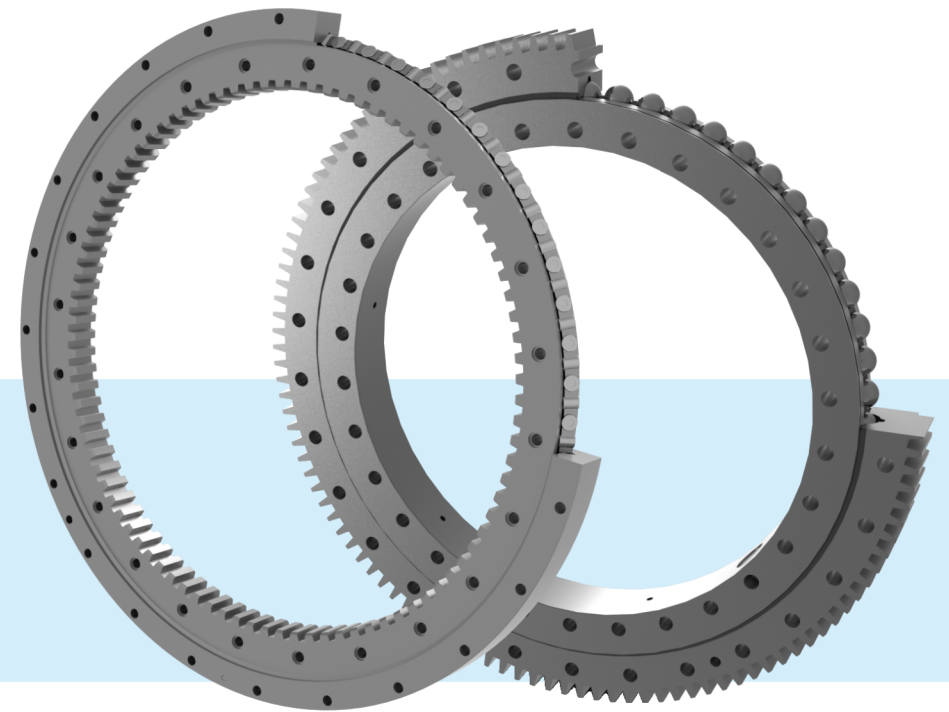


Slewing bearing



Slewing bearing

Selection and calculation of slewing bearing

Selection and calculation of single row ball slewing bearing

1. Calculation of rated static capacity

$$C_o = f \cdot D \cdot d$$

In the formula:

C_o - Rated static capacity	kN
f- Static capacity coefficient	0.108kN/mm ²
D- Raceway center diameter	mm
d- Ball nominal diameter	mm

2. Calculate the equivalent axial load based on the combined external load

$$C_p = F_a + 4370M/D + 3.44F_r$$

In the formula:

C_p - Equivalent axial load	kN
M- overturning moment	kN.m
F_a - axial force	kN
r- radial force	kN

3. Safety factor calculation

$$f_s = C_o / C_p$$

The value of f_s can be selected according to the table below

Selection and calculation of three-row roller slewing bearing

1. Calculation of rated static capacity

$$C_o = f \cdot D \cdot d$$

In the formula:

C_o - Rated static capacity	kN
f- Static capacity coefficient	0.172kN/mm ²
D- Raceway center diameter	mm
d- Upper row roller diameter	mm

2. Calculate the equivalent axial load based on the combined external load,

$$C_p = F_a + 4370M/D + 3.44F_r$$

In the formula:

C_p - Equivalent axial load	kN
M- overturning moment	kN.m
F_a - axial force	kN

3. Safety factor calculation

$$f_s = C_o / C_p$$

The value of f_s can be selected according to the table below

Slewing bearing safety factor f_s

Work type	Operating characteristic	Mechanical example	f_s
Light	Infrequent full load, Rotary balance, low impact	Stacker-reclaimer, truck crane, non-port wheeled crane	1.00—1.15
Medium	Infrequent full load, fast rotation, impact	Tower crane, marine crane, crawler crane	1.15—1.30
Heavy	Often full load, fast rotation, large impact	Grab crane, port crane, single bucket excavator, container crane	1.30—1.45
Extremely heavy	Full load, large impact or harsh workplace conditions	Bucket wheel excavator, tunnel boring machine, metallurgical crane, offshore working platform crane	1.45—1.70

Types and series of slewing bearing

Types and series of slewing bearing

1. Product types:

0- Ball slewing bearings; 1- Roller slewing bearing

2. Raceway structure types:

- 1- Single row cross roller type and single row four-point contact ball type;
- 2- double-row ball with different diameter type;
- 3- Three row roller type

3. Driving method:

- 0-Toothless;
- 1-Small modulus of external meshing of involute cylindrical gear;
- 2-Large modulus of external meshing of involute cylindrical gear ;
- 3-Small modulus of internal meshing of involute cylindrical gear ;
- 4-Large modulus of internal meshing of involute cylindrical gear

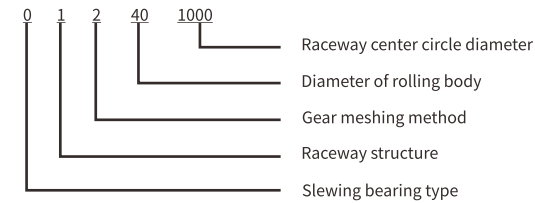
4. Diameter of rolling body (ball or roller)

5. Raceway center circle diameter

Examples of basic model specification

Slewing bearing numbering method

JB / T2300-2018 standard slewing bearing numbering method



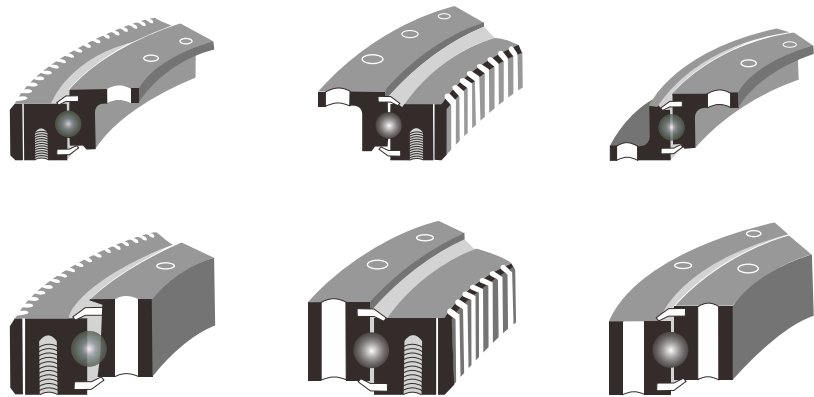
1. The toothless single row ball type slewing bearing is composed of an outer gear type inner ring and an inner gear type outer ring with the same center circle diameter of raceway, and its plug and oil hole are arranged on the outer ring.

