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- cross roller bearings
- rotary table bearings
- harmonic reducer bearings
- non standard bearings

manufacturer of high precision bearings



Luoyang E-find Precision Bearing
Manufacturing Co.,Ltd

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Luoyang E-find Precision Bearing Manufacturing Co.,Ltd



OPENNESS, PROFESSIONALISM AND RESPONSIBILITY



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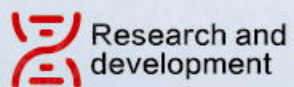
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+Company Profiles

Luoyang EFANT Precision Bearing Manufacturing Co., Ltd. is located in China's bearing manufacturing base---Luoyang. Our company specializes in R&D and manufacturing of precision cross roller bearings, rotary table bearings and various non-standard bearings. The machining accuracy is P5, P4 and P2.

Benefits from Luoyang's unique bearing industry foundation, our company has established a complete quality management system and has an excellent technical team. At the same time, sophisticated production process equipment and perfect test equipment are necessary conditions for the production of precision bearings, and the high precision,high reliability of products are guaranteed. All kinds of bearings produced by our company are widely used in the automation industry, CNC machine tool industry and robot industry.

The company adheres to the concept of "openness, professionalism and responsibility", actively participate in competition and cooperation, strives to become a professional bearing application service provider, and shoulders its due social responsibilities.



Research and development



Manufacturing

+Service concept



7*24 hours

Create value for customers

Professional team, quick response, pre-sale consultation, sales support, and after-sales service full process guarantee

+>>> Cross roller bearing

In crossed cylindrical roller bearings, the cylindrical rollers are arranged in two 90° V-shaped raceways at a 90° included angle 1:1, and the cylindrical rollers are separated by the spacer block. This structure makes a set of bearings It can bear radial load, axial load and overturning load at the same time.

This kind of combined bearing has a compact structure, and at the same time greatly simplifies the structure design of the bearing under the premise of ensuring structural rigidity. Most bearings can be pre-loaded before leaving the factory, which further facilitates installation and maintenance work. Therefore, cross cylindrical roller bearings It has the characteristics of high precision, high load and high rigidity, which is very suitable for the occasions where the space size is clearly restricted, such as the rotating part of the robot, the joint part of the manipulator, the numerical control indexing table, the medical equipment, and the measuring instrument.



Product category >>

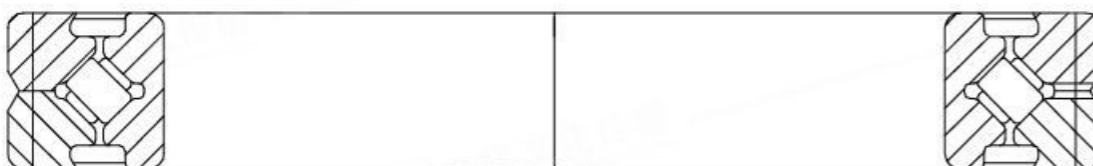
ERBC standard type

This model is a standard type of crossed cylindrical roller bearings. The outer ring is divided into two parts in the axial direction, and the inner ring is integral. It is most suitable for parts that require the rotation accuracy of the inner ring.



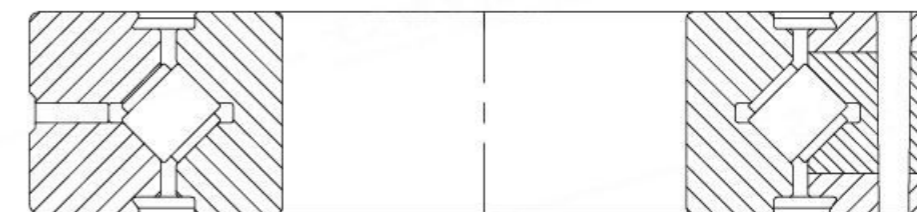
ERBS compact type

This model is a compact model obtained by reducing the thickness of the RB type inner ring and outer ring. Similarly, the outer ring is divided into two parts in the axial direction, and the inner ring is integral. Most suitable for parts with lightweight and small space requirements.



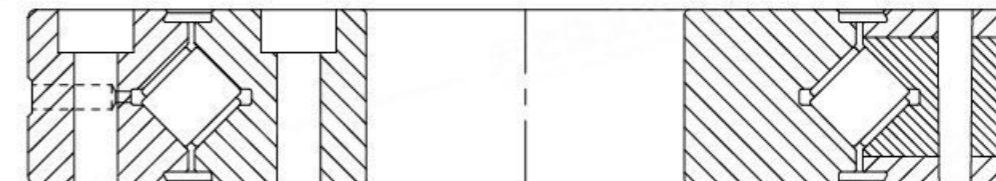
ERBH high rigidity type

The inner and outer rings of this type of bearing are of an integral structure, which has higher structural rigidity than the RB-type separate outer ring. This type of bearing is widely used in robots, machine tools and medical equipment that require small, high rigidity and high rotational accuracy And other rotating parts.



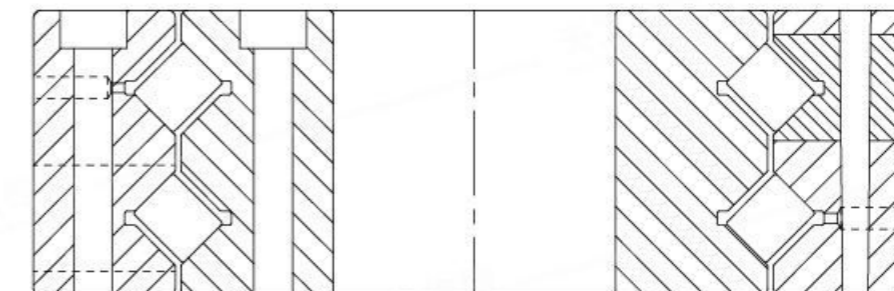
ERBF end face mount type

This model is the overall structure of the inner and outer rings. Compared with the ERBH model, there are mounting holes on the end face, which is convenient for the structural design application of end face installation. It can be installed and used without the shaft or bearing seat.



EDRX dual row type

This model is a cross cylindrical roller structure with a double-row raceway structure. The inner and outer rings are integral structures. The single row rollers are arranged in one direction without crossing. The two rows of cylindrical rollers are arranged 90° cross in two 90° V-shaped raceways, inside and outside. Mounting holes are designed on the end face of the ring to facilitate the structural design of the end face installation.



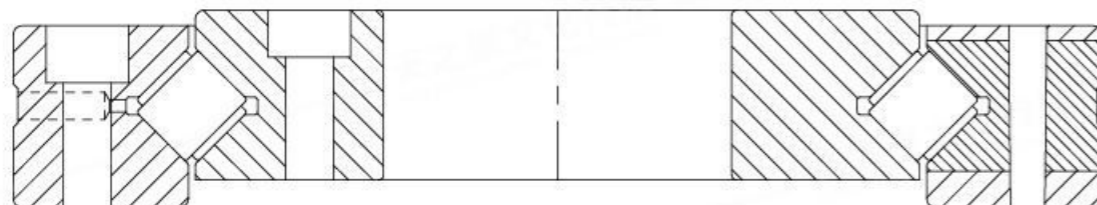
EFSX type

This type of crossed cylindrical roller bearing is designed in accordance with the deep groove ball bearing 618 series. The cylindrical rollers are arranged at a 90° included angle and are arranged in a 1:1 cross between two 90° V-shaped raceways. The inner ring is an integral structure, the outer ring is divided into two parts in the axial direction up and down, connected by 3 connecting rings in the circumferential direction, and there is no sealing ring between the inner and outer rings.



EFXU and EXSU European standard

The inner and outer rings of these two types of crossed cylindrical roller bearings are of integral structure and can be directly mounted on the end face.



Model name rules

Nominal model	Inner diameter	Width	Structure code	Sealed	Clearance	Runout accuracy grade
ERBC	80	16		UU	CC0/C0/C1	P5/P4/P2
ERBS	50	08		UU	CC0/C0	P5/P4
ERBH	90	16		UU	CC0/C0/C1	P5/P4/P2
ERBF	35	15	G/X	UU	CC0/C0	P5/P4/P2
EDRX	100	20	G	UU	CC0	P5/P4/P2/UP

Nominal model	Inner diameter	Width	Sealed	Clearance	Runout accuracy grade
EFSX	70	10	No sealed by default	VSP/RL0/RL1	P4 (Can be omitted)
EFXU	40	22	No sealed by default	VSP/RL0/RL1	P4 (Can be omitted)
EXSU	130	25	No sealed by default	VSP/RL0/RL1	P4 (Can be omitted)

Comment:

1. Sealing: UU inner and outer ring diameters are sealed on both sides, blank means no seal, especially EFSX full series without seal ring.
2. Bearing clearance: CC0 preload, C0 positive clearance, C1 large clearance;
VSP preload, RL0 positive clearance, RL1 large clearance;
Bearing clearance only represents radial clearance. In special cases, axial clearance shall be explained separately.
3. Runout accuracy grade: P5, P4, P2 are limited to the runout accuracy of the bearing (Kea, Sea, Kia, Sia).
4. All bearing dimensional tolerance grades are P5.
5. For products that are not in the range of standard models, please consult our company. When conditions permit, our company can customize non-standard bearings.

Customized according to the size range of the sample book, such as internal teeth, external teeth, additional flanges, surface heat treatment, and bearing housings and shafts that match the bearings can be customized and processed, and the drawings agreed and confirmed by both parties shall prevail.

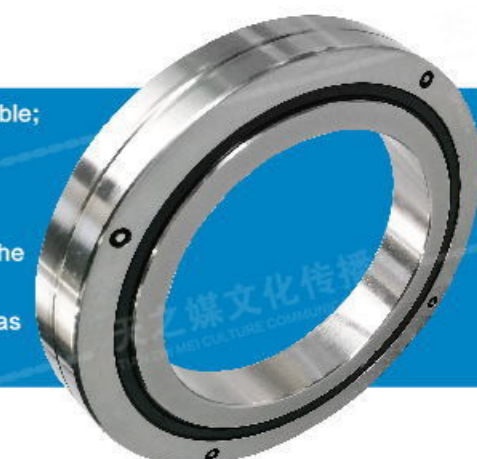
Customization process:

1. The customer informs the working condition or the sample drawing
2. Technical personnel of both parties communicate technical details
3. We will issue confirmation drawings for customers to confirm
4. Both parties confirm the drawings and sign a technical agreement (the technical agreement and the contract have the same legal effect)



Bearing selection

1. Determine the conditions of use and fill in the application condition table;
2. Determine the bearing model category;
3. Select the bearing size according to life calculation and determine bearing model;
4. Determine the bearing runout accuracy and clearance according to the used accuracy and rigidity requirements;
5. Combined with structural design, determine special conditions such as lubrication method and starting torque.



Life calculation

Bearing rating life

Bearing rating life refers to the total number of revolutions that a batch of bearings of the same model can operate under the same conditions, 90% of the bearings do not peel off the raceway surface due to rolling fatigue. It is often expressed in L, and the unit is the revolution. Calculated as follows:

$$L = (C/f_w P)^{10/3} \times 10^6$$

C The rated dynamic load of the bearing

P Equivalent dynamic load under working conditions

f_w Load factor under working conditions, see the table below for details

Working conditions	f_w
Smooth operation	1-1.2
Normal operation (changes in load direction and size)	1.2-1.5
Severe shock and vibration	1.5-3

The calculation formula of equivalent dynamic load P is as follows:

$$P = X * (F_r + 2 * M / D_{pw}) + Y * F_a$$

X dynamic radial coefficient (see the table below for specific values)

Y dynamic axial coefficient

F_r radial load

F_a axial load

M overturning moment

D_{pw} cylindrical roller movement pitch circle diameter

Calculation conditions	X	Y
$F_a / (F_r + 2 * M / D_{pw}) \leq 1.5$	1	0.45
$F_a / (F_r + 2 * M / D_{pw}) > 1.5$	0.67	0.67
$F_r = 0, M = 0$	0.67	0.67

Static safety factor

The static load rating of a bearing refers to a static load with a certain direction and size. At this time, the maximum contact stress at the center point of the contact area between the cylindrical roller and the raceway surface reaches the limit value of the contact stress of the material itself, and the bearing can move slowly (approximately Static state) without failure. Therefore, when the bearing is subjected to external loads in a static manner, the static safety factor must be considered. The static safety factor of the bearing is represented by S_0 , and its calculation formula is as follows:

$$S_0 = C_0 / P_0$$

C_0 Bearing static load rating

P_0 Equivalent static load under working conditions

Static safety factor value table

Load condition	S_0
Normal load	1-2
Impact load	2-3

Considering the dynamic performance of the bearing life, it is recommended that the static safety factor be at least 7 or more.

The calculation formula of equivalent static load P_0 is as follows:

$$P_0 = (F_r + 2 * M / D_{pw}) + 0.44 * F_a$$

F_r Radial load

M Overturning moment

D_{pw} Cylindrical roller movement pitch circle diameter

F_a Axial load

For crossed roller bearings, there is not only the influence of static radial load, but also the influence of static allowable axial load and static allowable overturning moment.

Static allowable axial load $F_{a0} = C_0 / 0.44$

Static allowable overturning moment $M_0 = C_0 * D_{pw} / 2$

C_0 Bearing static load rating

D_{pw} Pitch circle diameter of cylindrical roller

Matching

For ERBC, ERBS, ERBH bearings without end face mounting holes, the recommended matching relationship is shown in the following table:

Radial clearance	Application conditions	Axis	Bearing seat
CC0	Regardless of conditions	g5	H7
C0	Inner ring rotation	h5	H7
	Outer ring rotation	g5	Js7
C1	Ordinary load of inner ring rotation	J5	H7
	Rotating impact load of inner ring	K5	Js7
	Ordinary load of outer ring rotation	g5	Js7
	Rotating impact load of outer ring	h5	K7

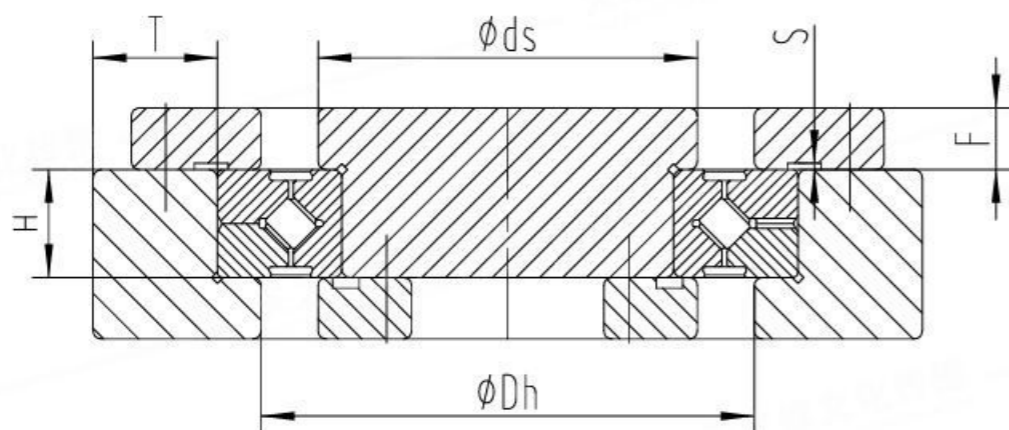
The matching relationship of bearings with CC0 clearance is generally selected as a clearance fit, but a small interference fit relationship can be used when rigidity and accuracy are higher requirements. At the same time, special attention should be paid to the change of bearing clearance under application conditions. It is best to select the corresponding shaft and bearing seat according to the bearing inner diameter tolerance and outer diameter tolerance to achieve a small interference fit.

For ERBF, EFSX, EFXU, EXSU, EDRX bearings with end-face mounting holes, the matching relationship is basically not required, but the recommended matching relationship is: shaft h7 and bearing seat H7 when the accuracy of the installation position is required.

Installation

Shaft shoulder diameter size

In the bearing size specification table, we list the corresponding installation shoulder diameter Dh and ds of each bearing. In the design of the shaft structure, please design the shaft, bearing seat and step size of axial end cover according to our recommended shaft shoulder diameter, to ensure smooth bearing application.



Shaft shoulder depth dimension

In order to ensure the effective axial positioning of the bearing during installation, the depth dimension H of the shaft shoulder should be matched according to the bearing width tolerance. The specific relationship is as follows:

$$H=B-0.1$$

Bearing seat wall thickness design

In order to ensure the structural strength, we recommend that the wall thickness dimension T of the bearing seat should be at least 0.6 or more of the radial cross-sectional dimension of the bearing, is

$$T = (D-d) / 2 * 0.6$$

Axial end cover design

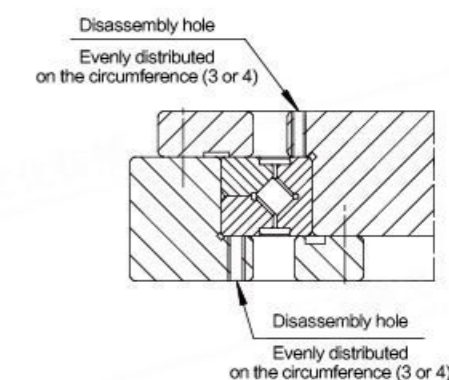
In order to ensure the structural strength, we recommend the thickness of the axial end cover $F = (0.5 \sim 1.2) * B$,

The depth of the annular groove on the mounting surface of the axial end cover is $S = 0.5$; the effect of the annular groove on the axial end cover can effectively solve the problem that the end cover cannot compress the bearing.

The H, F, S and T involved in the installation dimensions of the inner ring that are not expressed in the installation diagram above (when the diameter of the shaft exceeds 100mm, the shaft can be made into a hollow shaft, and T should be designed according to the recommended value). The same applies to the above formula.

Disassembly screw hole

The compact structure of the crossed cylindrical roller bearing makes it difficult to disassemble the bearing. We recommend that you avoid the necessary design positions in the bearing structure design and add disassembly screw holes. Once the bearing needs to be disassembled, you can use screws to separate the bearings through the screw holes. Push out from the shaft and the bearing seat, and the disassembly screw hole is best divided into three or four equal circumferences.



