

## Spherical roller bearing



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A spherical roller bearing has two sets of rollers. The outer raceway is a spherical surface, and the inner ring has two raceways inclining with an angle to the bearing axis. The bearing is capable of self-alignment, therefore the bearing is not easily affected by the misalignment of the shaft, housing or the deflection of the shaft. Spherical roller bearings can handle high radial load, as well as bidirectional axial load.

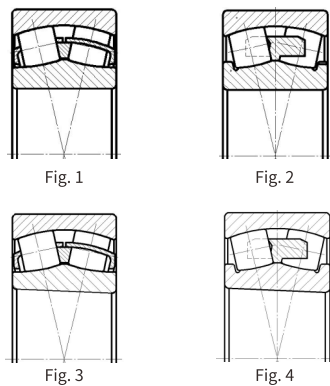
Applications of spherical roller bearings include: engineering machinery, grain machinery, paper manufacturing machinery, escalator machinery, railway vehicle axle, rolling mill gearbox, rolling mill rollers, crushers, vibration screens, petroleum machinery, textile machinery, printing machinery, woodworking machinery and various reducers.

The spherical roller bearings of C&U are equipped with symmetrical large diameter spherical rollers (reinforce type), which can take extremely heavy load and vibration load. The internal design varies slightly by series and size. C&U can provide CC structure and CAC structure and E-type reinforced structure spherical roller bearings.

The internal bores of spherical roller bearings include cylindrical bore and tapered bore. Tapered bore's taper is 1: 12 (suffix code is K) or 1: 30 (suffix code is K30). C&U can provide spherical roller bearings whose inner surfaces have cylindrical bore or tapered bore, and most of C&U spherical roller bearings have tapered bores with taper 1: 12 (suffix code is K). Only the tapering of the spherical roller bearings of 24000 series and 24100 series is 1: 30 (suffix code is K30).

C&U can provide spherical roller bearings with lubricating oil groove and oil hole in the outer ring. The following specification table does not include the dimensions and data of bearings with lubricating oil groove and oil hole. Please consult C&U if necessary.

C&U can also provide spherical roller bearings with seals. There are various seal structures according to working conditions and the internal structures of spherical roller bearings.



### 1. Structure type

**(1) 20000 CC (Fig. 1)**  
Inner ring without rib on both sides, movable spacer, symmetrical spherical rollers, two pressed cages and cylindrical inner bore surface.

**(2) 20000 CAC (Fig. 2)**  
Inner ring with ribs on both sides, symmetrical spherical rollers, 1 brass solid cage, cylindrical inner bore surface.

**(3) 20000 CCK (Fig. 3)**  
Inner ring without rib on either side, movable spacer, symmetrical spherical rollers, two pressed cages, inner bore with taper, which is 1: 12 (suffix code is K) or 1:30 (suffix code is K30).

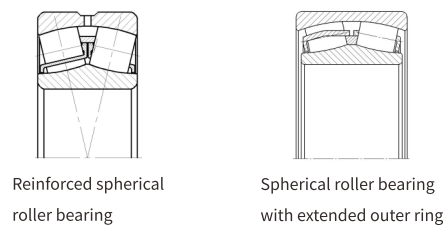
**(4) 20000 CCAK (Fig. 4)**  
Inner ring with ribs on both sides, symmetrical spherical rollers, one brass solid cage, inner bore surface with taper 1: 12(suffix code is K) or 1:30(suffix code is K30).

**(5)20000 CC/W33 (Fig. 5)**  
Inner ring without rib on either side, movable spacer, symmetrical spherical rollers, two pressed cages, outer ring with lubricating oil groove and oil hole, cylindrical inner bore surface.

**(6) 20000 CAC/W 33 (Fig. 6)**  
Inner ring with ribs on both sides, symmetrical spherical rollers, one brass solid cage, outer ring with lubricating groove and oil hole, cylindrical inner bore surface.

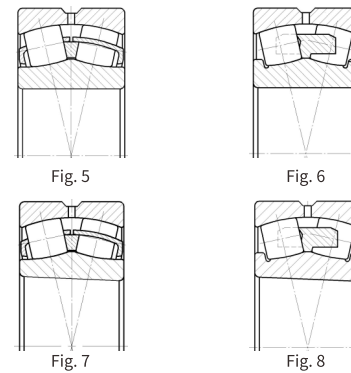
**(7)20000 CCK/W 33 (Fig. 7)**  
Inner ring without rib on either sides, movable spacer, symmetrical spherical rollers, 2 pressed cages, outer ring with lubricating groove and oil hole, inner bore surface with taper 1: 12 (suffix code is K) or 1:30(suffix code is K30).

**(8) 20000 CACK/W 33 (Fig. 8)**  
Inner ring with ribs on both sides, symmetrical spherical rollers, a brass solid cage, outer ring with lubricating groove and oil hole, inner bore surface with tape 1: 12 (suffix code is K), or 1: 30(suffix code is K30).



### 2. Dimensional accuracy & running accuracy

C&U standard spherical roller bearings have universal tolerances. C&U can also provide high-precision spherical roller bearings. For the corresponding dimensional accuracy and running accuracy requirements, please refer to Section 5 for the technical explanation.



### 3. Radial clearance

C&U standard spherical roller bearings adopt normal clearance. To meet the requirements of different working environments and installations, C&U can also provide large clearance spherical roller bearings, or C2 clearance spherical roller bearings which is smaller than normal clearance. Please refer to Section 6 for the technical specifications of radial clearance values for spherical roller bearings with cylindrical bores. These data are the clearance value without load before the bearing mounting.

### 4. Cage

Cages for CC type structure are made from pressed steel sheets. Cages for CAC type structure uses solid brass cages.

### 5. Allowable misalignment angle

The internal structure design of spherical roller bearings enable them to self-align, which allows the bearing to correct the angle misalignment between the inner and outer rings. In common loading and working conditions, the misalignment angle values given in Table 1 are permitted when the inner ring is running. Whether this given value can be reached also depends on the design of the bearing arrangement and seal type, etc.

### 6. Dynamic Equivalent Load

$$\text{When } F_r/F_t \leq e, P = F_r + Y_1 F_a$$

$$\text{When } F_r/F_t > e, P = 0.67 F_r + Y_2 F_a$$

The relevant calculating coefficient e, Y<sub>1</sub>, and Y<sub>2</sub> for each bearing can be found in the specification table.

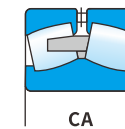
### 7. Static equivalent load

$$P_0 = F_1 + Y_0 F_2$$

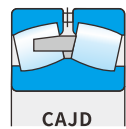
The coefficient value Y<sub>0</sub> for each bearing has been given in the specification table. According to different working conditions, C&U can produce the following types of non-standard spherical roller bearing.

Table 1

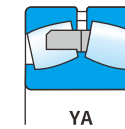
Bearing series	Allowable misalignment angle
21300 series	1°
22200 series	1.5°
22300 series	2°
23000 series	1.5°
23100 series	1.5°
23200 series	2.5°
24000 series	2°
24100 series	2.5°



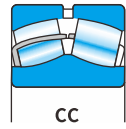
CA type: machined brass cage with guide spacer itself, and an inner ring with two small ribs



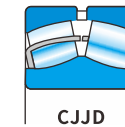
CAJD type: optimized cage based on CA type



YA type: two brass cages, a fixing mid-rib and two small ribs on the inner ring



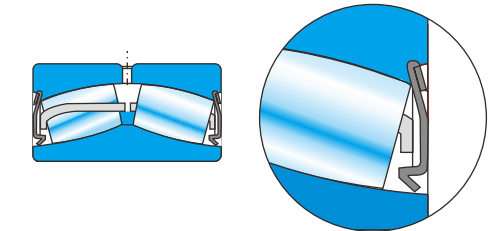
CC type: two pressed steel sheet cages, a spacer, and without a rib on inner ring



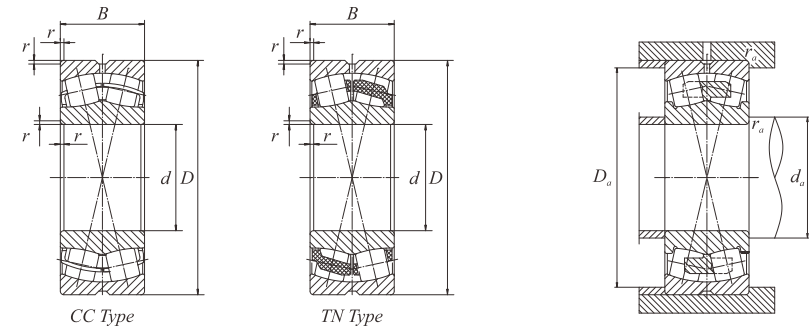
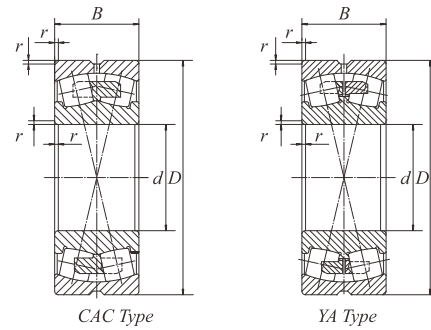
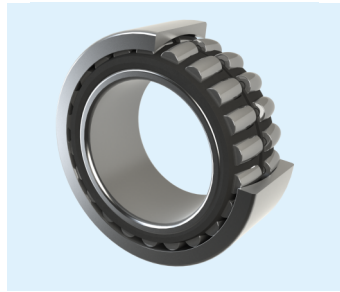
CJJD type: two pressed steel sheet cages, no rib on the inner ring and no spacer



TN type: two injection molded cages, no spacer, and self-guided rollers

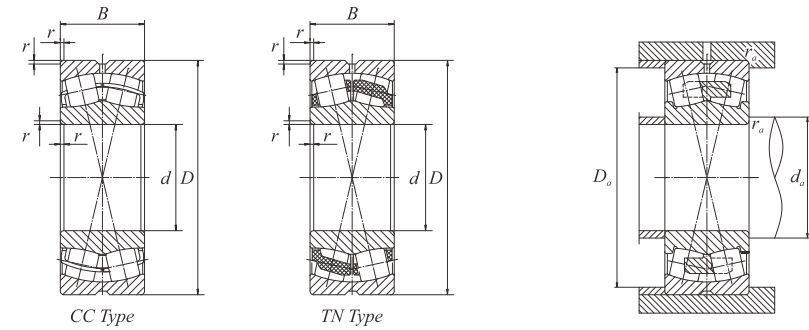
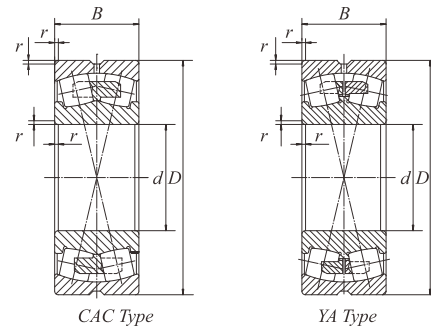
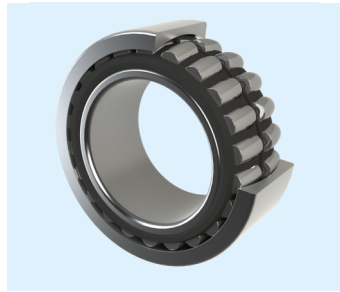


Sealed spherical roller bearings: C&U is capable to provide spherical roller bearings with contact seals on both sides. The seals are made of oil resistant or high temperature resistant rubber with steel skeleton.



**d 20~65mm**

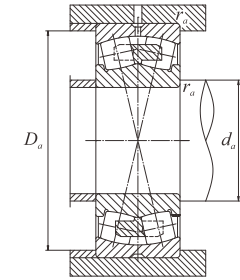
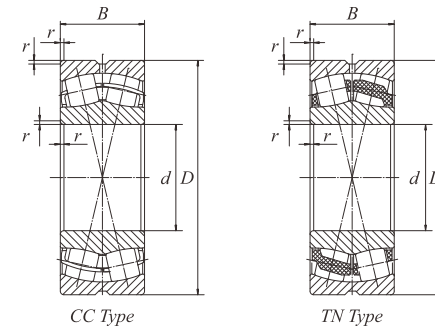
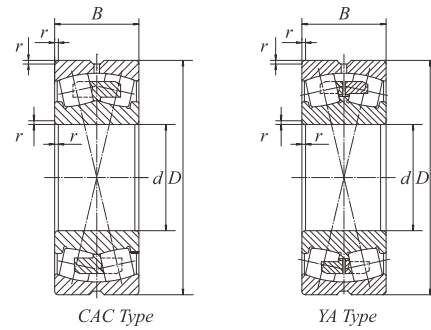
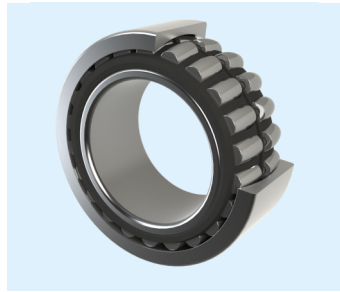
Boundary dimensions (mm)			Chamfer (mm) r(Min)	Basic load ratings (kN)		Limiting speeds (r/min)		Reference mass (kg) ≈	Nominal numbers (New)	Nominal numbers (Old)	Mounting dimensions(mm)			Calculating coefficient			
d	D	B		C <sub>r</sub>	C <sub>0r</sub>	Grease	Oil				d <sub>s</sub> Min	D <sub>a</sub> Max	r <sub>a</sub> Max	e	Y <sub>1</sub>	Y <sub>2</sub>	Y <sub>0</sub>
20	52	18	1	45.1	40.5	11050	14450	0.28	22205/20E		25.6	46.4	1.0	0.35	1.9	2.9	1.8
25	52	18	1	45.1	40.5	11050	14450	0.26	22205C	53505	30.6	46.4	1.0	0.35	1.9	2.9	1.8
	62	17	1	48.9	42.9	7225	10200	0.28	21305CC	53305H	32	55	1.0	0.30	2.3	3.4	2.2
30	62	20	1	59.8	56.7	8500	11900	0.29	22206C	53506	35.6	56.4	1.0	0.33	2	3	2
	72	19	1.1	69.2	63	6375	8500	0.41	21306CC	53306H	37	65	1.0	0.27	2.5	3.7	2.5
35	72	23	1.1	78.9	75.1	7650	10200	0.43	22207C	53507	42	65	1.0	0.31	2.2	3.3	2.2
	80	21	1.5	79.2	74.9	5695	8075	0.55	21307CC	53307H	44	71	1.5	0.28	2.4	3.6	2.5
40	80	23	1.1	89.4	88.4	6800	9350	0.55	22208C	53508	47	73	1.0	0.28	2.4	3.6	2.5
	90	23	1.5	97.2	94.3	5950	8075	0.71	21308CA	53308H	49	81	1.5	0.26	2.6	3.9	2.5
	90	33	1.5	137.9	136.4	5100	6800	1.10	22308C	53608	49	81	1.5	0.37	1.8	2.7	1.8
	90	33	1.5	137.9	136.4	5100	6800	1.10	22308CA	53608H	49	81	1.5	0.37	1.8	2.7	1.8
45	85	23	1.1	97.1	100.1	6375	8500	0.59	22209C	53509	52	78	1.0	0.26	2.6	3.9	2.5
	100	25	1.5	129.5	120.1	5355	7225	0.95	21309CA	53309H	54	91	1.5	0.26	2.6	3.9	2.5
	100	36	1.5	168.4	168.4	4505	5950	1.40	22309C	53609	54	91	1.5	0.37	1.8	2.7	1.8
	100	36	1.5	168.4	168.4	4505	5950	1.40	22309CA	53609H	54	91	1.5	0.37	1.8	2.7	1.8
50	90	23	1.1	97.1	102.2	5950	8075	0.87	22210C	53510	57	83	1.0	0.24	2.8	4.2	2.8
	110	27	2	143.5	153	4760	6370	1.35	21310C	53310H	61	99	2.0	0.24	2.8	4.2	2.8
	110	40	2	215.2	222	4760	6375	1.90	22310C	53610	60	100	2.0	0.37	1.8	2.7	1.8
	110	40	2	215.2	222	4080	5355	1.90	22310CA	53610H	60	100	2.0	0.37	1.8	2.7	1.8
55	100	25	1.5	120	126.1	5355	7225	0.88	22211C	53511	64	91	1.5	0.24	2.8	4.2	2.8
	120	29	2	159	160.7	4760	6375	1.60	21311CA	53311H	65	110	2.0	0.25	2.7	4	2.5
	120	43	2	248.4	257.6	3655	4760	2.40	22311C	53611	65	110	2.0	0.35	1.9	2.9	1.8
	120	43	2	248.4	257.6	3655	4760	2.40	22311CA	53611H	65	110	2.0	0.35	1.9	2.9	1.8
60	110	28	1.5	143.2	153.9	4760	6375	1.22	22212C	53512	69	101	1.5	0.24	2.8	4.2	2.8
	130	31	2.1	192.3	190.3	4080	5355	1.95	21312CA	53312H	72	118	2.0	0.24	2.8	4.2	2.8
	130	46	2.1	285	308	3400	4505	3.00	22312C	53612	72	118	2.0	0.35	1.9	2.9	1.8
	130	46	2.1	285	308	3400	4505	3.00	22312CA	53612H	72	118	2.0	0.35	1.9	2.9	1.8
65	120	31	1.5	182.2	204.5	4250	5950	1.63	22213C	53513	74	111	1.5	0.24	2.8	4.2	2.8



