

ZWZ

Bearing Integral Catalogue

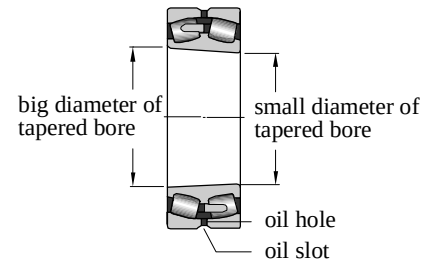
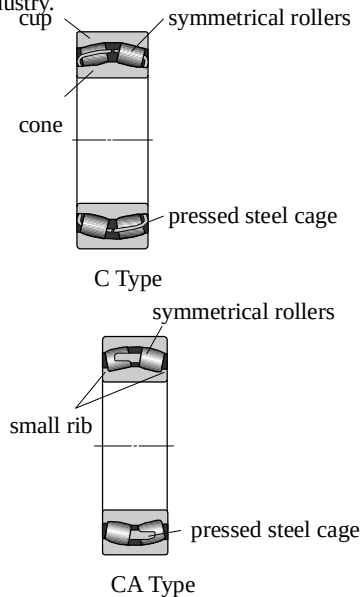


WAFANGDIAN BEARING GROUP CORP., LTD.

Product Characteristics:

Two rows spherical rollers are put between the spherical raceways on the outer ring and the two grooves on the inner ring for spherical roller bearings. Since the curve center of outer ring is the same as that of the whole bearing arrangement, these bearings are self-aligned and automatically adjust the bending of the shaft and housing, besides, it can also compensate the concentricity error caused by this. Except radial load, these bearings can also carry combination of axial and radial load in two directions and possess high load capacity as well as good resistance to vibration and impact.

Spherical roller bearings are mainly applied to metallurgical machinery, mining machinery, papermaking, vessel, textile machinery, coal mill, electric power and other kinds of mechanical equipments. They are the bearings that are mostly widely used in mechanical industry.



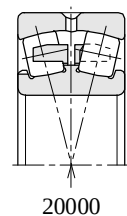
Product types

ZWZ spherical roller bearings can be divided into the following types:

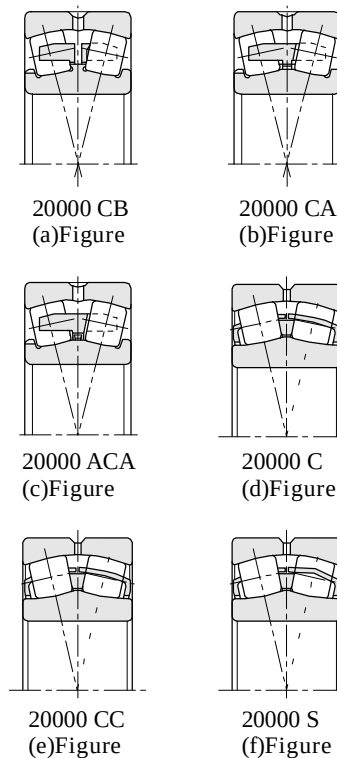
- .Open type spherical roller bearing
- .Sealed spherical roller bearing
- .Spherical roller bearings used in vibration riddles
- .SDB type spherical roller bearing
- .Split spherical roller bearings

Open type spherical roller bearing contains asymmetrical roller bearing and symmetrical roller bearing. The main difference is the design of inner ring and cage.

Asymmetrical roller bearing belongs to old product that is made up of outer ring, inner ring with center rib and small rib, two-body solid cage and some rollers. Vibration system adopts. For example, there is no structure code after 20000 code. The structure is as below:

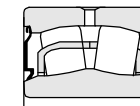


Symmetrical roller bearing contains CA type, ACA type, CB type, C type, CC type and S type.



Sealed Spherical Roller Bearing

Sealed spherical roller bearing contains CA type with solid cage, sealing on basis of CB type and CC type.



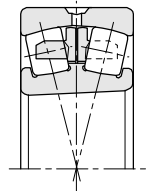
For the bearing device that has special requirements on heavy load, poor working condition and sealing, the spherical roller bearing with the structure of contact-type sealing ring in steel frame on both sides can be provide. Top of sealing ring is installed on outer ring of bearing, rotate with outer ring synchronously and stick bottom lip on raceway

of inner ring. This type of sealing ring in steel frame can be resistant to corrosion and to aging. They are common to be applied in elevator tractor which can prevent impurities entering and oil grease lost.

Vibration screen spherical roller bearings
The new type vibration resistance spherical roller bearings are VB type structure developed on basis of asymmetrical roller bearing type and CB type bearing. Some of them also use CA, CB or asymmetrical roller bearing. Vibrating machine bearings have the same boundary dimension as the basic version, and have fixed center ribs on the inner rings. They can carry axial load; The new design with special structure of cage, double guides by inner and outer diameter can control the guide gap and displacement between the cage, inner and outer rings to prevent vibration and reduce vibration. There are two kinds including cylindrical hole and tapered hole.

VB type structure is developed by ZWZ especially for vibration machinery and they can also be used on universal machinery. Performance: they have heavier carrying load capacity, impact resistance, vibration resistance, small friction, lower temperature rise and longer service life.

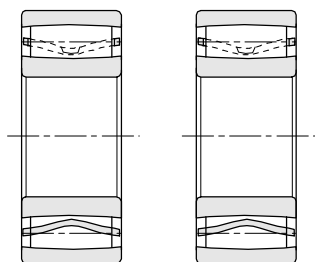
The code name of vibration screen spherical roller bearings is denoted with the suffix VB. The structure is as below:



SDB Type Spherical Roller Bearing

SDB type spherical roller bearing is a new type of radial roller bearing developed on basis of cylindrical roller bearing and spherical roller bearing. They can self align automatically and get big axial displacement.

Single-row spherical roller bearings are installed with curved symmetrical rollers, with recessed ring raceway that has groove on one side or both sides. The spring lock ring or sealing ring can be installed according to requirements. Bearing has ability to self align and make axial movement. This kind of bearing is widely used in equipments of fan-shaped section in steel plant and textile industry. The main structure is as below:

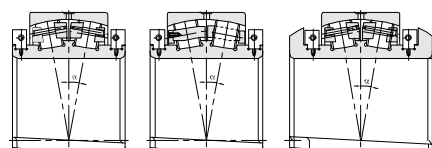


Split Spherical Roller Bearings

These bearings are mainly used in the applications where it is difficult to touch bearings or separable bearings are used and a big broken down cost caused by plenty of time and human maintenance or changing parts. For example, cranks.

ZWZ can manufacture different structures of split spherical roller bearings according to customer's demands. In order to meet the requirements of mounting, the split inner rings and outer rings are normally adopted. The jamming rings on the two sides of wide inner rings make the mounting easy.

The code name of split spherical roller bearings is denoted with the suffix D.



Dimension Rang:

ZWZ spherical roller bearing boundary dimensions are listed in the bearings dimensions table.

Bore diameter dimension range: 30 mm- 2000mm

Outer diameter dimension range: 68mm-2700mm

Width range: 20mm-550mm

Tolerances:

ZWZ manufactures spherical roller bearings with P0 and P6 precision grades. Also ZWZ can manufacture spherical roller bearings with P5 according to customer's demands. All of tolerances values conform to GB307.1 Standard .All of tolerance values are listed in the preface table.

Radial clearances

ZWZ manufactures spherical roller bearings with C0, C2, C3, C4 and C5 clearances which are all conform to the GB4604 Standard. The C3 group clearances are taken as standard clearance for spherical roller bearings with tapered bores. The radial clearance values are listed in the preface table. These values are applied to bearings without load.

ZWZ can manufacture spherical roller bearings with non standard clearances according to customer's demands. The clearance of spherical roller bearings applied to vibration riddles is C4 group clearance.

Clearance value is shown in Table 1 and Table 2.

Vibrating machine bearing adopt big radial clearance, C3, C4 group or nonstandard clearance between C3-C4.

Vibration riddles spherical roller bearings adopt C4 group clearance.

Radial clearance of SDB type spherical roller bearing is shown in Table 3.

Cage

Normally, CA type spherical roller bearings use brass, bronze cages or carbon steel solid cages. But C type spherical roller bearings normally use pressed sheet-steel cages. Please contact with ZWZ in advance if you need spherical roller bearings with non-standard cages.

The equivalent load

The equivalent dynamic load

when $F_a / F_r \leq e$,

$P = F_r + Y_1 F_a$

When $F_a / F_r > e$,

$P_r = 0.67 F_r + Y_2 F_a$

The factors e, Y_1 and Y_2 are listed in the bearing dimension tables.

The equivalent static load

$P_0 = F_r + Y_0 F_a$

The factors Y_0 are listed in the bearing dimension tables.

Table 1 Radial clearance of spherical roller bearing with cylindrical bole

μm

Nominal ID d mm		Clearance									
		Groub 2		Groub 0		Groub 3		Groub 4		Groub 5	
Over	To	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
14	18	10	20	20	35	35	45	45	60	60	75
18	24	10	20	20	35	35	45	45	60	60	75
24	30	15	25	25	40	40	55	55	75	75	95
30	40	15	30	30	45	45	60	60	80	80	100
40	50	20	35	35	55	55	75	75	100	100	125
50	65	20	40	40	65	65	90	90	120	120	150
65	80	30	50	50	80	80	110	110	145	145	180
80	100	35	60	60	100	100	135	135	180	180	225
100	120	40	75	75	120	120	160	160	210	210	260
120	140	50	95	95	145	145	190	190	240	240	300
140	160	60	110	110	170	170	220	220	280	280	350
160	180	65	120	120	180	180	240	240	310	310	390
180	200	70	130	130	200	200	260	260	340	340	430
200	225	80	140	140	220	220	290	290	380	380	470
225	250	90	150	150	240	240	320	320	420	420	520
250	280	100	170	170	260	260	350	350	460	460	570
280	315	110	190	190	280	280	370	370	500	500	630
315	355	120	200	200	310	310	410	410	550	550	690
355	400	130	220	220	340	340	450	450	600	600	750
400	450	140	240	240	370	370	500	500	660	660	820
450	500	140	260	260	410	410	550	550	720	720	900
500	560	150	280	280	440	440	600	600	780	780	1000
560	630	170	310	310	480	480	650	650	850	850	1100
630	710	190	350	350	530	530	700	700	920	920	1190
710	800	210	390	390	580	580	770	770	1010	1010	1300
800	900	230	430	430	650	650	860	860	1120	1120	1440
900	1000	260	480	480	710	710	930	930	1220	1220	1570

Table 2 Radial clearance of spherical roller bearing with tapered bole μm

Nominal ID d mm		Clearance									
		Groub 2		Groub 0		Groub 3		Groub 4		Groub 5	
Over	To	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
18	24	15	25	25	35	35	45	45	60	60	75
24	30	20	30	30	40	40	55	55	75	75	95
30	40	25	35	35	50	50	65	65	85	85	105
40	50	30	45	45	60	60	80	80	100	100	130
50	65	40	55	55	75	75	95	95	120	120	160
65	80	50	70	70	95	95	120	120	150	150	200
80	100	55	80	80	110	110	140	140	180	180	230
100	120	65	100	100	135	135	170	170	220	220	280
120	140	80	120	120	160	160	200	200	260	260	330
140	160	90	130	130	180	180	230	230	300	300	380
160	180	100	140	140	200	200	260	260	340	340	430
180	200	110	160	160	220	220	290	290	370	370	470
200	225	120	180	180	250	250	320	320	410	410	520
225	250	140	200	200	270	270	350	350	450	450	570
250	280	150	220	220	300	300	390	390	490	490	620
280	315	170	240	240	330	330	430	430	540	540	680
315	355	190	270	270	360	360	470	470	590	590	740
355	400	210	300	300	400	400	520	520	650	650	820
400	450	230	330	330	440	440	570	570	720	720	910
450	500	260	370	370	490	490	630	630	790	790	1000
500	560	290	410	410	540	540	680	680	870	870	1100
560	630	320	460	460	600	600	760	760	980	980	1230
630	710	350	510	510	670	670	850	850	1090	1090	1360
710	800	390	570	570	750	750	960	960	1220	1220	1500
800	900	440	640	640	840	840	1070	1070	1370	1370	1690
900	1000	490	710	710	930	930	1190	1190	1520	1520	1860

Table 3 Radial clearance of SDB type spherical roller bearing with cylindrical bole μm

d mm		Groub 3		Groub 4		d mm		Groub 3		Groub 4	
		min	max	min	max			min	max	min	max
18	24	39	51	51	65	180	200	238	307	307	394
24	30	46	60	60	76	200	225	262	337	337	434
30	40	55	73	73	93	225	250	282	368	368	478
40	50	65	85	85	109	250	280	307	407	407	519
50	65	79	104	104	139	280	315	330	434	434	570
65	80	96	124	124	164	315	355	360	483	483	620
80	100	120	158	158	206	355	400	395	528	528	675
100	120	144	186	186	244	400	450	435	577	577	745
120	140	166	215	215	280	450	500	475	633	633	811
140	160	195	252	252	321	500	560	518	688	688	890
160	180	217	280	280	361	560	630	567	751	751	975

Definition of Bearing Code

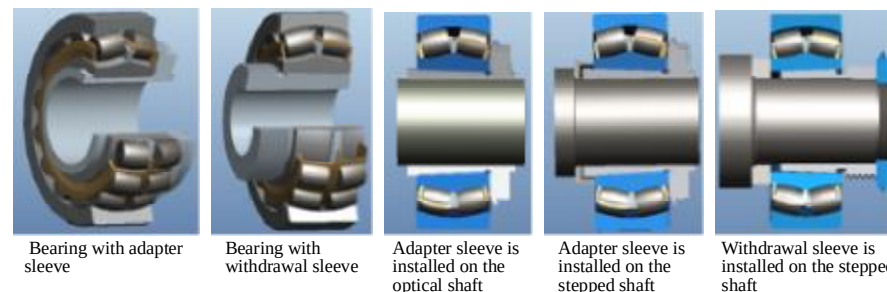
- ACA- Spherical roller bearing, with movable center rib and asymmetric rollers
- C- Spherical roller bearing, without rib on inner ring, with movable center rib and installed with symmetric rollers and pressed cage.
- CA- CA Spherical roller bearing, without center rib on inner ring, with small rib on both sides and installed with symmetric rollers and solid cage
- CAB-CA type Spherical roller bearing, piercing in middle of rollers with support type cage.
- CABC-CAB type Spherical roller bearing, with improved roller guiding mode (roughness of roller surface, roughness of raceway surface, heating treatment changes, etc.), to reduce friction.
- CAC-CA type Spherical roller bearing, with improved roller guiding mode (roughness of roller surface, roughness of raceway surface, heating treatment changes, etc.), to reduce friction.
- CB- Continuous casting bearing
- CC-C type Spherical roller bearing, with improved roller guiding mode (roughness of roller surface, roughness of raceway surface, heating treatment changes, etc.), to reduce friction.
- /C3- Clearance meets 3 group as specified in standard
- /C4 - Clearance meets 4 group as specified in standard
- /C9- Bearing clearance is different from current standard
- /CRA9- Radial clearance is nonstandard, with requirements on axial clearance
- D- Split bearing

- F1- Carbon steel
- F3- Nodular cast iron
- /P5- Tolerance meets Level 5 as specified in standard
- /P6- Tolerance meets Level 6 as specified in standard
- /HA- Ring, rolling elements and cage, or only the ring and rolling elements are made of vacuum smelting bearing steel
- /HC- Ring and rolling elements or only the ring or only the rolling elements alone is made up of carbon steel (/HC-20Cr 2Ni4A;/HC1-20Cr2Mn2MoA;/HC2-15Mn;/HC3-G20CrMo)
- /HCR- Shows to distinguish the same series that rolling elements are made up of carbon steel
- /HG- Ring and rolling elements or only the ring is made up of other bearing steel (/HG-5 Gr MnMo;/HG1-55SiMoVA;/HG2-GCr18Mo;/HG3-42CrMo;/HG4-GCr15SiMn)
- K- Bearing with tapered bore, tapered 1:12
- K30- Bearing with tapered bore, tapered 1:30
- L- Light alloy solid cage. When material of cage changes, express with attached digits.
- N- Bearing with snap ring groove on outer ring
- NR- Bearing with snap ring groove on outer ring and retainer ring
- Q1- Aluminium, Fe and Mn bronze materials
- 2RS- Bearing with RS sealing on both sides
- 2RS2- Bearing with steel skeleton rubber fluoride on both sides
- S- When ID is less than 65mm, the structure is similar with CC type and outline of the cage is made up of two pieces of broken line.
- /S0- After high-temperature tempering to bearing ring, the working temperature can reach 150°C
- /S1- After high-temperature tempering to bearing ring, the working temperature can reach 200°C
- /S2- After high-temperature tempering to bearing ring, the working temperature can reach 250°C
- /S3- After high-temperature tempering to bearing ring, the working temperature can reach 300°C
- /S4- After high-temperature tempering to bearing ring, the working temperature can reach 350°C
- SDB- Structure code, single-row spherical roller bearing that can self-align and make axial displacement.
- TN1- Nylon
- V- Full complement rolling elements(without cage)
- VB- Vibrating screen bearing
- /W20- There are 3 lubrication holes on outer ring of bearing (without oil groove)
- /W33- There are an oil groove and 3 lubrication holes on outer ring of bearing]
- /W33T- There are 8 lubrication holes on outer ring of bearing
- /W33X- There are an oil groove and 6 lubrication holes on outer ring of bearing
- X1- Outer diameter is nonstandard
- X2- Width (height) is nonstandard
- X3- Outer diameter and width (height) are nonstandard (standard inner diameter)

- YAB- Structure and technique are required to change at the same time
- YAD- The same type of bearing, no less than two changes of the structure at the same time
- YA1- Outside surface of bearing outer ring is different from standard design
- YA2- Inner bore of bearing inner ring is different from standard design
- YA3- End face of bearing ring is different from standard design
- YA6- Mounting chamfer of bearing is different from standard design
- YA7- Rib or retainer ring of bearing is different from standard design
- YA8- Cage structure changes
- YB2- Dimension and tolerance of bearing change
- /Z- Bearing vibration accelerated speed magnitude extreme value category (Z1- with specified vibration accelerated speed magnitude extreme value; Z2- vibration accelerated speed magnitude extreme value is less than Z1 group; Z3- vibration accelerated speed magnitude extreme value is less than Z2 group)
- /V- Bearing vibration speed magnitude extreme value category (V1- with specified vibration speed magnitude extreme value; V2- vibration speed magnitude extreme value is less than V1 group; V3- vibration speed magnitude extreme value is less than V2 group)

Adapter Sleeve and Withdrawal Sleeve

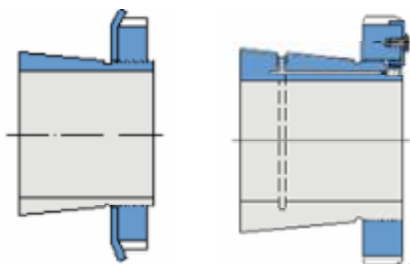
Adapter sleeve and withdrawal sleeve supplied by ZWZ can install optical shaft and stepped shaft into spherical roller bearing with tapered bore easily and rapidly.



Adapter Sleeve Design

Adapter sleeve is one of the most commonly used bearing accessories which is used to fix the bearing with tapered bore on cylindrical journal including optical shaft and stepped shaft. This kind of accessory is easy to mount and needn't be fixed by other devices. When using adapter sleeve on the optical shaft, bearing can be fixed anywhere on the shaft.

When used as stepped shaft and cooperating with stepped ring, bearing can be fixed to the given place more accurately on the shaft and also relatively easy to dismount. Adapter sleeve provided by ZWZ has lock nut and necessary locking device shown as figure below. For small adapter sleeve, locking nut is fixed by lock washer. For big adapter sleeve, locking nut is fixed by a locking clasp. There is a slit on the adapter sleeve, the surface taper



is 1:12. For the surface of adapter sleeve with size 40 or less than 40, it is after phosphating. For the adapter sleeve with larger size, adopt undissolved antirusting agent to protect adapter sleeve surface.

Oil injection method can simplify mounting and dismounting of bearing. In order to cooperate with this method, ZWZ can provide the design with an oil path and oil groove that you can choose from. The oil entrance is on one side with screw thread of adapter sleeve; oil groove is on the cone surface of adapter sleeve. After injecting hydraulic oil into oil path and oil groove, it will form a layer of oil film on the matching surface of bearing and adapter sleeve, which can significantly reduce the force needed for installation of bearing. This kind of standard adapter sleeve code is OH...H.

Common Information and Data

Dimension

Dimension of adapter sleeve conforms to standard ISO2982-1:1995.

Tolerance

Tolerance of ZWZ adapter sleeve conforms to standard JB/T7919.

Screw Thread

For ZWZ adapter sleeve with size 40 or more

than 40, metric screw thread tolerance is 6g and conforms to standard ISO9653:1998 standard. For large size adapter sleeve, metric screw thread tolerance is 7e and conforms to standard ISO2903: 1993 standard.

Requirements of Shaft Tolerance

Because adapter sleeve is installed on shaft to work in concert with bearing, it has larger tolerance range than that is directly installed on cylindrical journal. But geometrical tolerance must keep in very narrow range, for precision of geometrical tolerance will influence rotation precision of bearing directly. Generally, shaft tolerance is h9 according to ISO1101:1983 standard and cylindricity should be IT5/2.