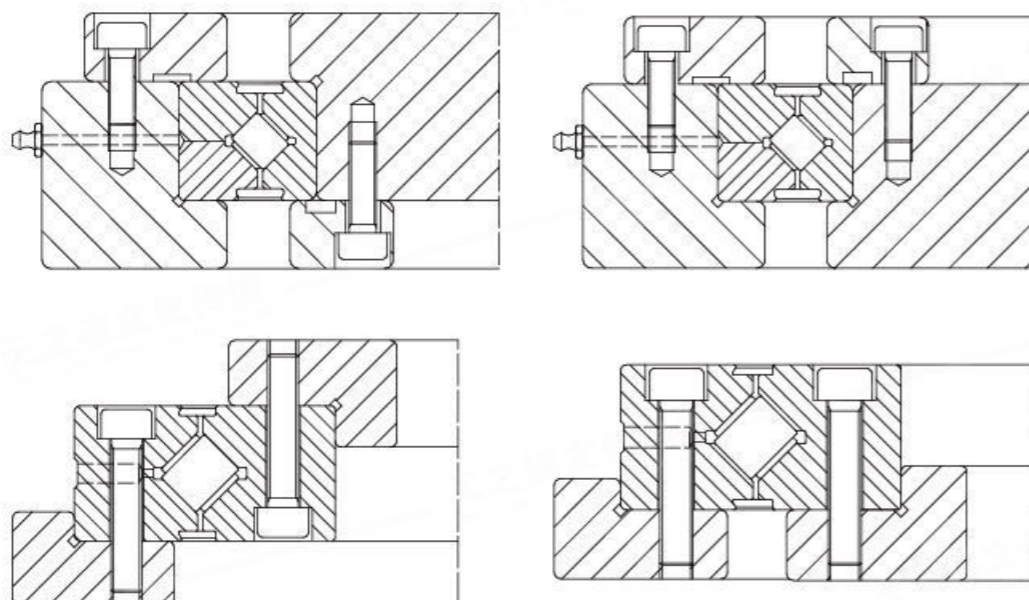
Axial end cover fixing screw design

Outer ring outer diameter size D	Quantity of screws	Screw specifications
Exceed To		
100	≥ 8	M3, M4, M5
200	≥ 12	M4, M5, M6, M8
500	≥ 16	M5, M6, M8, M10, M12
	≥ 24	≥ M12

Screw tightening torque

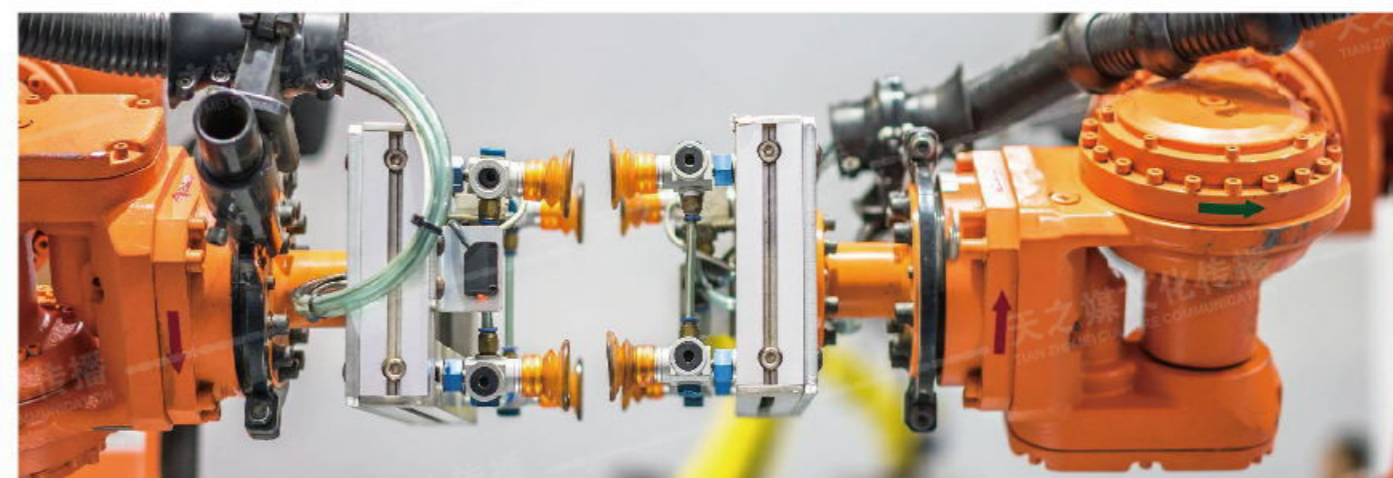
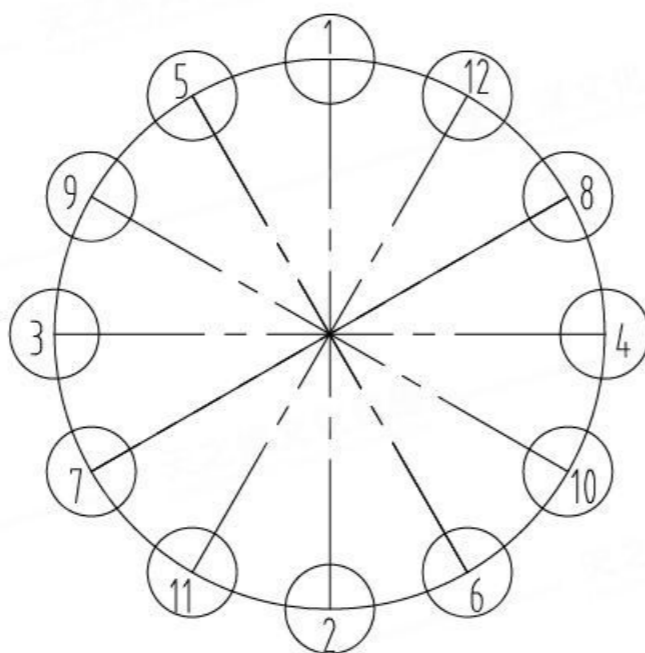
Screw specifications (level 10.9)	Tightening torque	Screw specifications (level 10.9)	Tightening torque
M3	2	M10	70
M4	4	M12	120
M5	8.5	M16	200
M6	14	M20	390
M8	34	M22	530

Typical installation structure



Installation process

1. Prepare installation tools, including brush, cleaning cloth, cleaning fluid, vernier caliper, feeler gauge, heater or installation tooling, torque wrench, magnetic gauge holder, dial indicator, etc.
2. Use brushes, cleaning cloths, and cleaning fluid to clean the installation parts and tools used.
3. Use heaters or installation tools to install the bearings on the shaft, or use heaters or installation tools to install the bearings into the bearing housing. The sequence of this process can be determined according to the specific cooperation and structural design.
4. It is strictly forbidden to force the rolling elements during the installation process, and it is strictly prohibited to knock the outer ring when installing the inner ring, and it is also strictly prohibited to knock the inner ring when installing the outer ring.
5. Use vernier calipers and feeler gauges to inspect the size of the installation and matching positions, focusing on ensuring the correct depth of the shaft shoulder.
6. Install the axial end cover, use a torque wrench to tighten the fixing screws three times, and tighten the screws step by step in the order of 40%, 70%, and 100% of the standard torque of the screw and the "cross method" each time.
7. After the inner ring and the shaft are installed or the outer ring and the bearing seat are installed, check the installation accuracy with a magnetic meter seat and a dial indicator. Once a problem is found, it needs to be removed and reinstalled.
8. For the installation structure with the lubricating oil hole, pay special attention to the corresponding installation of the lubricating oil hole position.



Precautions

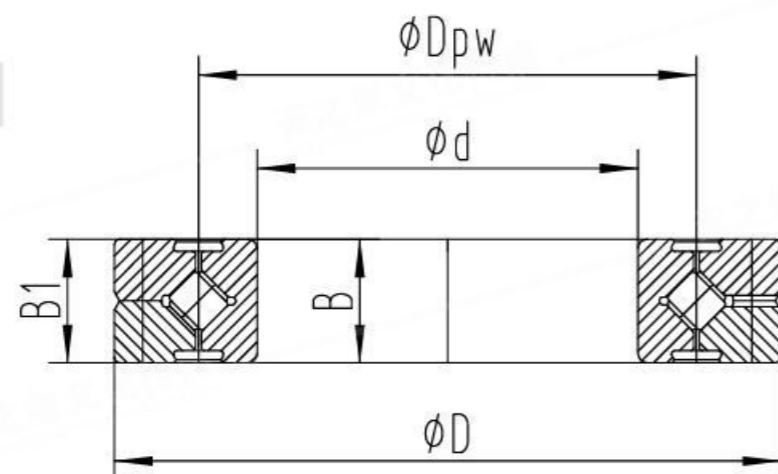
1. The bearing has been filled with grease, and there is no need to add grease during installation; after installation and long-term operation, the same brand of grease can be refilled through the lubricating hole.
2. When handling bearings weighing more than 20KG, it is best to work together to prevent bumps and injuries.
3. The working temperature should not exceed 80° C to prevent the sealing ring from aging and failing too quickly.
4. When installing the split ferrule, do not loosen the connecting screws or rivets, just install the bearing directly on the shaft or in the bearing seat.
5. For the bearings installed on the end face, the axial end cover is not necessary, and the screws fixed on the end face still have to be tightened three times according to the "cross method".

Lubrication

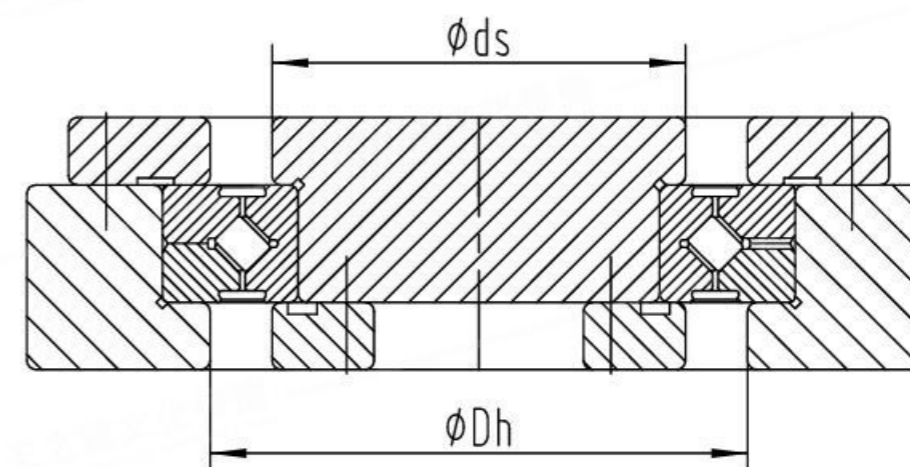
1. Do not mix greases of different brands to prevent premature failure due to reactions.
2. For special application conditions such as low temperature, high temperature, vibration and impact load, the corresponding grease should be selected to ensure that the bearing will not fail in long-term use.
3. The replenishment period of grease can be determined according to the specific working conditions. Under normal load conditions, 3-6 months is a more appropriate replenishment period.
4. Bearings installed on the end face can be installed with grease nipple to directly replenish grease when the outer diameter of the bearing is not positioned.



Size specification table »



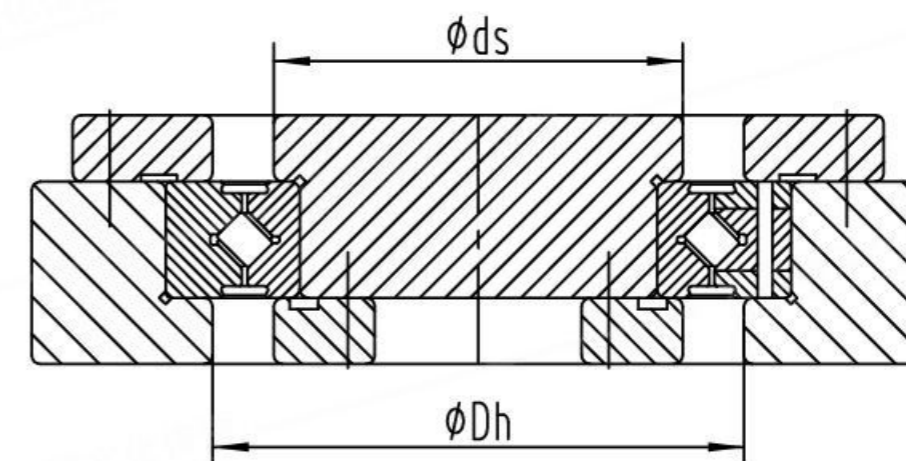
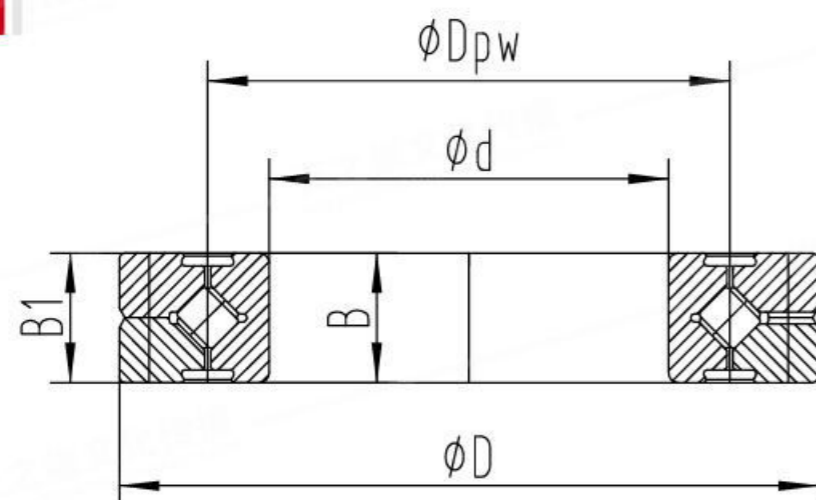
Model	Inside diameter	Tolerance	Outer diameter	Tolerance	Inner ring width	Tolerance	Outer ring width	Tolerance	Pitch diameter	Inner ring shaft shoulder	Outer ring shaft shoulder
	d (mm)	δd (mm)	D (mm)	δD (mm)	B (mm)	δB (mm)	B1 (mm)	δB1 (mm)	Dpw (mm)	ds (mm)	Dh (mm)
ERBC2008	20	0/-0.006	36	0/-0.007	8	0/-0.075	8	0/-0.100	27	23.5	30.5
ERBC2508	25	0/-0.006	41	0/-0.007	8	0/-0.075	8	0/-0.100	32	28.5	35.5
ERBC3010	30	0/-0.006	55	0/-0.009	10	0/-0.075	10	0/-0.100	41.5	37	47
ERBC3510	35	0/-0.008	60	0/-0.009	10	0/-0.075	10	0/-0.100	46.5	41	51.5
ERBC4010	40	0/-0.008	65	0/-0.009	10	0/-0.075	10	0/-0.100	51.5	47.5	57.5
ERBC4510	45	0/-0.008	70	0/-0.009	10	0/-0.075	10	0/-0.100	56.5	51	61.5
ERBC5013	50	0/-0.008	80	0/-0.009	13	0/-0.075	13	0/-0.100	64	57.4	72
ERBC6013	60	0/-0.009	90	0/-0.010	13	0/-0.075	13	0/-0.100	74	68	82
ERBC7013	70	0/-0.009	100	0/-0.010	13	0/-0.075	13	0/-0.100	84	78	92
ERBC8016	80	0/-0.009	120	0/-0.010	16	0/-0.075	16	0/-0.100	98	91	111
ERBC9016	90	0/-0.010	130	0/-0.011	16	0/-0.075	16	0/-0.100	108	98	118
ERBC10016	100	0/-0.010	140	0/-0.011	16	0/-0.075	16	0/-0.100	119.3	109	129
ERBC10020	100	0/-0.010	150	0/-0.011	20	0/-0.075	20	0/-0.100	123	113	133
ERBC11016	110	0/-0.010	135	0/-0.011	16	0/-0.075	16	0/-0.100	121.8	117	127
ERBC11015	110	0/-0.010	145	0/-0.011	15	0/-0.075	15	0/-0.100	126.5	122	136
ERBC11020	110	0/-0.010	160	0/-0.013	20	0/-0.075	20	0/-0.100	133	120	143
ERBC12016	120	0/-0.010	150	0/-0.011	16	0/-0.075	16	0/-0.100	134.7	127	141
ERBC12025	120	0/-0.010	180	0/-0.013	25	0/-0.075	25	0/-0.100	148.7	133	164
ERBC13015	130	0/-0.013	160	0/-0.013	15	0/-0.100	15	0/-0.120	144.5	137	152
ERBC13025	130	0/-0.013	190	0/-0.015	25	0/-0.100	25	0/-0.120	158	143	174
ERBC14016	140	0/-0.013	175	0/-0.013	16	0/-0.100	16	0/-0.120	154.8	147	162
ERBC14025	140	0/-0.013	200	0/-0.015	25	0/-0.100	25	0/-0.120	168	154	185



Model	Basic static load rating	Basic dynamic load rating	Inner ring runout accuracy P5	Inner ring runout accuracy P4	Inner ring runout accuracy P2	Preload	Positive clearance	Large clearance	Weight
	Cor (KN)	Cr (KN)	Kia (mm)	Kia (mm)	Kia (mm)	CC0 (mm)	C0 (mm)	C1 (mm)	m (Kg)
ERBC2008	3.1	3.23	0.004	0.003	0.0025	0/-0.008	0/0.015	0.015/0.035	0.04
ERBC2508	3.83	3.63	0.004	0.003	0.0025	0/-0.008	0/0.015	0.015/0.035	0.05
ERBC3010	8.36	7.35	0.004	0.003	0.0025	0/-0.008	0/0.015	0.015/0.035	0.12
ERBC3510	9.12	7.64	0.005	0.004	0.0025	0/-0.008	0/0.025	0.025/0.050	0.13
ERBC4010	10.6	8.33	0.005	0.004	0.0025	0/-0.008	0/0.025	0.025/0.050	0.16
ERBC4510	11.3	8.62	0.005	0.004	0.0025	0/-0.008	0/0.025	0.025/0.050	0.17
ERBC5013	20.9	16.7	0.005	0.004	0.0025	0/-0.008	0/0.025	0.025/0.050	0.27
ERBC6013	24.3	18	0.005	0.004	0.0025	0/-0.010	0/0.030	0.030/0.060	0.3
ERBC7013	27.7	19.4	0.005	0.004	0.0025	0/-0.010	0/0.030	0.030/0.060	0.35
ERBC8016	42.1	30.1	0.005	0.004	0.0025	0/-0.010	0/0.030	0.030/0.060	0.7
ERBC9016	45.3	31.4	0.006	0.005	0.0025	0/-0.010	0/0.040	0.040/0.070	0.75
ERBC10016	48.6	31.7	0.006	0.005	0.0025	0/-0.010	0/0.040	0.040/0.070	0.83
ERBC10020	50.9	33.1	0.006	0.005	0.0025	0/-0.010	0/0.040	0.040/0.070	1.45
ERBC11016	24.1	12.5	0.006	0.005	0.0025	0/-0.010	0/0.040	0.040/0.070	0.4
ERBC11015	41.5	23.7	0.006	0.005	0.0025	0/-0.010	0/0.040	0.040/0.070	0.75
ERBC11020	54	34	0.006	0.005	0.0025	0/-0.010	0/0.040	0.040/0.070	1.56
ERBC12016	43.2	24.2	0.006	0.005	0.0025	0/-0.010	0/0.040	0.040/0.070	0.72
ERBC12025	100	66.9	0.006	0.005	0.0025	0/-0.010	0/0.040	0.040/0.070	2.62
ERBC13015	46.7	25	0.008	0.006	0.0025	0/-0.010	0/0.040	0.040/0.080	0.72
ERBC13025	107	69.5	0.008	0.006	0.0025	0/-0.010	0/0.040	0.040/0.080	2.82
ERBC14016	50.1	25.9	0.008	0.006	0.0025	0/-0.010	0/0.040	0.040/0.080	1
ERBC14025	121	75.8	0.008	0.006	0.0025	0/-0.010	0/0.040	0.040/0.080	2.96