**d 70~95mm**

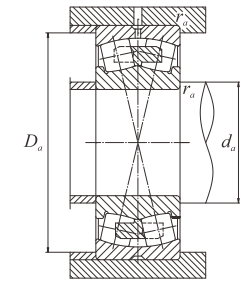
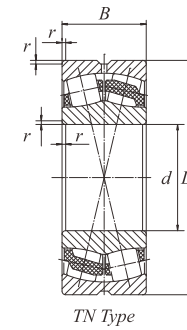
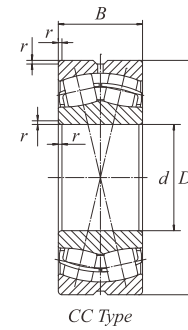
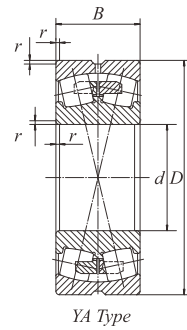
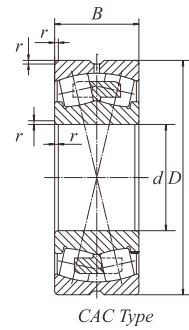
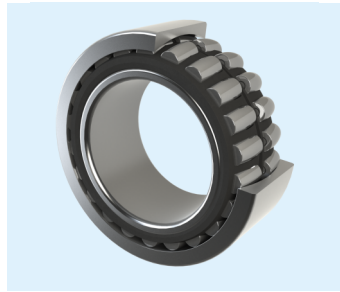
Boundary dimensions (mm)			Chamfer (mm) r(Min)	Basic load ratings (kN)		Limiting speeds (r/min)		Reference mass (kg) ≈	Nominal numbers (New)	Nominal numbers (Old)	Mounting dimensions(mm)			Calculating coefficient			
d	D	B		C <sub>r</sub>	C <sub>0r</sub>	Grease	Oil				d <sub>s</sub> Min	D <sub>s</sub> Max	r <sub>s</sub> Max	e	Y <sub>1</sub>	Y <sub>2</sub>	Y <sub>0</sub>
70	140	33	2.1	214	226.4	3655	5100	2.45	21313CA	53313H	77	128	2.0	0.24	2.8	4.2	2.8
	140	48	2.1	313	331	3230	4250	3.60	22313C	53613	77	128	2.0	0.35	1.9	2.9	1.8
	140	48	2.1	313	331	3230	4250	3.60	22313CA	53613H	77	128	2.0	0.35	1.9	2.9	1.8
70	125	31	1.5	191	210	4250	5695	1.66	22214C	53514	79	116	1.5	0.23	2.9	4.4	2.8
	150	35	2.1	241.8	239.8	3400	4760	3.00	21314CA	53314H	82	138	2.0	0.24	2.8	4.2	2.8
	150	51	2.1	368	396	2890	3825	4.40	22314C	53614	82	138	2.0	0.35	1.9	2.9	1.8
	150	51	2.1	368	396	2890	3825	4.40	22314CA	53614H	82	138	2.0	0.35	1.9	2.9	1.8
75	130	31	1.5	195	221	4080	5355	1.75	22215C	53515	84	121	1.5	0.22	3	4.6	2.8
	160	37	2.1	284	283.4	3400	4760	3.55	21315CA	53315H	87	148	2.0	0.23	2.9	4.4	2.8
	160	55	2.1	405	437	2720	3655	5.40	22315C	53615	87	148	2.0	0.35	1.9	2.9	1.8
	160	55	2.1	405	437	2720	3655	5.40	22315CA	53615H	87	148	2.0	0.35	1.9	2.9	1.8
80	140	33	2	222	252.1	3655	5100	2.20	22216C	53516	90	130	2.0	0.22	3	4.6	2.8
	170	39	2.1	299.8	304	3230	4505	4.20	21316CA	53316H	92	158	2.0	0.23	2.9	4.4	2.8
	170	58	2.1	451	497	2550	3400	6.40	22316C	53616	92	158	2.0	0.35	1.9	2.9	1.8
	170	58	2.1	451	497	2550	3400	6.40	22316CA	53616H	92	158	2.0	0.35	1.9	2.9	1.8
85	150	36	2	266.7	308.5	3400	4760	2.80	22217C	53517	95	140	2.0	0.22	3	4.6	2.8
	180	41	3	349.5	356.2	3230	4505	5.00	21317CA	53317H	99	166	2.5	0.23	2.9	4.4	2.8
	180	60	3	506	570	2380	3230	7.40	22317C	53617	99	166	2.5	0.33	2	3	2
	180	60	3	506	570	2380	3230	7.40	22317CA	53617H	99	166	2.5	0.33	2	3	2
90	160	40	2	299.1	354.8	3230	4505	4.00	22218C	53518	100	150	2.0	0.23	2.9	4.4	2.8
	160	52.4	2	380.4	482.5	2380	3230	4.60	23218C	3053218	100	150	2.0	0.31	2.2	3.3	2.2
	190	43	3	387.8	396.8	3060	4080	5.80	21318CA	53318H	104	176	2.5	0.23	2.9	4.4	2.8
	190	64	3	560	640	2210	3060	8.80	22318C	53618	104	176	2.5	0.35	1.9	2.9	1.8
	190	64	3	560	640	2210	3060	8.80	22318CA	53618H	104	176	2.5	0.35	1.9	2.9	1.8
95	170	43	2.1	350	414	3060	4080	4.20	22219C	53519	107	158	2.0	0.24	2.8	4.2	2.8
	200	45	3	432.9	460.2	2890	3825	7.15	21319CA	53319H	109	186	2.5	0.23	2.9	4.4	2.8
	200	67	3	616	704	2210	2890	10.30	22319C	53619	109	186	2.5	0.35	1.9	2.9	1.8





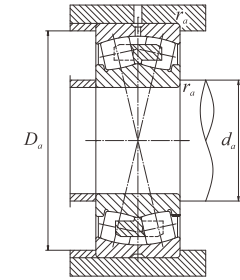
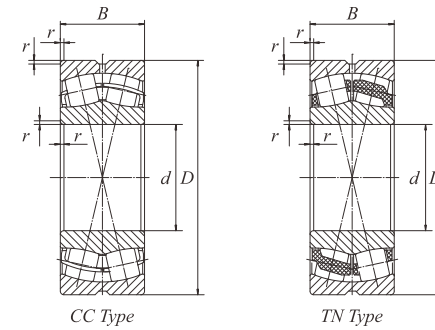
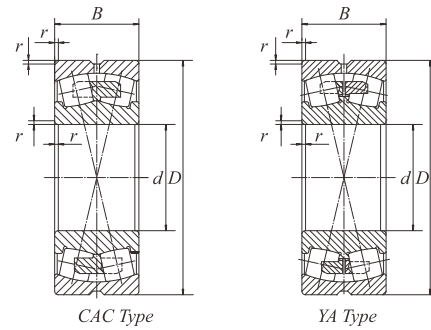
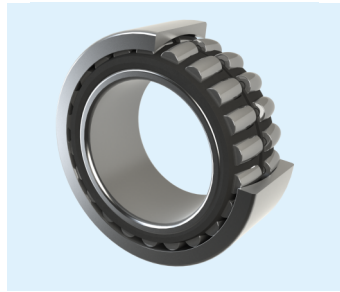
**d 100~140mm**

Boundary dimensions (mm)			Chamfer (mm) r(Min)	Basic load ratings (kN)		Limiting speeds (r/min)		Reference mass (kg) ≈	Nominal numbers (New)	Nominal numbers (Old)	Mounting dimensions(mm)			Calculating coefficient			
d	D	B		C <sub>r</sub>	C <sub>0r</sub>	Grease	Oil				d <sub>s</sub> Min	D <sub>s</sub> Max	r <sub>s</sub> Max	e	Y <sub>1</sub>	Y <sub>2</sub>	Y <sub>0</sub>
100	200	67	3	616	704	2210	2890	10.30	22319CA	53619H	109	186	2.5	0.35	1.9	2.9	1.8
	165	52	2	394.5	536.9	2550	3400	4.40	23120CA	3053720H	110	155	2.0	0.30	2.3	3.4	2.2
	180	46	2.1	407.7	474.6	2890	3825	5.00	22220CA	53520H	112	168	2.0	0.24	2.8	4.2	2.8
	180	60.3	2.1	473.2	518.3	2040	2890	6.70	23220CA	3053220H	112	168	2.0	0.33	2	3	2
	215	47	3	391	451	2890	3825	8.80	21320CA	53320H	114	201	2.5	0.22	3	4.6	2.8
	215	73	3	750	874	2040	2890	13.0	22320CA	53620H	114	201	2.5	0.35	1.9	2.9	1.8
110	170	45	2	332	479.5	2890	3655	3.75	23022CA	3053122H	120	160	2.0	0.23	2.9	4.4	2.8
	180	56	2	458.5	644.3	2380	3060	5.55	23122CA	3053722H	120	170	2.0	0.30	2.3	3.4	2.2
	180	69	2	498.8	825.4	1870	3060	6.85	24122CA	4053722H	120	170	2.0	0.37	1.8	2.7	1.8
	200	53	2.1	534.9	622.5	2550	3400	7.40	22222CA	53522H	122	188	2.0	0.25	2.7	4	2.5
	200	69.8	2.1	621.1	829.8	1870	2720	9.70	23222CA	3053222H	122	188	2.0	0.33	2	3	2
	240	80	3	874	1030	1700	2380	18.10	22322CA	53622H	124	226	2.5	0.35	1.9	2.9	1.8
120	180	46	2	350.7	518.4	2720	3400	4.30	23024CA	3053124H	130	170	2.0	0.22	3	4.6	2.8
	180	60	2	429.3	668.3	2040	2890	5.40	24024CA	4053124H	130	170	2.0	0.30	2.3	3.4	2.2
	200	62	2	557.5	777.8	2210	2890	7.80	23124CA	3053724H	130	190	2.0	0.28	2.4	3.6	2.5
	200	80	2	716.7	1058	1615	2210	10.00	24124CA	4053724H	130	190	2.0	0.37	1.8	2.7	1.8
	215	58	2.1	580	704	2380	3230	9.20	22224CA	53524H	132	203	2.0	0.25	2.7	4	2.5
	215	76	2.1	751.6	1022	1700	2380	12.00	23224CA	3053224H	132	203	2.0	0.35	1.9	2.9	1.8
	260	86	3	926.4	1066	1700	2210	22.00	22324CA	53624H	134	246	2.5	0.35	1.9	2.9	1.8
130	200	52	2	446.1	647.1	2380	3060	6.20	23026CA	3053126H	140	190	2.0	0.23	2.9	4.4	2.8
	200	69	2	547.8	843.7	1700	2550	7.95	24026CA	4053126H	140	190	2.0	0.31	2.2	3.3	2.2
	210	64	2	633.9	897.2	2040	2720	8.55	23126CA	3053726H	140	200	2.0	0.28	2.4	3.6	2.5
	210	80	2	682.6	1011	1530	2040	11.00	24126CA	4053726H	140	200	2.0	0.35	1.9	2.9	1.8
	230	64	3	680	860	2210	3060	11.20	22226CA	53526H	144	216	2.5	0.26	2.6	3.9	2.5
	230	80	3	778.9	1064	1615	2210	14.00	23226CA	3053226H	144	216	2.5	0.33	2	3	2
	280	93	4	1087	1268	1530	2040	29.00	22326CA	53626H	148	262	3.0	0.35	1.9	2.9	1.8
140	210	53	2	519.6	773.7	2210	2890	6.70	23028CA	3053128H	150	200	2.0	0.22	3	4.6	2.8



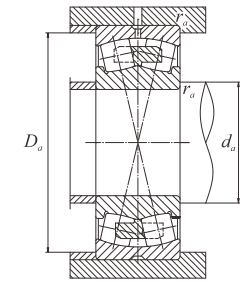
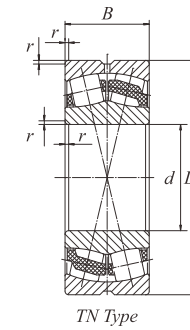
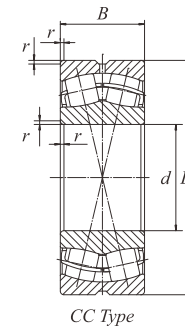
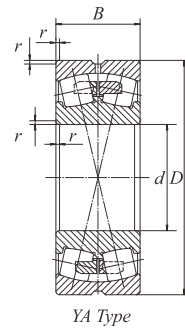
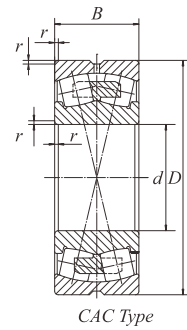
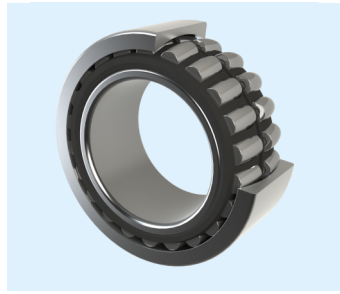
d 150~170mm

Boundary dimensions (mm)			Chamfer (mm) r(Min)	Basic load ratings (kN)		Limiting speeds (r/min)		Reference mass (kg) ≈	Nominal numbers (New)	Nominal numbers (Old)	Mounting dimensions(mm)			Calculating coefficient			
d	D	B		C <sub>r</sub>	C <sub>0r</sub>	Grease	Oil				d <sub>s</sub> Min	D <sub>s</sub> Max	r <sub>s</sub> Max	e	Y <sub>1</sub>	Y <sub>2</sub>	Y <sub>0</sub>
	210	69	2	578	921.5	1700	2380	8.45	24028CA	4053128H	150	200	2.0	0.30	2.3	3.4	2.2
	225	68	2.1	669.7	977.7	1870	2380	10.50	23128CA	3053728H	152	213	2.0	0.28	2.4	3.6	2.5
	225	85	2.1	768.3	1188	1445	2040	13.00	24128CA	4053728H	152	213	2.0	0.35	1.9	2.9	1.8
	250	68	3	739.8	953.3	2040	2720	14.50	22228CA	53528H	154	236	2.5	0.26	2.6	3.9	2.5
	250	88	3	920.4	1282	1445	2040	18.50	23228CA	3053228H	154	236	2.5	0.33	2	3	2
	300	102	4	1247	1480	1445	1870	36.00	22328CA	53628H	158	282	3.0	0.35	1.9	2.9	1.8
150	225	56	2.1	574.2	850.2	2040	2720	8.14	23030CA	3053130H	162	213	2.0	0.22	3	4.6	2.8
	225	75	2.1	664.1	1066	1530	2210	10.50	24030CA	4053130H	162	213	2.0	0.30	2.3	3.4	2.5
	250	80	2.1	863.8	1255	1700	2210	16.00	23130CA	3053730H	162	238	2.0	0.30	2.3	3.4	2.2
	250	100	2.1	1005	1522	1275	1870	19.50	24130CA	4053730H	162	238	2.0	0.37	1.8	2.7	1.8
	270	73	3	823.1	1051	1870	2550	18.50	22230CA	53530H	164	256	2.5	0.26	2.6	3.9	2.5
	270	96	3	1161	1625	1360	1870	24.00	23230CA	3053230H	164	256	2.5	0.35	1.9	2.9	1.8
	320	108	4	1383	1656	1360	1870	43.00	22330CA	53630H	168	302	3.0	0.35	1.9	2.9	1.8
160	240	60	2.1	586	890	2040	2550	9.74	23032CA	3053132H	172	228	2.0	0.22	3	4.6	2.8
	240	80	2.1	753	1232	1445	2040	13.00	24032CA	4053132H	172	228	2.0	0.30	2.3	3.4	2.2
	270	86	2.1	1074	1520	1615	2040	20.50	23132CA	3053732H	172	258	2.0	0.30	2.3	3.4	2.2
	270	109	2.1	1205	1829	1190	1615	25.00	24132CA	4053132H	172	258	2.0	0.40	1.7	2.5	1.6
	290	80	3	1000	1320	1700	2380	22.00	22232CA	53532H	174	276	2.5	0.26	2.6	3.9	2.5
	290	104	3	1256	1777	1275	1870	30.00	23232CA	3053232H	174	276	2.5	0.35	1.9	2.9	1.8
	340	114	4	1530	1800	1275	1615	51.00	22332CA	53632H	178	322	3.0	0.35	1.9	2.9	1.8
170	260	67	2.1	730.5	1132	1870	2380	13.10	23034CA	3053134H	182	248	2.0	0.23	2.9	4.4	2.8
	260	90	2.1	918	1523	1360	2040	17.50	24034CA	4053134H	182	248	2.0	0.33	2	3	2
	280	88	2.1	1028	1523	1530	2040	21.50	23134CA	3053734H	182	268	2.0	0.30	2.3	3.4	2.2
	280	109	2.1	1220	1860	1105	1615	26.50	24134CA	4053734H	182	268	2.0	0.37	1.8	2.7	1.8
	310	86	4	1030	1340	1615	2210	29.00	22234CA	53534H	188	292	3.0	0.27	2.5	3.7	2.5
	310	110	4	1355	1920	1190	1700	36.50	23234CA	3053234H	188	292	3.0	0.35	1.9	2.9	1.8
	360	120	4	1781	2226	1190	1530	60.00	22334CA	53634H	188	342	3.0	0.33	2	3	2