Withdrawal Sleeve

Design

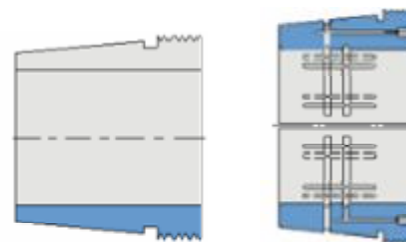
Withdrawal sleeve is mainly used to fix bearing with tapered bore to cylindrical journal on steeped shaft. Withdrawal sleeve is pressed into shaft shoulder or similar devices between the bearing with tapered bore and shaft, then fixed on the shaft by nut or end plate. For screw thread of shaft end has different dimension according to actual application, lock nut or end plate will not be supplied with withdrawal sleeve and need be ordered separately. Besides, the nuts for dismounting the withdrawal sleeve also need to be ordered separately.

Surface of ZWZ withdrawal sleeve is coated with antirust agent, with a slit and the taper of surface is 1:12.

The nuts for dismounting the withdrawal sleeve also need to be ordered separately.

Oil injection method can simplify mounting and dismounting of bearing. In order to

cooperate with this method, ZWZ can provide the design with an oil path and oil groove that you can choose from. There are two oil entrances on one side with screw thread of AOH withdrawal sleeve. There are some oil grooves along the circumferential and axial direction on the cone surface and cylindrical inner surface. After injecting hydraulic oil into oil path and oil groove, it will form a layer of oil film on the matching surface of bearing and withdrawal sleeve as well on the matching surface of shaft and withdrawal sleeve, which can significantly reduce the force needed for installation of bearing.



Common Information and Data

Dimension

Dimension of adapter sleeve conforms to standard ISO2982-1:1995.

Tolerance

Tolerance of ZWZ adapter sleeve conforms to standard JB/T7919.

Screw Thread

For ZWZ adapter sleeve with size 40 or more than 40, metric screw thread tolerance is 6g and conforms to standard ISO9653:1998 standard. For large size adapter sleeve, metric screw thread tolerance is 7e and conforms to standard ISO2903: 1993 standard.

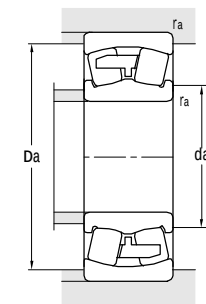
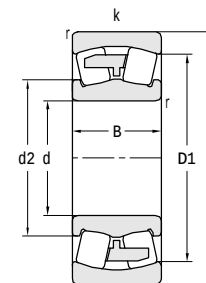
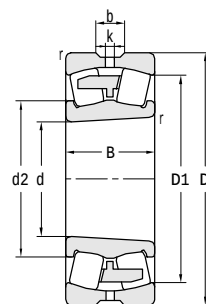
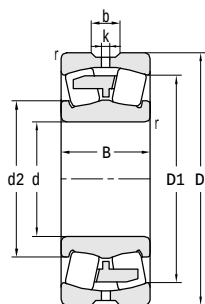
Requirements of Shaft Tolerance

Because adapter sleeve is installed on shaft to work in concert with bearing, it has larger tolerance range than that is directly installed on cylindrical journal. But geometrical tolerance must keep in very narrow range, for precision of geometrical tolerance will influence rotation precision of bearing directly. Generally, shaft tolerance is h9 according to ISO1101:1983 standard and cylindricity should be IT5/2.

Spherical Roller Bearing(CA)

ZWZ

d 30–60 mm



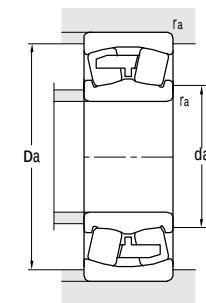
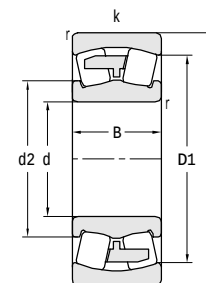
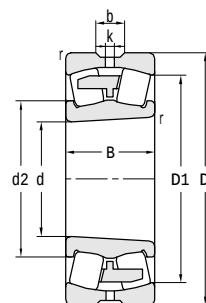
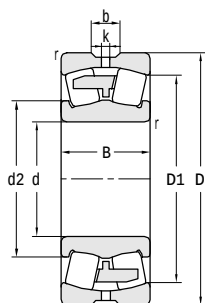
Principal dimensions				Basic load ratings		Limit speed ratings		Designations
d	D	B	r _{min}	C _r	C _{0r}	Grease	Oil	
mm				kN		r/min		
30	68	20	1	60.8	57	6000	7500	22206X1CAN
35	72	23	1.1	72.5	81.5	6000	7500	22207CA/W33
	82	23	0.5	86	92	6000	7500	21307X3CA/CRA9
40	90	33	1.5	143	133	4500	5600	22308CA
	90	33	1.5	143	133	4500	5600	22308CH/W33
	90	33	1.5	143	133	4500	5600	22308CAK
45	85	23	1.1	96.9	95	5300	6700	22209CA
	100	36	1.5	174	174	3800	4800	22309CA
	100	36	1.5	174	174	3800	4800	22309CAK
50	90	23	1.1	98.8	103	5000	6300	22210CA
	90	23	1.1	98.8	103	5000	6300	22210/W33
	90	23	1.1	98.8	103	5000	6300	22210CAK
	110	27	2	148	158	3400	4300	21310CA/C3
	110	40	2	209	213	3400	4300	22310CA
	110	40	2	209	213	3400	4300	22310CA/W33A
	110	40	2	209	213	3400	4300	22310CAK
55	100	25	1.5	119	126	4500	5600	22211CA
	100	25	1.5	119	126	4500	5600	22211CAK
	100	25	1.5	101	126	4500	5600	22211/W33
	100	25	1.5	101	126	4500	5600	22211K/W33
	120	43	2	257	266	3200	4000	22311CA
	120	43	2	257	266	3200	4000	22311CA/YB2
	120	43	2	257	266	3200	4000	22311CAK
60	110	28	1.5	148	158	4000	5000	22212CA
	110	28	1.5	148	158	4000	5000	22212CAK/W33
	110	28	1.5	121	145	4000	5000	22212
	130	46	2.1	225	248	3000	3800	22312
	130	46	2.1	225	248	3000	3800	22312K
	130	46	2.1	295	318	3000	3800	22312CA
	130	46	2.1	295	318	3000	3800	22312CA/C9-ZG

Other dimensions				Contact surface and chamfer dimensions			Calculation coefficient				Weight
d2	D1	b	k	da	Da	ra	e	Y1	Y2	Y0	
mm				mm			mm				kg
41	52.3			37	60	1	0.32	2.09	3.11	2.04	0.384
46	60	5.5	3	41	65	1					0.441
83	69			42	75						0.652
56	74	5.5	2.5	49	81	1.5	0.39	1.73	2.58	1.69	1.02
49.9	74.3	5.5	3	49	81	1.5	0.37	1.80	2.70	1.80	1.01
56	74	5.5	2.5	49	81	1.5	0.39	1.73	2.58	1.69	0.993
57.6	73	5.5	2	52	78	1	0.28	2.40	3.50	2.50	0.629
63	81.4	5.5	2.5	54	91	1.5	0.38	1.80	2.60	1.70	1.53
63	81.4	5.5	2.5	54	91	1.5	0.38	1.80	2.60	1.70	1.52
62.2	81.6	5.5	2	57	83	1	0.26	2.60	3.90	2.50	0.630
63	81.6	5.5	2	57	83	1	0.27	2.50	3.70	2.50	0.629
62.2	81.6	5.5	2	57	83	1	0.26	2.60	3.90	2.50	0.630
69	92			60	100	2	0.24	2.80	4.20	2.80	1.34
69	90.6	5.5	2.5	60	100	2	0.38	1.80	2.60	1.70	2.17
69	90.6	5.5	2.5	60	100	2	0.38	1.80	2.60	1.70	2.06
69	90.6	5.5	2.5	60	100	2	0.38	1.80	2.60	1.70	2.13
68.8	87.3	5.5	2	64	91	1.5	0.25	2.70	4.00	2.60	0.887
68.8	87.3	5.5	2	64	91	1.5	0.25	2.70	4.00	2.60	0.879
70	87.3	5.5	2	64	91	1.5	0.26	2.60	3.90	2.50	0.742
70	87.3	5.5	2	64	91	1.5	0.26	2.60	3.90	2.50	0.724
75	99.5	5.5	2.5	65	110	2	0.37	1.80	2.70	1.80	2.60
75	99.5			65	110	2	0.37	1.80	2.70	1.80	2.60
75	99.5	5.5	2.5	65	110	2	0.37	1.80	2.70	1.80	2.42
75.2	95	5.5	2	69	101	1.5	0.24	2.80	4.20	2.80	1.01
75.2	95	5.5	2	69	101	1.5	0.24	2.80	4.20	2.80	0.982
75.5	95	5.5	2	69	101	1.5	0.27	2.50	3.70	2.50	1.09
79	108	5.5	3	72	118	2	0.40	1.68	2.50	1.64	2.93
79	108	5.5	3	72	118	2	0.40	1.68	2.50	1.64	2.86
81.4	108	5.5	3	72	118	2	0.37	1.80	2.70	1.80	3.33
81.4	108	5.5	3	72	118	2	0.37	1.80	2.70	1.80	3.33

Spherical Roller Bearing(CA)

ZWZ

d 60–80 mm



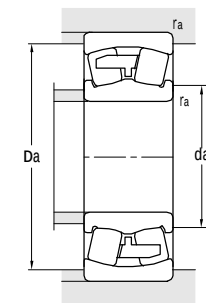
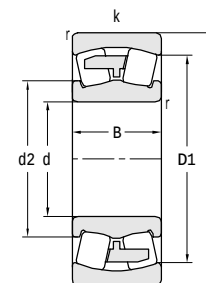
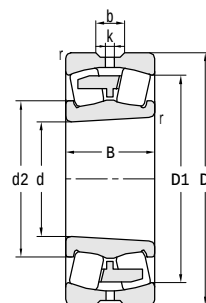
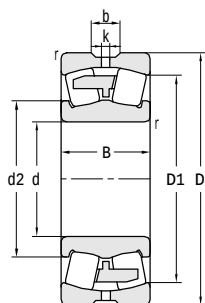
Principal dimensions				Basic load ratings		Limit speed ratings		Designations	
d	D	B	r _{min}	C _r	C _{0r}	Grease	Oil		
mm				kN		r/min			
60	130	46	2.1	295	318	3000	3800	22312CA/YB2	22312CAF3
	130	46	2.1	295	318	3000	3800	22312CAK	22312CAK/W33
65	120	31	1.5	183	205	3800	4800	22213CA	22213CA/W33
	120	31	1.5	183	205	3800	4800	22213CAK	22213CAK/W33
	120	31	1.5	170	216	3800	4800	22213S/W33	
	120	31	1.5	143	175	3800	4800	22213/W33	
	120	31	1.5	143	175	3800	4800	22213K/W33	
	140	33	2.1	224	257	2800	3600	21313CA	
	140	48	2.1	262	325	2600	3400	22313CH/W33	
	140	48	2.1	323	342	2600	3400	22313CA	22313CA/W33
	140	48	2.1	323	342	2600	3400	22313CAF3	22313CAKF3
	140	48	2.1	323	342	2600	3400	22313CAK	22313CAK/W33
70	125	31	1.5	162	205	3600	4500	22214CA	22214CA/W33
	125	31	1.5	162	205	3600	4500	22214CAK	
	125	31	1.5	159	200	3600	4500	22214/W33	
	150	35	2.1	270	309	2400	3200	21314CA	
	150	51	2.1	380	408	2200	3000	22314CA	22314CA/W33
	150	51	2.1	380	408	2200	3000	22314CAK	22314CAK/W33
	150	51	2.1	380	408	2200	3000	22314CAF3	22314CAKF3
75	115	40	1.1	164	250	2900	3500	24015CA	24015CA/W33
	130	31	1.5	150	192	3400	4300	22215	
	130	31	1.5	201	228	3400	4300	22215CA	22215CA/W33
	130	31	1.5	201	228	3400	4300	22215CAK	
	160	55	2.1	418	451	2200	3000	22315CA	22315CA/W33
	160	55	2.1	418	451	2200	3000	22315CAF3	22315CAK/W33
	160	55	2.1	418	451	2200	3000	22315CAK	
	160	55	2.1	418	451	2200	3000	22315CAK	
80	140	33	2	165	225	3200	4000	22216CA	22216CA/W33
	140	33	2	165	225	3200	4000	22216CAK	
	170	58	2.1	380	495	2000	2800	22316CA	22316CA/W33
	170	58	2.1	380	495	2000	2800	22316CA/C9-ZG	
	170	58	2.1	380	495	2000	2800	22316CA/HAC9W33YA8	
	170	58	2.1	380	495	2000	2800	22316CAF3	
	170	58	2.1	380	495	2000	2800		

Other dimensions				Contact surface and chamfer dimensions			Calculation coefficient				Weight
d2	D1	b	k	da	Da	ra	e	Y1	Y2	Y0	
mm				mm			mm				kg
81.4	108			72	118	2	0.37	1.80	2.70	1.80	3.33
81.4	108	5.5	3	72	118	2	0.37	1.80	2.70	1.80	3.33
81.5	103	5.5	2.5	74	111	1.5	0.25	2.70	4.00	2.50	1.56
81.5	103	5.5	2.5	74	111	1.5	0.25	2.70	4.00	2.50	1.52
80	106	5.5	3	74	111	1.5	0.25	2.70	4.00	2.50	1.57
82	103	5.5	2.5	74	111	1.5	0.27	2.50	3.70	2.50	1.57
82	103	5.5	2.5	74	111	1.5	0.27	2.50	3.70	2.50	1.54
87.9	119			77	128	2	0.25	2.70	4.00	2.60	2.58
81.6	118	8.3	4.5	77	128	2	0.35	1.90	2.90	1.80	4.92
88.6	116	5.5	3	77	128	2	0.35	1.90	2.90	1.80	4.92
88.6	116			77	128	2	0.35	1.90	2.90	1.80	4.90
88.6	116	5.5	3	77	128	2	0.35	1.90	2.90	1.80	4.90
86.8	109	6	2.5	79	116	1.5	0.24	3.00	4.60	2.80	1.83
86.8	109			79	116	1.5	0.24	3.00	4.60	2.80	1.81
87.2	109	6	2.5	79	116	1.5	0.26	2.60	3.90	2.50	1.66
95.4	127			82	138	2	0.25	2.70	4.00	2.60	3.02
95.8	125	8.3	4	82	138	2	0.35	1.90	2.90	1.80	5.23
95.8	125	8.3	4	82	138	2	0.35	1.90	2.90	1.80	5.21
95.8	125			82	138	2	0.35	1.90	2.90	1.80	5.14
87.5	100	5.5	3	82	106	1	0.32	2.09	3.11	2.04	1.48
92	114			84	121	1.5					1.73
92	114	5.5	2.5	84	121	1.5	0.24	3.00	4.60	2.80	1.71
92	114			84	121	1.5	0.24	3.00	4.60	2.80	1.67
101	133	8.3	4	87	148	2	0.35	1.90	2.90	1.80	5.44
101	133	8.3	4	87	148	2	0.35	1.90	2.90	1.80	5.40
101	133	8.3	4	87	148	2	0.35	1.90	2.90	1.80	5.32
98.9	122	5.5	2.5	91	129	2	0.24	2.80	4.20	2.80	2.08
98.9	122			91	129	2	0.24	2.80	4.20	2.80	2.03
109	142	8.3	4	92	158	2	0.34	1.99	2.96	1.94	7.47
109	142	8.3	4	92	158	2	0.34	1.99	2.96	1.94	6.54
109	142	8.3	4	92	158	2	0.34	1.99	2.96	1.94	7.36
109	142			92	158	2	0.34	1.99	2.96	1.94	7.34

Spherical Roller Bearing(CA)

ZWZ

d 80–95 mm



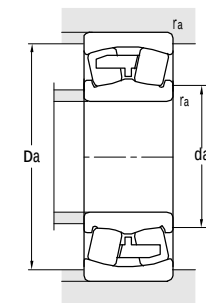
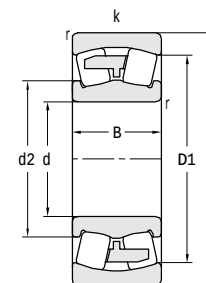
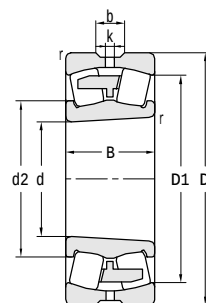
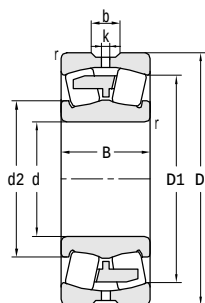
Principal dimensions				Basic load ratings		Limit speed ratings		Designations
d	D	B	r _{min}	C _r	C _{0r}	Grease	Oil	
mm				kN		r/min		
80	170	58	2.1	380	495	2000	2800	22316CAK
82.6	170	58	2.1	380	495	2000	2800	206/82.6CA/W33
85	150	36	2	193	254	3000	3800	22217CA
	150	36	2	193	254	3000	3800	22217CAK
	180	41	3	294	360	2000	2800	21317CA
	180	60	3	391	505	1900	2600	22317CA
	180	60	3	390	505	1900	2600	22317ACA
	180	60	3	391	505	1900	2600	22317CAF3
	180	60	3	391	505	1900	2600	22317CAK
	180	60	3	391	505	1900	2600	22317CAKF3
90	140	50	1.5	233	390	2600	3400	24018CA
	160	40	2	269	360	2600	3400	22218CA
	160	40	2	269	360	2600	3400	22218CAF3
	160	40	2	269	360	2600	3400	22218CAK
	160	52.4	2	287	415	2000	2800	23218
	160	52.4	2	287	415	2000	2800	23218K
	160	52.4	2	287	415	2000	2800	23218F3
	160	52.4	2	337	475	1900	2600	23218CA
	160	52.4	2	369	480	1900	2600	23218CA/HAC9SOW24
	160	52.4	2	337	475	1900	2600	23218CAK
	160	67	2	334	475	1900	2600	24218X2CA/YB2
	190	64	3	580	660	1800	2400	22318CA
	190	64	3	580	660	1800	2400	22318CAF3
	190	64	3	580	660	1800	2400	22318CAK
	190	64	3	580	660	1800	2400	22318ACA
	190	64	3	400	505	1800	2400	22318
	190	64	3	400	505	1800	2400	22318K
	190	43	3	580	660	2400	3200	21318CA/W33
95	170	43	2.1	361	428	2400	3200	22219CA
	170	43	2.1	361	428	2400	3200	22219CAK
	200	45	3	404	466	2400	3200	21319CA/W33
	200	67	3	637	727	1800	2400	22319

Other dimensions				Contact surface and chamfer dimensions			Calculation coefficient				Weight
d2	D1	b	k	da	Da	ra	e	Y1	Y2	Y0	
mm				mm			mm				kg
109	142			92	158	2	0.34	1.99	2.96	1.94	7.40
109	142	8.3	4	92	158	2	0.34	1.99	2.96	1.94	6.37
105	132	6.5	3	96	139	2	0.24	2.80	4.20	2.80	2.69
105	132			96	139	2	0.24	2.80	4.20	2.80	2.64
118	152			99	166	2.5	0.24	2.80	4.20	2.80	5.42
115	150	8.3	4	99	166	2.5	0.34	1.99	2.96	1.94	8.19
115	150	8.3	4	99	166	2.5	0.34	1.99	2.96	1.94	8.19
115	150			99	166	2.5	0.34	1.99	2.96	1.94	8.12
115	150	8.3	4	99	166	2.5	0.34	1.99	2.96	1.94	8.08
115	150	8.3	4	99	166	2.5	0.34	1.99	2.96	1.94	8.01
106	121	5.5	3	100	125	1.5	0.33	2.00	3.00	2.00	3.25
111	139	8.3	2.5	101	149	2	0.25	2.70	4.00	2.60	3.40
111	139			101	149	2	0.25	2.70	4.00	2.60	3.38
111	139	8.3	2.5	101	149	2	0.25	2.70	4.00	2.60	3.28
111	133	5.5	2.5	101	149	2	0.35	1.90	2.90	1.80	4.64
111	133	5.5	2.5	101	149	2	0.35	1.90	2.90	1.80	4.5
111	133			101	149	2	0.35	1.90	2.90	1.80	4.61
112	136	5.5	2.5	101	149	2	0.25	2.70	4.00	2.60	4.82
112	136	5.5	2.5	101	149	2	0.25	2.70	4.00	2.60	4.72
112	136	5.5	2.5	101	149	2	0.25	2.70	4.00	2.60	4.55
112	136			101	149	2	0.31	2.20	3.30	2.20	5.87
123	159	8.3	5	104	176	2.5	0.34	1.99	2.96	1.94	11.5
123	159			104	176	2.5	0.34	1.99	2.96	1.94	11.2
123	159	8.3	5	104	176	2.5	0.34	1.99	2.96	1.94	11.1
123	159			104	176	2.5	0.34	1.99	2.96	1.94	9.44
121	159			104	176	2.5	0.36	1.87	2.79	1.83	8.62
121	159	8.3	5	104	176	2.5	0.36	1.87	2.79	1.83	8.43
112	150	8.3	4.5	104	176	2.5	0.24	2.80	4.20	2.80	5.82
119	148	8.3	3	107	158	2	0.24	2.80	4.20	2.80	4.68
119	148	8.3	3	107	158	2	0.24	2.80	4.20	2.80	4.48
112	150	8.3	4.5	107	158	2	0.24	2.80	4.20	2.80	7.48
128	167			109	186	2.5					10.4

Spherical Roller Bearing(CA)