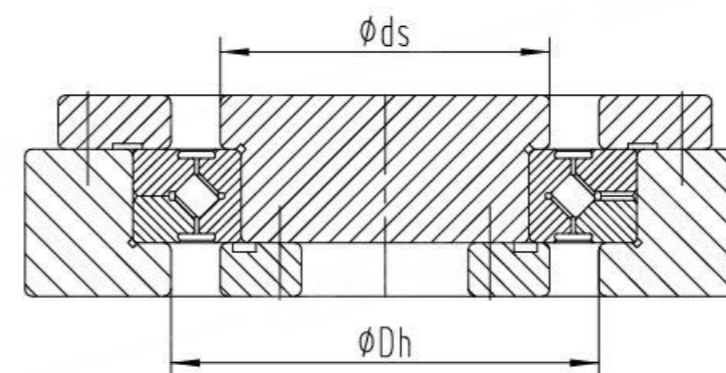
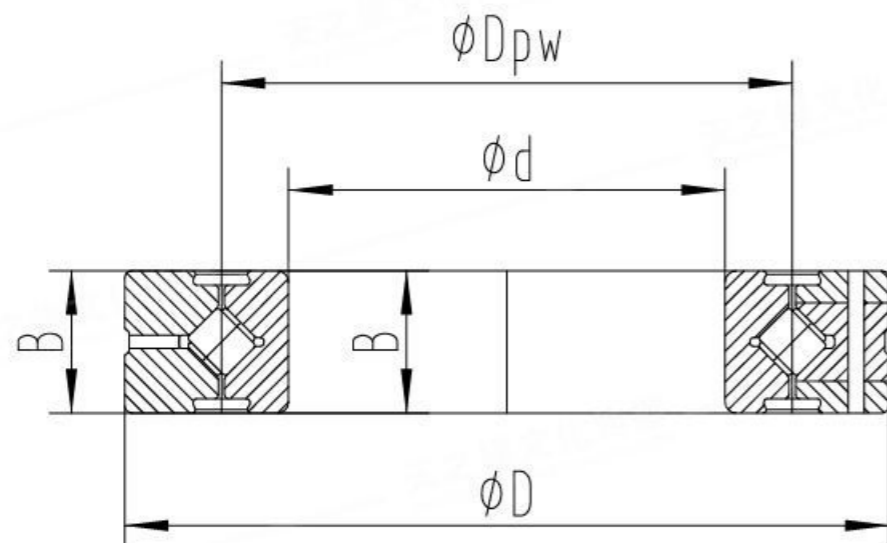
Model	Inside diameter	Tolerance	Outer diameter	Tolerance	Inner ring width	Tolerance	Outer ring width	Tolerance	Pitch diameter	Inner ring shaft shoulder	Outer ring shaft shoulder
	d (mm)	δd (mm)	D (mm)	δD (mm)	B (mm)	δB (mm)	B1 (mm)	$\delta B1$ (mm)	Dpw (mm)	ds (mm)	Dh (mm)
ERBC15013	150	0/-0.013	180	0/-0.013	13	0/-0.100	13	0/-0.120	164	157	172
ERBC15025	150	0/-0.013	210	0/-0.015	25	0/-0.100	25	0/-0.120	178	164	194
ERBC15030	150	0/-0.013	230	0/-0.015	30	0/-0.100	30	0/-0.120	188	173	211
ERBC16025	160	0/-0.013	220	0/-0.015	25	0/-0.100	25	0/-0.120	188.6	173	204
ERBC17020	170	0/-0.013	220	0/-0.015	25	0/-0.100	25	0/-0.120	191	184	198
ERBC18025	180	0/-0.013	240	0/-0.015	25	0/-0.100	25	0/-0.120	210	195	225
ERBC19025	190	0/-0.015	240	0/-0.015	25	0/-0.100	25	0/-0.120	211.9	202	222
ERBC20025	200	0/-0.015	260	0/-0.018	25	0/-0.100	25	0/-0.120	230	215	245
ERBC20030	200	0/-0.015	280	0/-0.018	30	0/-0.100	30	0/-0.120	240	221	258
ERBC20035	200	0/-0.015	295	0/-0.018	35	0/-0.100	35	0/-0.120	247.7	225	270
ERBC22025	220	0/-0.015	280	0/-0.018	25	0/-0.100	25	0/-0.120	250.1	235	265
ERBC24025	240	0/-0.015	300	0/-0.018	25	0/-0.100	25	0/-0.120	269	256	281
ERBC25025	250	0/-0.015	310	0/-0.018	25	0/-0.100	25	0/-0.120	277.5	265	290
ERBC25030	250	0/-0.015	330	0/-0.020	30	0/-0.100	30	0/-0.120	287.5	269	306
ERBC25040	250	0/-0.015	355	0/-0.020	40	0/-0.100	40	0/-0.120	300.7	275	326
ERBC30025	300	0/-0.018	360	0/-0.020	25	0/-0.120	25	0/-0.150	328	315	340
ERBC30035	300	0/-0.018	395	0/-0.020	35	0/-0.120	35	0/-0.150	345	322	368
ERBC30040	300	0/-0.018	405	0/-0.023	40	0/-0.120	40	0/-0.150	351.6	326	377
ERBC35020	350	0/-0.023	400	0/-0.020	20	0/-0.150	20	0/-0.200	373.4	363	383
ERBC40035	400	0/-0.023	480	0/-0.023	35	0/-0.150	35	0/-0.200	440.3	422	459
ERBC40040	400	0/-0.023	510	0/-0.028	40	0/-0.150	40	0/-0.200	453.4	428	479
ERBC45025	450	0/-0.035	500	0/-0.023	25	0/-0.150	25	0/-0.200	474	464	484
ERBC50025	500	0/-0.035	550	0/-0.028	25	0/-0.150	25	0/-0.200	524.2	514	534
ERBC50040	500	0/-0.035	600	0/-0.028	40	0/-0.150	40	0/-0.200	548.8	526	572
ERBC50050	500	0/-0.035	625	0/-0.028	50	0/-0.150	50	0/-0.200	561.6	536	587
ERBC60040	600	0/-0.040	700	0/-0.035	40	0/-0.150	40	0/-0.200	650	627	673
ERBC70045	700	0/-0.075	815	0/-0.100	45	0/-0.150	45	0/-0.200	753.5	731	777
ERBC80070	800	0/-0.075	950	0/-0.100	70	0/-0.150	70	0/-0.200	868.1	836	900
ERBC90070	900	0/-0.100	1050	0/-0.125	70	0/-0.300	70	0/-0.400	969	937	1001
ERBC1000110	1000	0/-0.100	1250	0/-0.125	110	0/-0.300	110	0/-0.400	1114	1057	1171
ERBC1250110	1250	0/-0.125	1500	0/-0.160	110	0/-0.300	110	0/-0.400	1365.8	1308	1423

Model	Basic static load rating	Basic dynamic load rating	Inner ring runout accuracy P5	Inner ring runout accuracy P4	Inner ring runout accuracy P2	Preload	Positive clearance	Large clearance	Weight
	Cor (KN)	Cr (KN)	Kia (mm)	Kia (mm)	Kia (mm)	CC0 (mm)	C0 (mm)	C1 (mm)	m (Kg)
ERBC15013	53.5	27	0.008	0.006	0.0025	0/-0.010	0/0.040	0.040/0.090	0.68
ERBC15025	128	76.8	0.008	0.006	0.0025	0/-0.010	0/0.040	0.040/0.090	3.16
ERBC15030	156	100	0.008	0.006	0.0025	0/-0.010	0/0.040	0.040/0.090	5.3
ERBC16025	135	81.7	0.008	0.006	0.005	0/-0.010	0/0.040	0.040/0.090	3.14
ERBC17025	62.1	29	0.008	0.006	0.005	0/-0.010	0/0.050	0.050/0.100	2.21
ERBC18025	143	84	0.008	0.006	0.005	0/-0.010	0/0.050	0.050/0.100	3.44
ERBC19025	82.9	41.7	0.010	0.008	0.005	0/-0.010	0/0.050	0.050/0.110	2.99
ERBC20025	157	84.2	0.010	0.008	0.005	0/-0.010	0/0.050	0.050/0.110	4
ERBC20030	200	114	0.010	0.008	0.005	0/-0.010	0/0.050	0.050/0.110	6.7
ERBC20035	252	151	0.010	0.008	0.005	0/-0.010	0/0.050	0.050/0.110	9.6
ERBC22025	171	92.3	0.010	0.008	0.005	0/-0.010	0/0.060	0.060/0.120	4.1
ERBC24025	145	68.3	0.010	0.008	0.005	0/-0.010	0/0.060	0.060/0.130	4.5
ERBC25025	150	69.3	0.010	0.008	0.005	0/-0.010	0/0.060	0.060/0.130	5
ERBC25030	244	126	0.010	0.008	0.005	0/-0.010	0/0.060	0.060/0.130	8.1
ERBC25040	348	195	0.010	0.008	0.005	0/-0.010	0/0.060	0.060/0.130	14.8
ERBC30025	178	76.3	0.013	0.010	0.006	0/-0.015	0/0.100	0.100/0.170	5.9
ERBC30035	367	183	0.013	0.010	0.006	0/-0.015	0/0.100	0.100/0.170	13.4
ERBC30040	409	212	0.013	0.010	0.006	0/-0.015	0/0.100	0.100/0.170	17.2
ERBC35020	143	54.1	0.015	0.012	0.007	0/-0.015	0/0.110	0.110/0.190	3.9
ERBC40035	370	156	0.015	0.012	0.007	0/-0.015	0/0.120	0.120/0.210	14.5
ERBC40040	531	241	0.015	0.012	0.007	0/-0.015	0/0.120	0.120/0.210	23.5
ERBC45025	182	61.7	0.018	0.014	0.009	0/-0.020	0/0.130	0.130/0.230	6.6
ERBC50025	201	65.5	0.018	0.014	0.009	0/-0.020	0/0.130	0.130/0.250	7.3
ERBC50040	607	239	0.018	0.014	0.009	0/-0.020	0/0.130	0.130/0.250	26
ERBC50050	653	267	0.018	0.014	0.009	0/-0.020	0/0.130	0.130/0.250	41.7
ERBC60040	721	264	0.020	0.016	0.010	0/-0.020	0/0.170	0.170/0.310	29
ERBC70045	836	281	0.023	0.018	0.011	0/-0.020	0/0.190	0.190/0.350	46
ERBC80070	1330	468	0.023	0.018	0.011	0/-0.030	0/0.210	0.210/0.390	105
ERBC90070	1490	494	0.025	0.020	0.012	0/-0.030	0/0.230	0.230/0.430	120
ERBC1000110	3220	1220	0.025	0.020	0.012	0/-0.030	0/0.260	0.260/0.480	360
ERBC1250110	3970	1350	0.028	0.022	0.016	0/-0.030	0/0.320	0.320/0.580	440



Model	Inside diameter	Tolerance	Outer diameter	Tolerance	Inner ring width	Tolerance	Outer ring width	Tolerance	Pitch diameter	Inner ring shaft shoulder	Outer ring shaft shoulder
	d (mm)	δd (mm)	D (mm)	δD (mm)	B (mm)	δB (mm)	B1 (mm)	$\delta B1$ (mm)	Dpw (mm)	ds (mm)	Dh (mm)
ERBS5008	50	0/-0.008	66	0/-0.009	8	0/-0.120	8	0/-0.120	57	53.5	60.5
ERBS6008	60	0/-0.009	76	0/-0.009	8	0/-0.120	8	0/-0.120	67	63.5	70.5
ERBS7008	70	0/-0.009	86	0/-0.010	8	0/-0.120	8	0/-0.120	77	73.5	80.5
ERBS8008	80	0/-0.009	96	0/-0.010	8	0/-0.120	8	0/-0.120	87	83.5	90.5
ERBS9008	90	0/-0.010	106	0/-0.010	8	0/-0.120	8	0/-0.120	97	93.5	100.5
ERBS10008	100	0/-0.010	116	0/-0.010	8	0/-0.120	8	0/-0.120	107	103.5	110.5
ERBS11008	110	0/-0.010	126	0/-0.011	8	0/-0.120	8	0/-0.120	117	113.5	120.5
ERBS12008	120	0/-0.010	136	0/-0.011	8	0/-0.120	8	0/-0.120	127	123.5	130.5
ERBS13008	130	0/-0.013	146	0/-0.011	8	0/-0.120	8	0/-0.120	137	133.5	140.5
ERBS14008	140	0/-0.013	156	0/-0.013	8	0/-0.120	8	0/-0.120	147	143.5	150.5
ERBS15008	150	0/-0.013	166	0/-0.013	8	0/-0.120	8	0/-0.120	157	153.5	160.5
ERBS16013	160	0/-0.013	186	0/-0.015	13	0/-0.120	13	0/-0.120	172	165	179
ERBS17013	170	0/-0.013	196	0/-0.015	13	0/-0.120	13	0/-0.120	182	175	189
ERBS18013	180	0/-0.013	206	0/-0.015	13	0/-0.120	13	0/-0.120	192	185	199
ERBS19013	190	0/-0.015	216	0/-0.015	13	0/-0.120	13	0/-0.120	202	195	209
ERBS20013	200	0/-0.015	226	0/-0.015	13	0/-0.120	13	0/-0.120	212	205	219

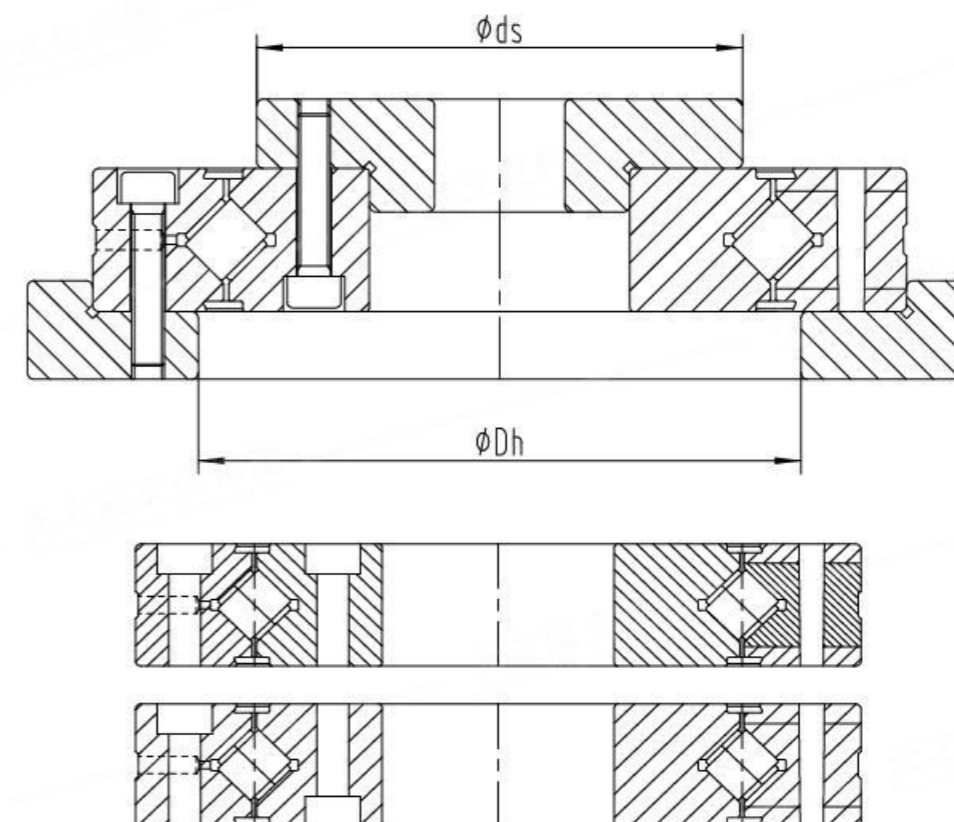
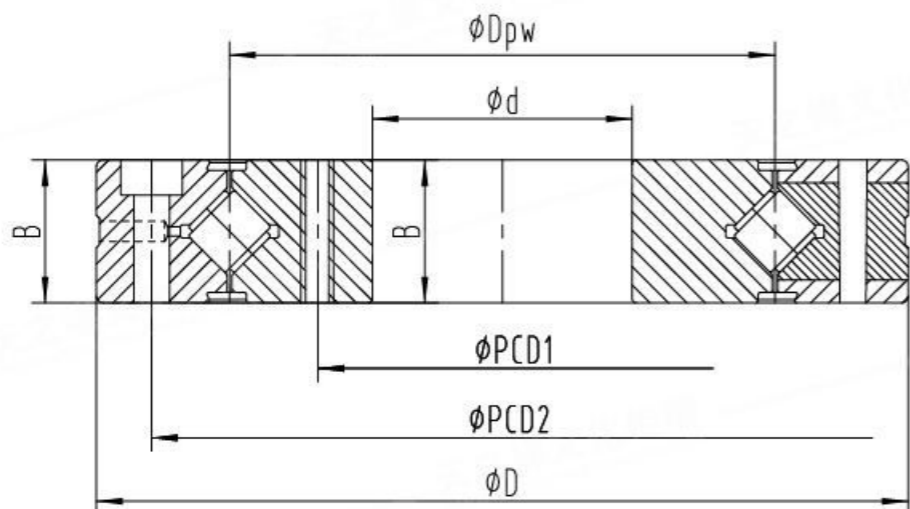
Model	Basic static load rating	Basic dynamic load rating	Inner ring runout accuracy P5	Inner ring runout accuracy P4	Preload	Positive clearance	Weight
	Cor (KN)	Cr (KN)	Kia (mm)	Kia (mm)	CC0 (mm)	C0 (mm)	m (Kg)
ERBS5008	7.19	5.1	0.013	0.01	0/-0.008	0/0.015	0.08
ERBS6008	8.68	5.68	0.013	0.01	0/-0.008	0/0.015	0.09
ERBS7008	9.8	5.98	0.015	0.012	0/-0.008	0/0.015	0.1
ERBS8008	11.3	6.37	0.015	0.012	0/-0.008	0/0.015	0.11
ERBS9008	12.4	6.76	0.015	0.012	0/-0.008	0/0.015	0.12
ERBS10008	13.9	7.15	0.015	0.012	0/-0.008	0/0.015	0.14
ERBS11008	15	7.45	0.020	0.015	0/-0.008	0/0.015	0.15
ERBS12008	16.5	7.84	0.020	0.015	0/-0.008	0/0.015	0.17
ERBS13008	17.6	7.94	0.025	0.020	0/-0.008	0/0.015	0.18
ERBS14008	19.1	8.33	0.025	0.020	0/-0.008	0/0.015	0.19
ERBS15008	20.6	8.82	0.025	0.020	0/-0.008	0/0.015	0.2
ERBS16013	44.9	23.3	0.025	0.020	0/-0.010	0/0.020	0.59
ERBS17013	46.5	23.5	0.025	0.020	0/-0.010	0/0.020	0.64
ERBS18013	49.8	24.5	0.030	0.025	0/-0.010	0/0.020	0.68
ERBS19013	51.5	24.9	0.030	0.025	0/-0.010	0/0.020	0.69
ERBS20013	54.7	25.8	0.030	0.025	0/-0.010	0/0.020	0.71



Model	Inside diameter	Tolerance	Outer diameter	Tolerance	Inner ring width	Tolerance	Outer ring width	Tolerance	Pitch diameter	Inner ring shaft shoulder	Outer ring shaft shoulder
	d (mm)	δd (mm)	D (mm)	δD (mm)	B (mm)	δB (mm)	B1 (mm)	$\delta B1$ (mm)	Dpw (mm)	ds (mm)	Dh (mm)
ERBH2008	20	0/-0.006	36	0/-0.007	8	0/-0.075	8	0/-0.075	27	24	31
ERBH2508	25	0/-0.006	41	0/-0.007	8	0/-0.075	8	0/-0.075	32	29	36
ERBH3010	30	0/-0.006	55	0/-0.009	10	0/-0.075	10	0/-0.075	41.5	36.5	48.5
ERBH3510	35	0/-0.008	60	0/-0.009	10	0/-0.075	10	0/-0.075	46.5	41.5	53.5
ERBH4010	40	0/-0.008	65	0/-0.009	10	0/-0.075	10	0/-0.075	51.5	46.5	58.5
ERBH4510	45	0/-0.008	70	0/-0.009	10	0/-0.075	10	0/-0.075	56.5	51.8	63.5
ERBH5013	50	0/-0.008	80	0/-0.009	13	0/-0.075	13	0/-0.075	64	56	74
ERBH6013	60	0/-0.009	90	0/-0.010	13	0/-0.075	13	0/-0.075	74	66	84
ERBH7013	70	0/-0.009	100	0/-0.010	13	0/-0.075	13	0/-0.075	84	76	94
ERBH8016	80	0/-0.009	120	0/-0.010	16	0/-0.075	16	0/-0.075	98	88	112
ERBH9016	90	0/-0.010	130	0/-0.011	16	0/-0.075	16	0/-0.075	108	98	122
ERBH10020	100	0/-0.010	150	0/-0.011	20	0/-0.075	20	0/-0.075	123	110	140
ERBH11020	110	0/-0.010	160	0/-0.013	20	0/-0.075	20	0/-0.100	133	120	150
ERBH12025	120	0/-0.010	180	0/-0.013	25	0/-0.075	25	0/-0.100	148.7	132	168
ERBH13025	130	0/-0.013	190	0/-0.15	25	0/-0.100	25	0/-0.100	158	142	178
ERBH14025	140	0/-0.013	200	0/-0.015	25	0/-0.100	25	0/-0.100	168	152	188
ERBH15025	150	0/-0.013	210	0/-0.015	25	0/-0.100	25	0/-0.100	178	162	198
ERBH20025	200	0/-0.015	260	0/-0.018	25	0/-0.100	25	0/-0.120	230	212	248
ERBH25025	250	0/-0.015	310	0/-0.018	25	0/-0.100	25	0/-0.120	277.5	262	298

Model	Basic static load rating	Basic dynamic load rating	Inner ring runout accuracy P5
	Cor (KN)	Cr (KN)	Kia (mm)
ERBH2008	2.4	2.9	0.004
ERBH2508	2.8	3.1	0.004
ERBH3010	8.4	7.6	0.004
ERBH3510	9.1	7.9	0.005
ERBH4010	10.6	8.6	0.005
ERBH4510	11.3	8.9	0.005
ERBH5013	20.9	17.3	0.005
ERBH6013	24.3	18.8	0.005
ERBH7013	27.7	20.1	0.005
ERBH8016	43.4	32.1	0.005
ERBH9016	46.8	33.1	0.006
ERBH10020	72.2	50.9	0.006
ERBH11020	77.4	52.4	0.006
ERBH12025	108	73.4	0.006
ERBH13025	115	75.9	0.008
ERBH14025	130	81.9	0.008
ERBH15025	138	84.3	0.008
ERBH20025	169	92.3	0.010
ERBH25025	207	102	0.010