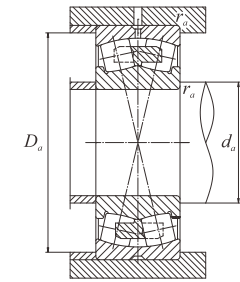
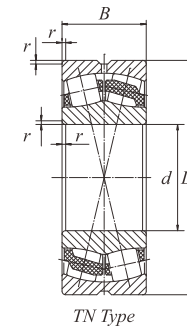
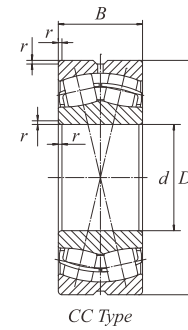
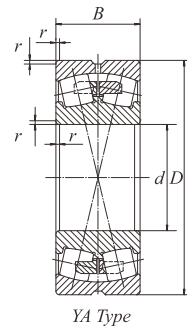
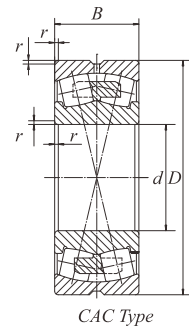
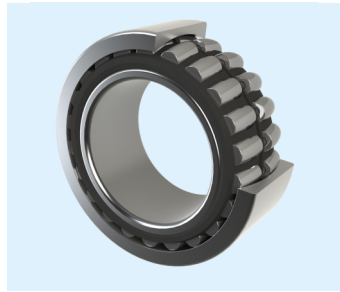
**d 180~220mm**

Boundary dimensions (mm)			Chamfer (mm) r(Min)	Basic load ratings (kN)		Limiting speeds (r/min)		Reference mass (kg) ≈	Nominal numbers (New)	Nominal numbers (Old)	Mounting dimensions(mm)			Calculating coefficient			
d	D	B		C <sub>r</sub>	C <sub>0r</sub>	Grease	Oil				d <sub>s</sub> Min	D <sub>s</sub> Max	r <sub>s</sub> Max	e	Y <sub>1</sub>	Y <sub>2</sub>	Y <sub>0</sub>
180	280	74	2.1	964.3	1453	1700	2210	17.40	23036CA	3053136H	192	268	2.0	0.24	2.8	4.2	2.8
	280	100	2.1	1095	1781	1275	1870	23.00	24036CA	4053136H	192	268	2.0	0.33	2	3	2
	300	96	3	1213	1831	1445	1870	27.50	23136CA	3053736H	194	286	2.5	0.30	2.3	3.4	2.2
	300	118	3	1413	2203	1105	1445	33.50	24136CA	4053736H	194	286	2.5	0.37	1.8	2.7	1.8
	320	86	4	1080	1430	1530	2210	30.00	22236CA	53536H	198	302	3.0	0.26	2.6	3.9	2.5
	320	112	4	1484	2166	1105	1615	39.00	23236CA	3053236H	198	302	3.0	0.35	1.9	2.8	1.8
	380	126	4	1950	2440	1105	1445	70.00	22336CA	53636H	198	362	3.0	0.35	1.9	2.8	1.8
190	290	75	2.1	1004	1553	1615	2040	18.40	23038CA	3053138H	202	278	2.0	0.23	2.9	4.4	2.8
	290	100	2.1	1120	1800	1190	1700	24.00	24038CA	4053138H	202	278	2.0	0.31	2.2	3.3	2.2
	320	104	3	1394	2115	1275	1700	34.50	23138CA	3053738H	204	306	2.5	0.31	2.2	3.3	2.2
	320	128	3	1576	2397	1020	1360	42.00	24138CA	4053738H	204	306	2.5	0.40	1.7	2.5	1.6
	340	92	4	1170	1500	1445	2040	35.30	22238CA	53538H	208	322	3.0	0.19	3.6	5.3	3.6
	340	120	4	1596	2336	1105	1530	47.50	23238CA	3053238H	208	322	3.0	0.35	1.9	2.9	1.8
	400	132	5	2122	2672	1020	1360	81.00	22338CA	53638H	212	378	4.0	0.35	1.9	2.9	1.8
200	310	82	2.1	1088	1706	1530	1870	23.40	23040CA	3053140H	212	298	2.0	0.24	2.8	4.2	2.8
	310	109	2.1	1304	2221	1105	1615	30.50	24040CA	4053140H	212	298	2.0	0.33	2	3	2
	340	112	3	1642	2495	1275	1615	42.50	23140CA	3053740H	214	326	2.5	0.31	2.2	3.3	2.2
	340	140	3	1725	2664	935	1275	52.00	24140CA	4053740H	214	326	2.5	0.40	1.7	2.5	1.6
	360	98	4	1350	1780	1360	1870	47.70	22240CA	53540H	218	342	3.0	0.26	2.6	3.9	2.5
	360	128	4	1788	2614	1020	1445	57.00	23240CA	3053240H	218	342	3.0	0.35	1.9	2.9	1.8
	420	138	5	2247	2830	1020	1275	94.00	22340CA	53640H	222	398	4.0	0.33	2	3	2
220	300	60	2.1	630	1080	1615	1870	12.5	23944CA/W33		231	289	2	0.16	4.2	6.3	4
	340	90	3	1226	1978	1360	1700	33.5	23044CA/W33	3053144H	233	327	2.5	0.23	2.9	4.4	2.8
	340	118	3	1507	2524	1020	1445	40.0	24044CA/W33	4053144H	233	327	2.5	0.33	2	3	2
	370	120	4	1687	2512	1105	1445	53.5	23144CA/W33	3053744H	237	353	3	0.30	2.3	3.4	2.2
	370	150	4	1950	3080	850	1190	67.0	24144CA/W33	4053744H	237	353	3	0.40	1.7	2.5	1.6
	400	108	4	1620	2170	1275	1700	60.5	22244CA/W33	53544H	237	383	3	0.27	2.5	3.7	2.5



**d 240~300mm**

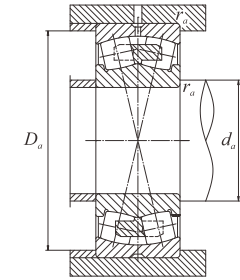
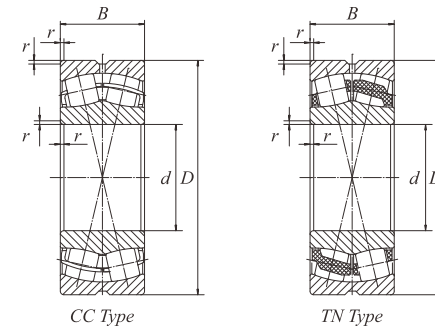
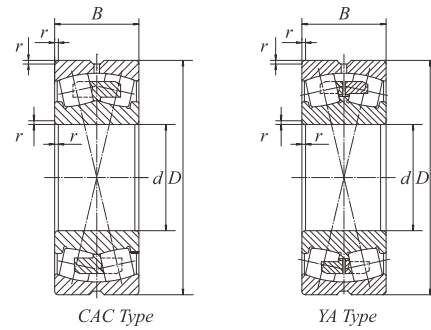
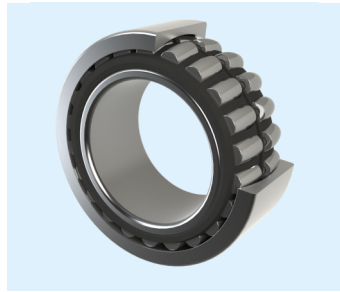
Boundary dimensions (mm)	Chamfer (mm)	Basic load ratings (kN)		Limiting speeds (r/min)		Reference mass (kg)	Nominal numbers (New)	Nominal numbers (Old)	Mounting dimensions(mm)			Calculating coefficient					
		d	D	B	r(Min)				C <sub>r</sub>	C <sub>0r</sub>	Grease	Oil	d <sub>s</sub> Min	D <sub>s</sub> Max	r <sub>s</sub> Max	e	Y <sub>1</sub>
400	144	4	2226	3225	935	1275	81.5	23244CA/W33	3053244H	237	383	3	0.35	1.9	2.9	1.8	
			460	145	5	2648	3387	850	1190	120.0	22344CA/W33	53644H	240	440	4	0.31	2.2
240	320	60	2.1	655	1160	1445	1700	13.5	23948CA/W33		251	309	2	0.15	4.5	6.7	4.5
	360	92	3	1371	2280	1275	1615	33.5	23048CA/W33	3053148H	253	347	2.5	0.23	2.9	4.4	2.8
	360	118	3	1536	2590	935	1360	43.0	24048CA/W33	4053148H	253	347	2.5	0.30	2.3	3.4	2.2
	400	128	4	2075	3237	1020	1360	66.5	23148CA/W33	3053748H	257	383	3	0.30	2.3	3.4	2.2
	400	160	4	2210	3590	765	1105	83.0	24148CA/W33	4053748H	257	383	3	0.40	1.7	2.5	1.6
	440	120	4	2020	2760	1105	1530	83.0	22248CA/W33	53548H	257	423	3	0.27	2.5	3.7	2.5
	440	160	4	2670	3950	808	1105	110.0	23248CA/W33	3053248H	257	423	3	0.35	1.9	2.9	1.8
500	155	5	2850	3680	808	1105	155.0	22348CA/W33	53648H	260	480	4	0.31	2.2	3.3	2.2	
260	360	75	2	920	1656	1275	1615	23.5	23952CA/W33		271	349	2	0.18	3.8	5.6	3.6
	400	104	3	1686	2728	1105	1445	48.5	23052CA/W33	3053152H	275	385	3	0.23	2.9	4.4	2.8
	400	140	3	1880	3170	850	1190	65.5	24052CA/W33	4053152H	275	385	3	0.33	2	3	2
	440	144	3	2340	3590	935	1190	90.5	23152CA/W33	3053752H	277	423	3	0.31	2.2	3.3	2.2
	440	180	3	2760	4410	723	1020	110.0	24152CA/W33	4053752H	277	423	3	0.40	1.7	2.5	1.6
	480	130	4	2350	3260	1020	1360	110.0	22252CA/W33	53552H	280	460	4	0.27	2.5	3.7	2.5
	480	174	4	2990	4390	723	1020	140.0	23252CA/W33	3053252H	280	460	4	0.35	1.9	2.9	1.8
	540	165	5	3260	4180	723	935	190.0	22352CA/W33	53652H	286	514	5	0.31	2.2	3.3	2.2
280	380	75	2.1	1012	1926	1190	1445	25.0	23956CA/W33		291	369	2	0.16	4.2	6.3	4
	420	106	4	1713	2922	1105	1360	52.0	23056CA/W33	3053156H	295	405	3	0.23	2.9	4.4	2.8
	420	140	4	1990	3490	808	1190	69.5	24056CA/W33	4053156H	295	405	3	0.31	2.2	3.3	2.2
	460	146	5	2438	3910	850	1105	97.0	23156CA/W33	3053756H	300	440	4	0.30	2.3	3.4	2.2
	460	180	5	2850	4690	680	935	120.0	24156CA/W33	4053756H	300	440	4	0.40	1.7	2.5	1.6
	500	130	5	2480	3450	935	1275	115.0	22256CA/W33	53556H	300	480	4	0.26	2.6	3.9	2.5
	500	176	5	2990	4508	680	935	150.0	23256CA/W33	3053256H	300	480	4	0.35	1.9	2.9	1.8
	580	175	6	3680	4780	680	935	235.0	22356CA/W33	53656H	306	554	5	0.30	2.3	3.4	2.2
300	420	90	3	1410	2510	1105	1360	39.5	23960CA/W33		313	407	2.5	0.19	3.6	5.3	3.6



d 320~380mm

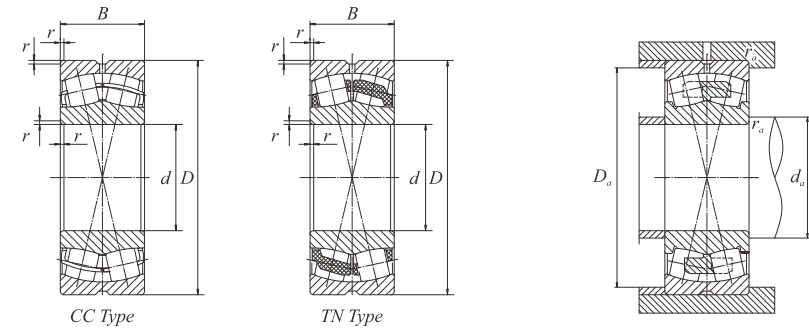
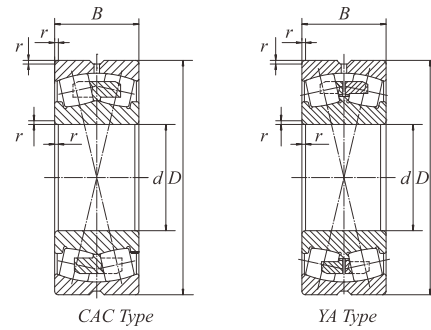
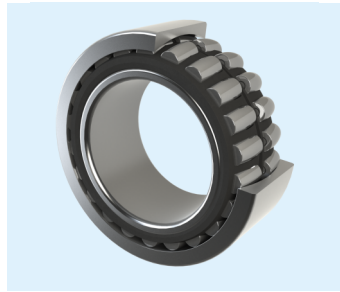
Boundary dimensions (mm)			Chamfer (mm) r(Min)	Basic load ratings (kN)		Limiting speeds (r/min)		Reference mass (kg) ≈	Nominal numbers (New)	Nominal numbers (Old)	Mounting dimensions(mm)			Calculating coefficient			
d	D	B		C <sub>r</sub>	C <sub>0r</sub>	Grease	Oil				d <sub>s</sub> Min	D <sub>s</sub> Max	r <sub>s</sub> Max	e	Y <sub>1</sub>	Y <sub>2</sub>	Y <sub>0</sub>
	460	118	4	2179	3715	1020	1275	71.5	23060CA/W33	3053160H	315	445	3	0.23	2.9	4.4	2.8
	460	160	4	2480	4370	723	1020	97	24060CA/W33	4053160H	315	445	3	0.33	2	3	2
	500	160	5	2940	4690	808	1020	125	23160CA/W33	3053760H	320	480	4	0.30	2.3	3.4	2.2
	500	200	5	3450	5790	595	850	160	24160CA/W33	4053760H	320	480	4	0.40	1.7	2.5	1.6
	540	140	5	2900	3910	850	1190	145	22260CA/W33	53560H	320	520	4	0.26	2.6	3.9	2.5
	540	192	5	3590	5380	638	850	190	23260CA/W33	3053260H	320	520	4	0.35	1.9	2.9	1.8
320	440	90	3	1430	2700	1190	1275	42	23964CA/W33		333	427	2.5	0.17	4	5.9	4
	480	121	4	2239	3910	935	1190	78	23064CA/W33	3053164H	335	465	3	0.23	2.9	4.4	2.8
	480	160	4	2620	4690	680	1020	100	24064CA/W33	4053164H	335	465	3	0.31	2.2	3.3	2.2
	540	176	5	3450	5520	723	935	165	23164CA/W33	3053764H	340	520	4	0.31	2.2	3.3	2.2
	540	218	5	3910	6530	570	765	210	24164CA/W33	4053764H	340	520	4	0.40	1.7	2.5	1.6
	580	150	5	3310	4510	808	1105	175	22264CA/W33	53564H	340	560	4	0.26	2.6	3.9	2.5
	580	208	5	4050	6160	595	808	240	23264CA/W33	3053264H	340	560	4	0.35	1.9	2.9	1.8
340	460	90	3	1516	2856	1105	1190	46	23968CA/W33		353	447	2.5	0.17	4	5.9	4
	520	133	5	2480	4180	850	1105	105	23068CA/W33	3053168H	358	502	4	0.24	2.8	4.2	2.8
	520	180	5	3170	5700	638	935	140	24068CA/W33	4053168H	358	502	4	0.33	2	3	2
	580	190	5	3910	6250	680	850	210	23168CA/W33	3053768H	360	560	4	0.31	2.2	3.3	2.2
	580	243	5	4880	7960	510	723	280	24168CA/W33	4053768H	360	560	4	0.40	1.7	2.5	1.6
	620	224	6	4690	7170	476	680	295	23268CA/W33	3053268H	366	594	5	0.35	1.9	2.9	1.8
360	480	90	3	1550	2900	1020	1105	46	23972CA/W33		373	467	2.5	0.15	4.5	6.7	4.5
	540	134	5	2530	4410	808	1020	110	23072CA/W33	3053172H	378	522	4	0.23	2.9	4.4	2.8
	540	180	5	3260	6020	595	850	145	24072CA/W33	4053172H	378	522	4	0.31	2.2	3.3	2.2
	600	192	5	3950	6390	638	850	220	23172CA/W33	3053772H	380	580	4	0.30	2.3	3.4	2.2
	600	243	5	5150	8550	536	723	280	24172CA/W33	4053772H	380	580	4	0.40	1.7	2.5	1.6
	650	232	6	4970	7630	451	638	335	23272CA/W33	3053272H	386	624	5	0.35	1.9	2.9	1.8
380	520	106	4	1800	3490	935	1020	69	23976CA/W33		395	505	3	0.17	4	5.9	4
	560	135	5	2670	4600	765	1020	115	23076CA/W33	3053176H	398	542	4	0.22	3	4.6	2.8