ZWZ

d 95~110 mm



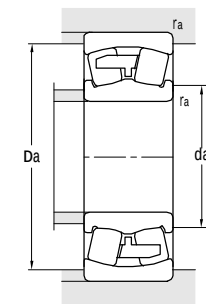
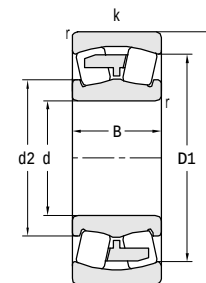
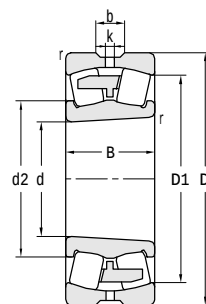
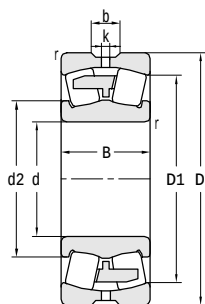
Principal dimensions				Basic load ratings		Limit speed ratings		Designations	
d	D	B	r _{min}	C _r	C _{0r}	Grease	Oil		
mm				kN		r/min			
95	200	67	3	637	727	1800	2400	22319CA	22319CA/W33
	200	67	3	637	727	1800	2400	22319CAF3	22319CAK
	200	67	3	637	727	1800	2400	22319CAKF3	22319CAKF3/W33
100	150	37	1.5	215	400	2400	3200	23020CA	23120CA/W33
	150	50	1.5	271	445	2400	3200	24020CA/W33	
	165	52	2	347	510	2000	2800	23120CA	
	165	52	2	347	510	2000	2800	23120CAK/W33	23120K/W33
	165	52	2	347	465	2000	2800	23120K/W33	
	180	46	2.1	404	466	2200	3000	22220	
	180	46	2.1	404	466	2200	3000	22220CA	22220CA/W33
	180	46	2.1	404	466	2200	3000	22220CAF3	22220CAKF3
	180	46	2.1	404	466	2200	3000	22220CAK	22220CAK/W33
	180	60.3	2.1	400	570	1700	2200	23220F1/W33	23220CA/W33
	180	60.3	2.1	451	610	1700	2200	23220CA	
	180	60.3	2.1	451	610	1700	2200	23220CAK/W33	
	215	47	3	385	490	1700	2200	21320CA	22320CA/W33
	215	73	3	774	903	1700	2200	22320CA	
	215	73	3	774	903	1700	2200	22320CAF3	
	215	73	3	774	903	1700	2200	22320CAK	22320CAK/W33
105	175	56	2	402	550	1900	2700	23121CA	23121CAL
	175	56	2	402	550	1900	2700	23121CA/W33	
110	170	45	2	295	460	2200	3000	23022CA	23022CA/W33
	170	45	2	295	460	2200	3000	23022CAF3	23022CAF3/W33
	170	60	2	394	589	2100	2800	24022CA	24022CA/W33
	170	60	2	394	589	2100	2800	24022CA/W33A	23122CAK/C3W33
	180	56	2	409	580	1900	2600	23122CA	
	180	56	2	409	580	1900	2600	23122CAF3	
	180	56	2	409	580	1900	2600	23122CAK/W33	24122CA/W33
	180	82	3	510	870	1000	1400	24122X2TN1/YA6	
	180	69	2	494	750	1000	1400	24122F1/W33	
	180	69	2	494	750	1000	1400	24122CA	22222CA/W33
	200	53	2.1	530	610	2000	2800	22222CA	
	200	53	2.1	530	610	2000	2800	22222CAF3	

Other dimensions				Contact surface and chamfer dimensions			Calculation coefficient				Weight
d2	D1	b	k	da	Da	ra	e	Y1	Y2	Y0	
mm				mm			mm				kg
128	167	8.3	5	109	186	2.5	0.34	1.99	2.96	1.94	10.5
128	167			109	186	2.5	0.34	1.99	2.96	1.94	10.5
128	167	8.3	5	109	186	2.5	0.34	1.99	2.96	1.94	10.3
116	135			110	140	1.5	0.23	2.90	4.40	2.80	2.52
115	133	5.5	3	110	140	1.5	0.30	2.25	3.35	2.20	3.18
121	143	5.5	3	110	155	2	0.30	2.90	4.40	2.80	4.42
121	143	5.5	3	110	155	2	0.30	2.90	4.40	2.80	4.26
121	143	5.5	3	110	155	2	0.30	2.25	3.35	2.20	4.44
126	156			112	168	2					5.24
124	156	8.3	3	112	168	2	0.24	2.80	4.20	2.80	5.18
124	156			112	168	2	0.24	2.80	4.20	2.80	5.10
124	156	8.3	3	112	168	2	0.24	2.80	4.20	2.80	4.96
125	153	9.5	4	112	168	2					6.39
125	153	9.5	4	112	168	2	0.33	2.00	3.00	2.00	6.52
125	153	9.5	4	112	168	2	0.33	2.00	3.00	2.00	6.21
138	179			114	201	2.5					8.74
138	179	11.1	5	114	201	2.5	0.35	1.90	2.90	1.80	13.8
138	179			114	201	2.5	0.35	1.90	2.90	1.80	13.4
138	179	11.1	5	114	201	2.5	0.35	1.90	2.90	1.80	13.8
127	151			115	165	2	0.31	2.20	3.30	2.20	5.48
127	151	5.5	3	115	165	2	0.31	2.20	3.30	2.20	5.35
128	150	7.5	3	120	160	2	0.25	2.70	4.00	2.60	3.58
128	150	7.5	3	120	160	2	0.25	2.70	4.00	2.60	3.54
128	150	5.5	3	120	160	2	0.32	2.09	3.11	2.04	4.98
128	150	5.5	3	120	160	2	0.32	2.09	3.11	2.04	4.90
132	156	5.5	3	120	170	2	0.30	2.25	3.35	2.20	5.73
132	156			120	170	2	0.30	2.25	3.35	2.20	5.70
132	156	5.5	3	120	170	2	0.30	2.25	3.35	2.20	5.51
123	148										7.56
131	153	5.5	2.5	120	170	2					6.91
131	153	5.5	2.5	120	170	2	0.35	1.90	2.90	1.80	6.92
139	173	8.3	4	122	188	2	0.26	2.60	3.90	2.50	7.43
139	173			122	188	2	0.26	2.60	3.90	2.50	7.37

Spherical Roller Bearing(CA)

ZWZ

d 110~120 mm



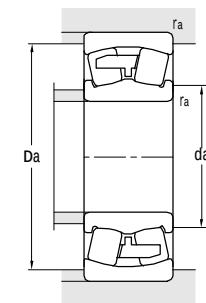
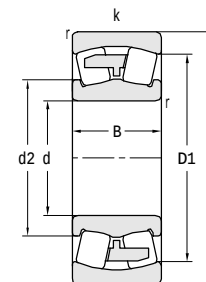
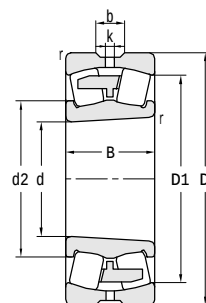
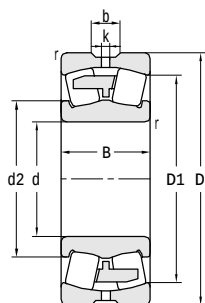
Principal dimensions				Basic load ratings		Limit speed ratings		Designations
d	D	B	r _{min}	C _r	C _{0r}	Grease	Oil	
mm				kN		r/min		
110	200	53	2.1	530	610	2000	2800	22222CAK
	200	69.8	2.1	570	727	1600	2000	23222CA
	200	69.8	2.1	570	727	1600	2000	23222CAF3
	200	69.8	2.1	570	727	1600	2000	23222CAK
	200	69.8	2.1	570	727	1600	2000	23222CAKF3
	200	69.8	2.1	490	740	1700	2200	23222/W33
	240	80	3	900	1060	1600	2000	22322CA
	240	80	3	900	1060	1600	2000	22322CAF3
	240	80	3	900	1060	1600	2000	22322CAK
	240	80	3	900	1060	1600	2000	22322CAKF3
	240	80	3	900	1060	1600	2000	22322CAK
	240	50	3	420	490	1600	2000	21322CA/W33
120	180	46	2	340	495	2000	2800	23024CA
	180	46	2	340	495	2000	2800	23024CAK
	180	46	2	340	495	2000	2800	23024CAKF3/W33
	180	46	2	340	495	2000	2800	23024CA/W33A
	180	60	2	410	660	1600	2000	24024CA
	180	60	2	410	660	1600	2000	24024CA/W513
	180	60	2	410	660	1600	2000	24024F1/W33
	200	62	2	490	715	1800	2400	23124CA/W33
	200	62	2	430	715	1900	2600	23124/W33
	200	62	2	430	715	1900	2600	23124K
	200	80	2	620	925	1400	1800	24124CA
	200	80	2	620	925	1400	1800	24124CAF3
	200	80	2	620	925	1400	1800	24124CAK30/W33
	215	58	2.1	600	730	1900	2600	22224CA
	215	58	2.1	600	730	1900	2600	22224CA/W33
	215	58	2.1	600	730	1900	2600	22224CAK
	215	58	2.1	600	730	1900	2600	22224CAF3
	215	58	2.1	600	730	1900	2600	22224CAK/W33
	215	58	2.1	600	730	1900	2600	22224CAKF3/W33
	215	76	2.1	660	940	1500	1900	23224CA
	215	76	2.1	660	940	1500	1900	23224CAF3/W33
	215	76	2.1	660	940	1500	1900	23224CAK/W33
	215	76	2.1	660	940	1500	1900	23224CAKF3/W33
	240	100	2	570	925	1500	1900	24124X3CA/C9WN33
	260	86	3	920	1060	1400	1800	22324
	260	86	3	920	1060	1400	1800	22324K
	260	86	3	920	1060	1400	1800	22324KF3
	260	86	3	920	1060	1400	1800	22324F3

Other dimensions				Contact surface and chamfer dimensions			Calculation coefficient				Weight
d2	D1	b	k	da	Da	ra	e	Y1	Y2	Y0	
mm				mm			mm				kg
139	173	8.3	4	122	188	2	0.26	2.60	3.90	2.50	7.25
138	168	12	5	122	188	2	0.34	1.99	2.96	1.94	10.1
138	168	12	5	122	188	2	0.34	1.99	2.96	1.94	9.79
138	168	12	5	122	188	2	0.34	1.99	2.96	1.94	9.83
138	168	12	5	122	188	2	0.34	1.99	2.96	1.94	9.77
139	168	12	5	122	188	2	0.35	1.90	2.90	1.80	9.54
151	197	13.9	6	122	188	2.5	0.31	2.20	3.30	2.20	18.9
151	197	13.9	6	122	188	2.5	0.31	2.20	3.30	2.20	18.7
151	197	13.9	6	122	188	2.5	0.31	2.20	3.30	2.20	18.5
150	202	7.5	3								11.7
139	162	5.5	3	130	170	2	0.23	2.90	4.40	2.80	4.44
139	162			130	170	2	0.23	2.90	4.40	2.80	4.42
139	162	5.5	3	130	170	2	0.23	2.90	4.40	2.80	4.34
139	162	7	4	130	170	2					4.39
139	158	5.5	4	130	170	2	0.31	2.20	3.30	2.20	5.83
139	158	5.5	4	130	170	2	0.31	2.20	3.30	2.20	5.79
139	158	5.5	4	130	170	2					5.5
146	174	5.5	3	130	190	2	0.30	2.30	3.40	2.20	12.2
146	174	5.5	3	130	190	2	0.31	2.20	3.30	2.20	7.97
146	174	5.5	3	130	190	2	0.31	2.20	3.30	2.20	7.73
146	167	5.5	3	130	190	2	0.30	2.30	3.40	2.20	10
146	167			130	190	2	0.30	2.30	3.40	2.20	9.95
146	167	5.5	3	130	190	2	0.30	2.30	3.40	2.20	9.88
149	187			132	203	2	0.26	2.60	3.90	2.50	9.87
149	187	11.1	4	132	203	2	0.26	2.60	3.90	2.50	9.53
149	187	11.1	4	132	203	2	0.26	2.60	3.90	2.50	9.76
149	187	11.1	4	132	203	2	0.26	2.60	3.90	2.50	9.68
150	182	8.3	5	132	203	2	0.35	1.90	2.90	1.80	12.1
150	182	8.3	5	132	203	2	0.35	1.90	2.90	1.80	12.0
150	182	8.3	5	132	203	2	0.35	1.90	2.90	1.80	11.9
146	167			130	190	2	0.38	1.80	2.60	1.70	21.3
157	218			134	246	2.5					21.7
157	218			134	246	2.5					21.3
157	218			134	246	2.5					21.1
157	218			134	246	2.5					21.2

Spherical Roller Bearing(CA)

ZWZ

d 120~130 mm



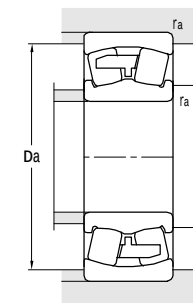
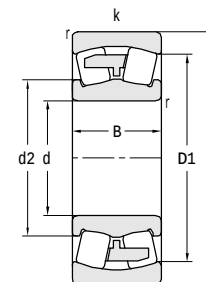
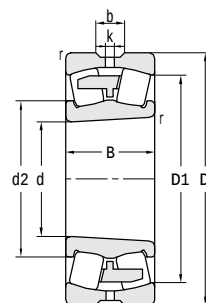
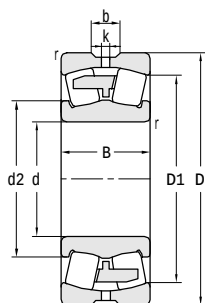
Principal dimensions				Basic load ratings		Limit speed ratings		Designations	
d	D	B	r _{min}	C _r	C _{0r}	Grease	Oil		
mm				kN		r/min			
120	260	86	3	920	1100	1400	1800	22324CA	22324CA/W33
	260	86	3	920	1100	1400	1800	22324CAN/W33	
	260	86	3	920	1100	1400	1800	22324CAF3	22324CAK
	260	86	3	920	1100	1400	1800	22324CAKF3	22324CAKF3/W33
	260	86	3	920	1100	1400	1800	22324ACA	
130	200	52	2	410	580	1900	2600	23026CA	23026CA/W33
	200	52	2	410	580	1900	2600	23026CAF3	23026CAF3/W33
	200	52	2	410	580	1900	2600	23026CAK	
	200	52	2	410	580	1900	2600	23026CAKF3	23026CAKF3/W33
	200	52	2	370	670	1900	2600	23026NR	
	200	69	2	510	810	1800	2400	24026CA/W33	24026CA/W513
	200	69	2	510	820	1800	2400	24026F1/W33	
	210	64	2	530	790	1700	2200	23126CA	23126CA/W33
	210	64	2	530	790	1700	2200	23126CAKF3/W33	
	210	80	2	650	980	1700	2200	24126CA	24126CA/W33
	210	80	2	650	980	1700	2200	24126CAK/W33	
	210	80	2	650	980	1700	2200	24126CAK30/W33	
	220	73	3	740	1000	1700	2200	23226X3CAQ1/HG2P63	
	230	64	3	700	880	1800	2400	22226CA	22226CA/W33
	230	64	3	700	880	1800	2400	22226CAK	22226CAK/W33
	230	64	3	700	880	1800	2400	22226CAKF3	
	230	80	3	580	910	1400	1800	23226/W33	
	230	80	3	740	1020	1300	1700	23226CA	23226CA/W33
	230	80	3	740	1020	1300	1700	23226CAF3	23226CAF3/W33
	230	80	3	740	1020	1300	1700	23226CAF3/HAC3SOW20X	
	230	80	3	740	1020	1300	1700	23226CAK	23226CAKF3
	280	93	4	810	1250	1300	1700	22326	22326/W33
	280	93	4	810	1250	1300	1700	22326K	22326K/W33
	280	93	4	810	1250	1300	1700	22326F3	
	280	93	4	810	1250	1300	1700	22326KF3	
	280	93	4	1060	1300	1300	1700	22326CA	22326CA/W33
	280	93	4	1060	1300	1300	1700	22326CAF3	22326CAF3/W33
	280	93	4	1060	1300	1300	1700	22326CAK	22326CAK/W33
	280	93	4	1060	1300	1300	1700	22326ACA	
	280	93	4	1060	1300	1300	1700	22326CAQ1/HA	

Other dimensions				Contact surface and chamfer dimensions			Calculation coefficient				Weight
d2	D1	b	k	da	Da	ra	e	Y1	Y2	Y0	
mm				mm			mm				kg
165	215	13.9	6	134	246	2.5	0.34	1.99	2.96	1.94	23.3
165	215	13.9	6	134	246	2.5	0.34	1.99	2.96	1.94	23.1
165	215	13.9	6	134	246	2.5	0.34	1.99	2.96	1.94	23.1
165	215	13.9	6	134	246	2.5	0.34	1.99	2.96	1.94	22.8
165	215	13.9	6	134	246	2.5	0.34	1.99	2.96	1.94	22.8
153	179	9.5	4	140	190	2	0.24	2.80	4.20	2.80	7.04
153	179	9.5	4	140	190	2	0.24	2.80	4.20	2.80	6.75
153	179	9.5	4	140	190	2	0.24	2.80	4.20	2.80	6.68
153	179	9.5	4	140	190	2	0.24	2.80	4.20	2.80	6.57
153	176	9.5	4	140	190	2	0.24	2.80	4.20	2.80	6.38
151	175	5.5	3	140	190	2	0.32	2.09	3.11	2.04	7.76
151	175	5.5	3	140	190	2	0.32	2.09	3.11	2.04	7.72
156	183	8.3	4	140	200	2	0.28	2.40	3.50	2.50	10.7
156	183	8.3	4	140	200	2	0.28	2.40	3.50	2.50	10.1
153	180	8.3	4	140	200	2	0.35	1.90	2.90	1.80	10.6
153	180	8.3	4	140	200	2	0.35	1.90	2.90	1.80	10.2
153	180	8.3	4	140	200	2	0.35	1.90	2.90	1.80	10.4
157	188	8.3	4	140	210	2	0.32	2.09	3.11	2.04	11.3
162	200	10	5	144	216	2.5	0.27	2.50	3.70	2.50	12.4
162	200	10	5	144	216	2.5	0.27	2.50	3.70	2.50	12.2
162	200	10	5	144	216	2.5	0.27	2.50	3.70	2.50	12.1
164	194	12	5	144	216	2.5	0.34	1.99	2.96	1.94	14.9
161	194	12	5	144	216	2.5	0.33	2.00	3.00	2.00	15.9
161	194	12	5	144	216	2.5	0.33	2.00	3.00	2.00	15.8
161	194	12	5	144	216	2.5	0.33	2.00	3.00	2.00	15.8
161	194	12	5	144	216	2.5	0.33	2.00	3.00	2.00	15.9
176	235	16.7	6	148	262	3					27.2
176	235	16.7	6	148	262	3					26.6
176	235	16.7	6	148	262	3					27.1
176	235	16.7	6	148	262	3					26.5
178	232	16.7	6	148	262	3	0.34	1.99	2.96	1.94	28.9
178	232	16.7	6	148	262	3	0.34	1.99	2.96	1.94	28.4
178	232	16.7	6	148	262	3	0.34	1.99	2.96	1.94	26.3
178	232	16.7	6	148	262	3	0.34	1.99	2.96	1.94	28.9
178	232	16.7	6	148	262	3	0.34	1.99	2.96	1.94	28.9

Spherical Roller Bearing(CA)

ZWZ

d 140~150 mm



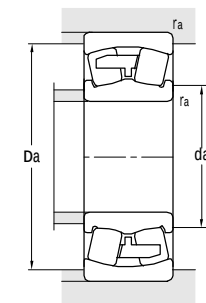
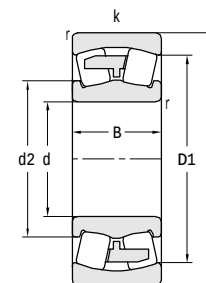
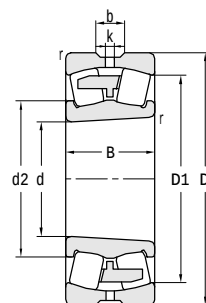
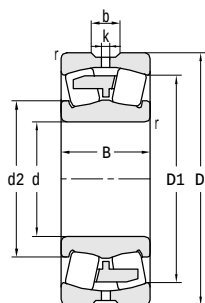
Principal dimensions				Basic load ratings		Limit speed ratings		Designations	
d	D	B	r _{min}	C _r	C _{0r}	Grease	Oil		
mm				kN		r/min			
140	210	53	2	440	655	1800	2400	23028	23028/W33
	210	53	2	440	655	1800	2400	23028K	23028K/W33
	210	53	2	440	655	1800	2400	23028F3	23028F3/W33
	210	53	2	440	655	1800	2400	23028KF3	23028KF3/W33
	210	53	2	440	706	1800	2400	23028CA	23028CA/W33
	210	53	2	440	706	1800	2400	23028CAF3	
	210	53	2	440	706	1800	2400	23028CAK	23028CAKF3
	210	69	2	540	960	1800	2400	24028CA	24028CA/W33
	210	69	2	540	960	1800	2400	24028CAK30/W33	
	211.5	69	2	540	960	1800	2400	24028CAX1/W33	
	225	68	2.1	550	865	1600	2000	23128	23128/W33
	225	68	2.1	550	865	1600	2000	23128K	23128K/W33
	225	68	2.1	550	865	1600	2000	23128F3	
	225	68	2.1	550	865	1600	2000	23128KF3	
	225	68	2.1	550	865	1600	2000	23128N	
	225	68	2.1	600	935	1600	2000	23128CA	23128CA/W33
	225	68	2.1	600	935	1600	2000	23128CAN	
	225	85	2.1	730	1150	850	1100	24128CA	24128CA/W33
	225	85	2.1	730	1150	850	1100	24128CAF3	
	225	85	2.1	730	1150	850	1100	24128CAK30/W33	
	250	68	3	680	1000	1700	2200	22228CA	22228CA/W33
	250	68	3	680	1000	1700	2200	22228CAF3	22228CAF3/W33
	250	68	3	680	1000	1700	2200	22228CAK	22228CAK/W33
	250	68	3	680	1000	1700	2200	22228CAKF3/W33	
	250	88	3	770	1095	1300	1700	23228K/W33	
	250	88	3	910	1365	1200	1600	23228CA/W33	23228CA/W33
	250	88	3	910	1365	1200	1600	23228CAK/W33	
	300	102	4	1230	1950	1100	1500	22328CA	22328CA/W33
	300	102	4	1230	1950	1100	1500	22328CAF3	22328CAF3/W33
	300	102	4	1230	1950	1100	1500	22328CAK	22328CAK/W33
	300	102	4	1230	1950	1100	1500	22328CAN/W33	
	300	102	4	1230	1950	1100	1500	22328CAQ1/HA	
	300	118	4	1230	1950	1100	1500	23328CA	
150	225	56	2.1	485	795	1700	2200	23030CA	23030CA/W33
	225	56	2.1	485	795	1700	2200	23030CAK	

