UNIVERSAL INDUSTRIAL PRODUCTS INC.

SLEWING BEARING CATALOG © UIPI ®

www.ui-pi.com

900 EAST HAMILTON AVENUE, SUITE 100,
CAMPBELL, CALIFORNIA 95008, USA

TOLL FREE: 1-800-290-6979
EMAIL: sales@ui-pi.com

Index (Certified Technology, Reliable Solution)

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UNIVERSAL INDUSTRIAL PRODUCTS INC.

Part 1 Company Profile

Introduction

Universal Industrial Products, Inc. (UIPI) is a slewing bearing manufacturer specializing in large diameter solutions. For over a decade, we have helped our customers with bearing design and supply solutions that have allowed them to reduce costs and improve profitability.

Our design engineers are available visit with you on site and review your application requirements in detail. We will assist you throughout the design, installation, and maintenance processes. Once a design is implemented and tested, we are happy to work on stocking an inventory for delivery on a JIT basis.

Our goal is to work with you as business partners, not just a supplier. Our design services, manufacturing, and quality, along with a strong focus on customer service, will help us build long-lasting, beneficial relationships.

UIPI History

- **2004** UIPI was founded in Silicon Valley, California, dedicated to the Sino-US trade.
- **2006** UIPI established Shenyang Leadway Machinery Equipment Co., Ltd. to handle all sales.
- **2006** Manufactured first Chinese-made slewing bearings used in the Chinese Medical Industry (X-Ray, CRT, MRI).
- **2007** Manufactured first Chinese-made slewing bearings used in the Japanese Robot Industry.
- **2007** Manufactured first Chinese-made slewing bearings used on the Canadian LOVAT Tunnel Boring Machine. (A Caterpillar company)
- **2014** UIPI established Universal Industrial Products, Inc. (Luoyang).
- **2015** UIPI re-certified ISO9001:2015 quality control management system.
- **2016** UIPI delivered more than 100,000 slewing bearings to the North American market.
- **2017** UIPI successfully registers with the American Petroleum Institute (API) Quality Management System.
- **2018** UIPI re-locate to 13,500m^2 new plant in Xin'An county in Luoyang City.

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UIPI Today

UIPI is dedicated to the quality, lead time, and consistency demanded in the North American market and globally. Providing bearings to both OEM and aftermarket manufacturers, UIPI has sales teams in North America, Asia, Europe, the Middle East, and Australia, and are able to provide both sales and after-sales services. Through 2017, we have provided more than $100 million in slewing bearings to major OEMs in North America and Europe, the areas accounting for 95% of our total business. Over the last decade, UIPI has established itself as one of the top suppliers of slewing rings to North America.

Export 95% of Manufactured Slewing Bearings
About 70 Multinational Staff Members
Production Capacity of 1000 pcs/month
Custom-engineered Solutions Delivered to Over 20 Countries
13,500 ㎡ Facility in Luoyang China
Distribution Warehouse in North America

UIPI Philosophy

Reputation - Profession - Efficiency - Innovation

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Customer Locations ★ Headquarter ▲ Facilities ● Sales Office

America	Singapore
Canada	Spain
Mexico	Russia
Australia	England
New Zealand	Turkey
Thailand	Swede
India	Israel
Indonesia	Ireland
Malaysia	France
Pakistan	Germany
Iraq	Saudi Arabia
Iran	UAE (United Arab Emirates)

For any further information, please contact :

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Continuing Improvement---API Certificate

Advanced R&D, regularly updated machinery, and a fact-based approach to growth are the keys to UIPI's constant evolution while ensuring consistently high quality products. UIPI strives to continuously improve all aspects of its business, including manufacturing, engineering, and customer service. Attention to the specific demands of our customers and market, optimization of all the production processes, and implementation of strict control procedures are just some of the guidelines of the company's shared values.

After two years of regular audits, we have completed the very difficult process of becoming registered with the American Petroleum Institute (API). This process involves using many of the quality control techniques we already have in place, and adding in certified and approved methods to give us a very detailed and transparent quality control process. In order to answer to the requests of a demanding market, UIPI is in the process of getting acknowledged by many of the most recognized, and respected international certification bodies such as the American Bureau of Shipping (ABS), Bureau Veritas, and Det Norske Veritas (DNV).

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Part 2 Slewing Bearing Applications

UIPI bearings have been installed in countless different applications. A few of these different industries include:

- Access Platforms
- Amusement Rides
- Attachments
- Ballast Regulator
- Boomlift
- Bridge Cranes
- Bucket Wheels
- Crane-Hook Rotators
- Concrete Pumps
- Construction Cranes
- Deck Cranes
- Drilling Equipment
- Earth-Drilling Machines
- Excavators
- Emergency Vehicles
- Floating Cranes
- Forklift Equipment
- Forest Machines
- Grapple
- Harbor Cranes
- Logging Industry Machine
- Manipulators
- Harbor Cranes
- Logging Industry Machine
- Manipulators
- Mobile Cranes
- Offshore Cranes
- Packing Machines
- Railway Cranes
- Rotary Tables
- Reclaimers
- Robots
- Sewer Cleaner
- Ship Loaders
- Shipyard Cranes
- Stackers
- Tower Cranes
- Trailer
- Tunnel Boring Machines
- Water Treatment Equipments
- Welding Positioners
- Wind Turbines

Boom Truck

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Excavator

Forestry Cranes & Loaders

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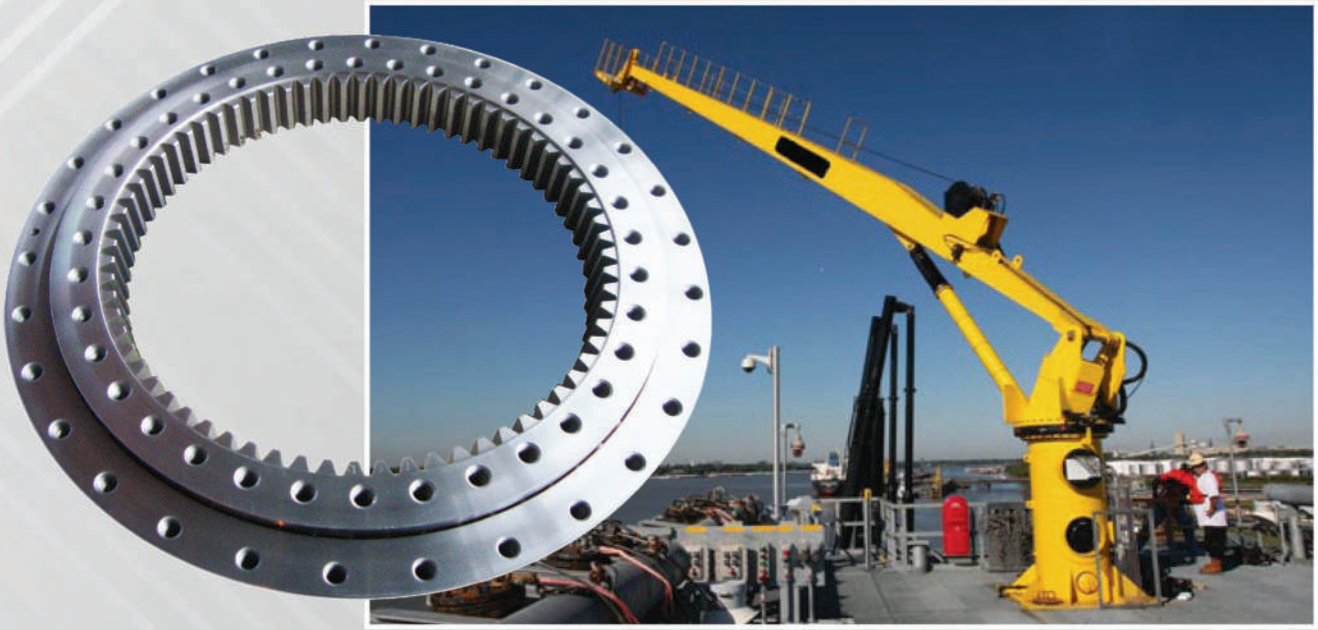
Deck Crane



Attachments

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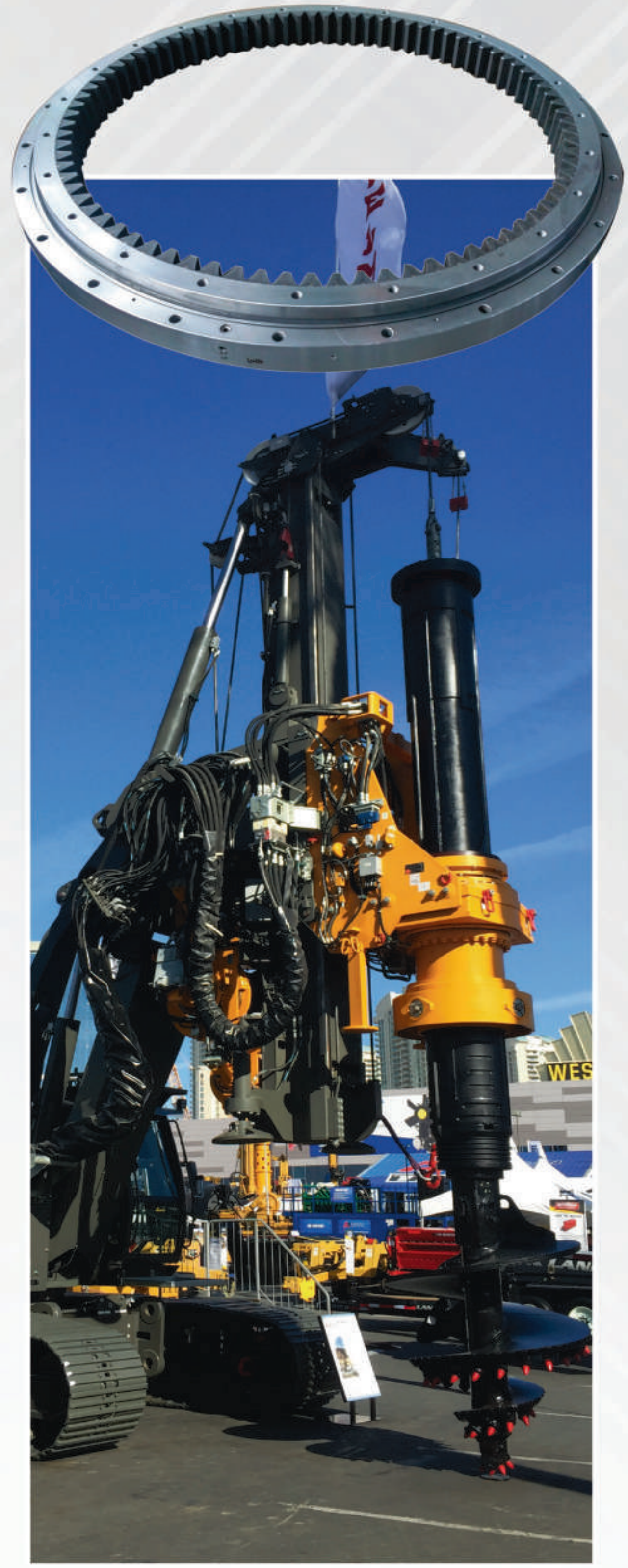
Access Platforms

Drilling Equipment



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Emergency Vehicles

Concrete Pump

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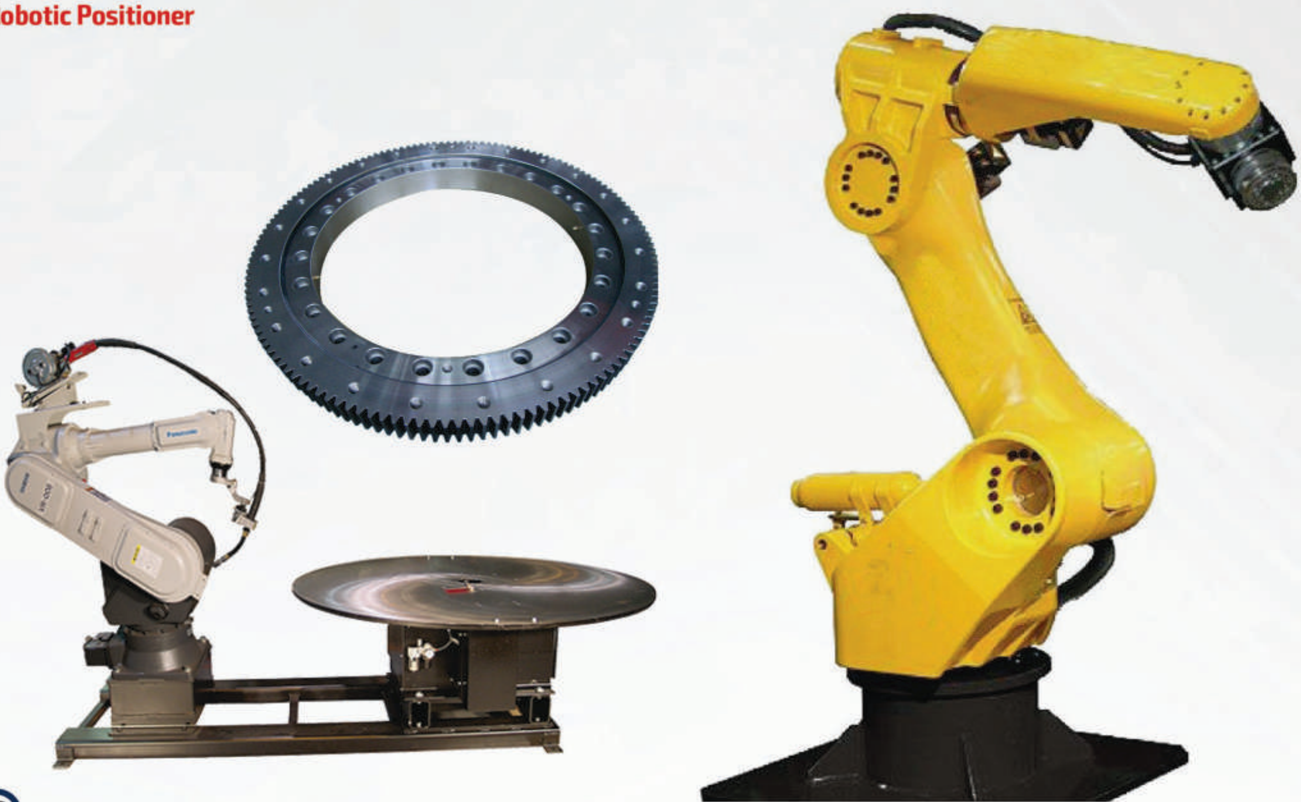
Sewer Cleaner

Robotic Positioner



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Packing Machine

Ballast Regulator

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Trailer

Amusement Rides

Solar

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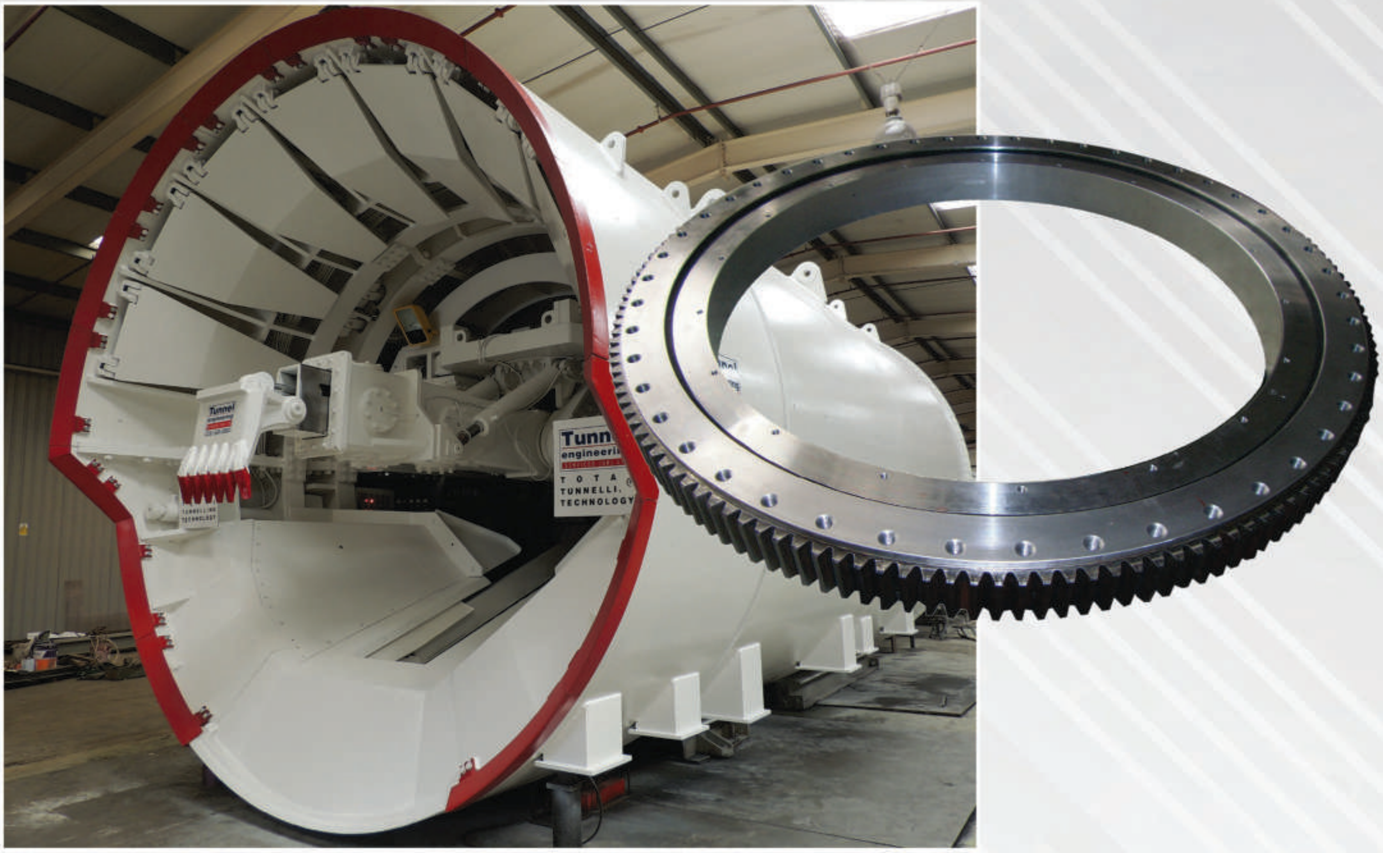
Wind Generator

Tunnel Boring Machine



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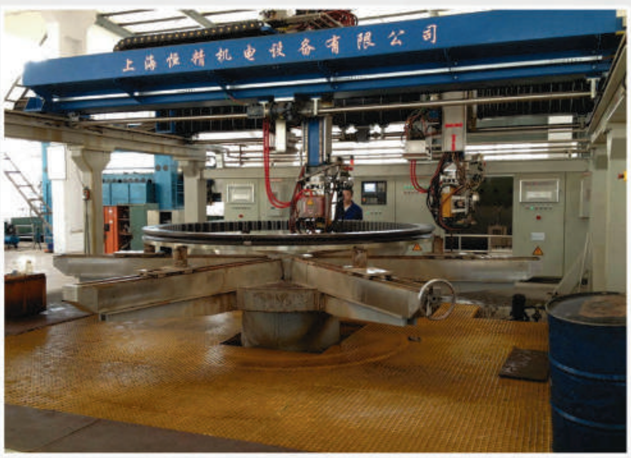
Part 3 Manufacturing Process