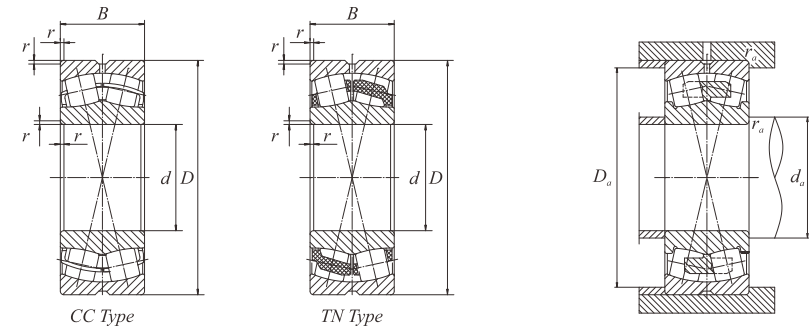
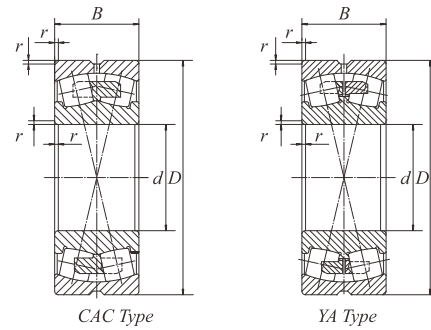
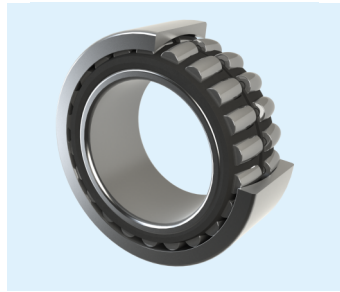
**d 400~460mm**

Boundary dimensions (mm)			Chamfer (mm) r(Min)	Basic load ratings (kN)		Limiting speeds (r/min)		Reference mass (kg) ≈	Nominal numbers (New)	Nominal numbers (Old)	Mounting dimensions(mm)			Calculating coefficient			
d	D	B		C <sub>r</sub>	C <sub>0r</sub>	Grease	Oil				d <sub>s</sub> Min	D <sub>s</sub> Max	r <sub>s</sub> Max	e	Y <sub>1</sub>	Y <sub>2</sub>	Y <sub>0</sub>
	560	180	5	3310	6250	570	808	150	24076CA/W33	4053176H	398	542	4	0.30	2.3	3.4	2.2
	620	194	5	4050	6530	476	850	230	23176CA/W33	3053776H	400	600	4	0.30	2.3	3.4	2.2
	620	243	5	5240	9020	408	723	300	24176CA/W33	4053776H	400	600	4	0.37	1.8	2.7	1.8
	680	240	6	5380	8420	425	638	375	23276CA/W33	3053276H	406	654	5	0.35	1.9	2.9	1.8
<b>400</b>	540	106	4	1840	3590	850	935	71	23980CA/W33		415	525	3	0.16	4.2	6.3	4
	600	148	5	2990	5240	723	935	150	23080CA/W33	3053180H	418	582	4	0.23	2.9	4.4	2.8
	600	200	5	3960	7360	536	765	205	24080CA/W33	4053180H	418	582	4	0.30	2.3	3.4	2.2
	650	200	6	4280	7040	451	808	265	23180CA/W33	3053780H	426	624	5	0.28	2.4	3.6	2.5
	650	250	6	5700	9750	366	680	340	24180CA/W33	4053780H	426	624	5	0.37	1.8	2.7	1.8
	720	256	6	6030	9570	408	570	450	23280CA/W33	3053280H	426	694	5	0.35	1.9	2.9	1.8
	820	243	7.5	6900	9570	366	638	650	22380CA/W33	53680H	432	788	6	0.30	2.3	3.4	2.2
<b>420</b>	560	106	3	1880	3820	850	935	75	23984CA/W33		435	545	3	0.16	4.2	6.3	4
	620	150	4	3130	5520	510	935	155	23084CA/W33	3053184H	438	602	4	0.22	3	4.6	2.8
	620	200	4	4050	7640	451	765	210	24084CA/W33	4053184H	438	602	4	0.30	2.3	3.4	2.2
	700	224	5	5150	8560	408	765	350	23184CA/W33	3053784H	446	674	5	0.30	2.3	3.4	2.2
	700	280	5	6760	11590	340	595	445	24184CA/W33	4053784H	446	674	5	0.40	1.7	2.5	1.6
	760	272	6	6760	10670	383	536	535	23284CA/W33	3053284H	452	728	6	0.35	1.9	2.9	1.8
<b>440</b>	600	118	4	2250	4510	808	850	99.5	23988CA/W33		455	585	3	0.16	4.2	6.3	4
	650	157	6	3360	6030	476	850	180	23088CA/W33	3053188H	463	627	5	0.22	3	4.6	2.8
	650	212	6	4420	8420	425	723	245	24088CA/W33	4053188H	463	627	5	0.30	2.3	3.4	2.2
	720	226	6	5520	9200	383	723	360	23188CA/W33	3053788H	466	694	5	0.30	2.3	3.4	2.2
	720	280	6	6900	12140	340	595	460	24188CA/W33	4053788H	466	694	5	0.37	1.8	2.7	1.8
	790	280	7.5	7180	11500	366	510	590	23288CA/W33	3053288H	472	758	6	0.35	1.9	2.9	1.8
<b>460</b>	620	118	4	2300	4600	476	935	105	23292CA/W33		475	605	3	0.16	4.2	6.3	4
	680	163	6	3590	6390	476	808	205	23092CA/W33	3053192H	483	675	5	0.22	3	4.6	2.8
	680	218	6	4780	9200	408	680	275	24092CA/W33	4053192H	483	675	5	0.28	2.4	3.6	2.5
	760	240	7.5	5890	9940	366	680	440	23192CA/W33	3053792H	492	728	6	0.30	2.3	3.4	2.2



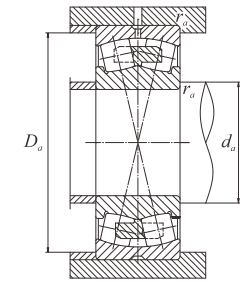
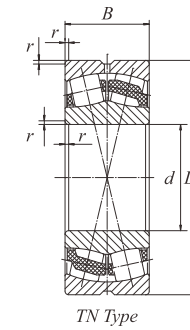
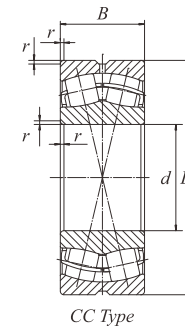
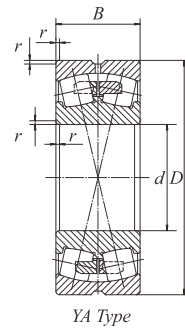
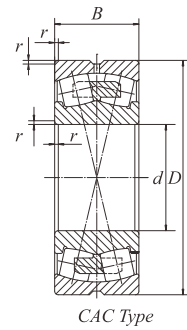
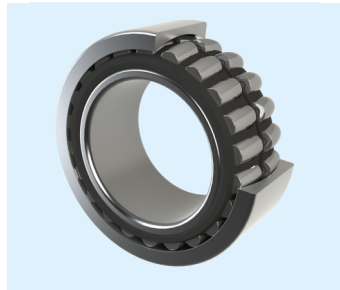
**d 480~600mm**

Boundary dimensions (mm)			Chamfer (mm) r(Min)	Basic load ratings (kN)		Limiting speeds (r/min)		Reference mass (kg) ≈	Nominal numbers (New)	Nominal numbers (Old)	Mounting dimensions(mm)			Calculating coefficient			
d	D	B		C <sub>r</sub>	C <sub>0r</sub>	Grease	Oil				d <sub>s</sub> Min	D <sub>s</sub> Max	r <sub>s</sub> Max	e	Y <sub>1</sub>	Y <sub>2</sub>	Y <sub>0</sub>
480	760	300	7.5	7640	13430	306	570	560	24192CA/W33	4053792H	492	728	6	0.37	1.8	2.7	1.8
	830	296	7.5	7820	12600	340	476	695	23292CA/W33	3053292H	492	798	6	0.35	1.9	2.9	1.8
	650	128	5	2670	5240	476	850	125	23996CA/W33		498	632	4	0.18	3.8	5.6	3.6
	700	165	6	3590	6270	451	808	215	23096CA/W33	3053196H	503	677	5	0.21	3.2	4.8	3.2
	700	218	6	4880	9570	383	638	285	24096CA/W33	4053196H	503	677	5	0.28	2.4	3.6	2.5
	790	248	7.5	6390	11040	340	638	485	23196CA/W33	3053796H	512	758	6	0.30	2.3	3.4	2.2
	790	308	7.5	8280	14350	289	536	605	24196CA/W33	4053796H	512	758	6	0.37	1.8	2.7	1.8
870	310	7.5	8560	13800	323	451	800	23296CA/W33	3053296H	512	838	6	0.35	1.9	2.9	1.8	
500	670	128	5	2670	5520	451	808	130	239/500 CA/W33		518	652	4	0.17	4	5.9	4
	720	167	6	3820	7180	425	765	225	230/500 CA/W33		523	697	5	0.21	3.2	4.8	3.2
	720	218	6	5060	10120	366	595	295	240/500 CA/W33		523	697	5	0.26	2.6	3.9	2.5
	830	264	7.5	7040	11870	323	595	580	231/500 CA/W33		532	798	6	0.30	2.3	3.4	2.2
	830	325	7.5	9020	15640	272	510	700	241/500 CA/W33		532	798	6	0.37	1.8	2.7	1.8
	920	336	7.5	9750	15920	306	425	985	232/500 CA/W33		532	888	6	0.35	1.9	2.9	1.8
530	710	136	5	2940	6160	425	765	155	239/530 CA/W33		548	692	4	0.17	4	5.9	4
	780	185	6	4690	8550	383	680	310	230/530 CA/W33		553	757	5	0.22	3	4.6	2.8
	780	250	6	6160	12140	340	570	410	240/530 CA/W33		553	757	5	0.28	2.4	3.6	2.5
	870	272	7.5	7500	12880	306	570	645	231/530 CA/W33		562	838	6	0.30	2.3	3.4	2.2
	870	335	7.5	9750	17480	255	476	830	241/530 CA/W33		562	838	6	0.37	1.8	2.7	1.8
	980	355	9.5	10210	18770	255	408	1200	232/530 CA/W33		570	940	8	0.35	1.9	2.9	1.8
560	750	140	5	3170	6620	383	723	175	239/560 CA/W33		578	732	4	0.16	4.2	6.3	4
	820	195	6	5150	9380	366	638	355	230/560 CA/W33		583	797	5	0.22	3	4.6	2.8
	820	258	6	6760	13430	323	536	465	240/560 CA/W33		583	797	5	0.28	2.4	3.6	2.5
	920	280	7.5	8420	14720	289	536	740	231/560 CA/W33		592	888	6	0.30	2.3	3.4	2.2
	920	355	7.5	11040	19872	238	425	985	241/560 CA/W33		592	888	6	0.35	1.9	2.9	1.8
	1030	365	9.5	12320	20240	238	366	1350	232/560 CA/W33		600	990	8	0.35	1.9	2.9	1.8
600	800	150	5	3590	7640	366	638	220	239/600 CA/W33		618	782	4	0.17	4	5.9	4



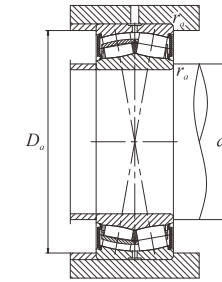
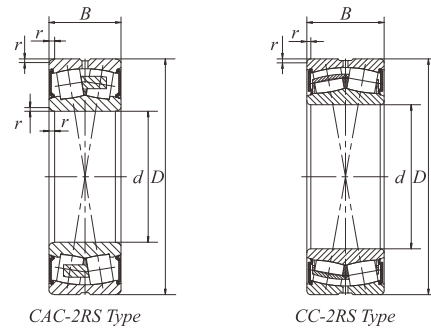
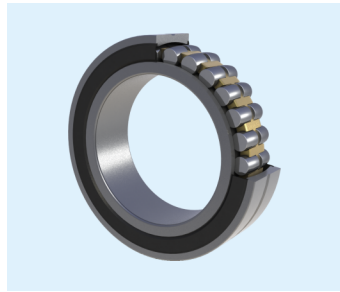
**d 630~800mm**

Boundary dimensions (mm)			Chamfer (mm) r(Min)	Basic load ratings (kN)		Limiting speeds (r/min)		Reference mass (kg) ≈	Nominal numbers (New)	Nominal numbers (Old)	Mounting dimensions(mm)			Calculating coefficient			
d	D	B		C <sub>r</sub>	C <sub>0r</sub>	Grease	Oil				d <sub>s</sub> Min	D <sub>s</sub> Max	r <sub>s</sub> Max	e	Y <sub>1</sub>	Y <sub>2</sub>	Y <sub>0</sub>
	870	200	6	5520	10490	340	595	405	230/600 CA/W33		623	847	5	0.22	3	4.6	2.8
	870	272	6	7500	15640	289	476	52	240/600 CA/W33		623	847	5	0.30	2.3	3.4	2.2
	980	300	7.5	9380	16560	272	476	895	231/600 CA/W33		632	948	6	0.30	2.3	3.4	2.2
	980	375	7.5	12140	21710	204	408	1200	241/600 CA/W33		632	948	6	0.22	3	4.6	2.8
	1090	388	9.5	13800	20240	221	340	1600	232/600 CA/W33		640	1050	8	0.35	1.9	2.9	1.8
<b>630</b>	850	165	6	4280	9000	340	595	280	239/630 CA/W33		653	827	5	0.17	4	5.9	4
	920	212	7.5	6160	11500	323	570	485	230/630 CA/W33		658	892	6	0.21	3.2	4.8	3.2
	920	290	7.5	8100	16560	272	451	645	240/630 CA/W33		658	892	6	0.28	2.4	3.6	2.5
	1030	315	7.5	9660	19300	221	451	1050	231/630 CA/W33		662	998	6	0.30	2.3	3.4	2.2
	1030	400	7.5	13430	21710	187	383	1400	241/630 CA/W33		662	998	6	0.37	1.8	2.7	1.8
<b>670</b>	900	170	6	4600	9940	306	570	315	239/670 CA/W33		693	877	5	0.17	4	5.9	4
	980	230	7.5	7040	13430	289	510	600	230/670 CA/W33		698	952	6	0.21	3.2	4.8	3.2
	980	308	7.5	9200	18980	255	425	790	240/670 CA/W33		698	952	6	0.28	2.4	3.6	2.5
	1090	336	7.5	10030	20600	204	425	1250	231/670 CA/W33		702	1058	6	0.30	2.3	3.4	2.2
	1090	412	7.5	14720	26680	170	340	1600	241/670 CA/W33		702	1058	6	0.37	1.8	2.7	1.8
	1220	438	12	16560	28060	187	306	2270	232/670 CA/W33		718	1172	10	0.35	1.9	2.9	1.8
<b>710</b>	950	180	6	5150	11040	289	510	365	239/710 CA/W33		733	927	5	0.17	4	5.9	4
	1030	236	7.5	7650	15000	272	476	670	230/710 CA/W33		738	1002	6	0.21	3.2	4.8	3.2
	1030	315	7.5	9750	20980	221	383	895	240/710 CA/W33		738	1002	6	0.27	2.5	3.7	2.5
	1150	345	9.5	11250	23920	204	383	1450	231/710 CA/W33		750	1110	8	0.28	2.4	3.6	2.5
	1150	438	9.5	15900	29900	162	323	1900	241/710 CA/W33		750	1110	8	0.37	1.8	2.7	1.8
<b>750</b>	1000	185	6	5520	12150	272	476	420	239/750 CA/W33		773	977	5	0.16	4.2	6.3	4
	1090	250	7.5	8880	17100	238	408	795	230/750 CA/W33		778	1062	6	0.21	3.2	4.8	3.2
	1090	335	7.5	10850	23000	204	366	1065	240/750 CA/W33		778	1062	6	0.28	2.4	3.6	2.5
	1220	475	9.5	18400	34500	153	332	2100	241/750 CA/W33		790	1180	8	0.37	1.8	2.7	1.8
<b>800</b>	1060	195	6	5890	13160	255	451	470	239/800 CA/W33		823	1037	5	0.16	4.2	6.3	4
	1150	258	7.5	9200	18400	221	366	895	230/800 CA/W33		828	1122	6	0.20	3.4	5	3.2



