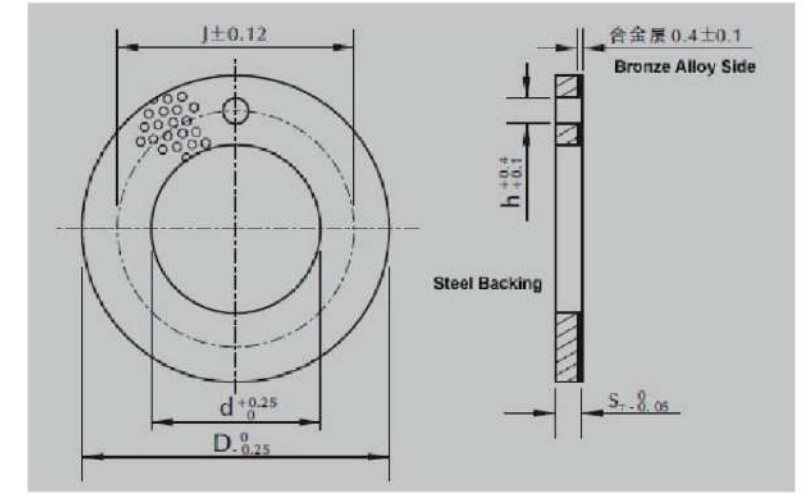
Bimetal CNB-MTF Flanged Bush



型号 Part No	法兰外径 Flang ΦD ₁	外径 D	内径 d	高度 Length	法兰高度 H	厚度 B
CNB-MTF 4040	60	46	40	39.5	3.5	3
CNB-MTF 4035	62	47	40	35	3.5	3.5
CNB-MTF 4055	68	55	45	55	3.5	5
CNB-MTF 5040A	72	57	50	40	3.5	3.5
CNB-MTF 5040B	70	57	50	40	3.5	3.5
CNB-MTF 5050	70	57	50	50	3.5	3.5
CNB-MTF 5460	92	60.6	54	60	3.5	3.3
CNB-MTF 6053	83	67	60	53	3.5	3.5
CNB-MTF 6060	87	67	60	60	3.5	3.5
CNB-MTF 6065	77	67	60	65	3.5	3.5
CNB-MTF 6060A	88	68	60	60	4	4
CNB-MTF 6060B	87	68	60	60	4	4
CNB-MTF 6465	102.6	70.4	63.5	65	3.5	3.5
CNB-MTF 6473	103	70.8	63.8	73	3.5	3.5
CNB-MTF 6553	85	72	65	53	3.5	3.5
CNB-MTF 6564	87	72	65	64	3.5	3.5
CNB-MTF 6575	108	72	65	75	3.5	3.5
CNB-MTF 7060	93	77	70	60	3.5	3.5
CNB-MTF 7090	108	80	70	90	5	5
CNB-MTF 7560	100	82	75	60	3.5	3.5
CNB-MTF 8060	105	87	80	68	3.5	3.5
CNB-MTF 8580	127	92	85	80	3.5	3.5
CNB-MTF 85103	128	92.6	85	103.5	3.5	3.8
CNB-MTF 89126	138	97.5	89.2	126.5	4.2	4.2
CNB-MTF 95127	144	105	95	127	5	5

双金属CNB-MTW止推垫圈

Bimetal CNB-MTW Thrust Washer

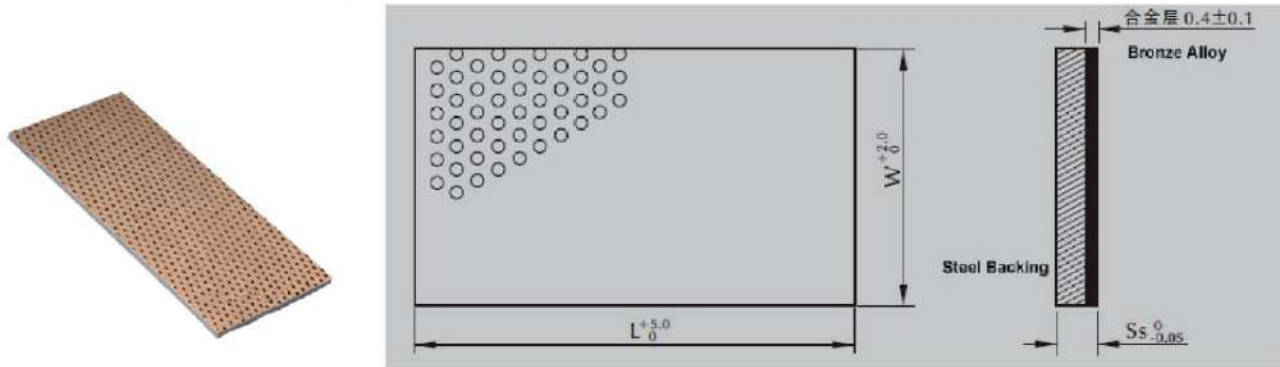


型号 Part No	外径 D	内径 d	厚度 B	孔中心圈径 mm	孔径 mm
CNB-MTW 10	12	24	1.5	18	1.5
CNB-MTW 12	14	26		20	
CNB-MTW 14	16	30		22	
CNB-MTW 16	18	32		25	
CNB-MTW 18	20	36		28	
CNB-MTW 20	22	38		30	
CNB-MTW 22	24	42		33	
CNB-MTW 24	26	44		35	
CNB-MTW 25	28	48		38	
CNB-MTW 30	32	54		43	
CNB-MTW 35	38	62	50	4	
CNB-MTW 40	42	66	54		
CNB-MTW 45	48	74	61		
CNB-MTW 50	52	78	65		



双金属CNB-MTP系列板材

Bimetal CNB-MTP Series plate



型号 Part No	长度 L	宽度 W	厚度 B
CNB-MTP 100125	500	125	1
CNB-MTP 150125			1.5
CNB-MTP 200125			2
CNB-MTP 250125			2.5



双金属集合

Bimetallic assembly

	产品名称 Material type	材质 material		产品名称 Material type	材质 material
	JF-800双金属直套	steel+CuPb10Sn10		JF-720双金属直套	steel+CuPb24Sn4
	JF-800双金属直套	steel+CuPb10Sn10		JF-720双金属轴套	steel+CuPb24Sn4
	JF-800双金属垫圈	steel+CuPb10Sn10		JF-720双金属垫圈	steel+CuPb24Sn4
	锁紧法兰双金属衬套	steel+CuPb10Sn10		JF-720齿轮泵侧板	steel+CuPb24Sn4
	JF-700双金属衬套	steel+CuPb30		JF-20双金属直套	steel+AlSn20Cu
	JF-700双金属轴承	steel+CuPb30		JF-20双金属轴套	steel+AlSn20Cu
	JF-700双金属垫圈	steel+CuPb30		JF-20双金属垫圈	steel+AlSn20Cu
	JF-700法兰双金属轴套	steel+CuPb30		JF-20法兰双金属轴套	steel+AlSn20Cu

钢板衬套

Steel plate bushing

钢板衬套 Steel plate bushing					

轴套材质

Bushing Material



CNB090产品介绍 CNB090 Brife Description

CNB090轴承是以高密度铜合金(CuSn6.5P0.1/CuSn8P0.3)为基体材质卷制而成的具有承载能力大,耐磨性能好的特点。基于铜易加工的良好性能和先进的工装模具,CNB090轴承可以在带材表面加工出适应各种工况条件的油穴(标准产品为菱形油穴),油槽等,使轴承在使用中可储存大量的润滑油脂,在工作初期形成油膜,降低摩擦系数,工作中延长加油间隔周期,有效提高轴承使用寿命。与传统的铜套相比,CNB090轴承具有密度高、薄壁、低重、负载压力大、长寿命,经济等优点,主要应用于农业机械、森林机械、工程机械、采矿机械等领域。

CNB090 bronze wrapped bushings are made of entirely bronze CuSn6.5 -P0.1/CuSn8P0.3. Because of material properties, the working surface rolled with diamond Indentations(standard Indentations) or stamped oil grooves according to detailed application. And it also has good Perform-ance of anti-corrosion caused by chemical and environments. During the operation, the grease and oil will be released from the Indentations,which allow for longterm lubrication. Compare with Machined bronze bearings;CNB090 can offer some advantages including thin wall, lower weight. cheaper cost, high load etc. It is suitable for high load, lower speed application like construction, Transport, and agriculture machinery.

轴套材质

Bushing Material



CNB092产品介绍 CNB092 Brife Description

CNB092轴承是以(CuSn6.5P0.1/CuSn8P0.3)为基体材质,表面排布规则的油孔,可在装配前或装配后涂抹油脂,以便在工作中易形成转移油膜,降低摩擦系数。具有油脂储存量大、免维护周期长等优点;产品被广泛应用于农业机械、森林机械、工程机械等。

CNB092 is deriving from CNB090;the difference betweenCn090 and CNB092 is indentations on working surface,which substitut -ed by Through-holes,these holes will allow greater capacity to collect lubricant,which build up a lubrication film at the start of movement and reduce the frication.it is suitable for high load ,lower speed application like constryction ,Transport,and agricult-ure machinery.