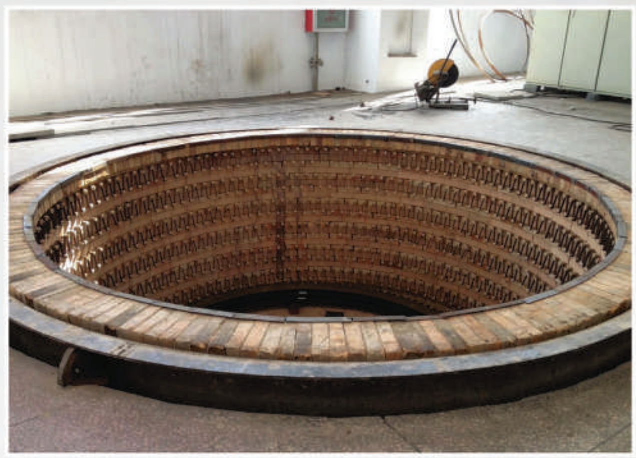
Manufacturing Facility and Areas

CNC Horizontal Lathe Machine

CNC Vertical Lathe Machine



CNC Induction Hardening Machine



Heat Treatment Tempering Furnace

CNC Drilling Machine

Gear Cutting Machine

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Assembly Area

Final Products Area

Warehouse in Los Angeles

Warehouse in Los Angeles

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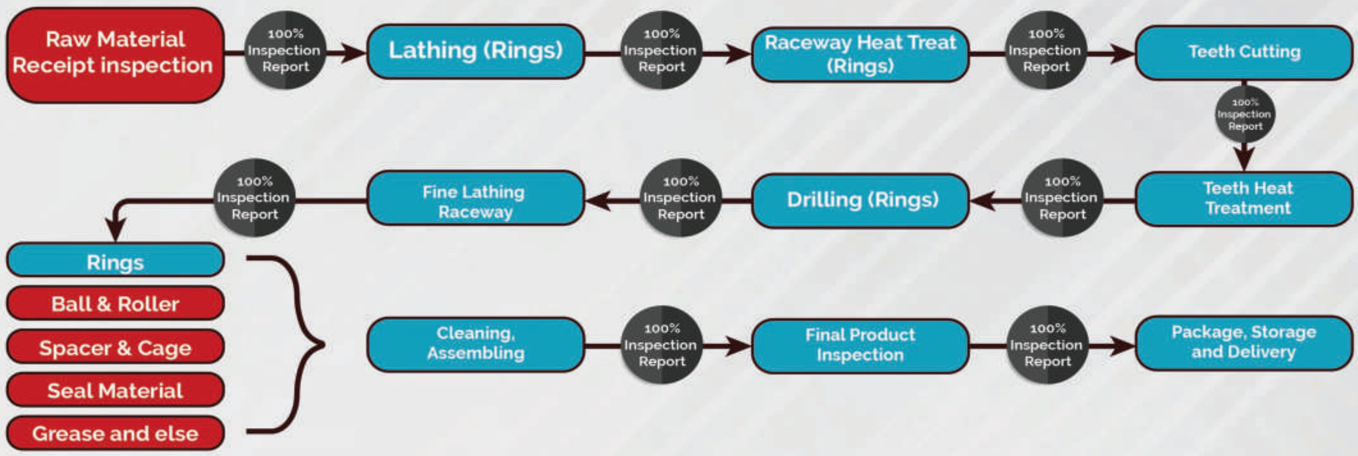
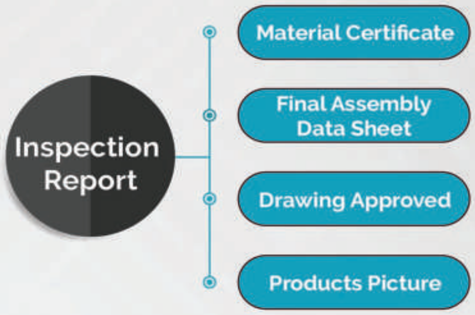
Production Process Flow Diagram





UIPI excels at manufacturing consistently high-quality slewing bearings. Our quality standard is met using state of the art design, manufacturing, and testing methods, maximizing the value of the experienced, senior engineers, and the most reliable, precise calculation methods available. Design verification is performed with the newest CAD/CAM design tools and FEA analysis programs.

The design of each slewing bearing is largely determined by the expected environmental conditions. Taking all application requirements into account, UIPI can recommend bearing size, rolling element, hardness, gear configuration, etc. Our capabilities range from 200mm ID up to 6,000mm OD. Working with you, we can design a bearing to meet your load, size, rotation, and life-cycle requirements.

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Packing and Storage

UIPI slewing bearings have a rust inhibiting lubricant on all surfaces. Once final inspection is complete, each bearing is lubricated, wrapped with impermeable plastic, and finished with a wrap of vinyl. These steps help prevent any rust from forming on the bearing surface and keeping it free of debris during transit and storage. All bearings are shipped in wooden crates.

Bearings should be stored in a clean, dry, and chemical-free environment. They should be well supported in a flat, horizontal position. If several bearings of equal size are to be stored they should be stacked, horizontally, with equal-in-size dividing blocks at a minimum 120 degrees around the top and bottom of the corresponding surfaces of each bearing.

These bearings can be stored for up to 12 months from the date of manufacture without any additional maintenance. For bearings that remain in storage over 12 months, please regrease, rotate, and reapply rust preventative coatings. Please contact UIPI for help with long-term storage procedures.

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Part 4 Quality Assurance

Technical Support

UIPI's main office is staffed with over a dozen application engineers, all with hands-on experience in countless applications. Their expertise, coupled with the latest software and hardware technologies, enable us to offer quick, precise help, regardless of the situation and requirements.

In order to achieve high reliability and durability of our slewing bearings, UIPI's staff is keenly focused on all influencing factors. Starting with the calculation and design phase, each bearing is constantly evaluated for accuracy and tolerance with regards to the customer's requirements and expectations.

Raw Materials

All the individual components of UIPI's large diameter bearing are selected according to the application and customer requirements, and are subject to the highest standards. Raw forgings and other components are only sourced from qualified, regularly audited suppliers. Inspections are completed after every stage of manufacturing, starting with receiving raw materials. We do in-house hardness testing on the forgings, checking them against the material certifications from our suppliers. Consistent, high-quality steel is the basic building block to long-lasting slewing bearings.

UIPI sources 42CrMo for every slewing bearing. Unlike many other Chinese manufacturers, we will not entertain requests for 50Mn or other lesser quality bearing alloys.

The following table shows our standard steels with the nearest equivalent foreign grades.

	CHINA	GERMANY	UK	U.S.A	ITALY	JAPAN	SPAIN	SWEDEN	AUSTRALIA
Standard	GB	DIN	B.S.	AISI	UNI	JIS	UNE	SSSTAHL	ASA
Material	42CrMo	42CrMo4	708M40	4140	42CrMo4	SNB7	42CrMo4	2244	AS 1444-4140

The following certificates and test reports are available on request:

- Ring-Material Certificate: Chemical Composition and Physical Properties certificate of Heat Treatment
- Ultrasonic Test
- Penetrant Test
- Hardness Test
- Mechanical Tests on Bearings: Tensile Strength Test, Impact Notch Test,etc.

For further test certificates, please refer to UIPI Sales Representative.

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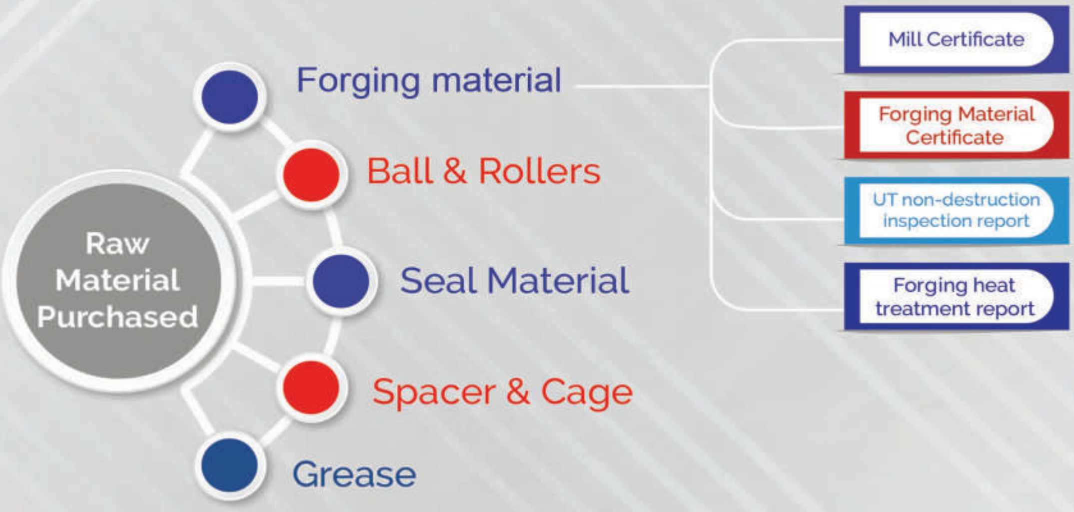
For further test certificates, please refer to UIPI Tech Design and Quality Department.



Heat Treatment

From the manufacturing side, heat treatment is one of the most critical steps in the entire process. Proper hardening gives UIPI bearings their characteristics of outstanding stability, hardness, and durability.

At UIPI, all heat treatment is done in-house on state-of-the-art hardening machines. Proper hardening of the raceway is what gives each bearing it load capacity, durability, and ability to withstand extreme loading without chipping, pitting, or impressions. After hardening, both the inner and outer raceways of every bearing are tested for hardness, micro-fractures.

Traceability

Following the strict API protocol for quality control, each ring is given a unique tracking number as soon as it is received at the UIPI facility. This tracking number enables our workers trace the material through each step of manufacturing, including when it was processed, who did the processing, and the results of each inspection. This number will then correlate to the final inspection report for review by customers.

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Quality Documentation

Final Inspection Report

UIPI/QR512-08		A/1			No.:	181023
UIPI P/N	EGSBM 721 432 89 KERS	Version		A	Date	2018.10.10
Ref. P/N	780145/0110756	Version			Remarks	

	Items	Requirements	Measured				
			S/N# 181006	S/N# 181007	S/N# 181008	S/N# 181009	S/N# 181010
			TRK# 01 P799 02 762P	TRK# 01 P806 02 760P	TRK# 01 P808 02 758P	TRK# 01 P807 02 765P	TRK# 01 P804 02 767P
1	Qty of Spacers	36	36	36	36	36	36
2	Qty of Balls	36	36	36	36	36	36
3	Ball Dimension	Ø44.45	±0	±0	±0	±0	±0
4	Outside Dia.	Ø721.36(0,-0.8)	Ø721	Ø721	Ø721.1	Ø721	Ø721
5	Inside Dia.	Ø432	Ø432.2	Ø432.3	Ø432.2	Ø432.3	Ø432.2
6	Large Inside Dia.	Ø435.1(0,+0.2)	Ø435.2	Ø435.2	Ø435.2	Ø435.2	Ø435.25
7	Outer Ring Height	81 (0 ,- 0.5)	81	81	81	81	81
8	Inner Ring Height	81 (0 ,- 0.5)	81	81	81	81	81
9	Total Height	89±1	89.1	89	89	89	89.1
10	Outer Ring M/F Runout	0.15	0.06	0.07	0.05	0.07	0.1
11	Inner Ring M/F Runout	0.15	0.1	0.1	0.08	0.12	0.1
12	Inner Ring Diameter Runout	0.14	0.1	0.1	0.09	0.09	0.11
13	Pitch Diameter Runout	0.25	0.06	0.09	0.28	0.1	0.08
14	Axial Play	0.05~0.15	0.08	0.02	0.12	0.1	0.08
15	Radial Play	0.05-0.15	0.09	0.02	0.14	0.08	0.1
16	Qty of Outer Ring Mounting Hole	24	24	24	24	24	24
17	Outer Ring Mounting Hole Size	3/4-10 UNC-2B, thru, EQS Depth no less than 38.1	OK	OK	OK	OK	OK
18	Outer Ring Mounting Hole Position	B.C. Circle Dia.: ø644.65 Position: ø0.76 Chord Length:84.14	Ø 644.7 84.1	Ø 644.8 84.2	Ø 644.9 84.3	Ø 644.8 84.2	Ø 644.8 84.2
19	Qty of Inner Ring Mounting Hole	(24-1)=23	23	23	23	23	23
20	Inner Ring Mounting Hole Size	7/8-9 UNC-2B, EQS Depth no less than 38.1	OK	OK	OK	OK	OK
21	Inner Ring Mounting Hole Position	B.C.Diameter: ø473 Position: ø0.76 chord length: 61.74	Ø 473.2 61.9	Ø 473.3 62	Ø 473 61.7	Ø 473.2 61.9	Ø 473 61.7
22	QT Hardness	269~321 HB	270	275	276	280	290
23	Raceway hardness	55~60 HRC	57	57	58	57	57
24	Pin Size	Ø12×80	OK	OK	OK	OK	OK
25	Set Screw	M11	OK	OK	OK	OK	OK
26	Nipple Size	1/8-27 NPT	OK	OK	OK	OK	OK
27	Teeth Number	112	112	112	112	112	112
28	Tooth Thickness	9.97(-0.35,-0.55)	9.5	9.5	9.5	9.5	9.5
29	Span measurement	244.29(-0.35,-0.55)	243.8	243.8	243.85	243.9	243.9
30	Gap between last ball and spacer		OK	OK	OK	OK	OK
31	Check the seal connection.		OK	OK	OK	OK	OK
32	Check bearings cleaning, no scratches, no burr.		OK	OK	OK	OK	OK
33	Rotation is flexible, smooth, no stagnation and abnormal sound		OK	OK	OK	OK	OK
34	Check threaded holes by go-no go gauge		OK	OK	OK	OK	OK
35	Mark "S" soft zone on outer ringmounting surface		OK	OK	OK	OK	OK
36	Mark high point of teeth with green paint and "X"		OK	OK	OK	OK	OK
37	Fill with 60% Lithium grease, keep right zerk with shipment		OK	OK	OK	OK	OK
38	Nipple Assembled		OK	OK	OK	OK	OK
39	Name Plate Assembled		OK	OK	OK	OK	OK
40	Record Starting Lorque		3NM	3NM	3NM	3NM	3NM
41	Bearing Packeged Well		OK	OK	OK	OK	OK

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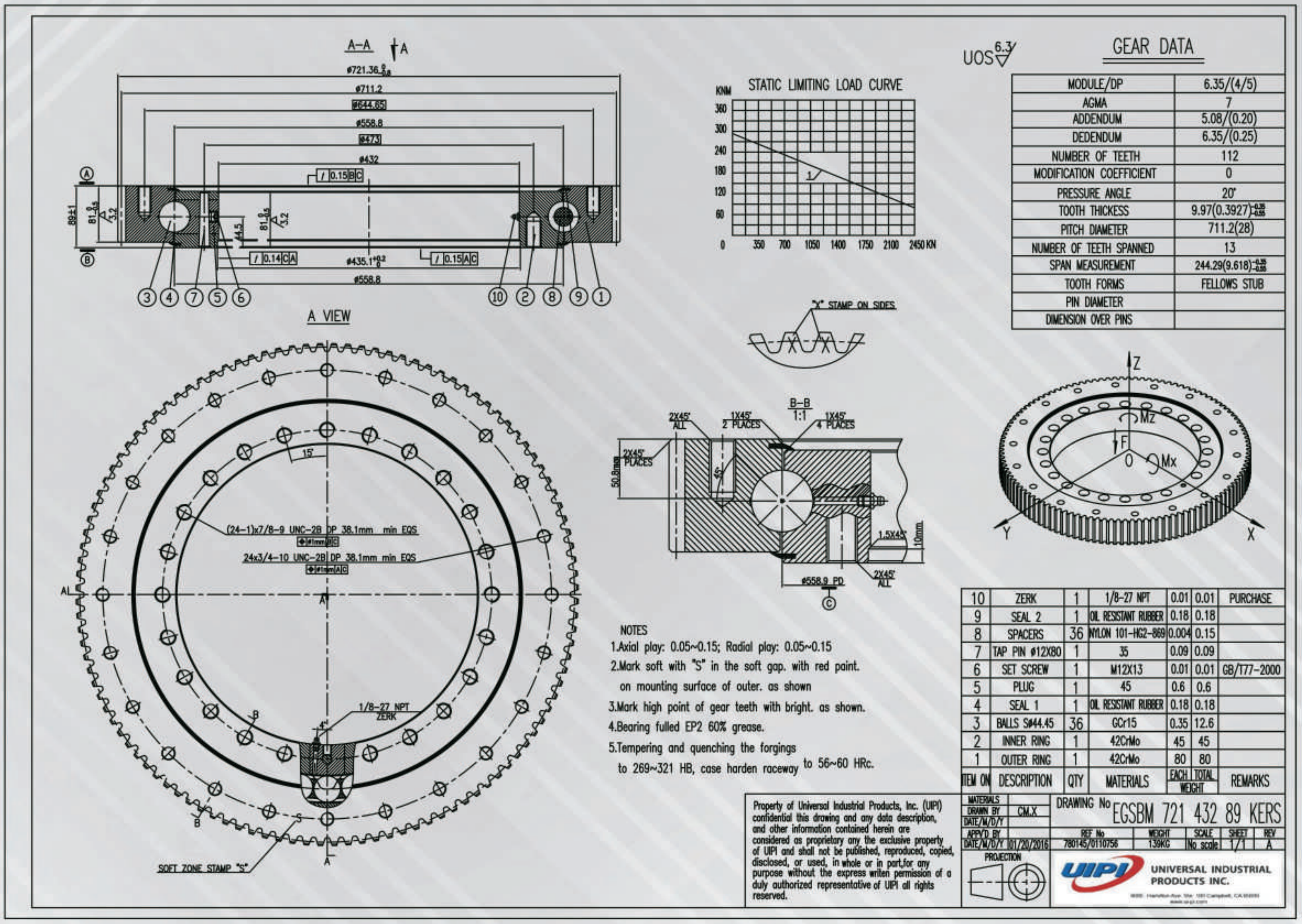
Drawing



The optimal design and calculation is decisive for the reliability and longevity of slewing bearings. In order to help customers to see the structure and configuration more clearly and visually, each design of our bearing is scale drawing. Each scale drawing is designed by 3D modeling, so it's available for customers to simulate the assembling and installation in the development and prototype stage and check to see if the bearing or machine need to be modified and improved In addition, we provide load curve for each bearing through comprehensive calculation. Should you require the life calculation for special heavy load bearing, we can provide.

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Training

High quality is a trademark of UIPI slewing bearings, and constant training is the base of our success. The quality management of UIPI is certified according to API (No. Q1-3152). To achieve and maintain these high standards, technical/production training courses are held periodically at the UIPI facility and sales offices. After that, the training results will be checked and evaluated by on-site operation or in-class examination with papers. Managing staff is also trained and tested, being held accountable to each other for productivity and growth.

Our production staff is regularly trained in the latest techniques and procedures. This enables us to stay ahead of the curve for the latest advancements in bearing manufacturing. It also helps increase productivity and efficiency, enabling us to keep lead times lower than the industry standard.

Our sales teams are regularly trained to have an excellent understanding of our manufacturing processes and advancements. They also meet together regularly to share about different applications, market strategies, and any possible problems. It is important for our sales teams to continue learning from each other, and more importantly, from each and every customer.

Supplier Evaluation

For material verification, UIPI utilizes advanced Finite Element Methods (FEM) and also Failure Mode & Effects Analysis (FMEA). These processes help with ensuring our suppliers consistently meet our high standards of quality.