**d 850~1250mm**

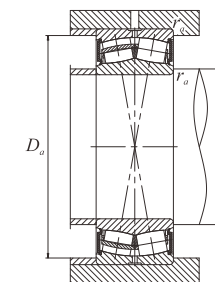
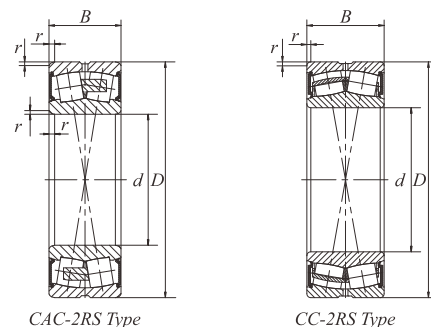
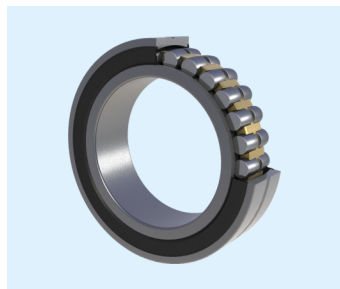
Boundary dimensions (mm)			Chamfer (mm) r(Min)	Basic load ratings (kN)		Limiting speeds (r/min)		Reference mass (kg) ≈	Nominal numbers (New)	Nominal numbers (Old)	Mounting dimensions(mm)			Calculating coefficient			
d	D	B		C <sub>r</sub>	C <sub>0r</sub>	Grease	Oil				d <sub>s</sub> Min	D <sub>s</sub> Max	r <sub>s</sub> Max	e	Y <sub>1</sub>	Y <sub>2</sub>	Y <sub>0</sub>
	1150	345	7.5	11350	26220	187	340	1200	240/800 CA/W33		828	1122	6	0.27	2.5	3.7	2.5
	1280	375	9.5	15220	28980	170	340	1920	231/800 CA/W33		840	1240	8	0.28	2.4	3.6	2.5
	1280	475	9.5	18720	37260	145	272	2300	241/800 CA/W33		840	1240	8	0.35	1.9	2.9	1.8
850	1030	136	5	3340	9200	221	451	240	238/850 CA/W33		868	1012	4	0.11	6.1	9.1	6.3
	1120	200	6	6110	14400	221	408	560	239/850 CA/W33		873	1097	5	0.16	4.2	6.3	4
	1220	272	7.5	9500	19900	187	340	1050	230/850 CA/W33		878	1192	6	0.20	3.4	5	3.2
	1220	365	7.5	12800	28980	170	306	1410	240/850 CA/W33		878	1192	6	0.27	2.5	3.7	2.5
	1360	400	12	16100	31740	153	306	2200	231/850 CA/W33		898	1312	10	0.28	2.4	3.6	2.5
900	1180	206	6	6380	15640	204	383	605	239/900 CA/W33		923	1157	5	0.15	4.5	6.7	4.5
	1280	280	7.5	9860	21350	187	340	1200	230/900 CA/W33		928	1252	6	0.20	3.4	5	3.2
	1280	375	7.5	13260	31740	162	289	1570	240/900 CA/W33		928	1252	6	0.26	2.6	3.9	2.5
	1420	515	12	20820	45080	119	238	3350	241/900 CA/W33		948	1372	10	0.35	1.9	2.9	1.8
950	1250	224	7.5	6670	18032	187	366	755	239/950 CA/W33		978	1222	6	0.15	4.5	6.7	4.5
	1360	300	7.5	11000	26220	153	289	1450	230/950 CA/W33		978	1332	6	0.20	3.4	5	3.2
	1360	412	7.5	13600	35880	145	255	1990	240/950 CA/W33		978	1332	6	0.27	2.5	3.7	2.5
	1500	545	12	22000	20600	111	221	3535	241/950 CA/W33		998	1452	10	0.35	1.9	2.9	1.8
1000	1320	315	7.5	9600	26680	145	272	1200	249/1000CA/W33		1028	1292	6	0.21	3.2	4.8	3.2
	1420	308	7.5	11700	28060	153	306	1600	230/1000CA/W33		1028	1392	6	0.19	3.6	5.3	3.6
	1420	412	7.5	14200	37260	136	238	2140	240/1000CA/W33		1028	1392	6	0.26	2.6	3.9	2.5
	1580	462	12	19700	44160	119	238	3500	231/1000CA/W33		1048	1532	10	0.28	2.4	3.6	2.5
	1580	580	12	24500	57960	102	204	4300	241/1000CA/W33		1048	1532	10	0.35	1.9	2.9	1.8
1060	1400	250	7.5	8700	23920	153	306	1100	239/1060CA/W33		1088	1372	6	0.16	4.2	6.3	4
	1500	325	9.5	12700	31280	145	272	2250	230/1060CA/W33		1094	1466	8	0.19	3.6	5.3	3.6
	1500	438	9.5	15920	41860	128	221	2515	240/1060CA/W33		1094	1466	8	0.26	2.6	3.9	2.5
1120	1460	335	7.5	10760	31740	119	221	1500	249/1120CA/W33		1148	1432	6	0.20	3.4	5	3.2
	1580	462	9.5	17200	46000	111	204	2925	240/1120CA/W33		1154	1546	8	0.26	2.6	3.9	2.5
1180	1540	272	7.5	10200	28520	128	255	1400	239/1180CA/W33		1208	1512	6	0.16	4.2	6.3	4
1250	1750	375	9.5	16500	41400	111	204	2840	230/1250CA/W33		1284	1716	8	0.19	3.6	5.3	3.6



**d 25~120mm**

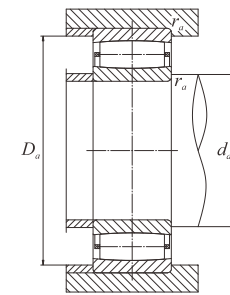
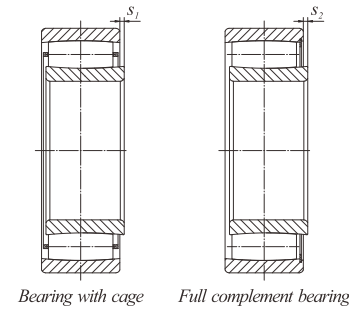
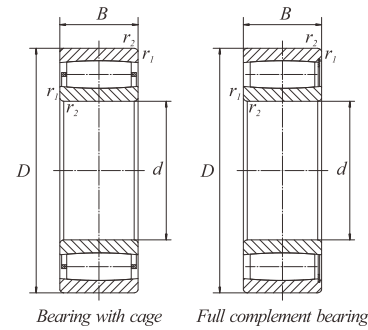
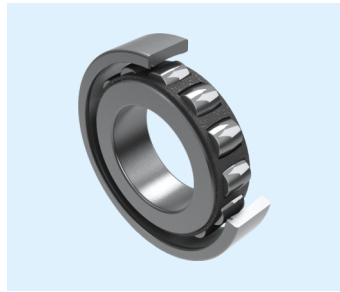
Boundary dimensions (mm)			Chamfer (mm) r(Min)	Basic load ratings (kN)		Limiting speeds (r/min)	Reference mass (kg) ≈	Nominal numbers	Mounting dimensions(mm)				Calculating coefficient			
d	D	B		C <sub>r</sub>	C <sub>0r</sub>				d <sub>s</sub> Min	d <sub>s</sub> Max	D <sub>s</sub> Max	r <sub>s</sub> Max	e	Y <sub>1</sub>	Y <sub>2</sub>	Y <sub>0</sub>
25	52	23	1	49	44	3580	0.31	22205X2-2RS	30	30	46.4	1	0.35	1.9	2.9	1.8
30	62	25	1	64	60	2780	0.34	22206X2-2RS	35.6	36	56.4	1	0.31	2.2	3.3	2
35	72	28	1.1	86.5	85	2380	0.52	22207X2-2RS	42	43	65	1	0.31	2.2	3.3	2
40	80	28	1.1	96.5	90	2180	0.57	22208X2-2RS	47	47	73	1	0.28	2.4	3.6	2.5
45	85	28	1.1	102	98	1980	0.66	22209X2-2RS	52	53	78	1	0.26	2.6	3.9	2.5
50	90	28	1.1	104	108	1880	0.70	22210X2-2RS	57	58	83	1	0.24	2.8	4.2	2.8
55	100	31	1.5	125	127	1680	1.00	22211X2-2RS	64	64	91	1.5	0.24	2.8	4.2	2.8
60	110	34	1.5	156	166	1580	1.30	22212X2-2RS	69	69	101	1.5	0.24	2.8	4.2	2.8
65	100	35	1.1	132	173	980	0.95	24013-2RS/W33	71	71.5	94	1	0.27	2.5	3.7	2.5
	120	38	1.5	193	216	1480	1.60	22213X2-2RS	74	76	111	1.5	0.24	2.8	4.2	2.8
70	125	38	1.5	208	228	1380	1.80	22214X2-2RS	79	80	116	1.5	0.23	2.9	4.4	2.8
75	115	40	1.1	173	232	930	1.55	24015-2RS/W33	81	81.5	109	1	0.28	2.4	3.6	2.5
	130	38	1.1	212	240	1280	2.10	22215X2-2RS	84	84	121	1.5	0.22	3	4.6	2.5
	160	64	2.1	440	475	930	6.54	22315X2-2RS	87	88	148	2	0.35	1.9	2.9	1.8
80	140	40	2	236	270	1180	2.40	22216X2-2RS	91	91.5	129	2	0.22	3	4.6	2.8
85	150	44	2	285	325	1080	3.00	22217X2-2RS	96	98	139	2	0.22	3	4.6	2.8
90	160	48	2	325	375	980	3.70	22218X2-2RS	101	102	149	2	0.24	2.8	4.2	2.8
100	150	50	1.5	285	415	780	3.15	24020-2RS/W33	107	108	143	1.5	0.28	2.4	3.6	2.5
	165	52	2	365	490	830	4.55	23120-2RS/W33	111	112	154	2	0.27	2.5	3.7	2.5
	180	55	2.1	425	490	880	5.50	22220X2-2RS	112	114	168	2	0.24	2.8	4.2	2.8
	180	60.3	2.1	475	600	680	6.85	23220-2RS	112	114	168	2	0.30	2.3	3.4	2.2
110	170	45	2	310	440	880	3.80	23022-2RS	119	122	161	2	0.23	2.9	4.4	2.8
	180	56	2	430	585	780	5.75	23122-2RS/W33	121	122	169	2	0.27	2.5	3.7	2.5
	180	69	2	520	750	610	7.10	24122-2RS/W33	121	121	169	2	0.35	1.9	2.9	1.8
	200	63	2.1	560	640	780	7.60	22222X2-2RS/W33	122	126	188	2	0.25	2.7	4	2.5
120	180	46	2	355	510	830	4.20	23024-2RS/W33	129	132	171	2	0.20	3.4	5	3.2
	180	60	2	430	670	650	5.45	24024-2RS/W33	129	130	171	2	0.28	2.4	3.6	2.5





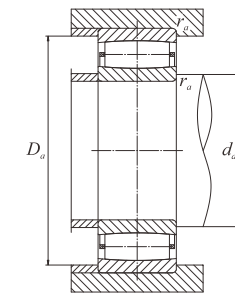
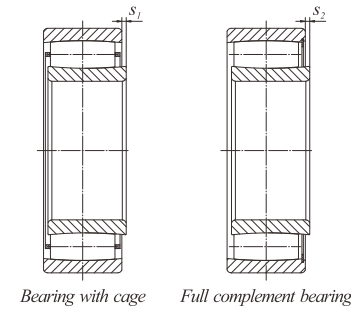
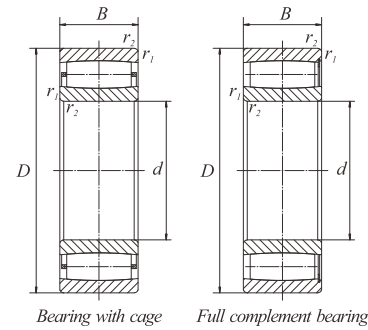
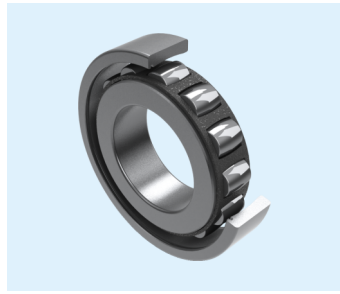
**d 130~220mm**

Boundary dimensions (mm)			Chamfer (mm) r(Min)	Basic load ratings (kN)		Limiting speeds (r/min)	Reference mass (kg) ≈	Nominal numbers	Mounting dimensions(mm)				Calculating coefficient			
d	D	B		C <sub>r</sub>	C <sub>0r</sub>				d <sub>s</sub> Min	d <sub>s</sub> Max	D <sub>s</sub> Max	r <sub>s</sub> Max	e	Y <sub>1</sub>	Y <sub>2</sub>	Y <sub>0</sub>
	200	80	2	655	950	540	10.5	<b>24124-2RS/W33</b>	131	132	189	2	0.37	1.8	2.7	1.8
	215	69	2.1	630	765	730	9.75	<b>22224X2-2RS</b>	132	136	203	2	0.26	2.6	3.9	2.5
<b>130</b>	200	52	2	430	610	780	6.00	<b>23026-2RS/W33</b>	139	145	191	2	0.21	3.2	4.8	3.2
	200	69	2	540	815	580	8.05	<b>24026-2RS/W33</b>	139	140	191	2	0.30	2.3	3.4	2.2
	210	80	2	680	1000	510	11.0	<b>24126-2RS/W33</b>	141	141	199	2	0.33	2	3	2
<b>140</b>	210	69	2	570	900	540	8.55	<b>24028-2RS/W33</b>	149	151	201	2	0.28	2.4	3.6	2.5
	225	85	2.1	765	1160	430	13.5	<b>24128-2RS/W33</b>	152	153	213	2	0.35	1.9	2.9	1.8
<b>150</b>	225	75	2.1	655	1040	510	10.5	<b>24030-2RS/W33</b>	161	162	214	2	0.28	2.4	3.6	2.5
	250	100	2.1	1020	1530	380	20.0	<b>24130-2RS/W33</b>	162	163	238	2	0.37	1.8	2.7	1.8
<b>160</b>	240	80	2.1	750	1200	430	13.0	<b>24032-2RS/W33</b>	171	173	229	2	0.28	2.4	3.6	2.5
	270	86	2.1	980	1370	510	20.5	<b>23132-2RS/W33</b>	172	180	258	2	0.28	2.4	3.6	2.5
<b>170</b>	260	90	2.1	930	1460	380	17.5	<b>24034-2RS/W33</b>	181	184	249	2	0.30	2.3	3.4	2.2
	280	109	2.1	1220	1860	340	27.5	<b>24134-2RS/W33</b>	182	185	268	2	0.37	1.8	2.7	1.8
<b>180</b>	280	100	2.1	1080	1730	360	23.0	<b>24036-2RS/W33</b>	191	194	269	2	0.31	2.2	3.3	2.2
<b>190</b>	320	128	3	1600	2500	320	43.0	<b>24138-2RS/W33</b>	204	210	306	2.5	0.40	1.7	2.5	1.6
<b>200</b>	340	140	3	1800	2800	300	53.5	<b>24140-2RS</b>	214	221	326	2.5	0.40	1.7	2.5	1.6
	360	128	4	1860	2700	410	58.0	<b>23240-2RS/W33</b>	217	229	343	3	0.35	1.9	2.9	1.8
<b>220</b>	300	60	2.1	546	1080	580	12.5	<b>23944-2RS</b>	231	238	289	2	0.15	4.5	6.7	4.5