化学成分

Chemical composition

型号 Part No	材料 Material	铜 Cu	锡 Sn	磷 P	铅 Pb	锌 Zn
CNB090	CuSn8	91.3%	8.5%	0.2%	/	/
CNB092	CuSn8	91.3%	8.5%	0.2%	/	/

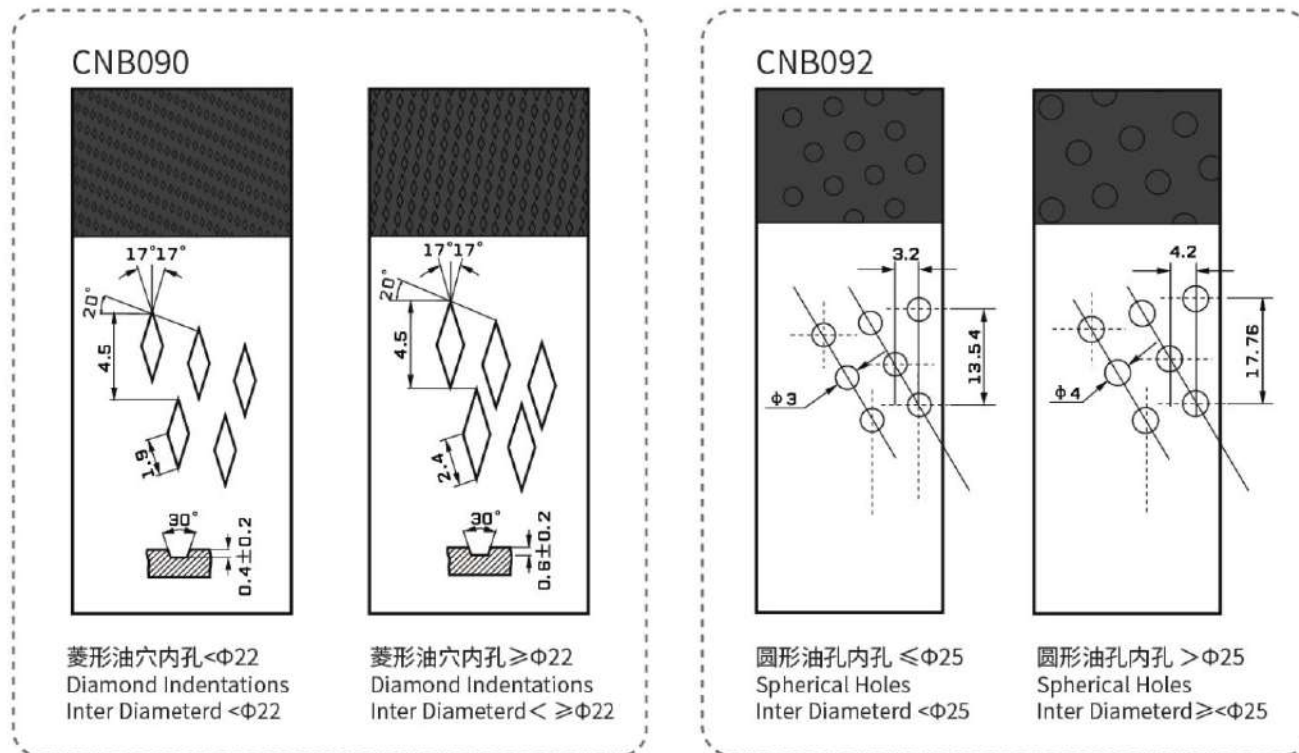
技术参数

Technical parameters

最大承载P	Max.Load Capacity		
静载	Static Load	N/mm ²	120
动载	Dynamic Load	N/mm ²	40
最高线速度V	Max.Speed		
CNB090		m/s	2.0
CNB092		m/s	>2.5
最高PV值	Max.PV Value	N/mm ² .m/s	2.8
抗拉强度	Tensile Strength	N/mm ²	450
抗压强度	Yield Point	N/mm ²	250
硬度	Hardness	HB	90-120
延伸度	Elongation		40%
摩擦系数	Coefficient of Friction	μ	0.08~0.25
使用温度	operation Temperature Range	°C	-100~200
导热系数	Thermal Conductivity	W/(m·k)	60
热膨胀系数	Coefficient of Thermal Expansion	K-1	15x10 ⁻⁶

标准油穴/油孔

Oil Indentations/Holes



轴承的选型 Bushing Design

与轴承寿命有关的六个因素:

载荷P[N/mm]Load

载荷越大, 轴承使用寿命越短; 载荷波动越大, 对轴承寿命的影响也越大, 轴承寿命越短; 无论在任何情况下, 最大载荷不可超过理论最大允许负载值。载荷大小等于实际工作载荷除以轴承的投影面积, 公式为 $P=F/(D*B)$ 。

V[m/s]与PV值

Velocity & PV Value 轴承的工作寿命取决于PV值的大小, 即实际负P[N/mm]与滑动速度V[m/s]乘积, PV越小, 轴承寿命越长。

温度T/Temperature

轴承的寿命也取决于轴承使用时的温度, 因此在设计选型时应尽量考虑相关部件的散热特性。

对磨部件的表面粗糙度

Ra Roughness of Mating Surface 与轴承对磨的部件接触面粗糙度应在Ra0.2~Ra0.8之间, 轴承在装配和使用的过程中不可有锐利的介质损坏轴承的工作表面。

使用寿命

对磨部件表面材料, 对磨部件表面粗糙度时影响轴套使用寿命的一个因素, 一般情况下某表面要求达到s0.4umka。

其他因素

如轴承座的设计、润滑条件等。

Factors of bushing service life:

(1) Operation load is an important factor for bushing service life and steady load is beneficial for it. Generally, the specific load determined by the type of loading, and should not exceed theoretical value. Specific load obtained from operation load divided by the projected area of bushing.

(2) Bushing service life determined by PV Value, $PV=P \times V$. PV value is smaller, service life of bushing is longer.

(3) Environment temperature and Thermal Generated from the different movements like Oscillating, rotary & reciprocating will influence the bushing service life. There is higher thermal expansion rate with poor thermal conductivity. It is necessary to control the bushing size and clearance.

(4) The roughness of mating surfaces should be Ra0.2~Ra0.8. During the process of installing, the sharp burr set for is forbidden to damage the mating surface.

(5) Material of Mating Surface will effect the service life of bushing the mating surface finish should be 0.4umka.

(6) Other Factors like Design of housing, Lubrication condition etc

PV值 PV Value

轴套 BUSHING		压力 PRESSURE,P	速度 VELOCITY,V	PV值 PV Value
		PN/mm ² (kgf/cm ²)	m/s (m/min)	N/mm ² *m/s (kgf/cm ² *m/min)
直套 Sleeve Bushing	1. 径向单向旋转 Rotating motion in single direction of radial journal	$\frac{F}{dl}$ $10^2 \frac{F}{dl}$	$\frac{\pi dn}{10^3}$ $\frac{\pi dn}{10^3}$	$\frac{\pi Fn}{10^3 L}$ $\frac{\pi Fn}{10 L}$
	2. 摇摆运动 Oscillating motion	$\frac{F}{dl}$ $10^2 \frac{F}{dl}$	$\frac{dc}{10^3}$ $\frac{\pi dc}{180 \times 10^3}$	$\frac{Fc}{10^3 L}$ $\frac{\pi Fc}{180 \times 10^3 L}$
	3. 往复运动 Reciprocating motion	$\frac{F}{dl}$ $10^2 \frac{F}{dl}$	$\frac{2cS}{10^3}$ $\frac{2cS}{10^3}$	$\frac{2FcS}{10^3 dL}$ $\frac{FcS}{SdL}$
止推垫片 Thrust Washer	1. 旋转 Rotating motion	$\frac{4F}{\pi(O^2-d^2)}$ $\frac{400F}{\pi(O^2-d^2)}$	$\frac{\pi On}{10^3}$ $\frac{\pi On}{10^3}$	$\frac{4FOn}{10^3(O^2-d^2)}$ $\frac{4FOn}{10^3(O^2-d^2)}$
	2. 摇摆运动 Oscillating motion	$\frac{4F}{\pi(O^2-d^2)}$ $\frac{400F}{\pi(O^2-d^2)}$	$\frac{OC}{10^3}$ $\frac{\pi Oc}{180 \times 10^3}$	$\frac{4FOC}{10^3 \pi(O^2-d^2)}$ $\frac{4FOc}{180 \times 10^3 \pi(O^2-d^2)}$
翻边轴套 Flange Bushing	1. 直套 Sleeve Bushings	翻边直套承载计算用上述直套承载计算公式, 但L=l+t. Use above formulas for sleeve bushing(L=l+t)	翻边直套承载计算用上述直套速度计算公式. Use above formulas for sleeve bushing	翻边直套承载计算用上述直套PV计算公式. Use above formulas for sleeve bushing
	2. 法兰面 Flange surface	翻边法兰面承载计算用上述垫片承载计算公式. Use above formulas for thrust washer	翻边法兰面速度计算用上述垫片计算公式. Use above formulas for thrust washer	翻边法兰面PV值计算用上述垫片PV计算公式. Use above formulas for thrust washer
滑块 Plate Ls	1. 往复运动 Reciprocating motion	$\frac{F}{BL}$ $10^2 \frac{F}{WL}$	$\frac{2cS}{10^3}$ $\frac{2cS}{10^3}$	$\frac{2FcS}{10^3 BL}$ $\frac{FcS}{sWL}$

- F: 承载loadN[kgf]
- N: 转速RotationsS-1(rpm)
- c: 往复圆周速度或摇摆Cylindrical velocity of reciprocating or oscillating motionS-1[cpm]
- S: 往复运动距离Stroke distancem[mm]
- θ: 摇摆角度Oscillating anglerad[mm]
- d: 轴套内径Bushing IDmm[mm]
- D: 轴套外径Bushing ODmm[mm]
- L: 轴套长度Bushing lengthmm[mm]
- W: 板材或滑动宽度Stirp/Slide way withmm{mm}

轴套装配 Bushing Installation

轴套接触面设计 Bushing Arrangement Design

错误的装配形式会破坏或缩短轴承的使用寿命, 下面列出了相关的装配形式, 请在设计时参考:
Wrong assemble will broken or reduced useful life the following assemble should be referred when design:

	错误 Error	正确 Correct
翻边套与轴肩接触形式 Flang Bushing & Shaft		
垫片与轴肩接触形式 Thrust Washer & shaft		
轴套与轴的油槽形式 Bushing & Oil grooves		
润滑油槽及油孔的形式 Oil grooves & Oil hole		
轴肩与轴套的接触面形式 Bushing & Shaft		
轴槽与轴套的接触面形式 Shaft groove & Bushing		
轴与轴套的同心度装配要求 Concentricity between Shaft & Bushing		

轴套座孔设计 Housing Design

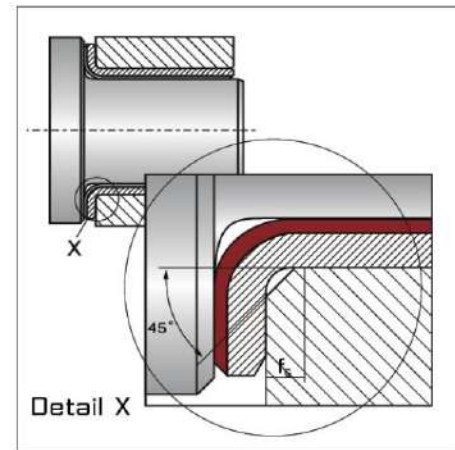
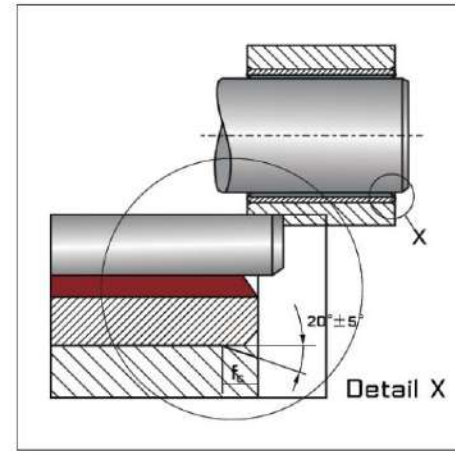
直套装配设计

为了更易于装配,轴承的座孔均应有一个倒角,如表。

Bushing

It's necessary there should have a chamfer on housing bore, it make bushing easier to be pressed into housing.

座孔 Housing bore diameter dg	倒角 Chamfer with FG
$d_g \leq 30$	0.8 ± 0.3
$30 < d_g \leq 80$	1.2 ± 0.4
$80 < d_g \leq 180$	1.8 ± 0.8
$\leq 180 < d_g$	2.5 ± 1.0



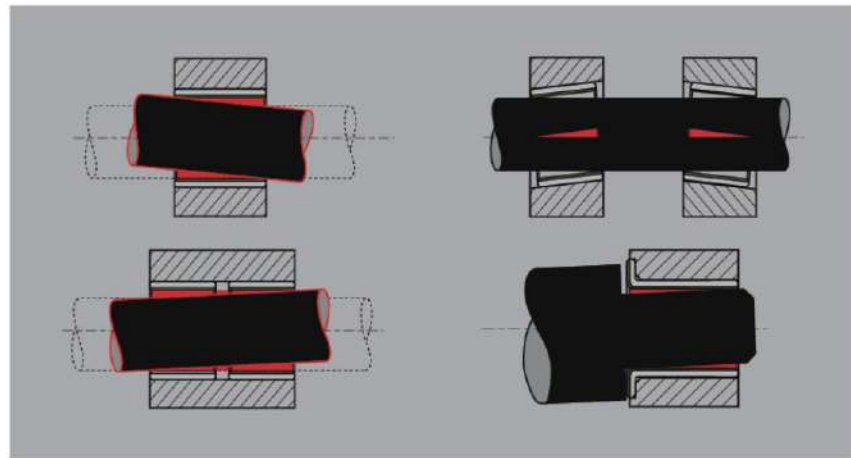
翻边套装配设计 Flange Bushing

座孔 Housing bore diameter dg	倒角 Chamfer with FG
$d_g \leq 10$	1.2 ± 0.2
$180 < d_g$	1.7 ± 0.2

同轴度 Concentricity

精确的同轴度对所有的轴承装配都是一个重要的考虑因素。轴承在一个轴套(或两个)长度内的不同轴度或在止推垫圈直径值内的不同轴度不应该超过0.020mm,如图所

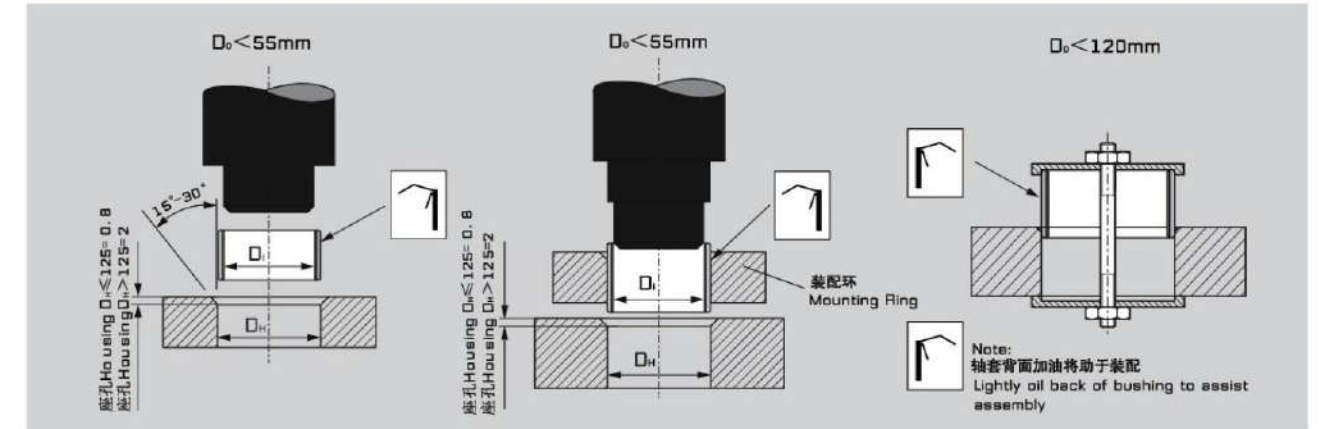
Concentricity is an important factor for bushing installation.



轴套压装 Bushing Installation

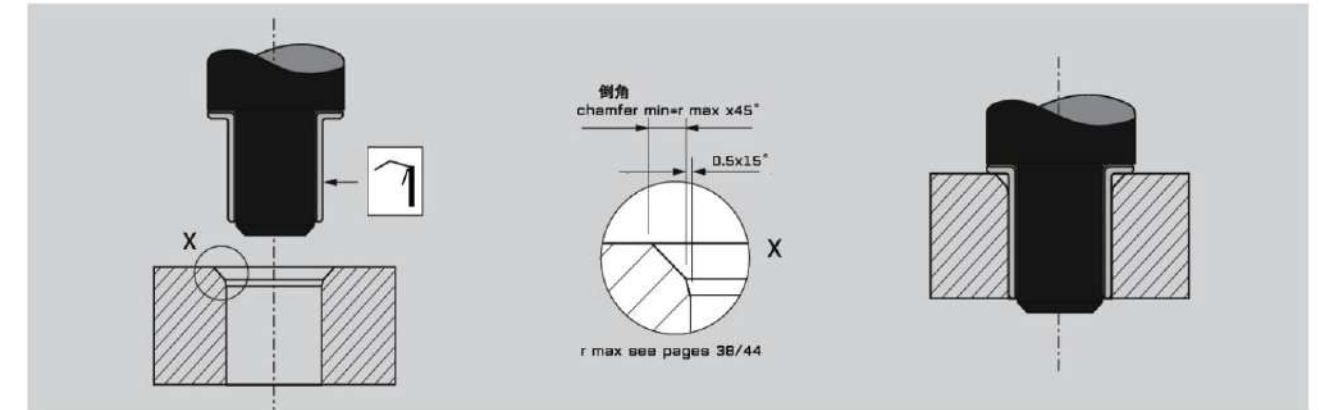
直套压装

Fitting of Cylindrical Bushing



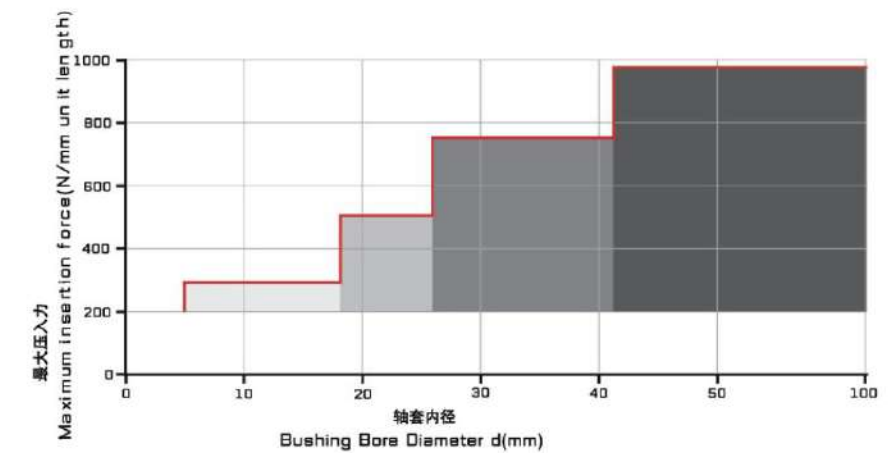
翻边轴套压装

Fitting of Flanged Bushing



压入力

Insertion Force

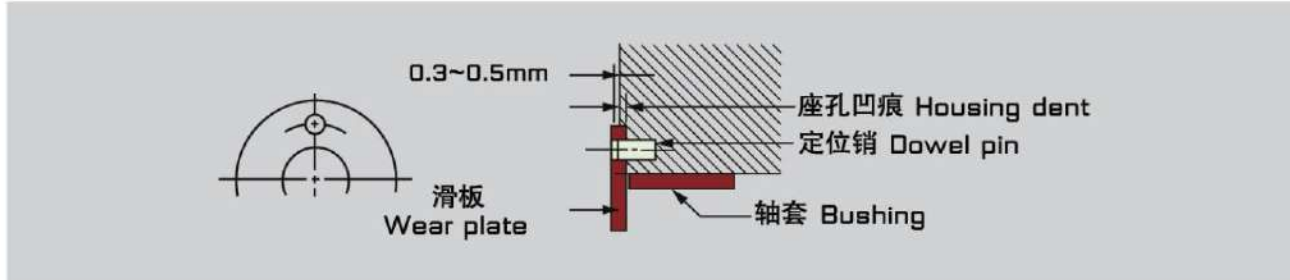


止推垫片和滑块装配 Thrust washers & Plate Installation

装配止推垫片和滑块时座孔肩有凹穴，定位销则应用于防止产品旋转。
Housing should have hollow dents for installing thrust washer and sliding plates.
Dowel pins used for prevent turning