2. The raceway center diameter series of the cross-roller slewing bearing is exactly the same as that of the single row ball slewing bearing. However, the diameter of the rolling elements of the cross roller slewing bearing and the single row ball slewing bearing with the same raceway center diameter are different. The correspondence is as follows:

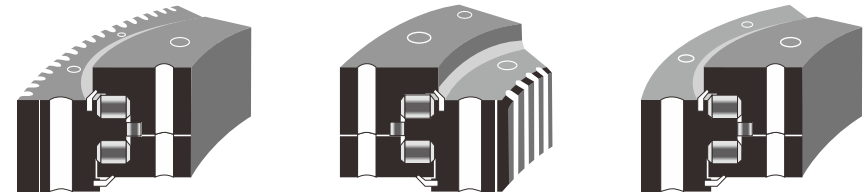
	Units: mm					
Q series steel ball diameter	20	25	32	40	50	60
J series cylindrical roller diameter	14	18	22	28	36	45

Slewing bearing structure

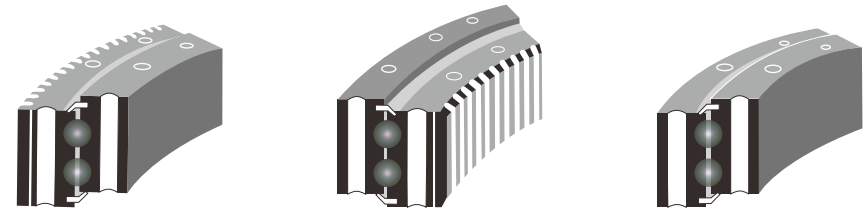
Single row ball slewing bearing



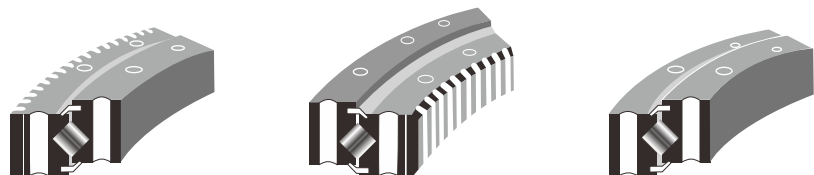
Three row roller slewing bearing



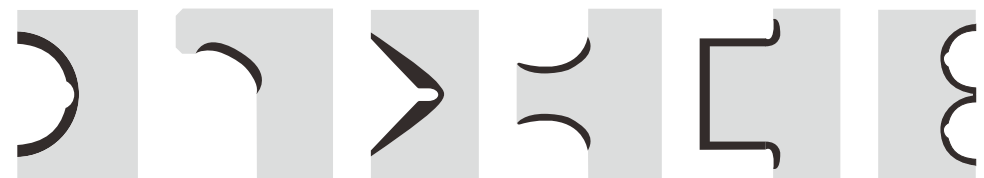
Double row ball slewing bearing



Single row cross roller slewing bearing



Heat treatment of slewing bearing



Single row four-point contact ball type raceway

Pressing ring raceway of double row ball with different diameter type

Single row cross roller type raceway

Nose ring raceway of double row ball with different diameters type

Three row roller type nose ring raceway

Double row ball type raceway



Full gear quenching

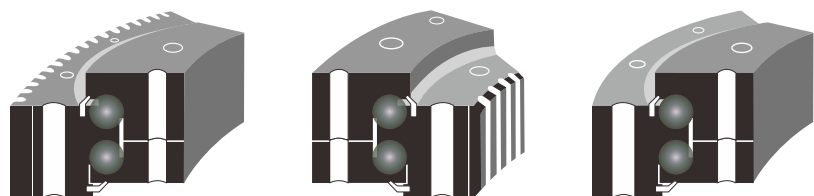


Quenching of gear tooth surface and root



Quenching of gear tooth surface

Double-row ball with different diameters slewing bearing

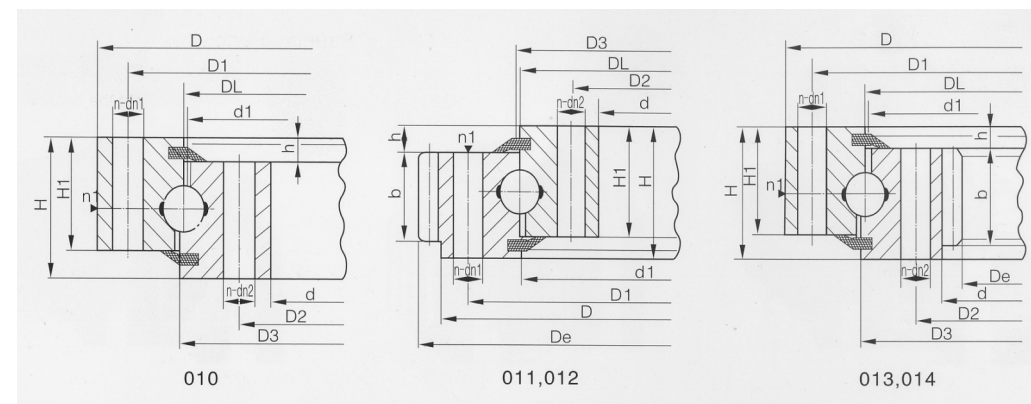


Structure characteristics, performance, scope of application

Single row four-point contact ball slewing bearing is composed of two seat rings. It is featured by compact structure, light weight and four-point contact between ball and arc raceway. It can bear axial force, radial force and overturning torque at the same time. This type of bearings is applicable to slewing conveyor, welding operating machine, and construction machinery like small-and-medium cranes and excavators.

Notes:

1. n1 is the number of oil holes evenly distributed: M10X1 JB/T7940.2 oil cup;
2. The gear width b can be changed to H-h;
3. The circumferential force of the inner gear is the maximum circumferential force, and the rated circumferential force is 1/2 of the maximum circumferential force.
4. The corrected coefficient of external gear is 0.1 and that of internal gear is 0.2.