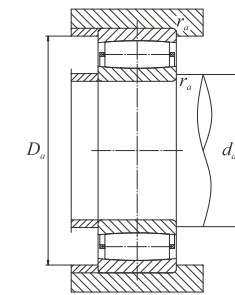
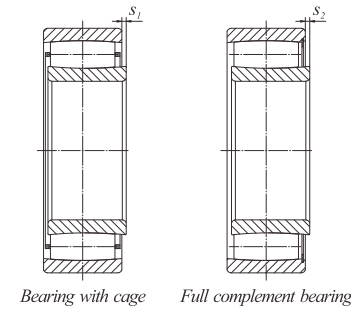
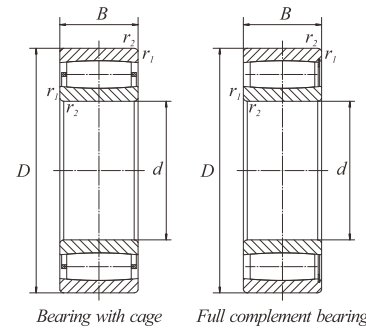
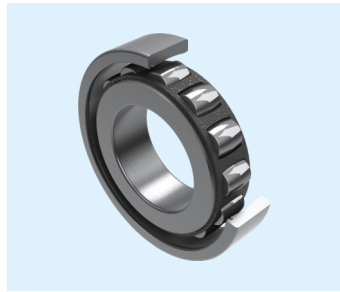
**d 25~55mm**

Boundary dimensions (mm)			Basic load ratings (kN)		Limiting speeds (r/min)		Mass (kg) ≈	Dimensions (mm)			Nominal numbers		Dimension of shoulder and chamfer					Calculating coefficient	
d	D	B	C <sub>r</sub>	C <sub>or</sub>	Grease	Oil		r <sub>1,2</sub>	S <sub>1</sub>	S <sub>2</sub>	Cylindrical bore	Tapered bore	d <sub>s</sub> Min	d <sub>s</sub> Max	D <sub>s</sub> Min	D <sub>s</sub> Max	r <sub>s</sub> Max	K <sub>1</sub>	K <sub>2</sub>
25	52	18	40	36	11050	15300	0.17	1	5.8	-	<b>S 2205 TN</b>	<b>S 2205 KTN</b>	30.6	32	42	46.4	1	0.09	0.126
	52	18	46	44		5950	0.18	1	5.8	2.8	<b>S 2205 V</b>	<b>S 2205 KV</b>	30.6	39	-	46.4	1	0.09	0.126
30	55	45	123	165		2550	0.50	1	7.9	4.9	<b>S 6006 V</b>		35.6	43	-	49.4	1	0.102	0.096
	62	20	63	57	9350	12750	0.27	1	4.5	-	<b>S 2206 TN</b>	<b>S 2206 KTN</b>	35.6	37	51	56.4	1	0.101	0.111
	62	20	70	65		5100	0.29	1	4.5	1.5	<b>S 2206 V</b>	<b>S 2206 KV</b>	35.6	49	-	56.4	1	0.101	0.111
35	72	23	76	73	8070	11050	0.43	1.1	5.7	-	<b>S 2207 TN</b>	<b>S 2207 KTN</b>	42	44	59	65	1	0.094	0.121
	72	23	87	88		4250	0.45	1.1	5.7	2.7	<b>S 2207 V</b>	<b>S 2207 KV</b>	42	57	-	65	1	0.094	0.121
40	62	22	70	92		3660	0.25	0.6	4.7	1.7	<b>S 4908 V</b>	<b>S 4908 K30V</b>	43.2	52	-	58.8	0.6	0.099	0.114
	62	30	95	130		2890	0.35	0.6	5	2	<b>S 5908 V</b>		43.2	45	-	58.8	0.6	0.096	0.106
	62	40	110	165		2380	0.47	0.6	9.4	6.4	<b>S 6908 V</b>		43.2	46	-	58.8	0.6	0.113	0.088
	80	23	80	80	6800	9350	0.50	1.1	7.1	-	<b>S 2208 TN</b>	<b>S 2208 KTN</b>	47	52	68	73	1	0.093	0.128
	80	23	90	95		3830	0.53	1.1	7.1	4.1	<b>S 2208 V</b>	<b>S 2208 KV</b>	47	66	-	73	1	0.093	0.128
45	68	22	70	100		3230	0.30	0.6	4.7	1.7	<b>S 4909 V</b>	<b>S 4909 K30V</b>	48.2	51	-	64.8	0.6	0.114	0.1
	68	30	90	130		2720	0.41	0.6	5	2	<b>S 5909 V</b>		48.2	51	-	64.8	0.6	0.096	0.106
	68	40	120	180		2210	0.55	0.6	9.4	6.4	<b>S 6909 V</b>		48.2	52	-	64.8	0.6	0.113	0.09
	85	23	80	85	6800	9350	0.55	1.1	7.1	-	<b>S 2209 TN</b>	<b>S 2209 KTN</b>	52	55	71	78	1	0.095	0.128
	85	23	90	101		3660	0.58	1.1	7.1	4.1	<b>S 2209 V</b>	<b>S 2209 KV</b>	52	69	-	78	1	0.095	0.128
50	72	22	80	115		3060	0.29	0.6	4.7	1.7	<b>S 4910 V</b>	<b>S 4910 K30V</b>	53.2	62	-	68.8	0.6	0.103	0.114
	72	30	100	160		2380	0.42	0.6	5	2	<b>S 5910 V</b>		53.2	56	-	68.8	0.6	0.096	0.11
	72	40	120	200		1870	0.54	0.6	9.4	6.4	<b>S 6910 V</b>		53.2	61	-	68.8	0.6	0.093	0.113
	80	30	108	128	4250	6380	0.55	1	6	-	<b>S 4010 TN</b>	<b>S 4010 K30TN</b>	54.6	57	69	75.4	1	0.103	0.107
	80	30	120	160		2550	0.59	1	6	3	<b>S 4010 V</b>	<b>S 4010 K30V</b>	54.6	67	-	75.4	1	0.103	0.107
	90	23	90	92	5950	800	0.59	1.1	7.1	-	<b>S 2210 TN</b>	<b>S 2210 KTN</b>	57	61	77	83	1	0.097	0.128
	90	23	100	110		3230	0.62	1.1	7.1	3.9	<b>S 2210 V</b>	<b>S 2210 KV</b>	57	73	-	83	1	0.097	0.128
55	80	25	90	140		2720	0.43	1	5.5	2.5	<b>S 4911 V</b>	<b>S 4911 K30V</b>	59.6	62	-	80.4	1	0.107	0.105



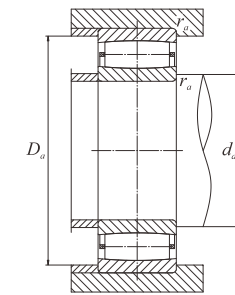
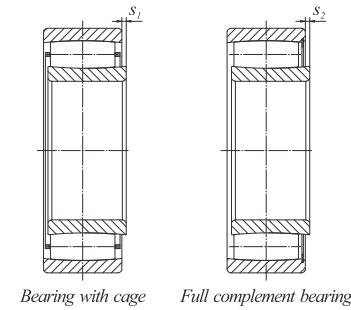
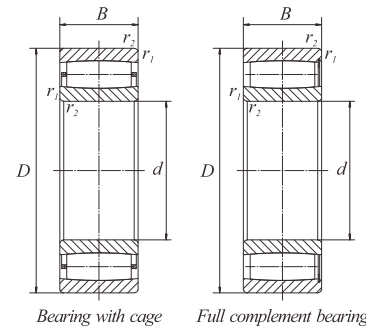
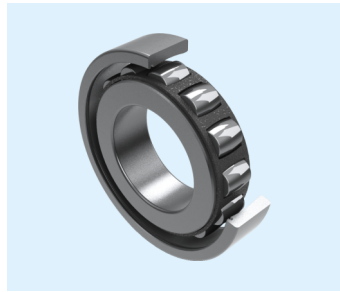
**d 60~75mm**

Boundary dimensions (mm)			Basic load ratings (kN)		Limiting speeds (r/min)		Mass (kg) ≈	Dimensions (mm)			Nominal numbers		Dimension of shoulder and chamfer					Calculating coefficient	
d	D	B	C <sub>r</sub>	C <sub>or</sub>	Grease	Oil		r <sub>1,2</sub>	S <sub>1</sub>	S <sub>2</sub>	Cylindrical bore	Tapered bore	d <sub>s</sub> Min	d <sub>s</sub> Max	D <sub>s</sub> Min	D <sub>s</sub> Max	r <sub>s</sub> Max	K <sub>1</sub>	K <sub>2</sub>
80	34		130	200		2210	0.60	1	6	3	<b>S 5911 V</b>		59.6	62	-	80.4	1	0.097	0.109
80	45		160	270		1700	0.81	1	7.9	4.9	<b>S 6911 V</b>		59.6	62	-	80.4	1	0.096	0.105
100	25		105	104	5700	7650	0.19	1.5	8.6	-	<b>S 2211 TN</b>	<b>S 2211 KTN</b>	64	65	84	91	1.5	0.094	0.133
100	25		120	120		2890	0.81	1.5	8.6	5.4	<b>S 2211 V</b>	<b>S 2211 KV</b>	64	80	-	91	1.5	0.094	0.133
<b>60</b>	85	25	103	150		2550	0.46	1	5.5	2.3	<b>S 4912 V</b>	<b>S 4912 K30V</b>	64.6	68	-	80.4	1	0.107	0.108
	85	34	130	220		2040	0.64	1	6	2.8	<b>S 5912 V</b>		64.6	68	-	80.4	1	0.097	0.11
	85	45	170	300		1620	0.84	1	7.9	4.7	<b>S 6912 V</b>		64.6	72	-	80.4	1	0.108	0.096
	110	28	130	140	4760	6380	1.10	1.5	8.5	-	<b>S 2212 TN</b>	<b>S 2212 KTN</b>	69	77	95	101	1.5	0.1	0.123
	110	28	150	170		2380	1.15	1.5	8.5	5.3	<b>S 2212 V</b>	<b>S 2212 KV</b>	69	91	-	101	1.5	0.1	0.123
<b>65</b>	90	25	160	160		2380	0.50	1	5.5	2.3	<b>S 4913 V</b>	<b>S 4913 K30V</b>	69.6	72	-	85.4	1	0.107	0.109
	90	34	140	240		1870	0.70	1	6	2.8	<b>S 5913 V</b>		69.6	72	-	85.4	1	0.097	0.111
	90	45	180	330		1530	0.93	1	7.9	4.7	<b>S 6913 V</b>		69.6	72	-	85.4	1	0.096	0.107
	100	35	180	280		2040	1.00	1.1	6	2.8	<b>S 4013 V</b>	<b>S 4013 K30V</b>	71	74		94	1	0.1	0.108
	120	31	165	160	4500	6380	1.40	1.5	9.6	-	<b>S 2213 TN</b>	<b>S 2213 KTN</b>	74	79	102	111	1.5	0.097	0.127
	130	31	190	200		2040	1.47	1.5	9.6	5.3	<b>S 2213 V</b>	<b>S 2213 KV</b>	74	79	-	111	1.5	0.097	0.127
<b>70</b>	100	30	150	220		2210	0.78	1	6	2.8	<b>S 4914 V</b>	<b>S 4914 K30V</b>	74.6	78	-	95.4	1	0.107	0.107
	100	40	180	280		1700	1.00	1	9.4	6.2	<b>S 5914 V</b>		74.6	78	-	95.4	1	0.114	0.095
	100	54	240	410		1450	1.40	1	9	5.8	<b>S 6914 V</b>		74.6	79	-	95.4	1	0.102	0.1
	125	31	170	180	4250	5950	1.45	1.5	9.6	-	<b>S 2214 TN</b>	<b>S 2214 KTN</b>	79	83	107	116	1.5	0.098	0.127
	125	31	190	210		2040	1.50	1.5	9.6	5.3	<b>S 2214 V</b>	<b>S 2214 KV</b>	79	102	-	116	1.5	0.098	0.127
	150	51	370	390	3230	4250	4.25	2.1	9.1	-	<b>S 2314</b>	<b>S 2314 K</b>	82	105	120	138	2	0.11	0.099
<b>75</b>	105	30	150	230		2040	0.82	1	6	2.8	<b>S 4915 V</b>	<b>S 4915 K30V</b>	79.6	83	-	100	1	0.107	0.108
	105	40	180	300		1620	1.10	1	9.4	6.2	<b>S 5915 V</b>		79.6	89	-	100	1	0.098	0.114
	105	54	180	300		1360	1.40	1	9.2	9.2	<b>S 6915 V</b>		79.6	88	-	100	1	0.073	0.154
	115	40	210	310		1700	1.50	1.1	9.4	5.1	<b>S 4015 V</b>	<b>S 4015 K30V</b>	81	87	-	109	1	0.115	0.097



**d 80~100mm**

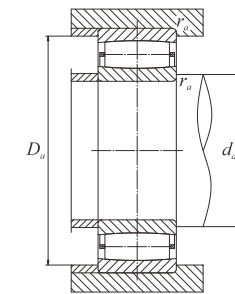
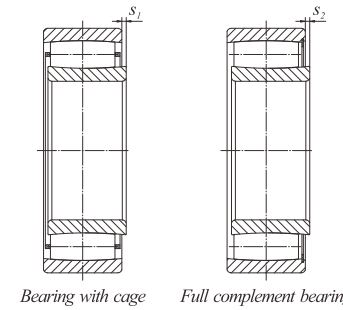
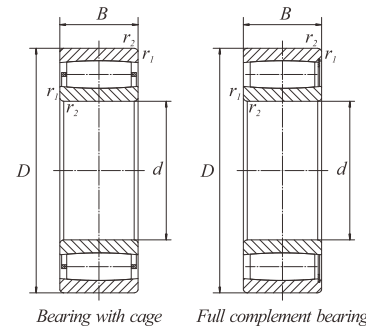
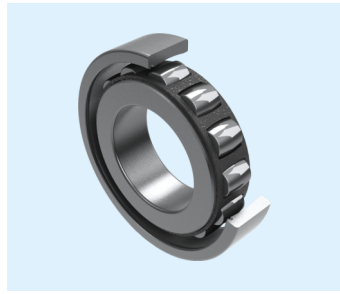
Boundary dimensions (mm)			Basic load ratings (kN)		Limiting speeds (r/min)		Mass (kg) ≈	Dimensions (mm)			Nominal numbers		Dimension of shoulder and chamfer					Calculating coefficient	
d	D	B	C <sub>r</sub>	C <sub>or</sub>	Grease	Oil		r <sub>1,2</sub>	S <sub>1</sub>	S <sub>2</sub>	Cylindrical bore	Tapered bore	d <sub>s</sub> Min	d <sub>s</sub> Max	D <sub>s</sub> Min	D <sub>s</sub> Max	r <sub>s</sub> Max	K <sub>1</sub>	K <sub>2</sub>
	130	31	180	190	4080	5700	1.60	1.5	9.6	-	<b>S 2215</b>	<b>S 2215 K</b>	84	98	110	121	1.5	0.099	0.127
	130	31	200	220		1870	1.65	1.5	9.6	5.3	<b>S 2215 V</b>	<b>S 2215 KV</b>	84	105	-	121	1.5	0.099	0.127
	160	55	390	420	3060	4080	5.20	2.1	13.1	-	<b>S 2315</b>	<b>S 2315 K</b>	87	110	130	148	2	0.103	0.107
<b>80</b>	110	30	160	250		1870	0.87	1	6	1.7	<b>S 4916 V</b>	<b>S 4916 K30V</b>	84.6	88	-	105	1	0.107	0.11
	110	40	190	310		1530	1.20	1	9.4	5.1	<b>S 5916 V</b>		84.6	88	-	105	1	0.114	0.098
	140	33	200	230	3830	5100	2.00	2	9.1	-	<b>S 2216</b>	<b>S 2216 K</b>	91	105	120	129	2	0.104	0.121
	140	33	230	280		1700	2.10	2	9.1	4.8	<b>S 2216 V</b>	<b>S 2226 KV</b>	91	115	-	129	2	0.104	0.121
	170	58	470	500	2890	3830	6.20	2.1	10.1	-	<b>S 2316</b>	<b>S 2316 K</b>	92	115	135	158	2	0.107	0.101
<b>85</b>	120	35	200	320		1700	1.30	1.1	6	1.7	<b>S 4917 V</b>	<b>S 4917 K30V</b>	91	94	-	114	1	0.1	0.114
	120	46	250	420		1450	1.70	1.1	8.9	4.6	<b>S 5917 V</b>		91	95	-	114	1	0.098	0.109
	150	36	250	290	3660	4760	2.60	2	7.1	-	<b>S 2217</b>	<b>S 2217 K</b>	96	110	125	139	2	0.114	0.105
	150	36	290	350		1530	2.80	2	7.1	1.7	<b>S 2217 V</b>	<b>S 2217 KV</b>	96	115	-	139	2	0.114	0.105
	180	60	490	550	2720	3660	7.30	3	12.1	-	<b>S 2317</b>	<b>S 2317 K</b>	99	125	145	166	2.5	0.105	0.105
<b>90</b>	125	35	170	290		1700	1.30	1.1	11	6.7	<b>S 4918 V</b>	<b>S 4918 K30V</b>	96	100	-	119	1	0.125	0.098
	125	46	206	360		1360	1.75	1.1	15.4	11.1	<b>S 5918 V</b>		96	105	-	119	1	0.089	0.131
	150	72	410	610		1280	5.10	2	19.7	19.7	<b>S2039 V</b>		101	115	-	139	2	0.087	0.123
	160	40	300	350	3230	4500	3.30	2	9.5	-	<b>S 2218</b>	<b>S 2218 K</b>	101	120	130	149	2	0.104	0.117
	160	40	330	400		1280	3.40	2	9.5	5.4	<b>S 2218 V</b>	<b>S 2218 KV</b>	101	125	-	149	2	0.104	0.117
	190	64	560	640	2380	3400	8.50	3	9.6	-	<b>S 2318</b>	<b>S 2318 K</b>	104	135	155	176	2.5	0.108	0.101
<b>95</b>	170	43	330	360	3230	4250	4.00	2.1	10.5	-	<b>S 2219</b>	<b>S 2219 K</b>	107	112	149	158	2	0.114	0.104
	200	67	560	640	2380	3400	10.0	3	12.6	-	<b>S 2319</b>	<b>S 2319 K</b>	109	135	155	186	2.5	0.103	0.106
<b>100</b>	140	40	253	410		1450	1.90	1.1	9.4	5.1	<b>S 4920 V</b>	<b>S 4920 K30V</b>	106	110	-	134	1	0.115	0.103
	140	54	345	580		1190	2.70	1.1	9	4.7	<b>S 5920 V</b>		106	105	-	134	1	0.103	0.105
	150	50	320	480		1190	3.05	1.5	14	9.7	<b>S 4020 V</b>	<b>S 4020 K30V</b>	109	120	-	141	1.5	0.098	0.118
	150	67	460	790		940	4.30	1.5	9.3	5	<b>S 5020 V</b>		109	125	-	141	1.5	0.112	0.094