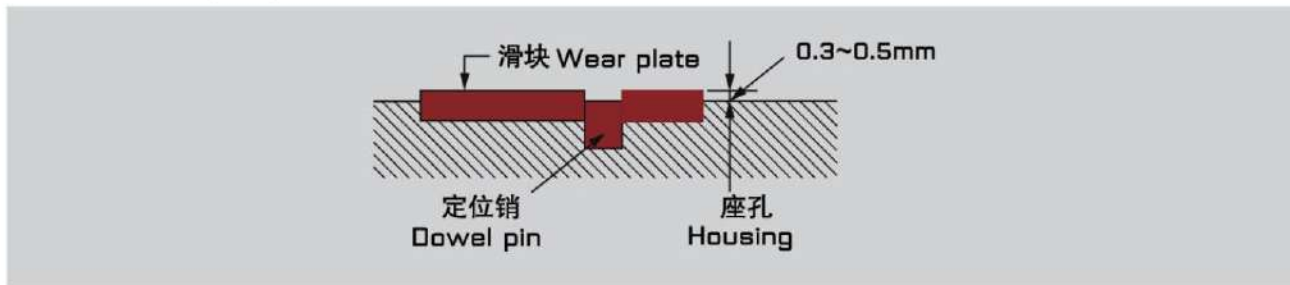
定位销应用(止推垫片)

Dowel Pin Application(Thrust Washer)



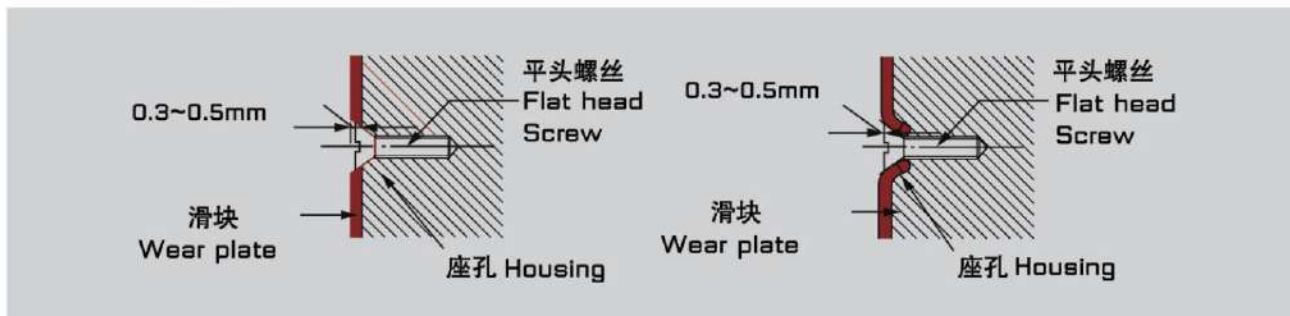
滑块镶嵌装配(滑板)

Inlaid Installation(Plate)



平头螺丝应用

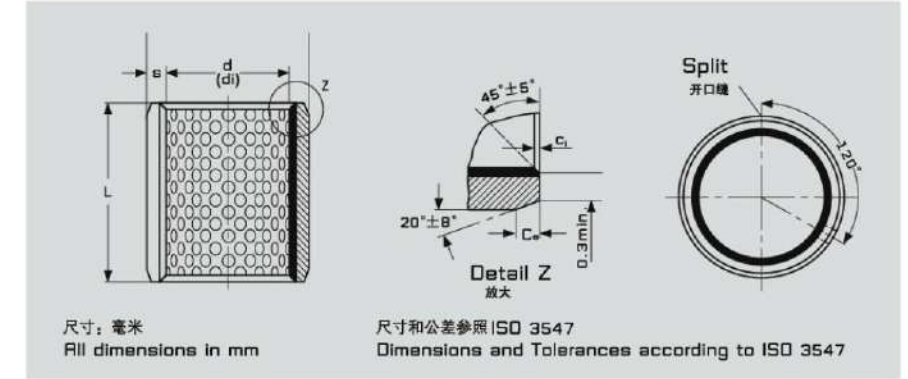
Flat Head Screw Application



- 安装后，垫圈的内径不能碰到旋转轴。
After install, I.D. of washer can not contact shaft
- 垫圈的钢背与轴承座相接触。
Backing of washer contact housing
- 定位销应比止推垫圈表面下凹0.25~0.5mm。
Dowel pin should 0.25~0.50mm lower than surface of thrust washer
- 平头螺丝应比止推垫圈表面下沉0.25~0.5mm。
Flat head screw should 0.25~0.50mm lower than surface of thrust washer

直套规格及公差

Sleeve Bushing Specification & Tolerance



尺寸：毫米
All dimensions in mm

尺寸和公差参照 ISO 3547
Dimensions and Tolerances according to ISO 3547

内外倒角尺寸表 Inside & Outside Chamfers

壁厚 Wall thickness S	内倒角 Inside Chamfer C _i	外倒角 Outside Chamfer C _e
1.00	0.30±0.20	0.60±0.40
1.50	0.40±0.30	0.60±0.40
2.00	0.40±0.30	1.20±0.40
2.50	0.60±0.30	1.80±0.60

直套型号标注方式 Bushings Symbol

直套型号标注方式 Bushings Symbol	CNB09-□	× ×	× ×
直套型号 Bushings Type			
直套内径 Bushings I.D.			
直套高度 Bushings Length			

型号 Part No	内径 Internal Diameter			外径 External Diameter			高度 Length
	内径 d	装配轴径 Shaft-Φd _s	装配后内孔尺寸 Φd _i (H9)	外径 D	装配座孔 Housing-ΦD _H	理论外径公差 O.D.ΦD _t	
CNB090/092 1010	10	9.984	10.043	12	12.018	0.065 0.03	10
CNB090/092 1015		9.957	10		12		15
CNB090/092 1020							20
CNB090/092 1210	12	11.984	12.043	14	14.019		10
CNB090/092 1215		11.957	12		14		15
CNB090/092 1220							20
CNB090/092 1410	14	13.984	14.043	16	16.018		10
CNB090/092 1415		13.957	14		16		15
CNB090/092 1420							20
CNB090/092 1425					25		
CNB090/092 1510	14	14.984	15.043	17	17.018	10	
CNB090/092 1515		14.957	15		17	15	
CNB090/092 1520						20	
CNB090/092 1525					25		
CNB090/092 1610	16	15.984	16.043	18	18.018	10	
CNB090/092 1615		15.957	16		18	15	
CNB090/092 1620						20	
CNB090/092 1625					25		

型号 Part No	内径 Internal Diameter			外径 External Diameter			高度 Length
	内径 d	装配轴径 Shaft-Φd _s	装配后内孔尺寸 Φd _i (H9)	外径 D	装配座孔 Housing-ΦD _H	理论外径公差 O.D.ΦD _i	ID<80L±0.25
							ID>80L±0.25
CNB090/092 1810	18	17.984	18.043	20	20.018	+0.065	10
CNB090/092 1815							15
CNB090/092 1820							20
CNB090/092 1825							25
CNB090/092 2010	20	19.980	20.052	23	23.020	+0.075	10
CNB090/092 2015							15
CNB090/092 2020							20
CNB090/092 2025							25
CNB090/092 2210	22	21.980	22.052	25	25.021	+0.035	10
CNB090/092 2215							15
CNB090/092 2220							20
CNB090/092 2225							25
CNB090/092 2230	24	23.980	24.052	27	27.021	+0.075	30
CNB090/092 2415							15
CNB090/092 2420							20
CNB090/092 2425							25
CNB090/092 2430	25	24.980	25.052	28	28.021	+0.035	30
CNB090/092 2515							15
CNB090/092 2520							20
CNB090/092 2525							25
CNB090/092 2530	28	27.980	28.052	32	32.021	+0.075	30
CNB090/092 2815							15
CNB090/092 2820							20
CNB090/092 2825							25
CNB090/092 2830	30	29.980	30.052	34	34.021	+0.075	30
CNB090/092 3015							15
CNB090/092 3020							20
CNB090/092 3025							25
CNB090/092 3030	32	31.975	32.062	36	36.025	+0.085	30
CNB090/092 3035							35
CNB090/092 3040							40
CNB090/092 3215							15
CNB090/092 3220	32	31.936	32.000	36	36.000	+0.045	20
CNB090/092 3225							25
CNB090/092 3230							30