No.	Basic number			Boundary dimensions			Mounting dimensions				Structural dimension					Gear parameter			External gear parameter		Internal gear parameter		Circumferential force of gear		Reference mass (kg)	
	Toothless	External gear	Internal gear	D mm	d mm	H mm	D1 mm	D2 mm	n	dn1 mm	dn2 mm	n1	D3 mm	d1 mm	H1 mm	h mm	b mm	X	m mm	De mm	Z	De mm	Z	Normalizing Z 10 ⁴ N		Tempering T 10 ⁴ N
1	010.20.200	011.20.200	-	280	120	60	248	152	12	16		2	201	199	50	10	40	0	3	300	98	-	-	-	-	19
2	010.20.224	011.20.224	-	304	144	60	272	176	12	16		2	225	223	50	10	40	0	3	321	105	-	-	-	-	21
3	010.20.250	011.20.250	-	330	170	60	298	202	18	16		2	251	249	50	10	40	0	4	352	86	-	-	-	-	23
4	010.20.280	011.20.280	-	360	200	60	328	232	18	16		2	281	279	50	10	40	0	4	348	94	-	-	-	-	26
5	010.25.315	011.25.315	013.25.315	408	222	70	372	258	20	18		2	316	314	60	10	50	0	5	435	85	190	40	2.9	4.4	41
6	010.25.355	011.25.355	013.25.355	448	262	70	412	298	20	18		2	256	354	60	10	50	0	5	475	93	235	49	2.9	4.4	46
7	010.25.400	011.25.400	013.25.400	493	307	70	457	343	24	18		2	401	399	60	10	50	0	6	528	86	276	48	3.5	5.3	54
8	010.25.450	011.25.450	013.25.450	543	357	70	507	393	24	18		2	451	499	60	10	50	0	6	576	94	324	56	3.5	5.3	60
9	010.30(25).500	011.30(25).500 012.30(25).500	013.30(25).500 014.30(25).500	602	398	80	566	434	20	18		4	501	499	70	10	60	+0.5	5 6	629 628.8	123 102	367 368.4	74 62	3.7 4.5	5.2 6.2	85
10	010.30(25).560	011.30(25).560 012.30(25).560	013.30(25).560 014.30(25).560	662	458	80	626	494	20	18		4	561	559	70	10	60	+0.5	5 6	689 688.8	135 112	427 428.4	86 72	3.7 4.5	5.2 6.2	95
11	010.30(25).630	011.30(25).630 012.30(25).630	013.30(25).630 014.30(25).630	732	528	80	696	564	24	18		4	631	629	70	10	60	+0.5	6 8	722.8 774.4	126 94	494.4 491.2	83 62	4.5 6.0	6.2 8.3	110
12	010.30(25).710	011.30(25).710 012.30(25).710	013.30(25).710 014.30(25).710	812	608	80	776	644	24	18		4	711	709	70	10	60	+0.5	6 8	850.8 854.4	139 104	572.4 571.2	96 72	4.5 6.0	6.2 8.3	120
13	010.40(30).800	011.40(30).800 012.40(30).800	013.40(30).800 014.40(30).800	922	678	100	878	722	30	22		6	801	798	90	10	80	+0.5	8 10	966.4 968	118 94	635.2 634	80 64	8.0 10.0	11.1 14.0	220
14	010.40(30).900	011.40(30).900 012.40(30).900	013.40(30).900 014.40(30).900	1022	778	100	978	822	30	22		6	901	898	90	10	80	+0.5	8 10	1062.4 1068	130 104	739.2 734	93 74	8.0 10.0	11.1 14.0	240
15	010.40(30).1000	011.40(30).1000 012.40(30).1000	013.40(30).1000 014.40(30).1000	1122	878	100	1078	922	36	22		6	1001	998	90	10	80	+0.5	10 12	1188 1185.6	116 96	824 820.8	83 69	10.0 12.0	14.0 16.7	270
16	010.40(30).1120	011.40(30).1120 012.40(30).1120	013.40(30).1120 014.40(30).1120	1242	998	100	1198	1042	36	22		6	1121	1118	90	10	80	+0.5	10 12	1298 1305.6	127 106	944 940.8	95 79	10.0 12.0	14.0 16.7	300
17	010.45(35).1250	011.45(35).1250 012.45(35).1250	013.45(35).1250 014.45(35).1250	1390	1110	110	1337	1163	40	26		5	1251	1248	100	10	90	+0.5	12 14	1449.6 1453.2	118 101	1048.8 1041.6	88 75	13.5 15.8	18.8 21.9	420
18	010.45(35).1400	011.45(35).1400 012.45(35).1400	013.45(35).1400 014.45(35).1400	1540	1260	110	1487	1313	40	26		5	1401	1398	100	10	90	+0.5	12 14	1605.6 1607.2	131 112	1192.8 1195.6	100 86	13.5 15.8	18.8 21.9	480
19	010.45(35).1600	011.45(35).1600 012.45(35).1600	013.45(35).1600 014.45(35).1600	1740	1460	110	1687	1513	45	26		5	1601	1598	100	10	90	+0.5	14 16	1817.2 1820.8	127 111	1391.6 1382.4	100 87	15.8 18.1	21.9 25.0	550
20	010.45(35).1800	011.45(35).1800 012.45(35).1800	013.45(35).1800 014.45(35).1800	1940	1660	110	1887	1713	45	26		5	1801	1798	100	10	90	+0.5	14 16	2013.2 2012.8	141 123	1573.6 1574.4	113 99	15.8 18.1	21.9 25.0	610
21	010.60(40).2000	011.60(40).2000 012.60(40).2000	013.60(40).2000 014.60(40).2000	2178	1825	144	2110	1891	48	33		8	2001	1998	132	12	120	+0.5	16 18	2268.8 2264.4	139 123	1734.4 1735.2	109 97	24.1 27.1	33.3 37.5	1100
22	010.60(40).2240	011.60(40).2240 012.60(40).2240	013.60(40).2240 014.60(40).2240	2418	2065	144	2350	2131	48	33		8	2241	2238	132	12	120	+0.5	16 18	2492.8 2498.4	153 136	1990.4 1987.2	125 111	24.1 27.1	33.3 37.5	1250
23	010.60(40).2500	011.60(40).2500 012.60(40).2500	013.60(40).2500 014.60(40).2500	2678	2325	144	2610	2391	56	33		8	2501	2498	132	12	120	+0.5	18 20	2768.4 2776	151 136	2239.2 2228	125 112	27.1 30.1	37.5 41.8	1400
24	010.60(40).2800	011.60(40).2800 012.60(40).2800	013.60(40).2800 014.60(40).2800	2978	2625	144	2910	2691	56	33		8	2801	2798	132	12	120	+0.5	18 20	3074.4 3076	168 151	2527.2 2528	141 127	27.1 30.1	37.5 41.8	1600
25	010.75(50).3150	011.75(50).3150 012.75(50).3150	013.75(50).3150 014.75(50).3150	3376	2922	174	3286	3014	56	45		8	3152	3147	162	12	150	+0.5	20 22	3476 3471.6	171 155	2828 2824.8	142 129	37.7 41.5	52.2 57.4	2800