**d 110~150mm**

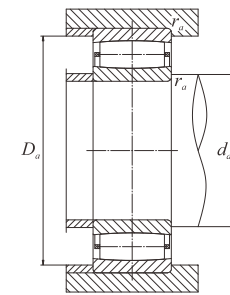
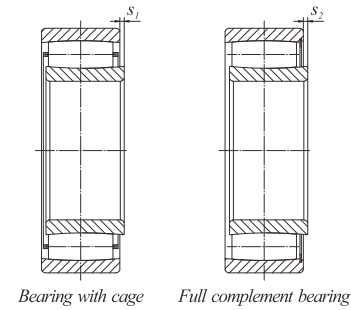
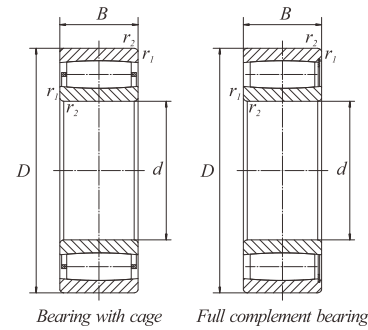
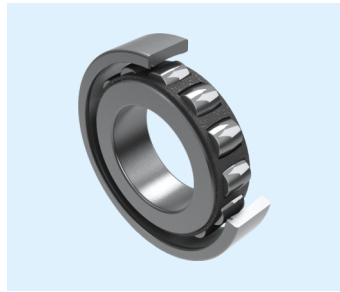
Boundary dimensions (mm)			Basic load ratings (kN)		Limiting speeds (r/min)		Mass (kg) ≈	Dimensions (mm)			Nominal numbers		Dimension of shoulder and chamfer					Calculating coefficient	
d	D	B	C <sub>r</sub>	C <sub>or</sub>	Grease	Oil		r <sub>1,2</sub>	S <sub>1</sub>	S <sub>2</sub>	Cylindrical bore	Tapered bore	d <sub>s</sub> Min	d <sub>s</sub> Max	D <sub>s</sub> Min	D <sub>s</sub> Max	r <sub>s</sub> Max	K <sub>1</sub>	K <sub>2</sub>
110	165	52	380	490	2720	3830	4.40	2	10	-	S 3120	S 3120 K	111	119	150	154	2	0.1	0.112
	165	52	437	600		1100	4.40	2	10	4.7	S 3120 V		111	130	-	154	2	0.1	0.112
	165	65	437	600		1100	5.25	2	17.7	17.7	S 4120 V	S 4120 K30V	111	130	-	154	2	0.09	0.125
	170	65	437	600		1190	5.95	2	17.7	17.7	S 2034 V		111	130	-	159	2	0.09	0.125
	180	46	380	420	3060	4080	4.85	2.1	10.1	-	S 2220	S 2220 K	112	130	150	168	2	0.108	0.11
	215	73	736	810	2210	3060	12.5	3	11.2	-	S 2320	S 2320 K	114	150	170	201	2.5	0.113	0.103
110	170	45	320	440	2720	3830	3.50	2	9.5	-	S 3022	S 3022 K	119	127	157	161	2	0.107	0.11
	170	60	460	730		1020	4.05	2	12	6.6	S 4022 V	S 4022 K30V	119	130	-	161	2	0.111	0.109
	180	69	610	920		770	7.05	2	11.4	4.6	S 4122 V	S 4122 K30V	120	145	-	170	2	0.111	0.097
	200	53	480	570	2720	3660	6.90	2.1	11.1	-	S 2222	S 2222 K	122	150	165	188	2	0.113	0.103
120	180	46	345	480	2550	3400	3.90	2	10.6	-	S 3024	S 3024 K	129	145	160	171	2	0.111	0.109
	180	46	390	580		1190	4.05	2	10.6	3.8	S 3024 V	S 3024 KV	129	150	-	171	2	0.111	0.106
	180	60	480	800		940	5.50	2	12	5.2	S 4024 V	S 4024 K30V	129	150	-	171	2	0.109	0.103
	200	80	710	1030		640	10.5	2	18	11.2	S 4124 V	S 4124 K30V	131	140	-	189	2	0.103	0.103
	215	58	560	650	2550	3400	8.60	2.1	13	-	S 2224	S 2224 K	132	143	192	203	2	0.113	0.103
	215	76	690	900	2040	2720	11.5	2.1	17.1	-	S 3224	S 3224 K	132	160	180	203	2	0.103	0.108
130	200	52	350	530	2380	3230	5.90	2	16.5	-	S 3026	S 3026 K	139	152	182	191	2	0.123	0.1
	200	69	570	850	1620	2380	7.84	2	11.4	-	S 4026	S 4026 K30	139	155	175	191	2	0.113	0.097
	200	69	660	1030		720	8.05	2	11.4	4.6	S 4026 V	S 4026 K30V	139	165	-	191	2	0.113	0.097
	210	80	690	1010		570	10.5	2	9.7	9.7	S 4126 V	S 4126 K30V	141	170	-	199	2	0.09	0.126
	230	64	670	855	2380	3230	11.00	3	9.6	-	S 2226	S 2226 K	144	170	185	216	2.5	0.113	0.101
140	210	53	450	670	2210	2890	6.30	2	11	-	S 3028	S 3028 K	149	161	195	201	2	0.102	0.116
	210	69	690	1120		680	8.55	2	11.4	5.9	S 4028 V	S 4028 K30V	149	175	-	201	2	0.115	0.097
	225	85	920	1470		540	14.20	2.1	12	5.2	S 4128 V	S 4128 K30V	151	185	-	214	2	0.111	0.097
150	225	56	490	780	2040	2720	8.30	2.1	2.8	-	S 3030 M	S 3030 KM	161	172	200	214	2	0.108	





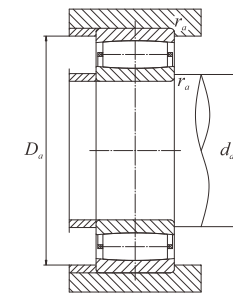
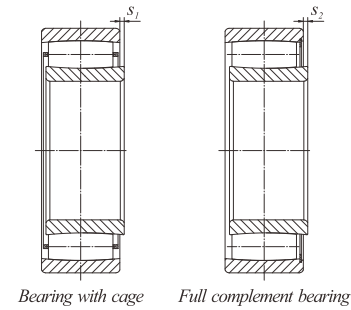
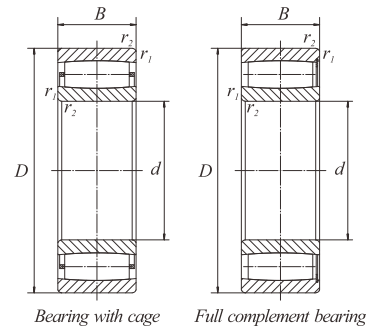
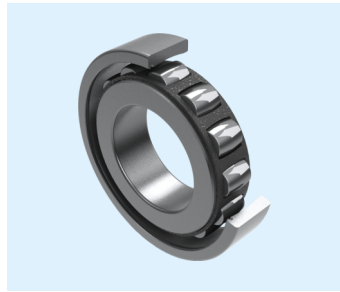
**d 160~190mm**

Boundary dimensions (mm)			Basic load ratings (kN)		Limiting speeds (r/min)		Mass (kg) ≈	Dimensions (mm)			Nominal numbers		Dimension of shoulder and chamfer					Calculating coefficient	
d	D	B	C <sub>r</sub>	C <sub>0r</sub>	Grease	Oil		r <sub>1,2</sub>	S <sub>1</sub>	S <sub>2</sub>	Cylindrical bore	Tapered bore	d <sub>s</sub> Min	d <sub>s</sub> Max	D <sub>s</sub> Min	D <sub>s</sub> Max	r <sub>s</sub> Max	K <sub>1</sub>	K <sub>2</sub>
	225	75	710	1210		640	10.50	2.1	17.4	10.6	<b>S 4030 V</b>	<b>S 4030 K30V</b>	161	185	-	214	2	0.107	0.106
	250	80	810	1180	1700	2380	15.00	2.1	13.9	-	<b>S 3130</b>	<b>S 3130 K</b>	162	195	215	238	2	0.12	0.092
	250	100	1120	1710		380	20.50	2.1	20	10.1	<b>S 4130 V</b>	<b>S 4130 K30V</b>	162	175	-	228	2	0.103	0.103
	270	73	900	1120	2040	2720	17.50	3	11.2	-	<b>S 2230</b>	<b>S 2230 K</b>	164	200	215	256	2.5	0.119	0.096
<b>160</b>	240	60	550	900	1870	2550	9.60	2.1	15	-	<b>S 3032</b>	<b>S 3032 K</b>	171	186	220	229	2	0.115	0.106
	240	80	730	1060	1360	2040	12.3	2.1	18.1	-	<b>S 4032</b>	<b>S 4032 K30</b>	171	190	210	229	2	0.109	0.103
	240	80	840	1340		510	12.6	2.1	18.1	8.2	<b>S 4032 V</b>	<b>S 4032 K30V</b>	171	195	-	229	2	0.109	0.103
	270	86	920	1280	1700	2210	20.0	2.1	19	-	<b>S 3132</b>	<b>S 3132 K</b>	172	190	242	258	2	0.099	0.111
	270	109	1340	1980		260	26.0	2.1	21	11.1	<b>S 4132 V</b>	<b>S 4132 K30V</b>	172	190	-	258	2	0.101	0.105
	290	104	1260	1680	1450	2040	28.5	3	19.3	-	<b>S 3232</b>	<b>S 3232 K</b>	174	215	245	276	2.5	0.112	0.096
<b>170</b>	260	67	690	1060	1700	2380	12.5	2.1	12.5	-	<b>S 3034</b>	<b>S 3034 K</b>	181	200	238	249	2	0.105	0.112
	260	90	1040	1710		400	17.5	2.1	17.1	7.2	<b>S 4034 V</b>	<b>S 4034 K30V</b>	181	215	-	249	2	0.108	0.103
	280	88	950	1340	1620	2210	21.0	2.1	21	-	<b>S 3134</b>	<b>S 3134 K</b>	182	200	250	268	2	0.101	0.109
	280	109	1400	2090		240	27.0	2.1	21	11.1	<b>S 4134 V</b>	<b>S 4134 K30V</b>	182	200	-	268	2	0.101	0.106
	310	86	1160	1500	1700	2210	28.0	4	16.4	-	<b>S 2234</b>	<b>S 2234 K</b>	187	230	225	293	3	0.114	0.1
<b>180</b>	280	74	810	1230	1620	2210	16.5	2.1	15.1	-	<b>S 3036</b>	<b>S 3036 K</b>	191	220	240	269	2	0.112	0.105
	280	100	1210	1950		370	23.0	2.1	20.1	10.2	<b>S 4036 V</b>	<b>S 4036 K30V</b>	191	225	-	269	2	0.107	0.103
	300	96	1150	1590	1530	2040	26.0	3	23.2	-	<b>S 3136</b>	<b>S 3136 K</b>	194	230	255	286	2.5	0.102	0.111
	300	118	1620	2480		190	34.5	3	20	10.1	<b>S 4136 V</b>	<b>S 4136 K30V</b>	194	210	-	286	2.5	0.095	0.11
	320	112	1400	2020	1280	1700	37.0	4	27.3	-	<b>S 3236</b>	<b>S 3236 K</b>	197	245	275	303	3	0.107	0.104
<b>190</b>	290	75	850	1340	1530	2040	17.5	2.1	16.1	-	<b>S 3038</b>	<b>S 3038 K</b>	201	235	255	279	2	0.113	0.107
	290	100	1260	2130		320	24.5	2.1	20	10.1	<b>S 4038 V</b>	<b>S 4038 K30V</b>	201	220	-	279	2	0.103	0.106
	320	104	1400	2020	1360	1870	33.5	3	19	-	<b>S 3138</b>	<b>S 3138 K</b>	204	227	290	306	2.5	0.096	0.113
	320	128	1870	2890		110	43.0	3	20	10.1	<b>S 4138 V</b>	<b>S 4138 K30V</b>	204	220	-	306	2.5	0.094	0.111
	340	92	1260	1590	1530	2040	34.0	4	22.5	-	<b>S 2238</b>	<b>S 2238 K</b>	207	250	275	323	3	0.108	0.108



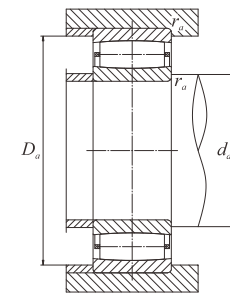
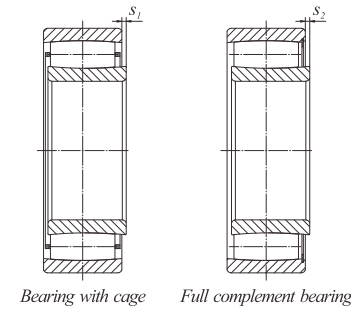
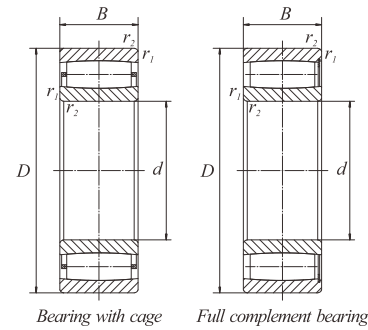
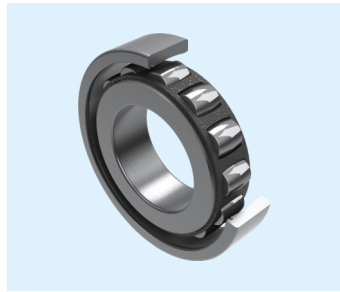
**d 200~380mm**