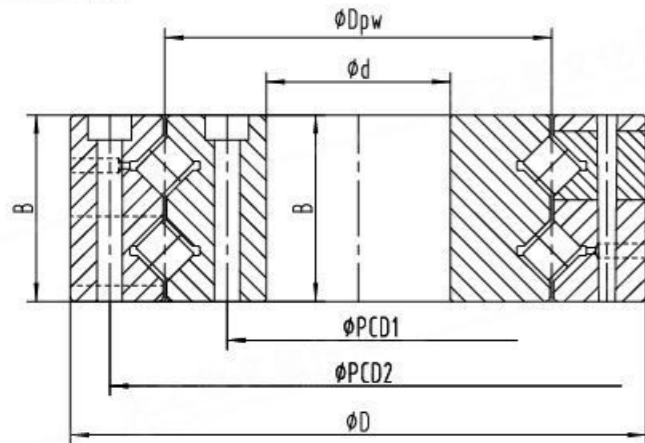
Model	Outer ring radial accuracy P5	Inner ring runout accuracy P4	Outer ring radial accuracy P4	Inner ring runout accuracy P2	Outer ring radial accuracy P2	Preload	Positive clearance	Large clearance	Weight
	Kea (mm)	Sia (mm)	Kea (mm)	Kia (mm)	Kea (mm)	CC0 (mm)	C0 (mm)	C1 (mm)	m (Kg)
ERBH2008	0.007	0.003	0.005	0.0025	0.0025	0/-0.010	0/0.010	0.010/0.020	0.04
ERBH2508	0.007	0.003	0.005	0.0025	0.0025	0/-0.010	0/0.010	0.010/0.020	0.05
ERBH3010	0.008	0.003	0.005	0.0025	0.004	0/-0.010	0/0.010	0.010/0.020	0.12
ERBH3510	0.008	0.004	0.005	0.0025	0.004	0/-0.010	0/0.010	0.010/0.020	0.13
ERBH4010	0.008	0.004	0.005	0.0025	0.004	0/-0.010	0/0.010	0.010/0.020	0.15
ERBH4510	0.008	0.004	0.005	0.0025	0.004	0/-0.010	0/0.010	0.010/0.025	0.16
ERBH5013	0.008	0.004	0.005	0.0025	0.004	0/-0.010	0/0.010	0.010/0.025	0.29
ERBH6013	0.010	0.004	0.006	0.0025	0.005	0/-0.010	0/0.010	0.010/0.025	0.33
ERBH7013	0.010	0.004	0.006	0.0025	0.005	0/-0.010	0/0.015	0.015/0.030	0.38
ERBH8016	0.010	0.004	0.006	0.0025	0.005	0/-0.010	0/0.015	0.015/0.030	0.74
ERBH9016	0.011	0.005	0.007	0.0025	0.005	0/-0.010	0/0.015	0.015/0.035	0.81
ERBH10020	0.011	0.005	0.007	0.0025	0.005	0/-0.010	0/0.015	0.015/0.035	1.45
ERBH11020	0.013	0.005	0.008	0.0025	0.005	0/-0.015	0/0.015	0.015/0.035	1.56
ERBH12025	0.013	0.005	0.008	0.0025	0.005	0/-0.015	0/0.015	0.015/0.035	2.62
ERBH13025	0.015	0.006	0.010	0.0025	0.007	0/-0.015	0/0.020	0.020/0.045	2.82
ERBH14025	0.015	0.006	0.010	0.0025	0.007	0/-0.015	0/0.020	0.020/0.045	2.96
ERBH15025	0.015	0.006	0.010	0.0025	0.007	0/-0.015	0/0.020	0.020/0.050	3.16
ERBH20025	0.018	0.008	0.011	0.005	0.007	0/-0.015	0/0.020	0.020/0.050	4
ERBH25025	0.018	0.008	0.011	0.005	0.007	0/-0.020	0/0.025	0.025/0.060	4.97



Model	Inside diameter	Tolerance	Outer diameter	Tolerance	Inner ring width	Tolerance	Pitch diameter	Shoulder of inner ring	Shoulder of outer ring	Mounting holes of inner ring		Mounting holes of outer ring			
	d (mm)	δd (mm)	D (mm)	δD (mm)	B (mm)	δB (mm)	Dpw (mm)	ds (mm)	Dh (mm)	PCD1 (mm)	ϕ/M (mm)	PCD2 (mm)	ϕ/M (mm)		
ERBF2012	20	0/-0.006	70	0/-0.009	12	0/-0.075	41.5	37	47	28	6-M3	57	6-3.4-6.5*3.3		
ERBF3515	35	0/-0.008	95	0/-0.010	15	0/-0.075	66	59	74	45	8-M4	83	8-4.5-8*4.4		
ERBF5515	55	0/-0.009	120	0/-0.010	15	0/-0.075	85	79	93	65	8-M5	105	8-5.5-9.5-5.4		
ERBF8022(G)	80	0/-0.009	165	0/-0.013	22	0/-0.075	124	114	134	97	10-5.5-9.5*5.4		148	10-5.5-9.5*5.4	
ERBF8022X											10-M5				
ERBF9025(G)	90	0/-0.010	210	0/-0.015	25	0/-0.075	147.5	133	162	112	12-9-14*8.6		187	12-9-14*8.6	
ERBF9025X											12-M8				
ERBF11528(G)	115	0/-0.010	240	0/-0.015	28	0/-0.100	178	161	195	139	12-9-14*8.6		217	12-9-14*8.6	
ERBF11528X											12-M8				
ERBF16035(G)	160	0/-0.013	295	0/-0.018	35	0/-0.100	227.5	208	246	184	12-11-17.5*10.8		270	12-11-17.5*10.8	
ERBF16035X											12-M10				
ERBF21040(G)	210	0/-0.015	380	0/0.-020	40	0/-0.100	297.3	272	320	240	16-14-20*13		350	16-14-20*13	
ERBF21040X											16-M12				
ERBF35045(G)	350	0/-0.018	540	0/-0.028	45	0/-0.100	445.4	417	473	385	24-14-20*13		505	24-14-20*13	
ERBF35045X											24-M12				

Model	Basic static load rating	Basic dynamic load rating	Inner ring radial / end runout P5		Outer ring radial / end runout P5		Inner ring radial / end runout P4		Outer ring radial / end runout P4		Inner ring radial / end runout P2		Outer ring radial / end runout P2		Weight
	Cor (kN)	Cr (kN)	Kia (mm)	Sia (mm)	Kea (mm)	Sea (mm)	Kia (mm)	Sia (mm)	Kea (mm)	Sea (mm)	Kia (mm)	Sia (mm)	Kea (mm)	Sea (mm)	Kg
ERBF2012	8.35	7.35	0.004	0.004	0.008	0.008	0.003	0.003	0.005	0.005	0.0025	0.0025	0.004	0.004	0.29
ERBF3515	22.3	17.5	0.005	0.005	0.01	0.01	0.004	0.004	0.006	0.006	0.0025	0.0025	0.005	0.005	0.62
ERBF5515	29.5	20.3	0.005	0.005	0.01	0.01	0.004	0.004	0.006	0.006	0.0025	0.0025	0.005	0.005	1
ERBF8022(G)	50.9	33.1	0.005	0.005	0.013	0.013	0.004	0.004	0.008	0.008	0.0025	0.0025	0.005	0.005	2.6
ERBF8022X	50.9	33.1	0.005	0.005	0.013	0.013	0.004	0.004	0.008	0.008	0.0025	0.0025	0.005	0.005	
ERBF9025(G)	76.8	49.1	0.006	0.006	0.015	0.015	0.005	0.005	0.010	0.010	0.0025	0.0025	0.007	0.007	4.9
ERBF9025X	76.8	49.1	0.006	0.006	0.015	0.015	0.005	0.005	0.010	0.010	0.0025	0.0025	0.007	0.007	
ERBF11528(G)	135	80.3	0.006	0.006	0.015	0.015	0.005	0.005	0.010	0.010	0.0025	0.0025	0.007	0.007	6.8
ERBF11528X	135	80.3	0.006	0.006	0.015	0.015	0.005	0.005	0.010	0.010	0.0025	0.0025	0.007	0.007	
ERBF16035(G)	173	104	0.008	0.008	0.018	0.018	0.006	0.006	0.011	0.011	0.005	0.005	0.007	0.007	11.4
ERBF16035X	173	104	0.008	0.008	0.018	0.018	0.006	0.006	0.011	0.011	0.005	0.005	0.007	0.007	
ERBF21040(G)	281	156	0.010	0.010	0.020	0.020	0.008	0.008	0.013	0.013	0.005	0.005	0.008	0.008	21.3
ERBF21040X	281	156	0.010	0.010	0.020	0.020	0.008	0.008	0.013	0.013	0.005	0.005	0.008	0.008	
ERBF35045(G)	473	222	0.015	0.015	0.025	0.025	0.012	0.012	0.013	0.013	0.007	0.007	0.010	0.010	35.4
ERBF35045X	473	222	0.015	0.015	0.025	0.025	0.012	0.012	0.016	0.016	0.007	0.007	0.010	0.010	

EDRX
G-IND BEARING

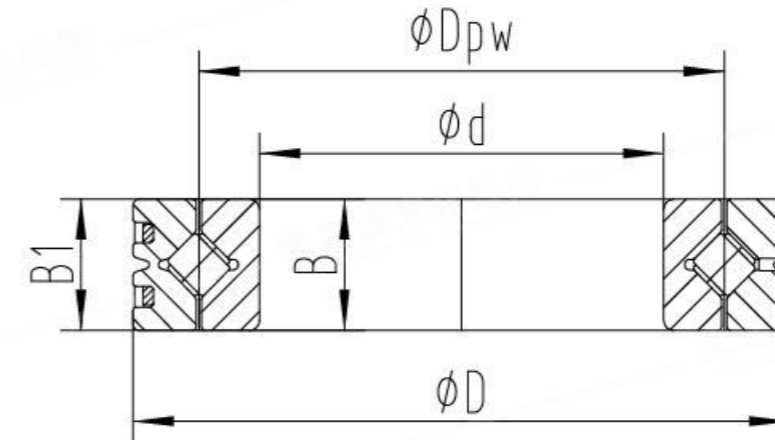


Model	Inside diameter	Tolerance	Outer diameter	Tolerance
	d (mm)	δ d (mm)	D (mm)	δ D (mm)
EDRX10020(G)	100	0/-0.020	185	0/-0.030
EDRX12030(G)	120	0/-0.020	210	0/-0.030
EDRX15030(G)	150	0/-0.025	240	0/-0.030
EDRX18040(G)	180	0/-0.025	280	0/-0.035
EDRX20040(G)	200	0/-0.030	300	0/-0.035
EDRX26050(G)	260	0/-0.035	385	0/-0.040
EDRX32550(G)	325	0/-0.040	450	0/-0.045
EDRX39550(G)	395	0/-0.040	525	0/-0.050
EDRX46050(G)	460	0/-0.045	600	0/-0.050
EDRX58060(G)	580	0/-0.050	750	0/-0.075
EDRX65060(G)	650	0/-0.075	870	0/-0.100

Model	Width	Tolerance	Pitch diameter	Shoulder of inner ring	Shoulder of outer ring	Mounting holes of inner ring		Mounting holes of outer ring		Basic static load rating	Basic dynamic load rating	Inner ring radial runout P5	Inner ring end face runout P5
	B (mm)	δ B (mm)	Dpw (mm)	ds (mm)	Dh (mm)	PCD1 (mm)	φ/M (mm)	PCD2 (mm)	φ/M (mm)	Cor (KN)	Cr (KN)	Kia (mm)	Sia (mm)
EDRX10020(G)	20	0/-0.075	142.5	136.5	148.5	115	12-5.6-10*5.5	170	12-5.6-10*5.5	59.3	24.6	0.006	0.006
EDRX12030(G)	30	0/-0.075	165	156	174	138	12-7-11*6.5	192	12-7-11*6.5	112	48.6	0.006	0.006
EDRX15030(G)	30	0/-0.100	195	186	204	168	16-7-11*6.5	222	12-7-11*6.5	136	54.1	0.006	0.006
EDRX18040(G)	40	0/-0.100	230	218	242	200	18-7-11*6.5	260	18-7-11*6.5	215	87	0.008	0.008
EDRX20040(G)	40	0/-0.100	250	238	262	220	20-7-11*6.5	280	20-7-11*6.5	231	89.7	0.008	0.008
EDRX26050(G)	50	0/-0.120	322.5	307.5	337.5	282	24-9.3-15*9	363	24-9.3-15*9	422	168	0.010	0.010
EDRX32550(G)	50	0/-0.150	387.5	372.5	402.5	347	30-9.3-15*9	428	30-9.3-15*9	558	199	0.010	0.010
EDRX39550(G)	50	0/-0.150	460	445	475	418	36-10-15*9	502	36-10-15*9	634	208	0.015	0.015
EDRX46050(G)	50	0/-0.150	530	515	545	486	40-10-15*9	574	40-10-15*9	771	233	0.015	0.015
EDRX58060(G)	60	0/-0.150	665	647	683	610	32-12-18*11	720	32-12-18*11	1120	334	0.020	0.020
EDRX65060(G)	60	0/-0.150	760	742	778	690	32-14-20*13	830	32-14-20*13	1290	360	0.020	0.020

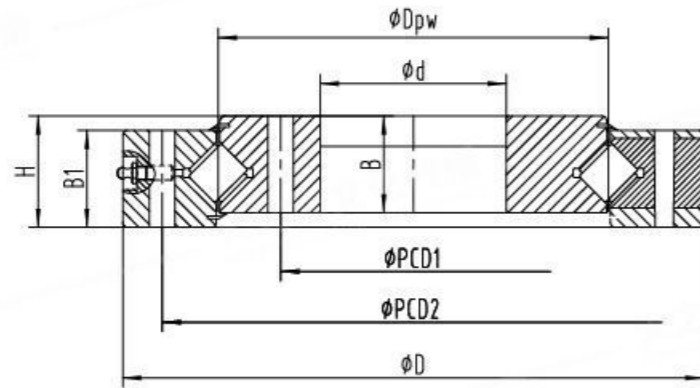
Model	Outer ring radial runout P5	Outer ring end face runout P5	Inner ring radial runout P4	Inner ring end face runout P4	Outer ring radial runout P4	Outer ring end face runout P4	Inner ring radial runout P2	Inner ring end face runout P2	Outer ring radial runout P2	Outer ring end face runout P2	Inner ring radial runout UP	Inner ring end face runout UP	Outer ring radial runout UP	Outer ring end face runout UP	Preload	Weight
	Kea (mm)	Sea (mm)	Kia (mm)	Sia (mm)	Kea (mm)	Sea (mm)	Kia (mm)	Sia (mm)	Kea (mm)	Sea (mm)	Kia (mm)	Sia (mm)	Kea (mm)	Sea (mm)	CC0 (mm)	m (Kg)
EDRX10020(G)	0.015	0.015	0.005	0.005	0.01	0.01	0.0025	0.0025	0.007	0.007	0.0015	0.0015	0.004	0.004	0.004	1.3
EDRX12030(G)	0.015	0.015	0.005	0.005	0.01	0.01	0.0025	0.0025	0.007	0.007	0.0015	0.0015	0.004	0.004	0.004	2.3
EDRX15030(G)	0.015	0.015	0.005	0.005	0.01	0.01	0.0025	0.0025	0.007	0.007	0.0015	0.0015	0.004	0.004	0.004	2.7
EDRX18040(G)	0.018	0.018	0.006	0.006	0.011	0.011	0.005	0.005	0.007	0.007	0.003	0.003	0.005	0.005	0.005	4.7
EDRX20040(G)	0.018	0.018	0.006	0.006	0.011	0.011	0.005	0.005	0.007	0.007	0.003	0.003	0.005	0.005	0.005	5.1
EDRX26050(G)	0.020	0.020	0.008	0.008	0.013	0.013	0.005	0.005	0.008	0.008	0.003	0.003	0.006	0.006	0.006	10.3
EDRX32550(G)	0.020	0.020	0.008	0.008	0.013	0.013	0.005	0.005	0.008	0.008	0.003	0.003	0.006	0.006	0.006	12.4
EDRX39550(G)	0.025	0.025	0.012	0.012	0.016	0.016	0.007	0.007	0.010	0.010	0.004	0.004	0.007	0.007	0.007	15.3
EDRX46050(G)	0.025	0.025	0.012	0.012	0.016	0.016	0.007	0.007	0.010	0.010	0.004	0.004	0.007	0.007	0.007	18.9
EDRX58060(G)	0.035	0.035	0.015	0.015	0.020	0.020	0.012	0.012	0.012	0.012	0.006	0.006	0.009	0.009	0.009	34.6
EDRX65060(G)	0.035	0.035	0.015	0.015	0.020	0.020	0.012	0.012	0.012	0.012	0.006	0.006	0.009	0.009	0.009	51.1

EFSX
G-IND BEARING



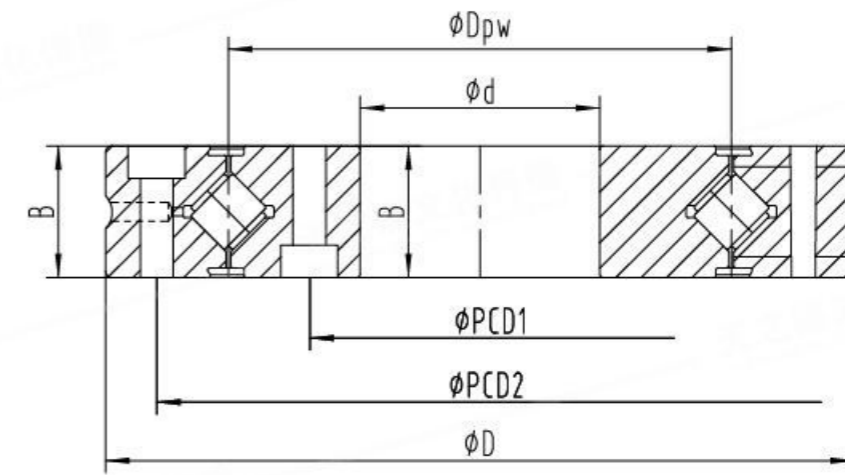
Model	ID	Tolerance	OD	Tolerance	Inner ring width	Tolerance	Outer ring width	Tolerance	Pitch diameter	Shoulder of inner ring	Shoulder of outer ring
	d (mm)	δ d (mm)	D (mm)	δ D (mm)	B (mm)	δ B (mm)	B1 (mm)	δ B1 (mm)	Dpw (mm)	ds (mm)	Dh (mm)
EFSX7010	70	0.004/-0.015	90	0/-0.022	10	0/-0.010	10	±0.060	80	77	83
EFSX9013	90	0.004/-0.018	115	0/-0.022	13	0/-0.010	13	±0.060	102	98.1	105.9
EFSX10013	100	0.004/-0.018	125	0/-0.025	13	0/-0.010	13	±0.060	112	108.1	115.9
EFSX12016	120	0.004/-0.018	150	0/-0.025	16	0/-0.010	16	±0.060	135	130.2	139.8
EFSX14018	140	0.004/-0.021	175	0/-0.025	18	0/-0.010	18	±0.060	157	151.6	162.4
EFSX16020	160	0.004/-0.021	200	0/-0.029	20	0/-0.025	20	±0.100	180	174	186
EFSX18022	180	0.004/-0.021	225	0/-0.029	22	0/-0.025	22	±0.100	202	195.4	208.6
EFSX20024	200	0.004/-0.024	250	0/-0.029	24	0/-0.025	24	±0.100	225	217.8	232.2
EFSX24028	240	0.005/-0.024	300	0/-0.032	28	0/-0.025	28	±0.100	270	261.6	278.4
EFSX30038	300	0.005/-0.027	380	0/-0.036	38	0/-0.050	38	±0.140	340	328.6	351.4
EFSX34038	340	0.007/-0.039	420	0/-0.040	38	0/-0.050	38	±0.140	380	368.6	391.4
EFSX40046	400	0.007/-0.029	500	0/-0.040	46	0/-0.050	46	±0.150	450	436.2	463.8
EFSX50056	500	0.008/-0.032	620	0/-0.044	56	0/-0.050	56	±0.160	560	543.2	576.8