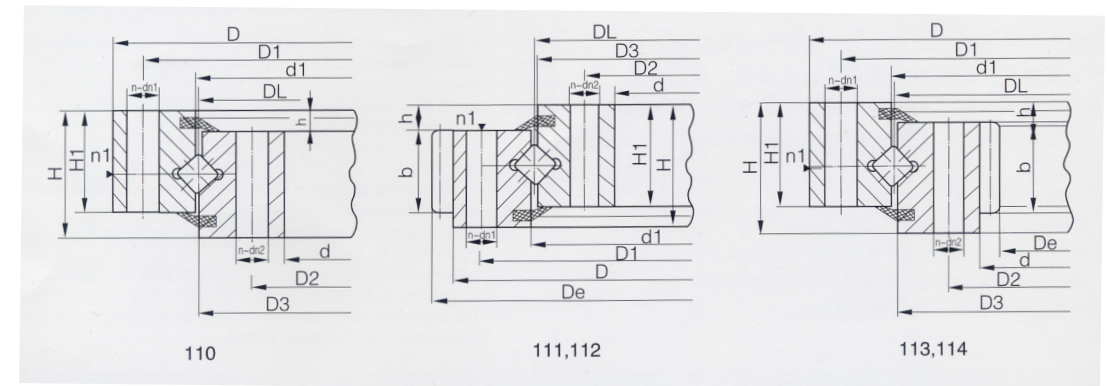
Remarks: If there is any other requirements, please contact with C&U Group for inquiry.

Structure characteristics, performance, scope of application

Single row cross roller slewing bearing is composed of two seat rings. It is featured by compact structure, light weight, high manufacturing and assembly accuracy and small installation clearance. The roller is cross arranged with a ratio of 1:1. The bearings can withstand axial force, overturning moment and large radial force at the same time, and is widely used in hoisting and conveying machinery, engineering machinery and military products.

Notes:

1. n1 is the number of oil holes evenly distributed: M10X1 JB/T7940.2 oil cup;
2. The gear width b can be changed to H-h;
3. The circumferential force of the inner gear is the maximum circumferential force, and the rated circumferential force is 1/2 of the maximum circumferential force.
4. The corrected coefficient of external gear is 0.1 and that of internal gear is 0.2.



No.	Basic number			Boundary dimensions			Mounting dimensions				Structural dimension					Gear parameter			External gear parameter		Internal gear parameter		Circumferential force of gear		Reference mass (kg)	
	Toothless	External gear	Internal gear	D mm	d mm	H mm	D1 mm	D2 mm	n	dn1 mm	dn2 mm	n1	D3 mm	d1 mm	H1 mm	h mm	b mm	X	m mm	De mm	Z	De mm	Z	Normalizing Z 10 ⁴ N		Tempering T 10 ⁴ N
1	110.25.500	111.25.500 112.25.500	113.25.500 114.25.500	602	398	75	566	434	20	18		4	498	502	65	10	60	+0.5	5 6	629 628.8	123 102	367 368.4	74 62	3.7 4.5	5.2 6.2	80
2	110.25.560	111.25.560 112.25.560	113.25.560 114.25.560	662	458	75	626	494	20	18		4	558	562	65	10	60	+0.5	5 6	689 688.8	135 112	427 428.4	86 72	3.7 4.5	5.2 6.2	90
3	110.25.630	111.25.630 112.25.630	113.25.630 114.25.630	732	528	75	696	564	24	18		4	628	632	65	10	60	+0.5	6 8	772.8 774.4	126 94	494.4 491.2	83 62	4.5 6.0	6.2 8.3	100
4	110.25.710	111.25.710 112.25.710	113.25.710 114.25.710	812	608	75	776	644	24	18		4	708	712	65	10	60	+0.5	6 8	850.8 854.4	139 104	572.4 571.2	96 72	4.5 6.0	6.2 8.3	110
5	110.28.800	111.28.800 112.28.800	113.28.800 114.28.800	922	678	82	878	722	30	22		6	798	802	72	10	65	+0.5	8 10	966.4 968	118 94	635.2 634	80 64	6.5 8.1	9.1 11.4	170
6	110.28.900	111.28.900 112.28.900	113.28.900 114.28.900	1022	778	82	978	822	30	22		6	898	902	72	10	65	+0.5	8 10	1062.4 1068	130 104	739.2 734	93 74	6.5 8.1	9.1 11.4	190
7	110.28.1000	111.28.1000 112.28.1000	113.28.1000 114.28.1000	1122	878	82	1078	922	36	22		6	998	1002	72	10	65	+0.5	10 12	1188 1185.6	116 96	824 820.8	83 69	8.1 9.7	11.4 13.6	210
8	110.28.1120	111.28.1120 112.28.1120	113.28.1120 114.28.1120	1242	998	82	1198	1042	36	22		6	1118	1122	72	10	65	+0.5	10 12	1298 1305.6	127 106	944 940.8	95 79	8.1 9.7	11.4 13.6	230
9	110.32.1250	111.32.1250 112.32.1250	113.32.1250 114.32.1250	1390	1110	91	1337	1163	40	26		5	1248	1252	81	10	75	+0.5	12 14	1449.6 1453.2	118 101	1048.8 1041.6	88 75	11.3 13.2	15.7 18.2	350
10	110.32.1400	111.32.1400 112.32.1400	113.32.1400 114.32.1400	1540	1260	91	1487	1313	40	26		5	1398	1402	81	10	75	+0.5	12 14	1605.6 1607.7	131 112	1192.8 1195.6	100 86	11.3 13.2	15.7 18.2	400
11	110.32.1600	111.32.1600 112.32.1600	113.32.1600 114.32.1600	1740	1460	91	1687	1513	45	26		5	1598	1602	81	10	75	+0.5	14 16	1817.2 1820.8	127 111	1391.6 1382.4	100 87	13.2 15.1	18.2 22.4	440
12	110.32.1800	111.32.1800 112.32.1800	113.32.1800 114.32.1800	1940	1660	91	1887	1713	45	33		5	1798	1802	81	10	75	+0.5	14 16	2013.2 2012.8	141 123	1573.6 1574.4	113 99	13.2 15.1	18.2 22.4	500
13	110.40.2000	111.40.2000 112.40.2000	113.40.2000 114.40.2000	2178	1825	112	2110	1891	48	33		8	1997	2003	100	12	90	+0.5	16 18	2268.8 2264.4	139 123	1734.4 1735.2	109 97	18.1 20.3	25.0 28.1	900
14	110.40.2240	111.40.2240 112.40.2240	113.40.2240 114.40.2240	2418	2065	112	2350	2131	48	33		8	2237	2243	100	12	90	+0.5	16 18	2492.8 2498.4	153 136	1990.4 1987.2	125 111	18.1 20.3	25.0 28.1	1000
15	110.40.2500	111.40.2500 112.40.2500	113.40.2500 114.40.2500	2678	2325	112	2610	2391	56	33		8	2497	2503	100	12	90	+0.5	18 20	2768.4 2776	151 136	2239.2 2228	125 112	20.3 22.6	28.1 31.3	1100
16	110.40.2800	111.40.2800 112.40.2800	113.40.2800 114.40.2800	2978	2625	112	2910	2691	56	33		8	2797	2803	100	12	90	+0.5	18 20	3074.4 3076	168 151	2527.2 2528	141 127	20.3 22.6	28.1 31.3	1250
17	110.50.3150	111.50.3150 112.50.3150	113.50.3150 114.50.3150	3376	2922	134	3286	3014	56	45		8	3147	3153	122	12	110	+0.5	20 22	3476 3471.6	171 155	2828 2824.8	142 129	27.6 30.4	38.3 42.1	2150