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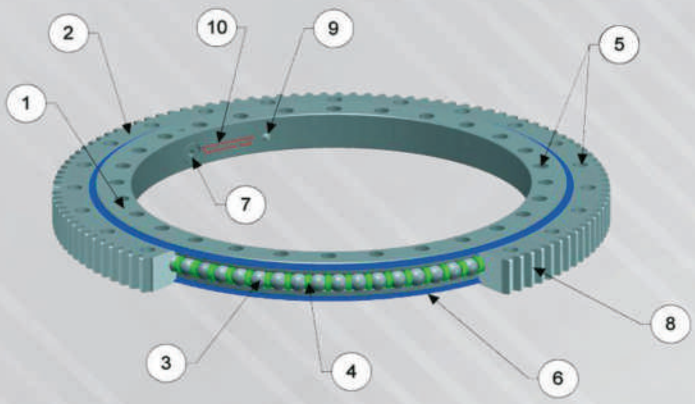
Part 5 : Technology of Slewing Bearing

Slewing Bearing Introduction

UIPI specializes in large-diameter bearings, which can carry combined loads: axial, radial load and tilting moment. Their design can include an array of different bolt hole sizes, internal or external gears, lubrication ports and sealing elements. This level of customization enables customers to save space, save design time, and ensure mounting and maintenance are simple tasks.



1. Inner Ring
2. Outer Ring
3. Rolling Elements
4. Spacers
5. Mounting Holes
6. Seals
7. Filler Plug
8. Gear
9. Grease Zerk
10. Identification

Rolling Element

UIPI standard rolling elements are manufactured from through-hardening alloys (GCr15 or GCr15SiMn).
These are equivalent to the AISI-SAE 52100 or E52100 family of alloys. UIPI can provide additional material specifications in compliance with their customers' requests. All materials used are chosen due to their ability to accept heat treatment and their specific wear characteristics. If you have a material you would rather us use, our engineers will review to ensure it's suitability to the specific application.

Spacers

Nylon PA1010 spacers are used to separate the rolling elements. This helps prevent bunching, jamming, or excess friction during rotation. For specialized applications, our engineers may select steel spacers or a brass cage.

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Lubrication and Seals

In order to ensure that bearings perform inline with specifications and customer requirements, they are generally greased prior to delivery. However, they are only greased to 60% capacity, and will need to be greased until purge during installation. Grease is used to reduce friction, seal the bearing, and provide protection against corrosion. While a standard EP2 Lithium grease is used for most bearings, our engineers can determine if a specialized lubrication is necessary for each application. Considerations for grease choice are RPM, usage, excessive heat or cold, or unique environmental issues.

Seals play another important part in the bearings ability to perform correctly and aid in its reliability and longevity during its service life. The seal's main purpose is to ensure that contaminants such as water or any type of dust particle, cannot enter the rolling elements or their corresponding raceways, and to retain lubrication. Generally, Nitrile seals are used. However, Labyrinth, Nylon, or Teflon seals are also used. The material used for the seal, and its design configuration, will be selected based on each specific application.

Product Identification

UIPI manufactured slewing bearings are all identified with an ID plate, located near the filler plug. This plate enables UIPI, and customers, to quickly identify each bearing model, as well as correlate each bearing to an inspection report. The ID plate shows:

- UIPI logo
- Bearing type
- Model number - drawing number
- Serial number

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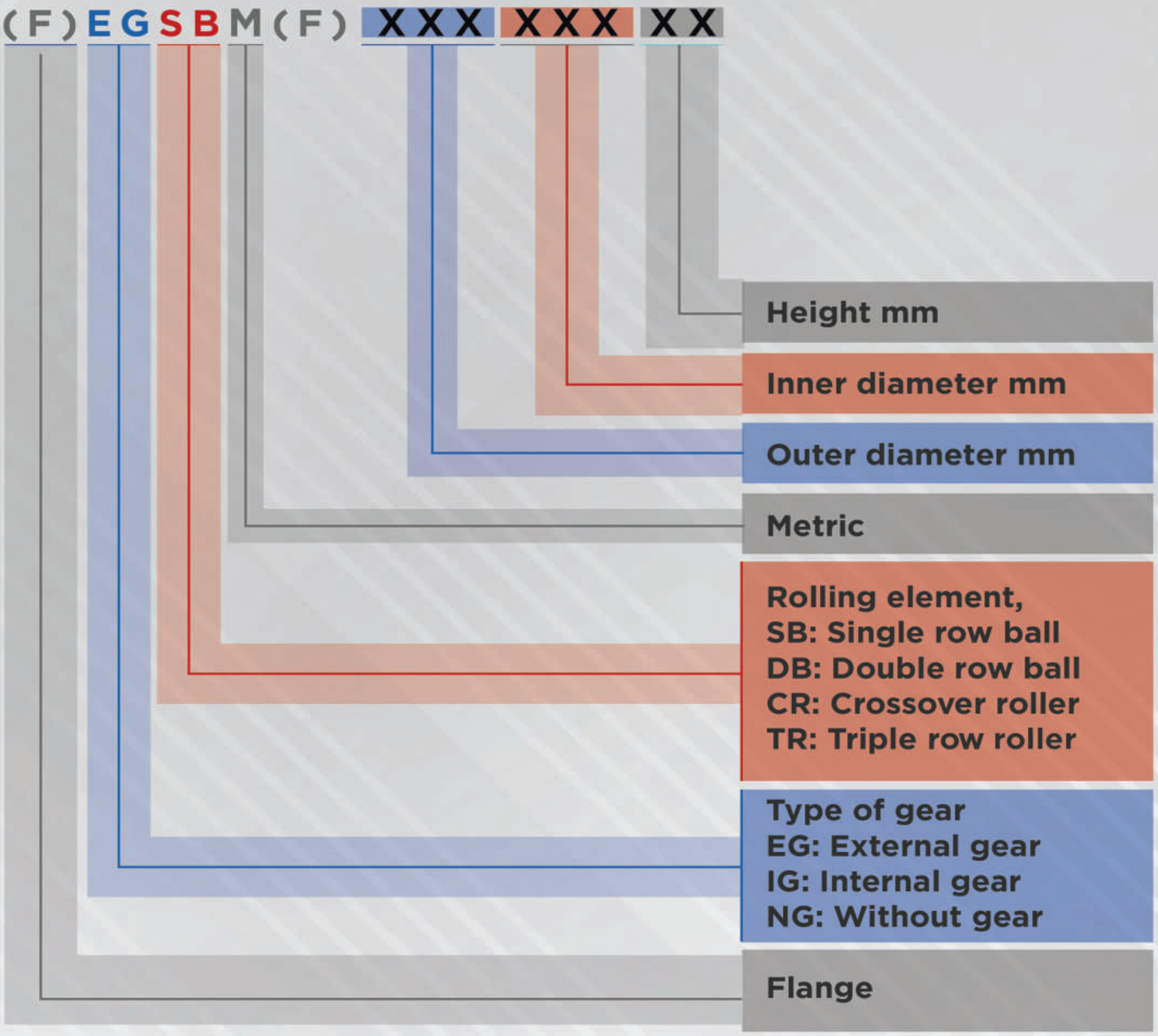
Product Designation



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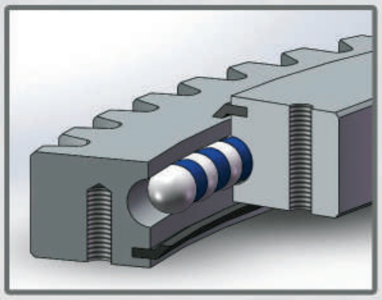
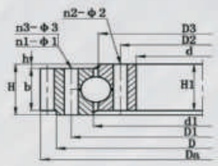
Slewing Bearing Types





SINGLE-ROW BALL SLEWING BEARING

Our most popular configuration, single-row ball slewing bearings are well-suited for axial, radial, and moment loads. Using a four-point contact design, loads are distributed between the balls and the two split raceways. The precision grinding and geometry of the ball and deep groove raceway allow for smooth rotation and increased capacity.

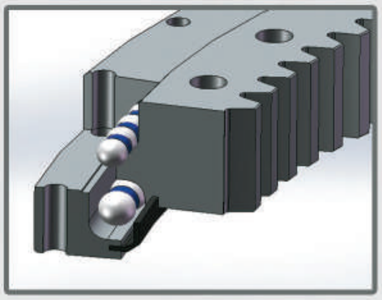
Specification:

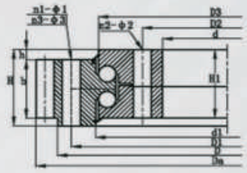
Raceway Diameters: Standard models from 6” to 240”(150mm to 6,000mm)

Capacity:

Thrust Loading : From 700 KN to 34,100 KN (7,670,000 Pounds)

Gearing: Non-gear, External Gear, Internal Gear





DOUBLE-ROW BALL SLEWING BEARING

Design-wise, the eight-point contact bearing design is the same as the four-point contact bearing with an additional ball and raceway configuration placed adjacent in the vertical axis. This allows for loading to be evenly distributed between the two raceway arrangements, resulting in an increase in loading capacity of between 75 - 80%.

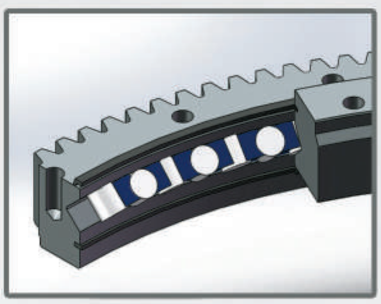
Specification:

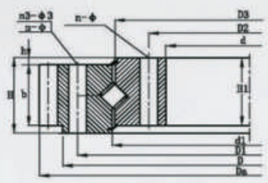
Raceway Diameters: Standard models from 18” to 196”
(480 mm to 5000mm)

Capacity:

Thrust Loading : From 1,210 KN to 26,700 KN (6,000,000Pounds)

Gearing: Non-gear, External Gear, Internal Gear





CROSSOVER ROLLER SLEWING BEARING

This style bearing utilizes rollers, placed at alternating directions, versus the traditional ball and spacer. Because rollers have more surface area in contact with the raceway, their load carrying capacity is typically higher than balls. However, because only half of the rollers are transmitting load in a given direction (due to alternating roller design), their overall load carrying capacity is typically slightly lower. The advantage of style bearing is a lower internal clearance than the standard ball bearing, resulting in an increased stiffness, tighter rigidity, and higher degree of rotational accuracy. Consequently, cross roller bearings are also less tolerant of imperfections in mounting and have a higher turning torque.

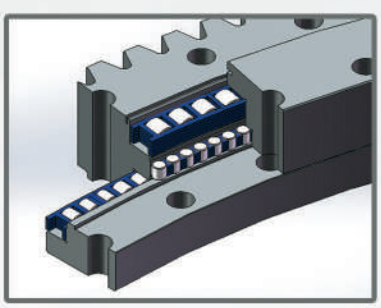
Specification:

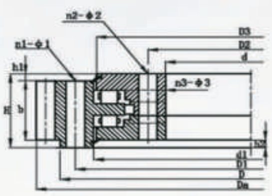
Raceway Diameters: Standard models from 18” to 196”(480 mm to 5,000mm)

Capacity:

Thrust Loading : From 880 KN to 45,200 KN (10,200,000 Pounds)

Gearing: Non-gear, External Gear, Internal Gear





TRIPLE ROW ROLLER SLEWING BEARING

These designs provide for the highest load rating of all designs. The three-row roller configurations allow for the two rollers in the vertical axis to take both axial and moment loads from the two adjacent raceways, while the third roller facilitates the radial load. Typical applications for these designs are in Construction, Mining and Marine applications.

Specification:

Raceway Diameters: Standard models from 18” to 196”(480 mm to 5000mm)

Capacity:

Thrust Loading : From 15,000 KN to 105,060 KN (23,630,000 Pounds)

Moment Loading: From 2,000 KN to 11,160 KN (2,510,000 Pounds)

Gearing: Non-gear, External Gear, Internal Gear.

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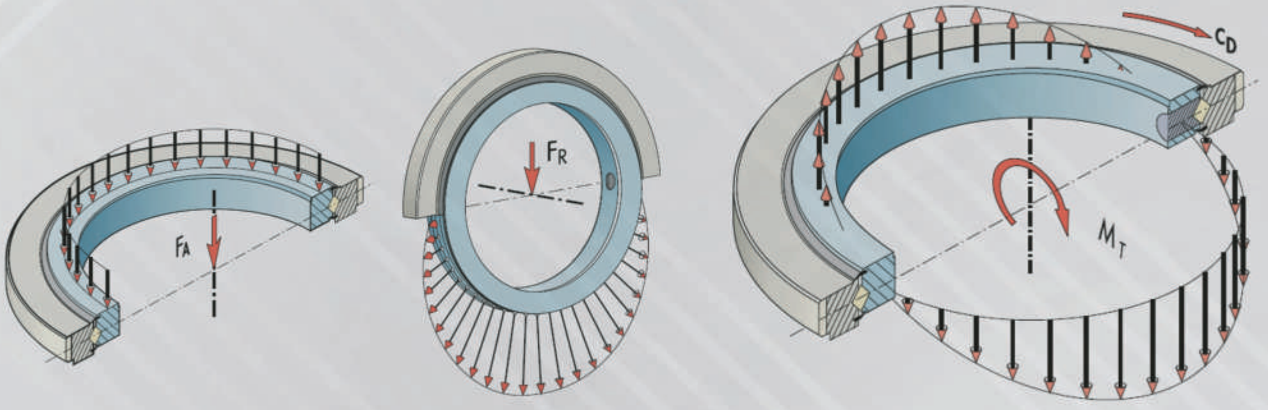
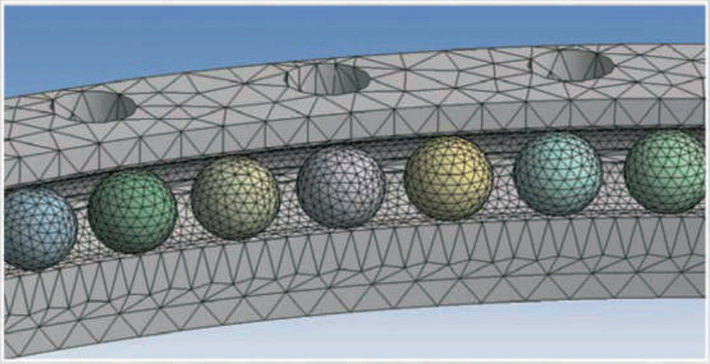
Load Curve Calculations





In order to understand the dynamics of applied forces and the bearings theoretical limitations during operation, UIPI use well proven international formulas to show their bearings performance and limitations. The data used in these formulas is given from the customer, and can be found on our **Bearing Application Data Sheet.** The results of these load and service life curves provide a good understanding for the customer as to what they can expect from their bearing selection. Also taken into account are the number and size of bolts. The limiting load curve of a bolt is confirmed when the connected length is four times longer than the nominal diameter, the pre-load is 70% of the yield limit of the bolt, and SAE Grade 8 bolts are used (or equivalent). The load and bolt curve drawings shown in this catalog are only a small selection of the products currently available from UIPI. If the part number you have selected does not have carrying curve drawing illustrated within this catalog, please contact your sales representative.

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Part 6 Installation and Maintenance

Installation

Prior to installation, a close inspection should be performed to ensure that upper and lower mounting surfaces are flat, level, and parallel to each other (see Table 8 for acceptable deviations). These surfaces should be free of paint, indentations, burrs, or any other contaminant that could cause distortion or misalignment between the inner and outer ring when mounted to their corresponding surfaces. The mounting surfaces themselves should have sufficient thickness and rigidity to avoid distortion or deflection when the bearing is under load.

To aid in handling larger bearings, UIPI machines equally spaced lift holes on the inner and outer rings.

Each bearings has a soft zone marked with an "S" on one of the mounting opposite surfaces (depends on gear orientation). This location correlates with the filler plug, and it is important that this area is located at 90 degrees to the major load zone, if possible.

In order to ensure that the bearing is operating with minimum torque and distortion, install bolts but do not fully tighten. Bolts should be torqued, in a "Z" or "Star" pattern, in accordance with their size, grade and bolt manufacturers specification, Table 9 shows these recommended values. Hardened steel washers are recommended. The use of any type of lock washer is prohibited from any slewing ring installations.

Table 8 Technical Specifications for Bearing Surface

Center Hole diameter D1 or D2 mm		Flatness a			Deviation of inclination pitch with same direction on circle adjacent unit length (L=a row pitch)			Deviation of inclination pitch with opposite direction on circle adjacent unit length (L=a row pitch)			Inclination pitch of radial width b δ			Surface roughness Ra		
		Class of Bearing														
OVER TO G		E	D	G	E	D	G	E	D	G	E	D	G	E	D	
250	400	120	80	50	0.0002 L	0.00013 L	0.00008 L	0.0002 L	0.00013 L	0.00008 L	60	40	25	2.5	1.25	0.8
400	630	150	100	60							80	50	30	2.5	12.5	0.8
630	1000	200	120	80							100	60	40	2.5	12.5	0.8
1000	1600	250	150	100							120	80	50	3.2	2.5	1.25
1600	2500	300	200	120							150	100	60	3.2	2.5	1.25
2500	4000	400	250	150							200	120	80	3.2	2.5	1.25
4000	6300	500	300	200							250	150	100	3.2	2.5	1.25

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Table 9:

Strength class of bolt ISO898			8.8			10.9			12.9		
limit of yielding			M≤16 640			940			1100		
N/mm2			M＜16 660								
Dia.	Stress area	Section area	Pre-tightening force	Theoretical fastener moment	torque NM	Pre-tightening force	Theoretical fastener moment	torque NM	Pre-tightening force	Theoretical fastener moment	torque NM
	mm2	mm2	FMN	MANm	M=0.9 MA	FMN	MANm	M=0.9 MA	FMN	MANm	M=0.9 MA
M5	14.2	12.7	6400	6.1	5.5	9300	8.9	8	10900	10.4	9.3
M6	20.1	17.9	9000	10.4	9.3	13200	15.5	13.9	15400	18	16.2
M8	36.6	32.8	16500	25	22.5	24200	37	33	28500	43	38
M10	58	52.3	26000	51	45	38500	75	67	45000	87	78
M12	84.3	76.2	38500	87	78	56000	120	117	66000	150	135
M14	115	105	53000	140	126	77000	205	184	90000	240	216
M16	157	144	72000	215	193	106000	310	279	124000	370	33
M18	193	175	91000	300	270	129000	430	387	151000	510	459
M20	245	225	117000	430	387	166000	620	558	194000	720	648
M22	303	282	146000	580	522	208000	830	747	24300	970	873
M24	353	324	168000	740	666	239000	1060	954	280000	1240	1116
M27	459	427	221000	1100	990	315000	1550	1395	370000	1850	1665
M30	561	519	270000	1500	1350	385000	2100	1890	450000	2500	2250
M33	694	647	335000			480000			560000		
M36	817	759	395000			560000			660000		
M39	976	913	475000			670000			790000		
M42	1120	1045	542000	need bolt liquor straining device		772000	need bolt liquor straining device		904000	need bolt liquor straining device	
M45	1300	1224	635000			905000			1059000		
M48	1470	1377	714000			1018000			1191000		
M52	1760	1652	857000			1221000			1429000		
M56	2030	1905	989000			1408000			1648000		
M60	2360	2227	1156000			1647000			1927000		

Maintenance

In-order to ensure optimum performance and longevity of UIPI slewing bearings, UIPI recommends both visual and physical inspection after the first 100 hours of operation. This includes checking bolts, re-lubricating, and inspecting for any debris, bolt slippage, or damage. Grease should be applied until old grease purges through the seal while continuously rotating the bearing. Re-greasing and tightening the bolts occur every 50-100 hours of operation, depending on your bearing type, application, and environment. For special applications involving water, salt water, heavy debris, or high RPM, please consult with your sales representative on proper maintenance intervals. If gears and pinion drives are integrated into your application, they should also be oiled at these intervals. Automatic Greasing Systems can be used, however, this does not eliminate the need for periodic visual inspections and re-tightening bolts.