Model	Basic static load rating	Basic dynamic load rating	Inner ring radial runout P4	Inner ring end face runout P4	Preload	Clearance	Large clearance	Weight
	Cor (KN)	Cr (KN)	Kia (mm)	Sia (mm)	VSP (mm)	RL0 (mm)	RL1 (mm)	m (Kg)
EFSX7010	30	12	0.01	0.01	-0.003/-0.015	-0.003/0.003	0.003/0.015	0.3
EFSX9013	47	17	0.01	0.01	-0.003/-0.015	-0.003/0.003	0.003/0.015	0.4
EFSX10013	52	18	0.01	0.01	-0.005/-0.020	-0.005/0.004	0.005/0.020	0.5
EFSX12016	75	26	0.01	0.01	-0.005/-0.020	-0.005/0.004	0.005/0.020	0.8
EFSX14018	116	41	0.015	0.01	-0.005/-0.020	-0.005/0.004	0.005/0.020	1.1
EFSX16020	133	44	0.015	0.01	-0.005/-0.020	-0.005/0.004	0.005/0.020	1.7
EFSX18022	187	63	0.015	0.01	-0.005/-0.025	-0.005/0.005	0.005/0.025	2.3
EFSX20024	208	68	0.015	0.01	-0.005/-0.025	-0.005/0.005	0.005/0.025	3.1
EFSX24028	300	95	0.020	0.01	-0.005/-0.025	-0.005/0.005	0.005/0.030	5.3
EFSX30038	504	156	0.020	0.01	-0.005/-0.025	-0.005/0.005	0.005/0.040	12
EFSX34038	563	167	0.025	0.01	-0.005/-0.025	-0.005/0.005	0.005/0.040	13.5
EFSX40046	833	244	0.030	0.01	-0.005/-0.025	-0.005/0.005	0.005/0.050	24
EFSX50056	1244	355	0.040	0.01	-0.005/-0.030	-0.005/0.006	0.006/0.060	44



Model	ID	Tolerance	OD	Tolerance	Inner ring width	Outer ring width	Height	Tolerance	Pitch diameter	Mounting holes of inner ring	
	d (mm)	δd (mm)	D (mm)	δD (mm)	B (mm)	B1 (mm)	H (mm)	δH (mm)	Dpw (mm)	PCD1 (mm)	ϕ/M (mm)
EFXU4022	40	0/0.025	112	0/-0.040	22	21	22	± 0.1	77	56	6-M8
EFXU5726	57	0/0.025	140	0/-0.040	26	25	26	± 0.1	94	70	6-M8
EFXU7616	76.2	0/0.013	145.79	0/-0.120	13	15.87	15.87	± 0.1	111	88.9	6- $\phi 8$
EFXU6930	69	0/0.020	170	0/-0.040	30	29	30	± 0.1	120	90	6-M8
EFXU10222	101.6	0/0.013	196.85	0/-0.046	22.22	22.22	22.22	± 0.1	149	115.8	16- $\phi 7$ - $\phi 11^*6.4$
EFXU12535	124.5	0/0.025	234	0/-0.040	30	30	35	± 0.1	179	144.5	12- $\phi 11$
EFXU12535ZT	126.5										
EFXU14036	140	0/0.3	300	0/-0.2	30	30	36	± 0.1	222	170	12- $\phi 18$
EFXU19146	191	0/0.072	329	0/-0.089	41	41	46	± 0.1	260	215	20- $\phi 14$
EFXU19146ZT	193										
EFXU21626	216	0/-0.026	311	0/-0.052	25.4	25.4	25.4	± 0.1	264	231.8	12- $\phi 9$ - $\phi 15^*9$
EFXU33646	336	0/0.089	474	0/-0.089	41	41	46	± 0.1	405	360	30- $\phi 14$
EFXU33646ZT	338										
EFXU38026	380	0/0.057	480	0/-0.2	26	26	26	± 0.1	430	398	20-M10
EFXU38486	384	0/0.089	646	0/-0.089	79	79	86	± 0.1	515	432	18- $\phi 26$
EFXU38486ZT	386										

Model	Mounting holes of outer ring		Basic static load rating	Basic dynamic load rating	Inner ring radial runout P4	Inner ring end face runout P4	Outer ring radial runout P4	Outer ring end face runout P4	Preload	Positive clearance	Weight
	PCD2 (mm)	ϕ/M (mm)	Cor (KN)	Cr (KN)	Kia (mm)	Sia (mm)	Kea (mm)	Sea (mm)	VSP (mm)	RL0 (mm)	m (Kg)
EFXU4022	97	6- $\phi 7$ - $\phi 11^*6.4$	14.2	14.3	0.011	0.011	0.011	0.011	-0.005/-0.008		1.4
EFXU5726	120	6- $\phi 9$ - $\phi 15^*8$	18.4	20.7	0.011	0.011	0.011	0.011	-0.005/-0.008		2.4
EFXU7616	133.1	8- $\phi 7$ - $\phi 11^*6.4$	21.5	22.8	0.011	0.011	0.011	0.011	-0.005/-0.020		1.2
EFXU6930	148	6- $\phi 9$ - $\phi 15^*8$	26	35.5	0.011	0.011	0.011	0.011	-0.005/-0.008		4
EFXU10222	177.8	16- $\phi 7$ - $\phi 11^*6.4$	32.5	40	0.011	0.011	0.011	0.011	-0.005/-0.020		3.6
EFXU12535	214	12- $\phi 11$	88	75	0.011	0.011	0.011	0.011	0/-0.020		7
EFXU12535ZT											
EFXU14036	270	12-M6	131	85	0.011	0.011	0.011	0.011	0/-0.020	0.010/0.030	12
EFXU19146	305	20- $\phi 14$	173	135	0.011	0.011	0.011	0.011	0/-0.020	0.010/0.030	16
EFXU19146ZT											
EFXU21626	295.3	12- $\phi 9$ - $\phi 15^*9$	57	54	0.011	0.011	0.011	0.011	0/-0.020	0.010/0.030	6.9
EFXU33646	450	30- $\phi 14$	270	172	0.025	0.025	0.025	0.025	0/-0.020	0.010/0.030	25
EFXU33646ZT											
EFXU38026	462	20- $\phi 9$ - $\phi 15^*9$	138	70	0.025	0.025	0.025	0.025	0/-0.020	0.010/0.030	12
EFXU38486	598	18- $\phi 26$	670	455	0.04	0.04	0.04	0.04	0/-0.030	0.010/0.030	115
EFXU38486ZT											

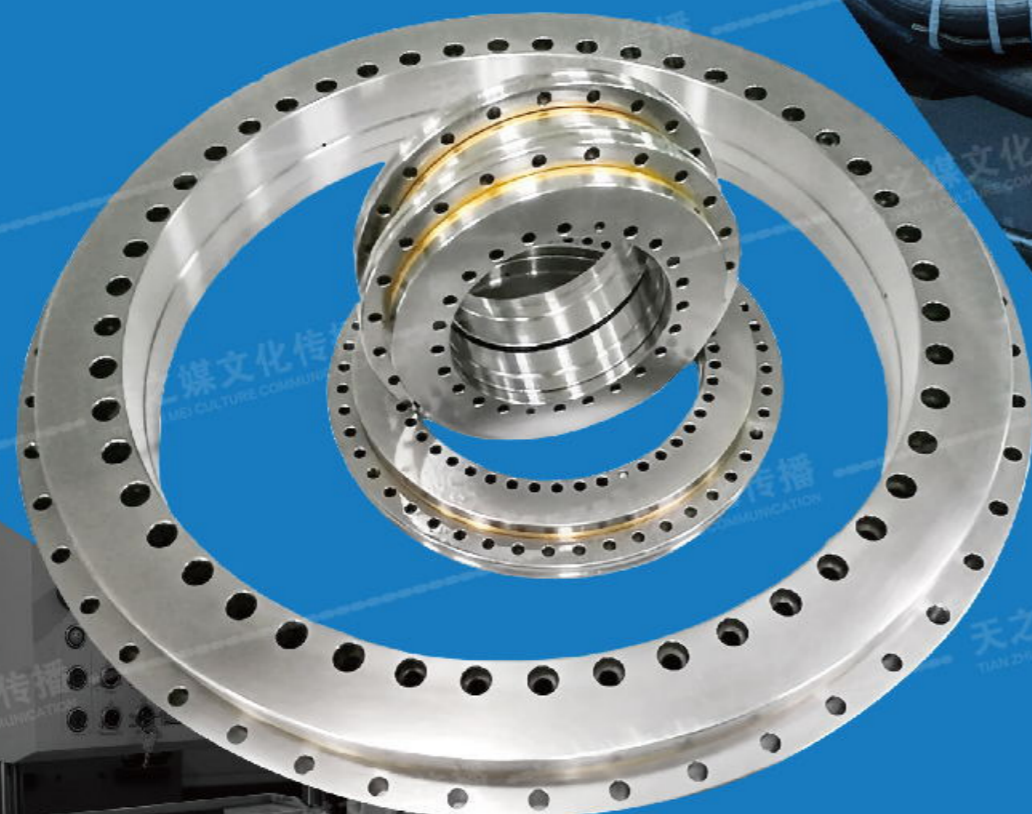


Model	ID	Tolerance	OD	Tolerance	Inner ring width	Outer ring width	Height	Tolerance	Pitch diameter	Mounting holes of inner ring	
	d (mm)	δd (mm)	D (mm)	δD (mm)	B (mm)	B1 (mm)	H (mm)	δH (mm)	Dpw (mm)	PCD1 (mm)	ϕ/M (mm)
EXSU13025	130	0/0.04	205	0/-0.046	24.8	24.8	25.4	± 0.1	168	145	12- $\phi 6.8$ - $\phi 11^*6.8$
EXSU15025	150	0/0.04	225	0/-0.052	24.8	24.8	25.4	± 0.1	188	165	16- $\phi 6.8$ - $\phi 11^*6.8$
EXSU18025	180	0/0.04	255	0/-0.052	24.8	24.8	25.4	± 0.1	228	195	20- $\phi 6.8$ - $\phi 11^*6.8$
EXSU22025	220	0/0.046	295	0/-0.52	24.8	24.8	25.4	± 0.1	258	235	24- $\phi 6.8$ - $\phi 11^*6.8$
EXSU28025	280	0/0.052	355	0/-0.057	24.8	24.8	25.4	± 0.1	318	295	28- $\phi 6.8$ - $\phi 11^*6.8$
EXSU36025	360	0/0.057	435	0/-0.063	24.8	24.8	25.4	± 0.1	398	375	36- $\phi 6.8$ - $\phi 11^*6.8$
EXSU34456	344	0/0.057	484	0/-0.063	44.5	44.5	56	± 0.1	414	368	24- $\phi 14$
EXSU47456	474	0/0.063	614	0/-0.07	44.5	44.5	56	± 0.1	544	498	32- $\phi 14$
EXSU57456	574	0/0.07	714	0/-0.08	44.5	44.5	56	± 0.1	644	598	36- $\phi 14$
EXSU67456	674	0/0.08	814	0/-0.09	44.5	44.5	56	± 0.1	744	698	40- $\phi 14$
EXSU77456	774	0/0.08	914	0/-0.09	44.5	44.5	56	± 0.1	844	798	40- $\phi 14$
EXSU87456	874	0/0.09	1014	0/-0.105	44.5	44.5	56	± 0.1	944	898	44- $\phi 14$
EXSU102456	1024	0/0.105	1164	0/-0.105	44.5	44.5	56	± 0.1	1094	1048	48- $\phi 14$

Model	Mounting holes of outer ring		Basic static load rating	Basic dynamic load rating	Inner ring radial runout P4	Inner ring end face runout P4	Outer ring radial runout P4	Outer ring end face runout P4	Preload	Weight
	PCD2 (mm)	ϕ/M (mm)	Cor (KN)	Cr (KN)	Kia (mm)	Sia (mm)	Kea (mm)	Sea (mm)	VSP (mm)	m (Kg)
EXSU13025	190	12- $\phi 6.8$ - $\phi 11^*6.8$	119	41.4	0.01	0.01	0.01	0.01	-0.005/-0.020	3.3
EXSU15025	210	16- $\phi 6.8$ - $\phi 11^*6.8$	133	44.5	0.01	0.01	0.01	0.01	-0.005/-0.020	3.7
EXSU18025	240	20- $\phi 6.8$ - $\phi 11^*6.8$	154	48	0.01	0.01	0.01	0.01	-0.005/-0.025	4.3
EXSU22025	280	24- $\phi 6.8$ - $\phi 11^*6.8$	182	53	0.01	0.01	0.01	0.01	-0.005/-0.025	5.1
EXSU28025	340	28- $\phi 6.8$ - $\phi 11^*6.8$	228	60	0.01	0.01	0.01	0.01	-0.005/-0.025	6.3
EXSU36025	420	36- $\phi 6.8$ - $\phi 11^*6.8$	285	67	0.01	0.01	0.01	0.01	-0.005/-0.025	7.8
EXSU34456	460	24- $\phi 14$	250	146	0.06	0.04	0.06	0.04	-0.01/-0.03	28
EXSU47456	590	32- $\phi 14$	330	170	0.06	0.04	0.07	0.04	-0.01/-0.03	38
EXSU57456	690	36- $\phi 14$	395	185	0.07	0.05	0.08	0.05	-0.01/-0.04	44
EXSU67456	790	40- $\phi 14$	455	200	0.08	0.05	0.09	0.05	-0.01/-0.04	52
EXSU77456	890	40- $\phi 14$	510	215	0.08	0.06	0.09	0.06	-0.01/-0.04	60
EXSU87456	990	44- $\phi 14$	580	227	0.09	0.06	0.11	0.06	-0.01/-0.05	67
EXSU102456	1140	48- $\phi 14$	670	246	0.11	0.07	0.11	0.07	-0.01/-0.05	77

ROTARY TABLE BEARING

High precision, high load capacity and high rigidity
---CNC machine tool rotary table bearing

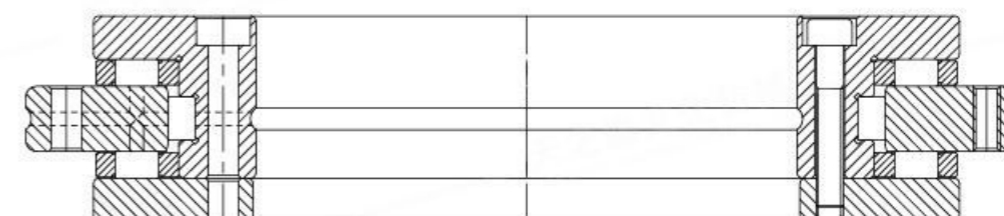


+ Rotary table bearing

In the rotary table bearing, the radial raceway of a thrust/centripetal L-shaped inner ring, the radial raceway of a thrust/centripetal seat ring and a set of radial cylindrical rollers form the radial part of the rotary table bearing. The axial raceway of the thrust/centripetal L-shaped inner ring, the two axial raceways of the thrust/centripetal seat ring, and two sets of thrust cylindrical rollers and their retainers form the axial part of the rotary table bearing. The radial and axial combined structure of this series enable it to withstand radial load, bidirectional axial load and overturning moment. This series of bearings can be preloaded and can achieve high rotation accuracy, so it is particularly suitable for CNC rotation workbenches, swing-angle milling heads, gear grinding machine workbenches and other workplaces that require high precision.

The inner ring and outer ring of this series of bearings are designed with screw mounting holes, which makes the installation and fixing very simple; at the same time, the bearing preload is adjusted according to the working conditions at the factory, so there is no need to adjust the installation preload during installation.

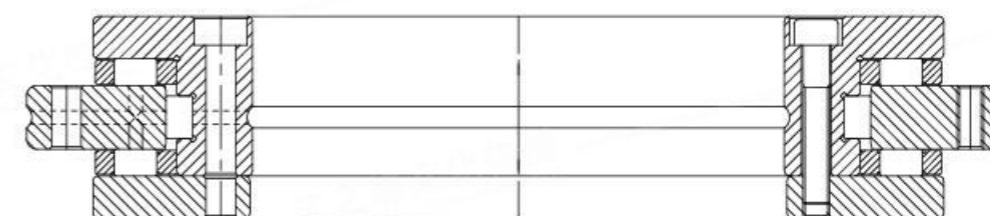
The inner ring and outer ring of the bearing are designed with lubricating oil holes, through which lubricating grease can be conveniently added and replenishing the inside of the bearing.



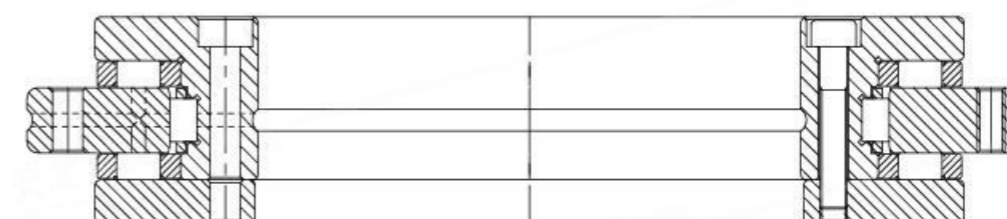
Product category »

This series of bearings are divided into the standard type (EFRT) and the high-speed type (ERTS). The high-speed type is different from the standard type: the radial part of the high-speed type is separated by a radial cage between the cylindrical rollers, while the standard type is radial part of the cylindrical rollers are not separated by a retainer and are in a fully loaded state; therefore, the high-speed type has a higher movement speed than the standard type, which is more suitable for workplaces that require higher accuracy and speed. The standard model is more used on work occasions with high load capacity, high speed and high rigidity but low speed.

EFRT standard type



ERTS high-speed type



Model name rules

Model	the inside diameter of	Retainer material	Highly tight tolerance	Installation requirements or clearance	Runout accuracy grade
EFRT	100	M/TV	H1/H2/H1H2	VSP/RLO	P4/P2
ERTS	200	M/TV	H1/H2/H1H2	RLO	P4/P2

Comment:

1. Retainer material: M brass retainer, TV nylon retainer
2. Strict height tolerance: H1 only means that the height tolerance of H1 is implemented according to strict standards, H2 only means that the height tolerance of H2 is implemented according to strict standards, H1H2 means that the height tolerances of H1 and H2 are implemented according to strict standards, and the blank means that the height tolerance of H1 and H2 is implemented according to strict standards. Ordinary standards are implemented.
3. Installation requirements or clearance: VSP bearing installation structure has a strengthening ring, RLO bearing is in a relatively small preload state, and blank means that the bearing clearance is implemented in accordance with common standards when leaving the factory.
Special note: The radial clearance of this series of bearings is in the preload condition. The VSP, RLO or common standards mentioned above only refer to the axial clearance of the bearing.
4. Runout accuracy grade: P4 and P2 are limited to the runout accuracy of the bearing (Kea Sea Kia Sia).
5. All bearing dimensional tolerance grades are implemented in accordance with P5.
For products that are not in the range of standard models, please consult our company. When conditions permit, our company can customize non-standard bearings.

Bearing selection

1. Determine the conditions of use and fill in the application condition table;
2. Determine the bearing model category;
3. Select the bearing size according to life calculation and determine bearing model;
4. Determine the bearing runout accuracy and clearance according to the used accuracy and rigidity requirements;
5. Combined with structural design, determine special conditions such as lubrication method and starting torque.