Other dimensions				Contact surface and chamfer dimensions			Calculation coefficient				Weight
d2	D1	b	k	da	Da	ra	e	Y1	Y2	Y0	
mm				mm			mm				kg
162	187	8.3	4	150	200	2					6.8
162	187	8.3	4	150	200	2					6.36
162	187	8.3	4	150	200	2					6.73
162	187	8.3	4	150	200	2					6.29
162	188	8.3	4.5	150	200	2	0.23	2.90	4.40	2.80	6.70
162	188			150	200	2	0.23	2.90	4.40	2.80	6.68
162	188			150	200	2	0.23	2.90	4.40	2.80	6.50
162	185	5.5	3	150	200	2	0.30	2.30	3.40	2.20	8.31
162	185	5.5	3	150	200	2	0.30	2.30	3.40	2.20	8.17
162	183	5.5	3	150	200	2	0.30	2.30	3.40	2.20	8.58
166	196			152	213	2					10.9
166	196	8.3	5	152	213	2					10.9
166	196			152	213	2					10.8
166	196			152	213	2					10.7
166	196			152	213	2					10.9
166	196	8.3	5	152	213	2	0.29	2.30	3.50	2.40	10.9
166	196	8.3	5	152	213	2	0.29	2.30	3.50	2.40	10.9
165	192	8.3	4.5	152	213	2	0.37	1.80	2.70	1.80	13.5
165	192			152	213	2	0.37	1.80	2.70	1.80	13.5
165	192	8.3	4.5	152	213	2	0.37	1.80	2.70	1.80	13.2
176	218	11.1	5	154	236	2.5	0.26	2.60	3.90	2.50	16.2
176	218	11.1	5	154	236	2.5	0.26	2.60	3.90	2.50	15.6
176	218	11.1	5	154	236	2.5	0.26	2.60	3.90	2.50	15.0
176	218	11.1	5	154	236	2.5	0.26	2.60	3.90	2.50	14.8
172	215	15	6	154	236	2.5	0.36	1.87	2.79	1.83	18.3
173	215	15	6	154	236	2.5	0.33	2.00	3.00	2.00	19.7
173	215	15	6	154	236	2.5	0.33	2.00	3.00	2.00	19.3
191	249	16.7	7	158	282	3	0.35	1.90	2.90	1.80	36.0
191	249			158	282	3	0.35	1.90	2.90	1.80	35.9
191	249	16.7	7	158	282	3	0.35	1.90	2.90	1.80	36.2
191	249	16.7	7	158	282	3					36.0
191	249	16.7	7	158	282	3					36.2
190	243			158	280	3	0.40	1.69	2.51	1.65	41.7
174	201	8.3	4.5	162	213	2	0.22	3.00	4.60	2.80	8.01
174	201	8.3	4.5	162	213	2	0.22	3.00	4.60	2.80	7.41

Spherical Roller Bearing(CA)

ZWZ

d 150~160 mm



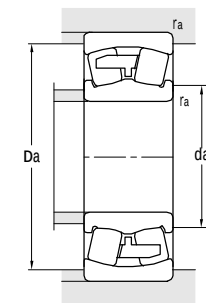
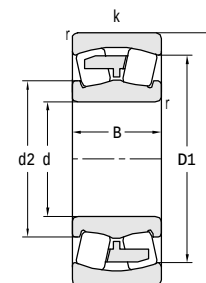
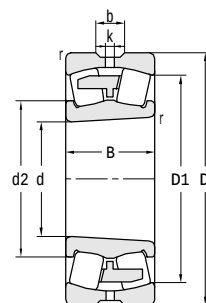
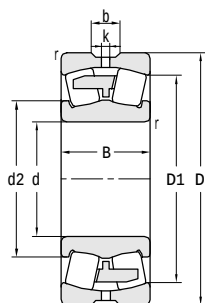
Principal dimensions				Basic load ratings		Limit speed ratings		Designations
d	D	B	r _{min}	C _r	C _{0r}	Grease	Oil	
mm				kN		r/min		
150	225	56	2.1	485	795	1700	2200	23030CAF3
	225	75	2.1	620	1050	1300	1700	24030CA/W33
	225	75	2.1	620	990	1300	1700	24030CA/W33X
	250	80	2.1	660	625	1400	1800	23130
	250	80	2.1	660	625	1400	1800	23130K
	250	80	2.1	660	625	1400	1800	23130F3
	250	80	2.1	660	625	1400	1800	23130KF3
	250	80	2.1	790	1140	1400	1800	23130CA
	250	80	2.1	790	1140	1400	1800	23130CAK
	250	80	2.1	790	1140	1400	1800	23130CAF3
	250	100	2.1	970	1450	800	1000	24130CA
	250	100	2.1	970	1450	800	1000	24130CAK
	270	73	3	810	1050	1600	2000	22230CA
	270	73	3	810	1050	1600	2000	22230CAF3
	270	73	3	810	1050	1600	2000	22230CAK
	270	96	3	1030	1550	1100	1500	23230CA
	270	96	3	1030	1550	1100	1500	23230CAK/W33
	270	96	3	1030	1550	1100	1500	23230CAK/HW33
	300	118	4	1780	1110			23328CA
	320	108	4	1390	1810	1000	1400	22230CA
	320	108	4	1390	1810	1000	1400	22230CAK/HW33
	320	108	4	1390	1810	1000	1400	22230CAK
160	240	60	2.1	415	860	1700	2200	23032
	240	60	2.1	415	860	1700	2200	23032K
	240	60	2.1	415	860	1700	2200	23032F3
	240	60	2.1	415	860	1700	2200	23032KF3
	240	60	2.1	555	875	1700	2200	23032CA
	240	60	2.1	555	875	1700	2200	23032CAK/W33
	240	60	2.1	555	875	1700	2200	23032CAF3
	240	80	2.1	600	1020	1100	1500	24032K/W33
	240	80	2.1	710	1210	1100	1500	24032CA/W33
	240	80	2.1	710	1210	1100	1500	24032CAK/W33
	240	80	2.1	710	1210	1200	1600	24032K/W33
	270	86	2.1	930	1300	1300	1700	23132
	270	86	2.1	930	1300	1300	1700	23132K
								23032CA/W33
								23032K/W33
								23032F3/W33
								24032CAF3/W33
								24032CAK30/W33

Other dimensions				Contact surface and chamfer dimensions			Calculation coefficient				Weight
d2	D1	b	k	da	Da	ra	e	Y1	Y2	Y0	
mm				mm			mm				kg
174	201			162	213	2	0.22	3.00	4.60	2.80	7.96
175	196	5.5	3	162	213	2	0.31	2.20	3.30	2.20	9.39
175	196	5.5	3	162	213	2	0.31	2.20	3.30	2.20	9.39
182	216	11.1	5	162	238	2					15.8
182	216	11.1	5	162	238	2					16.1
182	216	11.1	5	162	238	2					15.6
182	216	11.1	5	162	238	2					15.9
182	216	11.1	5	162	238	2	0.30	2.30	3.40	2.20	16.5
182	216	11.1	5	162	238	2	0.30	2.30	3.40	2.20	16.4
182	216	11.1	5	162	238	2	0.30	2.30	3.40	2.20	16.4
180	208	8.3	4.5	162	238	2	0.37	1.80	2.70	1.80	19.2
180	208	8.3	4.5	162	238	2	0.37	1.80	2.70	1.80	19.0
189	234	12	6	164	256	2.5	0.26	2.60	3.90	2.50	18.7
189	234			164	256	2.5	0.26	2.60	3.90	2.50	18.5
189	234			164	256	2.5	0.26	2.60	3.90	2.50	18.2
188	228	11.1	6	164	256	2.5	0.35	1.90	2.90	1.80	26.6
188	228	11.1	6	164	256	2.5	0.35	1.90	2.90	1.80	26.3
188	228	11.1	6	164	256	2.5	0.35	1.90	2.90	1.80	26.5
190	243			168	275	3					41.7
203	265	16.7	9	168	302	3	0.36	1.87	2.79	1.83	41.0
203	265	16.7	9	168	302	3	0.36	1.87	2.79	1.83	40.6
203	265			168	302	3	0.36	1.87	2.79	1.83	41.1
185	213	11.1	4	172	228	2					10.2
185	213	11.1	4	172	228	2					9.89
185	213	11.1	4	172	228	2					10
185	213			172	228	2					9.7
186	216	8.3	5	172	228	2	0.22	3.00	4.60	2.80	10.0
186	216	8.3	5	172	228	2	0.22	3.00	4.60	2.80	9.5
186	216			172	228	2	0.22	3.00	4.60	2.80	9.97
183	209	8.3	5	172	228	2					12.1
183	209	8.3	5	172	228	2	0.30	2.30	3.40	2.20	13.2
183	209	8.3	5	172	228	2	0.30	2.30	3.40	2.20	13.2
184	209	8.3	5	172	228	2	0.32	2.09	3.11	2.04	12.1
188	234	13.9	6	172	258	2					21.2
188	234			172	258	2					20.6

Spherical Roller Bearing(CA)

ZWZ

d 160~170 mm



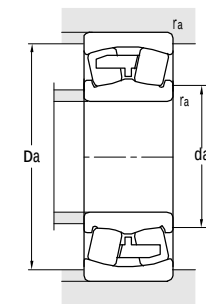
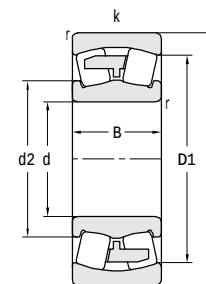
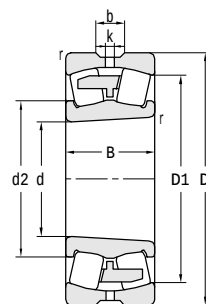
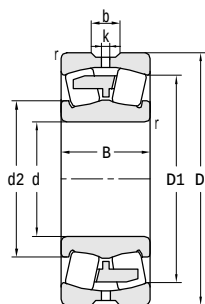
Principal dimensions				Basic load ratings		Limit speed ratings		Designations	
d	D	B	r _{min}	C _r	C _{0r}	Grease	Oil		
mm				kN		r/min			
160	270	86	2.1	930	1300	1300	1700	23132F3	23132F3/W33
	270	86	2.1	930	1300	1300	1700	23132N	
	270	86	2.1	930	1430	1300	1700	23132CA	23132CA/W33
	270	86	2.1	930	1430	1300	1700	23132CAK	
	270	86	2.1	930	1430	1300	1700	23132CAF3	
	270	86	2.1	685	1140	1400	1800	23132K	
	270	86	2.1	930	1300	1400	1800	23132CK	23132CK/W33
	270	109	2.1	1120	1690	700	900	24132CA/HAC9SOW20X	
	270	109	2.1	1120	1690	700	900	24132CA/W33	24132CA/W33X
	270	109	2.1	1120	1690	700	900	24132CAK30/C3W33	
	290	80	3	950	1380	1500	1900	22232CA	22232CAF3
	290	80	3	950	1300	1500	1900	22232CAK	
	290	80	3	950	1300	1500	1900	22233ACA	
	290	104	3	900	1600	1000	1400	23232	
	290	104	3	900	1600	1000	1400	23232K	
	290	104	3	900	1600	1000	1400	23232F3	
	290	104	3	1160	1770	1000	1400	23232CA	23232CA/W33
	290	104	3	1160	1770	1000	1400	23232CAK	23232CAK/W33
	340	114	4	1200	1800	950	1300	22332	22332/W33
	340	114	4	1200	1800	950	1300	22332K	22332K/W33
	340	114	4	1200	1800	950	1300	22332F3	
	340	114	4	1200	1800	950	1300	22332KF3	
	340	114	4	1520	1860	950	1300	22332CAK	
	340	114	4	1520	2050	950	1300	22332CA	22332CA/W33
	340	114	4	1520	2050	950	1300	22332CAF3	22332CAF3/W33
	340	114	4	1520	2050	950	1300	22332CAK	
	340	114	4	1200	1800	950	1300	22332Q1/W33	
	340	114	4	1520	2050	950	1300	22332CAK3/W33	
170	230	45	2	310	715	1700	2200	23934CA/W33	
	260	67	2.1	510	1070	1600	2000	23034	23034/W33
	260	67	2.1	510	1070	1600	2000	23034K	23034K/W33
	260	67	2.1	510	1070	1600	2000	23034YA2	
	260	67	2.1	510	1070	1600	2000	23034F3	
	260	67	2.1	510	1070	1600	2000	23034KF3	
	260	67	2.1	510	1070	1600	2000	23034CA	23034CA/W33
	260	67	2.1	670	1090	1600	2000		
	260	67	2.1						
	260	67	2.1						

Other dimensions				Contact surface and chamfer dimensions			Calculation coefficient				Weight
d2	D1	b	k	da	Da	ra	e	Y1	Y2	Y0	
mm				mm			mm				kg
188	234			172	258	2					21
188	234			172	258	2					21
188	234	13.9	6	172	258	2	0.30	2.30	3.40	2.20	21.9
188	234			172	258	2	0.30	2.30	3.40	2.20	21.7
195	234			172	258	2	0.30	2.30	3.40	2.20	21.9
193	231			172	258	2	0.34	1.99	2.96	1.94	20.6
193	231	13.9	6	172	258	2	0.34	1.99	2.96	1.94	21.2
195	225	8.3	4	172	258	2	0.40	1.69	2.51	1.65	23.4
193	225	8.3	4	172	258	2	0.40	1.69	2.51	1.65	24.6
193	225	8.3	4	172	258	2	0.40	1.69	2.51	1.65	24.2
193	249			174	276	2.5	0.27	2.50	3.70	2.50	24.6
201	249			174	276	2.5	0.27	2.50	3.70	2.50	23.8
201	249			174	276	2.5	0.27	2.50	3.70	2.50	24.1
198	244			174	276	2.5					36.1
198	244			174	276	2.5					34.3
198	244			174	276	2.5					35.9
189	244	13.9	7	174	276	2.5	0.35	1.90	2.90	1.80	30.2
200	244	13.9	7	174	276	2.5	0.35	1.90	2.90	1.80	28.9
212	283	16.7	7	178	322	3					50.2
212	283	16.7	7	178	322	3					49.5
212	283			178	322	3					49.7
212	283			178	322	3					49
201	284			178	322	3	0.35	1.90	2.90	1.80	52.8
201	284	16.7	7	178	322	3	0.35	1.90	2.90	1.80	51.6
216	284	16.7	7	178	322	3	0.35	1.90	2.90	1.80	51.8
201	284	16.7	7	178	322	3	0.35	1.90	2.90	1.80	51.6
212	283	16.7	7	178	322	3					50.2
216	284	16.7	7	178	322	3	0.35	1.90	2.90	1.80	51.8
189	212	5.5	3	182	213	2					5.45
200	231	11.1	5	182	248	2					13.7
200	231	11.1	5	182	248	2					13.3
200	231			182	248	2					13.6
200	231			182	248	2					13.6
200	231			182	248	2					13.2
198	231	11.1	5	182	248	2	0.23	2.90	4.40	2.80	14.1

Spherical Roller Bearing(CA)

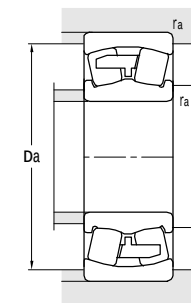
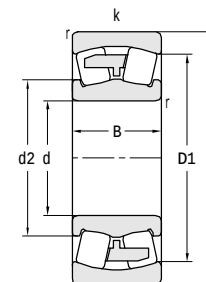
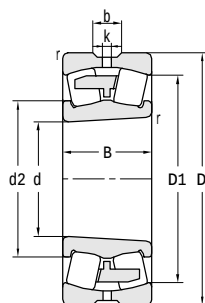
ZWZ

d 170~180 mm



Principal dimensions				Basic load ratings		Limit speed ratings		Designations
d	D	B	r _{min}	C _r	C _{0r}	Grease	Oil	
mm				kN		r/min		
170	260	67	2.1	670	1090	1600	2000	23034CAK
	260	67	2.1	670	1090	1600	2000	23034CAF3
	260	67	2.1	670	1090	1600	2000	23034CAKF3/W33
	260	90	2.1	885	1500	1000	1400	24034CA
	260	90	2.1	885	1500	1000	1400	24034CAK/W33
	280	88	2.1	890	1450	1200	1600	23134
	280	88	2.1	890	1450	1200	1600	23134K
	280	88	2.1	890	1450	1200	1600	23134F3
	280	88	2.1	890	1450	1200	1600	23134KF3
	280	88	2.1	990	1530	1200	1600	23134CA
	280	88	2.1	990	1530	1200	1600	23134CAK
	280	109	2.1	1160	1830	670	850	24134CA
	280	109	2.1	1160	1830	670	850	24134CAK30/W33
	280	88	2.1	990	1530	1200	1600	23134CAKF3
	280	109	2.1	1160	1770	670	850	24134CA/W33
	280	109	2.1	1160	1770	670	850	24134CA
	310	86	4	1060	1450	1300	1700	22234CA
	310	86	4	1060	1450	1300	1700	22234CAK
	310	86	4	1060	1390	1300	1700	22234K/W33
	310	110	4	1330	1930	950	1300	23234CA
	310	110	4	1330	1930	950	1300	23234CAF3/W33
	360	120	4	1300	2110	950	1300	22334
	360	120	4	1300	2110	950	1300	22334K
	360	120	4	1300	2110	950	1300	22334KF3
	360	120	4	1300	2110	950	1300	22334F3
	360	120	4	1670	2120	950	1300	22334CA
	360	120	4	1670	2120	950	1300	22334CA/W33X
	360	120	4	1670	2120	950	1300	22334ACA
	360	120	4	1670	2120	950	1300	22334CA/HCEW33
	360	136	4	1670	2280	950	1300	23334X2/W33
180	250	52	2	430	830	1700	2200	23936CAF3/W33
	280	74	2.1	700	1320	1400	1800	23036
	280	74	2.1	700	1320	1400	1800	23036K
	280	74	2.1	700	1320	1400	1800	23036YA2
	280	74	2.1	700	1320	1400	1800	23036F3

Other dimensions				Contact surface and chamfer dimensions			Calculation coefficient				Weight
d2	D1	b	k	da	Da	ra	e	Y1	Y2	Y0	
mm				mm			mm				kg
198	231			182	248	2	0.23	2.90	4.40	2.80	13.8
198	231			182	248	2	0.23	2.90	4.40	2.80	14.0
198	231	11.1	5	182	248	2	0.23	2.90	4.40	2.80	13.5
198	227	8.3	4	182	248	2	0.33	2.00	3.00	2.00	17.8
188	226	8.3	4	198	249	2	0.33	2.00	3.00	2.00	16.8
204	246	13.9	6	182	268	2					23
204	246	13.9	6	182	268	2					21.6
204	246			182	268	2					22.6
204	246			182	268	2					21.2
204	243			182	268	2	0.30	2.30	3.40	2.20	25.7
204	243	13.9	6	182	268	2	0.30	2.30	3.40	2.20	24.3
203	237	8.3	5	182	268	2	0.37	1.80	2.70	1.80	25.4
203	237	8.3	5	182	268	2	0.37	1.80	2.70	1.80	24.7
204	243			182	268	2	0.30	2.30	3.40	2.20	24.6
203	237	8.3	5	182	268	2	0.37	1.80	2.70	1.80	24.8
203	237			182	268	2	0.37	1.80	2.70	1.80	25.4
215	268	16.7	6	188	292	3	0.27	2.50	3.70	2.50	26.8
215	268	16.7	6	188	292	3	0.27	2.50	3.70	2.50	26.2
215	268	16.7	6	188	292	3	0.27	2.50	3.70	2.50	27.8
214	261	13.9	7	188	292	3	0.34	1.99	2.96	1.94	38.0
214	261	13.9	7	188	292	3	0.34	1.99	2.96	1.94	37.7
228	300	16.7	7	188	342	3					60.1
228	300	16.7	7	188	342	3					60.1
228	300			188	342	3					59.4
228	300			188	342	3					60
231	299	16.7	7	188	342	3	0.34	1.99	2.96	1.94	62.6
231	299	16.7	7	188	342	3	0.34	1.99	2.96	1.94	62.6
231	299			188	342	3	0.34	1.99	2.96	1.94	61.4
231	299	16.7	7	188	342	3	0.34	1.99	2.96	1.94	62.6
229	292	22.3	12	188	342	3					68.6
204	230	9.5	4	190	240	2	0.18	3.80	5.60	3.60	7.4
214	247	13.9	6	192	268	2					18.1
214	247	13.9	6	192	268	2					17.6
214	247			192	268	2					18
214	247			192	268	2					17.6