型号 Part No	内径 Internal Diameter			外径 External Diameter			高度 Length
	内径 d	装配轴径 Shaft-Φd _s	装配后内孔尺寸 Φd _i (H9)	外径 D	装配座孔 Housing-ΦD _H	理论外径公差 O.D.ΦD _i	ID<80L±0.25
							ID>80L±0.25
CNB090/092 3235	32	31.975	32.062	36	36.025	+0.085	35
CNB090/092 3240							40
CNB090/092 3250							50
CNB090/092 3515							35
CNB090/092 3525	20						
CNB090/092 3525	25						
CNB090/092 3530	30						
CNB090/092 3535	40	39.975	40.062	44	44.025	+0.085	35
CNB090/092 3540							40
CNB090/092 4020							20
CNB090/092 4025							25
CNB090/092 4030	40	39.936	40.000	44	44.000	+0.045	30
CNB090/092 4035							35
CNB090/092 4040							40
CNB090/092 4050							50
CNB090/092 4520	45	44.975	45.062	50	50.025	+0.085	20
CNB090/092 4525							25
CNB090/092 4530							30
CNB090/092 4535							35
CNB090/092 4540	50	49.975	50.062	55	55.025	+0.085	40
CNB090/092 4550							50
CNB090/092 5020							20
CNB090/092 5025							25
CNB090/092 5030	50	49.936	50.000	55	55.000	+0.045	30
CNB090/092 5035							35
CNB090/092 5040							40
CNB090/092 5050							50
CNB090/092 5060	55	54.970	55.074	60	60.030	+0.100	60
CNB090/092 5520							20
CNB090/092 5525							25
CNB090/092 5530							30
CNB090/092 5535	55	54.924	55.000	60	60.000	+0.055	35
CNB090/092 5540							40
CNB090/092 5550							50
CNB090/092 5560							60

型号 Part No	内径 Internal Diameter			外径 External Diameter			高度 Length						
	内径 d	装配轴径 Shaft-Φd.	装配后内孔尺寸 Φd _i (H9)	外径 D	装配座孔 Housing-ΦD _H	理论外径公差 O.D.ΦD _i	ID<80L±0.25						
							ID>80L±0.25						
CNB090/092 6025	60	59.970 59.924	60.074 60.000	65	65.030 65.000		25						
CNB090/092 6030							30						
CNB090/092 6035							35						
CNB090/092 6040							40						
CNB090/092 6050							50						
CNB090/092 6060							60						
CNB090/092 6070							70						
CNB090/092 6530							65	64.970 64.924	65.074 65.000	70	70.030 70.000		30
CNB090/092 6535													35
CNB090/092 6540	40												
CNB090/092 6550	50												
CNB090/092 6560	60												
CNB090/092 6570	70												
CNB090/092 6580	80												
CNB090/092 7030	70	69.970 69.924	70.074 70.000	75	75.030 75.000	+0.100 +0.055							30
CNB090/092 7035													35
CNB090/092 7040							40						
CNB090/092 7050							50						
CNB090/092 7060							60						
CNB090/092 7070							70						
CNB090/092 7080							80						
CNB090/092 7530							75	74.970 74.924	75.074 75.000	80	80.030 80.000		30
CNB090/092 7535													35
CNB090/092 7540	40												
CNB090/092 7550	50												
CNB090/092 7560	60												
CNB090/092 7570	70												
CNB090/092 7580	80												
CNB090/092 8030	80	79.970 79.924	80.074 80.000	85	85.030 85.000								30
CNB090/092 8035													35
CNB090/092 8040							40						
CNB090/092 8040							50						
CNB090/092 8060							60						
CNB090/092 8070							70						
CNB090/092 8080							80						

型号 Part No	内径 Internal Diameter			外径 External Diameter			高度 Length						
	内径 d	装配轴径 Shaft-Φd.	装配后内孔尺寸 Φd _i (H9)	外径 D	装配座孔 Housing-ΦD _H	理论外径公差 O.D.ΦD _i	ID<80L±0.25						
							ID>80L±0.25						
CNB090/092 8530	85	84.964 84.910	85.087 85.000	90	90.035 90.000		30						
CNB090/092 8535							35						
CNB090/092 8540							40						
CNB090/092 8650							50						
CNB090/092 8560							60						
CNB090/092 8570							70						
CNB090/092 8580							80						
CNB090/092 8590							90						
CNB090/092 9030							90	89.964 89.910	90.087 90.000	95	95.035 95.000		30
CNB090/092 9035	35												
CNB090/092 9040	40												
CNB090/092 9050	50												
CNB090/092 9060	60												
CNB090/092 9070	70												
CNB090/092 9080	80												
CNB090/092 9090	90												
CNB090/092 9540	95	94.964 94.910	95.087 95.000	100	100.035 100.000	+0.120 +0.070							40
CNB090/092 9550							50						
CNB090/092 9560							60						
CNB090/092 9560							70						
CNB090/092 9580							80						
CNB090/092 9590							90						
CNB090/092 95100							100						
CNB090/092 10050							100	99.964 99.910	100.097 100.000	105	105.035 105.000		50
CNB090/092 10060													60
CNB090/092 10070	70												
CNB090/092 10080	80												
CNB090/092 10090	90												
CNB090/092 100100	100												
CNB090/092 10550	105	104.964 104.910	105.087 105.000	110	110.035 110.000								50
CNB090/092 10560													60
CNB090/092 10570													70
CNB090/092 10580							80						
CNB090/092 10590							90						
CNB090/092 105100							100						

型号 Part No	内径 Internal Diameter			外径 External Diameter			高度 Length						
	内径 d	装配轴径 Shaft-Φd.	装配后内孔尺寸 Φd.(H9)	外径 D	装配座孔 Housing-ΦD _H	理论外径公差 O.D.ΦD _i	ID<80L±0.25						
							ID>80L±0.25						
CNB090/092 11050	110	110.087 110.910	110.087 110.000	115	115.035 115.000		50						
CNB090/092 11060							60						
CNB090/092 11070							70						
CNB090/092 11080							80						
CNB090/092 11090							90						
CNB090/092 110100							100						
CNB090/092 11550							115	115.087 115.000	115.087 115.000	120	120.035 120.000	+0.120 +0.070	50
CNB090/092 11560													60
CNB090/092 11570													70
CNB090/092 11580													80
CNB090/092 11590	90												
CNB090/092 115100	100												
CNB090/092 12060	120	119.964 119.910	120.087 120.000	125	125.035 125.000								60
CNB090/092 12070													70
CNB090/092 12080													80
CNB090/092 12090													90
CNB090/092 120100							100						
CNB090/092 12560							125	124.957 124.894	125.100 125.000	130	130.040 130.000		60
CNB090/092 12570													70
CNB090/092 12580													80
CNB090/092 12590													90
CNB090/092 125100													100
CNB090/092 13060	130	129.957 129.894	130.087 130.000	135	135.040 135.000	+0.170 +0.100							60
CNB090/092 13070													70
CNB090/092 13080													80
CNB090/092 13090													90
CNB090/092 130100													100
CNB090/092 13560							135	134.957 134.894	135.100 135.000	140	140.040 140.000		60
CNB090/092 13570													70
CNB090/092 13580													80
CNB090/092 13590													90
CNB090/092 135100													100
CNB090/092 14060	140	139.957 139.894	140.100 140.000	145	145.040 145.000								60
CNB090/092 14070													70
CNB090/092 14080													80

型号 Part No	内径 Internal Diameter			外径 External Diameter			高度 Length						
	内径 d	装配轴径 Shaft-Φd.	装配后内孔尺寸 Φd.(H9)	外径 D	装配座孔 Housing-ΦD _H	理论外径公差 O.D.ΦD _i	ID<80L±0.25						
							ID>80L±0.25						
CNB090/092 14090	140	139.957 139.894	140.100 140.000	145	145.040 145.000		90						
CNB090/092 14095							95						
CNB090/092 140100							100						
CNB090/092 14560							145	144.957 144.894	145.100 145.000	150	150.040 150.000		60
CNB090/092 14570	70												
CNB090/092 14580	80												
CNB090/092 14590	90												
CNB090/092 145100	150	149.957 149.894	150.100 150.000	155	155.040 155.000		100						
CNB090/092 15060							60						
CNB090/092 15070							70						
CNB090/092 15080							80						
CNB090/092 15090	155	154.957 154.894	155.100 155.100	160	160.040 160.000	+0.170 +0.100	90						
CNB090/092 150100							100						
CNB090/092 15560							160	159.957 159.894	160.100 160.000	165	165.040 165.000		60
CNB090/092 15570													70
CNB090/092 15580	80												
CNB090/092 15590	90												
CNB090/092 155100	165	164.957 164.894	165.100 165.000	170	170.040 170.000		100						
CNB090/092 16060							60						
CNB090/092 16070							70						
CNB090/092 16080							80						
CNB090/092 16090	170	169.957 169.894	170.100 170.000	178	175.040 175.000		90						
CNB090/092 160100							100						
CNB090/092 16560							175	174.957 174.894	175.100 175.000	180	180.040 180.000		60
CNB090/092 16570													70
CNB090/092 16580	80												
CNB090/092 16590	90												
CNB090/092 165100	180	174.957 174.894	175.100 175.000	180	180.040 180.000		100						
CNB090/092 17060							60						
CNB090/092 17070							70						
CNB090/092 17080							80						
CNB090/092 17090	180	174.957 174.894	175.100 175.000	180	180.040 180.000		90						
CNB090/092 170100							100						
CNB090/092 17560							60						
CNB090/092 17570							70						