Life calculation

Bearing rated life

Bearing rating life refers to the total number of revolutions that a batch of bearings of the same model can operate under the same conditions, 90% of the bearings do not peel off the raceway surface due to rolling fatigue. It is often expressed in L, and the unit is the revolution. Calculated as follows:

$$L = (C/P)^{10/3} \times 10^6$$

C The rated dynamic load of the bearing

P Equivalent dynamic load under working conditions

Static safety factor

The static load rating of a bearing refers to a static load with a certain direction and size. At this time, the maximum contact stress at the center point of the contact area between the cylindrical roller and the raceway surface reaches the limit value of the contact stress of the material itself, and the bearing can move slowly (approximately Static state) without failure. Therefore, when the bearing is subjected to external loads in a static manner, the static safety factor must be considered. The static safety factor of the bearing is represented by S_0 , and its calculation formula is as follows:

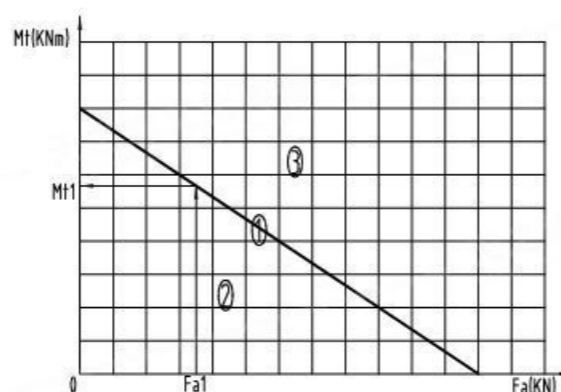
$$S_0 = C_0 / P_0$$

C_0 Bearing static load rating

P_0 Equivalent static load under working conditions

For precision equipment such as machine tools or similar application conditions, it is recommended that the static safety factor be at least 4.

For turntable bearings, the static safety factor must consider not only the influence of static radial load, but also the influence of static axial load and static overturning moment.



Operating temperature

The operating temperature range of turntable bearings is -30°C to $+120^{\circ}\text{C}$, but when used in precision equipment such as machine tools or similar application conditions, it is recommended that the working environment temperature be -20°C to $+80^{\circ}\text{C}$.

Limit speed

The limit speed listed in the size specification table is achieved by the bearing under ideal working conditions. These conditions include the bearing's operating temperature, structure, accuracy, installation conditions, actual load, lubrication conditions, etc., therefore, the actual selection should be combined with the working condition table to determine.

Bearing friction torque

Most of the rotary table bearings of this series are in a preloaded state when they leave the factory, which will have a certain influence on the selection of driving force during structural design. Therefore, pay special attention to the bearing friction torque when selecting the bearing. The friction torque of this series of bearings is in the size specification table Listed.

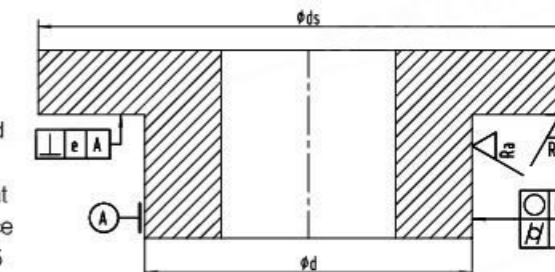
The friction torque listed in the size specification table is a static friction torque. The measurement condition is about 20°C at room temperature, and the relative movement speed between the inner and outer rings is 5r/s; after the actual installation, due to the influence of factors such as installation coordination and speed changes, The actual frictional torque will become 2 to 2.5 times larger than the original. This is only true for standard models, and high-speed models will also become larger about 1.5 times.

Matching

Since this series of bearings are already in a preloaded state at the factory, it is recommended that the matching relationship between the shaft and the bearing seat of this series of bearings is a transition fit. The inappropriate matching relationship will change the internal clearance of the bearing and the running accuracy after installation and the rigidity of the shaft system, which will ultimately reduce the service life of the bearing.

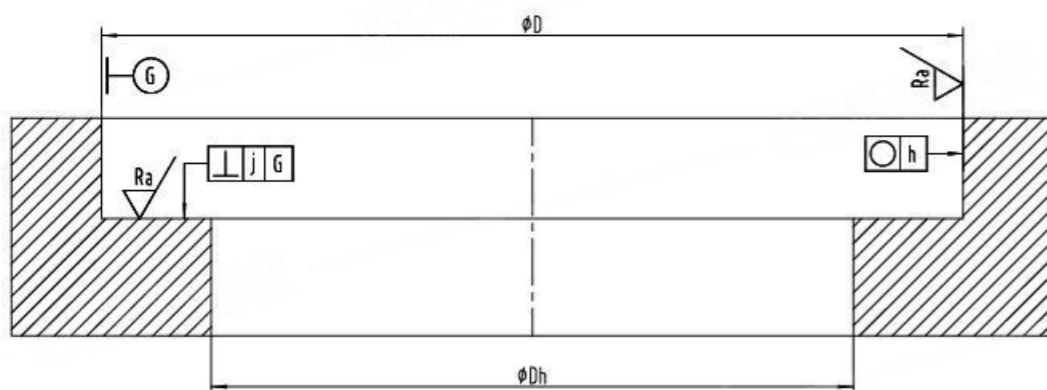
The dimensional tolerance of the shaft is recommended to h5. Specifically, when the shafting accuracy requirements are high, the gap between the shaft and the inner diameter of the bearing should be as close to zero as possible; for the shaft system with higher speed and longer cycle operation, it is recommended that the inner diameter of the shaft and the bearing should not exceed 0.01 A clearance of mm is appropriate; for high-speed bearings, a clearance of no more than 0.005 mm between the shaft and the inner diameter of the bearing is recommended.

The dimensional tolerance of the bearing seat is recommended to J6. Specifically, when the shafting operation accuracy is high, the gap between the bearing outer diameter and the bearing seat diameter should be as zero as possible; for the shaft system with higher speed and longer cycle operation, it is recommended that the bearing outer diameter and bearing seat The gap is not less than 0.02mm.



Model	Nominal size of the recommended shaft d (mm)	Recommended shaft tolerance Δd (mm)	Roundness b(μm)	Cylindricity c(μm)	Verticality d(μm)	Surface roughness Ra(μm)
EFRT50	50	0/-0.011	3	3	3	0.4
EFRT80	80	0/-0.013	3	3	3	0.4
EFRT100	100	0/-0.015	4	4	4	0.4
EFRT120	120	0/-0.015	4	4	4	0.4
EFRT150	150	0/-0.018	5	5	5	0.8
EFRT180	180	0/-0.018	5	5	5	0.8
EFRT200	200	0/-0.020	7	7	7	0.8
EFRT260	260	0/-0.023	8	8	8	0.8
EFRT325	325	0/-0.025	9	9	9	0.8
EFRT395	395	0/-0.025	9	9	9	0.8
EFRT460	460	0/-0.027	10	10	10	0.8
EFRT580	580	0/-0.028	11	11	11	1.6
EFRT650	650	0/-0.032	12	12	12	1.6
EFRT850	850	0/-0.036	14	14	14	1.6
EFRT950	950	0/-0.036	14	14	14	1.6
EFRT1030	1030	0/-0.045	16	16	16	1.6
EFRT1200	1200	0/-0.054	18	18	18	1.6

Shaft design

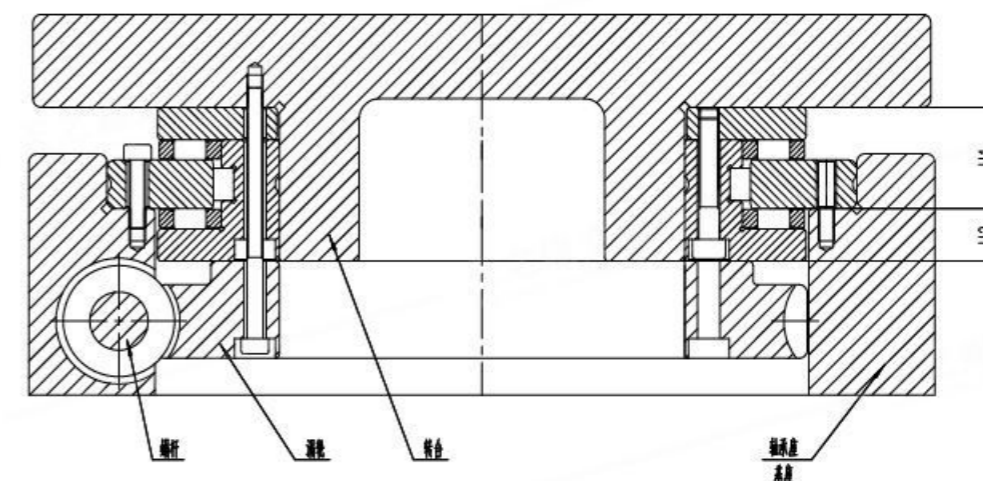


Model	Nominal size of the recommended shaft d (mm)	Recommended shaft tolerance $\delta D(\text{mm})$	Roundness h (μm)	Verticality j (μm)	Surface roughness Ra (μm)
EFRT50	126	0.018/-0.007	5	5	0.8
EFRT80	146	0.018/-0.007	5	5	0.8
EFRT100	185	0.022/-0.007	7	7	0.8
EFRT120	210	0.022/-0.007	7	7	0.8
EFRT150	240	0.022/-0.007	7	7	0.8
EFRT180	280	0.025/-0.007	8	8	0.8
EFRT200	300	0.025/-0.007	8	8	0.8
EFRT260	385	0.029/-0.007	9	9	0.8
EFRT325	450	0.033/-0.007	10	10	0.8
EFRT395	525	0.034/-0.010	11	11	1.6
EFRT460	600	0.034/-0.010	11	11	1.6
EFRT580	750	0.038/-0.012	12	12	1.6
EFRT650	870	0.044/-0.012	14	14	1.6
EFRT850	1095	0.052/-0.014	16	16	1.6
EFRT950	1200	0.052/-0.014	16	16	1.6
EFRT1030	1300	0.060/-0.016	18	18	1.6
EFRT1200	1490	0.068/-0.020	20	20	1.6

Installation (typical installation structure) »

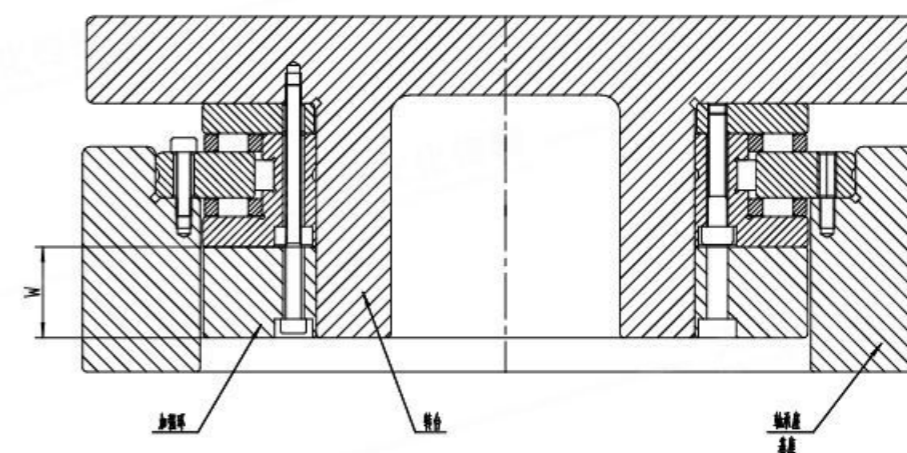
H1, H2 strict tolerance standards

As shown in the figure below, the worm gear and worm are transmitted and the worm gear with the bearing are directly connected. At this time, in order to ensure the alignment of the worm gear and the worm, and reduce the height (axial) adjustment, the tolerance of bearing H2 is suitable for strict tolerance standards; in addition, to ensure The height of the turntable is within a suitable tolerance range, and the tolerance of the bearing H1 is suitable for strict tolerance standards. If there are similar application requirements, strict tolerance standards can be required for H1 and H2.



VSP structure with reinforcement ring

In applications where high rigidity of the rotary table is required (at this time, the effect of preload on the rigidity of the shaft system has reached its limit), a reinforcing ring can be installed on the end of the bearing inner ring, which can effectively reduce the deformation of the bearing and further improve the rigidity of the bearing.

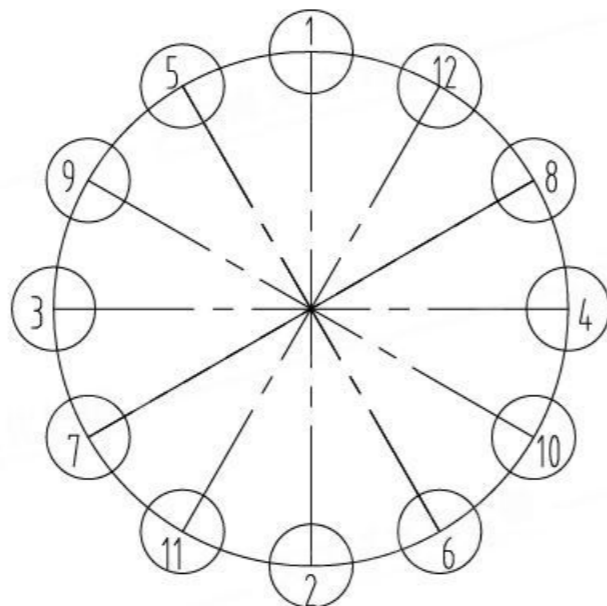


The thickness of the strengthening ring is $W=(1.5-2)*C$, the inner diameter of the strengthening ring and the bearing inner diameter have the same dimensional tolerance, and the matching relationship with the shaft is also the same.

Installation process

1. Prepare installation tools, including brush, cleaning cloth, cleaning fluid, vernier caliper, feeler gauge, heater or installation tool, torque wrench, magnetic gauge holder, dial indicator, etc.
2. Use brushes, cleaning cloths, and cleaning fluid to clean the installation parts and tools used.
3. Use heaters or installation tools to install the bearings on the shaft, and then install the bearings into the bearing housing. The installation sequence can also be determined according to the specific structural design.
4. It is strictly forbidden to force the rolling elements during the installation process, and it is strictly prohibited to knock the outer ring when installing the inner ring, and it is also strictly prohibited to knock the inner ring when installing the outer ring.
5. Use vernier calipers and feeler gauges to inspect the size of the installation and matching positions, focusing on ensuring the correct depth of the shaft shoulder.
6. The tightening method of the inner ring end screw and outer ring end screw: use a torque wrench to tighten the fixing screw three times, each time according to the screw standard torque of 40%, 70%, 100% and the "cross method" step by step tightening screw.
7. After the inner ring and the shaft are installed or the outer ring and the bearing seat are installed, check the installation accuracy with a magnetic meter seat and a dial indicator. Once a problem is found, it needs to be removed and reinstalled.

For the installation structure designed with lubricating oil holes, pay special attention to the corresponding installation of the lubricating oil hole positions.



Lubrication

This series of bearings has been filled with grease when leaving the factory without special requirements; if the customer has special requirements for grease, please indicate in the working condition table; if the customer uses oil lubricating, please also indicate in the working condition, the bearing is not filled with grease when leaving the factory, and only a small amount of anti-rust oil is reserved.

The grease filled in the bearing has been run and used before leaving the factory. If the customer uses it after storage for a long time, please run and run for a period of time before use. Depending on the size of the bearing, we recommend running 20 to 50 laps.

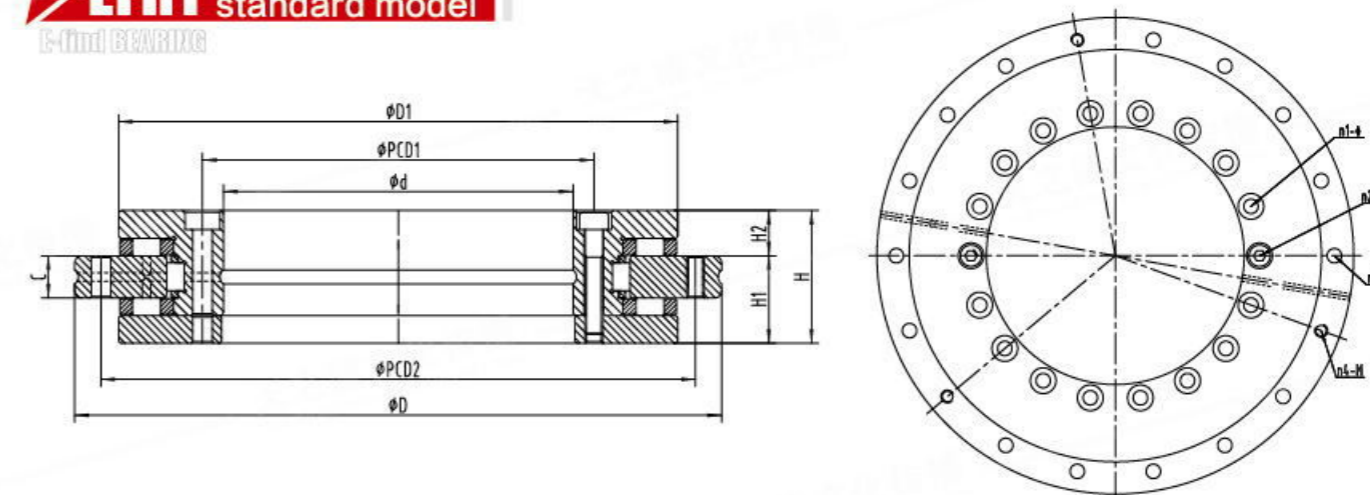
Lubricating greases of different grades must not be mixed to prevent the reaction from causing grease failure. Please pay attention to this requirement.

After the bearing has been running for a long time, the grease will volatilize and part of the aging. In order to ensure that the bearing is in good lubrication protection, please replenish the same brand of grease in time; according to the actual application conditions, we recommend a replenishment cycle of six months to twelve months.