Remarks: If there is any other requirements, please contact with C&U Group for inquiry.

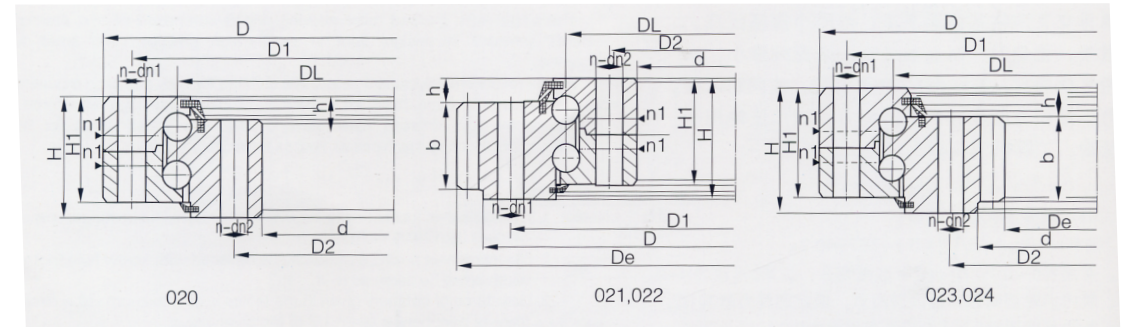
Double row ball with different diameters slewing bearing (02 series) JB/T2300-1999

Structure characteristics, performance, scope of application

The double row ball slewing bearing has three seat rings. The balls and spacers can be directly arranged into the upper and lower raceways. According to the force condition, the balls with different diameters can be arranged in the upper and lower rows.

This kind of open assembly is very convenient. The bearing angle of the upper and lower arc raceways is 90°C. It can bear a great deal of axial force and overturning torque. When the

radial force is greater than 0.1 times the axial force, the raceway needs special design. The axial and radial dimensions of the double row ball slewing bearing are relatively large and the structure is firm, which makes it especially suitable for loading and unloading machinery like above-medium-diameter tower crane and truck crane.