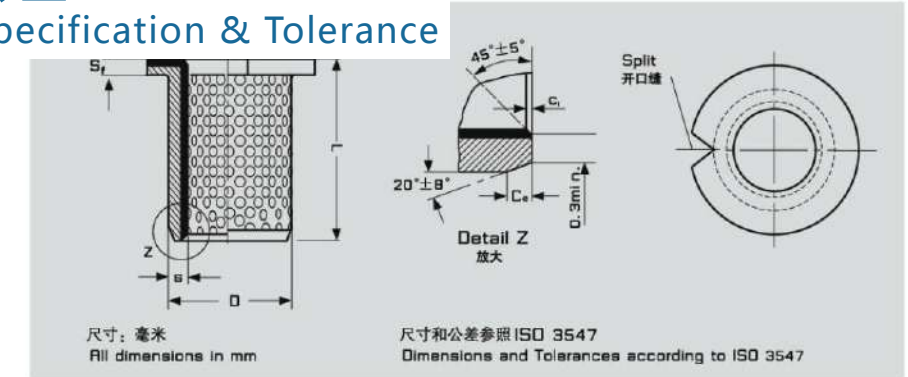
型号 Part No	内径 Internal Diameter			外径 External Diameter			高度 Length
	内径 d	装配轴径 Shaft-Φd _s	装配后内孔尺寸 Φd _i (H9)	外径 D	装配座孔 Housing-ΦD _H	理论外径公差 O.D.ΦD _t	ID<80L±0.25
							ID>80L±0.25
CNB090/092 17580	175	174.957 174.894	175.100 175.000	180	180.040 180.000	+0.170 +0.100	80
CNB090/092 17585							85
CNB090/092 17590							90
CNB090/092 175100							100
CNB090/092 18060	180	174.957 174.894	180.100 180.000	185	185.040 185.000		60
CNB090/092 18070							70
CNB090/092 18080							80
CNB090/092 18090							90
CNB090/092 180100	100						
CNB090/092 18560	185	184.957 184.878	185.115 185.000	190	190.046 190.000		60
CNB090/092 18565						65	
CNB090/092 18570						70	
CNB090/092 18580						80	
CNB090/092 18590						90	
CNB090/092 185100						100	
CNB090/092 19060	190	189.950 189.878	190.115 190.000	195	195.046 195.000	60	
CNB090/092 19070						70	
CNB090/092 19080						80	
CNB090/092 19090						90	
CNB090/092 190100						100	
CNB090/092 19560	195	194.950 194.878	195.115 195.000	200	200.046 200.000	60	
CNB090/092 19570						70	
CNB090/092 19580						80	
CNB090/092 19590						90	
CNB090/092 195100						100	
CNB090/092 20060	200	199.950 199.878	200.115 200.000	205	205.046 205.000	60	
CNB090/092 20070						70	
CNB090/092 20080						80	
CNB090/092 20090						90	
CNB090/092 200100	100						
CNB090/092 20560	205	204.950 204.878	205.115 205.000	210	210.046 210.000	60	
CNB090/092 20570						70	
CNB090/092 20580						80	
CNB090/092 20590						90	
CNB090/092 205100						100	

型号 Part No	内径 Internal Diameter			外径 External Diameter			高度 Length
	内径 d	装配轴径 Shaft-Φd _s	装配后内孔尺寸 Φd _i (H9)	外径 D	装配座孔 Housing-ΦD _H	理论外径公差 O.D.ΦD _t	ID<80L±0.25
							ID>80L±0.25
CNB090/092 21560	215	214.950 214.878	215.115 215.000	220	220.046 220.000	+0.210 +0.130	60
CNB090/092 21570							70
CNB090/092 21580							80
CNB090/092 21590							90
CNB090/092 215100							100
CNB090/092 22560							225
CNB090/092 22570	70						
CNB090/092 22580	80						
CNB090/092 22590	90						
CNB090/092 225100	100						
CNB090/092 23060	230	229.950 229.878	230.115 230.000	235	235.046 235.000	60	
CNB090/092 23070						70	
CNB090/092 23080						80	
CNB090/092 23090						90	
CNB090/092 230100						100	
CNB090/092 24060	240	239.950 239.878	240.115 240.000	245	245.046 245.000	60	
CNB090/092 24070						70	
CNB090/092 24070						80	
CNB090/092 24090						90	
CNB090/092 240100						100	
CNB090/092 25060	250	249.950 249.878	250.115 250.000	255	255.046 255.000	60	
CNB090/092 25070						70	
CNB090/092 25080						80	
CNB090/092 25090						90	
CNB090/092 250100						100	
CNB090/092 26060	260	259.944 259.863	260.944 260.000	265	265.052 265.000	60	
CNB090/092 26070						70	
CNB090/092 26080						80	
CNB090/092 26090						90	
CNB090/092 260100						100	
CNB090/092 27060	270	269.944 269.863	270.130 270.000	275	275.052 275.000	60	
CNB090/092 27070						70	
CNB090/092 27080						80	
CNB090/092 27090						90	
CNB090/092 270100						100	

型号 Part No	内径 Internal Diameter			外径 External Diameter			高度 Length
	内径 d	装配轴径 Shaft- Φd_s	装配后内孔尺寸 Φd_i (H9)	外径 D	装配座孔 Housing- ΦD_H	理论外径公差 O.D. ΦD_t	
CNB090/092 28060	280	279.944 279.863	280.130 280.000	285	285.052 285.000		ID<80L±0.25
CNB090/092 28070							60
CNB090/092 28080							70
CNB090/092 28090							80
CNB090/092 280100							90
CNB090/092 29060	290	289.944 289.863	290.130 290.000	295	295.052 295.000	+0.260 +0.170	ID>80L±0.25
CNB090/092 29070							60
CNB090/092 29080							70
CNB090/092 29090							80
CNB090/092 290100							90
CNB090/092 30060	300	299.944 289.863	300.130 300.000	305	305.052 305.000		60
CNB090/092 30070							70
CNB090/092 30080							80
CNB090/092 30090							90
CNB090/092 300100							100

CNB090/092F翻边规格及公差 Sleeve Bushing Specification & Tolerance

直套规格及公差 Sleeve Bushing Specification & Tolerance



内外倒角尺寸表 Inside & Outside Chamfers

壁厚 Wall thickness S	内倒角 Inside Chamfer C _i	外倒角 Outside Chamfer C _o
1.00	0.30±0.20	0.60±0.40
1.50	0.40±0.30	0.60±0.40
2.00	0.40±0.30	1.20±0.40
2.50	0.60±0.30	1.80±0.60

翻边型号标注方式 Flange Bushing Symbol

翻边套型号标注方式 Flange Bushing Symbol	CNB09□-F	× ×	× ×
轴承型号 Flange Bushing Type			
翻边套内径 Flange Bushing I. D.			
翻边套高度 Flange Bushing Length			



型号 Part No	内径 Internal Diameter			外径 External Diameter			法兰外径 Flang ΦD_f	高度 Length
	内径 d	装配轴径 Shaft- Φd_s	装配后内孔尺寸 Φd_i (H9)	外径 D	装配座孔 Housing- ΦD_H	理论外径公差 O.D. ΦD_t		
CNB090F/092F 2515	25	24.980 24.947	25.052 25.000	28	28.021 28.000	+0.075 +0.035	35	15
CNB090F/092F 2520								20
CNB090F/092F 2525								25
CNB090F/092F 3020	30	29.980 29.947	30.052 30.000	34	34.052 34.000		45	20
CNB090F/092F 3025								25
CNB090F/092F 3030								30
CNB090F/092F 3520	35	35.975 35.936	35.062 35.000	39	39.025 39.000		50	20
CNB090F/092F 3525								25
CNB090F/092F 3530								30
CNB090F/092F 3535								35
CNB090F/092F 4025	40	39.975 39.936	40.062 40.000	44	44.025 44.000	+0.085 +0.045	55	25
CNB090F/092F 4030								30
CNB090F/092F 4035								35
CNB090F/092F 4040								40
CNB090F/092F 4530	45	44.975 44.936	45.062 45.000	50	50.025 50.000		60	30
CNB090F/092F 4535								35
CNB090F/092F 4540								40
CNB090F/092F 4550								50

型号 Part No	内径 Internal Diameter			外径 External Diameter			法兰外径 Flang ΦD _f	高度 Length	
	内径 d	装配轴径 Shaft-Φd _s	装配后内孔尺寸 Φd _i (H9)	外径 D	装配座孔 Housing-ΦD _h	理论外径公差 O.D.ΦD _t		ID<80L±0.25	ID>80L±0.25
CNB090F/092F 5030	50	49.975 49.936	50.062 50.000	55	55.025 55.000	+0.085 +0.045	65	30	
CNB090F/092F 5035								35	
CNB090F/092F 5040								40	
CNB090F/092F 5050								50	
CNB090F/092F 5530	55	54.970 54.924	55.074 55.000	60	60.030 60.000		70	30	
CNB090F/092F 5535								35	
CNB090F/092F 5540								40	
CNB090F/092F 5550								50	
CNB090F/092F 6030	60	59.970 59.924	60.074 60.000	65	65.030 65.000		75	30	
CNB090F/092F 6035								35	
CNB090F/092F 6040								40	
CNB090F/092F 6050								50	
CNB090F/092F 6060	65	64.970 64.924	65.074 65.000	70	70.030 70.000		80	60	
CNB090F/092F 6530								30	
CNB090F/092F 6535								35	
CNB090F/092F 6540								40	
CNB090F/092F 6550	70	69.970 69.924	70.074 70.000	75	75.030 75.000		85	50	
CNB090F/092F 6560								60	
CNB090F/092F 7035								35	
CNB090F/092F 7040								40	
CNB090F/092F 7050	75	74.970 74.924	75.074 75.000	80	80.030 80.000		90	50	
CNB090F/092F 7060								60	
CNB090F/092F 7070								70	
CNB090F/092F 7535								35	
CNB090F/092F 7540	80	79.970 79.924	80.074 80.000	85	85.030 85.000		100	40	
CNB090F/092F 7550								50	
CNB090F/092F 7560								60	
CNB090F/092F 7570								70	
CNB090F/092F 8040	90	89.960 89.910	90.087 90.000	100	100.035 100.000		110	40	
CNB090F/092F 8050								50	
CNB090F/092F 8060								60	
CNB090F/092F 8070								70	
CNB090F/092F 8080	90	89.960 89.910	90.087 90.000	100	100.035 100.000		110	80	
CNB090F/092F 9050								50	
CNB090F/092F 9060								60	