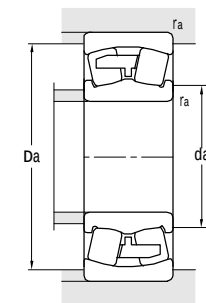
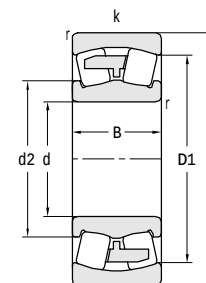
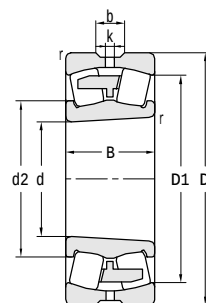
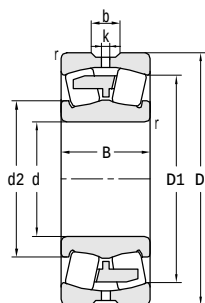
ZWZ

Other dimensions				Contact surface and chamfer dimensions			Calculation coefficient				Weight
d2	D1	b	k	da	Da	ra	e	Y1	Y2	Y0	
mm				mm			mm				kg
214	247			192	268	2					17.2
214	247	13.9	7.5	192	268	2	0.25	2.70	4.00	2.60	17.7
214	247	13.9	7.5	192	268	2	0.25	2.70	4.00	2.60	16.8
214	247			192	268	2	0.25	2.70	4.00	2.60	17.6
210	242	8.3	4	192	268	2	0.33	2.00	3.00	2.00	25.7
210	242	8.3	4	192	268	2	0.33	2.00	3.00	2.00	25.6
216	259			194	286	2.5					28.6
216	259	13.9	6	194	286	2.5					28.2
216	259			194	286	2.5					28.2
216	259	13.9	6	194	286	2.5					27.8
216	259	13.9	6	194	286	2.5	0.30	2.30	3.40	2.20	27.6
216	259			194	286	2.5	0.30	2.30	3.40	2.20	27.0
216	259	13.9	6	194	286	2.5	0.30	2.30	3.40	2.20	27.5
216	259			194	286	2.5					26.8
216	259	13.9	6	194	286	2.5	0.30	2.30	3.40	2.20	26.5
212	252	11.1	6	194	286	2.5	0.37	1.80	2.70	1.80	33.0
212	252	11.1	6	194	286	2.5	0.37	1.80	2.70	1.80	32.8
212	252			194	286	2.5	0.37	1.80	2.70	1.80	33.0
224	278			198	302	3					31.1
224	278			198	302	3					30.2
224	278			198	302	3					30.8
224	278	16.7	6	198	302	3	0.26	2.60	3.90	2.50	29.4
224	278			198	302	3	0.26	2.60	3.90	2.50	29.2
224	278			198	302	3	0.26	2.60	3.90	2.50	29.3
224	278	16.7	6	198	302	3	0.26	2.60	3.90	2.50	29.1
222	271	13.9	7	198	302	3					40
222	271			198	302	3	0.35	1.90	2.90	1.80	38.7
222	271	13.9	7	198	302	3	0.35	1.90	2.90	1.80	38.6
222	271	13.9	7	198	302	3	0.35	1.90	2.90	1.80	38.5
222	271	13.9	7	198	302	3	0.35	1.90	2.90	1.80	38.4
241	317	22.3	8	198	362	3					70.9
241	317	22.3	8	198	362	3					69.8
241	317			198	362	3					70.5
242	316	22.3	8	198	362	3	0.34	1.99	2.96	1.94	72.2
242	316	22.3	8	198	362	3	0.34	1.99	2.96	1.94	71.3
242	316	22.3	8	198	362	3	0.34	1.99	2.96	1.94	71.3

Spherical Roller Bearing(CA)

ZWZ

d 190~200 mm



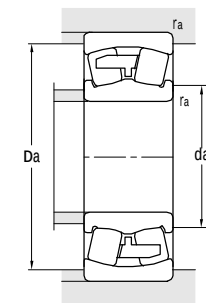
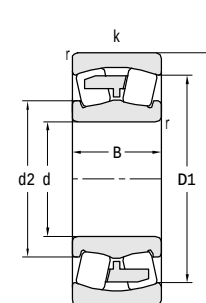
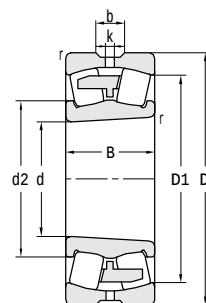
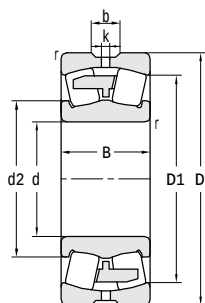
Principal dimensions				Basic load ratings		Limit speed ratings		Designations
d	D	B	r _{min}	C _r	C _{0r}	Grease	Oil	
mm				kN		r/min		
190	260	52	2	440	855	1600	2000	23938CA/W33
	280	67	2.5	660	1210			20638
	290	75	2.1	720	1300	1300	1700	23038
	290	75	2.1	720	1300	1300	1700	23038K
	290	75	2.1	720	1300	1300	1700	23038F3
	290	75	2.1	820	1450	1300	1700	23038CA
	290	75	2.1	820	1450	1300	1700	23038CAF3
	290	75	2.1	820	1450	1300	1700	23038CAK
	290	75	2.1	820	1450	1300	1700	23038CAKF3/W33
	290	100	2.1	1060	1840	950	1300	24038CA
	290	100	2.1	1060	1840	950	1300	24038CAF3
	290	100	2.1	1060	1840	950	1300	24038CA/W33X
	320	104	3	1100	1880	1000	1400	23138
	320	104	3	1100	1880	1000	1400	23138K
	320	104	3	1100	1880	1000	1400	23138F3
	320	104	3	1100	1880	1000	1400	23138KF3
	320	104	3	1300	1980	1000	1400	23138CA
	320	104	3	1300	1980	1000	1400	23138CAK/W33
	320	128	3	1520	2400	600	750	24138CA
	320	128	3	1520	2400	600	750	24138CAF3
	320	128	3	1520	2400	600	750	24138CA/HW33
	320	128	3	1520	2400	600	750	24138CAK30F3/W33
	340	92	4	1210	1620	1200	1600	22238F3
	340	92	4	1210	1620	1200	1600	22238CA
	340	92	4	1210	1620	1200	1600	22238CA/W33
	340	92	4	1210	1620	1200	1600	22238CAF3
	340	92	4	1210	1620	1200	1600	22238CAK
	340	92	4	1210	1620	1200	1600	22238CAK/W33
	340	120	4	1580	2400	850	1100	23238CA
	340	120	4	1580	2400	850	1100	23238CAK/W33
	400	132	5	2010	2630	850	1100	22338CA
	400	132	5	2010	2630	850	1100	22338CAF3
	400	132	5	2010	2630	850	1100	22338ACA
200	280	60	2.1	520	1150	1600	2000	23940CAF3/W33
	280	186	1.1					23940CA/W33
								H2344

Other dimensions				Contact surface and chamfer dimensions			Calculation coefficient				Weight
d2	D1	b	k	da	Da	ra	e	Y1	Y2	Y0	
mm				mm			mm				kg
213	238	5.5	3	202	248	2	0.18	3.80	5.60	3.60	8.29
220	253			204	264	2					14.5
222	259	13.9	5	202	278	2					19.6
222	259	13.9	5	202	278	2					19.1
222	259	13.9	5	202	278	2					19.4
224	259	13.9	5	202	278	2	0.23	2.90	4.40	2.80	17.3
224	259			202	278	2	0.23	2.90	4.40	2.80	17.2
224	259	13.9	5	202	278	2	0.23	2.90	4.40	2.80	16.8
224	259	13.9	5	202	278	2	0.23	2.90	4.40	2.80	16.5
219	252	8.3	4.5	202	278	2	0.31	2.20	3.30	2.20	22.9
219	252			202	278	2	0.31	2.20	3.30	2.20	22.8
219	252	8.3	4.5	202	278	2	0.31	2.20	3.30	2.20	22.4
232	271			204	306	2.5					35.3
232	271	13.9	7	204	306	2.5					35.3
232	271			204	306	2.5					34.9
232	271			204	306	2.5					34.9
232	276	13.9	7	204	306	2.5	0.31	2.20	3.30	2.20	34.3
232	276	13.9	7	204	306	2.5					30
226	267	11.1	6	204	306	2.5	0.40	1.69	2.51	1.65	41.9
226	267	11.1	6	204	306	2.5	0.40	1.69	2.51	1.65	41.8
226	267	11.1	6	204	306	2.5	0.40	1.69	2.51	1.65	41.8
226	267	11.1	6	204	306	2.5	0.40	1.69	2.51	1.65	41.5
235	293			208	322	3					35.6
235	293			208	322	3	0.26	2.60	3.90	2.50	37.4
235	293	16.7	6	208	322	3	0.26	2.60	3.90	2.50	37.4
235	293			208	322	3	0.26	2.60	3.90	2.50	37.2
235	293	16.7	6	208	322	3	0.26	2.60	3.90	2.50	37.3
235	293			208	322	3	0.26	2.60	3.90	2.50	37.0
237	288	16.7	7	208	322	3	0.35	1.90	2.90	1.80	44.8
237	288	16.7	7	208	322	3	0.35	1.90	2.90	1.80	43.1
257	334	22.3	8	212	378	4	0.34	1.99	2.96	1.94	82.2
257	334			212	378	4	0.34	1.99	2.96	1.94	81.7
257	334	22.3	12	212	378	4	0.34	1.99	2.96	1.94	81.0
226	254	9.5	4	212	268	2	0.19	3.61	5.38	3.53	12.1
											16.8

Spherical Roller Bearing(CA)

ZWZ

d 200~220 mm



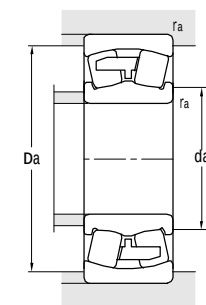
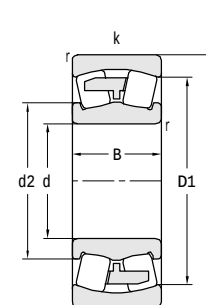
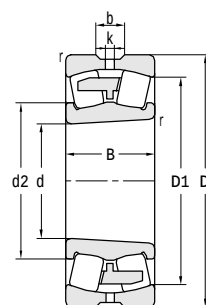
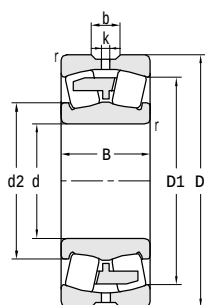
Principal dimensions				Basic load ratings		Limit speed ratings		Designations	
d	D	B	r _{min}	C _r	C _{0r}	Grease	Oil		
mm				kN		r/min			
200	310	82	2.1	660	1370	1200	1600	23040	23040/W33
	310	82	2.1	660	1370	1200	1600	23040K	23040K/W33
	310	82	2.1	660	1370	1200	1600	23040F3	23040F3/W33
	310	82	2.1	660	1370	1200	1600	23040KF3	
	310	82	2.1	950	1560	1200	1600	23040CA	23040CA/W33
	310	82	2.1	950	1560	1200	1600	23040CAK	23040CAK/W33
	310	109	2.1	1230	2130	900	1200	24040CA/W33	24040CAK30/W33
	340	112	3	1520	2240	950	1300	23140CA	23140CA/W33
	340	112	3	1520	2240	950	1300	23140CA/HCW33YA2	
	340	112	3	1520	2240	950	1300	23140CAK	23140CAK/W33
	340	140	3	1710	3800	5601	700	24140CA/W33	
	340	140	3	1710	3800	5601	700	24140CAK30F3	24140CAK30F3/W33
	360	98	4	1390	1830	1100	1500	22240	22240/W33
	360	98	4	1390	1830	1100	1500	22240K	22240K/W33
	360	98	4	1390	1830	1100	1500	22240F3	22240KF3/W33
	360	98	4	1390	1950	1100	1500	22240CA	22240CA/W33
	360	98	4	1390	1950	1100	1500	22240CAF3	22240CAKF3
	360	98	4	1390	1950	1100	1500	22240CAK	22240CAK/W33
	360	128	4	1770	2570	850	1100	23240CA/W33	
	360	128	4	1770	2570	850	1100	23240CA/HCW33	
	360	128	4	1770	2570	850	1100	23240CAK	23240CAK/W33
	360	128	4	1770	2730	900	1200	23240/W33	
	420	138	5	2200	2760	850	1100	22340	22340/W33
	420	138	5	2200	2760	850	1100	22340K	22340K/W33
	420	138	5	1620	2740	850	1100	22340F3	22340F3/W33
	420	138	5	2200	2860	850	1100	22340CA	22340CAF3
	420	138	5	2200	2860	850	1100	22340CA/W33	
	420	138	5	2200	2860	850	1100	22340CAK	22340CAK/W33
	420	138	5	2000	2860	850	1100	22340CK	22340CK/W33
	420	165	5	2220	2860	750	950	23340CAF3	
220	300	60	2.1	520	1190	1500	1900	23944CA/W33	23944CAF3/C3W33
	340	90	3	1160	1900	1100	1500	23044CA	23044CA/W33
	340	90	3	1160	1900	1100	1500	23044CAK	23044CAK/W33
	340	90	3	1160	1900	1100	1500	23044CA/YA2	
	340	90	3	1160	1900	1100	1500	23044CAKF3	

Other dimensions				Contact surface and chamfer dimensions			Calculation coefficient				Weight
d2	D1	b	k	da	Da	ra	e	Y1	Y2	Y0	
mm				mm			mm				kg
236	271	13.9	6	212	298	2					25
236	271	13.9	6	212	298	2					24.5
236	271	13.9	6	212	298	2					24.7
236	271	13.9	6	212	298	2					24.2
237	276	13.9	7.5	212	298	2	0.25	2.70	4.00	2.60	22.6
237	276	13.9	7.5	212	298	2	0.25	2.70	4.00	2.60	22.4
233	268	11.1	5	212	298	2	0.33	2.00	3.00	2.00	31.3
243	292	16.7	7	214	326	2.5	0.31	2.20	3.30	2.20	43.8
243	292	16.7	7	214	326	2.5	0.31	2.20	3.30	2.20	43.5
243	292	16.7	7	214	326	2.5	0.31	2.20	3.30	2.20	42.6
242	284	11.1	6	214	326	2.5	0.40	1.70	2.50	1.60	51.5
242	283	11.1	6	214	326	2.5	0.40	1.70	2.50	1.60	51.3
248	309			218	342	3					44.2
248	309			218	342	3					43.4
248	309			218	342	3					43.8
250	309	16.7	6	218	342	3	0.26	2.60	3.90	2.50	44.7
250	309	16.7	6	218	342	3	0.26	2.60	3.90	2.50	44.3
250	309	16.7	6	218	342	3	0.26	2.60	3.90	2.50	44
249	304	16.7	8	218	342	3	0.35	1.90	2.90	1.80	53.4
249	304	16.7	8	218	342	3	0.35	1.90	2.90	1.80	53.4
249	304	16.7	8	218	342	3	0.35	1.90	2.90	1.80	52
248	304	16.7	8	218	342	3	0.36	1.87	2.79	1.83	56.5
269	350	22.3	8	222	398	4					96
269	350	22.3	8	222	398	4					94
269	350	22.3	8	222	398	4					95
269	350			222	398	4	0.34	1.99	2.96	1.94	95.7
269	350			222	398	4	0.34	1.99	2.96	1.94	96.7
269	350	22.3	8	222	398	4	0.34	1.99	2.96	1.94	94
269	350	22.3	8	222	398	4	0.34	1.99	2.96	1.94	90
266	340			222	398	4	0.40	1.68	2.50	1.64	95.2
242	278	8.3	4	232	288	2	0.18	3.80	5.60	3.60	12.9
260	303	13.9	6	234	326	2.5	0.24	2.80	4.20	2.80	30.3
260	303	13.9	6	234	326	2.5	0.24	2.80	4.20	2.80	31.6
260	303			234	326	2.5	0.25	2.75	4.09	2.69	31.5
260	303			234	326	2.5	0.24	2.80	4.20	2.80	31

Spherical Roller Bearing(CA)

ZWZ

d 220~240 mm



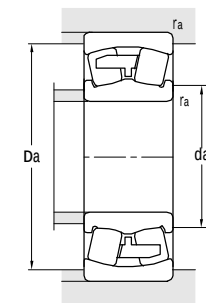
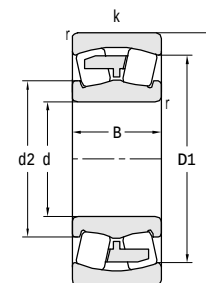
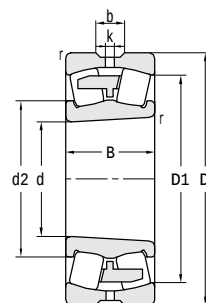
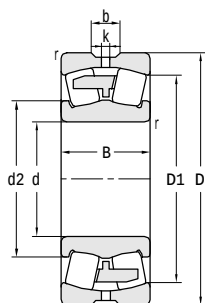
Principal dimensions				Basic load ratings		Limit speed ratings		Designations	
d	D	B	r _{min}	C _r	C _{0r}	Grease	Oil		
mm				kN		r/min			
220	340	118	3	1480	2500	850	1100	24044CA	24044CA/W33
	340	118	3	1480	2500	850	1100	24044CA/W33X	
	340	118	3	1480	2500	850	1100	24044CAN	
	340	118	3	1480	2500	850	1100	24044CAK30/W33	
	340	118	3	1480	2500	850	1100	24044CAF3	24044CAF3/W33
	370	120	4	1500	1160	900	1200	23144	23144/W33
	370	120	4	1500	1160	900	1200	23144K	
	370	120	4	1500	1160	900	1200	23144F3	23144F3/W33
	370	120	4	1500	1160	900	1200	23144KF3/W33	
	370	120	4	1710	2710	900	1200	23144CA	23144CA/W33
	370	120	4	1510	2750	900	1200	23144CA/HG2/W33	
	370	120	4	1510	2710	900	1200	23144CAK	23144CAK/W33
	370	120	4	1730	2710	900	1200	23144CAKF3/W33	22244CAK/W33
	370	150	4	2010	3410	500	630	24144CA/W33	24144CAK30
	400	108	4	1670	2400	950	1300	22244CA	22244CA/W33
	400	108	4	1670	2400	950	1300	22244CA/W33X	22244CAF3
	400	108	4	1670	2400	950	1300	22244CAK	22244CAK/W33T
	400	144	4	2240	3280	750	950	23244CA/W33	23244CAK/W33
	460	145	5	2570	3450	980	1360	22344CA	22344CA/W33
	460	145	5	2570	3450	980	1360	22344CAK/W33	
240	320	60	2.1	630	1360	1300	1700	23948CA	23948CA/W33
	320	60	2.1	660	1450	1300	1700	23948CAF3	23948CAF3/W33
	330	60	2.1	610	1280	1200	1500	23948X1CAF3/HA	
	330	190	1.1					OH3152H	
	360	92	3	1230	2110	1000	1400	23048	23048/W33
	360	92	3	1230	2110	1000	1400	23048Q1/YA2	
	360	92	3	1230	2110	1000	1400	23048K	23048K/W33
	360	92	3	1230	2110	1000	1400	23048F3	23048F3/W33
	360	92	3	1230	2110	1000	1400	23048KF3	23048KF3/W33
	360	92	3	1230	2080	1000	1400	23048CA	23048CA/W33
	360	92	3	1230	2080	1000	1400	23048CAQ1/YA2	
	360	92	3	1230	2080	1000	1400	23048CAK	23048CAK/W33
	360	92	3	1230	2080	1000	1400	23048CAQ1	
	360	118	3	1520	2800	800	1000	24048CA	
	360	118	3	1520	2800	800	1000	24048CA/W33X	

