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SLEWING RINGS / BEARINGS

PRODUCT REFERENCE GUIDE

Slewing Bearings

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- Material
- Quality Control Process
- Applications
- Products Information

YRT Rotary Table Bearings

- Features
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- Lubrication
- Operating Temperature
- Design and Safety Guidelines
- Limiting Speeds
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Cross Roller Bearings

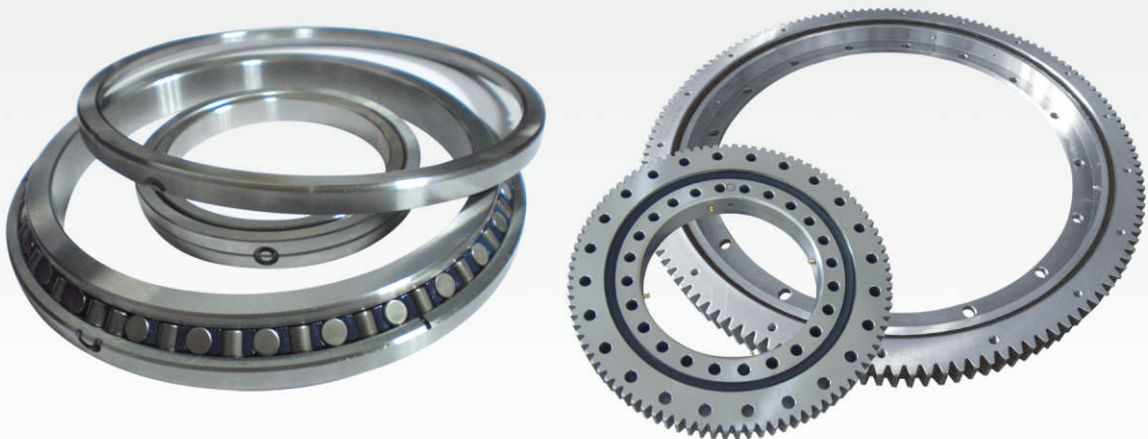
- Features
- Sealing
- Lubrication
- Operating Temperature
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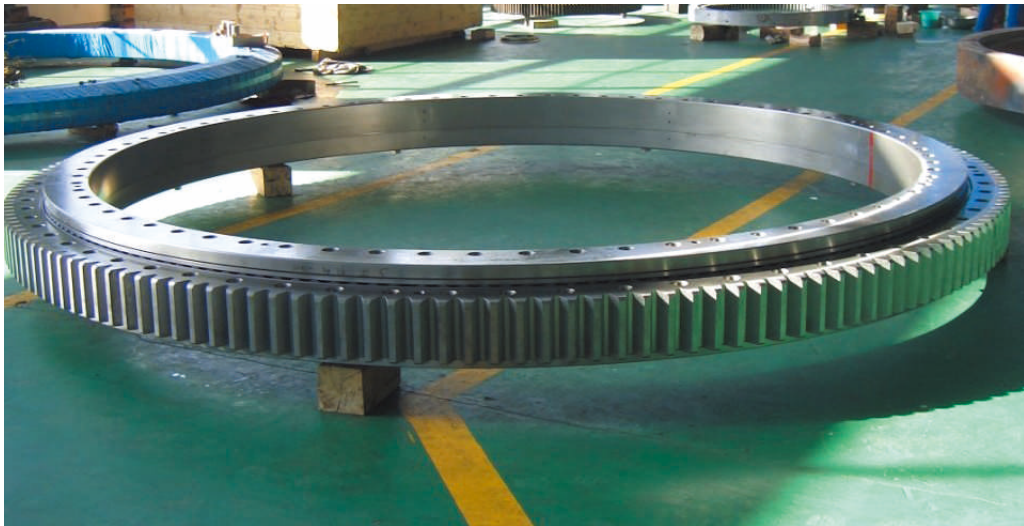
Cross Taper Roller Bearings

- Features
- Application
- Products Information

Slewing Rings

Slewing bearings consist of an internal and external ring and with an integrated raceway system and optional internal or external teeth. In Slewing Rings, the rolling elements can accommodate axial, radial & tilting moment loads acting either singly or in combination and in any direction. These bearings can be used in many applications, like access platforms, bucket wheel excavators, cranes of all types, offshore applications and so on.





➤ Features:

- Available range from 60 mm to 5000 mm in outer diameter
- Consist of an inner ring, an outer ring and rolling elements—balls or cylindrical rollers—that are separated by polyamide
- Can accommodate axial, radial & tilting moment loads acting either singly or in combination and in any direction.
- Can perform both slewing (oscillating) movements as well as rotational movements.
- Can be equipped with attachment bolts through the holes in rings
- Usually can manufacture ungeared, internal gear and external gear slewing bearings
- Can manufacture slewing rings equivalents to those famous brands in this field.

Slewing Rings consist of:

- Single-Row Four-point Contact Ball Slewing Bearings
- Double-Row Ball Slewing Bearings
- Single-Row Cross Roller Slewing Bearings
- Three-Row Roller Slewing Bearings

➤ Material:

Material of ring and rolling element

As a rule, rolling element of Slewing Rings adopt full hardening carbon chromium bearing steel GCr15 or GCr15SiMn to manufacture; bearing rings adopt surface quenched steel 42CrMo or 50Mn. If any special requirements for main machine, may adopt 42CrMo4, 45# and other grade surface quench steel.

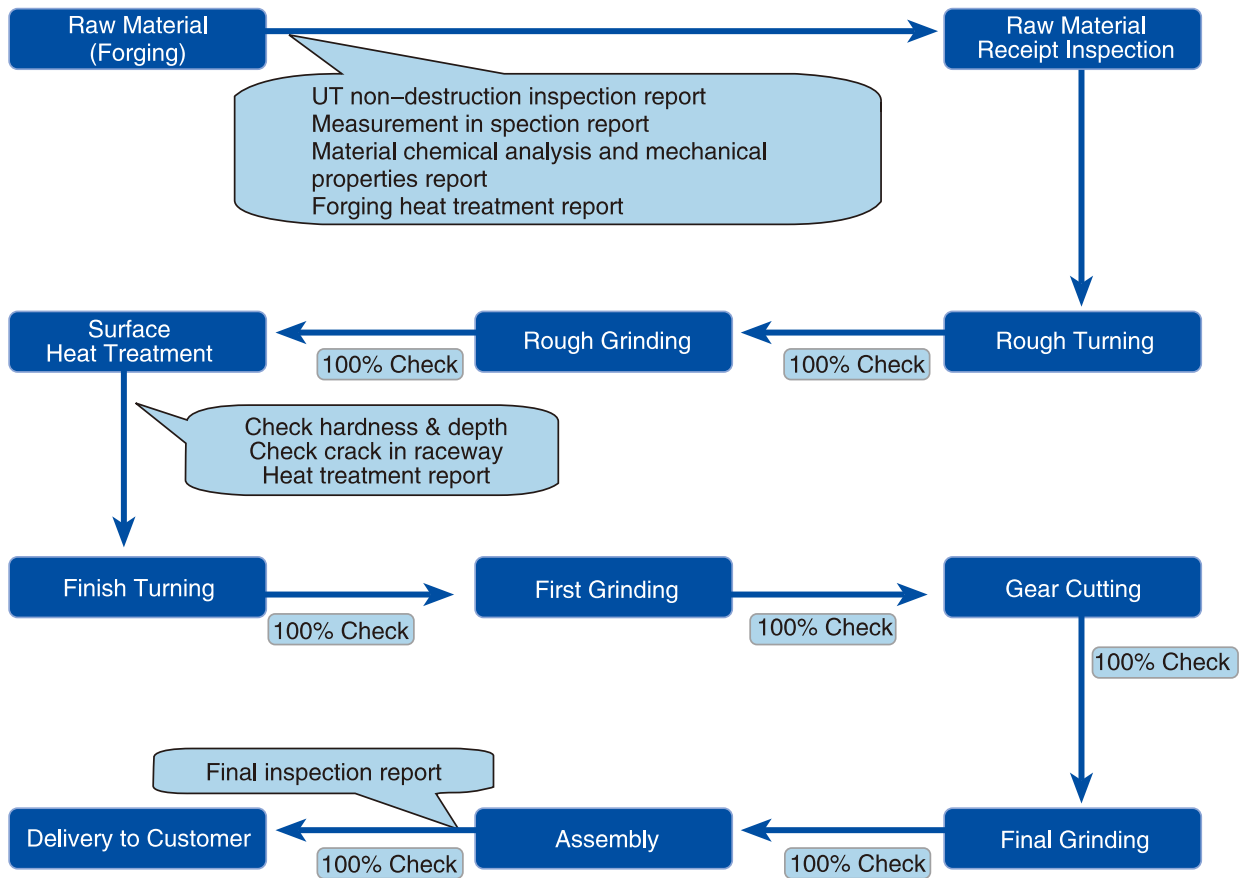
Cage Material

The cage forms of Slewing Rings include integral type cage, sectional type cage and spacing block type cage etc. Among them, integral type cage or sectional type cage adopt brass, carbon steel, cast aluminum and nylon. Spacing block type cage adopt polyamide resin, nylon, cast aluminum and aluminum bronze.

Sealing ring material

The sealing ring material of Slewing Rings adopt oil-resistant NBR, for higher temperature range occasions, may adopt fluorine rubber.

➤ Quality Control Process



➤ Applications

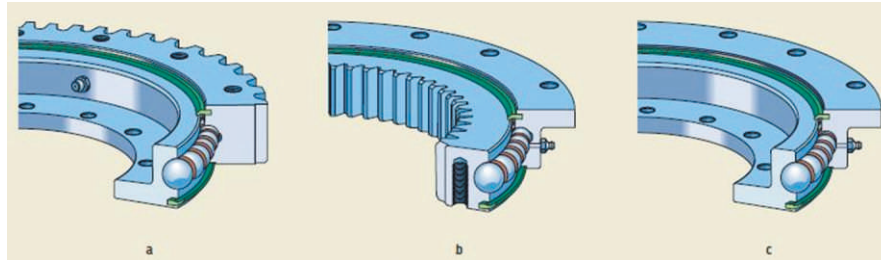
- access platforms
- bucket wheel excavators
- conveyor booms
- cranes of all types
- small, medium and large excavators
- indexing tables
- ladle turrets
- offshore applications
- robots
- railway bogies
- rotary platforms
- stackers
- solar mirrors
- tunnel boring machines
- win turbines

Slewing Rings

Single-Row Four-point Contact Ball Slewing Bearings

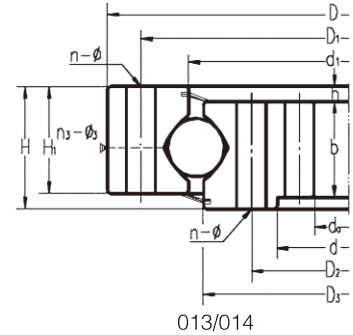
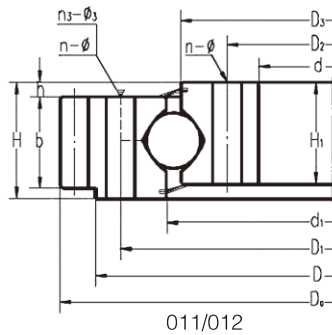
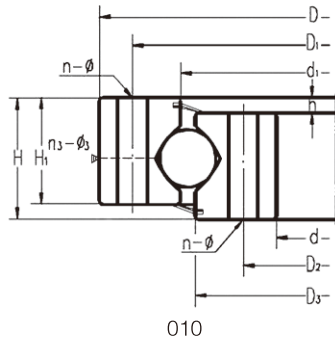
Features:

- A four-point Contact Ball Slewing Bearing is composed of 2 seat-rings, compact in structure and light. The balls contact with the circular race at four points, can accommodate axial, radial & tilting moment loads simultaneously. So it enjoys strong dynamic loading capacity.
- These bearings can be manufactured as with an external gear (a), with an internal gear (b), ungeared(c) as below.
- Outer Diameters: range from 602 mm to 4726 mm
- These slewing bearings are mainly used for slewing conveyers, welding arm and positioner, medium duty cranes, excavators and other engineer machines



Technical Parameters:

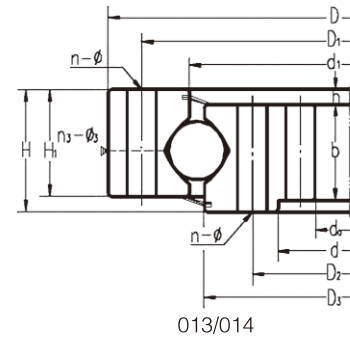
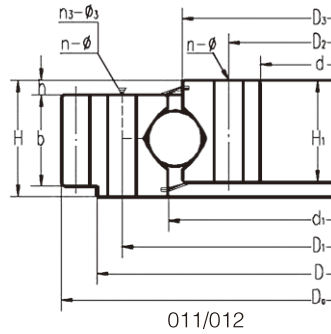
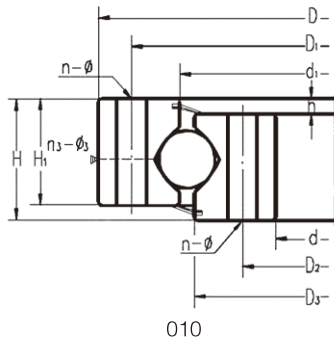
Designations			Boundary Dimensions			Mounting Size			
Ungeared	External Gear	Internal Gear	D	d	H	D ₁	D ₂	n	φ
Type			mm			mm			mm
010.30.500.12	011.30.500.**	013.30.500.**	602	398	80	566	434	20	18
	012.30.500.**	014.30.500.**	602	398	80	566	434	20	18
010.30.560.**	011.30.560.**	013.30.560.**	662	458	80	626	494	20	18
	012.30.560.**	014.30.560.12	662	458	80	626	494	20	18
010.30.630.**	011.30.630.**	013.30.630.**	732	528	80	696	564	24	18
	012.30.630.**	014.30.630.**	732	528	80	696	564	24	18
010.30.710.**	011.30.710.**	013.30.710.**	812	608	80	776	644	24	18
	012.30.710.**	014.30.710.**	812	608	80	776	644	24	18
010.30.955.11			1098	893	90	1060	845	48/47	22
010.40.800.**	011.40.800.**	013.40.800.12	922	678	100	878	722	30	22
	012.40.800.**	014.40.800.**	922	678	100	878	722	30	22
010.40.900.**	011.40.900.**	013.40.900.**	1022	778	100	978	822	30	22
	012.40.900.**	014.40.900.**	1022	778	100	978	822	30	22
010.40.1000.**	011.40.1000.12	013.40.1000.**	1122	878	100	1078	922	36	22
	012.40.1000.**	014.40.1000.**	1122	878	100	1078	922	36	22
010.40.1120.**	011.40.1120.**	013.40.1120.**	1242	998	100	1198	1042	36	22
	012.40.1120.**	014.40.1120.**	1242	998	100	1198	1042	36	22
010.45.1250.**	011.45.1250.**	013.45.1250.**	1390	1110	110	1337	1163	40	26
	012.45.1250.**	014.45.1250.**	1390	1110	110	1337	1163	40	26
010.45.1400.**	011.45.1400.**	013.45.1400.**	1540	1260	110	1487	1313	40	26
	012.45.1400.**	014.45.1400.**	1540	1260	110	1487	1313	40	26
010.45.1600.**	011.45.1600.**	013.45.1600.**	1740	1460	110	1687	1513	45	26
	012.45.1600.**	014.45.1600.**	1740	1460	110	1687	1513	45	26
010.45.1800.**	011.45.1800.**	013.45.1800.**	1940	1660	110	1887	1713	45	26
	012.45.1800.**	014.45.1800.**	1940	1660	110	1887	1713	45	26