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Part 7 Product Range

Our current product range includes slewing ring bearings which may be single-row or double-row four-point contact, crossover roller, triple-row roller or a combination of both ball and roller elements. In addition to standard types, a variety of customized and application specific special design are available.

UIPI manufactures large diameter slewing bearings for a wide range of applications. UIPI can manufacture the bearing with external, internal or no gear teeth. The gear teeth are available in common or uncommon modules from 1 to 30.

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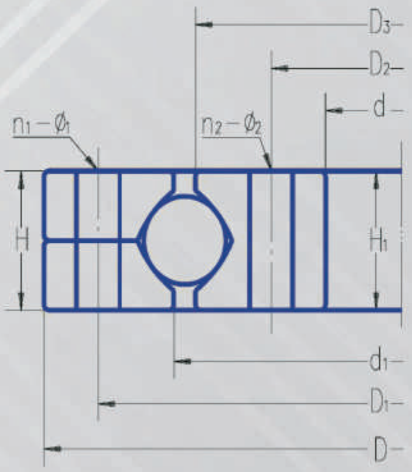
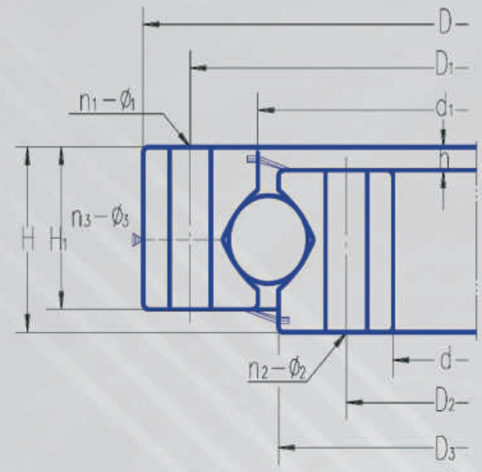
UNIVERSAL INDUSTRIAL PRODUCTS INC.

Single Row Ball Slewing Bearing (Gearless)





Drawing No.	Boundary Dimensions			Bolt Hole Diameter						Structure Dimensions						Basic Load Ratings Coa	Weight
	D	d	H	D1	D2	n1	n2	φ1	φ2	D3	d1	H1	h	n3	φ3		
	mm			mm				mm		mm					mm	10^4 N	kg
NGSBM 480.260.60	480	260	60	444	296	16	16	14	14	360	380	60	--	--	--	75.4	55
NGSBM 590.460.45	590	460	45	570	488	8	12	M10	10	518	542	45	--	--	--	62.6	35.9
NGSBM 780.530.60	780	530	60	740	560	20	20	17	13	645	665	35	--	--	--	112	103
NGSBM 720.560.36	720	560	36	690	590	12	12	14	12	639	642	33	3	--	--	70.8	40.3
														--			
NGSBM 780.560.60	780	560	60	--	--	--	--	--	--	645	668	60	3	--	--	224	103
NGSBM 780.630.69	780	630	69	--	--	--	--	--	--	718	722	69	--	--	--	111	79.4
NGSBM 900.700.36	900	700	36	860	740	12	12	M16	17	796	804	36	3	--	--	179	60
NGSBM 950.760.80	950	760	80	915	795	24	24	18	M16	854	857	71	9	4	M10*1	203	138
NGSBM 1000.775.64	1000	775	64	948	802	24	12/12	M12	13/M12	878	882	49	15	2	M8*1	196	112
NGSBM 1050.800.90	1050	800	90	1012	838	30	30	20	20	923	927	76	16	3	M10*1	215	192
NGSBM 1120.850.85	1120	850	85	1074	924	12	12	M20	22	995	1010	85	--	--	--	151	248
NGSBM 1200.932.120	1200	932	120	1148	984	40	40	26	M24	1064	1068	100	20	4	G1/4IN	349	328
NGSBM 1165.960.90	1165	960	90	1135	1040	36	36	18	M16	1073	1077	78	14	6	M10*1	249	202
NGSBM 1250.1000.100	1250	1000	100	1206	1044	12	12	18	M16	1123	1127	90	10	3	M10*1	540	283
NGSBM 1509.1260.90	1509	1260	90	1465	1315	36	36	22	M20	1386	1389	70	14	2	ZG1/8in	378	274
NGSBM 1820.1400.136	1820	1400	136	1750	1470	24	24	35	35	1608	1612	136	--	4	M10*1	611	1114
NGSBM 1780.1440.100	1780	1440	100	1730	1494	48	48	22	M20	1618	1622	85	15	4	M12*1.25	503	533
NGSBM 1927.1628.130	1927	1628	130	1875	1680	36	36	26	M24	1774	1778	115	15	6	G1/4in	692	732
NGSBM 2000.1700.150	2000	1700	150	1950	1750	24	24	21	21	1842	1858	130	20	4	M10*1	684	826
NGSBM 1050.832.56	1050	832	56	1020	862	12	12	18	18	942	946	45	--	4	M6	227	52.5
NGSBM 485.275.55	485	275	55	453	307	16	12	18	M16	381	386	50	5	4	M10*1	87.2	43.7
NGSBM 440.240.55	440	240	55	400	280	18	18	M20	22	340	342	50	5	3	M10*1	78.2	34.7

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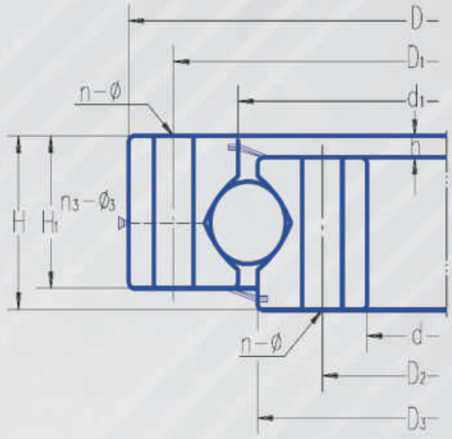
Single Row Ball Slewing Bearing (Gearless)



Drawing No.	Boundary Dimensions			Bolt Hole Diameter				Structure Dimensions						Basic Load Ratings Coa	Weight
	D	d	H	D1	D2	n	φ	D3	d1	H1	h	n3	φ3		
	mm			mm			mm	mm					mm	10^4 N	kg
NGSBM 602.398.80	602	398	80	566	434	20	18	498.5	501.5	70	10	4	M10x1	129	75.8
NGSBM 662.458.80	662	458	80	626	494	20	18	558.5	561.5	70	10	4	M10x1	144	94
NGSBM 732.528.80	732	528	80	696	564	24	18	628.5	631.5	70	10	4	M10x1	187	110
NGSBM 812.608.80	812	608	80	776	644	24	18	708.5	711.5	70	10	4	M10x1	212	120
NGSBM 1098.893.90	1098	893	90	1060	845	48/47	22	956.5	953.5	71	19	6	M10x1	270	126
NGSBM 922.678.100	922	678	100	878	722	30	22	798.5	801.5	90	10	6	M10x1	313	256
NGSBM 1022.778.100	1022	778	100	978	822	30	22	898.5	901.5	90	10	6	M10x1	355	240
NGSBM 1122.878.100	1122	878	100	1078	922	36	22	998.5	1002	90	10	6	M10x1	394	305
NGSBM 1242.998.100	1242	998	100	1198	1042	36	22	1118	1122	90	10	6	M10x1	443	300
NGSBM 1390.1110.110	1390	1110	110	1337	1163	40	26	1248	1252	100	10	6	M10x1	554	420
NGSBM 1540.1260.110	1540	1260	110	1487	1313	40	26	1398	1402	100	10	6	M10x1	617	480
NGSBM 1740.1460.110	1740	1460	110	1687	1513	45	26	1598	1602	100	10	8	M10x1	702	550
NGSBM 1940.1660.110	1940	1660	110	1887	1713	45	26	1798	1802	100	10	8	M10x1	793	610
NGSBM 2178.1825.144	2178	1825	144	2110	1891	48	33	1998	2002	132	12	8	M10x1	1210	1100
NGSBM 2418.2065.144	2418	2065	144	2350	2131	48	33	2238	2243	132	12	8	M10x1	1350	1250
NGSBM 2678.2325.144	2678	2325	144	2610	2391	56	33	2498	2503	162	12	8	M10x1	1500	1400
NGSBM 2978.2625.144	2978	2625	144	2910	2691	56	33	2798	2803	162	12	8	M10x1	1680	1600
NGSBM 3376.2922.174	3376	2922	174	3286	3014	56	45	3148	3153	162	12	8	M10x1	2380	2800
NGSBM 2000.1700.150	2000	1700	150	1950	1750	24	21	1842	1858	130	20	4	M10x1	684	826
NGSBM 4226.3772.174	4226	3772	174	4136	3864	60	45	3998	4003	162	12	10	M10x1	3020	3600
NGSBM 4726.4272.174	4726	4272	174	4636	4364	60	45	4498	4503	162	12	10	M10x1	3410	4000

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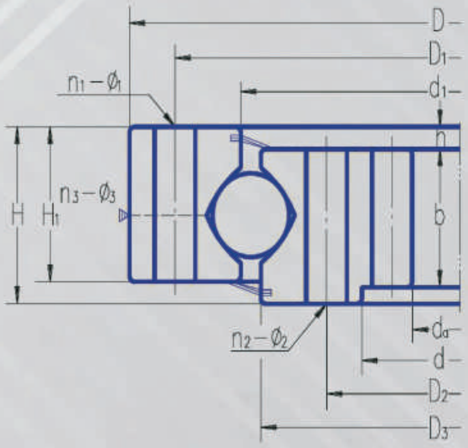
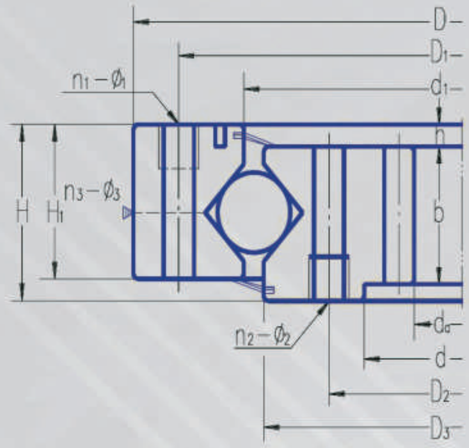
Single Row Ball Slewing Bearing (With Internal Gear)





Drawing No.	Boundary Dimensions			Bolt Hole Diameter						Structure Dimensions						Gear Parameters					Basic Load Ratings Coa	Weight
	D	d	H	D1	D2	n1	n2	φ1	φ2	D3	d1	H1	h	n3	φ3	m	da	Z	b	x		
	mm			mm				mm		mm					mm		mm		mm		10^4 N	kg
IGSBM 1200.984.56	1200	1050	56	1170	1044	24	16	17.5	10.5	1088	1092	46	12	4	M8*1	6	984	166	44	0	210	84.1
IGSBM 1270.972.100	1270	1000	100	1220	1050	24	24	17/M12	17/M12	1133	1177	85	15	2	M10*1	6	972	164	70	0	384	322
IGSBM 1530.1160.122	1530	1210	122	1480	1260	40	40	26	26	1368	1372	108	12	4	M10*1	10	1160	118	80	0	713	540
IGSBM 1715.1364.110	1715	1400	110	1660	1460	24	24	M20	M20	1558	1562	95	15	2	M12*1.25	6	1363.8	230	7	-0.35	365	545
IGSBM 1715.1364.110B	1715	1400	110	1660	1460	24	24	23	23	1558	1562	95	15	2	M10*1	6	1363.8	230	77	-0.35	365	545
IGSBM 1780.1400.100	1780	1440	100	1730	1494	48	48	22	M20	1618	1622	85	10	4	M12*1.25	8	1400	177	50	0	503	554
IGSBM 1780.1400.104	1780	1440	104	1730	1494	48	48	22	M20	1613	1627	87	10	6	M12*1.25	8	1400	177	52	0	578	555
IGSBM 1875.1451.140	1875	1525	140	1815	1585	42	42	29	29	1698	1702	122	17	4	M12*1.25	16	1451.2	92	110	0.35	873	1019
IGSBM 2050.1696.112	2050	1790	112	2006	1847	72	36	22	22	1925	1926	92	12	18	M10*1	16	1696	108	100	-0.5	604	663
IGSBM 2488.2142.160	2488	2230	160	2445	2275	48	48	M20	M22	2338	2343	135	5	8	ZG1/4in	18	2142	121	145	0	1247	1114
IGSBM 2500.2142.140	2500	2240	140	2454	2280	56	56	M24	M24	2358	2363	115	5	8	M14*1.5	18	2142	121	125	0	856	1161
IGSBM 2990.2618.160	2990	2735	160	2954	2770	48	48	M20	M24	2835	2845	135	5	8	ZG1/4in	22	2618	121	144	0	1559	1457

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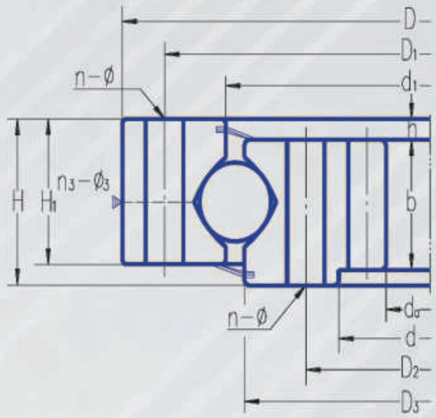
Single Row Ball Slewing Bearing (With Internal Gear)



Drawing No.	Boundary Dimensions			Bolt Hole Diameter				Structure Dimensions						Gear Parameters					Basic Load Ratings Coa	Weight
	D	d	H	D1	D2	n	φ	D3	d1	H1	h	n3	φ3	m	da	Z	b	x		
		mm			mm		mm		mm				mm		mm		mm		10^4 N	kg
IGSBM 602.365.80	602	398	80	566	434	20	18	499	502	70	10	4	M10x1	5	365	74	60	+0.5	129	75.8
IGSBM 662.425.80	662	458	80	626	494	20	18	559	562	70	10	4	M10x1	5	425	86	60	+0.5	144	94
IGSBM 732.492.80	732	528	80	696	564	24	18	629	632	70	10	4	M10x1	6	492	83	60	+0.5	187	110
IGSBM 812.510.80	812	608	80	776	644	24	18	709	712	70	10	4	M10x1	6	510	86	60	+0.5	212	120
IGSBM 922.632.100	922	678	100	878	722	30	22	799	802	90	10	6	M10x1	8	632	80	80	+0.5	313	256
IGSBM 1022.736.100	1022	778	100	978	822	30	22	899	902	90	10	6	M10x1	8	736	93	80	+0.5	355	240
IGSBM 1122.820.100	1122	878	100	1078	922	36	22	999	1002	90	10	6	M10x1	10	820	83	80	+0.5	394	305
IGSBM 1242.940.100	1242	998	100	1198	1042	36	22	1118	1122	90	10	6	M10x1	10	940	95	80	+0.5	443	300
IGSBM 1390.1044.110	1390	1110	110	1337	1163	40	26	1248	1252	100	10	6	M10x1	12	1044	88	90	+0.5	554	420
IGSBM 1540.1188.110	1540	1260	110	1487	1313	40	26	1398	1402	100	10	6	M10x1	12	1188	100	90	+0.5	617	480
IGSBM 1740.1386.110	1740	1460	110	1687	1513	45	26	1598	1602	100	10	8	M10x1	14	1386	100	90	+0.5	702	550
IGSBM 1940.1568.110	1940	1660	110	1887	1713	45	26	1798	1802	100	10	8	M10x1	14	1568	113	90	+0.5	793	610
IGSBM 2178.1728.144	2178	1825	144	2110	1891	48	33	1998	2002	132	12	8	M10x1	16	1728	109	120	+0.5	1210	1100
IGSBM 2418.1984.144	2418	2065	144	2350	2131	48	33	2238	2243	132	12	8	M10x1	16	1984	125	120	+0.5	1350	1250
IGSBM 2678.2232.144	2678	2325	144	2610	2391	56	33	2498	2503	162	12	8	M10x1	18	2232	125	120	+0.5	1500	1400
IGSBM 2978.2520.144	2978	2625	144	2910	2691	56	33	2798	2803	162	12	8	M10x1	18	2520	141	120	+0.5	1680	1600
IGSBM 3376.2820.174	3376	2922	174	3286	3014	56	45	3148	3153	162	12	8	M10x1	20	2820	142	150	+0.5	2380	2800
IGSBM 3776.3220.174	3776	3322	174	3686	3414	56	45	3548	3553	162	12	8	M10x1	20	3220	162	150	+0.5	2690	3200
IGSBM 4226.3652.174	4226	3772	174	4136	3864	60	45	3998	4003	162	12	10	M10x1	22	3652	167	150	+0.5	3020	3600
IGSBM 4726.4158.174	4726	4272	174	4636	4364	60	45	4498	4503	162	12	10	M10x1	22	4158	190	150	+0.5	3410	4000

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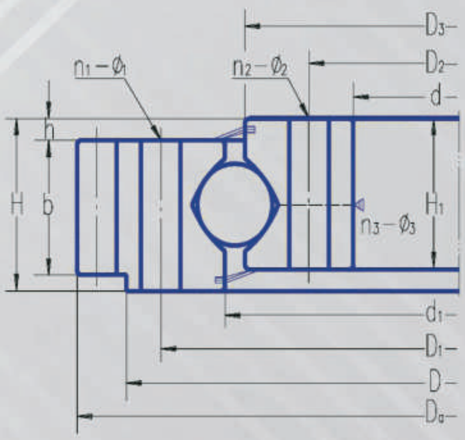
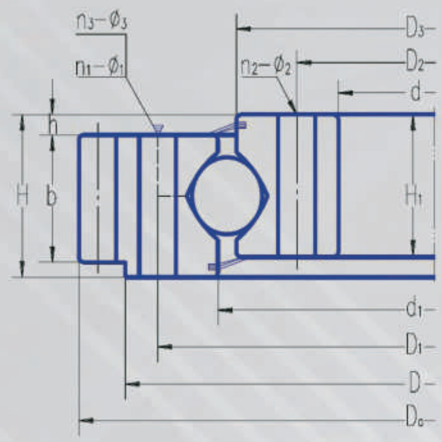
Single Row Ball Slewing Bearing (With External Gear)