Other dimensions				Contact surface and chamfer dimensions			Calculation coefficient				Weight
d2	D1	b	k	da	Da	ra	e	Y1	Y2	Y0	
mm				mm			mm				kg
257	295	11.1	5	234	326	2.5	0.33	2.00	3.00	2.00	39.3
257	295	11.1	5	234	326	2.5	0.33	2.00	3.00	2.00	38.9
257	295	11.1	5	234	326	2.5	0.33	2.00	3.00	2.00	39.1
257	295	11.1	5	234	326	2.5	0.33	2.00	3.00	2.00	38.5
257	295	11.1	5	234	326	2.5	0.33	2.00	3.00	2.00	39
265	310	16.7	7	238	352	3					54.8
265	310			238	352	3					53.2
265	310	16.7	7	238	352	3					54.3
265	310	16.7	7	238	352	3					52.4
268	320	16.7	7	238	352	3	0.30	2.30	3.40	2.20	54.7
268	320	16.7	7	238	352	3	0.30	2.30	3.40	2.20	54.6
268	320	16.7	7	238	352	3	0.30	2.30	3.40	2.20	53.1
268	320	16.7	7	238	352	3	0.30	2.30	3.40	2.20	52.7
262	308	11.1	6	238	352	3	0.40	1.70	2.50	1.60	66.4
275	344	16.7	8	238	382	3	0.27	2.50	3.70	2.50	63.5
275	344	16.7	8	238	382	3	0.27	2.50	3.70	2.50	63
275	344			238	382	3	0.27	2.50	3.70	2.50	63.2
272.5	334	16.7	8	238	382	3	0.36	1.89	2.81	1.85	77.3
293.5	384.5	22.3	12	246	422	4	0.32	2.09	3.11	2.04	119
293.5	384.5	22.3	12	246	422	4	0.32	2.09	3.11	2.04	119
266	295	9.5	4	252	308	2	0.15	4.50	6.70	4.50	15.1
266	295	9.5	4	252	308	2	0.15	4.50	6.70	4.50	14.9
266	295			252	308	2	0.15	4.50	6.70	4.50	15.8
278	317	13.9	6	254	346	2.5					23.3
278	317			254	346	2.5					34.9
278	317	13.9	6	254	346	2.5					34.8
278	317	13.9	6	254	346	2.5					33.9
278	317	13.9	6	254	346	2.5					34.5
278	317	13.9	6	254	346	2.5					33.5
278	322	13.9	6	254	346	2.5	0.24	2.80	4.20	2.80	34.2
278	322			254	346	2.5	0.24	2.80	4.20	2.80	34.2
278	322	13.9	6	254	346	2.5	0.24	2.80	4.20	2.80	32.2
278	322			254	346	2.5	0.24	2.80	4.20	2.80	34.2
278	318	11.1	5	254	346	2.5	0.30	2.30	3.40	2.20	44.1
278	318	11.1	5	254	346	2.5	0.30	2.30	3.40	2.20	43.7

Spherical Roller Bearing(CA)

ZWZ

d 240~260 mm



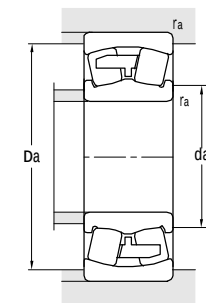
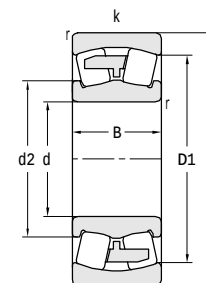
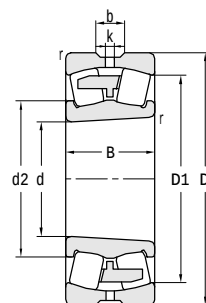
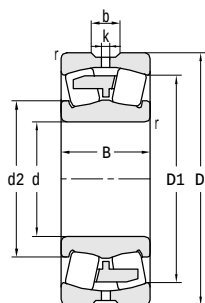
Principal dimensions				Basic load ratings		Limit speed ratings		Designations	
d	D	B	r _{min}	C _r	C _{0r}	Grease	Oil		
mm				kN		r/min			
240	360	118	3	1520	2800	800	1000	24048CAK30	24048CAK30/W33
	400	128	4	1550	2930	850	1100	23148	23148/W33
	400	128	4	1550	2930	850	1100	23148K	23148K/W33
	400	128	4	1550	2930	850	1100	23148F3	
	400	128	4	1980	3040	850	1100	23148CA	23148CA/W33
	400	128	4	1980	3040	850	1100	23148CAK/W33	
	400	160	4	2280	3750	480	600	24148/W33	
	400	160	4	2280	3750	480	600	24148F3/W33	
	400	160	4	2280	3705	480	600	24148CA	24148CA/W33
	400	160	4	2280	3705	480	600	24148CAK/W33	
	400	160	4	2280	3705	480	600	24148CAK30/C3W33	24148CAK30F3/W33
	440	120	4	2090	3250	900	1200	22248CA	22248CA/W33
	440	120	4	2090	3250	900	1200	22248CAK	22248CAK/W33
	440	120	4	2090	3250	900	1200	22248CAF3/C9W33	22248CAF3/W33
	440	120	4	2090	3250	900	1200	22248K/W33	
	440	160	4	2950	3950	670	850	23248CA/W33	
	440	160	4	2950	3950	670	850	23248CAK/W33	
	440	160	4	2950	3800	670	850	23248CAF3	
	500	155	5	2950	4100	650	800	22348CA	22348CA/W33
	500	155	5	2950	4100	650	800	22348CAK	22348CAK/W33
241	410	128	4	1860	3350	1000	1400	2650CA	
250	350	195	1.1					OH3156H	
	360	75	2.1	902	1750	1100	1500	23952CA	23952CA/W33
	410	128	4	1860	3350			2650CA	
260	360	75	2.1	835	1750	1100	1500	23952CA	23952CA/W33
	360	75	2.1	835	1750	1100	1500	23952CAK/W33	
	400	104	4	1520	2550	900	1200	23052CA	23052CA/W33
	400	104	4	1520	2550	900	1200	23052CAF3	
	400	104	4	1520	2550	900	1200	23052CAK	23052CAK/W33
	400	104	4	1520	2550	900	1200	23052CAKF3	
	400	140	4	1930	3500	700	900	24052CA/W33	
	400	140	4	1930	3800	700	900	24052CA/W33XYA	
	400	140	4	1930	3500	700	900	24052CAF3	24052CAF3/W33

Other dimensions				Contact surface and chamfer dimensions			Calculation coefficient				Weight
d2	D1	b	k	da	Da	ra	e	Y1	Y2	Y0	
mm				mm			mm				kg
278	318	11.1	5	254	346	2.5	0.30	2.30	3.40	2.20	44.1
290	347	16.7	8	258	382	3					47.5
290	347	16.7	8	258	382	3					65.6
290	347			258	382	3					66.7
289	345	16.7	8	258	382	3	0.31	2.21	3.29	2.16	68.2
289	345	16.7	8	258	382	3	0.31	2.21	3.29	2.16	66.5
285	336	11.1	6	258	382	3					81
285	336	11.1	6	258	382	3					80
285	336	11.1	6	258	382	3	0.40	1.70	2.50	1.60	79
285	336	11.1	6	258	382	3	0.40	1.70	2.50	1.60	75.6
285	336	11.1	6	258	382	3	0.40	1.70	2.50	1.60	77.8
290	383	18	7	258	422	3	0.27	2.50	3.70	2.50	85.3
290	383	18	7	258	422	3	0.27	2.50	3.70	2.50	82.4
303	379	18	7	258	422	3	0.27	2.50	3.70	2.50	85
305	379	18	7	258	422	3	0.27	2.50	3.70	2.50	84.1
292	369	22.3	8	258	422	3	0.35	1.90	2.90	1.80	102
292	369	22.3	8	258	422	3	0.35	1.90	2.90	1.80	102
292	369			258	422	3	0.35	1.90	2.90	1.80	102
330	390	22.3	12	297	439	4	0.32	2.09	3.11	2.04	146
330	390	22.3	12	297	439	4	0.32	2.09	3.11	2.04	145
299	356			272	382	3	0.29	2.30	3.50	2.40	59.4
294	328	12	6	272	348	2	0.18	3.80	5.60	3.60	25.9
298	356			271	390	3					21.6
											59.4
287	331	12	6	271	348	2	0.18	3.80	5.60	3.60	24.4
287	331	12	6	271	348	2	0.18	3.80	5.60	3.60	24.2
306	357	16.7	7	278	382	3	0.23	2.90	4.40	2.80	49.8
306	357			278	382	3	0.23	2.90	4.40	2.80	49.5
306	357	16.7	7	278	382	3	0.23	2.90	4.40	2.80	46.9
306	357			278	382	3	0.23	2.90	4.40	2.80	46.6
300	347	11.1	6	278	382	3	0.33	2.00	3.00	2.00	66.7
300	347	11.1	6	278	382	3	0.33	2.00	3.00	2.00	67.2
300	347	11.1	6	278	382	3	0.33	2.00	3.00	2.00	64.9

Spherical Roller Bearing(CA)

ZWZ

d 260~280 mm



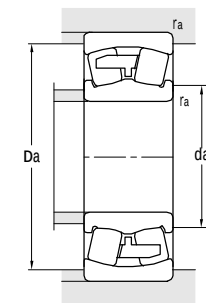
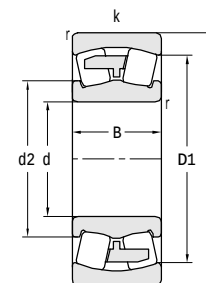
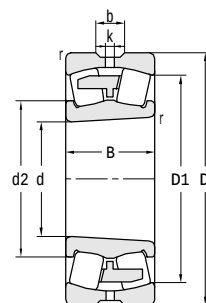
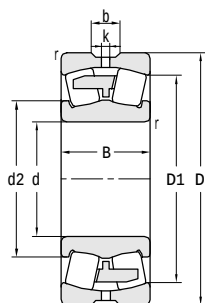
Principal dimensions				Basic load ratings		Limit speed ratings		Designations
d	D	B	r _{min}	C _r	C _{0r}	Grease	Oil	
mm				kN		r/min		
260	400	140	4	1930	3500	700	900	24052CAK30/W33
	440	144	4	2420	3700	800	1000	23152
	440	144	4	2420	3700	800	1000	23152K
	440	144	4	2420	3750	800	1000	23152K/HG2YA6
	440	144	4	2420	3750	800	1000	23152K/HG2YAB
	440	144	4	2420	3700	800	1000	23152F3
	440	144	4	2420	3750	800	1000	23152CA
	440	144	4	2420	3750	800	1000	23152CAK
	440	144	4	2420	3750	800	1000	23152CAK/HG2C9YA6/W33
	440	144	4	2420	3750	800	1000	23152CAK30
	440	180	4	2850	4560	430	530	24152CA
	440	180	4	2850	4560	430	530	24152CA/HAW36
	440	180	4	2850	4560	430	530	24152CAK30/W33
	440	180	4	2850	4560	430	530	24152CAF3/W33
	440	180	4	2420	4380	430	530	SX-24152
	480	130	5	2520	3600	850	1100	22252CA
	480	130	5	2520	3600	850	1100	22252CAK
	480	174	5	2800	4600	630	800	23252/HG2W33T
	480	174	5	3090	4750	630	800	23252CA/W33
	480	174	5	3090	4750	630	800	23252CA/W33X
	480	174	5	3090	4750	630	800	23252CA/W33XB
	480	174	5	3090	4750	630	800	23252CAF3/W33
	480	174	5	3090	4750	630	800	23252CAK/W33
	480	174	5	3090	4750	630	800	23252CAKL/W33
	540	165	6	3370	4700	630	800	22352
	540	165	6	3370	4700	630	800	22352K
	540	165	6	3370	4700	630	800	22352F3
	540	165	6	3370	4750	630	800	22352CA/W33
	540	165	6	3370	4750	630	800	22352CAK/W33
	540	165	6	3370	4750	630	800	22352CAF3
	540	165	6	3370	4750	630	800	22352CAKF3/W33
280	350	52	2	435	1230	1200	1500	23856CA
	380	75	2.1	805	1850	1000	1400	23956CA
	380	75	2.1	805	1850	1000	1400	23956CAQ1/W33
	420	106	4	1640	2810	850	1100	23056
								23056/W33

Other dimensions				Contact surface and chamfer dimensions			Calculation coefficient				Weight
d2	D1	b	k	da	Da	ra	e	Y1	Y2	Y0	
mm				mm			mm				kg
300	347	11.1	6	278	382	3	0.33	2.00	3.00	2.00	65.2
318	372	16.7	12	278	422	3					92.1
318	372			278	422	3					90.2
310	380			278	422	3					94.4
310	380			278	422	3					94.4
318	372			278	422	3					91.6
310	379	16.7	9	278	422	3	0.31	2.20	3.30	2.20	88.9
310	379	16.7	9	278	422	3	0.31	2.20	3.30	2.20	88.7
310	379	16.7	9	278	422	3	0.31	2.20	3.30	2.20	88.7
310	379	16.7	9	278	422	3	0.31	2.20	3.30	2.20	86.7
312	366	13.9	8	278	422	3	0.39	1.73	2.58	1.69	115
312	366	13.9	8	278	422	3	0.39	1.73	2.58	1.69	114
312	366	13.9	8	278	422	3	0.39	1.73	2.58	1.69	112
312	366	13.9	8	278	422	3	0.39	1.73	2.58	1.69	113
312	366	13.9	8	278	422	3	0.39	1.73	2.58	1.69	114
330	414	22.3	12	282	458	4	0.27	2.51	3.74	2.45	106
330	414			282	458	4	0.27	2.51	3.74	2.45	105
320	404	27	16	282	458	4					138
320	404	22.3	8	282	458	4	0.35	1.90	2.90	1.80	141
320	404	22.3	12	282	458	4	0.35	1.90	2.90	1.80	141
320	404	25	15	282	458	4	0.35	1.90	2.90	1.80	141
320	404	22.3	8	282	458	4	0.35	1.90	2.90	1.80	138
320	404	22.3	8	282	458	4	0.35	1.90	2.90	1.80	139
320	404	22.3	8	282	458	4	0.35	1.90	2.90	1.80	137
349	446	24	10	288	512	5					191
349	446	24	10	288	512	5					190
349	446			288	512	5					190
349	455	22.3	8	288	512	5	0.31	2.20	3.30	2.20	186
349	455	22.3	8	288	512	5	0.31	2.20	3.30	2.20	185
349	455	22.3	8	288	512	5	0.31	2.20	3.30	2.20	184
349	455	22.3	8	288	512	5	0.31	2.20	3.30	2.20	183
305	328	8.3	4.5	278	348	2	0.13	5.36	7.98	5.24	11.4
316	346	12	6	292	368	2	0.18	3.80	5.66	3.72	25.3
316	346	12	6	292	368	2	0.18	3.80	5.66	3.72	25.7
326	371	16.7	7	296	400	3					54.9

Spherical Roller Bearing(CA)

ZWZ

d 280~300 mm



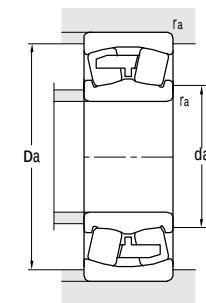
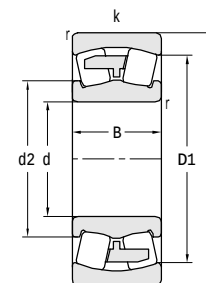
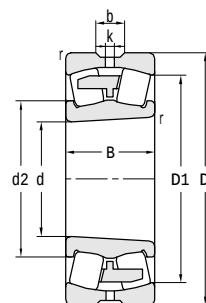
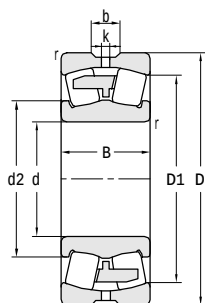
Principal dimensions				Basic load ratings		Limit speed ratings		Designations	
d	D	B	r _{min}	C _r	C _{0r}	Grease	Oil		
mm				kN		r/min			
280	420	106	4	1640	2810	850	1100	23056K	23056K/W33
	420	106	4	1640	2810	850	1100	23056X1K	
	420	106	4	1640	2810	850	1100	23056F3	23056F3/W33
	420	106	4	1640	2810	850	1100	23056KF3	
	420	106	4	1640	2850	850	1100	23056CA	23056CA/W33
	420	106	4	1640	2850	850	1100	23056CAK	23056CAK/W33
	420	140	4	2050	3700	670	850	24056CA/W33	
	420	140	4	2050	3700	670	850	24056CA/W33X	24056CA/W33YA2
	420	140	4	2050	3700	670	850	24056CAF3	24056CAF3/W33
	420	140	4	2050	3700	670	850	24056CAK30F3	24056CAK30F3/W33
	460	146	5	2520	4200	800	1000	23156/W33	
	460	146	5	2520	4150	750	950	23156CA	23156CA/W33
	460	146	5	2520	4150	750	950	23156CAF3	
	460	146	5	2520	4150	750	950	23156CAKF3	
	460	146	5	2520	4150	750	950	23156CAK	23156CAK/W33
	460	130	5	2520	4150	750	950	23156X2CA	
	460	180	5	2900	4950	400	500	24156CA	24156CA/W33
	460	180	5	2900	4950	400	500	24156CAK30/W33	
	460	180	5	2900	4950	400	500	24156CA/HCW33	
	500	130	5	2570	3600	800	1000	22256CA	22256CA/W33
	500	130	5	2570	3600	800	1000	22256CAK	22256CAK/W33
	500	130	5	2570	3600	800	1000	22256CAF3	
	500	130	5	2130	3300	850	1100	22256/W33	
	500	130	5	2130	3300	850	1100	22256K/W33	
	500	176	5	3080	5100	600	750	23256CA	23256CA/W33
	500	176	5	3080	5100	600	750	23256CAF3	23256CAF3/W33
	500	176	5	3080	5100	600	750	23256CAK/W33	
	500	176	5	3080	5100	600	750	23256CAKF3/W33	
	580	175	6	3200	5600	600	750	22356	22356/W33
	580	175	6	3800	5700	600	750	22356CA	22356CA/W33
	580	175	6	3800	5700	600	750	22356CAK/W33	
	580	175	6	3800	5700	600	750	22356CAF3/W33	
300	380	60	3	640	1580	950	1400	23860CA/W33	
	380	60	3	640	1580	950	1400	23860CAK/W33	

Other dimensions				Contact surface and chamfer dimensions			Calculation coefficient				Weight
d2	D1	b	k	da	Da	ra	e	Y1	Y2	Y0	
mm				mm			mm				kg
326	371	16.7	7	296	400	3					53.4
326	371			296	400	3					57.6
326	371	16.7	7	296	400	3					54.6
326	371			296	400	3					53.1
323	377	16.7	7	298	402	3	0.23	2.91	4.40	2.84	56.8
323	377	16.7	7	298	402	3	0.23	2.91	4.40	2.84	56.6
317	366	11.1	6	298	402	3	0.31	2.20	3.30	2.20	66.8
317	366	11.1	6	298	402	3	0.31	2.20	3.30	2.20	68.6
317	366	11.1	6	298	402	3	0.31	2.20	3.30	2.20	66.8
317	366	11.1	6	298	402	3	0.31	2.20	3.30	2.20	67.2
337	400	16.7	8	302	438	4	0.32	2.09	3.11	2.04	99.1
333	400	16.7	8	302	438	4	0.30	2.30	3.40	2.20	104
333	400			302	438	4	0.30	2.30	3.40	2.20	103
333	400			302	438	4	0.30	2.30	3.40	2.20	100
333	400	16.7	8	302	438	4	0.30	2.30	3.40	2.20	96.9
332	404			302	438	4	0.27	2.50	3.72	2.45	87
327	393	13.9	8	302	438	4	0.40	1.70	2.50	1.60	118
327	393	13.9	8	302	438	4	0.40	1.70	2.50	1.60	115
327	388	13.9	8	302	438	4	0.40	1.70	2.50	1.60	118
347	435	22.3	8	302	478	4	0.26	2.60	3.90	2.50	118
347	435	22.3	8	302	478	4	0.26	2.60	3.90	2.50	117
347	435			302	478	4	0.26	2.60	3.90	2.50	117
348	435	22.3	8	302	478	4	0.27	2.50	3.70	2.50	113
348	435	22.3	8	302	478	4	0.27	2.50	3.70	2.50	109
340	424	22.3	8	302	478	4	0.35	1.90	2.90	1.80	147
340	424	22.3	8	302	478	4	0.35	1.90	2.90	1.80	146
340	424	22.3	8	302	478	4	0.35	1.90	2.90	1.80	153
340	424	22.3	8	302	478	4	0.35	1.90	2.90	1.80	142
372	485	22.3	8	314	552	5	0.32	2.09	3.11	2.04	230
364	485	22.3	8	308	552	5	0.30	2.30	3.40	2.20	221
364	485	22.3	8	308	552	5	0.30	2.30	3.40	2.20	217
364	485	22.3	8	308	552	5	0.30	2.30	3.40	2.20	221
328	357	12	6	310	368	2	0.13	5.20	7.70	5.00	16.8
	328	357	12	310	368	2	0.13	5.20	7.70	5.00	17.6

Spherical Roller Bearing(CA)

ZWZ

d 300 mm



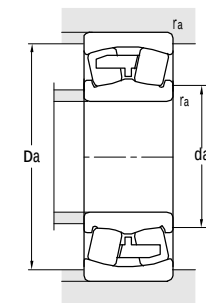
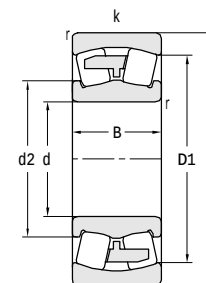
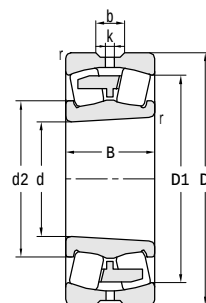
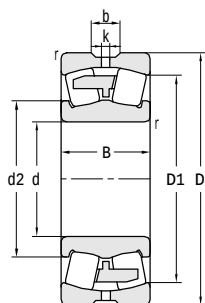
Principal dimensions				Basic load ratings		Limit speed ratings		Designations
d	D	B	r _{min}	C _r	C _{0r}	Grease	Oil	
mm				kN		r/min		
300	420	90	3	1140	2500	950	1300	23960CA/W33
	420	90	3	1140	2500	950	1300	23960CAK
	420	118	3	1580	3600	950	1300	24960CA/W33
	440	105	4	2010	3450	870	1100	23060X3CA/W33
	460	118	4	1400	3200	800	1000	23060/W33
	460	118	4	1400	3200	800	1000	23060F3
	460	118	4	1400	3200	800	1000	23060KF3
	460	118	4	1400	3200	800	1000	23060KQ1/W33
	460	118	4	2010	3450	800	1000	23060CA
	460	118	4	2010	3450	800	1000	23060CAK
	460	118	4	2010	3450	800	1000	23060CAK/C9W33
	460	118	4	2010	3450	800	1000	23060CAF3/W33
	460	160	4	2570	4750	600	750	24060CA
	500	160	5	3040	4850	670	850	23160CA
	500	160	5	3040	4850	670	850	23160CAF1
	500	160	5	3040	4850	670	850	23160CA/HCEC9W33
	500	160	5	3040	4850	670	850	23160CAF3
	500	160	5	3040	4850	670	850	23160CAKF3
	500	160	5	3040	4850	670	850	23160CAK
	500	200	5	3560	5990	600	750	24160CA
	500	200	5	3560	5990	600	750	24160CAK30/W33
	540	140	5	2990	4300	750	950	22260CA
	540	140	5	2990	4300	750	950	22260CAF3
	540	140	5	2990	4300	750	950	22260CAKF3
	540	140	5	2990	4040	800	1000	22260/W33
	540	140	5	2990	4040	800	1000	22260K/W33
	540	192	5	3700	5560	530	670	23260CAF1
	540	192	5	3700	5560	530	670	23260CAKF1/W33
	540	192	5	3150	5300	530	670	23260/YA3
	540	192	5	3700	5950	530	670	23260CA
	540	192	5	3700	5950	530	670	23260CAK/W33
	540	192	5	3700	5950	530	670	23260CA/W33T
	540	192	5	3700	5950	530	670	23260CAF1
	540	192	5	3700	5950	530	670	23260CAF3/W33
	540	192	5	3700	5950	530	670	23260CAK/W33
	620	185	7.5	3950	6000			22360CA