Structural Dimensions						Gear Parameters							Basic Load Rating	Mass
D3	d1	H1	h	n3	$\phi 3$	m	Da	Z	da	Z	b	x	Coa	
mm							mm		mm		mm		KN	Kg
498.5	501.5	70	10	4	M10x1	5	630	123	365	74	60	+0.5	1290	85
498.5	501.5	70	10	4	M10x1	6	630	102	366	62	60	+0.5	1290	85
558.5	561.5	70	10	4	M10x1	5	690	135	425	86	60	+0.5	1440	95
558.5	561.5	70	10	4	M10x1	6	690	112	426.5	72	60	+0.5	1440	95
628.5	631.5	70	10	4	M10x1	6	774	126	492	83	60	+0.5	1870	110
628.5	631.5	70	10	4	M10x1	8	776	94	488	62	60	+0.5	1870	110
708.5	711.5	70	10	4	M10x1	6	852	139	570	86	60	+0.5	2120	120
708.5	711.5	70	10	4	M10x1	8	856	104	568	72	60	+0.5	2120	120
956.5	953.5	71	19	6	M10x1								2700	126
798.5	801.5	90	10	6	M10x1	8	968	118	632	80	80	+0.5	3130	220
798.5	801.5	90	10	6	M10x1	10	970	94	630	64	80	+0.5	3130	220
898.5	901.5	90	10	6	M10x1	8	1064	130	736	93	80	+0.5	3550	240
898.5	901.5	90	10	6	M10x1	10	1070	104	730	74	80	+0.5	3550	240
998.5	1001.5	90	10	6	M10x1	10	1190	116	820	83	80	+0.5	3940	270
998.5	1001.5	90	10	6	M10x1	12	1188	96	816	69	80	+0.5	3940	270
1118	1122	90	10	6	M10x1	10	1300	127	940	95	80	+0.5	4430	300
1118	1122	90	10	6	M10x1	12	1308	106	936	79	80	+0.5	4430	300
1248	1252	100	10	6	M10x1	12	1452	118	1044	88	90	+0.5	5540	420
1248	1252	100	10	6	M10x1	14	1456	101	1036	75	90	+0.5	5540	420
1398	1402	100	10	6	M10x1	12	1608	131	1188	100	90	+0.5	6170	480
1398	1402	100	10	6	M10x1	14	1610	112	1190	86	90	+0.5	6170	480
1598	1602	100	10	8	M10x1	14	1820	127	1386	100	90	+0.5	7020	550
1598	1602	100	10	8	M10x1	16	1824	111	1376	87	90	+0.5	7020	550
1798	1802	100	10	8	M10x1	14	2016	141	1568	113	90	+0.5	7930	610
1798	1802	100	10	8	M10x1	16	2016	123	1568	99	90	+0.5	7930	610

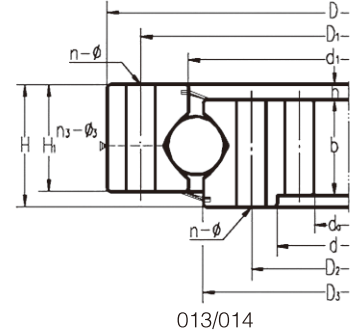
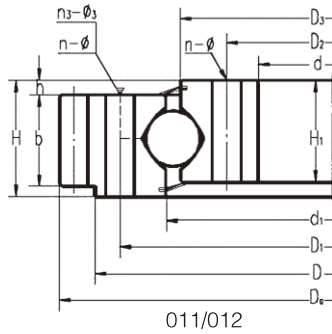
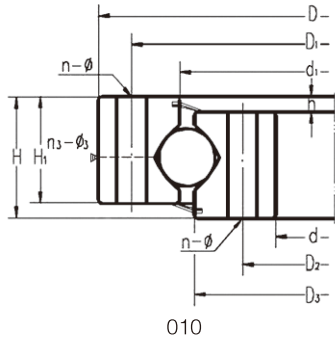
Slewing Rings

Single-Row Four-point Contact Ball Slewing Bearings



Technical Parameters:

Designations			Boundary Dimensions			Mounting Size			
Ungeared	External Gear	Internal Gear	D	d	H	D ₁	D ₂	n	φ
Type			mm			mm			mm
010.60.2000.**	011.60.2000.**	013.60.2000.**	2178	1825	144	2110	1891	48	33
	012.60.2000.**	014.60.2000.**	2178	1825	144	2110	1891	48	33
010.60.2240.**	011.60.2240.**	013.60.2240.**	2418	2065	144	2350	2131	48	33
	012.60.2240.**	014.60.2240.**	2418	2065	144	2350	2131	48	33
010.60.2500.**	011.60.2500.**	013.60.2500.**	2678	2325	144	2610	2391	56	33
	012.60.2500.**	014.60.2500.**	2678	2325	144	2610	2391	56	33
010.60.2800.**	011.60.2800.**	013.60.2800.**	2978	2625	144	2910	2691	56	33
	012.60.2800.**	014.60.2800.**	2978	2625	144	2910	2691	56	33
010.75.3150.**	011.75.3150.**	013.75.3150.**	3376	2922	174	3286	3014	56	45
	012.75.3150.**	014.75.3150.**	3376	2922	174	3286	3014	56	45
010.75.3550.**	011.75.3550.**	013.75.3550.**	3776	3322	174	3686	3414	56	45
	012.75.3550.**	014.75.3550.**	3776	3322	174	3686	3414	56	45
010.75.4000.**	011.75.4000.**	013.75.4000.**	4226	3772	174	4136	3864	60	45
	012.75.4000.**	014.75.4000.**	4226	3772	174	4136	3864	60	45
010.75.4500.**	011.75.4500.**	013.75.4500.**	4726	4272	174	4636	4364	60	45
	012.75.4500.**	014.75.4500.**	4726	4272	174	4636	4364	60	45



Structural Dimensions						Gear Parameters							Basic Load Rating	Mass
D3	d1	H1	h	n3	φ3	m	Da	Z	da	Z	b	x	Coa	
mm							mm		mm		mm		KN	Kg
1998	2002	132	12	8	M10x1	16	2272	139	1728	109	120	+0.5	12100	1100
1998	2002	132	12	8	M10x1	18	2268	123	1728	97	120	+0.5	12100	1100
2237.5	2242.5	132	12	8	M10x1	16	2496	153	1984	125	120	+0.5	13500	1250
2237.5	2242.5	132	12	8	M10x1	18	2502	136	1980	111	120	+0.5	13500	1250
2497.5	2502.5	132	12	8	M10x1	18	2772	151	2232	125	120	+0.5	15000	1400
2497.5	2502.5	132	12	8	M10x1	20	2780	136	2220	112	120	+0.5	15000	1400
2797.5	2802.5	132	12	8	M10x1	18	3078	168	2520	141	120	+0.5	16800	1600
2797.5	2802.5	132	12	8	M10x1	20	3080	151	2520	127	120	+0.5	16800	1600
3147.5	3152.5	162	12	8	M10x1	20	3480	171	2820	142	150	+0.5	23800	2800
3147.5	3152.5	162	12	8	M10x1	22	3476	155	2816	129	150	+0.5	23800	2800
3547.5	3552.5	162	12	8	M10x1	20	3880	191	3220	162	150	+0.5	26900	3200
3547.5	3552.5	162	12	8	M10x1	22	3894	174	3212	147	150	+0.5	26900	3200
3997.5	4002.5	162	12	10	M10x1	22	4334	194	3652	167	150	+0.5	30200	3600
3997.5	4002.5	162	12	10	M10x1	25	4350	171	3650	147	150	+0.5	30200	3600
4497.5	4502.5	162	12	10	M10x1	22	4840	217	4158	190	150	+0.5	34100	4000
4497.5	4502.5	162	12	10	M10x1	25	4850	191	4150	167	150	+0.5	34100	4000

Slewing Rings

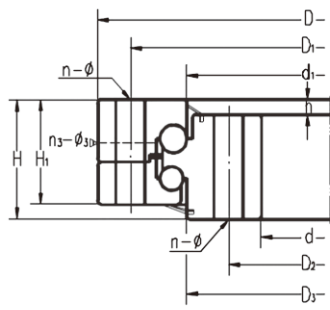
Double-Row Ball Slewing Bearings

Features:

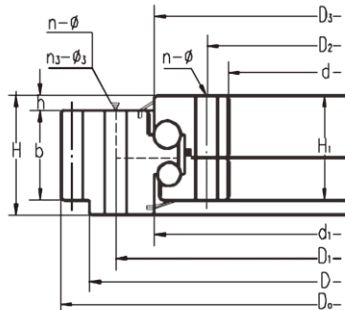
- Double–row four–point contact ball slewing bearings offer advantages for applications where the associated components may not be able to provide the level of stiffness or accuracy required by other types of slewing bearings.
- These bearings consist of two one–piece rings and two independent rows of balls. The ball set can be a full complement design or separated by a window–type steel cage or polyamide spacers. And the bearings are normally preloaded and fitted with integral lip seals.
- These bearings can be manufactured as with an external gear, with an internal gear, ungeared.
- Applications: especially used for loading & unloading machines of over–medium diameter, such as Tower Crane, Truck Crane and so on.
- Outer Diameters: range from 616mm to 4778 mm

Technical Parameters:

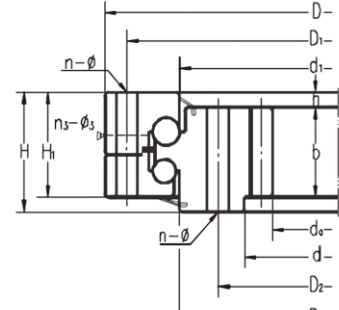
Designations			Boundary Dimensions			Mounting Size			
Ungeared	External Gear	Internal Gear	D	d	H	D ₁	D ₂	n	φ
Type			mm			mm			mm
020.25.500. **	021.25.500. **	023.25.500. **	616	384	106	580	420	20	18
	022.25.500. **	024.25.500. **	616	384	106	580	420	20	18
020.25.560. **	021.25.560. **	023.25.560. **	676	444	106	640	480	20	18
	022.25.560. **	024.25.560. **	676	444	106	640	480	20	18
020.25.630. **	021.25.630. **	023.25.630. **	746	514	106	710	550	24	18
	022.25.630. **	024.25.630. **	746	514	106	710	550	24	18
020.25.710. **	021.25.710. **	023.25.710. **	826	594	106	790	630	24	18
	022.25.710. **	024.25.710. **	826	594	106	790	630	24	18
020.30.800. **	021.30.800. **	023.30.800. **	942	658	124	898	702	30	22
	022.30.800. **	024.30.800. **	942	658	124	898	702	30	22
020.30.900. **	021.30.900. **	023.30.900. **	1042	758	124	998	802	30	22
	022.30.900. **	024.30.900. **	1042	758	124	998	802	30	22
020.30.1000. **	021.30.1000. **	023.30.1000. **	1142	858	124	1098	902	36	22
	022.30.1000. **	024.30.1000. **	1142	858	124	1098	902	36	22
020.30.1120. **	021.30.1120. **	023.30.1120. **	1262	978	124	1218	1022	36	22
	022.30.1120. **	024.30.1120. **	1262	978	124	1218	1022	36	22
020.40.1250. **	021.40.1250. **	023.40.1250. **	1426	1074	160	1374	1126	40	26
	022.40.1250. **	024.40.1250. **	1426	1074	160	1374	1126	40	26
020.40.1400. **	021.40.1400. **	023.40.1400. **	1576	1224	160	1524	1272	40	26
	022.40.1400. **	024.40.1400. **	1576	1224	160	1524	1272	40	26
020.40.1600. **	021.40.1600. **	023.40.1600. **	1776	1424	160	1724	1476	45	26
	022.40.1600. **	024.40.1600. **	1776	1424	160	1724	1476	45	26
020.40.1800. **	021.40.1800. **	023.40.1800. **	1976	1624	160	1924	1676	45	26
	022.40.1800. **	024.40.1800. **	1976	1624	160	1924	1676	45	26
020.50.2000. **	021.50.2000. **	023.50.2000. **	2215	1785	190	2149	1851	48	33



020



021/022

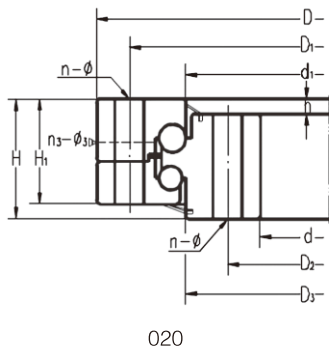


023/024

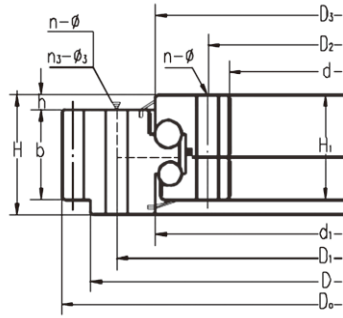
Structural Dimensions						Gear Parameters							Basic Load Rating	Mass
D3	d1	H1	h	n3	φ3	m	Da	Z	da	Z	b	x	Coa	
mm							mm		mm		mm		KN	Kg
523	517	96	26	4	M10x1	5	645	126	355	72	60	+0.5	1210	100
483	477	96	26	4	M10x1	6	648	105	348	59	60	+0.5	1210	100
583	577	96	26	4	M10x1	5	705	138	415	84	60	+0.5	1340	115
543	537	96	26	4	M10x1	6	708	115	408	69	60	+0.5	1340	115
653	647	96	26	4	M10x1	6	792	129	480	81	60	+0.5	1530	130
613	607	96	26	4	M10x1	8	792	96	472	60	60	+0.5	1530	130
733	727	96	26	4	M10x1	6	864	141	558	94	60	+0.5	1730	140
693	687	96	26	4	M10x1	8	864	105	552	70	60	+0.5	1730	140
828	822	114	29	6	M10x1	8	984	120	616	78	80	+0.5	2300	200
778	771	114	29	6	M10x1	10	990	96	610	62	80	+0.5	2300	200
928	922	114	29	6	M10x1	8	1088	133	712	90	80	+0.5	2580	250
878	871	114	29	6	M10x1	10	1090	106	710	72	80	+0.5	2580	250
1028	1022	114	29	6	M10x1	10	1200	117	810	82	80	+0.5	2860	300
978	971	114	29	6	M10x1	12	1200	97	792	67	80	+0.5	2860	300
1148	1142	114	29	6	M10x1	10	1320	129	920	93	80	+0.5	3210	340
1098	1091	114	29	6	M10x1	12	1320	107	912	77	80	+0.5	3210	340
1286	1282	150	39	6	M10x1	12	1500	122	1008	85	90	+0.5	4820	580
1218	1214	150	39	6	M10x1	14	1498	104	1008	73	90	+0.5	4820	580
1436	1432	150	39	6	M10x1	12	1644	134	1152	97	90	+0.5	5430	650
1368	1364	150	39	6	M10x1	14	1652	115	1148	83	90	+0.5	5430	650
1636	1632	150	39	8	M10x1	14	1848	129	1344	97	90	+0.5	6200	750
1568	1564	150	39	8	M10x1	16	1856	113	1344	85	90	+0.5	6200	750
1836	1832	150	39	8	M10x1	14	2058	144	1540	111	90	+0.5	6920	820
1768	1764	150	39	8	M10x1	16	2064	126	1536	97	90	+0.5	6920	820
2038	2032	178	47	8	M10x1	16	2304	141	1696	107	120	+0.5	9870	1150