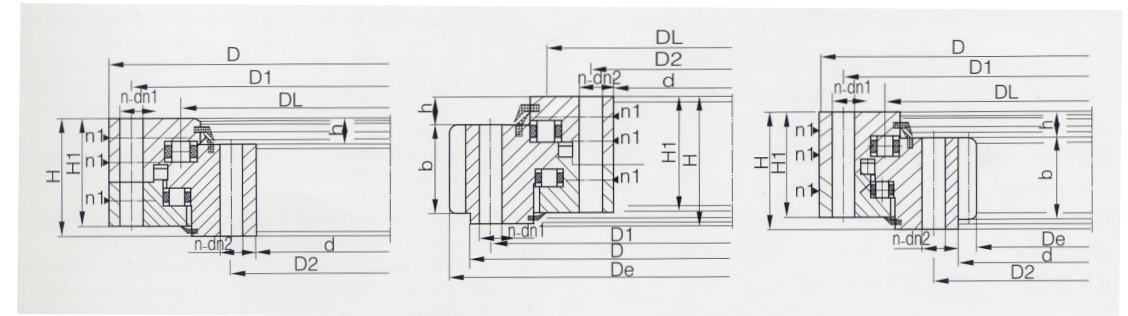
No.	Basic number			Boundary dimensions			Mounting dimensions				Structural dimension			Gear parameter			External gear parameter		Internal gear parameter		Circumferential force of gear		Reference mass (kg)
	Toothless	External gear	Internal gear	D mm	d mm	H mm	D1 mm	D2 mm	n	dn1 dn2 mm	n1	H1 mm	h mm	b mm	X	m mm	De mm	Z	De mm	Z	Normalizing Z 10 ⁴ N	Tempering T 10 ³ N	
1	020.25.500	021.25.500 022.25.500	023.25.500 024.25.500	616	384	106	580	420	20	18	4	96	26	60	+0.5	5 6	644 646.8	126 105	357 350.4	72 59	3.7 4.5	5.2 6.2	100
2	020.25.560	021.25.560 022.25.560	023.25.560 024.25.560	676	444	106	640	480	20	18	4	96	26	60	+0.5	5 6	704 706.8	138 115	417 410.4	84 69	3.7 4.5	5.2 6.2	115
3	020.25.630	021.25.630 022.25.630	023.25.630 024.25.630	746	514	106	710	550	24	18	4	96	26	60	+0.5	6 8	790.8 790.4	129 96	482.4 475.2	81 60	4.5 6.0	6.2 8.3	130
4	020.25.710	021.25.710 022.25.710	023.25.710 024.25.710	826	594	106	790	630	24	18	4	96	26	60	+0.5	6 8	862.8 862.4	141 105	560.4 555.2	94 70	4.5 6.0	6.2 8.3	140
5	020.30.800	021.30.800 022.30.800	023.30.800 024.30.800	942	658	124	898	702	30	22	6	114	29	80	+0.5	8 10	982.4 988	120 96	619.2 614	78 62	8.0 10.0	11.1 14.1	200
6	020.30.900	021.30.900 022.30.900	023.30.900 024.30.900	1042	758	124	998	802	30	22	6	114	29	80	+0.5	8 10	1086.4 1088	133 106	715.2 714	90 72	8.0 10.0	11.1 14.1	250
7	020.30.1000	021.30.1000 022.30.1000	023.30.1000 024.30.1000	1142	858	124	1098	902	36	22	6	114	29	80	+0.5	10 12	1198 1197.6	117 97	814 796.8	82 67	10.1 12.0	14.0 16.7	300
8	020.30.1120	021.30.1120 022.30.1120	023.30.1120 024.30.1120	1262	978	124	1218	1022	36	22	6	114	29	80	+0.5	10 12	1318 1317.6	129 107	924 916.8	93 77	10.1 12.0	14.0 16.7	340
9	020.40.1250	021.40.1250 022.40.1250	023.40.1250 024.40.1250	1426	1074	160	1374	1126	40	26	5	150	39	90	+0.5	12 14	1497.6 1495.2	122 104	1012.8 1013.6	85 73	13.5 15.8	18.8 21.9	580
10	020.40.1400	021.40.1400 022.40.1400	023.40.1400 024.40.1400	1576	1224	160	1524	1272	40	26	5	150	39	90	+0.5	12 14	1641.6 1649.2	134 115	1156.8 1153.6	97 83	13.5 15.8	18.8 21.9	650
11	020.40.1600	021.40.1600 022.40.1600	023.40.1600 024.40.1600	1776	1424	160	1724	1476	45	26	5	150	39	90	+0.5	14 16	1845.2 1852.8	129 113	1349.6 1350.4	97 85	15.8 18.1	21.9 25.0	750
12	020.40.1800	021.40.1800 022.40.1800	023.40.1800 024.40.1800	1976	1624	160	1924	1676	45	26	5	150	39	90	+0.5	14 16	2055.2 2060.8	144 126	1545.6 1542.4	111 97	15.8 18.1	21.9 25.0	820
13	020.50.2000	021.50.2000 022.50.2000	023.50.2000 024.50.2000	2215	1785	190	2149	1851	48	33	8	178	47	120	+0.5	16 18	2300.8 2300.4	141 125	1702.4 1699.2	107 95	24.1 27.1	33.3 37.5	1150
14	020.50.2240	021.50.2240 022.50.2240	023.50.2240 024.50.2240	2455	2025	190	2389	2091	48	33	8	178	47	120	+0.5	16 18	2540.8 2552.4	156 139	1942.4 1933.2	122 108	24.1 27.1	33.3 37.5	1500
15	020.50.2500	021.50.2500 022.50.2500	023.50.2500 024.50.2500	2715	2285	190	2649	2351	56	33	8	178	47	120	+0.5	18 20	2804.4 2816	153 138	2203.2 2188	123 110	27.1 30.1	37.5 41.8	1700
16	020.50.2800	021.50.2800 022.50.2800	023.50.2800 024.50.2800	3015	2585	190	2949	2651	56	33	8	178	47	120	+0.5	18 20	3110.4 3116	170 153	2491.2 2488	139 125	27.1 30.1	37.5 41.8	1900
17	020.60.3150	021.60.3150 022.60.3150	023.60.3150 024.60.3150	3428	2872	226	3338	2962	56	45	8	214	56	150	+0.5	20 22	3536 3537.6	174 158	2768 2758.8	139 126	37.7 41.5	52.2 57.4	3300
18	020.60.3550	021.60.3550 022.60.3550	023.60.3550 024.60.3550	3828	3272	226	3738	3362	56	45	8	214	56	150	+0.5	20 22	3936 3633.6	194 176	3168 3176.8	159 145	37.7 41.5	52.2 57.4	3700
19	020.60.4000	021.60.4000 022.60.4000	023.60.4000 024.60.4000	4278	3722	226	4188	3812	60	45	10	214	56	150	+0.5	22 25	4395.6 4395	197 173	3618.8 3610	165 145	41.5 47.1	57.4 65.2	4200
20	020.60.4500	021.60.4500 022.60.4500	023.60.4500 024.60.4500	4778	4222	226	4688	4312	60	45	10	214	56	150	+0.5	22 25	4879.6 4895	219 193	4122.8 4110	188 165	41.5 47.1	57.4 65.2	4700

Remarks: If there is any other requirements, please contact with C&U Group for inquiry.

Structure characteristics, performance, scope of application

The three row roller slewing bearing has three seat rings. The upper and lower rollers and the radial raceways are separated, so that the load of each row of roller can be accurately determined, and can bear various loads at the same time. It is one of the four products with the largest

bearing capacity. Its axle and radial dimensions are large and its structure is firm. It is especially suitable for heavy models requiring larger diameter, such as bucket wheel excavators, wheel lifting, port crane, molten steel table and large tonnage truck crane.