Other dimensions				Contact surface and chamfer dimensions			Calculation coefficient				Weight
d2	D1	b	k	da	Da	ra	e	Y1	Y2	Y0	
mm				mm			mm				kg
339	382	15	6	314	406	2.5	0.19	3.60	5.30	3.60	40.1
339	382			314	406	2.5	0.19	3.60	5.30	3.60	39
339	376	18	7								52.8
343	396	16.7	9	302	438	3	0.21	3.16	4.71	3.09	54.7
351	406	16.7	7	322	438	3					70.4
351	406	16.7	7	322	438	3					69.8
351	406	16.7	7	322	438	3					69.5
351	409	16.7	7	318	442	3					70.3
351	409	16.7	7	318	442	3	0.23	2.90	4.40	2.80	75.8
351	409	16.7	7	318	442	3	0.23	2.90	4.40	2.80	73.6
351	409	16.7	7	318	442	3	0.23	2.90	4.40	2.80	73.4
351	409	16.7	7	318	442	3	0.23	2.90	4.40	2.80	74.9
342	399	13.9	7	318	442	3	0.32	2.09	3.11	2.04	99
356	433	16.7	8	322	478	4	0.30	2.30	3.40	2.20	127
356	433	16.7	9	322	478	4	0.30	2.30	3.40	2.20	143
356	433	16.7	9	322	478	4	0.30	2.30	3.40	2.20	126
356	433	16.7	8	322	478	4	0.30	2.30	3.40	2.20	127
356	433	16.7		322	478	4	0.30	2.30	3.40	2.20	123
356	433	16.7	9	322	478	4	0.30	2.30	3.40	2.20	123
356	420	13.9	6	322	478	4	0.39	1.75	2.61	1.71	160
356	420	13.9	6	322	478	4	0.39	1.75	2.61	1.71	157
374	467			322	518	4	0.26	2.60	3.90	2.50	138
374	467	22.3	8	322	518	4	0.26	2.60	3.90	2.50	136
374	467			322	518	4	0.26	2.60	3.90	2.50	136
374	467	22.3	8	322	518	4	0.27	2.50	3.70	2.50	140
374	467	22.3	8	322	518	4	0.27	2.50	3.70	2.50	137
373	455	22	10	322	518	4	0.35	1.90	2.90	1.80	192
373	455	22	10	322	518	4	0.35	1.90	2.90	1.80	190
373	455			322	518	4	0.35	1.90	2.90	1.80	194
373	455	22	10	322	518	4	0.35	1.90	2.90	1.80	190
373	455	22	10	322	518	4					187
373	455	22	10	322	518	4					193
373	455	22	10	322	518	4					194
373	455	22	10	322	518	4					192
373	455	22	10	322	518	4	0.35	1.90	2.90	1.80	189
396	523			335	586	6					271

Spherical Roller Bearing(CA)

ZWZ

d 318~340 mm



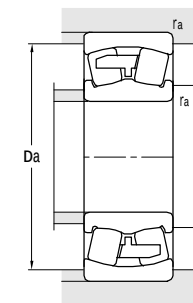
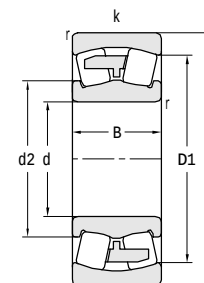
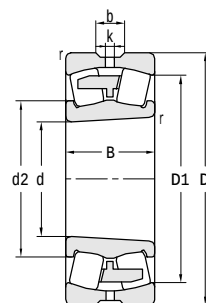
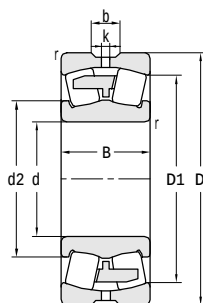
Principal dimensions				Basic load ratings		Limit speed ratings		Designations
d	D	B	r _{min}	C _r	C _{0r}	Grease	Oil	
mm				kN		r/min		
318	620	224	6	4350	7600			206/318/C9
320	400	60	2.1	670	1620	920	1280	23864CA/W33
	400	60	2.1	670	1620	920	1280	23864CAK/W33
	440	90	3	1360	2650	900	1200	23964CA 23964CA/W33
	440	90	3	1360	2650	900	1200	23964CAK/W33
	480	121	4	2130	3610	800	1000	23064 23064/W33
	480	121	4	2130	3610	800	1000	23064K
	480	121	4	2130	3610	800	1000	23064F3
	480	121	4	2130	3610	800	1000	23064/YA2
	480	121	4	2130	3900	800	1000	23064CA 23064CA/W33
	480	121	4	2130	3900	800	1000	23064CAK 23064CAK/W33
	480	121	4	2130	3900	800	1000	23064CAF3/W33
	480	160	4	2700	5100	560	700	24064CA 24064CA/W33
	480	160	4	2700	5100	560	700	24064CAF3 24064CAF3/W33
	480	160	4	2700	5100	560	700	24064CAK30/W33
	540	176	5	2990	5350	630	800	23164K/W33
	540	176	5	3560	5700	630	800	23164CA 23164CA/W33
	540	176	5	3560	5700	630	800	23164CAK 23164CAK/W33
	540	210	5	4040	6750	340	430	24164CA/W33 24164CA/W33T
	540	210	5	4040	6750	340	430	24164CAK30/W33
	580	150	5	3420	4660	670	850	22264CA 22264CA/W33
	580	150	5	3420	4660	670	850	22264CAK
	580	150	5	3420	4660	700	900	22264/W33
	580	150	5	3420	4660	700	900	22264K/W33
	580	208	5	4180	6370	500	630	23264 23264/W33
	580	208	5	4180	6820	500	630	23264CA 23264CA/W33
	580	208	5	4180	6820	500	630	23264CA/YA1W33
	580	208	5	4180	6820	500	630	23264CAF3 23264CAF3/W33
	580	208	5	4180	6820	500	630	23264CAK30/W33
	580	208	5	4180	6820	500	630	23264CAK/W33
	670	200	7.5	4530	6820	450	600	22364CAK/W33
340	460	90	3	1390	2660	900	1200	23968CA/W33
	460	90	3	1390	2700	900	1200	23968CAK/W33
	460	90	3	1390	2660	900	1200	23968CAF3/W33

Other dimensions				Contact surface and chamfer dimensions			Calculation coefficient				Weight
d2	D1	b	k	da	Da	ra	e	Y1	Y2	Y0	
mm				mm			mm				kg
424	524			348	578	5					320
346	376	13.9	6	332	388	2	0.12	5.60	8.40	5.60	20.5
346	376	13.9	6	332	388	2	0.12	5.60	8.40	5.60	20.3
360	402	15	6	338	426	2.5	0.18	3.80	5.60	3.60	41.8
360	405	15	6	360	427	2.5	0.18	3.80	5.60	3.60	40.4
368	431	22	8	338	462	3					78.5
368	431										76.1
368	431			338	462	3					77.5
368	431			338	462	3					78.9
368	431	16.7	8	338	462	3	0.23	2.90	4.40	2.80	84.8
368	431	16.7	8	338	462	3	0.23	2.90	4.40	2.80	84.3
368	431	16.7	8	338	462	3	0.23	2.90	4.40	2.80	84.7
368	421	22	8	338	462	3	0.32	2.09	3.11	2.04	106
368	421	22	8	338	462	3	0.32	2.09	3.11	2.04	106
368	421	22	8	338	462	3	0.32	2.09	3.11	2.04	103
387	465	22.3	12	342	518	4					165
389	465	22.3	8	342	518	4	0.31	2.20	3.30	2.20	200
389	465	22.3	8	342	518	4	0.31	2.20	3.30	2.20	195
364	455	17.7	9.5	342	518	4	0.40	1.70	2.50	1.60	206
364	455	17.7	9.5	342	518	4	0.40	1.70	2.50	1.60	203
400	502	22.3	8	342	558	4	0.26	2.60	3.90	2.50	175
400	502			342	558	4	0.26	2.60	3.90	2.50	172
400	502	22.3	8	342	558	4	0.27	2.50	3.70	2.50	177
400	502	22.3	8	342	558	4	0.27	2.50	3.70	2.50	173
400	490			342	558	4	0.35	1.90	2.90	1.80	247
400	490	22.3	10	342	558	4	0.35	1.90	2.90	1.80	250
400	490	22.3	10	342	558	4	0.35	1.90	2.90	1.80	248
400	490	22.3	10	342	558	4	0.35	1.90	2.90	1.80	252
400	490	22.3	10	342	558	4	0.35	1.90	2.90	1.80	240
400	490	22.3	10	342	558	4	0.35	1.9	2.9	1.8	241
430	566	22.3	12	355	635	6					344
378	423	15	6	354	446	2.5	0.17	4.00	5.90	4.00	46
378	423	15	6	354	446	2.5	0.17	4.00	5.90	4.00	45.9
378	423	15	6	354	446	2.5	0.17	4.00	5.90	4.00	57.3

Spherical Roller Bearing(CA)

ZWZ

d 340~360 mm



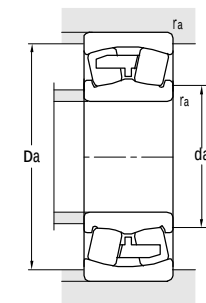
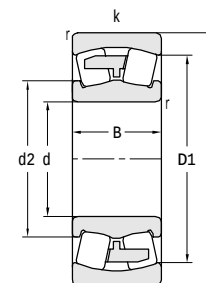
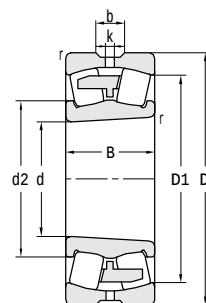
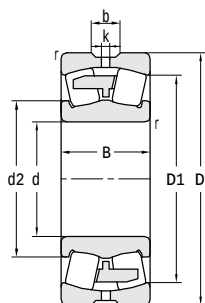
Principal dimensions				Basic load ratings		Limit speed ratings		Designations	
d	D	B	r _{min}	C _r	C _{0r}	Grease	Oil		
mm				kN		r/min			
340	520	133	5	2570	4400	700	900	23068CA	23068CA/W33
	520	133	5	2570	4400	700	900	23068CA/W33YA1	
	520	133	5	2570	4400	700	900	23068CAK	
	520	133	5	2570	4400	700	900	23068CAF3	23068CAF3/W33
	520	133	5	2570	4400	700	900	23068CAKF3	23068CAKF3/W33
	520	133	5	2570	4400	700	900	23068CAK/W33	
	520	180	5	3280	5890	530	670	24068CA/W33	24068CA/C9W33
	520	180	5	3280	5890	530	670	24068CAK/W33	
	520	180	5	3280	5890	530	670	24068CAF1/HA	24068CAF1/W33
	520	180	5	3280	5890	530	670	24068CK30/W33	
	520	180	5	3280	5890	530	670	24068CAF3	24068CAF3/W33
	520	180	5	3280	5890	530	670	24068CAK30F1	24068CAK30F1/W33
	520	180	5	3280	5890	530	670	24068CAK30F3	24068CAK30F3/W33
	580	190	5	4040	6460	600	750	23168CA	23168CA/W33
	580	190	5	4040	6460	600	750	23168CAK/W33	
	580	190	5	4040	6460	600	750	23168CAF3/W33	
	580	190	5	4040	6460	600	750	23168CAKF3/W33	
	580	243	5	5040	8220	320	400	24168CA/W33	
	580	243	5	5040	8220	320	400	24168CAK30/W33	
	580	243	5	5040	8220	320	400	24168CAK30F3/W33	
	620	224	6	4350	7600	430	530	23268	
	620	224	6	5000	8150	500	700	23268CA	23268CA/W33
	620	224	6	5000	8150	500	700	23268CAK	23268CAK/W33
360	480	90	3	1390	3000	850	1100	23972CA	23972CA/W33
	480	90	3	1330	2610	850	1100	23972CAK/W33	
	540	134	5	2610	4800	670	850	23072CA	23072CA/W33
	540	134	5	2610	4800	670	850	23072CAK	
	540	134	5	2610	4800	670	850	23072CAF3	23072CAF1
	540	134	5	2610	4800	670	850	23072CAKF3/W33	
	540	134	5	2610	4800	670	850	23072CAF3/HAW33	23072CAF3/W33
	540	180	5	3370	6220	600	750	24072CA	24072CA/W33
	540	180	5	3370	6220	600	750	24072CAK/W33	
	540	180	5	3370	6220	600	750	24072CAK30	
	600	192	5	3400	6200	560	700	23172K/W33	
	600	192	5	4080	6850	560	700	23172CA	23172CA/W33

Other dimensions				Contact surface and chamfer dimensions			Calculation coefficient				Weight
d2	D1	b	k	da	Da	ra	e	Y1	Y2	Y0	
mm				mm			mm				kg
400	464	22.3	8	362	498	4	0.24	2.80	4.20	2.80	115
400	464	22.3	8	362	498	4	0.24	2.80	4.20	2.80	114
400	464	22.3	8	362	498	4	0.24	2.80	4.20	2.80	112
400	464	22.3	8	362	498	4	0.24	2.80	4.20	2.80	114
400	464	22.3	8	362	498	4	0.24	2.80	4.20	2.80	111
400	464	22.3	8	362	498	4	0.24	2.80	4.20	2.80	111
394	451	16.7	8	362	498	4	0.33	2.00	3.00	2.00	137
394	451	16.7	8	362	498	4	0.33	2.00	3.00	2.00	132
394	451	16.7	8	362	498	4	0.33	2.00	3.00	2.00	136
377	453	16.7	9	358	502	4	0.33	2.00	3.00	2.00	137
394	451	16.7	8	362	498	4	0.33	2.00	3.00	2.00	136
394	451	16.7	8	362	498	4	0.33	2.00	3.00	2.00	134
394	451	16.7	8	362	498	4	0.33	2.00	3.00	2.00	134
412	497	22.3	8	362	558	4	0.31	2.20	3.30	2.20	211
412	497	22.3	8	362	558	4	0.31	2.20	3.30	2.20	208
412	497	22.3	8	362	558	4	0.31	2.20	3.30	2.20	210
412	497	22.3	8	362	558	4	0.31	2.20	3.30	2.20	206
408	486	22.3	10	362	558	4	0.4	1.7	2.5	1.6	261
408	486	22.3	10	362	558	4	0.40	1.70	2.50	1.60	256
408	486	22.3	10	362	558	4	0.40	1.70	2.50	1.60	258
424	524			368	592	5	0.35	1.9	2.9	1.8	300
426	528			368	592	5	0.35	1.90	2.90	1.80	299
426	528	22.3	12	368	592	5	0.35	1.90	2.90	1.80	290
403	441	11.1	6	374	466	2.5	0.16	4.20	6.30	4.00	45.9
403	441	11.1	6	374	466	2.5	0.16	4.20	6.30	4.00	46.4
419	486	22.3	8	382	518	4	0.23	2.90	4.40	2.80	126
419	486			382	518	4	0.23	2.90	4.40	2.80	125
419	486			382	518	4	0.23	2.90	4.40	2.80	125
419	486	22.3	8	382	518	4	0.23	2.90	4.40	2.80	124
419	486	22.3	8	382	518	4	0.23	2.90	4.40	2.80	125
398	474	16.7	8	382	518	4	0.31	2.2	3.3	2.2	147
398	474	16.7	8	382	518	4	0.31	2.20	3.30	2.20	143
398	474			382	518	4	0.31	2.2	3.3	2.2	148
434	518	22.3	12	382	578	4	0.30	2.30	3.40	2.20	218
434	518	22.3	12	382	578	4	0.30	2.30	3.40	2.20	224

Spherical Roller Bearing(CA)

ZWZ

d 360~380 mm



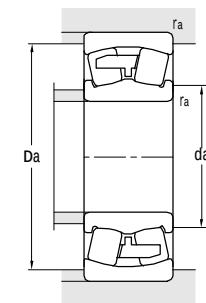
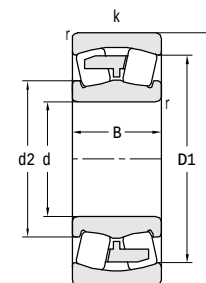
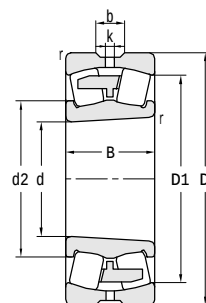
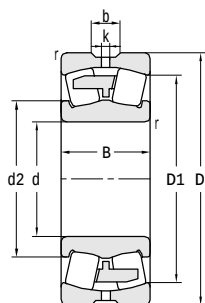
Principal dimensions				Basic load ratings		Limit speed ratings		Designations
d	D	B	r _{min}	C _r	C _{0r}	Grease	Oil	
mm				kN		r/min		
360	600	192	5	4080	6850	560	700	23172CAK/W33
	600	192	5	4080	6850	560	700	23172CAKF1/W33
	600	243	5	5320	8840	300	380	24172CA 24172CA/W33
	600	243	5	5320	8840	300	380	24172CA/W36
	600	243	5	5320	8840	300	380	24172CAF1 24172CAF1/W33
	600	243	5	5320	8840	300	380	24172CAK30/W33
	600	243	5	5320	8840	300	380	24172CAK30F1/W33 24172CAK30F3/W33
	600	243	5	5320	8840	300	380	24172CAQ1/W36
	600	243	5	5600	8400	300	380	SX-24172
	650	170	6	4200	6200	600	800	22272CA/W33
	650	232	6	5130	7880	400	500	23272 23272/W33
	650	232	6	5300	9050	500	700	23272CA 23272CA/W33
	650	232	6	5300	9050	500	700	23272CAK 23272CAK/W33
	650	232	6	5300	9050	500	700	23272CAKF3/W33
	750	224	7.5	5650	8600	400	500	22372CA 22372CA/W33
	750	224	7.5	5650	8600	400	500	22372CAK 22372CAK/W33
	750	224	7.5	5650	8600	400	500	22372CAF3
	750	224	7.5	5650	8600	400	500	22372CAKF3
380	520	106	4	1860	3900	800	1000	23976CA/W33
	520	106	4	1860	3900	800	1000	23976CAF1/W33 23976CAF3/W33
	560	135	5	2750	5000	630	800	23076CA 23076CA/W33
	560	135	5	2750	5000	630	800	23076CAK/W33
	560	135	5	2750	5000	630	800	23076CAF1/W33 23076CAF3/W33
	560	135	5	2750	5000	630	800	23076CAKF3 23076CAKF3/W33
	560	180	5	3420	6550	480	600	24076CA/W33
	560	180	5	3420	6550	480	600	24076CAF3 24076CAF3/W33
	560	180	5	3420	6550	480	600	24076CAK30F3/W33
	620	194	5	4180	7300	400	500	23176/W33
	620	194	5	4300	7750	500	900	23176CA 23176CA/W33
	620	194	5	4300	7750	500	900	23176CA/W33T
	620	194	5	4300	7750	500	900	23176CAK 23176CAK/W33
	620	194	5	4300	7750	500	900	23176CAK30/W33
	620	194	5	4300	7750	500	900	23176CAF3/HAW33 23176CAF3/W33
	620	194	5	4300	7750	500	900	23176CAKF3 23176CAKF3/W33
	620	194	5	4300	7750	500	900	23176CAK/W33