型号 Part No	内径 Internal Diameter			外径 External Diameter			法兰外径 Flang ΦD _f	高度 Length	
	内径 d	装配轴径 Shaft-Φd _s	装配后内孔尺寸 Φd _i (H9)	外径 D	装配座孔 Housing-ΦD _h	理论外径公差 O.D.ΦD _t		ID<80L±0.25	ID>80L±0.25
CNB090F/092F 9070	95	94.964 94.910	95.087 95.000	100	100.035 100.000		115	70	
CNB090F/092F 9080								80	
CNB090F/092F 9090								90	
CNB090F/092F 10050								50	
CNB090F/092F 10060	100	99.964 99.910	100.087 100.000	105	105.035 105.000		120	60	
CNB090F/092F 10070								70	
CNB090F/092F 10080								80	
CNB090F/092F 10090								90	
CNB090F/092F 11050	110	109.964 109.910	110.087 110.000	115	115.035 110.000	+0.120 +0.070	130	50	
CNB090F/092F 11060								60	
CNB090F/092F 11070								70	
CNB090F/092F 11080								80	
CNB090F/092F 11090	120	119.964 119.910	120.087 120.000	125	125.035 125.000		140	90	
CNB090F/092F 12060								60	
CNB090F/092F 12070								70	
CNB090F/092F 12080								80	
CNB090F/092F 12090	130	129.957 129.894	130.100 130.000	135	135.040 135.000		155	90	
CNB090F/092F 13060								60	
CNB090F/092F 13070								70	
CNB090F/092F 13080								80	
CNB090F/092F 13090	140	139.957 139.894	140.100 140.000	145	145.040 145.000		165	60	
CNB090F/092F 14060								60	
CNB090F/092F 14070								70	
CNB090F/092F 14080								80	
CNB090F/092F 14090	150	149.957 149.894	150.100 150.000	155	155.040 155.000	+0.170 +0.100	180	90	
CNB090F/092F 15060								60	
CNB090F/092F 15070								70	
CNB090F/092F 15080								80	
CNB090F/092F 15090	160	159.957 159.894	160.100 160.000	165	165.040 165.000		190	90	
CNB090F/092F 16060								60	
CNB090F/092F 16070								70	
CNB090F/092F 16080								80	
CNB090F/092F 16090	170	169.957 169.894	170.100 170.000	175	175.040 175.000		200	90	
CNB090F/092F 17060								60	
CNB090F/092F 17070								70	

型号 Part No	内径 Internal Diameter			外径 External Diameter			法兰外径 Flang ΦD _f	高度 Length
	内径 d	装配轴径 Shaft-Φd _s	装配后内孔尺寸 Φd _i (H9)	外径 D	装配座孔 Housing-ΦD _h	理论外径公差 O.D.ΦD _t		ID<80L±0.25
								ID>80L±0.25
CNB090F/092F 17080	170	169.957	170.100	175	175.040		200	80
CNB090F/092F 17090								90
CNB090F/092F 18060	180	179.957	180.100	185	185.040		215	60
CNB090F/092F 18070								70
CNB090F/092F 18080								80
CNB090F/092F 18090								90
CNB090F/092F 19060	190	189.950	170.100	195	195.046		225	60
CNB090F/092F 19070								70
CNB090F/092F 19080								80
CNB090F/092F 19090								90
CNB090F/092F 20060	200	199.950	200.115	205	205.046		235	60
CNB090F/092F 20070								70
CNB090F/092F 20080								80
CNB090F/092F 20090								90
CNB090F/092F 22560	225	224.950	225.115	230	230.046		260	60
CNB090F/092F 22570								70
CNB090F/092F 22580								80
CNB090F/092F 22590								90
CNB090F/092F 25060	250	249.950	250.115	255	255.046		290	60
CNB090F/092F 25070								70
CNB090F/092F 25080								80
CNB090F/092F 25090								90
CNB090F/092F 26560	265	264.955	265.130	270	270.052		305	60
CNB090F/092F 26570								70
CNB090F/092F 26580								80
CNB090F/092F 26590								90
CNB090F/092F 28560	285	284.944	285.130	290	290.052		325	60
CNB090F/092F 28570								70
CNB090F/092F 28580								80
CNB090F/092F 28590								90
CNB090F/092F 30060	300	299.944	300.130	305	305.052		340	60
CNB090F/092F 30070								70
CNB090F/092F 30080								80
CNB090F/092F 30090								90

轴公差表 (250)

Shaft tolerance Table (250)

≥	<	c9	d8	e7	e8	f7	g6	h5	h6	h7	h8	js6	js7	k6	m6	n6	p6	p7	r6	s6
-	3	-60 -85	-20 -34	-14 -24	-14 -28	-6 -16	-2 -8	0 -4	0 -6	0 -10	0 -14	±3	±5	+6 0	+8 +2	+10 +4	+12 +6	+16 +6	+16 +10	+20 +14
3	6	-70 -100	-30 -48	-20 -32	-20 -38	-10 -22	-4 -12	0 -5	0 -8	0 -12	0 -18	±4	±6	+9 +1	+12 +4	+16 +8	+20 +12	+24 +12	+23 +15	+27 +19
6	10	-80 -116	-40 -62	-25 -40	-25 -47	-13 -28	-5 -14	0 -6	0 -9	0 -15	0 -22	±4.5	±7	+10 +1	+15 +6	+19 +10	+24 +15	+30 +15	+28 +19	+32 +23
10	18	-95 -138	-50 -77	-32 -50	-32 -59	-16 -34	-6 -17	0 -8	0 -11	0 -18	0 -27	±5.5	±9	+12 +1	+18 +7	+23 +12	+29 +18	+36 +18	+34 +23	+39 +28
18	24	-110 -162	-65 -98	-40 -61	-40 -73	-20 -41	-7 -20	0 -9	0 -13	0 -21	0 -33	±6.5	±10	+15 +2	+21 +8	+28 +15	+35 +22	+43 +22	+41 +28	+48 +35
30	40	-120 -182	-80 -119	-50 -70	-50 -89	-25 -50	-9 -25	0 -11	0 -16	0 -25	0 -39	±8	±12	+18 +2	+25 +9	+33 +17	+42 +26	+51 +26	+50 +34	+50 +34
40	50	-140 -214	-100 -146	-60 -90	-60 -106	-30 -60	-10 -29	0 -13	0 -19	0 -30	0 -46	±9.5	±15	+21 +2	+30 +11	+39 +20	+51 +32	+62 +32	+60 +41	+72 +53
65	80	-150 -224	-120 -174	-72 -107	-72 -126	-36 -71	-12 -34	-120 -174	0 -22	0 -35	0 -54	±11	±17	+25 +3	+35 +13	+45 +23	+59 +37	+72 +37	+73 +51	+93 +71
80	100	-170 -257	-140 -207	-80 -119	-80 -138	-40 -99	-14 -43	-140 -207	0 -25	0 -40	0 -63	±12.5	±20	+28 +3	+40 +15	+52 +27	+68 +43	+83 +43	+90 +65	+125 +100
100	120	-180 -267	-160 -227	-90 -129	-90 -148	-45 -109	-16 -49	-160 -227	0 -28	0 -45	0 -72	±15	±23	+33 +4	+46 +17	+60 +31	+79 +50	+96 +50	+109 +80	+159 +130
120	140	-200 -300	-180 -249	-100 -149	-100 -168	-50 -119	-18 -59	-180 -249	0 -31	0 -48	0 -81	±16	±26	+36 +14	+52 +20	+66 +34	+88 +56	+108 +56	+126 +94	+190 +158
140	160	-210 -310	-190 -259	-110 -159	-110 -178	-55 -129	-19 -69	-190 -259	0 -34	0 -51	0 -90	±18	±28	+40 +4	+57 +21	+73 +37	+98 +62	+119 +62	+144 +112	+226 +190
160	180	-230 -330	-210 -269	-120 -169	-120 -188	-60 -139	-20 -79	-200 -269	0 -37	0 -54	0 -100	±20	±31	+45 +5	+63 +23	+80 +40	+108 +68	+131 +68	+166 +126	+272 +232
180	200	-240 -355	-220 -279	-130 -179	-130 -198	-65 -149	-21 -89	-210 -279	0 -40	0 -57	0 -110	±21	±31	+45 +5	+63 +23	+80 +40	+108 +68	+131 +68	+172 +132	+292 +252
200	225	-260 -375	-240 -299	-140 -189	-140 -208	-70 -159	-22 -99	-220 -299	0 -43	0 -60	0 -120	±22	±31	+45 +5	+63 +23	+80 +40	+108 +68	+131 +68	+172 +132	+292 +252
225	250	-280 -395	-260 -319	-150 -199	-150 -218	-75 -169	-23 -109	-230 -319	0 -46	0 -63	0 -130	±23	±31	+45 +5	+63 +23	+80 +40	+108 +68	+131 +68	+172 +132	+292 +252
250	280	-300 -430	-280 -339	-160 -209	-160 -228	-80 -179	-24 -119	-240 -339	0 -49	0 -66	0 -140	±24	±31	+45 +5	+63 +23	+80 +40	+108 +68	+131 +68	+172 +132	+292 +252
280	315	-330 -460	-300 -359	-170 -219	-170 -238	-85 -189	-25 -129	-250 -359	0 -52	0 -69	0 -150	±25	±31	+45 +5	+63 +23	+80 +40	+108 +68	+131 +68	+172 +132	+292 +252
315	355	-360 -500	-320 -379	-180 -229	-180 -248	-90 -199	-26 -139	-260 -379	0 -55	0 -72	0 -160	±26	±31	+45 +5	+63 +23	+80 +40	+108 +68	+131 +68	+172 +132	+292 +252
355	400	-400 -540	-340 -399	-190 -239	-190 -258	-95 -209	-27 -149	-270 -399	0 -58	0 -75	0 -170	±27	±31	+45 +5	+63 +23	+80 +40	+108 +68	+131 +68	+172 +132	+292 +252
400	450	-440 -595	-360 -419	-200 -249	-200 -268	-100 -219	-28 -159	-280 -419	0 -61	0 -78	0 -180	±28	±31	+45 +5	+63 +23	+80 +40	+108 +68	+131 +68	+172 +132	+292 +252
450	500	-480 -635	-380 -439	-210 -259	-210 -278	-105 -229	-29 -169	-290 -439	0 -64	0 -81	0 -190	±29	±31	+45 +5	+63 +23	+80 +40	+108 +68	+131 +68	+172 +132	+292 +252