Drawing No.	Boundary Dimensions			Bolt Hole Diameter						Structure Dimensions						Gear Parameters					Basic Load Ratings Coa	Weight
	D	d	H	D1	D2	n1	n2	φ1	φ2	D3	d1	H1	h	n3	φ3	m	Da	Z	b	x		
	mm			mm				mm		mm					mm		mm		mm		10^4 N	kg
EGSBM 696.470.77	649	470	77	630	500	18	18	M16	18	567.5	564.5	64	13	6	M10*1	6	696	114	60	0	157	93.1
EGSBM 798.600.72	768	600	72	740	636	24	20	M18*2.5	19	689	691	60	7	4	ZG1/8in	6	798	131	50	0	107	94.1
EGSBM 889.674.70	853	674	70	825	709	23	34	20	M20	764	768	59	10	2	ZG1/8in	7	889	125	50	0	183	89
EGSBM 889.674.70	853	674	70	825	709	24	34	18	18	764	768	59	10	2	ZG1/8in	7	889	125	50	0	183	88.6
EGSBM 924.710.67	894	710	67	845	744	8	8	M10	M10	798	806	58	9	3	M10*1	6	924	152	55	0	179	107
EGSBM 924.710.67	894	710	67	875	760	12	8	M10	M12	798	806	58	9	3	M10*1	6	924	152	55	0	179	107
EGSBM 924.710.67B	894	710	67	865	744	20	20	13	13	798	806	58	9	4	M10*1	6	924	152	55	0	179	107
EGSBM 1092.800.90	1050	800	90	1012	838	30	30	20	20	923	927	76	16	3	M10*1	6	1092	180	60	0	215	217
EGSBM 1388.1060.109	1335	1060	109	1295	1105	24	24	M20	22	1198	1202	100	9	4	M8*1	10	1388	138	80	-0.6	501	407
EGSBM 1424.1075.120	1365	1075	120	1310	1130	36	36	26	26	1218	1222	105	15	4	M8*1	8	1424	176	90	0	463	463
EGSBM 1420.1075.130	1365	1075	130	1310	1130	36	36	24	24	1218	1222	105	10	--	--	10	1420	140	120	0	463	550
EGSBM 1420.1075.120	1365	1075	120	1310	1130	36	36	24	24	1218	1222	105	15	4	M10*1	10	1420	138	90	+1.0	463	463
EGSBM 1424.1075.120	1365	1075	120	1310	1130	36	36	M24	26	1218	1222	105	15	4	M8*1	8	1424	176	90	0	463	463
EGSBM 1584.1330.82	1475	1330	82.4	1510	1362	24	24	18.5	18.5	1439	1445	70	12	6	M10*1	9	1584	174	70	0	353	280
EGSBM 1449.1352.100	1407	1352	100	1370	1404	13	18	M8	M10	1390	1394	63	--	8	6	4.5	1449	320	60	0	216	143
EGSBM 2108.1640.160	2050	1640	160	1990	1710	30	30	28	28	1844	1856	140	20	2	M14*1.5	10	2108	210	105	-0.6	1118	1264
EGSBM 1970.1700.120	1945	1700	120	1900	1750	24	24	M18	21	1825	1845	110	10	4	M10*1	5	1970	392	35	0	405	516
EGSBM 2080.1700.100	2052	1700	100	1980	1780	24	24	20	M18	1878	1882	97	10	4	M14*1.5	5	2080	414	50	0	551	678
EGSBM 2952.2650.100	2885	2650	100	2850	2700	48	48	M20	M20	2777	2781	80	10	6	ZG1/4in	12	2952	244	80	0	913	751

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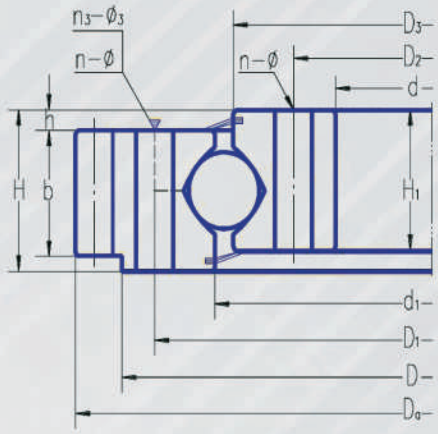
Single Row Ball Slewing Bearing (With External Gear)



Drawing No.	Boundary Dimensions			Bolt Hole Diameter				Structure Dimensions						Gear Parameters					Basic Load Ratings Coa	Weight
	D	d	H	D1	D2	n	φ	D3	d1	H1	h	n3	φ3	m	Da	Z	b	x		
	mm			mm			mm	mm					mm		mm		mm		10^4 N	kg
EGSBM 630.398.80	602	398	80	566	434	20	18	498.5	501.5	70	10	4	M10x1	5	630	123	60	+0.5	129	75.8
EGSBM 690.458.80	662	458	80	626	494	20	18	558.5	561.5	70	10	4	M10x1	5	690	135	60	+0.5	144	94
EGSBM 774.528.80	732	528	80	696	564	24	18	628.5	631.5	70	10	4	M10x1	6	774	126	60	+0.5	187	110
EGSBM 852.608.80	812	608	80	776	644	24	18	708.5	711.5	70	10	4	M10x1	6	852	139	60	+0.5	212	120
EGSBM 968.678.100	922	678	100	878	722	30	22	798.5	801.5	90	10	6	M10x1	8	968	118	80	+0.5	313	256
EGSBM 1064.778.100	1022	778	100	978	822	30	22	898.5	901.5	90	10	6	M10x1	8	1064	130	80	+0.5	355	240
EGSBM 1190.878.100	1122	878	100	1078	922	36	22	998.5	1002	90	10	6	M10x1	10	1190	116	80	+0.5	394	305
EGSBM 1300.998.100	1242	998	100	1198	1042	36	22	1118	1122	90	10	6	M10x1	10	1300	127	80	+0.5	443	300
EGSBM 1452.1110.110	1390	1110	110	1337	1163	40	26	1248	1252	100	10	6	M10x1	12	1452	118	90	+0.5	554	420
EGSBM 1608.1260.110	1540	1260	110	1487	1313	40	26	1398	1402	100	10	6	M10x1	12	1608	131	90	+0.5	617	480
EGSBM 1820.1460.110	1740	1460	110	1687	1513	45	26	1598	1602	100	10	8	M10x1	14	1820	127	90	+0.5	702	550
EGSBM 2016.1660.110	1940	1660	110	1887	1713	45	26	1798	1802	100	10	8	M10x1	14	2016	141	90	+0.5	793	610
EGSBM 2272.1825.144	2178	1825	144	2110	1891	48	33	1998	2002	132	12	8	M10x1	16	2272	139	120	+0.5	1210	1100
EGSBM 2496.2065.144	2418	2065	144	2350	2131	48	33	2238	2243	132	12	8	M10x1	16	2496	153	120	+0.5	1350	1250
EGSBM 2772.2325.144	2678	2325	144	2610	2391	56	33	2498	2503	162	12	8	M10x1	18	2772	151	120	+0.5	1500	1400
EGSBM 3078.2625.144	2978	2625	144	2910	2691	56	33	2798	2803	162	12	8	M10x1	18	3078	168	120	+0.5	1680	1600
EGSBM 3480.2922.174	3376	2922	174	3286	3014	56	45	3148	3153	162	12	8	M10x1	20	3480	171	150	+0.5	2380	2800
EGSBM 3880.3322.174	3776	3322	174	3686	3414	56	45	3548	3553	162	12	8	M10x1	20	3880	191	150	+0.5	2690	3200
EGSBM 4334.3772.174	4226	3772	174	4136	3864	60	45	3998	4003	162	12	10	M10x1	22	4334	194	150	+0.5	3020	3600
EGSBM 4840.4272.174	4726	4272	174	4636	4364	60	45	4498	4503	162	12	10	M10x1	22	4840	217	150	+0.5	3410	4000

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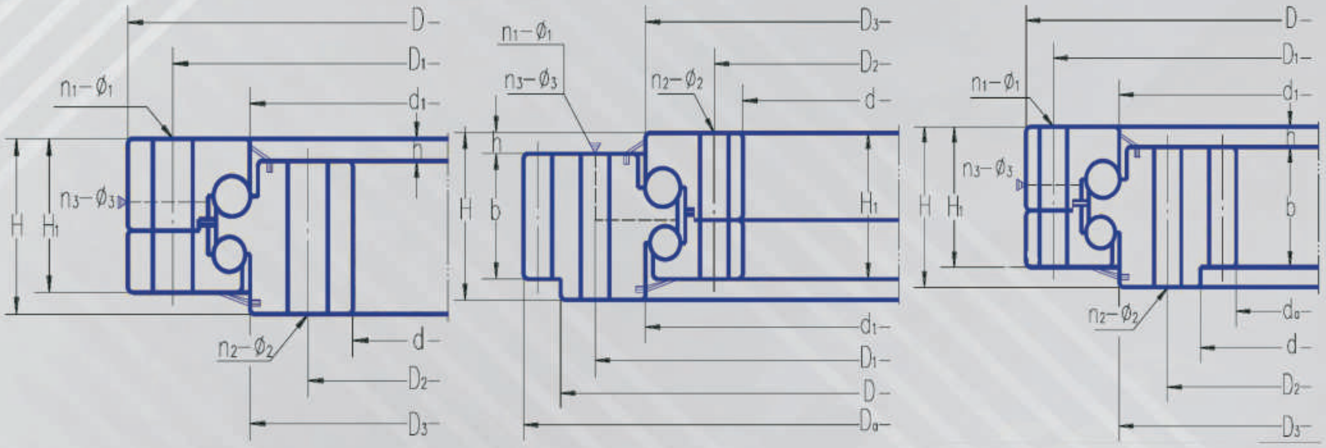
Double Row Ball Slewing Bearing (Gearless)



Drawing No.	Boundary Dimensions			Bolt Hole Diameter				Structure Dimensions						Basic Load Ratings Coa	Weight
	D	d	H	D1	D2	n	φ	D3 (D3')	d1 (d1')	H1	h	n3	φ3		
	mm			mm			mm	mm					mm	10^4 N	kg
NGDBM 616.384.106	616	384	106	580	420	20	18	523	517	96	26	4	M10x1	121	100
NGDBM 676.444.106	676	444	106	640	480	20	18	583	577	96	26	4	M10x1	134	115
NGDBM 746.514.106	746	514	106	710	550	24	18	653	647	96	26	4	M10x1	153	130
NGDBM 826.594.106	826	594	106	790	630	24	18	733	727	96	26	4	M10x1	173	140
NGDBM 942.658.124	942	658	124	898	702	30	22	828	822	114	29	6	M10x1	230	200
NGDBM 1042.758.124	1042	758	124	998	802	30	22	928	922	114	29	6	M10x1	258	250
NGDBM 1142.858.124	1142	858	124	1098	902	36	22	1028	1022	114	29	6	M10x1	286	300
NGDBM 1262.978.124	1262	978	124	1218	1022	36	22	1148	1142	114	29	6	M10x1	321	340
NGDBM 1426.1074.160	1426	1074	160	1374	1126	40	26	1286	1282	150	39	6	M10x1	482	580
NGDBM 1576.1224.160	1576	1224	160	1524	1272	40	26	1436	1432	150	39	6	M10x1	543	650
NGDBM 1776.1424.160	1776	1424	160	1724	1476	45	26	1636	1632	150	39	8	M10x1	620	750
NGDBM 1976.1624.160	1976	1624	160	1924	1676	45	26	1836	1832	150	39	8	M10x1	692	820
NGDBM 2215.1785.190	2215	1785	190	2149	1851	48	33	2038	2032	178	47	8	M10x1	987	1150
NGDBM 2455.2025.190	2455	2025	190	2389	2091	48	33	2278	2272	178	47	8	M10x1	1110	1500
NGDBM 2715.2285.190	2715	2285	190	2649	2351	56	33	2538	2532	178	47	8	M10x1	1110	1500
NGDBM 3015.2585.190	3015	2585	190	2649	2651	56	33	2838	2832	178	47	8	M10x1	1390	1900
NGDBM 3428.2872.226	3428	2872	226	3338	2962	56	45	3198	3192	214	56	8	M10x1	1870	3300
NGDBM 3828.3272.226	3828	3272	226	3738	3362	56	45	3598	3592	214	56	8	M10x1	2110	3700
NGDBM 4278.3722.226	4278	3722	226	4188	3812	60	45	4048	4042	214	56	10	M10x1	2170	4200
NGDBM 4778.4222.226	4778	4222	226	4688	4312	60	45	4548	4542	214	56	10	M10x1	2670	4700

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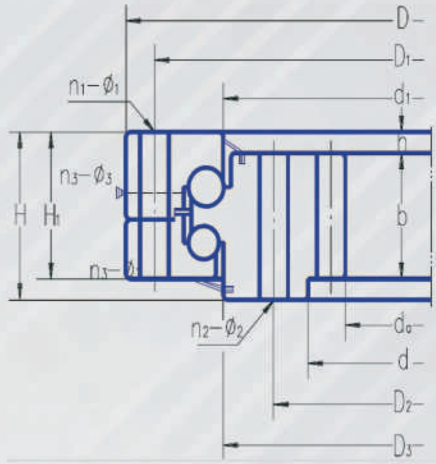
Double Row Ball Slewing Bearing (With Internal Gear)



Drawing No.	Boundary Dimensions			Bolt Hole Diameter				Structure Dimensions						Gear Parameters					Basic Load Ratings Coa	Weight
	D	d	H	D1	D2	n	φ	D3 (D3'	d1 (d1'	H1	h	n3	φ3	m	da	Z	b	x		
	mm			mm			mm	mm					mm		mm		mm		10^4 N	kg
IGDBM 616.355.106	616	384	106	580	420	20	18	523	517	96	26	4	M10x1	5	355	72	60	+0.5	121	100
IGDBM 676.415.106	676	444	106	640	480	20	18	583	577	96	26	4	M10x1	5	415	84	60	+0.5	134	115
IGDBM 746.480.106	746	514	106	710	550	24	18	653	647	96	26	4	M10x1	6	480	81	60	+0.5	153	130
IGDBM 826.558.106	826	594	106	790	630	24	18	733	727	96	26	4	M10x1	6	558	94	60	+0.5	173	140
IGDBM 942.616.124	942	658	124	898	702	30	22	828	822	114	29	6	M10x1	8	616	78	80	+0.5	230	200
IGDBM 1042.712.124	1042	758	124	998	802	30	22	928	922	114	29	6	M10x1	8	712	90	80	+0.5	258	250
IGDBM 1142.810.124	1142	858	124	1098	902	36	22	1028	1022	114	29	6	M10x1	10	810	82	80	+0.5	286	300
IGDBM 1262.920.124	1262	978	124	1218	1022	36	22	1148	1142	114	29	6	M10x1	10	920	93	80	+0.5	321	340
IGDBM 1426.1008.160	1426	1074	160	1374	1126	40	26	1286	1282	150	39	6	M10x1	12	1008	85	90	+0.5	482	580
IGDBM 1576.1152.160	1576	1224	160	1524	1272	40	26	1436	1432	150	39	6	M10x1	12	1152	97	90	+0.5	543	650
IGDBM 1776.1344.160	1776	1424	160	1724	1476	45	26	1636	1632	150	39	8	M10x1	14	1344	97	90	+0.5	620	750
IGDBM 1976.1540.160	1976	1624	160	1924	1676	45	26	1836	1832	150	39	8	M10x1	14	1540	111	90	+0.5	692	820
IGDBM 2215.1696.190	2215	1785	190	2149	1851	48	33	2038	2032	178	47	8	M10x1	16	1696	107	120	+0.5	987	1150
IGDBM 2455.1936.190	2455	2025	190	2389	2091	48	33	2278	2272	178	47	8	M10x1	16	1936	122	120	+0.5	1110	1500
IGDBM 2715.2196.190	2715	2285	190	2649	2351	56	33	2538	2532	178	47	8	M10x1	18	2196	123	120	+0.5	1110	1500
IGDBM 3015.2484.190	3015	2585	190	2649	2651	56	33	2838	2832	178	47	8	M10x1	18	2484	139	120	+0.5	1390	1900
IGDBM 3428.2760.226	3428	2872	226	3338	2962	56	45	3198	3192	214	56	8	M10x1	20	2760	139	150	+0.5	1870	3300
IGDBM 3828.3160.226	3828	3272	226	3738	3362	56	45	3598	3592	214	56	8	M10x1	20	3160	159	150	+0.5	2110	3700
IGDBM 4278.3680.226	4278	3722	226	4188	3812	60	45	4048	4042	214	56	10	M10x1	22	3608	165	150	+0.5	2170	4200
IGDBM 4778.4114.226	4778	4222	226	4688	4312	60	45	4548	4542	214	56	10	M10x1	22	4114	188	150	+0.5	2670	4700

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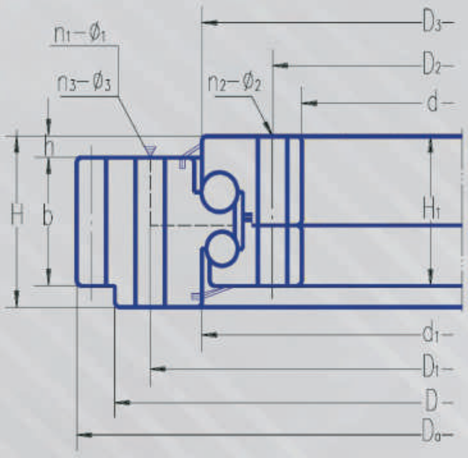
Double Row Ball Slewing Bearing (With External Gear)



Drawing No.	Boundary Dimensions			Bolt Hole Diameter				Structure Dimensions						Gear Parameters					Basic Load Ratings Coa	Weight
	D	d	H	D1	D2	n	φ	D3 (D3')	d1 (d1')	H1	h	n3	φ3	m	Da	Z	b	x		
	mm			mm			mm	mm					mm		mm		mm		10^4 N	kg
EGDBM 645.384.106	616	384	106	580	420	20	18	523	517	96	26	4	M10x1	5	645	126	60	+0.5	121	100
EGDBM 705.444.106	676	444	106	640	480	20	18	583	577	96	26	4	M10x1	5	705	138	60	+0.5	134	115
EGDBM 792.514.106	746	514	106	710	550	24	18	653	647	96	26	4	M10x1	6	792	129	60	+0.5	153	130
EGDBM 864.594.106	826	594	106	790	630	24	18	733	727	96	26	4	M10x1	6	864	141	60	+0.5	173	140
EGDBM 984.658.124	942	658	124	898	702	30	22	828	822	114	29	6	M10x1	8	984	120	80	+0.5	230	200
EGDBM 1088.758.124	1042	758	124	998	802	30	22	928	922	114	29	6	M10x1	8	1088	133	80	+0.5	258	250
EGDBM 1200.858.124	1142	858	124	1098	902	36	22	1028	1022	114	29	6	M10x1	10	1200	117	80	+0.5	286	300
EGDBM 1320.978.124	1262	978	124	1218	1022	36	22	1148	1142	114	29	6	M10x1	10	1320	129	80	+0.5	321	340
EGDBM 1498.1074.160	1426	1074	160	1374	1126	40	26	1218	1214	150	39	6	M10x1	14	1498	104	90	+0.5	482	580
EGDBM 1644.1224.160	1576	1224	160	1524	1272	40	26	1436	1432	150	39	6	M10x1	12	1644	134	90	+0.5	543	650
EGDBM 1848.1424.160	1776	1424	160	1724	1476	45	26	1636	1632	150	39	8	M10x1	14	1848	129	90	+0.5	620	750
EGDBM 2058.1624.160	1976	1624	160	1924	1676	45	26	1836	1832	150	39	8	M10x1	14	2058	144	90	+0.5	692	820
EGDBM 2304.1785.190	2215	1785	190	2149	1851	48	33	2038	2032	178	47	8	M10x1	16	2304	141	120	+0.5	987	1150
EGDBM 2544.2025.190	2455	2025	190	2389	2091	48	33	2278	2272	178	47	8	M10x1	16	2544	156	120	+0.5	1110	1500
EGDBM 2804.2285.190	2715	2285	190	2649	2351	56	33	2538	2532	178	47	8	M10x1	18	2804	153	120	+0.5	1110	1500
EGDBM 3114.2585.190	3015	2585	190	2649	2651	56	33	2838	2832	178	47	8	M10x1	18	3114	170	120	+0.5	1390	1900
EGDBM 3540.2872.226	3428	2872	226	3338	2962	56	45	3198	3192	214	56	8	M10x1	20	3540	174	150	+0.5	1870	3300
EGDBM 3940.3272.226	3828	3272	226	3738	3362	56	45	3598	3592	214	56	8	M10x1	20	3940	194	150	+0.5	2110	3700
EGDBM 4400.3722.226	4278	3722	226	4188	3812	60	45	4048	4042	214	56	10	M10x1	22	4400	197	150	+0.5	2170	4200
EGDBM 4884.4222.226	4778	4222	226	4688	4312	60	45	4548	4542	214	56	10	M10x1	22	4884	219	150	+0.5	2670	4700