Slewing Rings

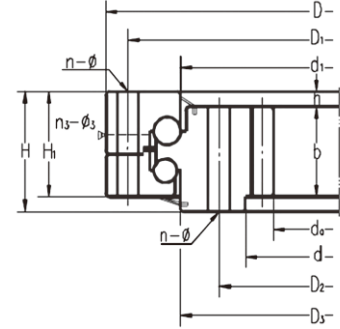
Double-Row Ball Slewing Bearings



020



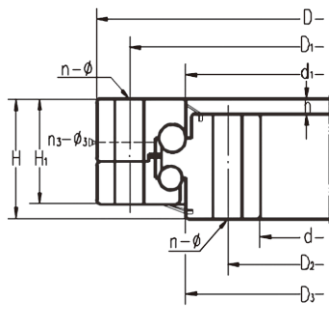
021/022



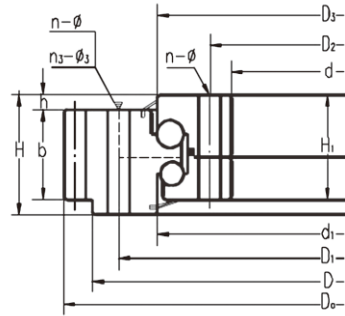
023/024

Technical Parameters:

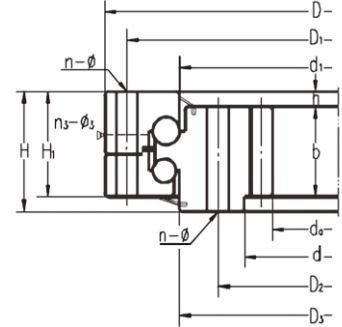
Designations			Boundary Dimensions			Mounting Size			
Ungearing	External Gear	Internal Gear	D	d	H	D ₁	D ₂	n	φ
Type			mm			mm			mm
	022.50.2000. **	024.50.2000. **	2215	1785	190	2149	1851	48	33
020.50.2240. **	021.50.2240. **	023.50.2240. **	2455	2025	190	2389	2091	48	33
	022.50.2240. **	024.50.2240. **	2455	2025	190	2389	2091	48	33
020.50.2500. **	021.50.2500. **	023.50.2500. **	2715	2285	190	2649	2351	56	33
	022.50.2500. **	024.50.2500. **	2715	2285	190	2649	2351	56	33
020.50.2800. **	021.50.2800. **	023.50.2800. **	3015	2585	190	2949	2651	56	33
	022.50.2800. **	024.50.2800. **	3015	2585	190	2949	2651	56	33
020.60.3150. **	021.60.3150. **	023.60.3150. **	3428	2872	226	3338	2962	56	45
	022.60.3150. **	024.60.3150. **	3428	2872	226	3338	2962	56	45
020.60.3550. **	021.60.3550. **	023.60.3550. **	3828	3272	226	3738	3362	56	45
	022.60.3550. **	024.60.3550. **	3828	3272	226	3738	3362	56	45
020.60.4000. **	021.60.4000. **	023.60.4000. **	4278	3722	226	4188	3812	60	45
	022.60.4000. **	024.60.4000. **	4278	3722	226	4188	3812	60	45
020.60.4500. **	021.60.4500. **	023.60.4500. **	4778	4222	226	4688	4312	60	45
	022.60.4500. **	024.60.4500. **	4778	4222	226	4688	4312	60	45



020



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023/024

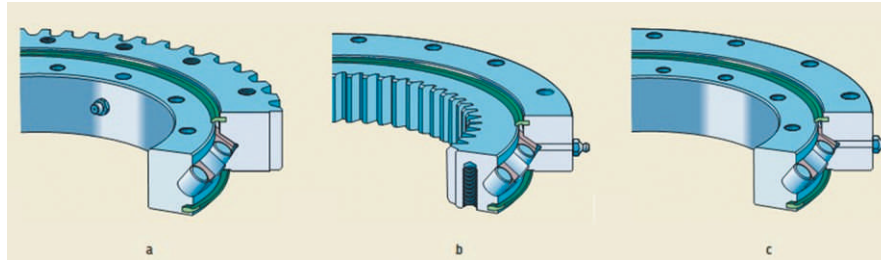
Structural Dimensions						Gear Parameters							Basic Load Rating	Mass
D3	d1	H1	h	n3	φ3	m	Da	Z	da	Z	b	x	Coa	
mm							mm		mm		mm		KN	Kg
1968	1962	178	47	8	M10x1	18	2304	125	1692	95	120	+0.5	9870	1150
2278	2272	178	47	8	M10x1	16	2544	156	1936	122	120	+0.5	11100	1500
2208	2202	178	47	8	M10x1	18	2556	139	1926	108	120	+0.5	11100	1500
2538	2532	178	47	8	M10x1	18	2804	153	2196	123	120	+0.5	11100	1500
2468	2462	178	47	8	M10x1	20	2820	138	2180	110	120	+0.5	11100	1500
2838	2832	178	47	8	M10x1	18	3114	170	2484	139	120	+0.5	13900	1900
2768	2762	178	47	8	M10x1	20	3120	153	2480	125	120	+0.5	13900	1900
3198	3192	214	56	8	M10x1	20	3540	174	2760	139	150	+0.5	18700	3300
3108	3102	214	56	8	M10x1	22	3542	158	2750	126	150	+0.5	18700	3300
3598	3592	214	56	8	M10x1	20	3940	194	3160	159	150	+0.5	21100	3700
3508	3502	214	56	8	M10x1	22	3938	176	3168	145	150	+0.5	21100	3700
4048	4042	214	56	10	M10x1	22	4400	197	3608	165	150	+0.5	23700	4200
3958	3952	214	56	10	M10x1	25	4400	173	3600	145	150	+0.5	23700	4200
4548	4542	214	56	10	M10x1	22	4884	219	4114	188	150	+0.5	26700	4700
4458	4452	214	56	10	M10x1	25	4900	193	4100	165	150	+0.5	26700	4700

Slewing Rings

Single-Row Cross Roller Slewing Bearings

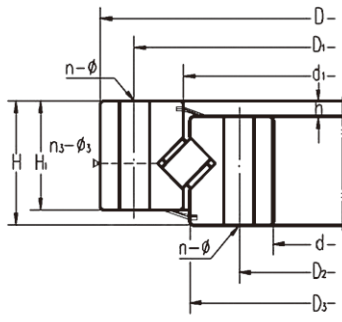
Features:

- Single-row cross cylindrical roller slewing bearings are simple in design, consisting of a one-piece inner and outer ring and cylindrical rollers separated by polyamide spacers and generally protected by integral seals. They can accommodate heavy radial loads and medium axial loads as well as tilting moments.
- These bearings can be manufactured as with an external gear (a), with an internal gear (b), ungeared(c) as below.
- Applications: mainly used for bucket wheel machine, medium duty cranes, port cargo handling machinery and other engineer machines.
- Outer Diameters: range from 602 mm to 4726 mm

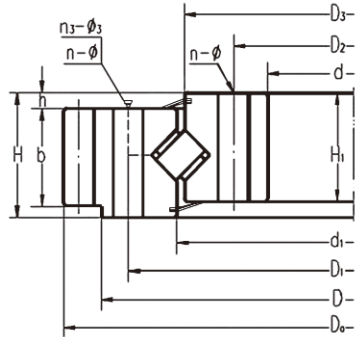


Technical Parameters:

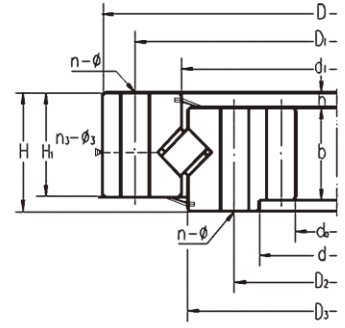
Designations			Boundary Dimensions			Mounting Size			
Ungeared	External Gear	Internal Gear	D	d	H	D ₁	D ₂	n	φ
Type			mm			mm			mm
110.25.500.**	111.25.500.**	113.25.500.**	602	398	75	566	434	20	18
	112.25.500.**	114.25.500.**	602	398	75	566	434	20	18
110.25.560.**	111.25.560.**	113.25.560.**	662	458	75	626	494	20	18
	112.25.560.**	114.25.560.**	662	458	75	626	494	20	18
110.25.630.**	111.25.630.**	113.25.630.**	732	528	75	696	564	24	18
	112.25.630.**	114.25.630.**	732	528	75	696	564	24	18
110.25.710.**	111.25.710.**	113.25.710.**	812	608	75	776	644	24	18
	112.25.710.**	114.25.710.**	812	608	75	776	644	24	18
110.28.800.**	111.28.800.**	113.28.800.**	922	678	82	878	722	30	22
	112.28.800.**	114.28.800.**	922	678	82	878	722	30	22
110.28.900.**	111.28.900.**	113.28.900.**	1022	778	82	978	822	30	22
	112.28.900.**	114.28.900.**	1022	778	82	978	822	30	22
110.28.1000.**	111.28.1000.**	113.28.1000.**	1122	878	82	1078	922	36	22
	112.28.1000.**	114.28.1000.**	1122	878	82	1078	922	36	22
110.28.1120.**	111.28.1120.**	113.28.1120.**	1242	988	82	1198	1042	36	22
	112.28.1120.**	114.28.1120.**	1242	988	82	1198	1042	36	22
110.32.1250.**	111.32.1250.**	113.32.1250.**	1390	1110	91	1337	1163	40	26
	112.32.1250.**	114.32.1250.**	1390	1110	91	1337	1163	40	26
110.32.1400.**	111.32.1400.**	113.32.1400.**	1540	1260	91	1487	1313	40	26
	112.32.1400.**	113.32.1400.**	1540	1260	91	1487	1313	40	26
110.32.1600.**	111.32.1600.**	113.32.1600.**	1740	1460	91	1687	1513	45	26
	112.32.1600.**	114.32.1600.**	1740	1460	91	1687	1513	45	26
110.32.1800.**	111.32.1800.**	113.32.1800.**	1940	1660	91	1887	1713	45	26
	112.32.1800.**	114.32.1800.**	1940	1660	91	1887	1713	45	26
110.40.2000.**	111.40.2000.**	113.40.2000.**	2178	1825	112	2110	1891	48	33



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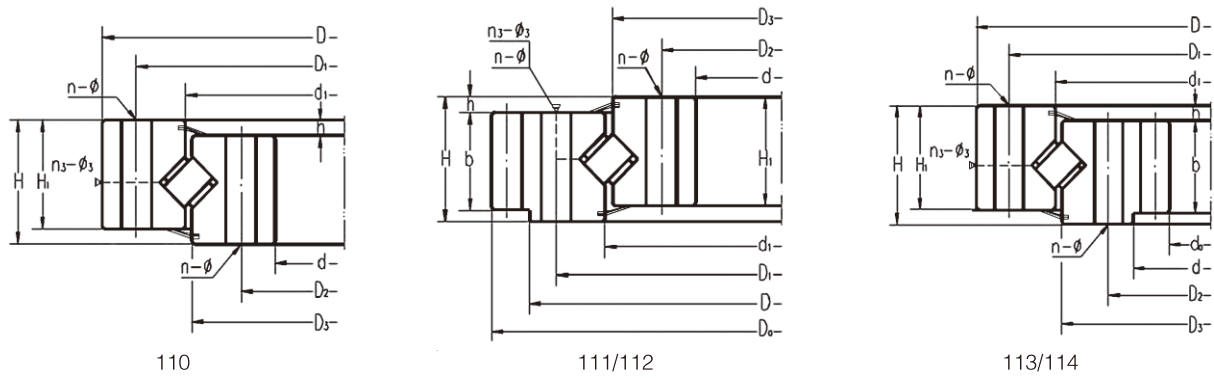


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Structural Dimensions						Gear Parameters							Basic Load Rating	Mass
D3	d1	H1	h	n3	$\phi 3$	m	Da	Z	da	Z	b	x	Coa	
mm							mm		mm		mm		KN	Kg
499	501	65	10	4	M10x1	5	630	123	365	74	60	+0.5	1040	80
499	501	65	10	4	M10x1	6	630	120	360	62	60	+0.5	1040	80
558.5	561.5	65	10	4	M10x1	5	690	135	425	86	60	+0.5	1160	90
558.5	561.5	65	10	4	M10x1	6	690	112	426	112	60	+0.5	1160	90
628.5	631.5	65	10	4	M10x1	6	774	126	492	83	60	+0.5	1300	100
628.5	631.5	65	10	4	M10x1	8	776	94	488	62	60	+0.5	1300	100
708.5	711.5	65	10	4	M10x1	6	852	139	570	96	60	+0.5	1490	110
708.5	711.5	65	10	4	M10x1	8	856	104	568	72	60	+0.5	1490	110
798.5	801.5	72	10	6	M10x1	8	968	118	632	80	65	+0.5	1850	170
798.5	801.5	72	10	6	M10x1	10	970	94	630	64	65	+0.5	1850	170
898.5	901.5	72	10	6	M10x1	8	1064	130	736	93	65	+0.5	2090	190
898.5	901.5	72	10	6	M10x1	10	1070	104	730	74	65	+0.5	2090	190
998.5	1001.5	72	10	6	M10x1	10	1190	116	820	83	65	+0.5	2330	210
998.5	1001.5	72	10	6	M10x1	12	1188	96	816	69	65	+0.5	2330	210
1118	1122	72	10	6	M10x1	10	1300	127	940	95	65	+0.5	2620	230
1118	1122	72	10	6	M10x1	12	1308	106	936	79	65	+0.5	2620	230
1248	1252	81	10	6	M10x1	12	1452	118	1044	88	75	+0.5	3210	350
1248	1252	81	10	6	M10x1	14	1456	101	1036	75	75	+0.5	3210	350
1398	1402	81	10	6	M10x1	12	1608	131	1188	100	75	+0.5	3580	400
1398	1402	81	10	6	M10x1	14	1610	112	1190	86	75	+0.5	3580	400
1598	1602	81	10	8	M10x1	14	1820	127	1386	100	75	+0.5	4120	440
1598	1602	81	10	8	M10x1	16	1824	111	1376	87	75	+0.5	4120	440
1798	1802	81	10	8	M10x1	14	2016	141	1568	113	75	+0.5	4600	500
1798	1802	81	10	8	M10x1	16	2016	123	1568	99	75	+0.5	4600	500
1998	2002	100	12	8	M10x1	16	2272	139	1728	109	90	+0.5	6860	900