Size specification table

EFRT standard model

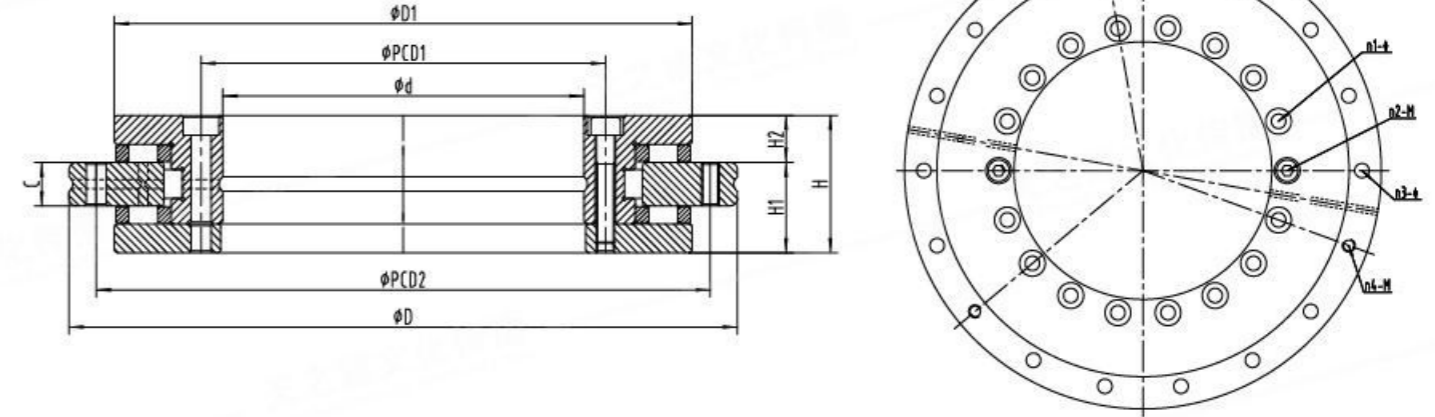


Model	ID	Tolerance	OD	Tolerance	Bearing height	Tolerance	Height 1	General tolerance	Tight tolerance	Height 2	Tight tolerance
	d (mm)	δd (mm)	D (mm)	δD (mm)	H (mm)	δH (mm)	H1 (mm)	$\delta H1$ (mm)	$\delta H10$ (mm)	H2 (mm)	$\delta H20$ (mm)
EFRT50	50	0/-0.008	126	0/-0.011	30	± 0.25	20	± 0.125	± 0.025	10	± 0.020
EFRT80	80	0/-0.009	146	0/-0.011	35	± 0.30	23.35	± 0.15	± 0.025	11.65	± 0.020
EFRT100	100	0/-0.010	185	0/-0.015	38	± 0.35	25	± 0.175	± 0.025	13	± 0.020
EFRT120	120	0/-0.010	210	0/-0.015	40	± 0.35	26	± 0.175	± 0.025	14	± 0.020
EFRT150	150	0/-0.013	240	0/-0.015	40	± 0.35	26	± 0.175	± 0.03	14	± 0.020
EFRT180	180	0/-0.013	280	0/-0.018	43	± 0.35	29	± 0.175	± 0.03	14	± 0.025
EFRT200	200	0/-0.015	300	0/-0.018	45	± 0.35	30	± 0.175	± 0.03	15	± 0.025
EFRT260	260	0/-0.018	385	0/-0.020	55	± 0.4	36.5	± 0.2	± 0.04	18.5	± 0.025
EFRT325	325	0/-0.023	450	0/-0.023	60	± 0.4	40	± 0.2	± 0.05	20	± 0.025
EFRT395	395	0/-0.023	525	0/-0.028	65	± 0.4	42.5	± 0.2	± 0.05	22.5	± 0.025
EFRT460	460	0/-0.023	600	0/-0.028	70	± 0.45	46	± 0.225	± 0.06	24	± 0.030
EFRT580	580	0/-0.025	750	0/-0.035	90	± 0.50	60	± 0.25	± 0.075	30	± 0.030
EFRT650	650	0/-0.038	870	0/-0.050	122	± 0.50	78	± 0.25	± 0.100	44	± 0.030
EFRT850	850	0/-0.050	1095	0/-0.063	124	± 0.6	80.5	± 0.3	± 0.120	43.5	± 0.030
EFRT950	950	0/-0.050	1200	0/-0.063	132	± 0.6	86	± 0.3	± 0.120	46	± 0.030
EFRT1030	1030	0/-0.063	1300	0/-0.080	145	± 0.6	92.5	± 0.3	± 0.150	52.5	± 0.030
EFRT1200	1200	0/-0.075	1490	0/-0.085	164	± 0.6	108	± 0.3	± 0.150	52.5	± 0.050

Model	Outer diameter of inner ring	Height of outer ring	Shoulder of inner ring	Shoulder of outer ring	Mounting holes of inner ring		Connection screw	Positional relationship	Mounting holes of outer ring		Lifting hole	Positional relationship
	D1 (mm)	C (mm)	ds (mm)	Dh (mm)	PCD1 (mm)	n1-φ			PCD2 (mm)	n3-φ		
EFRT50	50	10	103	107	63	10-φ5.6-φ10*5.4	2-M5	12*30°	116	12-φ5.6		12*30°
EFRT80	80	12	128	132	92	10-φ5.6-φ10*5.4	2-M5	12*30°	138	12-φ5.6		12*30°
EFRT100	100	12	159	163	112	16-φ5.6-φ10*5.4	2-M5	18*20°	170	15-φ5.6	3-M5	18*20°
EFRT120	120	12	183	187	135	22-φ7-φ11*6.2	2-M6	24*15°	195	21-φ7	3-M8	24*15°
EFRT150	150	12	212.5	216.5	165	34-φ7-φ11*6.2	2-M6	36*10°	225	33-φ7	3-M8	36*10°
EFRT180	180	15	243	247	194	46-φ7-φ11*6.2	2-M6	48*7.5°	260	45-φ7	3-M8	48*7.5°
EFRT200	200	15	272.4	276.4	215	46-φ7-φ11*6.2	2-M6	48*7.5°	285	45-φ7	3-M8	48*7.5°
EFRT260	260	18	345	349	280	34-φ9.3-φ15*8.2	2-M8	36*10°	365	33-φ9.3	3-M12	36*10°
EFRT325	325	20	413	417	342	34-φ9.3-φ15*8.2	2-M8	36*10°	430	33-φ9.3	3-M12	36*10°
EFRT395	395	20	485.7	489.7	415	46-φ9.3-φ15*8.2	2-M8	48*7.5°	505	45-φ9.3	3-M12	48*7.5°
EFRT460	460	22	558	562	482	46-φ9.3-φ15*8.2	2-M8	48*7.5°	580	45-φ9.3	3-M12	48*7.5°
EFRT580	580	30	698	702	610	42-φ11.4-φ18*11	6-M10	48*7.5°	720	42-φ11.4	6-M12	48*7.5°
EFRT650	650	34	798	802	680	42-φ14-φ20*13	6-M12	48*7.5°	830	42-14	6-M12	48*7.5°
EFRT850	850	37	1016	1020	890	54-φ18.5-φ26*17	6-M16	60*6°	1055	54-18.5	6-M16	60*6°
EFRT950	950	40	1128	1132	990	54-φ18.5-φ26*17	6-M16	60*6°	1160	54-18.5	6-M16	60*6°
EFRT1030	1030	40	1213	1217	1075	66-φ18.5-φ26*17	6-M16	72*5°	1255	66-18.5	6-M16	72*5°
EFRT1200	1200	52	1408	1412	1240	66-φ18.5-φ26*17	6-M16	72*5°	1445	66-18.5	6-M16	72*5°

Model	Fixing screw	Tightening torque	Axial loading		Radial loading		Friction torque	Limit speed	Runout P4		Runout P2		Weight
	M	M0 (Nm)	Coa (KN)	Ca (KN)	Cor (KN)	Cr (KN)	M (Nm)	nG (rpm)	Kia, Sia Kea, Sea(μm)	Kia, Sia Kea, Sea(μm)	m (Kg)		
EFRT50	M5	8.5	280	56	28.5	2.5	2.5	440	2	1	1.6		
EFRT80	M5	8.5	158	38	44	3	3	350	3	1.5	2.4		
EFRT100	M5	8.5	445	102	50	3.8	3.8	960	3	1.5	3.65		
EFRT120	M6	14	520	112	69	6	6	720	3	1.5	4.61		
EFRT150	M6	14	650	128	74	6	6	640	3	1.5	5.4		
EFRT180	M6	14	730	134	100	7.5	7.5	480	4	2	7.2		
EFRT200	M6	14	850	147	123	9	9	360	4	2	9.2		
EFRT260	M8	34	1090	168	140	14.5	14.5	240	6	3	17.8		
EFRT325	M8	34	1900	248	183	19.5	19.5	160	6	3	24.7		
EFRT395	M8	34	2190	265	200	28.5	28.5	160	6	3	32.5		
EFRT460	M8	34	2550	290	265	37.5	37.5	120	6	3	45.2		
EFRT580	M10	68	4450	580	235	90	90	65	10	5	89		
EFRT650	M12	116	6800	960	455	105	105	55	10	5	170		
EFRT850	M16	284	8500	1020	520	195	195	40	12	6	253		
EFRT950	M16	284	11400	1290	530	360	360	32	12	6	312		
EFRT1030	M16	284	10300	1140	580	375	375	32	12	6	375		
EFRT1200	M16	284	12850	1435	745	600	600	20	15	8	450		

ERTS High-speed model



Model	ID	Tolerance	OD	Tolerance	Bearing height	Tolerance	Height 1	General tolerance	Tight tolerance	Height 2	Tight tolerance
	d (mm)	δd (mm)	D (mm)	δD (mm)	H (mm)	δH (mm)	H1 (mm)	δH1 (mm)	δH10 (mm)	H2 (mm)	δH20 (mm)
ERTS200	200	0/-0.015	300	0/-0.018	45	±0.35	30	±0.175	±0.06	15	±0.025
ERTS260	260	0/-0.018	385	0/-0.020	55	±0.4	36.5	±0.2	±0.07	18.5	±0.025
ERTS325	325	0/-0.023	450	0/-0.023	60	±0.4	40	±0.2	±0.07	20	±0.025
ERTS395	395	0/-0.023	525	0/-0.028	65	±0.4	42.5	±0.2	±0.07	22.5	±0.025
ERTS460	460	0/-0.023	600	0/-0.028	70	±0.45	46	±0.225	±0.08	24	±0.030

Model	Outer diameter of inner ring	Height of outer ring	Shoulder of inner ring	Shoulder of outer ring	Mounting holes of inner ring		Connection screw	Positional relationship	Mounting holes of outer ring		Lifting hole	Positional relationship
	D1 (mm)	C (mm)	ds (mm)	Dh (mm)	PCD1 (mm)	n1-φ			PCD2 (mm)	n3-φ		
ERTS200	274	15	272	276	215	46-φ7-φ11*6.2	2-M6	48*7.5°	285	45-φ7	3-M8	48*7.5°
ERTS260	345	18	343	347	280	34-φ9.3-φ15*8.2	2-M8	36*10°	365	33-φ9.3	3-M12	36*10°
ERTS325	415	20	413	417	342	34-φ9.3-φ15*8.2	2-M8	36*10°	430	33-φ9.3	3-M12	36*10°
ERTS395	486	20	484	488	415	46-φ9.3-φ15*8.2	2-M8	48*7.5°	505	45-φ9.3	3-M12	48*7.5°
ERTS460	560	22	558	562	482	46-φ9.3-φ15*8.2	2-M8	48*7.5°	580	45-φ9.3	3-M12	48*7.5°

Model	Fixing screw	Tightening torque	Axial loading		Radial loading		Friction torque	Limit speed	Runout P4		Runout P2		Weight
	M	M0 (Nm)	Coa (KN)	Ca (KN)	Cor (KN)	Cr (KN)	M (Nm)	nG (rpm)	Kia, Sia Kea, Sea(μm)	Kia, Sia Kea, Sea(μm)	m (Kg)		
ERTS200	M6	14	840	155	226	94	5	1150	4	2	9.7		
ERTS260	M8	34	1050	173	305	110	8	900	6	3	18.3		
ERTS325	M8	34	1260	191	320	109	12	750	6	3	25		
ERTS395	M8	34	1540	214	390	121	18	650	6	3	33		
ERTS460	M8	34	1690	221	570	168	24	550	6	3	45		

+ Harmonic Reducer Bearing



Harmonic reducer is mainly composed of harmonic generator, flexible wheel, rigid wheel three basic components, in addition to rigid bearing (cross roller bearing) and flexible bearing (thin wall deep groove ball bearing).

The inner hole of the flexible bearing is matched with the elliptical cam outer ring. The outer ring is elastically deformed by the ball to match the inner diameter of the opening of the flexspline. The gear on the outer periphery of the opening of the flexspline meshes with the teeth of the rigid gear. The number of teeth of the rigid wheel is more than that of the flexible wheel. The flexible wheel and the rigid wheel are meshed on the long axis and separated on the short axis. The bottom of the flexible wheel is fixed at the output end, and the rigid bearing is installed at the output end of the reducer to connect with the outside.

Harmonic reducer is usually used in robotics, machine tools, aerospace and other industries. Accuracy, rigidity and bearing capacity and other requirements are very high. So the processing accuracy and installation accuracy of each part of the harmonic reducer are very high, the same requirements for bearings are also very high.

The most important things for a rigid bearing are its rigidity, reliability and precision of rotation. Before the rigid bearing delivering to customer, the bearing will be adjusted to a certain preload to ensure that the bearing is sufficiently rigid; The most important thing for flexible bearings is the maximum radial deformation of the bearing.

Type of Harmonic Reducer Bearing Structure

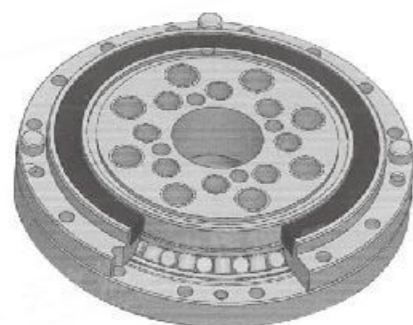
The harmonic reducer bearing includes rigid bearing and flexible bearing. Rigid bearing includes four series: CSG (CSF) series, CSD series, SHG(SHF) series, SHD series. Naming with reducer models; The flexible bearing is named HYR.

Rigid Harmonic Reducer Bearing

The rigid harmonic reducer bearing is a cross cylindrical roller structure, which can be divided into two categories according to its application: separate outer ring, integrate inner ring and integrate both outer ring & inner ring. The rollings are cylindrical rollers, arranged vertically in the V-shaped raceway at 90° from each other. The bearings of this structure can bear axial load, radial load and overturning moment at the same time in all directions and have high precision, high rigidity and composite loading capacity characters.

CSG(CSF) Separate Outer Ring, Integrate Inner Ring

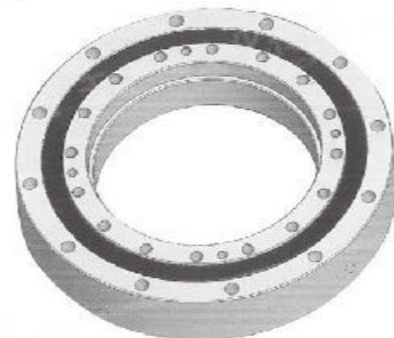
The outer ring is divided into two pieces, and the inner ring is a whole structure. Flange and bearing pedestal are not needed during installation. It is mainly used in output parts of various reducer of CSG and CSF series.



CSG (CSF)

SHG(SHF) Integrate Both Outer Ring & Inner Ring

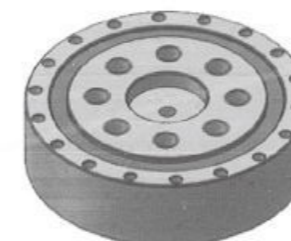
The outer ring and inner ring are integral structure, which have almost no influence on the performance during installation, and can obtain stable rotation accuracy and torque, which are mainly used in the output parts of various reducer of SHG and SHF series.



SHG (SHF)

CSD type Integrate Both Outer Ring & Inner Ring

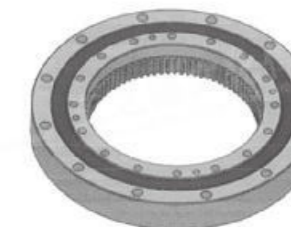
The outer ring and the inner ring are of integral structure, the outer diameter size is the same as that of CSG type, and it has higher rigidity than CSG type bearing, which is mainly used in the output part of CSD series reducer.



CSD type

SHD type Integrate Both Outer Ring & Inner Ring

The outer ring and the inner ring are of integral structure, and the inner ring has teeth, which can directly engage with the teeth on the flexible wheel, and the height is lower than SHG model, saving the installation space, mainly used in the output part of SHD reducer.

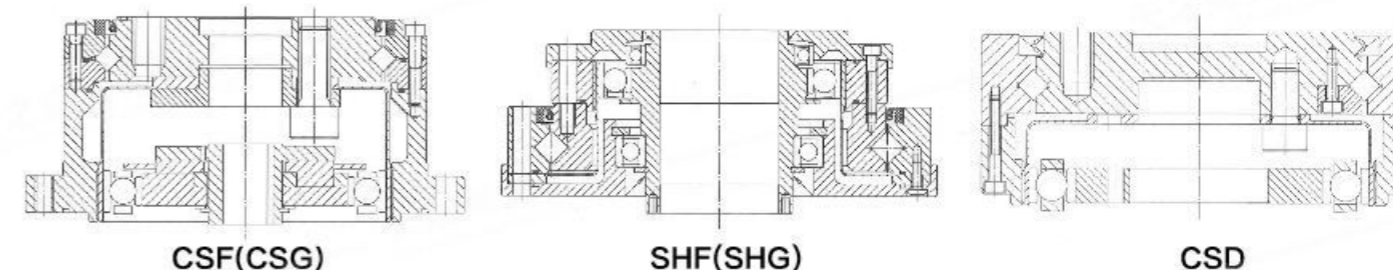


SHD type

Flexible Harmonic Reducer Bearing

The flexible bearing is mainly subjected to alternating stress. Due to its thin wall thickness, certain deformation occurs when it is combined with the CAM. The inner and outer rings and rolling body are made of high-carbon bearing steel, and nylon integral cage.

Installation Method



CSF(CSG)

SHF(SHG)

CSD

Bearing Lubrication

The main purpose of bearing lubrication is to use lubricant to form an isolating lubricating oil film on the friction surface between the ring, rolling element and spacer block to reduce friction and wear of the bearing, prevent sintering, and extend the service life of the bearing. In addition, the lubricant can also prevent bearing corrosion, reduce vibration, noise, and cool.

The rigid bearing for harmonic reducer has been filled with high-quality lithium complex grease before leaving the factory. Under normal conditions of use, there is no need to inject additional grease in the middle. After the bearing is greased, the friction torque will temporarily increase at the initial stage of operation. The friction torque will gradually stabilize after being attached between the raceway and the roller.

Installation Notice

Before installation, clean some parts such as the bearing seat or shaft that matches the bearing, remove oil and impurities, and confirm that there are no burrs or burrs. (Be sure to confirm that the inner diameter of the bearing seat and the outer diameter of the bearing, and the matching tolerances of the journal and the inner diameter of the bearing meet the requirements.)

When tightening the screws, the locking of the fixing bolts is divided into 3-4 stages from incomplete to complete locking, and the locking is repeated in the order of the cross method.

Before the bearing leaves the factory, the preload of the bearing has been adjusted by professional assemblers and the grease has been filled. Do not disassemble the bearing parts or clean the inside of the bearing without authorization.

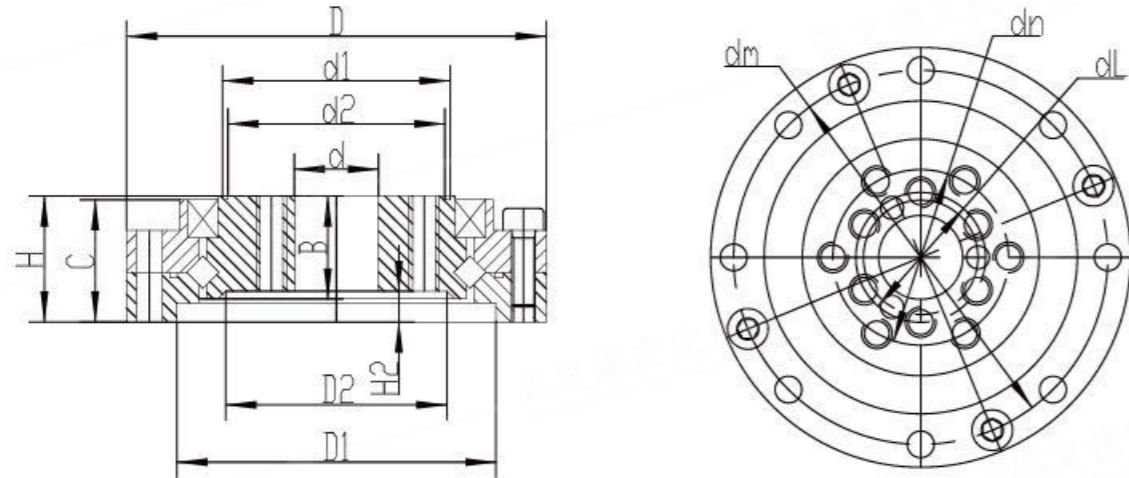
The operating temperature of the bearing is -20°C ~ +80°C. If the operating condition is beyond this range, please contact our company for consultation.

It is suggested that the materials of bearing parts can be aluminum alloy or cast iron, etc.,

If the bearing size you use is not found in the attached table, or does not match the size in the attached table, please feel free to consult our company.