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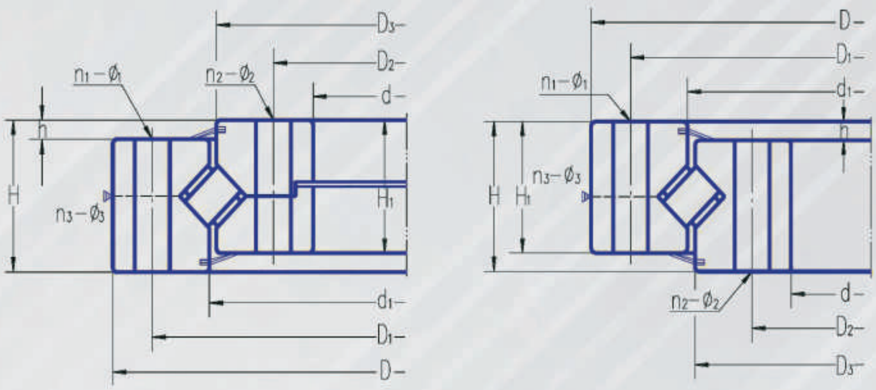
Crossover Row Roller Slewing Bearing (Gearless)



Drawing No.	Boundary Dimensions			Bolt Hole Diameter						Structure Dimensions						Basic Load Ratings Coa	Weight
	D	d	H	D1	D2	n1	n2	φ1	φ2	D3	d1	H1	h	n3	φ3		
	mm			mm				mm		mm					mm	10^4 N	kg
NGCRM 500.320.85	500	320	85	515	365	12	8	17	18	438	442	75	10	--	--	88.2	85.6
NGCRM 900.600.125	900	600	125	848	690	30	29	26	M24	750	754	105	15	3	M10x1	280	246
NGCRM 907.670.85	907	670	85	870	730	12	8	M16	18	808	812	75	10	--	--	165	170
NGCRM 1000.700.140	1000	700	140	940	770	24	24	M20	22	879	882	130	20	4	M10x1	254	
NGCRM 1150.845.130	1150	845	130	1100	895	24	24	22	22	1024	1030	105	10	6	M6	401	393
NGCRM 1180.870.115	1180	870	115	1125	920	18	18	28	28	1023	1027	100	15	2	M10x1	232	355
NGCRM 1200.962.90	1200	962	90	--	--	--	--	--	--	1088	1092	76	10	--	--	254	224
NGCRM 1270.1000.100	1270	1000	100	1220	1050	36	36	19	19	1132	1138	85	15	4	M10x1	333	303
NGCRM 1400.1060.120	1400	1060	120	1220	--	--	--	--	--	1248	1252	120	--	--	--	429	596
NGCRM 1520.1200.90	1520	1200	90	--	--	--	--	--	--	1356	1364	90	--	--	--	409	504
NGCRM 1700.1250.155	1700	1250	155	1650	1330	24	24	26	26	1446	1450	140	10	6	M10x1	602	1103
NGCRM 1608.1250.148	1608	1250	148	1512	1297	16	16	25	25	1403	1407	128	26	4	M10x1	595	743
NGCRM 1660.1278.120	1660	1278	120	1535	1335	18	18	26	26	1428	1432	105	15	4	M10x1	427	589
NGCRM 1715.1320.134	1715	1320	134	--	--	--	--	--	--	1503	1509	--	--	--	--	607	958
NGCRM 1840.1370.160	1840	1370	160	1770	1430	30	24	28	28	1598	1602	140	10	4	M10x1	997	1213
NGCRM 1700.1380.145	1700	1380	145	1650	1440	24	24	27	27	1568	1574	140	5	6	M10x1	461	746
NGCRM 1680.1412.170	1680	1412	170	--	1460	--	24	--	18	1544	1548	120	25	2	M10x1	617	725
NGCRM 1680.1412.185	1680	1412	185	--	1460	--	24	--	18	1544	1548	120	25	2	M12x1.25	576	759
NGCRM 2140.1600.145	2140	1600	145	1940	1710	48	48	26	26	1828	1832	135	10	4	M10x1	896	1357
NGCRM 2210.1776.150	2210	1776	150	2105	1840	36	36	26	26	1968	1972	135	15	4	M10x1	1113	1244
NGCRM 2320.1860.151	2320	1860	151	2245	1980	42	42	33	33	2113	2117	150	10	6	M10x1	890	1772
NGCRM 2320.1916.150	2320	1916	150	2245	1980	42	42	34	34	2113	2117	130	20	3	M10x1	1195	1214
NGCRM 2860.2190.300	2860	2190	300	2800	2270	36	36	32	32	2530	2550	260	40	12	8	3035	4797
NGCRM 2980.2500.180	2980	2500	180	2910	2590	48	48	33	33	2739	2743	170	10	6	M16x1.5	1760	2913

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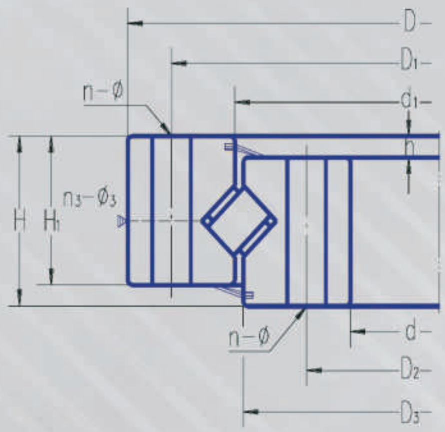
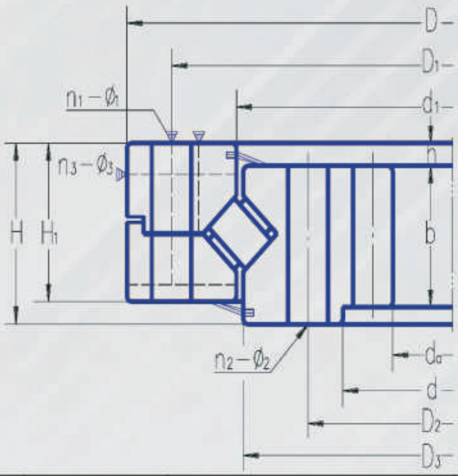
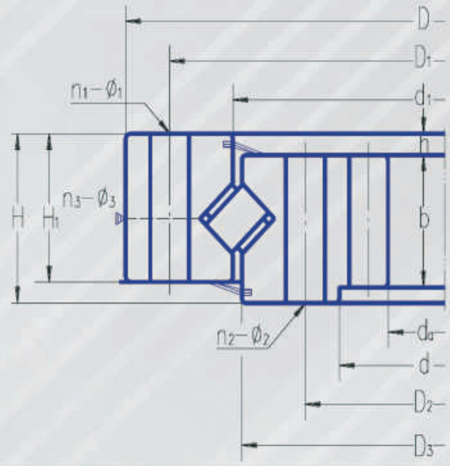


Drawing No.	Boundary Dimensions			Bolt Hole Diameter				Structure Dimensions						Basic Load Ratings Coa	Weight
	D	d	H	D1	D2	n	φ	D3 (D3')	d1 (d1')	H1	h	n3	φ3		
	mm			mm			mm	mm					mm	10^4 N	kg
NGCRM 602.398.75	602	398	75	566	434	20	18	499	501	65	10	4	M10x1	104	80
NGCRM 662.458.75	662	458	75	626	494	20	18	558.5	561.5	65	10	4	M10x1	116	90
NGCRM 732.528.75	732	528	75	696	564	24	18	628.5	631.5	65	10	4	M10x1	130	100
NGCRM 812.608.75	812	608	75	776	644	24	18	708.5	711.5	65	10	4	M10x1	149	110
NGCRM 922.678.82	922	678	82	878	722	30	22	798.5	801.5	72	10	6	M10x1	185	170
NGCRM 1022.778.82	1022	778	82	978	822	30	22	898.5	901.5	72	10	6	M10x1	209	190
NGCRM 1122.878.82	1122	878	82	1078	922	36	22	998.5	1001.5	72	10	6	M10x1	233	210
NGCRM 1542.998.82	1542	998	82	1198	1042	36	22	1118	1122	72	10	6	M10x1	262	230
NGCRM 1390.1110.91	1390	1110	91	1337	1163	40	26	1248	1252	81	10	6	M10x1	321	350
NGCRM 1540.1260.91	1540	1260	91	1487	1313	40	26	1398	1402	81	10	6	M10x1	358	400
NGCRM 1740.1460.91	1740	1460	91	1687	1513	45	26	1598	1602	81	10	8	M10x1	412	440
NGCRM 1940.1660.91	1940	1660	91	1887	1713	45	26	1798	1802	81	10	8	M10x1	460	500
NGCRM 2178.1825.112	2178	1825	112	2110	1891	48	33	1998	2002	100	12	8	M10x1	686	900
NGCRM 2178.1825.112	2178	1825	112	2110	1891	48	33	1991	1995	100	12	8	M10x1	635	767
NGCRM 2418.2065.112	2418	2065	112	2350	2131	48	33	2237.5	2242.5	100	12	8	M10x1	764	1000
NGCRM 2678.2325.112	2678	2325	112	2610	2391	56	33	2497.5	2502.5	100	12	8	M10x1	797	876
NGCRM 2978.2625.112	2978	2625	112	2910	2691	56	33	2797.5	2802.5	100	12	8	M10x1	960	1250
NGCRM 3376.2922.134	3376	2922	134	3286	3014	56	45	3147.5	3151.5	122	12	8	M10x1	1380	2150
NGCRM 3776.3322.134	3776	3322	134	3686	3414	56	45	3547.5	3552.5	122	12	8	M10x1	1570	2470
NGCRM 4226.3772.134	4226	3772	134	4136	3864	60	45	3997.5	4002.5	122	12	10	M10x1	1760	2800
NGCRM 4726.4272.134	4726	4272	134	4636	4364	60	45	4497.5	4502.5	122	12	10	M10x1	1980	3100

Crossover Row Roller Slewing Bearing (With Internal Gear)





Drawing No.	Boundary Dimensions			Bolt Hole Diameter						Structure Dimensions						Gear Parameters					Basic Load Ratings Coa	Weight
	D	d	H	D1	D2	n1	n2	φ1	φ2	D3	d1	H1	h	n3	φ3	m	da	Z	b	x		
	mm			mm				mm		mm					mm		mm		mm		10^4 N	kg
IGCRM 920.658.90	920	695	90	870	735	30	30	18	18	800	804	76	4	3	10	7	658	96	65	0	161	175
IGCRM 1000.718.95	1000	760	95	956	800	24	24	20	20	878	882	82	15	4	M10x1	8	717.6	91	70	0.35	237	206
IGCRM 1180.829.115	1180	870	115	1125	920	18	18	26	26	1023	1027	100	15	2	M8x1	8	828.8	105	90	0.3	292	374
IGCRM 1170.830.95	1170	875	95	1120	930	24	24	22	22	1018	1022	82	15	4	M10x1	8	829.6	105	70	0.35	276	297
IGCRM 1200.909.90	1200	950	90	1160	1000	36	18	18	18	1088	1092	76	10	4	M8x1	8	908.8	115	72	0.3	254	245
IGCRM 1200.962.90	1200	1010	90	1160	1041	36	20	22	M20	1088	1092	76	10	2	M8x1	10	962	97	72	0.6	254	199
IGCRM 1595.1220.120	1595	1278	120	1535	1335	36	36	26	26	1428	1432	106	14	6	M10x1	12	1220.4	103	90	0.35	398	585
IGCRM 1715.1330.110	1715	1400	110	1660	1460	40	40	26	M24	1558	1562	95	15	4	M10x1	10	1330	135	90	0	597	587
IGCRM 2420.1912.160	2420	2000	160	2350	2070	48	48	33	M30	2207	2213	140	20	6	M10x1	14	1912.4	138	120	0.3	1084	1607
IGCRM 2670.2154.160	2670	2240	160	2600	2320	54	54	35	M36	2457	2463	140	20	6	M12	16	2153.6	136	120	0.3	1441	1798
IGCRM 2800.2160.208	2800	2300	208	2710	2390	42	48	38	M36	2535	2545	180	18	6	M10x1	20	2160	110	175	0	1743	2756
IGCRM 3325.2592.300	3325	2680	300	3242	2754	32	32	33	33	2996	3000	270	30	4	M16x1.5	16	2592	164	180	0	3587	6320
IGCRM 3325.2592.300X	3325	2680	300	3242	2754	48	48	33	33	2996	3000	270	30	4	M16x1.5	16	2592	164	180	0	3587	6320
IGCRM 3850.3205.200	3850	3322	200	3720	3420	60	60	45	45	3568	3572	180	30	12	1/4	22	3205.4	147	158	0.35	1806	4520

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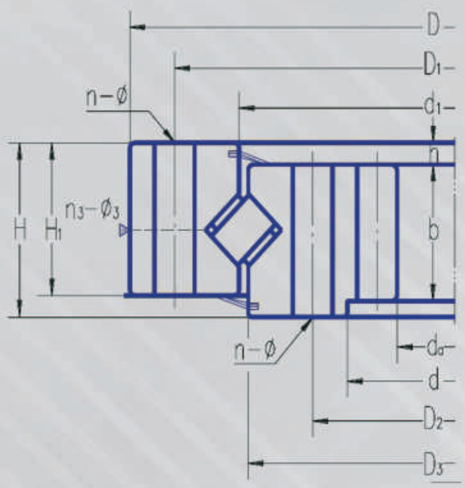

Drawing No.	Boundary Dimensions			Bolt Hole Diameter				Structure Dimensions						Gear Parameters					Basic Load Ratings Coa	Weight
	D	d	H	D1	D2	n	φ	D3 (D3')	d1 (d1')	H1	h	n3	φ3	m	da	Z	b	x		
	mm			mm			mm	mm					mm		mm		mm		10^4 N	kg
IGCRM 602.365.75	602	398	75	566	434	20	18	499	501	65	10	4	M10x1	5	365	74	60	0.5	104	80
IGCRM 662.425.75	662	458	75	626	494	20	18	559	561.5	65	10	4	M10x1	5	425	86	60	0.5	116	90
IGCRM 732.492.75	732	528	75	696	564	24	18	629	631.5	65	10	4	M10x1	6	492	83	60	0.5	130	100
IGCRM 812.570.75	812	608	75	776	644	24	18	709	711.5	65	10	4	M10x1	6	570	96	60	0.5	149	110
IGCRM 922.632.82	922	678	82	878	722	30	22	799	801.5	72	10	6	M10x1	8	632	80	65	0.5	185	170
IGCRM 1022.736.82	1022	778	82	978	822	30	22	899	901.5	72	10	6	M10x1	8	736	93	65	0.5	209	190
IGCRM 1122.820.82	1122	878	82	1078	922	36	22	999	1002	72	10	6	M10x1	10	820	83	65	0.5	233	210
IGCRM 1542.940.82	1542	998	82	1198	1042	36	22	1118	1122	72	10	6	M10x1	10	940	95	65	0.5	262	230
IGCRM 1390.1044.91	1390	1110	91	1337	1163	40	26	1248	1252	81	10	6	M10x1	12	1044	88	75	0.5	321	350
IGCRM 1540.1188.91	1540	1260	91	1487	1313	40	26	1398	1402	81	10	6	M10x1	12	1188	100	75	0.5	358	400
IGCRM 1740.1386.91	1740	1460	91	1687	1513	45	26	1598	1602	81	10	8	M10x1	14	1386	100	75	0.5	412	440
IGCRM 1940.1568.91	1940	1660	91	1887	1713	45	26	1798	1802	81	10	8	M10x1	14	1568	113	75	0.5	460	500
IGCRM 2002.1608.156	2002	1665	156	1940	1720	54	30	1827	1833	128	28	6	M10x1	12	1608	135	100	0.5	571	912
IGCRM 2178.1728.112	2178	1825	112	2110	1891	48	33	1998	2002	100	12	8	M10x1	16	1728	109	90	0.5	686	900
IGCRM 2418.1984.112	2418	2065	112	2350	2131	48	33	2238	2243	100	12	8	M10x1	16	1984	125	90	0.5	764	1000
IGCRM 2678.2232.112	2678	2325	112	2610	2391	56	33	2498	2503	100	12	8	M10x1	18	2232	125	90	0.5	797	876
IGCRM 2978.2520.112	2978	2625	112	2910	2691	56	33	2798	2803	100	12	8	M10x1	18	2520	141	90	0.5	960	1250
IGCRM 3376.2820.134	3376	2922	134	3286	3014	56	45	3148	3152	122	12	8	M10x1	20	2820	142	110	0.5	1380	2150
IGCRM 3776.3220.134	3776	3322	134	3686	3414	56	45	3548	3553	122	12	8	M10x1	20	3220	162	110	0.5	1570	2470
IGCRM 4226.3652.134	4226	3772	134	4136	3864	60	45	3998	4003	122	12	10	M10x1	22	3652	167	110	0.5	1760	2800
IGCRM 4726.4180.134	4726	4272	134	4636	4364	60	45	4498	4503	122	12	10	M10x1	22	4180	191	110	0.5	1980	3100

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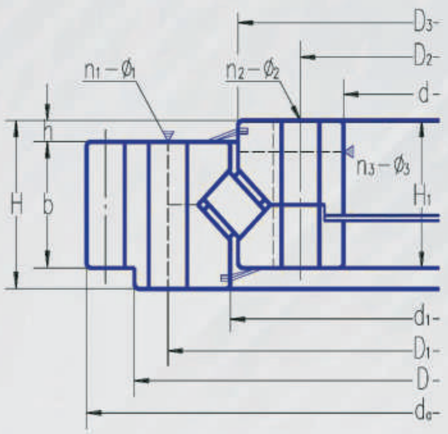
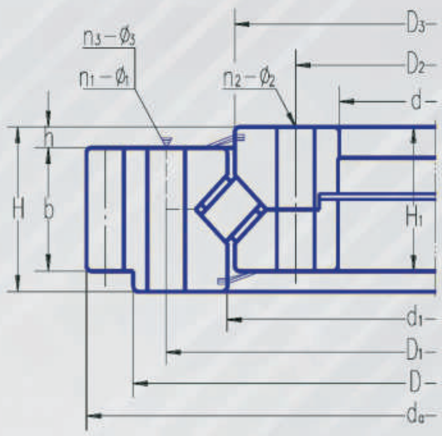
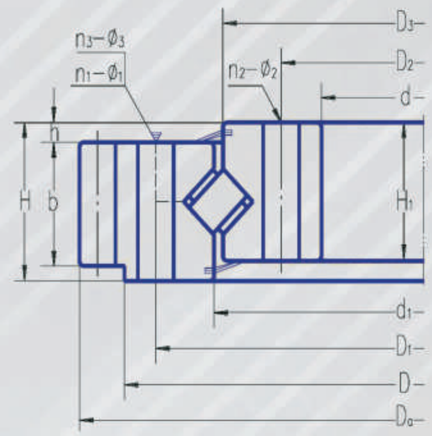
Crossover Row Roller Slewing Bearing (With External Gear)