座孔公差表 (250)

Housing Tolerance Table (250)

≥	<	B10	C9	D8	E7	E8	F7	G7	H6	H7	H8	js7	K7	M7	N7	P7	R7	T7	S6
-	3	+180 +140	+180 +140	+34 +20	+24 +14	+28 +14	+16 +6	+12 +2	+6 0	+10 0	+14 0	±5	0 -10	-2 -12	-4 -14	-6 -16	-10 -20	-14 -24	-
3	6	+188 +140	+188 +140	+48 +30	+32 +20	+38 +20	+22 +10	+16 +4	+8 0	+12 0	+18 0	±6	+3 -9	0 -12	-4 -16	-8 -20	-11 -23	-15 -27	-
6	10	+208 +150	+208 +150	+62 +40	+40 +25	+47 +25	+28 +13	+20 +5	+9 0	+15 0	+22 0	±7	+5 -10	0 -15	-4 -19	-9 -24	-13 -28	-17 -32	-
10	14	+200 +150	+200 +150	+77 +50	+50 +32	+59 +32	+34 +16	+24 +6	+11 0	+18 0	+27 0	±9	+6 -12	0 -18	-5 -23	-11 -29	-16 -34	-21 -32	-
14	18	+244 +160	+244 +160	+98 +65	+61 +40	+73 +40	+41 +20	+28 +7	+13 0	+21 0	+33 0	±10	+6 -15	0 -21	-7 -28	-14 -35	-20 -41	-27 -48	-
18	24	+270 +170	+270 +170	+119 +85	+75 +50	+89 +50	+50 +25	+34 +9	+16 0	+25 0	+39 0	±12	+7 -18	0 -25	-8 -33	-17 -42	-25 -50	-34 -59	-39 -64
24	30	+280 +180	+280 +180	+146 +100	+90 +60	+106 +60	+60 +30	+40 +10	+19 0	+30 0	+46 0	±15	+9 -21	0 -30	-9 -39	-21 -51	-30 -60	-42 -72	-55 -85
30	40	+320 +200	+320 +200	+174 +120	+107 +72	+125 +72	+71 +36	+47 +12	+22 0	+35 0	+54 0	±17	+10 -25	0 -35	-10 -45	-24 -59	-38 -73	-58 -93	-78 -113
40	50	+360 +220	+360 +220	+208 +145	+125 +85	+148 +85	+83 +43	+54 +14	+25 0	+40 0	+63 0	±20	+12 -28	0 -40	-12 -52	-28 -68	-41 -76	-66 -101	-91 -126
50	65	+420 +260	+420 +260	+242 +170	+146 +100	+172 +100	+96 +50	+61 +15	+29 0	+46 0	+72 0	±23	+13 -33	0 -46	-14 -46	-33 -79	-63 -109	-113 -159	-163 -209
65	80	+440 +280	+440 +280	+271 +190	+162 +110	+191 +110	+108 +56	+69 +17	+32 0	+52 0	+81 0	±26	+16 -36	0 -52	-14 -66	-36 -88	-74 -126	-138 -190	-198 -250
80	100	+470 +310	+470 +310	+299 +210	+182 +125	+214 +125	+119 +62	+75 +18	+36 0	+57 0	+89 0	±28	+17 -40	0 -57	-16 -73	-41 -98	-87 -144	-169 -226	-247 -304
100	120	+525 +340	+525 +340	+327 +230	+198 +135	+232 +135	+131 +68	+83 +20	+40 0	+63 0	+97 0	±31	0 -63	-17 80	-45 -108	-45 -108	-93 -150	-187 -224	-273 -330
120	140	+565 +380	+565 +380	+327 +230	+198 +135	+232 +135	+131 +68	+83 +20	+40 0	+63 0	+97 0	±31	0 -63	-17 80	-45 -108	-45 -108	-103 -166	-209 -272	-307 -370
140	160	+605 +420	+605 +420	+327 +230	+198 +135	+232 +135	+131 +68	+83 +20	+40 0	+63 0	+97 0	±31	0 -63	-17 80	-45 -108	-45 -108	-109 -172	-229 -292	-337 -400
160	180	+690 +480	+690 +480	+327 +230	+198 +135	+232 +135	+131 +68	+83 +20	+40 0	+63 0	+97 0	±31	0 -63	-17 80	-45 -108	-45 -108	-109 -172	-229 -292	-337 -400
180	220	+750 +540	+750 +540	+327 +230	+198 +135	+232 +135	+131 +68	+83 +20	+40 0	+63 0	+97 0	±31	0 -63	-17 80	-45 -108	-45 -108	-109 -172	-229 -292	-337 -400
220	225	+830 +600	+830 +600	+327 +230	+198 +135	+232 +135	+131 +68	+83 +20	+40 0	+63 0	+97 0	±31	0 -63	-17 80	-45 -108	-45 -108	-109 -172	-229 -292	-337 -400
250	250	+910 +680	+910 +680	+327 +230	+198 +135	+232 +135	+131 +68	+83 +20	+40 0	+63 0	+97 0	±31	0 -63	-17 80	-45 -108	-45 -108	-109 -172	-229 -292	-337 -400
250	280	+1010 +760	+1010 +760	+327 +230	+198 +135	+232 +135	+131 +68	+83 +20	+40 0	+63 0	+97 0	±31	0 -63	-17 80	-45 -108	-45 -108	-109 -172	-229 -292	-337 -400
280	315	+1090 +840	+1090 +840	+327 +230	+198 +135	+232 +135	+131 +68	+83 +20	+40 0	+63 0	+97 0	±31	0 -63	-17 80	-45 -108	-45 -108	-109 -172	-229 -292	-337 -400

卷制轴套检测

Wrapped Bushing Measurement

在自由状态下,卷制类轴套有一定的开口缝,不能精确的测量外径和内径。所以,卷制类轴承的内外径应有专业的测量工具和设备进行。

In free state,wrapped bushing will not be closed,which is impossible to accurately measure External diameter and internal diameter.When wrapped bushing Measured, special gauges and test equipments is necessary.

外径检测

Test external diameter ISO 3547-2 TEST B

轴套用力压入环规通规(最大加力250N)通过
Press the bushing into Go ring gange.Hnd push bushing through by hand(Max.force 250N)
用上述同样方法和相同力压入环规止端不通过
Use the above same way and press,bushing can not go into No Go ring gauge



内径检测

Test internal diameter IS3547-2 TEST C

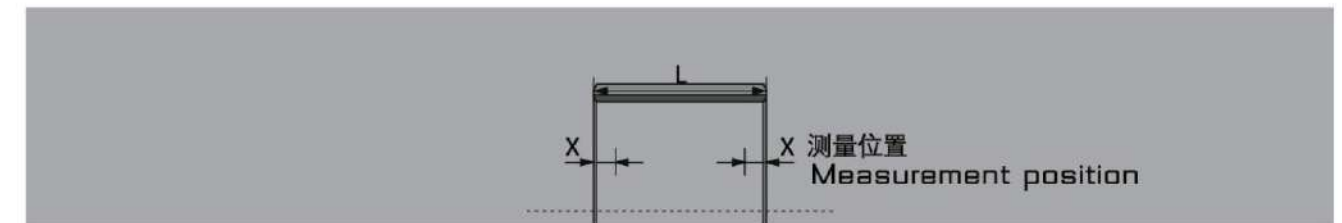
当轴套压入环规,塞规通端通过用较小力,塞规止端通过用较大力不超过250N
Press the bushing into ring gauge.The Go plug gauge could be inserted by a light pressure.The No Go Pluggauge could not be inserted by heavy pressure(Max.force 250N)
注意:轴套压入环规,轴套外径可能会永久减小
Note:When the bushing is pressed into ring gauge,external diameter could be permanent reduction



壁厚测量

Wall thickness Meaurment

轴套壁厚测量:按轴套高度在轴套轴向上测量一点,两点或三点。
The wall thickness of bushing is measured by profession gauge at one,two,or three positions according to bushing length



L(mm)	X(mm)	Measurement position
L ≤ 15	L/2	1
15 < L ≤ 50	4	2
50 < L ≤ 90	6 and L/2	3
L > 90	8 and L/2	3