CSG (CSF)

E-FIND BEARING

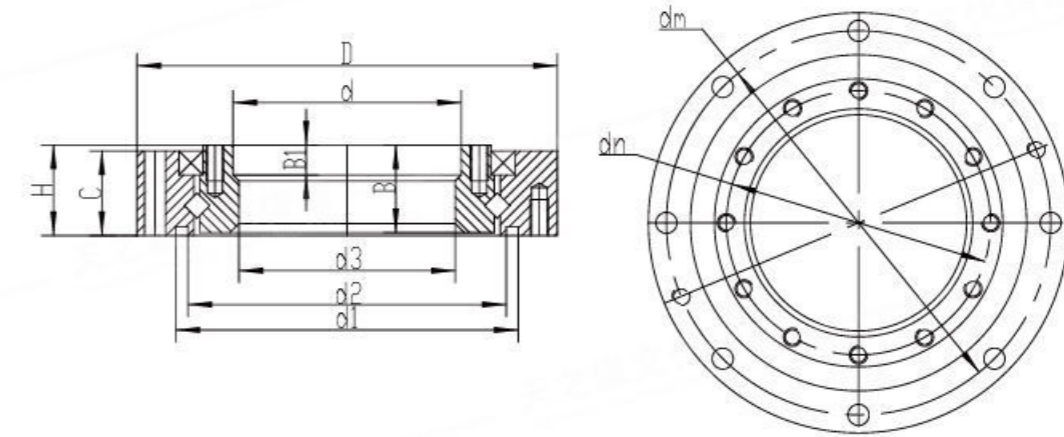


Model	Dimensions (unit: mm)									
	d	D	H	C	B	H2	D1	D2	d1	d2
CSG(CSF)-14	11	55	16.5	16	13.5	4	41.8	29	29.8	28.4
CSG(CSF)-17	10	62	16.5	16	13.5	4	49	34	36	33.8
CSG(CSF)-20	14	70	16.5	16	13.5	4.5	56.5	41	42.8	40
CSG(CSF)-25	20	85	18.5	18	16.5	3.5	67	52.5	55.3	52.6
CSG(CSF)-32	26	112	22.5	21.5	19	4.5	90	68	74	68.6
CSG(CSF)-40	32(24)	126	24	22.5	21.5	4.5	105	86	86	81.2
CSG(CSF)-50	40(32)	157	31	30	28	5	131.6	103	108	102.6
CSG(CSF)-65	52(44)	210	39	37	35	7	176	132	138	132.6

Model	Outer ring		Inner ring				Radial basic load rating		Mass
	dm	D	dn	Mounting hole 1	dL	Mounting hole 2	Cr (KN)	Cor (KN)	
CSG(CSF)-14	49	55	23	6-M4	17	6-M4	7	9.1	0.15
CSG(CSF)-17	56	62	27	6-M5	19	6-M5	7.6	10.7	0.24
CSG(CSF)-20	64	70	32	8-M6	24	8-M5	8.5	13.4	0.2
CSG(CSF)-25	79	85	42	8-M8	30	8-M6	13.8	21.6	0.45
CSG(CSF)-32	104	112	55	8-M10	40	8-M8	12.5	35.6	0.9
CSG(CSF)-40	117	126	68	8-M10	50	8-M10	25.9	41.4	1.3
CSG(CSF)-50	147	157	84	8-M14	60	8-M14	49.5	85	2.8
CSG(CSF)-65	198	210	110	8-M16	80	8-M16	74.6	133	7.9

SHG (SHF)

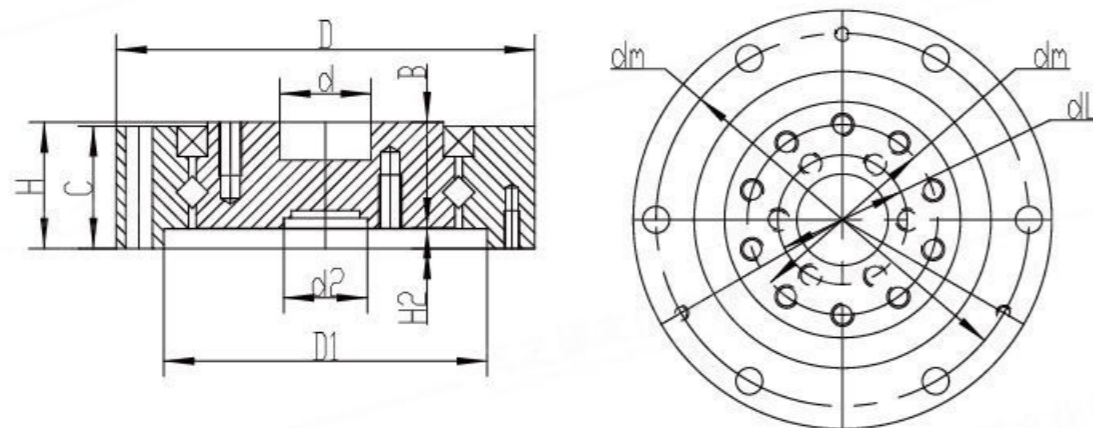
E-FIND BEARING



Model	Dimensions (unit: mm)								
	d	d3	D	H	C	B	B1	d1	d2
SHG(SHF)-14	38	36	70	15.1	14.1	14.6	5	57	53
SHG(SHF)-17	47	44.1	80	17	16	16.4	6.5	68.1	64.1
SHG(SHF)-20	54		90	18.5	17.5	17.5		78	72.6
SHG(SHF)-25	68	66	110	20.7	18.7	19.7	7.5	94.8	90
SHG(SHF)-32	88	84	142	24.4	23.4	23.4	8	123	117.6
SHG(SHF)-40	108	106	170	30	29	28.5	9.5	148	142.6
SHG(SHF)-50	135	129	214	36	34	34.5	11	188	182.6

Model	Outer ring			Inner ring			Radial basic load rating		Mass
	dm	Mounting hole 1	Mounting hole 2	dn	Mounting hole 3	Mounting hole 4	Cr (KN)	Cor (KN)	
SHG(SHF)-14	64	8-Φ3.5	2-M3(deep 6)	44	12-M3(deep 6)		6.1	14	0.11
SHG(SHF)-17	74	12-Φ3.5	4-M3(deep 6)	54	20-M3(deep 6)		9.4	16.1	0.36
SHG(SHF)-20	84	12-Φ3.5	4-M3(deep 6)	62	16-M3(deep 6)	4-M3(deep 6)	20.2	31.1	0.44
SHG(SHF)-25	102	12-Φ4.5	4-M3(deep 6)	77	16-M4(deep 8)	4-M3(deep 6)	28.5	45.2	0.7
SHG(SHF)-32	132	12-Φ5.5	4-M4(deep 8)	100	16-M5(deep 8)	4-M4(deep 8)	47.3	77.3	1.57
SHG(SHF)-40	158	12-Φ6.6	6-M4(deep 8)	122	16-M6(deep 10)	4-M5(deep 10)	35.5	71.2	2.4
SHG(SHF)-50	200	12-Φ9	6-M5(deep 10)	154	16-M8(deep 12)	8-M5(deep 10)	80.4	151.9	4.5

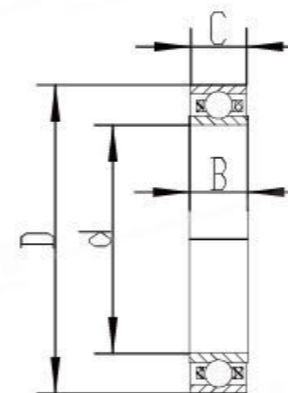
CSD
E-FIND BEARING



Model	Dimensions (unit: mm)							
	d	d2	D	H	C	B	H2	D1
CSD-14	12	11	55	16.6	16.1	13.9	2.7	42.5
CSD-17	14	11	62	16.6	16.1	13.9	2.7	49.7
CSD-20	18	16	70	18.3	17.8	15.6	2.7	57
CSD-25	24	20	85	23.4	22.9	20	3.4	73
CSD-32	32	30	112	24.5	23.5	20.9	3.6	95.3
CSD-40	36	32	126	29.1	28.1	24.6	4.5	109.6
CSD-50	48	44	157	34	33	29.4	4.6	138

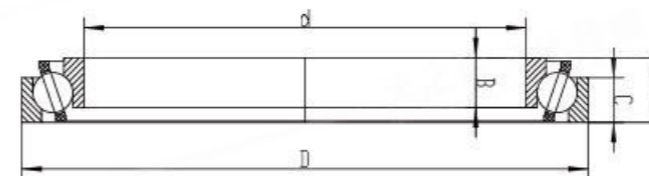
Model	Outer ring				Inner ring				Radial basic load rating		Mass kg
	dm	Mounting hole 1	Mounting hole 2	dn	Mounting hole 3	dL	Mounting hole 4	Cr (KN)	Cor (KN)		
CSD-14	49	6--Φ3.5	3-M2(deep 5)	25	10-M3(deep 7)	17	6-M3(deep 7)	7	9.1	0.24	
CSD-17	56	10--Φ3.5	5-M2(deep 5)	27	8-M5(deep 8)	19.5	8-M4(deep 8)	7.6	10.7	0.3	
CSD-20	64	12--Φ3.5	4-M2(deep 5)	34	8-M6(deep 9)	24	8-M4(deep 8)	8.5	13.4	0.42	
CSD-25	79	18--Φ3.5	6-M2(deep 5)	42	8-M8(deep 12)	30	8-M5(deep 9)	13.8	21.6	0.8	
CSD-32	104	18--Φ4.5	6-M3(deep 7)	57	10-M8(deep 12)	41	6-M6(deep 11)	12.5	35.6	1.4	
CSD-40	117.5	18--Φ5.5	6-M3(deep 8)	72	10-M10(deep 15)	48	6-M8(deep 11)	35.5	71.2	2.1	
CSD-50	147	22--Φ6.6	4-M3(deep 8)	88	10-M12(deep 18)	62	6-M10(deep 18)	49.5	85	3.8	

HYR
E-FIND BEARING



Model	Dimensions (unit: mm)				
	d	D	B	C	r
HYR-14	25.07	33.896	6.35	6.095	0.3
HYR-17	30.3	41.722	6.68	6.16	0.3
HYR-20	35.56	49.068	8.13	7.24	0.3
HYR-25	45.212	61.334	6.3	9.015	0.3
HYR-32	58.928	79.748	8.64	11.81	0.3
HYR-40	71.12	98.171	10.29	14.475	0.6
HYR-50	88.9	122.707	12.7	18.085	1
HYR-65	117.856	159.312	15.88	23.495	1

RV
E-FIND BEARING



Model	Dimensions (unit: mm)				Radial basic load rating	
	d	D	B	H	Cr (KN)	Cor (KN)
RV-20E	89	114	10	13	14.6	26.2
RV-40E	115	145	15	15	27	33
RV-80E	131	165	13	15	29	55
RV-110E	145	175	15	16	68	34
RV-160E	168	205	19	20	49	94
RV-320E	200	250	23	24	83.9	115.8
RV-10C	97	120	13	13	22.7	26
RV-50C	159	191	16.4	16	36.2	50.9
RV-120C	182	214	17	17	40	58
RV-320CA	320	383	29.8	30	130.8	219.8

Crankshaft Bearing

Model	Dimensions (unit: mm)					Radial basic load rating	
	d	D	T	B	C	Cr (KN)	Cor (KN)
30011	9.4	24	13	12	11	11.7	10.4
30101	12	27	13	12	11	13.4	12.8
32102	15	30	13.1 lower	12	11	16.3	17
30202	15	35	11.75	11	10	17.1	16.1
32202	15	35	15 lower	15	11.75	23.0	23.8
32202X1	15	36	15 lower	15	11.75	23.0	23.8
32004	20	42	15	15	12	25.1	28.2
30204	20	47	15	14	12	28.2	30.6
32006X2	30	58	20	20	15.5	42.8	51.6
33006X2	30	58	19.7	20	15.5	42.7	51.5
32206X3	30	65	22 lower	22	17.5	63.2	75

Working Condition Requirement Sheet

I Contact Info.			
1.Name:	2.Position:	3.Tel.:	4.E-mail:
5.Company:		6.Industry:	
II Application conditions			
1.Equipment type: ①Machining center ②grinding machine non-standard equipment ④testing equipment ⑤other equipment			
2.application site: ①NC rotary table ②Angular milling head ③Direct drive motor ④Others			
3.Precision and material of parts to be machined: ①Cast iron, semi-finishing ②Steel, precision processing ③Aluminum alloy, precision machining ④Handling,positioning			
4.Mode of power transmission: ①manual ②Motor direct drive ③Motor, worm gear drive ④Motor, gear reducer ⑤Motor, belt ⑥Hydraulic transmission ⑦Other			
5.Loading conditions: Fa= KN, Fr= KN, F1= KN, L1= mm.			
6.Bearing rotating speed and working hours: Limit speed= RPM, Working speed= RPM, Working hours: ①Intermittent ②continuous.			
7.Working environment & temperature conditions: ①Indoor, 10℃--60℃ ②Outdoor, -20℃--50℃ ③Other			
III Primary selection of bearing model			
1.Dimension: ID mm, OD mm, H mm.			
2.Precision: ①P5 ②P4 ③P2			
IV Special requirements			
Note: Above information will be protected by our company as confidential secret of both parties. Please rest assured when filling in the information.			

Customized according to the size range of the sample book, such as internal teeth, external teeth, additional flanges, surface heat treatment, and bearing housings and shafts that match the bearings can be customized and processed, and the drawings agreed and confirmed by both parties shall prevail.

Customization process:

1. The customer informs the working condition or the sample drawing
2. Technical personnel of both parties communicate technical details
3. We will issue confirmation drawings for customers to confirm
4. Both parties confirm the drawings and sign a technical agreement (the technical agreement and the contract have the same legal effect)

Model comparison table

EFANT	THK	IKO	INA
ERBC	RB	CRB	
ERBC2008	RB2008	CRBC208	
ERBC2508	RB2508	CRBC258	
ERBC3010	RB3010	CRBC3010	
ERBC3510	RB3510	CRBC3510	
ERBC4010	RB4010	CRBC4010	
ERBC4510	RB4510	CRBC4510	
ERBC5013	RB5013	CRBC5013	
ERBC6013	RB6013	CRBC6013	
ERBC7013	RB7013	CRBC7013	
ERBC8016	RB8016	CRBC8016	
ERBC9016	RB9016	CRBC9016	
ERBC10016	RB10016	CRBC10016	
ERBC10020	RB10020	CRBC10020	
ERBC11016	RB11016	CRBC11016	
ERBC11015	RB11015	CRBC11015	
ERBC11020	RB11020	CRBC11020	
ERBC12016	RB12016	CRBC12016	
ERBC12025	RB12025	CRBC12025	
ERBC13015	RB13015	CRBC13015	
ERBC13025	RB13025	CRBC13025	
ERBC14016	RB14016	CRBC14016	
ERBC14025	RB14025	CRBC14025	
ERBC15013	RB15013	CRBC15013	
ERBC15025	RB15025	CRBC15025	
ERBC15030	RB15030	CRBC15030	
ERBC16025	RB16025	CRBC16025	
ERBC17020	RB17020	CRBC17020	
ERBC18025	RB18025	CRBC18025	
ERBC19025	RB19025	CRBC19025	
ERBC20025	RB20025	CRBC20025	
ERBC20030	RB20030	CRBC20030	
ERBC20035	RB20035	CRBC20035	
ERBC22025	RB22025	CRBC22025	
ERBC24025	RB24025	CRBC24025	
ERBC25025	RB25025	CRBC25025	
ERBC25030	RB25030	CRBC25030	

EFANT	THK	IKO	INA
ERBC	RB	CRB	
ERBC25040	RB25040	CRBC25040	
ERBC30025	RB30025	CRBC30025	
ERBC30035	RB30035	CRBC30035	
ERBC30040	RB30040	CRBC30040	
ERBC35020	RB35020	CRBC35020	
ERBC40035	RB40035	CRBC40035	
ERBC40040	RB40040	CRBC40040	
ERBC45025	RB45025	CRBC45025	
ERBC50025	RB50025	CRBC50025	
ERBC50040	RB50040	CRBC50040	
ERBC50050	RB50050	CRBC50050	
ERBC60040	RB60040	CRBC60040	
ERBC70045	RB70045	CRBC70045	
ERBC80070	RB80070	CRBC80070	
ERBC90070	RB90070		
ERBC1000110	RB1000110		
ERBC1250110	RB1250110		

EFANT	THK	IKO	INA
ERBS	RA	CRBS	
ERBS5008	RA5008	CRBS508A	
ERBS6008	RA6008	CRBS608A	
ERBS7008	RA7008	CRBS708A	
ERBS8008	RA8008	CRBS808A	
ERBS9008	RA9008	CRBS908A	
ERBS10008	RA10008	CRBS1008A	
ERBS11008	RA11008	CRBS1108A	
ERBS12008	RA12008	CRBS1208A	
ERBS13008	RA13008	CRBS1308A	
ERBS14008	RA14008	CRBS1408A	
ERBS15008	RA15008	CRBS1508A	
ERBS16013	RA16013	CRBS16013A	
ERBS17013	RA17013	CRBS17013A	
ERBS18013	RA18013	CRBS18013A	
ERBS19013	RA19013	CRBS19013A	
ERBS20013	RA20013	CRBS20013A	

EFANT	THK	IKO	INA
ERBH		CRBH	
ERBH2008		CRBHV208A	
ERBH2508		CRBHV258A	
ERBH3010		CRBHV3010A	
ERBH3510		CRBHV3510A	
ERBH4010		CRBHV4010A	
ERBH4510		CRBHV4510A	
ERBH5013		CRBHV5013A	
ERBH6013		CRBHV6013A	
ERBH7013		CRBHV7013A	
ERBH8016		CRBHV8016A	
ERBH9016		CRBHV9016A	
ERBH10020		CRBHV10020A	
ERBH11020		CRBHV11020A	
ERBH12025		CRBHV12025A	
ERBH13025		CRBHV13025A	
ERBH14025		CRBHV14025A	
ERBH15025		CRBHV15025A	
ERBH20025		CRBHV20025A	
ERBH25025		CRBHV25025A	

EFANT	THK	IKO	INA
ERBF	RU	CRBF	
ERBF2012	RU42	CRBFV2012AT	
ERBF3515	RU66	CRBFV3515AT	
ERBF5515	RU85	CRBFV5515AT	
ERBF8022(G)	RU124(G)	CRBFV8022A(AD)	
ERBF8022X	RU124X	CRBFV8022AT	
ERBF9025(G)	RU148(G)	CRBFV9025A(AD)	
ERBF9025X	RU148X	CRBFV9025AT	
ERBF11528(G)	RU178(G)	CRBFV11528A(AD)	
ERBF11528X	RU178X	CRBFV11528AT	
ERBF16035(G)	RU228(G)		
ERBF16035X	RU228X		
ERBF21040(G)	RU297(G)		
ERBF21040X	RU297X		
ERBF35045(G)	RU445(G)		
ERBF35045X	RU445X		

EFANT	THK	IKO	INA
EDRX	RW		
EDRX10020(G)	RW145		
EDRX12030(G)	RW164		
EDRX15030(G)	RW195		
EDRX18040(G)	RW230		
EDRX20040(G)	RW250		
EDRX26050(G)	RW323		
EDRX32550(G)	RW388		
EDRX39550(G)	RW463		
EDRX46050(G)	RW530		
EDRX58060(G)	RW665		
EDRX65060(G)	RW760		

EFANT	THK	IKO	INA
EFSX			SX
EFSX7010			SX011814
EFSX9013			SX011818
EFSX10013			SX011820
EFSX12016			SX011824
EFSX14018			SX011828
EFSX16020			SX011832
EFSX18022			SX011836
EFSX20024			SX011840
EFSX24028			SX011848
EFSX30038			SX011860
EFSX34038			SX011868
EFSX40046			SX011880
EFSX50056			SX0118/500

EFANT	THK	IKO	INA
EFXU			XU
EFXU4022			XU050077
EFXU5726			XU060094
EFXU7616			XU060111
EFXU6930			XU080120
EFXU10222			XU080149
EFXU12535			XU120179
EFXU12535ZT			XU120179
EFXU14036			XU120222
EFXU19146			XU160260
EFXU19146ZT			XU160260ZT
EFXU21626			XU060264
EFXU33646			XU160405
EFXU33646ZT			XU160405ZT
EFXU38026			XU080430
EFXU38486			XU300515
EFXU38486ZT			XU300515ZT

EFANT	THK	IKO	INA
EXSU			XSU
EXSU13025			XSU080168
EXSU15025			XSU080188
EXSU18025			XSU080218
EXSU22025			XSU080258
EXSU28025			XSU080318
EXSU36025			XSU080398
EXSU34456			XSU140414
EXSU47456			XSU140544
EXSU57456			XSU140644
EXSU67456			XSU140744
EXSU77456			XSU140844
EXSU87456			XSU140944
EXSU102456			XSU141094

EFANT	THK	IKO	INA
EFRT			YRT
EFRT50			YRTC50
EFRT80			YRTC80
EFRT100			YRTC100
EFRT120			YRTC120
EFRT150			YRTC150
EFRT180			YRTC180
EFRT200			YRTC200
EFRT260			YRTC260
EFRT325			YRTC325
EFRT395			YRTC395
EFRT460			YRTC460
EFRT580			YRTC580
EFRT650			YRTC650
EFRT850			YRTC850
EFRT950			YRTC950
EFRT1030			YRTC1030
EFRT1200			YRTC1200

EFANT	THK	IKO	INA
ERTS			YRTS
ERTS200			YRTS200
ERTS260			YRTS260
ERTS325			YRTS325
ERTS395			YRTS395
ERTS460			YRTS460