Drawing No.	Boundary Dimensions			Bolt Hole Diameter						Structure Dimensions						Gear Parameters					Basic Load Ratings Coa	Weight
	D	d	H	D1	D2	n1	n2	φ1	φ2	D3	d1	H1	h	n3	φ3	m	Da	Z	b	x		
	mm			mm				mm		mm					mm		mm		mm		10^4 N	kg
EGCRM 1096.885.83	1056	885	83	1032	925	16	16	M16	18	986	988	75	13	--	--	8	1096	135	62.5	0	176	172
EGCRM 1180.885.115	1150	885	115	1115	935	16	16	18	18	1023	1027	100	15	4	M8x1	5	1180	234	80	0	292	330
EGCRM 1452.1100.115	1415	1100	115	1345	1160	24	24	21	21	1253	1255	100	15	4	M12x1.25	6	1452	240	84	0	270	497
EGCRM 1477.1100.140	1400	1100	140	1352	1160	26	26	24	26	1260	1264	126	21	4	M10x1	14	1477.28	104	90	-0.24	430	642
EGCRM 1477.1100.145	1400	1100	145	1352	1160	26	26	24	26	1260	1264	131	26	4	M10x1	14	1477.28	104	90	-0.24	430	644
EGCRM 1608.1250.148	1548	1250	148	1512	1297	16	16	25	25	1403	1407	122	20	4	M10x1	12	1608	132	100	0	539	661
EGCRM 1660.1278.120	1595	1278	120	1535	1335	36	36	26	26	1428	1432	105	15	4	M10x1	12	1659.6	134	90	+1.15	485	597
EGCRM 1784.1300.165	1705	1300	165	1644	1360	24	24	32	32	1504	1508	134	31	4	M10x1	14	1783.6	126	85	-0.3	578	1023
EGCRM 1781.1400.110	1715	1400	110	1660	1460	42	42	26	26	1558	1562	95	17	4	M12x1.25	12	1780.8	147	78	-0.3	597	579
EGCRM 1882.1460.125	1800	1460	125	1735	1525	32	36	26	26	1633	1637	110	10	4	M10x1	14	1881.6	133	95	-0.3	627	828
EGCRM 2700.2100.180	2600	2100	180	2540	2200	48	48	32	32	2368	2372	158	22	8	M10x1	18	2700	148	130	0	1100	2395
EGCRM 3108.2460.220	3108	2460	220	2930	2560	30	30	33	34	2745	2747	200	35	15	ZG1/4in	14	3108	220	200	0	1386	4091
EGCRM 3258.2500.260	2920	2500	260	3060	2622	36	36	40	40	2949	2916	240	60	36	ZG1/4in	18	3258	179	190	0	1996	5407
EGCRM 3440.2635.270	3332	2635	270	3240	2755	36	36	42	42	2998	3002	240	45	6	M12x1.25	20	3440	170	200	0	2950	5973
EGCRM 4100.3230.240	3970	3230	240	3820	3350	52	54	37	37	3578	3582	220	20	9	M12x1.25	25	4100	162	200	0	3520	7612

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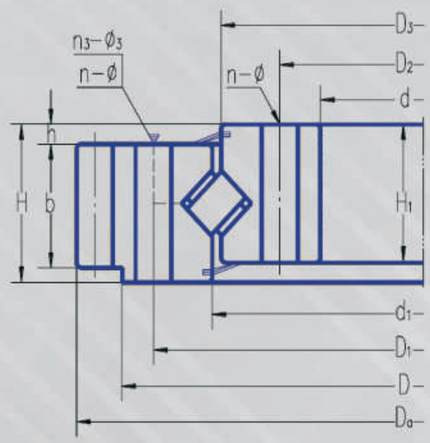
Crossover Row Roller Slewing Bearing (External Gear)



Drawing No.	Boundary Dimensions D	d	H	Bolt Hole Diameter D1	D2	n	φ	Structure Dimensions D3 (D3')	d1 (d1')	H1	h	n3	φ3	Gear Parameters m	Da	Z	b	x	Basic Load Ratings Coa	Weight
	mm			mm			mm	mm					mm		mm		mm		10^4 N	kg
EGCRM 630.398.75	602	398	75	566	434	20	18	499	501	65	10	4	M10x1	5	630	123	60	0.5	104	80
EGCRM 690.458.75	662	458	75	626	494	20	18	558.5	561.5	65	10	4	M10x1	5	690	135	60	0.5	116	90
EGCRM 774.528.75	732	528	75	696	564	24	18	628.5	631.5	65	10	4	M10x1	6	774	126	60	0.5	130	100
EGCRM 852.608.75	812	608	75	776	644	24	18	708.5	711.5	65	10	4	M10x1	6	852	139	60	0.5	149	110
EGCRM 968.678.82	922	678	82	878	722	30	22	798.5	801.5	72	10	6	M10x1	8	968	118	65	0.5	185	170
EGCRM 1064.778.82	1022	778	82	978	822	30	22	898.5	901.5	72	10	6	M10x1	8	1064	130	65	0.5	209	190
EGCRM 1190.878.82	1122	878	82	1078	922	36	22	998.5	1002	72	10	6	M10x1	10	1190	116	65	0.5	233	210
EGCRM 1300.998.82	1542	998	82	1198	1042	36	22	1118	1122	72	10	6	M10x1	10	1300	127	65	0.5	262	230
EGCRM 1452.1110.91	1390	1110	91	1337	1163	40	26	1248	1252	81	10	6	M10x1	12	1452	118	75	0.5	321	350
EGCRM 1608.1260.91	1540	1260	91	1487	1313	40	26	1398	1402	81	10	6	M10x1	12	1608	131	75	0.5	358	400
EGCRM 1820.1460.91	1740	1460	91	1687	1513	45	26	1598	1602	81	10	8	M10x1	14	1820	127	75	0.5	412	440
EGCRM 2016.1660.91	1940	1660	91	1887	1713	45	26	1798	1802	81	10	8	M10x1	14	2016	141	75	0.5	460	500
EGCRM 2272.1825.112	2178	1825	112	2110	1891	48	33	1998	2002	100	12	8	M10x1	16	2272	139	90	0.5	686	900
EGCRM 2496.2065.112	2418	2065	112	2350	2131	48	33	2238	2243	100	12	8	M10x1	16	2496	153	90	0.5	764	1000
EGCRM 2772.2325.112	2678	2325	112	2610	2391	56	33	2498	2503	100	12	8	M10x1	18	2772	151	90	0.5	797	876
EGCRM 3078.2625.112	2978	2625	112	2910	2691	56	33	2798	2803	100	12	8	M10x1	18	3078	168	90	0.5	960	1250
EGCRM 3480.2922.134	3376	2922	134	3286	3014	56	45	3148	3152	122	12	8	M10x1	20	3480	171	110	0.5	1380	2150
EGCRM 3880.3322.134	3776	3322	134	3686	3414	56	45	3548	3553	122	12	8	M10x1	20	3880	191	110	0.5	1570	2470
EGCRM 4334.3772.134	4226	3772	134	4136	3864	60	45	3998	4003	122	12	10	M10x1	22	4334	194	110	0.5	1760	2800
EGCRM 4840.4272.134	4726	4272	134	4636	4364	60	45	4498	4503	122	12	10	M10x1	22	4840	217	110	0.5	1980	3100

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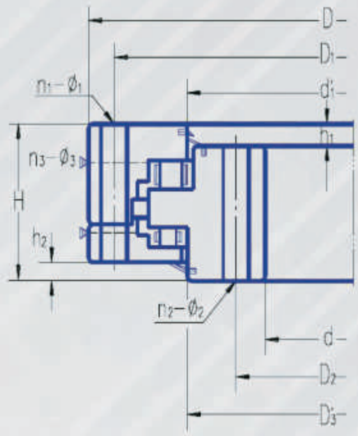
Three Row Roller Slewing Bearing (Gearless)



Drawing No.	Boundary Dimensions			Bolt Hole Diameter				Structure Dimensions						Basic Load Ratings		Weight
	D	d	H	D1	D2	n	φ	D3 (D3')	d1 (d1')	h1	h2	n3	φ3	Coa	Cor	
	mm			mm			mm	mm					mm	10^4 N		kg
NGTRM 634.366.148	634	366	148	598	402	24	18	537	526	32	10	4x2	M10x1	275	35.5	224
NGTRM 694.426.148	694	426	148	658	462	24	18	597	586	32	10	4x2	M10x1	308	39.9	240
NGTRM 764.496.148	764	496	148	728	532	28	18	667	656	32	10	4x2	M10x1	345	45.1	270
NGTRM 844.576.148	844	576	148	808	612	28	18	747	736	32	10	4x2	M10x1	388	51.7	300
NGTRM 964.636.182	964	636	182	920	680	36	22	841	830	40	10	4x2	M10x1	549	71.2	500
NGTRM 1064.736.182	1064	736	182	1020	780	36	22	941	930	40	10	4x2	M10x1	619	80.8	600
NGTRM 1164.836.182	1164	836	182	1120	880	40	22	1041	1030	40	10	5x2	M10x1	689	90.3	680
NGTRM 1284.956.182	1284	956	182	1240	1000	40	22	1161	1150	40	10	5x2	M10x1	768	102	820
NGTRM 1445.1055.220	1445	1055	220	1393	1107	45	26	1300	1290	50	10	5x2	M10x1	1110	146	1200
NGTRM 1595.1205.220	1595	1205	220	1543	1257	45	26	1450	1440	50	10	5x2	M10x1	1240	165	1300
NGTRM 1795.1405.220	1795	1405	220	1743	1457	48	26	1650	1640	50	10	6x2	M10x1	1420	190	1520
NGTRM 1995.1605.220	1995	1605	220	1943	1657	48	26	1850	1840	50	10	6x2	M10x1	1590	215	1750
NGTRM 2195.1816.150	2195	1816	150	2127	1885	60	33		2041	33	13	3x5	ZG1/4in	1690	66.3	1120
NGTRM 2461.2019.231	2461	2019	231	2395	2085	60	33	2295	2273	54	12	6x2	M10x1	2310	268	2700
NGTRM 3021.2579.231	3021	2579	231	2955	2645	72	33	2855	2833	54	12	8x2	M10x1	2880	339	3400
NGTRM 3432.2868.270	3432	2868	270	3342	2958	72	45	3213	3196	65	12	8x2	M10x1	3590	381	5000
NGTRM 3832.3268.270	3832	3268	270	3742	3358	72	45	3613	3596	65	12	8x2	M10x1	4040	431	5600
NGTRM 4282.3718.270	4282	3718	270	4192	3908	80	45	4063	4046	65	12	8x2	M10x1	4560	487	6400
NGTRM 4782.4218.270	4782	4218	270	4692	4308	80	45	4563	4546	65	12	8x2	M10x1	5445	580	6942

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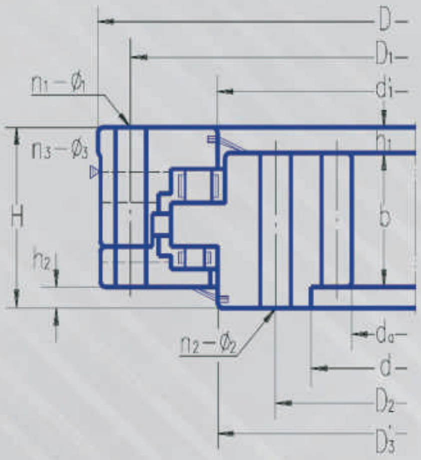
Three Row Roller Slewing Bearing (With Internal gear)



Drawing No.	Boundary Dimensions			Bolt Hole Diameter				Structure Dimensions						Gear Parameters					Basic Load Ratings		Weight
	D	d	H	D1	D2	n	φ	D3 (D3')	d1 (d1')	h1	h2	n3	φ3	m	da	Z	b	x	Coa	Cor	
		mm			mm		mm		mm				mm		mm		mm		10^4 N		kg
IGTRM 634.335.148	634	366	148	598	402	24	18	537	526	32	10	4x2	M10x1	5	335	68	80	+0.5	275	35.5	224
IGTRM 634.395.148	694	426	148	658	462	24	18	597	586	32	10	4x2	M10x1	5	395	80	80	+0.5	308	39.9	240
IGTRM 764.456.148	764	496	148	728	532	28	18	667	656	32	10	4x2	M10x1	6	456	77	80	+0.5	345	45.1	270
IGTRM 844.534.148	844	576	148	808	612	28	18	747	736	32	10	4x2	M10x1	6	534	90	80	+0.5	388	51.7	300
IGTRM 964.592.182	964	636	182	920	680	36	22	841	830	40	10	4x2	M10x1	8	592	75	120	+0.5	549	71.2	500
IGTRM 1064.688.182	1064	736	182	1020	780	36	22	941	930	40	10	4x2	M10x1	8	688	87	120	+0.5	619	80.8	600
IGTRM 1164.780.182	1164	836	182	1120	880	40	22	1041	1030	40	10	5x2	M10x1	10	780	79	120	+0.5	689	90.3	680
IGTRM 1284.900.182	1284	956	182	1240	1000	40	22	1161	1150	40	10	5x2	M10x1	10	900	91	120	+0.5	768	102	820
IGTRM 1445.980.220	1445	1055	220	1393	1107	45	26	1210	1200	50	10	5x2	M10x1	14	980	71	150	+0.5	1110	146	1200
IGTRM 1595.1106.220	1595	1205	220	1543	1257	45	26	1360	1350	50	10	5x2	M10x1	14	1106	80	150	+0.5	1240	165	1300
IGTRM 1795.1330.220	1795	1405	220	1743	1457	48	26	1650	1640	50	10	6x2	M10x1	14	1330	96	150	+0.5	1420	190	1520
IGTRM 1995.1526.220	1995	1605	220	1943	1657	48	26	1850	1840	50	10	6x2	M10x1	14	1526	110	150	+0.5	1590	215	1750
IGTRM 2221.1696.231	2221	1779	231	2155	1845	60	33	2055	2033	54	12	6x2	M10x1	16	1696	107	160	+0.5	2050	239	2400
IGTRM 2461.1920.231	2461	2019	231	2395	2085	60	33	2295	2273	54	12	6x2	M10x1	16	1920	121	160	+0.5	2310	268	2700
IGTRM 2721.2180.231	2721	2279	231	2655	2645	72	33	2467	2445	54	12	8x2	M10x1	20	2180	110	160	+0.5	2580	302	3000
IGTRM 3021.2480.231	3021	2579	231	2955	2645	72	33	2767	2745	54	12	8x2	M10x1	20	2480	125	160	+0.5	2880	339	3400
IGTRM 3432.2760.270	3432	2868	270	3342	2958	72	45	3213	3196	65	12	8x2	M10x1	20	2760	139	180	+0.5	3590	381	5000
IGTRM 4282.3608.270	4282	3718	270	4192	3908	80	45	4063	4046	65	12	8x2	M10x1	22	3608	165	180	+0.5	4560	487	6400
IGTRM 4782.4114.270	4782	4218	270	4692	4308	80	45	4563	4546	65	12	8x2	M10x1	22	4114	188	185	+0.5	5445	580	6942

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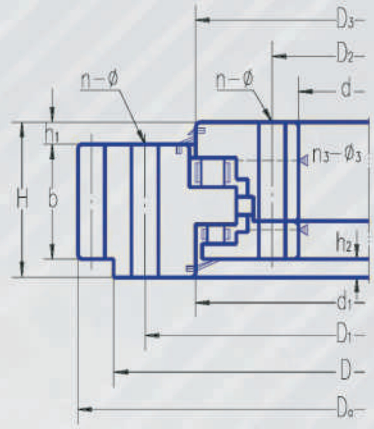
Three Row Roller Slewing Bearing (With External gear)



Drawing No.	Boundary Dimensions			Bolt Hole Diameter				Structure Dimensions						Gear Parameters					Basic Load Ratings		Weight
	D	d	H	D1	D2	n	φ	D3 (D3')	d1 (d1')	h1	h2	n3	φ3	m	Da	Z	b	x	Coa	Cor	
	mm			mm			mm	mm					mm		mm		mm		10^4 N		kg
EGTRM 665.366.148	634	366	148	598	402	24	18	537	526	32	10	4x2	M10x1	5	665	130	80	+0.5	275	35.5	224
EGTRM 725.426.148	694	426	148	658	462	24	18	597	586	32	10	4x2	M10x1	5	725	142	80	+0.5	308	39.9	240
EGTRM 810.496.148	764	496	148	728	532	28	18	667	656	32	10	4x2	M10x1	6	810	132	80	+0.5	345	45.1	270
EGTRM 888.576.148	844	576	148	808	612	28	18	747	736	32	10	4x2	M10x1	6	888	145	80	+0.5	388	51.7	300
EGTRM 1008.636.182	964	636	182	920	680	36	22	841	830	40	10	4x2	M10x1	8	1008	123	120	+0.5	549	71.2	500
EGTRM 1104.736.182	1064	736	182	1020	780	36	22	941	930	40	10	4x2	M10x1	8	1104	135	120	+0.5	619	80.8	600
EGTRM 1220.836.182	1164	836	182	1120	880	40	22	1041	1030	40	10	5x2	M10x1	10	1220	119	120	+0.5	689	90.3	680
EGTRM 1340.956.182	1284	956	182	1240	1000	40	22	1161	1150	40	10	5x2	M10x1	10	1340	131	120	+0.5	768	102	820
EGTRM 1512.1055.220	1445	1055	220	1393	1107	45	26	1300	1290	50	10	5x2	M10x1	12	1512	123	150	+0.5	1110	146	1200
EGTRM 1668.1205.220	1595	1205	220	1543	1257	45	26	1450	1440	50	10	5x2	M10x1	12	1668	136	150	+0.5	1240	165	1300
EGTRM 1876.1405.220	1795	1405	220	1743	1457	48	26	1650	1640	50	10	6x2	M10x1	14	1876	131	150	+0.5	1420	190	1520
EGTRM 2072.1605.220	1995	1605	220	1943	1657	48	26	1850	1840	50	10	6x2	M10x1	14	2072	145	150	+0.5	1590	215	1750
EGTRM 2269.1816.150	2195	1816	150	2127	1885	60	33		2041	33	13	3x5	ZG1/4in	16	2268.8	138	105	+0.9	1690	66.3	1120
EGTRM 2304.1779.231	2221	1779	231	2155	1845	60	33	2059	2055	54	12	6x3	M10x1	16	2304	141	160	+0.5	2050	239	2230
EGTRM 2560.2019.231	2461	2019	231	2395	2085	60	33	2295	2273	54	12	6x2	M10x1	16	2560	157	160	+0.5	2310	268	2700
EGTRM 2826.2279.231	2721	2279	231	2655	2345	72	33	2555	2561	54	12	8x3	M10x1	18	2826	154	160	+0.5	2580	302	2834
EGTRM 3114.2579.231	3021	2579	231	2955	2645	72	33	2855	2833	54	12	8x2	M10x1	18	3114	170	160	+0.5	2880	339	3400
EGTRM 3540.2868.270	3432	2868	270	3342	2958	72	45	3213	3196	65	12	8x2	M10x1	20	3540	174	180	+0.5	3590	381	5000
EGTRM 3480.2922.182	3376	2922	182	3286	3014	56	45	3190	3180	40	10	8x3	M10x1	20	3480	171	120	+0.5	2050	202	2308
EGTRM 3540.2868.270	3432	2868	270	3342	2958	72	45	3214	3197	50	12	8x2	ZG1/4in	20	3540	174	180	+0.5	3735	474	5404
EGTRM 3940.3268.270	3832	3268	270	3742	3358	72	45	3613	3596	65	12	8x2	M10x1	20	3940	194	180	+0.5	4040	431	5600
EGTRM 4400.3718.270	4282	3718	270	4192	3908	80	45	4063	4046	65	12	8x2	M10x1	22	4400	197	180	+0.5	4560	487	6400
EGTRM 4906.4218.270	4782	4218	270	4692	4308	80	45	4563	4546	65	12	8x2	M10x1	22	4906	220	185	+0.5	5445	580	6942
EGTRM 5460.4670.320	5320	4670	320	5220	4766	100	45	5082	5062	65	18	10x3	M10x1	20	5460	270	220	+0.5	6834	955	11752