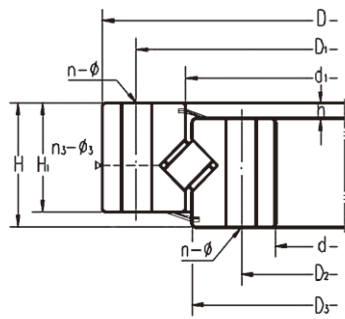
Slewing Rings

Single-Row Cross Roller Slewing Bearings

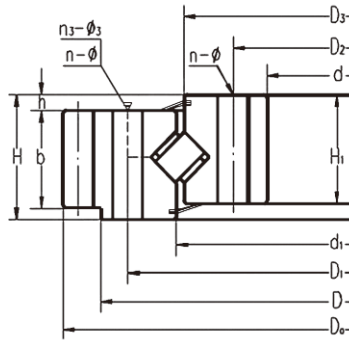


Technical Parameters:

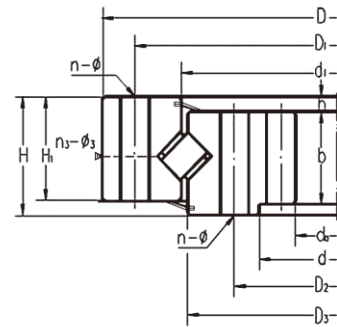
Designations			Boundary Dimensions			Mounting Size			
Ungeared	External Gear	Internal Gear	D	d	H	D ₁	D ₂	n	φ
Type			mm			mm			mm
	112.40.2000.**	114.40.2000.**	2178	1825	112	2110	1891	48	33
110.40.2240.**	111.40.2240.**	113.40.2240.**	2418	2065	112	2350	2131	48	33
	112.40.2240.**	114.40.2240.**	2418	2065	112	2350	2131	48	33
110.40.2500.**	111.40.2500.**	113.40.2500.**	2678	2325	112	2610	2391	56	33
	112.40.2500.**	114.40.2500.**	2678	2325	112	2610	2391	56	33
110.40.2800.**	111.40.2800.**	113.40.2800.**	2978	2625	112	2910	2691	56	33
	112.40.2800.**	114.40.2800.**	2978	2625	112	2910	2691	56	33
110.50.3150.**	111.50.3150.**	113.50.3150.**	3376	2922	134	3286	3014	56	45
	112.50.3150.**	114.50.3150.**	3376	2922	134	3286	3014	56	45
110.50.3550.**	111.50.3550.**	113.50.3550.**	3776	3322	134	3686	3414	56	45
	112.50.3550.**	114.50.3550.**	3776	3322	134	3686	3414	56	45
110.50.4000.**	111.50.4000.**	113.50.4000.**	4226	3772	134	4136	3864	60	45
	112.50.4000.**	114.50.4000.**	4226	3772	134	4136	3864	60	45
110.50.4500.**	111.50.4500.**	113.50.4500.**	4726	4272	134	4636	4364	60	45
	112.50.4500.**	114.50.4500.**	4726	4272	134	4636	4364	60	45



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Structural Dimensions						Gear Parameters							Basic Load Rating	Mass
D3	d1	H1	h	n3	$\phi 3$	m	Da	Z	da	Z	b	x	Coa	
mm							mm		mm		mm		KN	Kg
1998	2002	100	12	8	M10x1	18	2268	123	1728	97	90	+0.5	6860	900
2237.5	2242.5	100	12	8	M10x1	16	2496	153	1984	125	90	+0.5	7640	1000
2237.5	2242.5	100	12	8	M10x1	18	2502	136	1980	111	90	+0.5	7640	1000
2497.5	2502.5	100	12	8	M10x1	18	2772	151	2232	125	90	+0.5	7970	876
2497.5	2502.5	100	12	8	M10x1	20	2780	136	2220	112	90	+0.5	7970	876
2797.5	2802.5	100	12	8	M10x1	18	3078	168	2520	141	90	+0.5	9600	1250
2797.5	2802.5	100	12	8	M10x1	20	3080	151	2520	127	90	+0.5	9600	1250
3147.5	3152.5	122	12	8	M10x1	20	3480	171	2820	142	110	+0.5	13800	2150
3147.5	3152.5	122	12	8	M10x1	22	3476	155	2816	129	110	+0.5	13800	2150
3547.5	3552.5	122	12	8	M10x1	20	3880	191	3220	162	110	+0.5	15700	2470
3547.5	3552.5	122	12	8	M10x1	22	3894	174	3212	147	110	+0.5	15700	2470
3997.5	4002.5	122	12	10	M10x1	22	4334	194	3652	167	110	+0.5	17600	2800
3997.5	4002.5	122	12	10	M10x1	25	4350	171	3650	147	110	+0.5	17600	2800
4497.5	4502.5	122	12	10	M10x1	22	4940	217	4158	190	110	+0.5	19800	3100
4497.5	4502.5	122	12	10	M10x1	25	4850	191	4150	167	110	+0.5	19800	3100

Slewing Rings

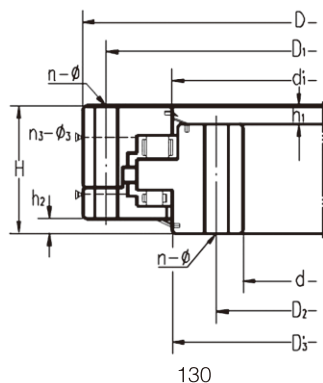
Three-Row Roller Slewing Bearings

Features:

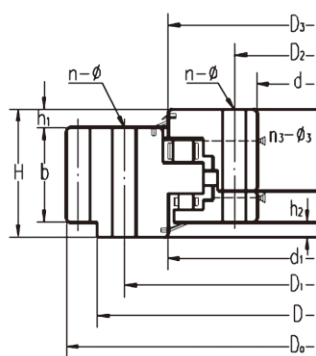
- Three-row roller slewing bearings are an excellent choice for heavily loaded applications. These bearings are combined cylindrical roller radial/thrust bearings, consisting of one one-piece and one two-piece ring as well as two roller sets to accommodate axial loads, and one roller set to accommodate radial loads. Polyamide cages separate the axially loaded rollers. The bearings are not preloaded and have integral lip seals. They provide the highest load ratings possible and can accommodate much heavy loads and high tilting moments.
- These bearings can be manufactured as with an external gear, with an internal gear, ungeared.
- Applications: mainly used for offshore applications, bucket wheel excavators, cranes of all types, and so on.
- Outer Diameters: range from 634mm to 4782 mm

Technical Parameters:

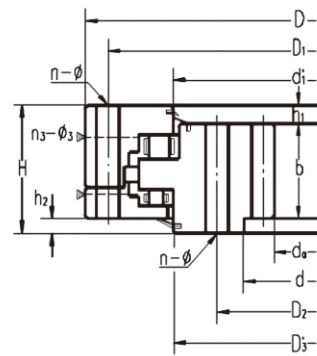
Designations			Boundary Dimensions			Mounting Size			
Ungeared	External Gear	Internal Gear	D	d	H	D ₁	D ₂	n	φ
Type			mm			mm			mm
130.25.500.**	131.25.500.**	133.25.500.**	634	366	148	598	402	24	18
	132.25.500.**	134.25.500.**	634	366	148	598	402	24	18
130.25.560.**	131.25.560.**	133.25.560.**	694	426	148	658	462	24	18
	132.25.560.**	134.25.560.**	694	426	148	658	462	24	18
130.25.630.**	131.25.630.**	133.25.630.**	764	496	148	728	532	28	18
	132.25.630.**	134.25.630.**	764	496	148	728	532	28	18
130.25.710.**	131.25.710.**	133.25.710.**	844	576	148	808	612	28	18
	132.25.710.**	134.25.710.**	844	576	148	808	612	28	18
130.32.800.**	131.32.800.**	133.32.800.**	964	636	182	920	680	36	22
	132.32.800.**	134.32.800.**	964	636	182	920	680	36	22
130.32.900.**	131.32.900.**	133.32.900.**	1064	736	182	1020	780	36	22
	132.32.900.**	134.32.900.**	1064	736	182	1020	780	36	22
130.32.1000.**	131.32.1000.**	133.32.1000.**	1164	836	182	1120	880	40	22
	132.32.1000.**	134.32.1000.**	1164	836	182	1120	880	40	22
130.32.1120.**	131.32.1120.**	133.32.1120.**	1284	956	182	1240	1000	40	22
	132.32.1120.**	134.32.1120.**	1284	956	182	1240	1000	40	22
130.40.1250.**	131.40.1250.**	133.40.1250.**	1445	1055	220	1393	1107	45	26
	132.40.1250.**	134.40.1250.**	1445	1055	220	1393	1107	45	26
130.40.1400.**	131.40.1400.**	133.40.1400.**	1595	1205	220	1543	1257	45	26
	132.40.1400.**	134.40.1400.**	1595	1205	220	1543	1257	45	26
130.40.1600.**	131.40.1600.**	133.40.1600.**	1795	1405	220	1743	1457	48	26
	132.40.1600.**	134.40.1600.**	1795	1405	220	1743	1457	48	26
130.40.1800.**	131.40.1800.**	133.40.1800.**	1995	1605	220	1943	1657	48	26
	132.40.1800.**	134.40.1800.**	1995	1605	220	1943	1657	48	26
130.45.2000.**	131.45.2000.**	133.45.2000.**	2221	1779	231	2155	1845	60	33



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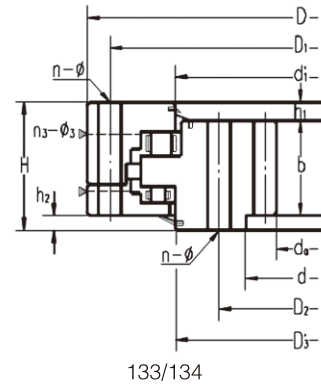
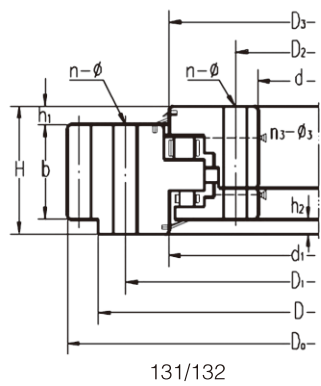
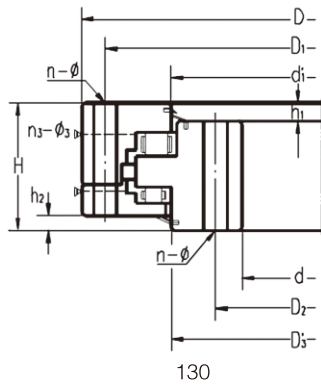


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Structural Dimensions						Gear Parameters							Basic Load Rating		Mass
D3	d1	h1	h2	n3	φ3	m	Da	Z	da	Z	b	x	Coa	Cor	
mm							mm		mm		mm		KN		Kg
537	526	32	10	4x2	M10x1	5	665	130	335	68	80	+0.5	2750	355	224
474	463	32	10	4x2	M10x1	6	666	108	336	57	80	+0.5	2750	355	224
597	586	32	10	4x2	M10x1	5	725	142	395	80	80	+0.5	3080	399	240
534	523	32	10	4x2	M10x1	6	726	118	396	67	80	+0.5	3080	399	240
667	656	32	10	4x2	M10x1	6	810	132	456	77	80	+0.5	3450	451	270
604	593	32	10	4x2	M10x1	8	808	98	456	58	80	+0.5	3450	451	270
747	736	32	10	4x2	M10x1	6	888	145	534	90	80	+0.5	3880	517	300
684	673	32	10	4x2	M10x1	8	888	108	536	68	80	+0.5	3880	517	300
841	830	40	10	4x2	M10x1	8	1008	123	592	75	120	+0.5	5490	712	500
770	759	40	10	4x2	M10x1	10	1010	98	590	60	120	+0.5	5490	712	500
941	930	40	10	4x2	M10x1	8	1104	135	688	87	120	+0.5	6190	808	600
870	859	40	10	4x2	M10x1	10	1110	108	690	70	120	+0.5	6190	808	600
1041	1030	40	10	5x2	M10x1	10	1220	119	780	79	120	+0.5	6890	903	680
970	959	40	10	5x2	M10x1	12	1224	99	780	66	120	+0.5	6890	903	680
1161	1150	40	10	5x2	M10x1	10	1340	131	900	91	120	+0.5	7680	1020	820
1090	1079	40	10	5x2	M10x1	12	1344	109	900	76	120	+0.5	7680	1020	820
1300	1290	50	10	5x2	M10x1	12	1512	123	984	83	150	+0.5	11100	1460	1200
1210	1200	50	10	5x2	M10x1	14	1512	105	980	71	150	+0.5	11100	1460	1200
1450	1440	50	10	5x2	M10x1	12	1688	136	1140	96	150	+0.5	12400	1650	1300
1360	1350	50	10	5x2	M10x1	14	1666	116	1134	82	150	+0.5	12400	1650	1300
1650	1640	50	10	6x2	M10x1	14	1876	131	1330	96	150	+0.5	14200	1900	1520
1560	1550	50	10	6x2	M10x1	16	1872	114	1328	84	150	+0.5	14200	1900	1520
1850	1840	50	10	6x2	M10x1	14	2072	145	1526	110	150	+0.5	15900	2150	1750
1760	1750	50	10	6x2	M10x1	16	2080	127	1520	96	150	+0.5	15900	2150	1750
2055	2033	54	12	6x2	M10x1	16	2304	141	1696	107	160	+0.5	20500	2390	2400

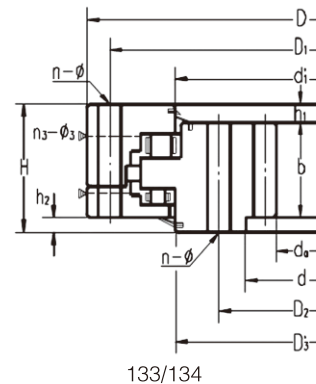
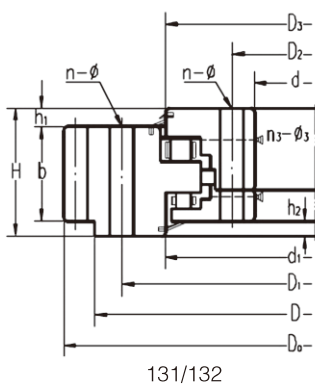
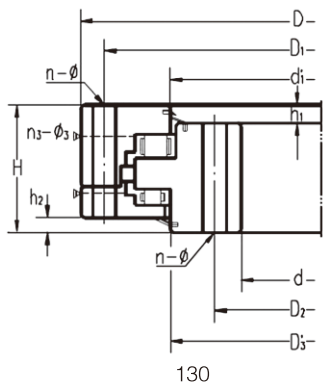
Slewing Rings

Three-Row Roller Slewing Bearings



Technical Parameters:

Designations			Boundary Dimensions			Mounting Size			
Ungeared	External Gear	Internal Gear	D	d	H	D ₁	D ₂	n	φ
Type			mm			mm			mm
	132.45.2000.**	134.45.2000.**	2221	1779	231	2155	1845	60	33
130.45.2240.**	131.45.2240.**	133.45.2240.**	2461	2019	231	2395	2085	60	33
	132.45.2240.**	134.45.2240.**	2461	2019	231	2395	2085	60	33
130.45.2500.**	131.45.2500.**	133.45.2500.**	2721	2279	231	2655	2345	72	33
	132.45.2500.**	134.45.2500.**	2721	2279	231	2655	2345	72	33
130.45.2800.**	131.45.2800.**	133.45.2800.**	3021	2579	231	2955	2645	72	33
	132.45.2800.**	134.45.2800.**	3021	2579	231	2955	2645	72	33
130.50.3150.**	131.50.3150.**	133.50.3150.**	3432	2868	270	3342	2958	72	45
	132.50.3150.**	134.50.3150.**	3432	2868	270	3342	2958	72	45
130.50.3550.**	131.50.3550.**	133.50.3550.**	3832	3268	270	3742	3358	72	45
	132.50.3550.**	134.50.3550.**	3832	3268	270	3742	3358	72	45
130.50.4000.**	131.50.4000.**	133.50.4000.**	4282	3718	270	4192	3808	80	45
	132.50.4000.**	134.50.4000.**	4282	3718	270	4192	3808	80	45
130.50.4500.**	131.50.4500.**	133.50.4500.**	4782	4218	270	4692	4308	80	45
	132.50.4500.**	134.50.4500.*	4782	4218	270	4692	4308	80	45



Structural Dimensions						Gear Parameters							Basic Load Rating		Mass
D3	d1	h1	h2	n3	$\phi 3$	m	Da	Z	da	Z	b	x	Coa	Cor	
mm							mm		mm		mm		KN		Kg
1967	1945	54	12	6x2	M10x1	18	2304	125	1692	95	160	+0,5	20500	2390	2400
2295	2273	54	12	6x2	M10x1	16	2560	157	1920	121	160	+0,5	23100	2680	2700
2207	2185	54	12	6x2	M10x1	18	2556	139	1926	108	160	+0,5	23100	2680	2700
2555	2533	54	12	8x2	M10x1	18	2826	154	2178	122	160	+0,5	25800	3020	3000
2467	2445	54	12	8x2	M10x1	20	2820	138	2180	110	160	+0,5	25800	3020	3000
2855	2833	54	12	8x2	M10x1	18	3114	170	2484	139	160	+0,5	28800	3390	3400
2767	2745	54	12	8x2	M10x1	20	3120	153	2480	125	160	+0,5	28800	3390	3400
3213	3196	65	12	8x2	M10x1	20	3540	174	2760	139	180	+0,5	35900	3810	5000
3104	3087	65	12	8x2	M10x1	22	3542	158	2750	126	180	+0,5	35900	3810	5000
3613	3596	65	12	8x2	M10x1	20	3940	194	3160	159	180	+0,5	40400	4310	5600
3504	3487	65	12	8x2	M10x1	22	3938	176	3146	144	180	+0,5	40400	4310	5600
4063	4046	65	12	8x2	M10x1	22	4400	197	3608	165	180	+0,5	45600	4870	6400
3954	3937	65	12	8x2	M10x1	25	4400	173	3600	145	180	+0,5	45600	4870	6400
4563	4546	65	12	8x2	M10x1	22	4906	220	4114	188	185	+0,5	54450	5800	6942
4454	4437	65	12	8x2	M10x1	25	4906	193	4100	165	185	+0,5	54450	5800	6942

● Features

YRT precision rotary table bearing is a kind of bearing fixed by a bidirectional thrust bearing and a centripetal-guided bearing. They can support radial loads, axial loads from both sides and tilting moments without clearance and are particularly suitable for bearing arrangements with high requirements for running accuracy, such as rotary tables, face plates, milling heads and reversible clamps. Due to the fixing holes in the bearing rings, the units are very easy to fit. The bearings are radial and axial preloaded after fitting.

Sealing:

Axial/radial bearings are supplied without seals.

Lubrication:

YRT Bearings are greased using a lithium complex soap grease and can be lubricated via the outer ring and L-section ring.

Operating temperature:

YRT bearings are suitable for operating temperatures from -30°C to $+120^{\circ}\text{C}$

● Design and safety guidelines

Basic rating life:

The load carrying capacity and life must be checked for the radial and axial bearing component.

Please contact us in relation to checking of the basic rating life. The speed, load and operating duration must be given.

Static load safety factor:

The static load safety factor S_0 indicates the security against impermissible permanent deformations in the bearing:

It is determined as follows: $S_0 = \frac{C_{or}}{F_{or}}$ or $\frac{C_{oa}}{F_{oa}}$

Static load safety factor: S_0

Basic static load rating according to dimension tables: C_{or}, C_{oa} N

Equivalent static load on the radial or axial bearing: F_{or}, F_{oa} N

Caution! In machine tools and similar areas of application, S_0 should be > 4 .

Limiting speeds:

The bearings allow the limiting speeds n_G given in the dimension tables. The operating temperatures occurring are heavily dependent on the environmental conditions. Calculation is possible by means of a thermal balance analysis based on frictional torque data.

Frictional torque:

The bearing frictional torque M_{RL} is influenced primarily by the viscosity and quantity of the lubricant and the bearing preload:

The lubricant viscosity and quantity are dependent on the lubricant grade and operating temperature.

The bearing preload is dependent on the mounting fits, the geometrical accuracy of the adjacent parts, the

temperature difference between the inner and outer ring, the screw tightening torque and the mounting situation (bearing inner ring axially supported on one or both sides).

Starting torque:

For YRT bearing, it must be taken into consideration that the frictional torque can increase by a factor of between 2 and 2.5 with increasing speed.

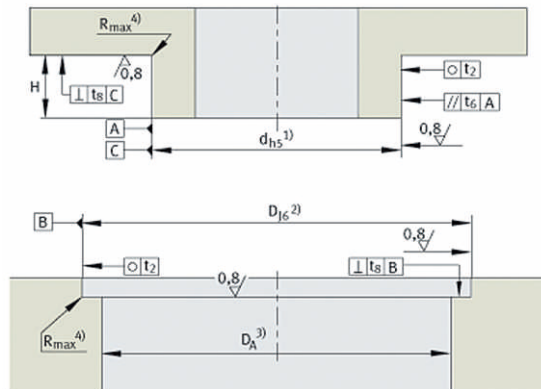
Accuracy of Adjacent construction:

The adjacent construction should be produced in accordance with Figure and the tolerances must be in accordance with the tables starting on page. Any deviations will influence the bearing frictional torque, running accuracy and running characteristics.

Requirements for the adjacent construction:

Legend to Figure:

1. Support over whole bearing height. It must be ensured that the means of support has adequate rigidity.
2. A precise fit is only necessary if radial support due to the load or a precise bearing position is required.
3. Note the bearing diameter D1 according to the dimension tables. Ensure that there is sufficient distance between the rotating bearing rings and the adjacent construction.



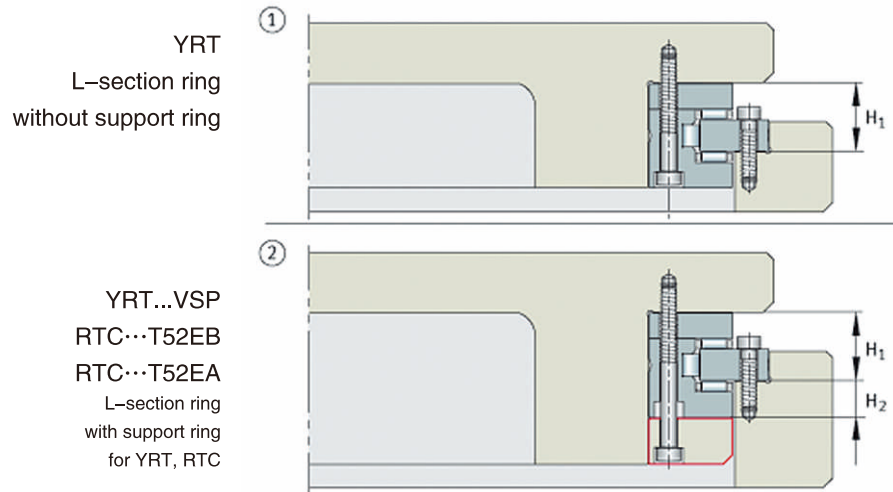
Geometrical and positional accuracy for shafts with YRT:

Nominal shaft diameter		Deviation		Roundness Parallelism Perpendicularity t ₂ , t ₆ , t ₈
d mm		d		
over	incl.	for tolerance zone h5		μm
		μm		
50	80	0	-13	3
80	120	0	-15	4
120	180	0	-18	5
180	250	0	-20	7
250	315	0	-23	8
315	400	0	-25	9
400	500	0	-27	10
500	630	0	-32	11
630	800	0	-36	13
800	1000	0	-40	15
1000	1250	0	-47	18

Geometrical and positional accuracy for housings with YRT:

Nominal housing bore diameter D mm		Deviation D		Roundness Perpendicularity t ₂ , t ₈
over	incl.	for tolerance zone J6 µm		µm
120	180	+18	-7	5
180	250	+22	-7	7
250	315	+25	-7	8
315	400	+29	-7	9
400	500	+33	-7	10
500	630	+34	-7	11
630	800	+38	-8	13
800	1000	+44	-12	15
1000	1250	+52	-14	18

Mounting dimensions H1, H2:



L-section ring without support ring:

For the case "L-section ring without support ring", the bearing designation is: YRT < bore diameter >

L-section ring with support ring: YRT bore diameter VSP

For the case "L-section ring with support ring", the bearing designation is: YRT < bore diameter > **VSP**

Caution! For bearing arrangements with a supported L-section ring, only bearings with the suffix VSP, EB or T52EA can be ordered. If the normal design is mounted with a supported L-section ring, there will be a considerable increase in the bearing frictional torque. The support ring should be at least twice as high as the shaft locating washer of the bearing.

Fitting:

Retaining screws secure the bearing components during transport. For easier centring of the bearing, the screws should be loosened before fitting and either secured again or removed after fitting. Tighten the fixing screws in crosswise sequence using a torque wrench in three stages to the specified tightening torque M_A while rotating the bearing:

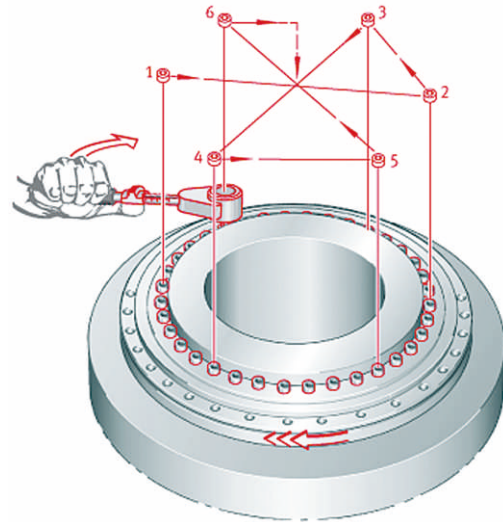
Stage 1: 40% of M_A

Stage 2: 70% of M_A

Stage 3: 100% of M_A

Observe the correct grade of the fixing screws.

Caution! Mounting forces must only be applied to the bearing ring to be fitted, never through the rolling elements. Bearing components must not be separated or interchanged during fitting and dismantling. If the bearing is unusually difficult to move, loosen the fixing screws and tighten them again in steps in a crosswise sequence. This will eliminate any distortion. Bearings should only be fitted in accordance with TPI 103, Fitting and Maintenance Manual.



Tightening of fixing screws

Dimensional tolerances, mounting dimensions, axial and radial runout for YRT:

Dimensional tolerances ¹⁾				Mounting dimensions					Axial and radial runout ²⁾	
Bore		Outside diameter				Re–stricted ³⁾		Re–stricted ³⁾	Normal	Re–stricted ³⁾
d	Δ_{ds}	D	Δ_{Ds}	H1	Δ_{H1s}	Δ_{H1s}	H2	Δ_{H2s}		
mm	mm	mm	mm	mm	mm	mm	mm	mm		
50	-0.008	126	-0.011	20	± 0.125	± 0.025	10	± 0.02	2	1
80	-0.009	146	-0.011	23.35	± 0.15	± 0.025	11.65	± 0.02	3	1.5
100	-0.01	185	-0.015	25	± 0.175	± 0.025	13	± 0.02	3	1.5
120	-0.01	210	-0.015	26	± 0.175	± 0.025	14	± 0.02	3	1.5
150	-0.013	240	-0.015	26	± 0.175	± 0.03	14	± 0.02	3	1.5
180	-0.013	280	-0.018	29	± 0.175	± 0.03	14	± 0.025	4	2
200	-0.015	300	-0.018	30	± 0.175	± 0.03	15	± 0.025	4	2
260	-0.018	385	-0.02	36.5	± 0.2	± 0.04	18.5	± 0.025	6	3
325	-0.023	450	-0.023	40	± 0.2	± 0.05	20	± 0.025	6	3
395	-0.023	525	-0.028	42.5	± 0.2	± 0.05	22.5	± 0.025	6	3
460	-0.023	600	-0.028	46	± 0.225	± 0.06	24	± 0.03	6	3
580	-0.025	750	-0.035	60	± 0.25	± 0.075	30	± 0.03	10	5 ⁴⁾
650	-0.038	870	-0.05	78	± 0.25	± 0.1	44	± 0.03	10	5 ⁴⁾
850	-0.05	1095	-0.063	80.5	± 0.3	± 0.12	43.5	± 0.03	12	6 ⁴⁾
950	-0.05	1200	-0.063	86	± 0.3	± 0.12	46	± 0.03	12	6 ⁴⁾
1030	-0.063	1300	-0.08	92.5	± 0.3	± 0.15	52.5	± 0.03	12	6 ⁴⁾

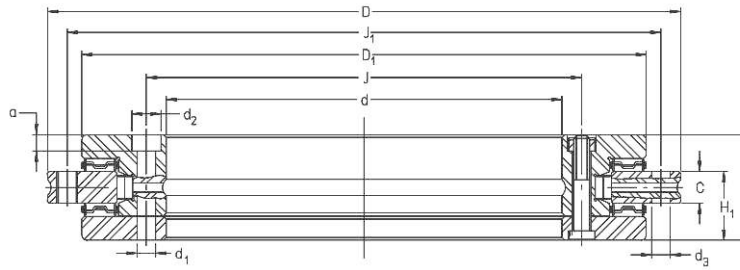
1). The diameter tolerances stated are mean values (DIN 620).

2). For rotating inner and outer ring, measured on fitted bearing, with ideal adjacent construction.

3). Special design, YRT only.

4). By agreement only for rotating outer ring.