No.	Basic number			Boundary dimensions			Mounting dimensions				Structural dimension			Gear parameter			External gear parameter		Internal gear parameter		Circumferential force of gear		Reference mass (kg)	
	Toothless	External gear	Internal gear	D mm	d mm	H mm	D1 mm	D2 mm	n	dn1 mm	dn2 mm	n1	H1 mm	h mm	b mm	X	m mm	De mm	Z	De mm	Z	Normalizing Z 10 ⁴ N		Tempering T 10 ⁴ N
1	130.25.500	131.25.500 132.25.500	133.25.500 134.25.500	634	366	148	598	402	24	18		4	138	32	80	+0.5	5 6	664 664.8	130 108	337 338.4	68 57	5.0 6.0	6.7 8.0	200 200
2	130.25.560	131.25.560 132.25.560	133.25.560 134.25.560	694	426	148	658	462	24	18		4	138	32	80	+0.5	5 6	724 724.8	142 118	397 398.4	80 67	5.0 6.0	6.7 8.0	224 224
3	130.25.630	131.25.630 132.25.630	133.25.630 134.25.630	764	496	148	728	532	28	18		4	138	32	80	+0.5	6 8	808.8 806.4	132 98	458.4 459.2	77 58	6.0 8.0	8.0 11.0	262 257
4	130.25.710	131.25.710 132.25.710	133.25.710 134.25.710	844	576	148	808	612	28	18		4	138	32	80	+0.5	6 8	886.8 886.4	145 108	536.4 539.2	90 68	6.0 8.0	8.0 11.0	295 291
5	130.32.800	131.32.800 132.32.800	133.32.800 134.32.800	964	636	182	920	680	36	22		4	172	40	120	+0.5	8 10	1006.4 1008	123 98	595.2 594	75 60	12.1 15.1	16.7 20.9	490 487
6	130.32.900	131.32.900 132.32.900	133.32.900 134.32.900	1064	736	182	1020	780	36	22		4	172	40	120	+0.5	8 10	1102.4 1108	135 108	691.2 694	87 70	12.1 15.1	16.7 20.9	549 564
7	130.32.1000	131.32.1000 132.32.1000	133.32.1000 134.32.1000	1164	836	182	1120	880	40	22		5	172	40	120	+0.5	10 12	1218 1221.6	119 99	784 784.8	79 66	15.1 18.1	20.9 25.1	631 631
8	130.32.1120	131.32.1120 132.32.1120	133.32.1120 134.32.1120	1284	956	182	1240	1000	40	22		5	172	40	120	+0.5	10 12	1338 1341.6	131 109	904 904.8	91 76	15.1 18.1	20.9 25.1	710 710
9	130.40.1250	131.40.1250 132.40.1250	133.40.1250 134.40.1250	1445	1055	220	1393	1107	45	26		5	210	50	150	+0.5	12 14	1509.6 1509.2	123 105	988.8 985.6	83 71	22.9 26.3	31.4 36.6	1137 1126
10	130.40.1400	131.40.1400 132.40.1400	133.40.1400 134.40.1400	1595	1205	220	1543	1257	45	26		5	210	50	150	+0.5	12 14	1665.6 1663.2	136 116	1144.8 1139.6	96 82	22.9 26.3	31.4 36.6	1299 1281
11	130.40.1600	131.40.1600 132.40.1600	133.40.1600 134.40.1600	1795	1405	220	1743	1457	48	26		6	210	50	150	+0.5	14 16	1873.2 1868.8	131 114	1335.6 1334.4	96 84	26.3 30.2	36.6 41.7	1501 1471
12	130.40.1800	131.40.1800 132.40.1800	133.40.1800 134.40.1800	1995	1605	220	1943	1657	48	26		6	210	50	150	+0.5	14 16	2069.2 2076.8	145 127	1531.6 1526.4	110 96	26.3 30.2	36.6 41.7	1682 1697
13	130.45.2000	131.45.2000 132.45.2000	133.45.2000 134.45.2000	2221	1779	231	2155	1845	60	33		6	219	54	160	+0.5	16 18	2300.8 2300.4	141 125	1702.4 1699.2	107 95	32.2 36.2	44.5 50.1	2147 2129
14	130.45.2240	131.45.2240 132.45.2240	133.45.2240 134.45.2240	2461	2019	231	2395	2085	60	33		6	219	54	160	+0.5	16 18	2556.8 2552.4	157 139	1926.4 1933.2	121 108	32.2 36.2	44.5 50.1	2501 2461
15	130.45.2500	131.45.2500 132.45.2500	133.45.2500 134.45.2500	2721	2279	231	2655	2345	72	33		8	219	54	160	+0.5	18 20	2822.4 2816	154 138	2185.2 2188	122 110	36.2 40.2	50.1 55.6	2786 2731
16	130.45.2800	131.45.2800 132.45.2800	133.45.2800 134.45.2800	3021	2579	231	2955	2645	72	33		8	219	54	160	+0.5	18 20	3110.4 3116	170 153	2491.2 2488	139 125	36.2 40.2	50.1 55.6	3067 3079
17	130.50.3150	131.50.3150 132.50.3150	133.50.3150 134.50.3150	3432	2868	270	3342	2958	72	45		8	258	65	180	+0.5	20 22	3536 3537.6	174 158	2768 2758.8	139 126	45.2 48.8	62.6 68.9	5025 5009
18	130.50.3550	131.50.3550 132.50.3550	133.50.3550 134.50.3550	3832	3268	270	3742	3358	72	45		8	258	65	180	+0.5	20 22	3936 3933.6	194 176	3168 3154.8	159 144	45.2 48.8	62.6 68.9	5113 5661
19	130.50.4000	131.50.4000 132.50.4000	133.50.4000 134.50.4000	4282	3718	270	4192	3808	80	45		8	258	65	180	+0.5	22 25	4395.6 4395	197 173	3616.8 3610	165 145	49.8 56.5	68.9 78.3	6508 6449
20	0130.50.4500	131.50.4500 132.50.4500	133.50.4500 134.50.4500	4782	4218	270	4692	4308	80	45		8	258	65	180	+0.5	22 25	4901.6 4895	220 193	4122.8 4110	188 165	49.8 56.5	68.9 78.3	7438 7308

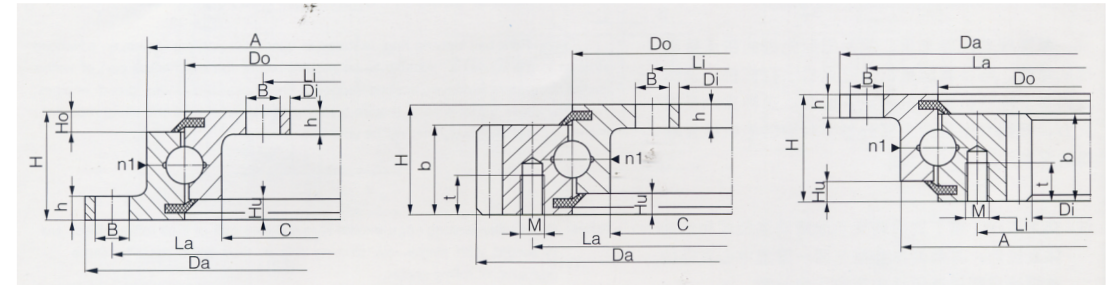
Remarks: If there is any other requirements, please contact with C&U Group for inquiry.

Single row ball slewing bearing(Light L series)

Structure characteristics, performance, scope of application

Single row four-point contact ball slewing bearing (light L series) consists of two seat rings. It is featured by compact structure and light weight, and four-points contact between balls and arc raceway. It can withstand axial force, radial

force and overturning torque at the same time. It is applicable to slewing conveyor, welding machine, automatic cleaning machine and other small and light machinery.