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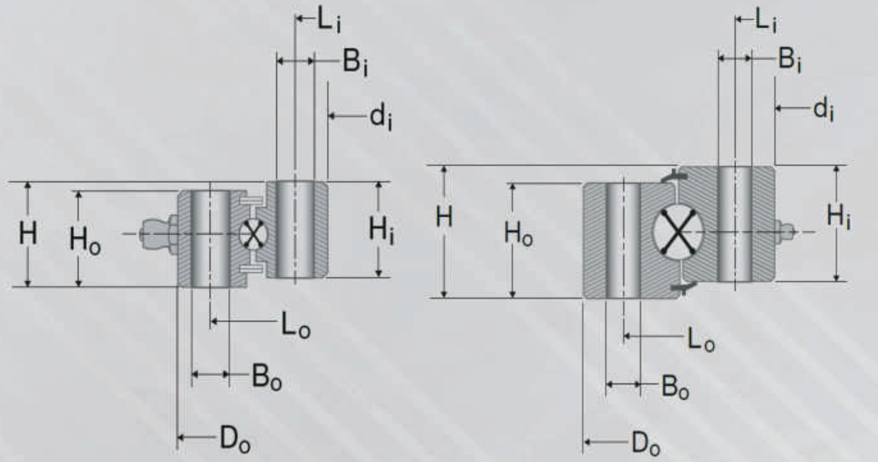
Gearless Slewing Ring



Unit: inch

UIPI Part No.	Kaydon	Silverthin	Overall Dimension					Mounting Holes					
								Inner Ring			Outer Ring		
			Do	Di	H	Hi/Ho	weight	Li	ni	Bi	Lo	no	Bo
NGSBM 110 50 20T	MTO-050	STO-050	4.331	1.968	0.787	0.728	2	2.48	8	0.26	3.818	8	0.26
NGSBM 110 50 20	MTO-050T	STO-050T	4.331	1.968	0.787	0.728	2	2.48	8	M6	3.818	8	M6
NGSBM 135 65 22	MTO-065	STO-065	5.315	2.559	0.866	0.787	4	3.149	8	0.354	4.724	8	0.354
NGSBM 135 65 22T	MTO-065T	STO-065T	5.315	2.559	0.866	0.787	4	3.149	8	M8	4.724	8	M8
NGSBM 226 122 34	MTO-122	STO-122	8.898	4.803	1.339	1.142	13	5.512	12	0.354	8.189	12	0.354
NGSBM 226 122 34T	MTO-122T	STO-122T	8.898	4.803	1.339	1.142	13	5.512	12	M8	8.189	12	M8
NGSBM 245 143 34	MTO-143	STO-143	9.803	5.63	1.339	1.142	15	6.496	12	0.433	8.937	12	0.433
NGSBM 245 143 34T	MTO-143T	STO-143T	9.803	5.63	1.339	1.142	15	6.496	12	M10	8.937	12	M10
NGSBM 300 145 50	MTO-145	STO-145	11.811	5.709	1.968	1.732	37	6.89	16	0.565	10.63	16	0.565
NGSBM 300 145 50T	MTO-145T	STO-145T	11.811	5.709	1.968	1.732	37	6.89	16	5/8-11	10.63	16	5/8-11
NGSBM 312 145 50X	MTO-145X	STO-145X	12.286	5.709	1.968	1.732	41	6.89	16	0.594	10.63	16	0.594
NGSBM 310 170 46	MTO-170	STO-170	12.205	6.693	1.811	1.614	33	7.874	12	0.512	11.024	12	0.512
NGSBM 310 170 46T	MTO-170T	STO-170T	12.205	6.693	1.811	1.614	33	7.874	12	M12	11.024	12	M12
NGSBM 365 210 40	MTO-210	STO-210	14.37	8.268	1.575	1.496	38	9.449	20	0.562	13.19	16	0.562
NGSBM 365 210 40T	MTO-210T	STO-210T	14.37	8.268	1.575	1.496	38	9.449	20	5/8-11	13.19	16	5/8-11
NGSBM 373 210 50T	MTO-210X	STO-210X	14.686	8.268	1.968	1.732	48	11.614	20	0.594	13.19	16	0.594
NGSBM 420 265 50	MTO-265	STO-265	16.535	10.433	1.968	1.732	54	11.614	24	0.562	15.354	18	0.562
NGSBM 420 265 50T	MTO-265T	STO-265T	16.535	10.433	1.968	1.732	54	11.614	24	5/8-11	15.354	18	5/8-11
NGSBM 434 265 50X	MTO-265X	STO-265X	17.086	10.433	1.968	1.732	61	11.614	24	0.594	15.354	18	0.594
NGSBM 520 324 52T	MTO-324T	STO-324T	20.486	12.77	2.062	2.022	105	14.375	20	5/8-11	18.875	20	5/8-11
NGSBM 520 324 52X	MTO-324X	STO-324X	20.486	12.77	2.375	2.063	105	14.375	20	0.688	18.875	20	0.688

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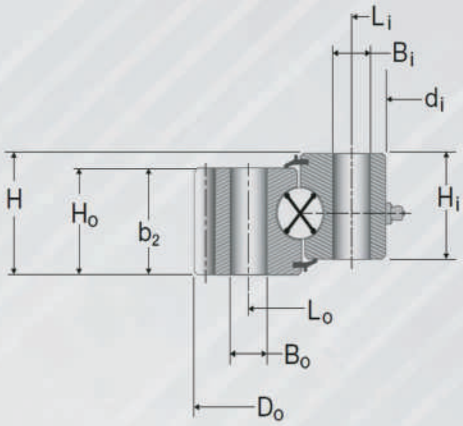
External Gear Slewing Ring



Unit: inch

UIPI Part No.	Kaydon	Silverthin	Overall Dimension					Teeth	Gear Dta a=20°		Mounting Holes Inner Ring			Mounting Holes Outer Ring		
			Do	Di	H	Hi/Ho	weight	Form	Pd	Z	Li	ni	Bi	Lo	no	Bo
EGSBM 312 145 50	MTE-145	STE-145	12.286	5.709	1.968	1.732	38	FS	5/7	60	6.890	16	0.562	10.630	16	0.562
EGSBM 312 145 50T	MTE-145T	STE-145T	12.286	5.709	1.968	1.732	38	FS	5/7	60	6.890	16	5/8-11	10.630	16	5/8-11
EGSBM 312 145 50X	MTE-145X	STE-145X	12.286	5.709	1.968	1.732	38	FS	5/7	60	6.890	16	.594	10.630	16	.594
EGSBM 373 210 40	MTE-210	STE-210	14.686	8.268	1.575	1.496	38	FS	5/7	72	9.449	20	.562	13.190	16	.562
EGSBM 373 210 40T	MTE-210T	STE-210T	14.686	8.268	1.575	1.496	38	FS	5/7	72	9.449	20	5/8-11	13.190	16	5/8-11
EGSBM 373 210 40X	MTE-210X	STE-210X	14.686	8.268	1.968	1.732	44	FS	5/7	72	9.449	20	0.594	13.190	16	.594
EGSBM 434 265 50	MTE-265	STE-265	17.086	10.433	1.968	1.732	57	FS	5/7	84	11.614	24	0.562	15.354	18	.562
EGSBM 434 265 50T	MTE-265T	STE-265T	17.086	10.433	1.968	1.732	57	FS	5/7	84	11.614	24	5/8-11	15.354	18	5/8-11
EGSBM 434 265 50X	MTE-265X	STE-265X	17.086	10.433	1.968	1.732	57	FS	5/7	84	11.614	24	0.594	15.354	18	.594
EGSBM 520 324 52T	MTE-324T	STE-324T	20.486	12.750	2.062	2.022	105	FS	5/7	101	14.375	20	5/8-11	18.875	20	5/8-11
EGSBM 520 324 52X	MTE-324X	STE-324X	20.486	12.770	2.375	2.063	105	FS	5/7	101	14.375	20	0.688	18.875	20	.688
EGSBM 626 413 60	MTE-415	STE-415	24.650	16.250	2.375	2.063	132	SD	4	97	17.750	20	0.813	22.250	16	.813
EGSBM 626 413 60T	MTE-415T	STE-415T	24.650	16.250	2.375	2.063	132	SD	4	97	17.750	20	3/4-10	22.250	16	3/4-10
EGSBM 683 470 60	MTE-470	STE-470	26.900	18.500	2.375	2.063	147	SD	4	106	20.000	24	0.813	24.500	18	.813
EGSBM 683 470 60T	MTE-470T	STE-470T	26.900	18.500	2.375	2.063	147	SD	4	106	20.000	24	3/4-10	24.500	18	3/4-10
EGSBM 753 540 60	MTE-540	STE-540	29.650	21.250	2.375	2.063	163	SD	4	117	22.750	28	0.813	27.250	24	.813
EGSBM 753 540 60T	MTE-540T	STE-540T	29.650	21.250	2.375	2.063	163	SD	4	117	22.750	28	3/4-10	27.250	24	3/4-10
EGSBM 852 587 73	MTE-590	STE-590	33.534	23.125	2.875	2.563	283	SD	4	99	24.875	24	0.938	30.625	18	.938
EGSBM 852 587 73T	MTE-590T	STE-590T	33.534	23.125	2.875	2.563	283	SD	4	99	24.875	24	7/8-9	30.625	18	7/8-9
EGSBM 970 705 73	MTE-705	STE-705	38.201	27.750	2.875	2.563	325	SD	4	113	29.500	28	0.938	35.250	24	.938
EGSBM 970 705 73T	MTE-705T	STE-705T	38.201	27.750	2.875	2.563	325	SD	4	113	29.500	28	7/8-9	35.250	24	7/8-9
EGSBM 1063 730 83	MTE-730	STE-730	41.850	28.750	3.250	2.880	491	SD	4	103	31.000	24	1.063	38.000	20	1.063
EGSBM 1063 730 83T	MTE-730T	STE-730T	41.850	28.750	3.250	2.880	491	SD	4	103	31.000	24	1-8	38.000	20	1-8
EGSBM 1205 870 108	MTE-870	STE-870	47.444	34.250	4.250	3.875	771	SD	4	117	36.250	28	1.188	43.875	24	1.188
EGSBM 1205 870 108T	MTE-870T	STE-870T	47.444	34.250	4.250	3.875	771	SD	4	117	36.250	28	1 1/8-7	43.875	24	1 1/8-7

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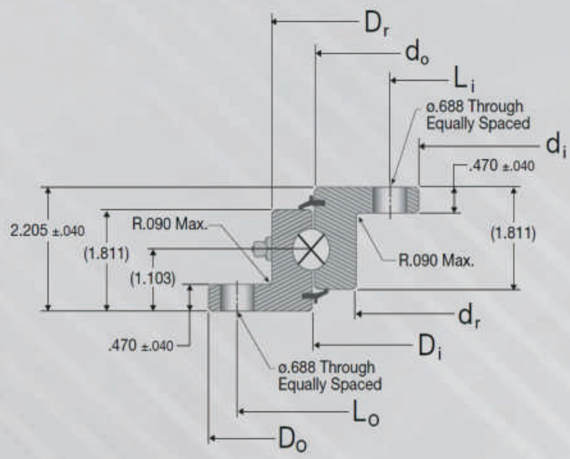
Gearless Flanged Slewing Ring

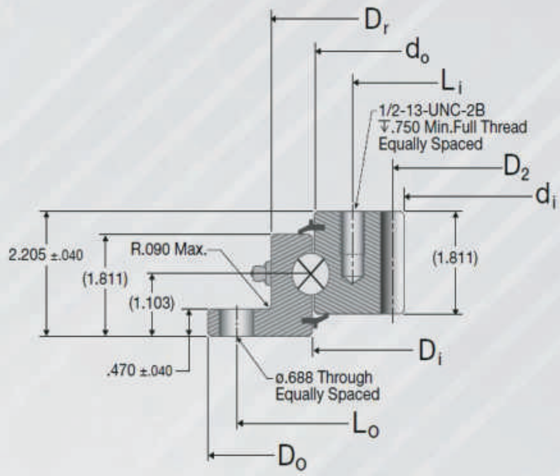


Unit: inch

UIPI Part No.	Kaydon	Rotek	Silverthin	Overall Dimension							Gear Dta		Mounting Holes			
											Stub a=20°		Inner Ring		Outer Ring	
				Do	Di	Dr	di	dr	do	weight	Pd	Z	Li	ni	Lo	no
FNGSBMF 518 412 56	RK6-16P1Z	L6-16P9Z	SK6-16PZ	20.390	16.220	17.870	11.970	14.490	16.142	58			13.13	12	19.25	8
FNGSBMF 648 542 56	RK6-22P1Z	L6-22P9Z	SK6-22PZ	25.510	21.340	22.990	17.090	19.610	21.260	76			18.13	15	24.38	12
FNGSBMF 748 642 56	RK6-25P1Z	L6-25P9Z	SK6-25PZ	29.450	25.280	26.930	21.030	23.550	25.200	89			22.13	18	28.38	12
FNGSBMF 848 742 56	RK6-29P1Z	L6-29P9Z	SK6-29PZ	33.390	29.212	30.870	24.970	27.490	29.134	104			26.13	18	32.25	15
FNGSBMF 948 842 56	RK6-33P1Z	L6-33P9Z	SK6-33PZ	37.320	33.150	34.800	28.900	31.420	33.070	118			30	18	36.25	18
FNGSBMF1048 942 56	RK6-37P1Z	L6-37P9Z	SK6-37PZ	41.260	37.090	38.740	32.840	35.360	37.010	132			34	20	40.13	18
FNGSBMF 1198 1092 56	RK6-43P1Z	L6-43P9Z	SK6-43PZ	47.170	43.000	44.650	38.750	41.270	42.913	153			39.88	24	46	18

Toll free: 1-800-290-6979
Fax: 1-772-365-2221
E-mail: sales@ui-pi.com

Internal Gear Flanged Slewing Ring



Unit: inch

UIPI Part No.	Kaydon	Rotek	Silverthin	Overall Dimension							Gear Dta		Mounting Holes			
											Stub a=20°		Inner Ring		Outer Ring	
				Do	Di	Dr	di	dr	do	weight	Pd	Z	Li	ni	Lo	no
FIGSBM 518 415 56	RK6-16N1Z	L6-16N9Z	SK6-16NZ	20.390	16.339	17.870	12.850		16.260	65	4	53	14.88	12	19.25	8
FIGSBM 648 542 56	RK6-22N1Z	L6-22N9Z	SK6-22NZ	25.510	21.340	22.990	17.600		21.260	90	4	72	19.63	15	24.38	10
FIGSBM 748 642 56	RK6-25N1Z	L6-25N9Z	SK6-25NZ	29.450	25.280	26.930	21.600		25.200	106	4	88	23.63	18	28.38	12
FIGSBM 848 742 56	RK6-29N1Z	L6-29N9Z	SK6-29NZ	33.390	29.213	30.870	25.600		29.134	121	4	104	27.63	18	32.25	15
FIGSBM 948 842 56	RK6-33N1Z	L6-33N9Z	SK6-33NZ	37.320	33.150	34.800	29.133		33.070	148	3	89	31.5	18	36.25	18
FIGSBM 1048 942 56	RK6-37N1Z	L6-37N9Z	SK6-37NZ	41.260	37.090	38.740	33.133		37.007	165	3	101	35.5	20	40.13	18
FIGSBM 1198 1092 56	RK6-43N1Z	L6-43N9Z	SK6-43NZ	47.170	43.071	44.650	39.133		42.992	188	3	119	41.5	24	46	18

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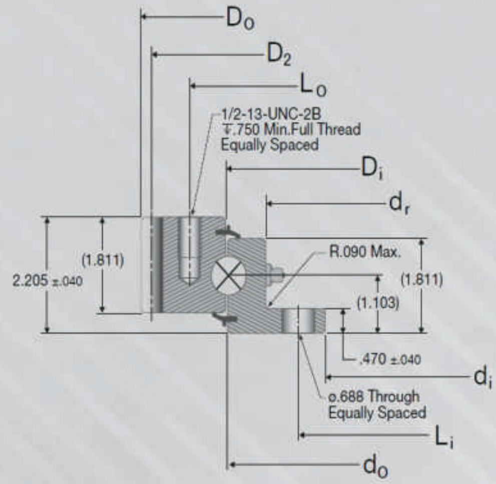
External Gear Flanged Slewing Ring



Unit: inch

UIPI Part No.	Kaydon	Rotek	Silverthin	Overall Dimension							Gear Dta		Mounting Holes			
											Stub a=20°		Inner Ring		Outer Ring	
				Do	Di	Dr	di	dr	do	weight	Pd	Z	Li	ni	Lo	no
EGSMBF 505 412 56	RK6-16E1Z	L6-16E9Z	SK6-16EZ	19.900	16.220		11.970	14.490	16.142	72	4	78	13.13	12	18	8
EGSMBF 639 542 56	RK6-22E1Z	L6-22E9Z	SK6-22EZ	25.150	21.340		17.090	19.610	21.260	96	4	99	18.13	15	23.25	12
EGSMBF 740 642 56	RK6-25E1Z	L6-25E9Z	SK6-25EZ	29.150	25.280		21.030	23.550	25.200	115	4	115	22.13	18	27.25	15
EGSMBF 836 742 56	RK6-29E1Z	L6-29E9Z	SK6-29EZ	32.900	29.220		24.970	27.490	29.134	1128	4	130	26.13	18	31	18
EGSMBF 945 842 56	RK6-33E1Z	L6-33E9Z	SK6-33EZ	37.200	33.150		28.900	31.420	33.070	152	3	110	30	18	35	18
EGSMBF 1046 942 56	RK6-37E1Z	L6-37E9Z	SK6-37EZ	41.200	37.090		32.840	35.360	37.008	172	3	122	34	20	38.879	18
EGSMBF 1190 1092 56	RK6-43E1Z	L6-43E9Z	SK6-43EZ	46.867	42.992		38.750	41.270	42.193	189	3	139	39.88	24	44.75	20

Toll free: 1-800-290-6979
Fax: 1-772-365-2221
E-mail: sales@ui-pi.com

Bearing Application Data Sheet

Please answer the questions on this form as completely as possible, include a drawing (or sketch) of the application if available. Be sure to show all parts and information relevant to the application. The data you supply is the basis for our recommendation.

To:
Universal Industrial Products Inc. Date:______________________
900E. Hamilton Ave. Ste. 100
Campbell, CA 95008

From:
Name: ______________________________ Title:________________________________
Company: ____________________________ Tel:_________________________________
Address:_______________________________
Application:____

❑ Experimental ❑ Prototype ❑ Production ❑ Spec. Machine ❑ Other

❑ Original Equipment Mfg. ❑ Replacement ❑ Own Use ❑ Resale

Annual Usage: Quotation Quantity:

Loads:

Condition	Loads			RPM		Percent of Time
	Axial	Radial	Moment	Max.	Mean	
1						
2						
3						
4						
5						

Vibration or shock?__________________________ Describe ___________________________

Factor of Safety of ______________________________ (is) (is not) included in loads above.

Life Hours (Min.) ________________ Hours (Avg.) ______________ Other ______________

Temperature
Normal Operating ______________°F Minimum _____________ °F Maximum ______________°F

Lubrication
Proposed lubricant ________________________ and method ________________________

Bearing
Preferred Size: Bore ______________ Outside Dia. ______________ Width ___________

Min. Bore __________Max. Outside Dia. __________Max. Width ____________

Preferred Type: ____

Bearing Axis in (Vertical) (Horizontal) position with (Outer) (Inner) race rotation relative t o load.

Gear Internal or External Tooth Form PD DP Face Width

Special requirements
(Materials, Torque, Oscillating Motion, Accuracy Seals, Protective Coatings, etc.) ______________
____
____

Date required ____

Comments: ____

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