YRT Rotary Table Bearings

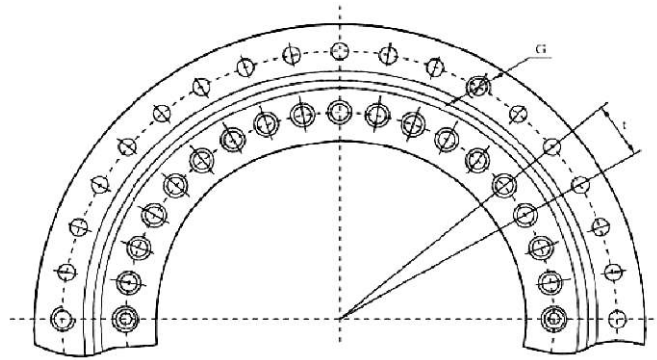


Technical Parameters:

Bearing Code	Boundary Dimensions								Fixing holes					
	d	D	H	H ₁	C	D1	J	J ₁	Inner ring			Outer ring		
	mm								d ₁	d ₂	a	quantity	d ₃	quantity
									mm	mm			mm	
YRT50	50	126	30	20	10	105	63	116	5.6	9	4	10	5.6	12
YRT80	80	146	35	23.35	12	130	92	138	5.6	10	4	10	4.6	12
YRT100	100	185	38	25	12	160	112	170	5.6	10	5.4	16	5.6	15
YRT120	120	210	40	26	12	184	135	195	7	11	6.2	22	7	21
YRT150	150	240	40	26	12	214	165	225	7	11	6.2	34	7	33
YRT180	180	280	43	29	15	244	194	260	7	11	6.2	46	7	45
YRT200	200	300	45	30	15	274	215	285	7	11	6.2	46	7	45
YRT260	260	385	55	36.5	18	345	280	365	9.3	15	8.2	34	9.3	33
YRT325	325	450	60	40	20	415	342	430	9.3	15	8.2	34	9.3	33
YRT395	395	525	65	42.5	20	486	415	505	9.3	15	8.2	46	9.3	45
YRT460	460	600	70	46	22	560	482	580	9.3	15	8.2	46	9.3	45
YRT580	580	750	90	60	30	700	610	720	11.4	18	11	46	11.4	42
YRT650	650	870	122	78	34	800	680	830	14	20	13	46	14	42
YRT850	850	1095	124	80.5	37	1018	890	1055	18.5	26	17	57	18.5	54
YRT950	950	1200	132	86	40	1130	990	1160	18.5	26	17	57	18.5	54
YRT1030	1030	1300	145	92.5	40	1215	1075	1255	18.5	26	17	66	18.5	66
YRT1200	1200	1490	164	108	52	1410	1240	1445	18.5	26	17	66	18.5	66

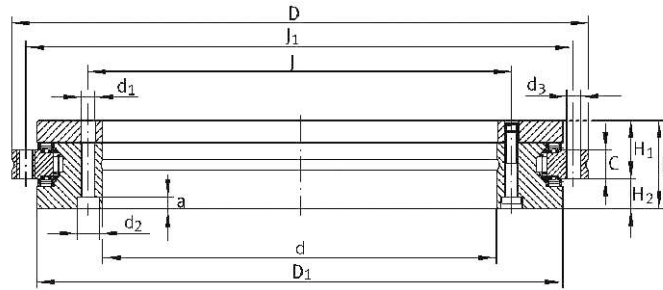
Remarks:

- 1) including retaining screws and threaded extraction holes
- 2) note install screws
- 3) bearing frictional torque must be tested under speed 5r/min, the startup frictional torque should be around 2–2.5 times of listed data.



Number of retaining screws	Extraction thread		Number of pitches X angle of pitches ¹⁾ Xt quantity	Screw tightening torque MA ²⁾ Nm	Basic Load Rating				Limiting speed grease r/min	Bearing frictional torque ³⁾ Nm	Mass Kg	Bearing Code
					axial		radial					
	DYN	STAT			DYN	STAT						
	Ca	Coa			Cr	Cor						
2	—	—	12 × 30°	8,5	38	158	28,5	49,5	600	2,5	1,6	YRT50
2	—	—	12 × 30°	8,5	56	255	42,5	100	530	3	2,4	YRT80
2	M5	3	18 × 20°	8,5	76,5	415	47,5	120	430	3	4,1	YRT100
2	M8	3	24 × 15°	14	102	540	52	143	340	7	5,3	YRT120
2	M8	3	36 × 10°	14	112	630	56	170	320	10	6,2	YRT150
2	M8	3	48 × 7,5°	14	118	710	69,5	200	280	12	7,7	YRT180
2	M8	3	48 × 7,5°	14	120	765	81,5	220	260	14	9,7	YRT200
2	M12	3	36 × 10°	34	160	1060	93	290	200	20	18,3	YRT260
2	M12	3	36 × 10°	34	275	1930	120	345	170	40	25	YRT325
2	M12	3	48 × 7,5°	34	300	2280	186	655	140	55	33	YRT395
2	M12	3	48 × 7,5°	34	355	2800	200	765	120	70	45	YRT460
2	M12	6	48 × 7,5°	68	490	4250	228	965	80	140	89	YRT580
2	M12	6	48 × 7,5°	116	1040	8000	490	1800	65	200	170	YRT650
3	M16	6	60 × 6°	284	1000	8650	455	1730	50	300	253	YRT850
3	M16	6	60 × 6°	284	1290	11400	530	2040	40	600	312	YRT950
6	M16	6	72 × 5°	284	1380	12000	620	2650	35	800	375	YRT1030
6	M16	6	72 × 5°	300	1435	12850	745	2800	25	1000	450	YRT1200

YRT Rotary Table Bearings

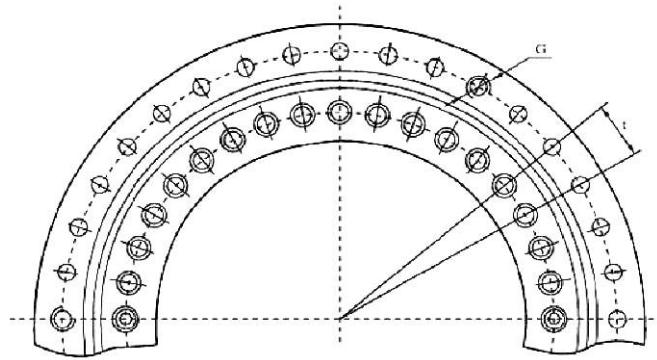


Technical Parameters:

Bearing Code	Boundary Dimensions								Fixing holes					
	d	D	H	H ₁	C	D ₁	J	J ₁	Inner ring			Outer ring		
	mm								d ₁	d ₂	a	quantity	d ₃	quantity
								mm						
YRTS200	200	300	45	30	15	274	215	285	7	11	6.2	46	7	45
YRTS260	260	385	55	36.5	18	345	280	365	9.3	15	8.2	34	9.3	33
YRTS325	325	450	60	40	20	415	342	430	9.3	15	8.2	34	9.3	33
YRTS395	395	525	65	42.5	20	486	415	505	9.3	15	8.2	46	9.3	45
YRTS460	460	600	70	46	22	560	482	580	9.3	15	8.2	46	9.3	45

Remarks:

- 1)including retaining screws and threaded extraction holes
- 2)note install screws
- 3)bearing frictional torque must be tested under speed 5r/min, the startup frictional torque should be around 2-2.5 times of listed data.



Number of retaining screws	Extraction thread		Number of pitches X angle of pitches	Screw tightening torque	Basic load rating				Limiting speed	Mass	Bearing Code	
					axial		radial					
	G	quantity			MA ²⁾	DYN	STAT	DYN	STAT	grease r/min		Kg
						Ca	Coa	Cr	Cor			
2	M8	3	48 × 7.5°	14	155	840	94	226	1160	9.7	YRTS200	
2	M12	3	36 × 10°	34	173	1050	110	305	910	18.3	YRTS260	
2	M12	3	36 × 10°	34	191	1260	109	320	760	25	YRTS325	
2	M12	3	48 × 7.5°	34	214	1540	121	390	650	33	YRTS395	
2	M12	3	36 × 10°	34	221	1690	168	570	560	45	YRTS460	

Cross Roller Bearings

Features

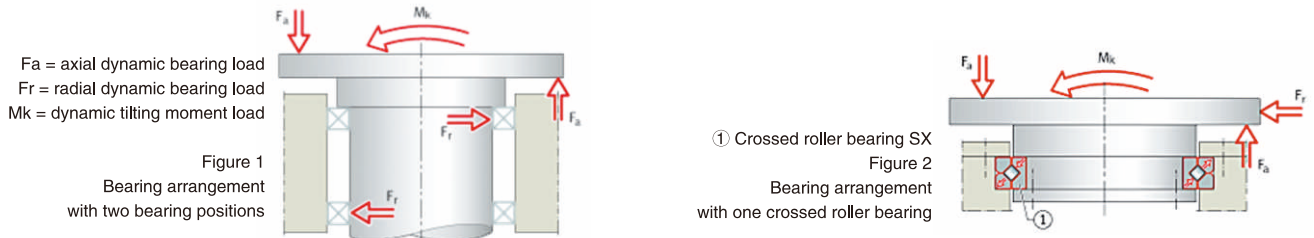
Cross roller bearings SX are bearings for high precision applications, whose dimensions conform to ISO dimension series 18 to DIN 616. They comprise outer rings, inner rings, rolling elements and plastic spacers. The outer ring is split and is held together by three retaining rings.

Cross roller bearings are very rigid, have high running accuracy and are supplied with normal clearance, low clearance or preload. Preloaded bearings have the suffix VSP.

The bearing outer rings are easily fixed to the adjacent construction using clamping rings.

For axial, radial and moment loads:

Due to the X arrangement of the cylindrical rollers, these bearings can support axial forces from both directions as well as radial forces, tilting moment loads and any combination of loads by means of a single bearing position. As a result, designs involving two bearing positions can be reduced to a single bearing position, Figure 1 and Figure 2.



Sealing:

The bearings are of an open design. The sealing arrangement can be designed anywhere within the adjacent construction.

Lubrication:

SX bearings do not have an oil-based preservative but are greased; they can be lubricated using oil.

Operating temperature:

Cross roller bearings are suitable for operating temperatures from -30°C to $+80^{\circ}\text{C}$.

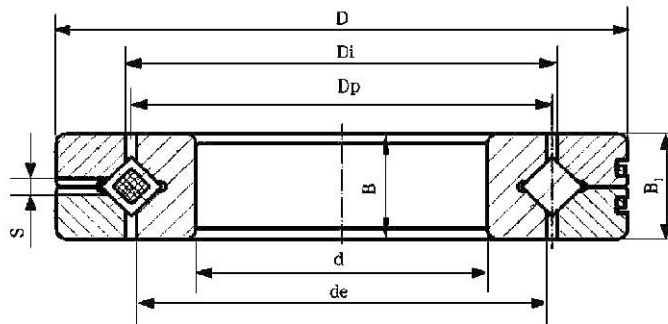
Suffixes: Suffixes for available designs: see table.

Available designs	Suffix	Description	Design
	RR	Corrosion-resistant design, with Corrotect coating	Special design, available by agreement
	RLO	Low clearance	Standard
	VSP	Preloaded	

Attention:

The separable inner or outer ring is fastened in place using special rivets, bolts or nuts when delivered. When installing, please do not disassemble it. Also, erroneously installing the spacer retainer will significantly affect the rotational performance of the system.

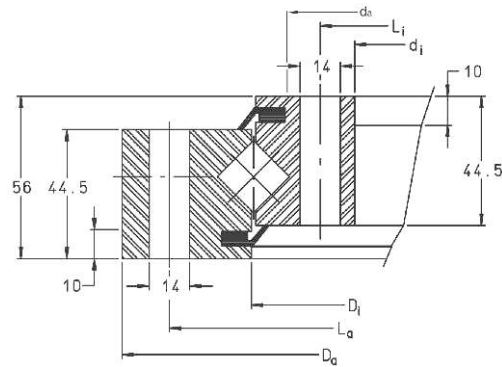
- 1.The joint between inner and outer rings may be misaligned when delivered. In that case, please loosen the bolts and correct the alignment by using a plastic hammer before installing it into the housing;
- 2.Please do not force onto the securing rivets or the bolts when installing or removing the crossed roller ring;
- 3.When mounting the flange, please pay attention to the dimensional tolerances of the parts so that the inner and outer ring can be fixed firmly by the flange from the side.



Technical Parameters:

Bearing Code	Main dimensions							shoulder height		Basic load rating				Mass
	inner diameter	outer diameter	Roller pitch circle diameter	width	Grease hole	r	de	Di	axial		radial			
	d	D	Dp	B B1	S				Ca	Coa	Cr	Cor	KN	Kg
SX011814	70	90	80	10	1.2	0.6	79.5	80.5	18	60	12	30	0.3	
SX011818	90	115	102	13	1.2	1	101.5	102.5	26	96	17	47	0.4	
SX011820	100	125	112	13	1.2	1	111.5	112.5	28	106	18	52	0.5	
SX011824	120	150	135	16	1.5	1	134.4	135.6	41	153	26	75	0.8	
SX011828	140	175	157	18	1.5	1.1	156.3	157.7	64	237	41	116	1.1	
SX011832	160	200	180	20	1.5	1.1	179.2	180.8	69	272	44	133	1.7	
SX011836	180	225	202	22	2	1.1	201.2	202.8	98	381	63	187	2.3	
SX011840	200	250	225	24	2	1.5	224.2	225.8	106	425	68	208	3.1	
SX011848	240	300	270	28	2	2	269.2	270.8	149	612	95	300	5.3	
SX011860	300	380	340	38	2.5	2.1	339.2	340.8	245	1027	156	504	12	
SX011868	340	420	380	38	2.5	2.1	379.2	380.8	265	1148	167	563	13.5	
SX011880	400	500	450	46	2.5	2.5	449	451	385	1699	244	833	24	
SX0118/500	500	620	560	56	2.5	3	558.8	561.2	560	2538	355	1244	44	

Cross Roller Bearings

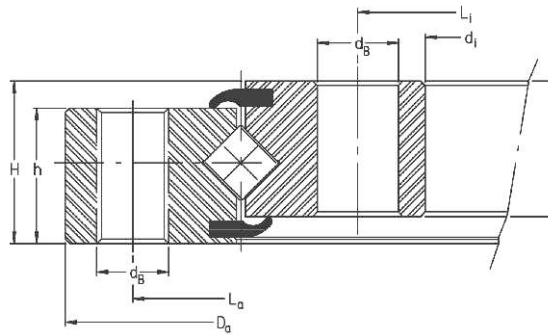


Technical Parameters:

Bearing Code	Dimensions										Basic Load Rating				Mass
	di	Da	H	Di	da	La	na	Li	ni	Fr _{max}	axial		radial		
											DYN. Ca	STAT. Coa	DYN. Cr	STAT. Cor	
mm										KN	KN				kg
XSU 140414	344	484	56	415	413	460	24	368	24	99.1	229	520	146	250	28
XSU 140544	474	614	56	545	543	590	32	498	32	132.2	270	680	170	330	38
XSU 140644	574	714	56	645	643	690	36	598	36	148.7	290	800	185	395	44
XSU 140744	674	814	56	745	743	790	40	698	40	165.2	315	930	200	455	52
XSU 140844	774	914	56	845	843	890	40	798	40	165.2	340	1050	215	510	60
XSU 140944	874	1014	56	945	943	990	44	898	44	181.7	360	1170	227	580	67
XSU 141094	1024	1164	56	1095	1093	1140	48	1048	48	198.2	390	1360	246	670	77