Boundary dimensions (mm)			Basic load ratings (kN)		Limiting speeds (r/min)		Mass (kg) ≈	Dimensions (mm)			Nominal numbers		Dimension of shoulder and chamfer					Calculating coefficient	
d	D	B	C <sub>r</sub>	C <sub>or</sub>	Grease	Oil		r <sub>1,2</sub>	S <sub>1</sub>	S <sub>2</sub>	Cylindrical bore	Tapered bore	d <sub>s</sub> Min	d <sub>s</sub> Max	D <sub>s</sub> Min	D <sub>s</sub> Max	r <sub>s</sub> Max	K <sub>1</sub>	K <sub>2</sub>
<b>200</b>	310	82	1030	1590	1450	2040	22.0	2.1	15.2	<b>S 3040</b>	<b>S 3040 K</b>	211	250	275	299	2	0.123	0.095	
	310	109	1500	2430		220	30.5	2.1	21	<b>S 4040 V</b>	<b>S 4040 K30V</b>	211	225	-	299	2	0.101	0.108	
	340	112	1470	2130	1280	1700	40.0	3	27.3	<b>S 3140</b>	<b>S 3140 K</b>	214	260	307	326	2.5	0.108	0.104	
	340	140	2170	3350		70	54.0	3	22	<b>S 4140 V</b>	<b>S 4140 K30V</b>	214	235	-	326	2.5	0.092	0.112	
<b>220</b>	340	90	1210	1870	1360	1870	29.0	3	17.2	<b>S 3044</b>	<b>S 3044 K</b>	233	270	295	327	2.5	0.114	0.104	
	340	118	1770	2990		170	40.0	3	20	<b>S 4044 V</b>	<b>S 4044 K30V</b>	233	250	-	327	2.5	0.095	0.113	
	370	120	1740	2660	1190	1620	51.0	4	22.3	<b>S 3144</b>	<b>S 3144 K</b>	237	290	315	351	3	0.114	0.097	
	400	108	1840	2300	1280	1700	56.5	4	20.5	<b>S 2244</b>	<b>S 2244 K</b>	237	295	320	383	3	0.113	0.101	
<b>240</b>	360	92	1230	1980	1100	1530	31.5	3	19.2	<b>S 3048</b>	<b>S 3048 K</b>	253	290	315	347	2.5	0.113	0.106	
	400	128	2130	3170	1100	1450	63.0	3	20.4	<b>S 3148</b>	<b>S 3148 K</b>	257	305	335	383	3	0.116	0.095	
<b>260</b>	400	104	1620	2622	1100	1530	46.0	4	19.3	<b>S 3052</b>	<b>S 3052 K</b>	275	325	350	385	3	0.122	0.096	
	440	144	2430	3720	940	1280	87.0	4	26.4	<b>S 3152</b>	<b>S 3152 K</b>	277	340	375	423	3	0.115	0.096	
<b>280</b>	420	106	1710	2850	1020	1360	50.0	4	21.3	<b>S 3056</b>	<b>S 3056 K</b>	295	350	375	405	3	0.121	0.098	
	460	146	2620	4140	940	1190	93.0	5	28.4	<b>S 3156</b>	<b>S 3156 K</b>	300	360	395	440	4	0.115	0.097	
<b>300</b>	460	118	1980	3450	940	1280	71.0	4	20	<b>S 3060 M</b>	<b>S 3060 KM</b>	315	375	405	445	3	0.123	0.095	
	460	160	2660	4500	720	1020	95.0	4	30.4	<b>S 4060 M</b>		315	360	400	445	3	0.105	0.106	
	500	160	2990	4780	850	1100	120.0	5	30.5	<b>S 3160</b>	<b>S 3160 K</b>	320	390	425	480	4	0.106	0.106	
<b>320</b>	480	121	2090	3680	850	1190	76.5	4	23.3	<b>S 3064 M</b>	<b>S 3064 KM</b>	335	395	430	465	3	0.121	0.098	
	540	176	3810	5790	810	1100	160.0	5	26.7	<b>S 3164 M</b>	<b>S 3164 KM</b>	340	410	455	520	4	0.114	0.096	
<b>340</b>	520	133	2660	4600	810	1100	100	5	25.4	<b>S 3068 M</b>	<b>S 3068 KM</b>	358	430	465	502	4	0.12	0.099	
	580	190	4500	6900	720	1020	205	5	25.9	<b>S 3168 M</b>	<b>S 3168 KM</b>	360	445	490	560	4	0.118	0.093	
<b>360</b>	480	90	1620	2990	850	1190	44	3	17.2	<b>S 3972 M</b>	<b>S 3972 KM</b>	373	405	440	467	2.5	0.127	0.104	
	540	134	2660	4600	770	1020	105	5	26.4	<b>S 3072 M</b>	<b>S 3072 KM</b>	378	445	480	522	4	0.12	0.099	
	600	192	4600	7360	680	940	215	5	27.9	<b>S 3172 M</b>	<b>S 3172 KM</b>	380	460	510	522	4	0.117	0.094	
<b>380</b>	520	106	1950	3680	810	1100	65.5	4	10	<b>S 3976 M</b>	<b>S 3976 KM</b>	395	425	490	505	3	0.128		



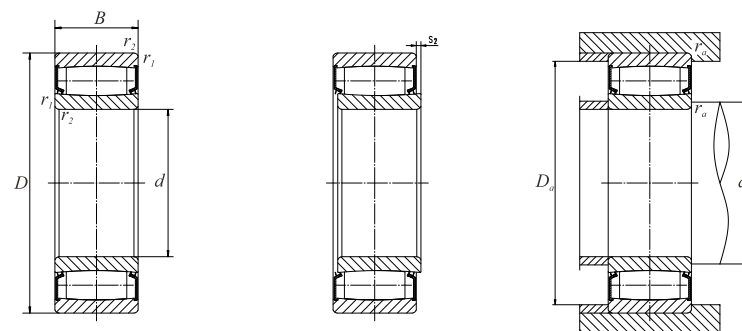
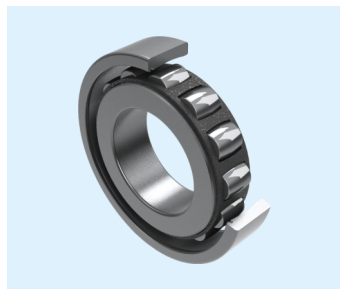
**d 400~530mm**

Boundary dimensions (mm)			Basic load ratings (kN)		Limiting speeds (r/min)		Mass (kg) ≈	Dimensions (mm)			Nominal numbers		Dimension of shoulder and chamfer					Calculating coefficient	
d	D	B	C <sub>r</sub>	C <sub>or</sub>	Grease	Oil		r <sub>1,2</sub>	S <sub>1</sub>	S <sub>2</sub>	Cylindrical bore	Tapered bore	d <sub>s</sub> Min	d <sub>s</sub> Max	D <sub>s</sub> Min	D <sub>s</sub> Max	r <sub>s</sub> Max	K <sub>1</sub>	K <sub>2</sub>
	560	135	2760	4780	770	1020	110	5	27	<b>S 3076 M</b>	<b>S 3076 KM</b>	398	460	495	542	4	0.12	0.1	
	620	194	4180	6900	640	850	230	5	19	<b>S 3176 M</b>	<b>S 3176 KM</b>	400	445	555	600	4	0.106		
<b>400</b>	540	106	1980	3818	770	1105	69	4	10	<b>S 3980 M</b>	<b>S 3980 KM</b>	415	435	505	525	3	0.128		
	600	148	3350	5700	680	940	140	5	30.6	<b>S 3080 M</b>	<b>S 3080 KM</b>	418	480	525	582	4	0.121	0.099	
	650	200	4600	7950	600	810	275	6	10.1	<b>S 3180 M</b>	<b>S 3180 KM</b>	426	480	565	624	5	0.109		
<b>420</b>	560	106	1980	3910	720	1020	71	4	21.3	<b>S 3984 M</b>	<b>S 3984 KM</b>	435	480	515	545	3	0.132	0.098	
	620	150	3490	5880	680	940	150	5	32.6	<b>S 3084 M</b>	<b>S 3084 KM</b>	438	510	550	602	4	0.12	0.1	
	700	224	5520	9560	570	770	340	6	34.8	<b>S 3184 M</b>	<b>S 3184 KM</b>	446	540	595	674	5	0.113	0.098	
<b>440</b>	600	118	2530	4870	680	940	98	4	11	<b>S 3988 M</b>	<b>S 3988 KM</b>	455	490	565	585	3	0.119		
	650	157	3450	5880	640	850	185	6	19.7	<b>S 3088 M</b>	<b>S 3088 KM</b>	463	490	565	627	5	0.105		
	720	226	5240	8550	570	770	360	6	22	<b>S 3188 M</b>	<b>S 3188 KM</b>	466	510	635	694	5	0.102		
<b>460</b>	620	118	2480	4870	680	940	100	4	11	<b>S 3992 M</b>	<b>S 3992 KM</b>	475	505	580	605	3	0.12		
	680	163	3680	6900	600	810	200	6	33.5	<b>S 3092 M</b>	<b>S 3092 KM</b>	486	565	605	654	5	0.114	0.108	
	760	240	6250	11040	510	680	430	7.5	51	<b>S 3192 M</b>	<b>S 3192 KM</b>	492	570	655	725	6	0.108	0.105	
	760	300	7630	13150	440	540	535	7.5	46.2	<b>S 4192 M</b>	<b>S 4192 KM</b>	492	570	655	725	6	0.111	0.097	
<b>480</b>	650	128	2850	5610	640	850	120	5	20.4	<b>S 3996 M</b>	<b>S 3996 KM</b>	498	550	590	632	4	0.133	0.095	
	700	165	3720	7170	570	770	210	6	35.5	<b>S 3096 M</b>	<b>S 3096 KM</b>	503	580	625	677	5	0.113	0.11	
	790	248	6390	11500	480	640	490	7.5	24	<b>S 3196 M</b>	<b>S 3196 KM</b>	512	580	705	758	6	0.104		
<b>500</b>	670	128	2890	5790	600	810	125	5	20.4	<b>S 39/500 M</b>	<b>S 39/500 KM</b>	518	580	615	652	4	0.135	0.095	
	720	167	3910	7630	530	770	225	6	37.5	<b>S 30/500 M</b>	<b>S 30/500 KM</b>	523	600	640	697	5	0.113	0.11	
	830	264	6900	11680	450	640	550	7.5	75.3	<b>S 31/500 M</b>	<b>S 31/500 K30M</b>	532	655	705	798	6	0.099	0.116	
	830	325	9010	16190	340	480	720	7.5	16.3	<b>S 41/500 M</b>	<b>S 41/500 KM</b>	532	595	705	798	6	0.093		
<b>530</b>	710	136	3260	6530	570	770	150	5	28.4	<b>S 39/530 M</b>	<b>S 39/530 KM</b>	548	600	640	692	4	0.129	0.101	
	780	185	4690	8740	510	680	295	6	35.7	<b>S 30/530 M</b>	<b>S 30/530 KM</b>	553	635	685	757	5	0.12	0.101	
	870	272	8090	14350	430	570	630	7.5	44.4	<b>S 31/530 M</b>	<b>S 31/530 KM</b>	562	680	745	838	6	0.115	0.097	



**d 560~630mm**

Boundary dimensions (mm)			Basic load ratings (kN)		Limiting speeds (r/min)		Mass (kg) ≈	Dimensions (mm)			Nominal numbers		Dimension of shoulder and chamfer					Calculating coefficient	
d	D	B	C <sub>r</sub>	C <sub>0r</sub>	Grease	Oil		r <sub>1,2</sub>	S <sub>1</sub>	S <sub>2</sub>	Cylindrical bore	Tapered bore	d <sub>s</sub> Min	d <sub>s</sub> Max	D <sub>s</sub> Min	D <sub>s</sub> Max	r <sub>s</sub> Max	K <sub>1</sub>	K <sub>2</sub>
560	750	140	3310	6760	450	720	170	5	32.4	<b>S 39/560 M</b>	<b>S 39/560 KM</b>	578	645	685	732	4	0.128	0.104	
	820	195	5150	10120	450	640	345	6	45.7	<b>S 30/560 M</b>	<b>S 30/560 KM</b>	583	695	740	793	5	0.116	0.106	
	920	280	8740	15640	410	570	750	7.5	28	<b>S 31/560 M</b>	<b>S 31/560 KM</b>	592	660	810	888	6	0.111		
600	800	150	3680	8090	480	640	210	5	32.4	<b>S 39/600 M</b>	<b>S 39/600 KM</b>	618	685	725	782	4	0.131	0.1	
	870	200	5790	11220	430	600	390	6	35.9	<b>S 30/600 M</b>	<b>S 30/600 KM</b>	623	725	775	847	5	0.125	0.098	
	980	300	9380	16560	370	510	870	7.5	30	<b>S 31/600 M</b>	<b>S 31/600 KM</b>	632	705	875	948	6	0.105		
630	850	165	4270	9200	450	600	270	6	35.5	<b>S 39/630 M</b>	<b>S 39/630 KM</b>	653	720	770	827	5	0.121	0.11	
	920	212	6250	11860	410	600	465	7.5	48.1	<b>S 30/630 M</b>	<b>S 30/630 KM</b>	658	775	810	892	6	0.118	0.104	
	1030	315	11220	20240	340	480	1040	7.5	31	<b>S 31/630 M</b>	<b>S 31/630 KM</b>	662	745	920	998	6	0.109		



**d 50~200mm**

Boundary dimensions (mm)			Basic load ratings (kN)		Limiting speeds (r/min)	Mass (kg) ≈	Dimensions (mm)		Nominal numbers		Dimension of shoulder and chamfer				Calculating coefficient	
d	D	B	C <sub>r</sub>	C <sub>0r</sub>			r <sub>1,2</sub>	S <sub>2</sub>	Cylindrical bore	Tapered bore	d <sub>s</sub> Min	D <sub>s</sub> Min	D <sub>s</sub> Max	r <sub>s</sub> Max	K <sub>1</sub>	K <sub>2</sub>
50	72	40	120	200	170	0.56	0.6	2.8	S 6910-2RSV		53.2	57	68.8	0.6	0.113	0.091
60	85	45	130	220	144	0.83	1	5.4	S 6912-2RSV		64.6	67	80.4	1	0.128	0.083
65	100	35	930	160	120	1.1	1.1	5.9	S 4013-2RSV		71	78	94	1	0.071	0.181
75	105	54	180	300	120	1.4	1	7.1	S 6915-2RSV		79.6	83	100	1	0.073	0.154
	115	40	130	170	110	1.4	1.1	7.3	S 4015-2RSV		81	88	111	1	0.210	0.063
90	125	46	200	360	93	1.75	1.1	4.5	S 5918-2RSV		96	101	119	1	0.089	0.131
100	150	50	280	410	80	2.9	1.5	6.2	S 4020-2RSV		107	113	143	1.5	0.145	0.083
	165	65	430	600	76	5.2	2	7.3	S 4120-2RSV		111	119	154	2	0.09	0.125
110	170	60	380	530	72	4.6	2	7.9	S 4022-2RSV		119	127	161	2	0.142	0.083
	180	69	460	650	72	6.6	2	8.2	S 4122-2RSV		121	129	169	2	0.086	0.133
120	180	60	390	580	68	5.1	2	7.5	S 4024-2RSV		129	139	171	2	0.085	0.142
	200	80	650	920	63	9.7	2	8.2	S 4124-2RSV		131	129	169	2	0.126	0.087
130	200	69	500	760	59	7.5	2	8.2	S 4026-2RSV		139	151	191	2	0.089	0.133
	210	80	690	1010	59	10.5	2	7.5	S 4126-2RSV		141	152	199	2	0.09	0.126
140	210	69	520	820	56	7.9	2	8.7	S 4028-2RSV		149	162	201	2	0.133	0.089
	225	85	710	1100	53	12.5	2.1	8.9	S 4128-2RSV		152	166	213	2	0.086	0.134
150	225	75	530	880	53	10.0	2.1	10.8	S 4030-2RSV		161	174	214	2	0.084	0.144
	250	100	1120	1710	51	20.5	2.1	6.4	S 4130-2RSV		162	178	238	2	0.103	0.103
160	240	80	600	1010	51	12.0	2.1	11.4	S 4032-2RSV		170	187	230	2	0.154	0.079
	270	109	1340	1980	45	26.0	2.1	6.7	S 4132-2RSV		172	189	258	2	0.101	0.105
170	260	90	880	1500	45	17.0	2.1	9	S 4034-2RSV		180	199	250	2	0.116	0.097
	280	109	1400	2090	45	27.0	2.1	6.7	S 4134-2RSV		182	198	268	2	0.101	0.106
180	280	100	1210	1950	45	23.5	2.1	6.4	S 4036-2RSV		190	202	270	2	0.103	0.105
	300	118	1619.2	2480	40	35.0	3	6.4	S 4136-2RSV		194	209	286	2.5	0.095	0.11
190	290	100	1260	2130	40	24.5	2.1	6.4	S 4038-2RSV		200	219	280	2	0.103	0.106
	320	128	1870	2890	38	43.5	3	6.4	S 4138-2RSV		204	220	306	2.5	0.094	0.111
200	310	109	1500	2430	38	31.0	2.1	6.7	S 4040-2RSV		210	227	300	2	0.101	0.108
	340	140	2170	3350	36	54.5	3	7	S 4140-2RSV		214	235	326	2.5	0.092	0.112