Toothless

External gear

Internal gear

	No.	number	Boundary dimensions(mm)			Mounting dimensions(mm)							Structural dimension(mm)						External gear parameter(mm)				Reference mass (kg)
			Da	Di	H	La	Li	na	B/M	ni	B/M	t	n1	h	A	C	Hu	Ho	m	z	k	b	
Toothless	1	LU414.20	518	304	56	455	332	8	18	12	18	-	4	12	453	375	10.5	10.5	-	-	-	-	23.4
	2	LU544.20	648	434	56	585	462	10	18	14	18	-	4	12	583	505	10.5	10.5	-	-	-	-	31.0
	3	LU644.20	748	534	56	685	562	12	18	16	18	-	4	12	683	605	10.5	10.5	-	-	-	-	36.4
	4	LU744.20	848	624	56	785	662	12	18	16	18	-	4	12	783	705	10.5	10.5	-	-	-	-	42.8
	5	LV844.20	948	734	56	885	762	14	18	18	18	-	4	12	883	805	10.5	10.5	-	-	-	-	47.8
	6	LU944.20	1048	834	56	985	862	16	18	20	18	-	4	12	983	905	10.5	10.5	-	-	-	-	53.1
	7	LU1094.20	1198	984	56	1170	1012	16	18	20	18	-	4	12	1133	1055	10.5	10.5	-	-	-	-	61.9
	8	LU955.30	1100	805	90	1060	845	30	22	30	22	-	6	21	1017	893	19	19	-	-	-	-	131
	9	LU1055.30	1200	905	90	1160	945	30	22	30	22	-	6	21	1117	993	19	19	-	-	-	-	145
	10	LU1155.30	1300	1005	90	1260	1045	36	22	36	22	-	6	21	1217	1093	19	19	-	-	-	-	159
	11	LU1255.30	1400	1105	90	1360	1145	42	22	42	22	-	6	21	1317	1193	19	19	-	-	-	-	172
	12	LU1355.30	1500	1205	90	1460	1245	42	22	42	22	-	6	21	1417	1293	19	19	-	-	-	-	186
	13	LU1455.30	1600	1305	90	1560	1345	48	22	48	22	-	6	21	1517	1393	19	19	-	-	-	-	200
External gear	7	LW414.20	504	304	56	455	332	10	M12	12	18	20	4	12	-	375	10.5	-	5	99	-0.1	45.5	29.3
	8	LW544.20	640.8	434	56	545	462	14	M12	14	18	20	4	12	-	505	10.5	-	6	105	-0.1	45.5	39.5
	9	LW644.20	742.8	534	56	685	562	16	M12	16	18	20	4	12	-	605	10.5	-	6	122	-0.1	45.5	47.6
	10	LW744.20	838.8	634	56	765	662	18	M12	16	18	20	4	12	-	705	10.5	-	6	138	-0.1	45.5	53.5
	11	LW844.20	950.4	734	56	885	762	18	M12	18	18	20	4	12	-	805	10.5	-	8	117	-0.1	45.5	65.1
	12	LW944.20	1046.4	834	56	965	862	20	M12	20	18	20	4	12	-	905	10.5	-	8	129	-0.1	45.5	69.6

	No.	number	Boundary dimensions(mm)			Mounting dimensions(mm)							Structural dimension(mm)						External gear parameter(mm)				Reference mass (kg)
			Da	Di	H	La	Li	na	B/M	ni	B/M	t	n1	h	A	C	Hu	Ho	m	z	k	b	
Toothless	1	Lw1094.20	1198.4	984	56	1135	1012	22	M12	20	18	20	4	12	-	1055	10.5	-	8	148	-0.1	45.5	83.0
	2	Lw955.30	1096.2	805	90	1016	845	30	M20	30	22	40	6	21	-	893	19	-	9	120	-0.1	71	165
	3	Lw1055.30	1198	905	90	1116	945	30	M20	30	22	40	6	21	-	993	19	-	10	118	-0.1	71	183
	4	Lw1155.30	1298	1005	90	1216	1045	36	M20	36	22	40	6	21	-	1093	19	-	10	128	-0.1	71	200
	5	Lw1255.30	1398	1105	90	1316	1145	42	M20	42	22	40	6	21	-	1193	19	-	10	138	-0.1	71	216
	6	Lw1355.30	1498	1205	90	1416	1245	42	M20	42	22	40	6	21	-	1293	19	-	10	148	-0.1	71	234
	7	Lw1455.30	1598	1305	90	1516	1345	48	M20	48	22	40	6	21	-	1393	19	-	10	158	-0.1	71	250
External gear	8	LN414.20	518	326.5	56	490	375	8	18	12	M12	20	4	12	453	-	10.5	-	5	67	-0.15	45.5	27.1
	9	LN544.20	648	445.2	56	620	505	10	18	16	M12	20	4	12	583	-	10.5	-	6	76	-0.1	45.5	36.9
	10	LN644.20	748	547.2	56	720	605	12	18	18	M12	20	4	12	683	-	10.5	-	6	93	-0.1	45.5	43.7
	11	LN744.20	848	649.2	56	820	705	12	18	20	M12	20	4	12	783	-	10.5	-	6	110	-0.1	45.5	51.1
	12	LN844.20	948	737.6	56	920	805	14	18	20	M12	20	4	12	883	-	10.5	-	8	94	-0.1	45.5	61.6
	13	LN944.20	1048	841.6	56	1020	905	16	18	22	M12	20	4	12	983	-	10.5	-	8	107	-0.1	45.5	65.8
	7	LN1094.20	1198	985.6	56	1170	1055	16	18	24	M12	20	4	12	1133	-	10.5	-	8	125	-0.1	45.5	80.7
	8	LN955.30	1100	812	90	1060	894	30	22	30	M20	40	6	21	1017	-	19	-	10	83	-0.1	71	159
	9	LN1055.30	1200	912	90	1160	994	30	22	30	M20	40	6	21	1117	-	19	-	10	93	-0.1	71	176
	10	LN1155.30	1300	1012	90	1260	1094	36	22	36	M20	40	6	21	1217	-	19	-	10	103	-0.1	71	192
	11	LN1255.30	1400	1112	90	1360	1194	42	22	42	M20	40	6	21	1317	-	19	-	10	113	-0.1	71	208
	12	LN1355.30	1500	1212	90	1460	1294	42	22	42	M20	40	6	21	1417	-	19	-	10	123	-0.1	71	226
	13	LN1455.30	1600	1312	90	1560	1394	48	22	48	M20	40	6	21	1517	-	19	-	10	133	-0.1	71	243

Remarks: If there is any other requirements, please contact with C&U Group for inquiry.