Remarks:

- 1). na: Number of fixing holes in outer ring
- 2). ni: Number of fixing holes in inner ring
- 3). Fr: Maximum permissible radial load against friction lock



Technical Parameters:

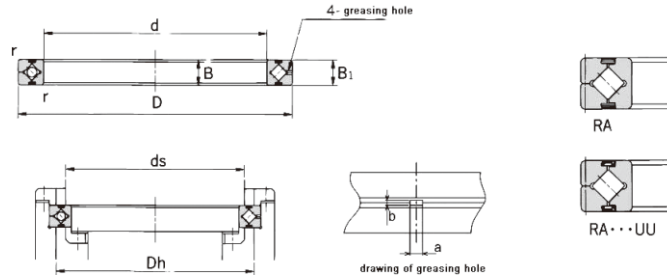
Bearing Code	Dimensions										Basic Load Rating				Mass
	di	Da	H	h	La	na	Li	ni	dB	Fr max	axial		radial		
											DYN. Ca	STAT. Coa	DYN. Cr	STAT. Cor	
mm										KN	KN				kg
XU050077	40	112	22	21	97	6	56	6	6.6	5.8	22.4	29	14.3	14.2	1.4
XU060094	57	140	26	25	120	6	70	6	9	9.2	32.5	37.5	20.7	18.4	2.4
XU060111	76.2	145.79	15.87	—	133.1	8	88.9	8	6.9	7.7	36	44.5	22.8	21.5	1.2
XU080120	69	170	30	29	148	6	90	6	9	10.5	56	53	35.5	26	4
XU080149	101.6	196.85	22.22	22.22	177.8	16	115.8	16	6.9	15.4	63	66	40	32.5	3.6
XU120179	124.5	234	35	30	214	12	144.5	12	11	33.6	118	179	75	88	7
XU120222	140	300	36	30	270	12	170	12	18	65.5	133	275	85	131	12
XU160260	191	329	46	41	305	20	215	20	14	82.6	212	350	135	173	16
XU080264	215.9	311	25.4	25.4	295.3	12	231.8	12	8.7	21	85	117	54	57	6.9
XU160405	336	474	46	41	450	30	360	30	14	123.9	270	550	172	270	25
XU080430	380	480	26	26	462	20	398	20	9	35	110	280	70	138	12
XU300515	384	646	86	79	598	18	432	18	26	313.2	720	1370	455	670	115
XU280680	565	795	79	72	755	30	605	30	22	363	750	1560	480	760	120
XU300785	670	900	86	79	860	36	710	36	22	435.6	900	2090	570	1030	155
XU260980	870	1090	79	69	1050	44	910	44	22	532.4	840	2180	530	1070	158

Remarks:

- 1). na: Number of fixing holes in outer ring
- 2). ni: Number of fixing holes in inner ring
- 3). Fr: Maximum permissible radial load against friction lock

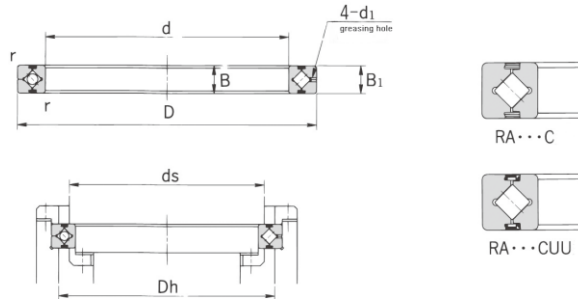
Cross Roller Bearings

Cross Roller Bearings RA Series



Technical Parameters:

Bearing Code	Main dimensions							shoulder height		Basic Load Rating (axial)		Mass
	inner diameter d	outer diameter D	Roller pitch circle diameter dp	width B B1	Grease hole a b		r	ds	Dh	C	Co	
	mm							mm		KN		Kg
RA 5008	50	66	57	8	2	0.8	0.8	53.5	60.5	5.1	7.19	0.08
RA 6008	60	76	67	8	2	0.8	0.8	63.5	70.5	5.68	8.68	0.09
RA 7008	70	86	77	8	2	0.8	0.8	73.5	80.5	5.98	9.8	0.1
RA 8008	80	96	87	8	2	0.8	0.8	83.5	90.5	6.37	11.3	0.11
RA 9008	90	106	97	8	2	0.8	0.8	93.5	100.5	6.76	12.4	0.12
RA 10008	100	116	107	8	2	0.8	0.8	103.5	110.5	7.15	13.9	0.14
RA 11008	110	126	117	8	2	0.8	0.8	113.5	120.5	7.45	15	0.15
RA 12008	120	136	127	8	2	0.8	0.8	123.5	130.5	7.84	16.5	0.17
RA 13008	130	146	137	8	2	0.8	0.8	133.5	140.5	7.94	17.6	0.18
RA 14008	140	156	147	8	2	0.8	0.8	143.5	150.5	8.33	19.1	0.19
RA 15008	150	166	157	8	2	0.8	0.8	153.5	160.5	8.82	20.6	0.2
RA 16013	160	186	172	13	2.5	1.6	1.2	165	179	23.3	44.9	0.59
RA 17013	170	196	182	13	2.5	1.6	1.2	175	189	23.5	46.5	0.64
RA 18013	180	206	192	13	2.5	1.6	1.2	185	199	24.5	49.8	0.68
RA 19013	190	216	202	13	2.5	1.6	1.2	195	209	24.9	51.5	0.69
RA 20013	200	226	212	13	2.5	1.6	1.2	205	219	25.8	54.7	0.71

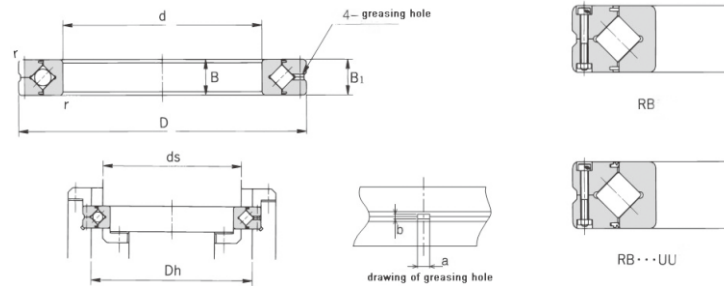


Technical Parameters:

Bearing Code	Main dimensions						shoulder height		basic load rating (axial)		Mass
	inner diameter d	outer diameter D	Roller pitch circle diameter dp	width B B1	Grease hole a	r	ds	Dh	C	Co	
	mm						mm		KN		Kg
RA 5008C	50	66	57	8	1.5	0.8	53.5	60.5	5.1	7.19	0.08
RA 6008C	60	76	67	8	1.5	0.8	63.5	70.5	5.68	8.68	0.09
RA 7008C	70	86	77	8	1.5	0.8	73.5	80.5	5.98	9.8	0.1
RA 8008C	80	96	87	8	1.5	0.8	83.5	90.5	6.37	11.3	0.11
RA 9008C	90	106	97	8	1.5	0.8	93.5	100.5	6.76	12.4	0.12
RA 10008C	100	116	107	8	1.5	0.8	103.5	110.5	7.15	13.9	0.14
RA 11008C	110	126	117	8	1.5	0.8	113.5	120.5	7.45	15	0.15
RA 12008C	120	136	127	8	1.5	0.8	123.5	130.5	7.84	16.5	0.17
RA 13008C	130	146	137	8	1.5	0.8	133.5	140.5	7.94	17.6	0.18
RA 14008C	140	156	147	8	1.5	0.8	143.5	150.5	8.33	19.1	0.19
RA 15008C	150	166	157	8	1.5	0.8	153.5	160.5	8.82	20.6	0.2
RA 16013C	160	186	172	13	2	1.2	165	179	23.3	44.9	0.59
RA 17013C	170	196	182	13	2	1.2	175	189	23.5	46.5	0.64
RA 18013C	180	206	192	13	2	1.2	185	199	24.5	49.8	0.68
RA 19013C	190	216	202	13	2	1.2	195	209	24.9	51.5	0.69
RA 20013C	200	226	212	13	2	1.2	205	219	25.8	54.7	0.71

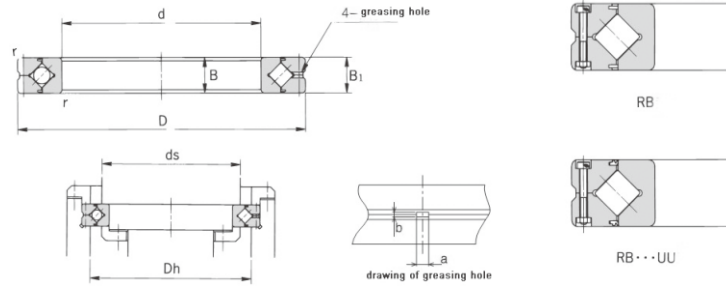
Cross Roller Bearings

Cross Roller Bearings RB Series



Technical Parameters:

Bearing Code	Main dimensions							shoulder height		Basic Load Rating (radial)		Mass
	inner diameter d	outer diameter D	Roller pitch circle diameter dp	width B B1	Grease hole a b		r	ds	Dh	C	Co	Kg
	mm											
RB 5013	50	80	64	13	2.5	1.6	1	57.4	72	16.7	20.9	0.27
RB 6013	60	90	74	13	2.5	1.6	1	68	82	18	24.3	0.3
RB 7013	70	100	84	13	2.5	1.6	1	78	92	19.4	27.7	0.35
RB 8016	80	120	98	16	3	1.6	1	91	111	30.1	42.1	0.7
RB 9016	90	130	108	16	3	1.6	1.5	98	118	31.4	45.3	0.75
RB 10016	100	140	119.3	16	3.5	1.6	1.5	109	129	31.7	48.6	0.83
RB 10020	100	150	123	20	3.5	1.6	1.5	113	133	33.1	50.9	1.45
RB 11012	110	135	121.8	12	2.5	1	1	117	127	12.5	24.1	0.4
RB 11015	110	145	126.5	15	3.5	1.6	1	122	136	23.7	41.5	0.75
RB 11020	110	160	133	20	3.5	1.6	1.5	120	140	34.0	54.0	1.56
RB 12016	120	150	134.2	16	3.5	1.6	1	127	141	24.2	43.2	0.72
RB 12025	120	180	148.7	25	3.5	2	2	133	164	66.9	100	2.62
RB 13015	130	160	144.5	15	3.5	1.6	1	137	152	25	46.7	0.72
RB 13025	130	190	158	25	3.5	2	2	143	174	69.5	107	2.82
RB 14016	140	175	154.8	16	2.5	1.6	1.5	147	162	25.9	50.1	1
RB 14025	140	200	168	25	3.5	2	2	154	185	74.8	121	2.96
RB 15013	150	180	164	13	2.5	1.6	1	157	172	27	53.5	0.68
RB 15025	150	210	178	25	3.5	2	2	164	194	76.8	128	3.16
RB 15030	150	230	188	30	4.5	3	2	173	211	100	156	5.3
RB 16025	160	220	188.6	25	3.5	2	2	173	204	81.7	135	3.14
RB 17020	170	220	191	20	3.5	1.6	2	184	198	29	62.1	2.21
RB 18025	180	240	210	25	3.5	2	2	195	225	84	143	3.44
RB 19025	190	240	211.9	25	3.5	1.6	1.5	202	222	41.7	82.9	2.99
RB 20025	200	260	230	25	3.5	2	2.5	215	245	84.2	157	4
RB 20030	200	280	240	30	4.5	3	2.5	221	258	114	200	6.7
RB 20035	200	295	247.7	35	5	3	2.5	225	270	151	252	9.6
RB 22025	220	280	250.1	25	3.5	2	2.5	235	265	92.3	171	4.1
RB 24025	240	300	269	25	3.5	2	3	256	281	68.3	145	4.5
RB 25025	250	310	277.5	25	3.5	2	3	265	290	69.3	150	5
RB 25030	250	330	287.5	30	4.5	3	3	269	306	126	244	8.1
RB 25040	250	355	300.7	40	6	3.5	3	275	326	195	348	14.8
RB 30025	300	360	328	25	3.5	2	3	315	340	76.3	178	5.9
RB 30035	300	395	345	35	5	3	3	322	368	183	367	13.4
RB 30040	300	405	351.6	40	6	3.5	3	326	377	212	409	17.2
RB 35020	350	400	373.4	20	3.5	1.6	3	363	383	54.1	143	3.9
RB 40035	400	480	440.3	35	5	3	3.5	422	459	156	370	14.5
RB 40040	400	510	453.4	40	6	3.5	3.5	428	479	241	531	23.5



Technical Parameters:

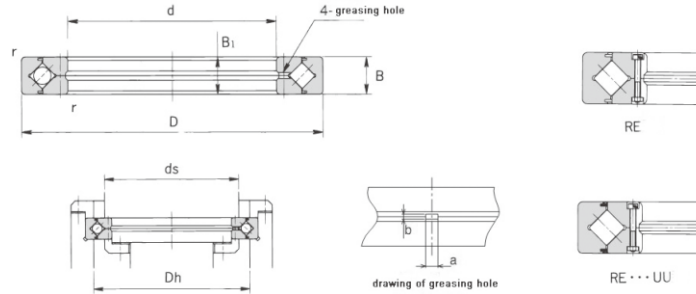
Bearing Code	Main dimensions							shoulder height		Basic Load Rating (radial)		Mass
	inner diameter d	outer diameter D	Roller pitch circle diameter dp	width B B1	Grease hole a b		r	ds	Dh	C	Co	Kg
	mm							mm		KN		
RB 45025	450	500	474	25	3,5	1,6	1,5	464	484	61,7	182	6,6
RB 50025	500	550	524,2	25	3,5	1,6	1,5	514	534	65,5	201	7,3
RB 50040	500	600	548,8	40	6	3	3,5	526	572	239	607	26
RB 50050	500	625	561,6	50	6	3,5	3,5	536	587	267	653	41,7
RB 60040	600	700	650	40	6	3	4	627	673	264	721	29
RB 70045	700	815	753,5	45	6	3	4	731	777	281	836	46
RB 80070	800	950	868,1	70	6	4	5	836	900	468	1330	105
RB 90070	900	1050	969	70	6	4	5	937	1001	494	1490	120
RB 1000110	1000	1250	1114	110	6	6	6	1057	1171	1220	3220	360
RB 1250110	1250	1500	1365,8	110	6	6	6	1308	1423	1350	3970	440

Remarks:

1. RB...UU series are with sealed;
2. Please use outer ring rotary when high precision is required

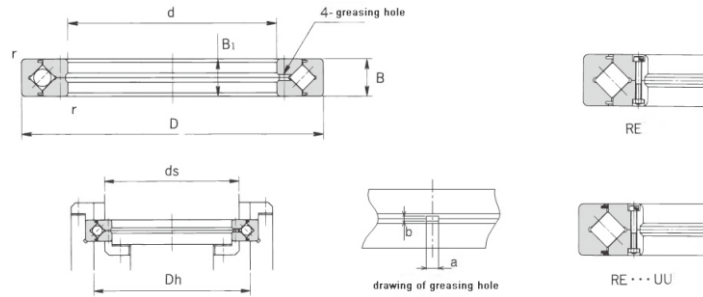
Cross Roller Bearings

Cross Roller Bearings RE Series



Technical Parameters:

Bearing Code	Main dimensions							shoulder height		Basic Load Rating (radial)		Mass
	inner diameter d	outer diameter D	Roller pitch circle diameter dp	width B B1	Grease hole a b		r	ds	Dh	C	Co	Kg
	mm							mm		KN		
RE 5013	50	80	66	13	2.5	1.6	1	57.5	72	16.7	20.9	0.27
RE 6013	60	90	76	13	2.5	1.6	1	68	82	18	24.3	0.3
RE 7013	70	100	86	13	2.5	1.6	1	78	92	19.4	27.7	0.35
RE 8016	80	120	101.4	16	3	1.6	1	91	111	30.1	42.1	0.7
RE 9016	90	130	112	16	3	1.6	1.5	98	118	31.4	45.3	0.75
RE 10016	100	140	121.1	16	3	1.6	1.5	109	129	31.7	48.6	0.83
RE 10020	100	150	127	20	3.5	1.6	1.5	113	133	33.1	50.9	1.45
RE 11012	110	135	123.3	12	2.5	1	1	117	127	12.5	24.1	0.4
RE 11015	110	145	129	15	3	1.6	1	122	136	23.7	41.5	0.75
RE 11020	110	160	137	20	3.5	1.6	1.5	120	140	34	54	1.56
RE 12016	120	150	136	16	3	1.6	1	127	141	24.2	43.2	0.72
RE 12025	120	180	152	25	3.5	2	2	133	164	66.9	100	2.62
RE 13015	130	160	146	15	3	1.6	1	137	152	25	46.7	0.72
RE 13025	130	190	162	25	3.5	2	2	143	174	69.5	107	2.82
RE 14016	140	175	160	16	3	1.6	1.5	147	162	25.9	50.1	1
RE 14025	140	200	172	25	3.5	2	2	154	185	74.8	121	2.96
RE 15013	150	180	166	13	2.5	1.6	1	158	172	27	53.5	0.68
RE 15025	150	210	182	25	3.5	2	2	164	194	76.8	128	3.16
RE 15030	150	230	192	30	4.5	3	2	173	210	100	156	5.3
RE 16025	160	220	192	25	3.5	2	2	173	204	81.7	135	3.14
RE 17020	170	220	196.1	20	3.5	1.6	2	184	198	29	62.1	2.21
RE 18025	180	240	210	25	3.5	2	2	195	225	84	143	3.44
RE 19025	190	240	219	25	3.5	1.6	1.5	202	222	41.7	82.9	2.99
RE 20025	200	260	230	25	3.5	2	2.5	215	245	84.2	157	4
RE 20030	200	280	240	30	4.5	3	2.5	221	258	114	200	6.7
RE 20035	200	295	247.7	35	5	3	2.5	225	270	151	252	9.6
RE 22025	220	280	250.1	25	3.5	2	2.5	235	265	92.3	171	4.1
RE 24025	240	300	272.5	25	3.5	2	3	256	281	68.3	145	4.5
RE 25025	250	310	280.9	25	3.5	2	3	268	293	69.3	150	5
RE 25030	250	330	287.5	30	4.5	3	3	269	306	126	244	8.1
RE 25040	250	355	300.7	40	6	3.5	3	275	326	195	348	14.8
RE 30025	300	360	332	25	3.5	2	3	319	344	75.7	178	5.9
RE 30035	300	395	345	35	5	3	3	322	368	183	367	13.4
RE 30040	300	405	351.6	40	6	3.5	3	326	377	212	409	17.2
RE 35020	350	400	376.6	20	3.5	1.6	3	363	383	54.1	143	3.9
RE 40035	400	480	440.3	35	5	3	3.5	422	459	156	370	14.5
RE 40040	400	510	453.4	40	6	3.5	3.5	428	479	241	531	23.5



Technical Parameters:

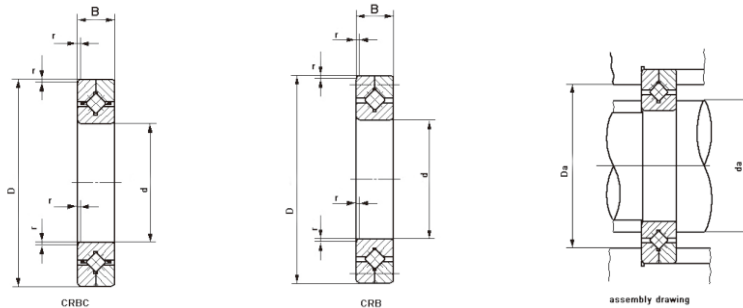
Bearing Code	Main dimensions							shoulder height		Basic Load Rating (radial)		Mass
	inner diameter d	outer diameter D	Roller pitch circle diameter dp	width B B1	Grease hole a b		r	ds	Dh	C	Co	Kg
	mm							mm		KN		
RE 45025	450	500	476.6	25	3,5	1.6	1.5	464	484	61.7	182	6.6
RE 50025	500	550	526.6	25	3,5	1.6	1.5	514	534	65.5	201	7.3
RE 50040	500	600	548.8	40	6	3	3.5	526	572	239	607	26
RE 50050	500	625	561.6	50	6	3.5	3.5	536	587	267	653	41.7
RE 60040	600	700	650	40	6	3	4	627	673	264	721	29

Remarks:

1. RE...UU series are with sealed;
2. Please use outer ring rotary when high precision is required

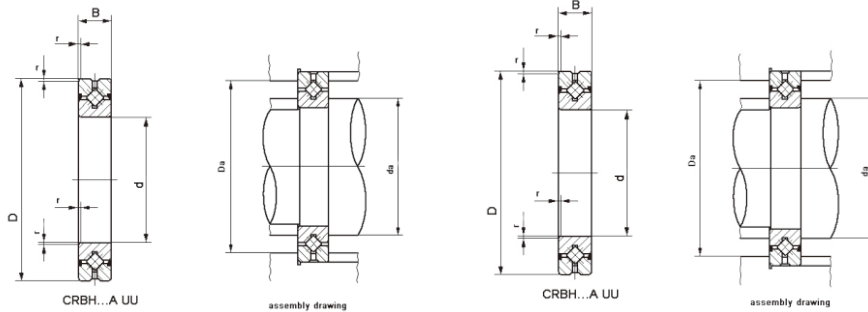
Cross Roller Bearings

Cross Roller Bearings CRB & CRBC Series



Technical Parameters:

Bearing Code		Main dimensions				Mounting dimensions		Basic Load Rating (radial)				Mass
With cage	Full complement	Inner dia.	Outer dia.	width	r_{min}	d_a	D_a	Dynamic (C)	Static (Co)	Dynamic (C)	Static (Co)	Kg
		d	D	B	mm	mm	mm	KN	KN	KN	KN	
CRBC 5013	CRB 5013	50	80	13	0,6	55	71	10,7	12,6	14,2	18,4	0,29
CRBC 6013	CRB 6013	60	90	13	0,6	64	81	11,6	14,6	15,4	21,5	0,33
CRBC 7013	CRB 7013	70	100	13	0,6	75	91	12,3	16,7	17	25,5	0,38
CRBC 8016	CRB 8016	80	120	16	0,6	86	107	18,2	25,5	24,3	37,5	0,74
CRBC 9016	CRB 9016	90	130	16	1	98	118	19,4	28,6	25,9	42,1	0,81
CRBC 10020	CRB 10020	100	150	20	1	108	134	31,5	45,1	39,4	61,1	1,45
CRBC 11020	CRB 11020	110	160	20	1	118	144	33,5	50,7	41,2	66,7	1,56
CRBC 12025	CRB 12025	120	180	25	1,5	132	164	47,7	70,5	59,9	95,4	2,62
CRBC 13025	CRB 13025	130	190	25	1,5	140	172	49,2	74,8	61	99,8	2,82
CRBC 14025	CRB 14025	140	200	25	1,5	151	183	50,7	79,2	64,1	108	2,96
CRBC 15025	CRB 15025	150	210	25	1,5	160	192	53,8	87,7	65	113	3,16
CRBC 15030	CRB 15030	150	230	30	1,5	166	202	69,2	108	85,9	144	5,3
CRBC 20025	CRB 20025	200	260	25	2	208	239	60,2	110	75,3	148	4
CRBC 20030	CRB 20030	200	280	30	2	218	262	108	178	133	234	6,7
CRBC 20035	CRB 20035	200	295	35	2	221	274	137	215	168	282	9,58
CRBC 25025	CRB 25025	250	310	25	2,5	259	290	67,2	136	83,9	183	4,97
CRBC 25030	CRB 25030	250	330	30	2,5	265	310	116	208	146	283	8,1
CRBC 25040	CRB 25040	250	355	40	2,5	271	330	179	299	215	382	14,8
CRBC 30025	CRB 30025	300	360	25	2,5	310	341	73,8	162	91,9	217	5,88
CRBC 30035	CRB 30035	300	395	35	2,5	318	372	163	299	205	408	13,4
CRBC 30040	CRB 30040	300	405	40	2,5	321	381	194	351	235	451	17,2
CRBC 40035	CRB 40035	400	480	35	2,5	414	457	133	300	165	400	14,5
CRBC 40040	CRB 40040	400	510	40	2,5	423	483	222	455	270	590	23,5
CRBC 40070	CRB 40070	400	580	70	2,5	430	532	470	811	576	1060	72,4
CRBC 50040	CRB 50040	500	600	40	2,5	517	573	212	497	259	648	26
CRBC 50050	CRB 50050	500	625	50	2,5	531	592	247	561	306	747	41,7
CRBC 50070	CRB 50070	500	680	70	2,5	530	633	536	1020	653	1330	86,1
CRBC 60040	CRB 60040	600	700	40	3	621	676	231	581	287	774	30,6
CRBC 60070	CRB 60070	600	780	70	3	630	734	591	1230	700	1540	102
CRBC 600120	CRB 600120	600	870	120	3	643	817	1250	2210	1490	2800	274
CRBC 70045	CRB 70045	700	815	45	3	730	785	250	681	313	917	46,5
CRBC 70070	CRB 70070	700	880	70	3	731	834	630	1390	766	1810	115
CRBC 700150	CRB 700150	700	1020	150	3	751	953	1660	3010	1980	3820	478
CRBC 80070	CRB 80070	800	950	70	4	831	907	417	1090	513	1440	109
CRBC 800100	CRB 800100	800	1030	100	4	840	972	936	2040	1140	2640	247



Technical Parameters:

Bearing Code		Main dimensions				Mounting dimensions		Basic Load Rating (radial)		Mass
		Inner dia. d	Outer dia. D	width B	r min	da	Da	Dynamic (C)	Static (Co)	Kg
		mm						KN		
CRBH 5013 A	CRBH 5013 A UU	50	80	13	0.6	56	74	17.3	20.9	0.29
CRBH 6013 A	CRBH 6013 A UU	60	90	13	0.6	66	84	18.8	24.3	0.33
CRBH 7013 A	CRBH 7013 A UU	70	100	13	0.6	76	94	20.1	27.7	0.38
CRBH 8016 A	CRBH 8016 A UU	80	120	16	0.6	88	112	32.1	43.4	0.74
CRBH 9016 A	CRBH 9016 A UU	90	130	16	0.6	98	122	33.1	46.8	0.81
CRBH 10020 A	CRBH 10020 A UU	100	150	20	0.6	110	140	50.9	72.2	1.45
CRBH 11020 A	CRBH 11020 A UU	110	160	20	0.6	120	150	52.4	77.4	1.56
CRBH 12025 A	CRBH 12025 A UU	120	180	25	1	132	168	73.4	108	2.62
CRBH 13025 A	CRBH 13025 A UU	130	190	25	1	142	178	75.9	115	2.82
CRBH 14025 A	CRBH 14025 A UU	140	200	25	1	152	188	81.9	130	2.96
CRBH 15025 A	CRBH 15025 A UU	150	210	25	1	162	198	84.3	138	3.16
CRBH 20025 A	CRBH 20025 A UU	200	260	25	1	212	248	92.3	169	4
CRBH 25025 A	CRBH 25025 A UU	250	310	25	1.5	262	298	102	207	4.97

Cross Taper Roller Bearings

Features:

Cross Taper Roller Bearings are variation of Crossed Cylindrical Roller Bearings, the taper rollers are arranged crosswise, with each roller perpendicular to the adjacent roller, and the intersection point of the extending lines of the rolling surface should lie in the slewing line of the bearing.

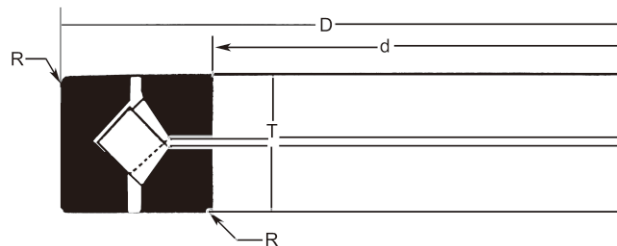
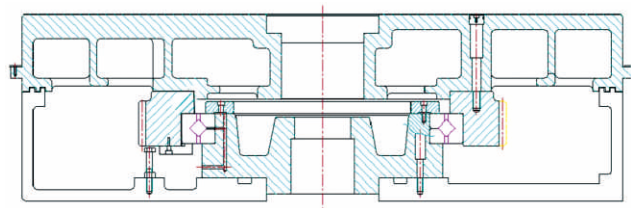
Cross Taper Roller Bearings have advantages:

- High precision: precision at P4, P2.
- High rigidity: these series bearings are with preload.
- High load capacity: can support radial load, axial load, and tilting load.
- High speed: rollers do pure rolling, so the limited speed of crossed taper roller bearings is higher than that of crossed cylindrical roller bearings.
- Low friction: the frictional torque of crossed taper roller bearings is much lower than that of crossed cylindrical roller bearings.

Application:

Cross taper roller bearings can be widely applied in high speed vertical lathe, high precision working table, vertical boring machine, and main axis of grinding machine etc.

Example:



Technical Parameters:

Bearing Code	Dimensions				Basic dynamic load rating		coefficient K
	d	D	T	R	double-row (radial)	Thrust	
	mm				N		
XR496051	203.2	279.4	31.75	1.5	51300	61600	0.48
JXR637050	300	400	37	1.5	63000	80100	0.45
JXR652050	310	425	45	2.5	82200	102000	0.46
XR678052	330.2	457.2	63.5	3.3	100000	123000	0.47
JXR699050	370	495	50	3	93600	119000	0.45
XR766051	457.2	609.6	63.5	3.3	141000	178000	0.45
XR820060	580	760	80	6.4	240000	299000	0.46
XR855053	685.8	914.4	79.375	3.3	270000	344000	0.45
XR882055	901.7	1117.6	82.55	3.3	300000	396000	0.44
XR889058	1028.7	1327.15	114.3	3.3	405000	534000	0.44
XR897051	1549.4	1828.8	101.6	3.3	518000	699000	0.43

Remarks:

In order to make it easy for calculation, the load rating noted in the above file is based on working 3000h at the speed of 500r/m, i.e. L10 life. While the limited bearing speed is depended on bearing dimension and the real load, and the speed is possible to be under 500r/m