Other dimensions				Contact surface and chamfer dimensions			Calculation coefficient				Weight
d2	D1	b	k	da	Da	ra	e	Y1	Y2	Y0	
mm				mm			mm				kg
434	518	22.3	12	382	578	4	0.30	2.30	3.40	2.20	223
434	518	22.3	12	382	578	4	0.30	2.30	3.40	2.20	222
430	511	20	12	382	578	4	0.37	1.80	2.70	1.80	270
430	511	20	8	382	578	4	0.37	1.80	2.70	1.80	270
430	511	20	12	382	578	4	0.37	1.80	2.70	1.80	269
430	511	20	12	382	578	4	0.37	1.80	2.70	1.80	267
430	511	20	12	382	578	4	0.37	1.80	2.70	1.80	268
430	511	20	12	382	578	4	0.37	1.80	2.70	1.80	270
430	511	20	8	382	578	4	0.37	1.80	2.70	1.80	271
449	563	22.3	8	388	622	5	0.26	2.60	3.87	2.54	248
443	547			388	622	5	0.35	1.90	2.90	1.80	341
443	547	22.3	10	388	622	5	0.35	1.90	2.90	1.80	332
443	547			388	622	5	0.35	1.90	2.90	1.80	329
443	547	22.3	10	388	622	5	0.35	1.90	2.90	1.80	327
471	631	22.3	12	392	720	6	0.31	2.21	3.29	2.16	469
471	631	22.3	12	392	720	6	0.31	2.21	3.29	2.16	443
471	631			392	720	6	0.31	2.21	3.29	2.16	466
471	631			392	720	6	0.31	2.21	3.29	2.16	441
426	476	15	10	398	502	3	0.17	4.00	5.90	4.00	69.9
426	476	15	10	398	502	3	0.17	4.00	5.90	4.00	69.5
441	505	22.3	8	402	538	4	0.22	3.00	4.60	2.80	125
441	505	22.3	8	402	538	4	0.22	3.00	4.60	2.80	122
441	505	22.3	8	402	538	4	0.22	3.00	4.60	2.80	129
441	505	22.3	8	402	538	4	0.22	3.00	4.60	2.80	125
435	494	22	10	402	538	4	0.3	2.3	3.4	2.2	151
435	494	22.3	8	402	538	4	0.30	2.30	3.40	2.20	150
435	494	22	10	402	538	4	0.30	2.30	3.40	2.20	153
457	540	22	8	402	598	4	0.30	2.30	3.40	2.20	237
457	540	22	8	402	598	4	0.3	2.3	3.4	2.2	249
457	540	27	16	402	598	4	0.30	2.30	3.40	2.20	248
457	540	22	8	402	598	4	0.30	2.30	3.40	2.20	242
457	540	22	8	402	598	4	0.30	2.30	3.40	2.20	241
457	540	22	8	402	598	4	0.30	2.30	3.40	2.20	248
457	540	22	8	402	598	4	0.30	2.30	3.40	2.20	241
457	540	22	8	402	598	4	0.30	2.30	3.40	2.20	243

Spherical Roller Bearing(CA)

ZWZ

d 380~420 mm



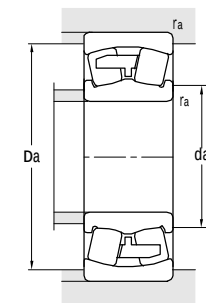
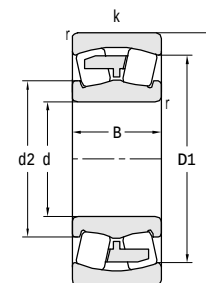
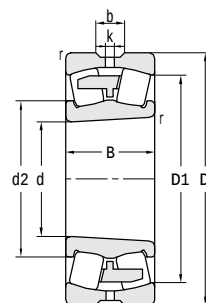
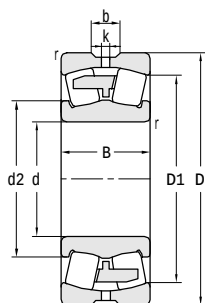
Principal dimensions				Basic load ratings		Limit speed ratings		Designations	
d	D	B	r _{min}	C _r	C _{0r}	Grease	Oil		
mm				kN		r/min			
380	620	243	5	5420	9310	300	380	24176CA/C9	24176CA/W33
	620	243	5	5420	9310	300	380	24176CAK30/W33	
	680	240	6	5750	9300	400	650	23276CA/W33	
	680	240	6	5750	9300	400	650	23276CAKF3/W33	23176CAK30/W33
	780	230	7.5	6000	9300	350	500	22376CAF3	22376CAF3/W33
400	540	106	4	1900	4000	750	950	23980CA/W33	
	540	106	4	1900	4000	750	950	23980CAK/W33	
	540	106	4	1900	4000	750	950	23980CAF1/W33	23980CAF3/W33
	540	100	4	1900	4000	750	950	23980X2CAF3/W33	23980X2CAF3/W33YA1
	590	142	5	3090	5500	630	800	23080X3CA	23080X3CA/W33
	600	148	5	3090	5500	600	750	23080CA	23080CA/P5W33
	600	148	5	3090	5500	600	750	23080CAK/W33	
	600	148	5	3090	5500	600	750	23080CAF3	23080CAF3/W33
	600	148	5	3090	5500	600	750	23080CAKF3	23080CAKF3/W33
	600	200	5	4090	7800	450	560	24080CA/W33	
	600	200	5	4090	7800	450	560	24080CAF3	24080CAF3/W33
	600	200	5	4090	7800	450	560	24080CAK30/W33	
	650	200	6	4160	7860	380	480	23180/W33	
	650	200	6	4550	8200	500	900	23180CA	23180CA/W33
	650	200	6	4550	8200	500	900	23180CAF3	23180CAF3/W33
	650	200	6	4550	8200	500	900	23180CAKF3/W33	23180CAK/W33
	650	200	6	4550	8200	500	900	23180CAHCRW33	
	670	216	6	4200	8540	380	480	23180X3CA/W33	
	650	250	6	5890	10070	320	400	24180CA	24180CA/W33
	650	250	6	5890	10070	320	400	24180CAF3	24180CAF3/W33
	650	250	6	5890	10070	320	400	24180CAK30/W33	
	650	250	6	5890	10070	320	400	24180CAHG2W33	
	720	256	6	6450	11000	400	600	23280CA	23280CA/W33
	720	256	6	6450	11000	400	600	23280CAF3/W33	23280CAF3
	720	256	6	6450	11000	400	600	23280CAKF3/W33	
	820	243	7.5	7400	10300	400	700	22380CA	22380CA/W33
	820	243	7.5	7400	10300	400	700	22380CAHCW33	22380CA/W33
420	520	75	2.1	950	2630	750	950	23884CAK	23884CAK/W33
	560	106	4	1950	4050	700	900	23984ACA/W33	

Other dimensions				Contact surface and chamfer dimensions			Calculation coefficient				Weight
d2	D1	b	k	da	Da	ra	e	Y1	Y2	Y0	
mm				mm			mm				kg
457	540	16.7	9	402	598	4	0.30	2.30	3.40	2.20	296
457	540	16.7	9	402	598	4	0.30	2.30	3.40	2.20	290
471	581	22.3	12	406	654	5	0.35	1.90	2.90	1.80	389
468	574	22.3	10	408	652	5	0.35	1.90	2.90	1.80	386
504	660			415	740	6					518
445	497	15	10	418	522	3	0.17	4.00	5.90	4.00	72.9
445	497	15	10	418	522	3	0.17	4.00	5.90	4.00	71.3
445	497	15	10	418	522	3	0.17	4.00	5.90	4.00	72.4
445	498	13.9	7.5	418	522	3	0.16	4.20	6.30	4.00	67.8
461	532	22.3	12	422	578	4	0.21	3.14	4.68	3.07	133
460	538			422	578	4	0.23	2.90	4.40	2.80	147
460	538	22	12	422	578	4	0.23	2.90	4.40	2.80	141
460	538	22	12	422	578	4	0.23	2.90	4.40	2.80	146
460	538	22	12	422	578	4	0.23	2.90	4.40	2.80	142
458	524	22	12	422	578	4	0.30	2.30	3.40	2.20	203
458	524	22	12	422	578	4	0.30	2.30	3.40	2.20	202
458	524	22	12	422	578	4	0.3	2.3	3.4	2.2	202
475	568	22.3	8	428	622	5					210
480	568	22.3	8	428	622	5	0.28	2.40	3.60	2.50	273
480	568	22.3	8	428	622	5	0.28	2.40	3.60	2.50	271
480	568	22.3	8	428	622	5	0.28	2.40	3.60	2.50	264
480	568	22.3	8	428	622	5	0.28	2.40	3.60	2.50	272
480	579	22.3	8	428	622	5	0.28	2.40	3.60	2.50	293
476	563	22.3	8	428	622	5	0.36	1.87	2.79	1.83	326
476	563	22.3	8	428	622	5	0.36	1.87	2.79	1.83	323
476	563	22.3	8	428	622	5	0.36	1.87	2.79	1.83	320
476	563	22.3	8	428	622	5	0.36	1.87	2.79	1.83	325
499	606	22	10	428	692	5	0.35	1.90	2.90	1.80	468
499	606	22	10	428	692	5	0.35	1.90	2.90	1.80	465
499	606	22	10	428	692	5	0.35	1.90	2.90	1.80	452
520	694	22.3	12	442	790	6	0.31	2.21	3.29	2.16	623
520	694	22.3	12	442	790	6	0.31	2.21	3.29	2.16	623
454	490	13.9	5	430	504	2	0.12	5.60	8.40	5.60	34.6
464	517	16.7	9	435	545	3	0.16	4.20	6.30	4.00	72.4

Spherical Roller Bearing(CA)

ZWZ

d 420~460 mm



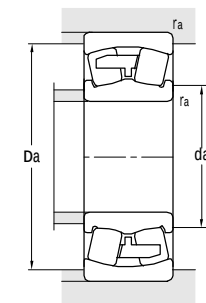
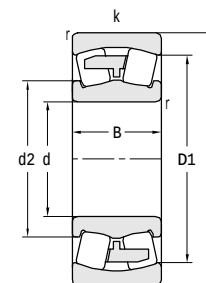
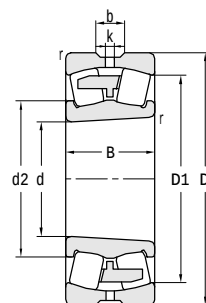
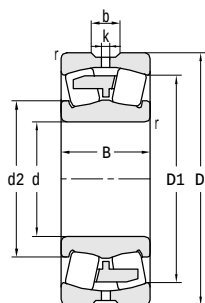
Principal dimensions				Basic load ratings		Limit speed ratings		Designations
d	D	B	r _{min}	C _r	C _{0r}	Grease	Oil	
mm				kN		r/min		
420	560	106	4	1950	3950	700	900	23984CA/W33
	620	150	5	3300	6400	500	1000	23084CA
	620	150	5	3300	6400	500	1000	23084CAK/W33
	620	150	5	3300	6400	500	1000	23084CAF3
	620	150	5	3300	6400	500	1000	23084CAKF3
	620	200	5	4180	8450	380	480	24084CA/W33
	620	200	5	4180	8450	380	480	24084CAF3/W33
	620	200	5	4180	8450	380	480	24084CAK30F3/W33X
	700	224	6	5320	9200	360	450	23184CA/W33
	700	224	6	5320	9200	360	450	23184CAK
	700	224	6	5320	9200	360	450	23184CAF3
	700	280	6	7000	11950	300	380	24184CA/W33
	700	280	6	7000	11950	300	380	24184CAK30/W33
	700	280	6	7000	11950	300	380	24184CAK30F3/W33
	760	272	7.5	7250	11900	400	550	23284CA/W33
	760	272	7.5	7250	11900	400	550	23284CAK
	760	272	7.5	7250	11900	400	550	23284CAF3/C9W33
440	600	118	4	2413	4850	450	560	23988CA/W33
	600	118	4	2413	4850	450	560	23988CAF3/W33
	650	157	6	3550	6500	500	900	23088CA
	650	157	6	3550	6500	500	900	23088CAK/W33
	650	157	6	3550	6500	500	900	23088CAF3
	650	157	6	3550	6500	500	900	23088CAKF3
	650	212	6	4550	9100	360	450	24088CA/W33
	650	212	6	4550	9100	360	450	24088CAK30/W33
	650	212	6	4550	9100	360	450	24088CAK30F3/W33
	720	226	6	5900	10000	400	750	23188CA
	720	226	6	5900	10000	400	750	23188CAK/W33
	720	280	6	7120	12500	300	380	24188CA/W33
	720	280	6	7120	12500	300	380	24188CAK30/W33
	790	280	7.5	7700	12800	350	500	23288CA/W33
	790	280	7.5	7700	12800	350	500	23288CAK/W33
460	580	118	3	1700	4655	450	560	24892CA
	580	118	3	1700	4655	450	560	24892CAK30/W33

Other dimensions				Contact surface and chamfer dimensions			Calculation coefficient				Weight
d2	D1	b	k	da	Da	ra	e	Y1	Y2	Y0	
mm				mm			mm				kg
464	517	16.7	9	435	545	3	0.16	4.20	6.30	4.00	73.6
484	558			442	598	4	0.22	3.00	4.60	2.80	149
484	558			442	598	4	0.22	3.00	4.60	2.80	143
484	558	22	8	442	598	4	0.22	3.00	4.60	2.80	148
484	558	22	8	442	598	4	0.22	3.00	4.60	2.80	143
479	548	22.3	12	442	598	4	0.30	2.30	3.40	2.20	202
479	548	22.3	12	442	598	4	0.30	2.30	3.40	2.20	201
479	548	22.3	12	442	598	4	0.30	2.30	3.40	2.20	197
505	605	22.3	12	448	672	5	0.30	2.30	3.40	2.20	353
505	605	22.3	12	448	672	5	0.30	2.30	3.40	2.20	352
505	605	22.3	12	448	672	5	0.30	2.30	3.40	2.20	353
497	599	22.3	12	448	674	5	0.38	1.80	2.60	1.70	436
495	596	22.3	12	448	674	5	0.38	1.80	2.60	1.70	428
495	596	22.3	12	448	674	5	0.38	1.80	2.60	1.70	436
525	643	22	12	456	724	6	0.35	1.90	2.90	1.80	550
525	643	22	12	456	724	6	0.35	1.90	2.90	1.80	551
525	643	22	12	456	724	6	0.35	1.90	2.90	1.80	546
492	553	16.7	8	462	578	3	0.17	4.00	5.90	4.00	101
492	553	16.7	8	462	578	3	0.17	4.00	5.90	4.00	101
507	585	22.3	8	468	622	5	0.22	3.00	4.60	2.80	186
507	585	22.3	8	468	622	5	0.22	3.00	4.60	2.80	179
507	585	22.3	8	468	622	5	0.22	3.00	4.60	2.80	185
507	585			468	622	5	0.22	3.00	4.60	2.80	178
502	569	22.3	12	468	626	5	0.30	2.30	3.40	2.20	251
502	569	22.3	12	468	626	5	0.30	2.30	3.40	2.20	251
502	569	22.3	12	468	626	5	0.30	2.30	3.40	2.20	245
522	626			468	692	5	0.30	2.30	3.40	2.20	375
522	626	22.3	12	468	692	5	0.30	2.30	3.40	2.20	372
517	618	22.3	12	468	692	5	0.37	1.80	2.70	1.80	436
517	618	22.3	12	468	692	5	0.37	1.80	2.70	1.80	455
548	675	22.3	12	472	578	6	0.35	1.90	2.90	1.80	611
548	675	22.3	12	472	578	6	0.35	1.90	2.90	1.80	578
504	540	16.7	7	472	566	2.5	0.17	4.00	5.90	4.00	77
504	540	16.7	7	472	566	2.5	0.17	4.00	5.90	4.00	82

Spherical Roller Bearing(CA)

ZWZ

d 460~480 mm



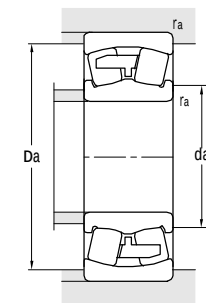
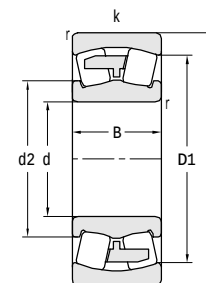
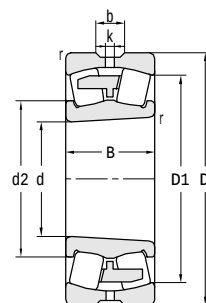
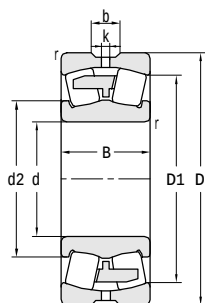
Principal dimensions				Basic load ratings		Limit speed ratings		Designations
d	D	B	r _{min}	C _r	C _{0r}	Grease	Oil	
mm				kN		r/min		
460	620	118	4	2400	5000	500	900	23992CA/W33
	620	110	4	2370	4750	430	530	23992X2CA/W33AY1
	650	120	4	430	5150	420	510	23992X3CA
	680	163	6	3800	7140	500	850	23092CA
	680	163	6	3800	7140	500	850	23092CAF3
	680	163	6	3800	7140	500	850	23092CAF3
	680	163	6	3800	7140	500	850	23092CAF3
	680	163	6	3800	7140	500	850	23092CAF3
	680	218	6	4900	10200	340	430	23092CAK
	680	218	6	4900	10200	340	430	24092CA/W33
	680	218	6	4900	10200	340	430	24092CAF3/W33
	680	218	6	4900	10200	340	430	24092CA/HCRW33
	760	240	7.5	6300	11100	350	700	23192CA
	760	240	7.5	6300	11100	350	700	23192CAF3
	760	240	7.5	6300	11100	350	700	23192CAF3
	760	240	7.5	6300	11100	350	700	23192CAF3
	760	300	7.5	7850	14400	160	200	24192CA/W33
	760	300	7.5	7850	14400	160	200	24192CAF3/W33
	760	300	7.5	7850	14400	160	200	24192CAF3/W33
	830	296	7.5	8400	13600	350	500	23292CAF3/W33
479	790	258	7.5	5300	12100	300	380	231/479X2CAF1/W33XYB2
480	600	90	3	1350	3985	500	900	23896CA
	650	128	5	2800	5725	500	900	23996CA/W33
	650	128	5	2800	5725	500	900	23996CAF1/W33
	650	128	5	2800	5725	500	900	23996CAF1
	650	128	5	2800	5725	500	900	23996CAF1
	700	165	6	3800	6900	450	850	23096CA/W33
	700	165	6	3800	6900	450	850	23096CA/W33
	700	165	6	3260	7530	400	500	23096F3
	700	218	6	5000	10400	340	430	24096CA/W33
	700	218	6	5000	10400	340	430	24096CAK30/W33
	790	248	7.5	6850	12000	350	700	23196CA/W33
	790	248	7.5	6850	12000	350	700	23196CAF1/W33X
	790	248	7.5	6850	12000	350	700	23196CAF1/W33X
	790	248	7.5	6850	12000	350	700	23196CAF1/W33X
	790	248	7.5	6850	12000	350	700	23196CAF1/W33X
	790	308	7.5	8550	14900	240	320	24196CAF3/W33

Other dimensions				Contact surface and chamfer dimensions			Calculation coefficient				Weight
d2	D1	b	k	da	Da	ra	e	Y1	Y2	Y0	
mm				mm			mm				kg
511	572	16.7	9	475	605	3	0.16	4.20	6.30	4.00	105
511	574	16.7	9	475	605	3	0.16	4.20	6.30	4.00	96.8
520	592	16.7	9	480	615	3	0.17	4.00	5.90	4.00	132
531	613	23.5	12	488	652	5	0.22	3.00	4.60	2.80	229
531	613	23.5	12	488	652	5	0.22	3.00	4.60	2.80	227
531	613	23.5	12	488	652	5	0.22	3.00	4.60	2.80	226
531	613	23.5	12	488	652	5	0.22	3.00	4.60	2.80	228
528	600	24	12	488	652	5	0.29	2.35	3.50	2.30	
528	600	24	12	488	652	5	0.29	2.35	3.50	2.30	304
528	600	24	12	488	652	5	0.29	2.35	3.50	2.30	308
557	660	22	8	496	724	6	0.30	2.30	3.40	2.20	442
557	660	22	8	496	724	6	0.30	2.30	3.40	2.20	437
557	660	22	8	496	724	6	0.30	2.30	3.40	2.20	440
557	660	22	8	496	724	6	0.30	2.30	3.40	2.20	435
540	639	22.3	8	496	724	6	0.37	1.80	2.70	1.80	461
540	639	22.3	8	496	724	6	0.37	1.80	2.70	1.80	460
540	639	22.3	8	496	724	6	0.37	1.80	2.70	1.80	459
566	698	22.3	10	496	794	6	0.35	1.90	2.90	1.80	698
578	683	22	12	516	754	6	0.31	2.20	3.30	2.20	497
523	563	13.9	7.5	500	580	2.5	0.13	5.36	7.98	5.24	60.4
532	596	16.7	10	502	628	4	0.18	3.80	5.60	3.60	126
532	596	16.7	10	502	628	4	0.18	3.80	5.60	3.60	125
532	596	16.7	10	504	628	4	0.18	3.80	5.60	3.60	121
532	596	16.7	10	504	628	4	0.18	3.80	5.60	3.60	121
552	634	22.3	12	504	678	5	0.21	3.20	4.80	3.20	215
552	634	22.3	12	504	678	5	0.21	3.20	4.80	3.20	203
553	625	22.3	12	504	678	5	0.23	2.90	4.40	2.80	247
542	618	22.3	12	504	678	5	0.28	2.40	3.60	2.50	285
542	618	22.3	12	504	678	5	0.28	2.40	3.60	2.50	290
578	687	22	12	516	754	6	0.30	2.30	3.40	2.20	520
578	687	22	12	516	754	6	0.30	2.30	3.40	2.20	516
578	687	22	12	516	754	6	0.30	2.30	3.40	2.20	485
578	687	22	12	516	754	6	0.30	2.30	3.40	2.20	489
568	673	22.3	8	513	759	6	0.37	1.80	2.70	1.80	582

Spherical Roller Bearing(CA)

ZWZ

d 480~530 mm



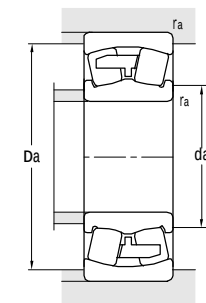
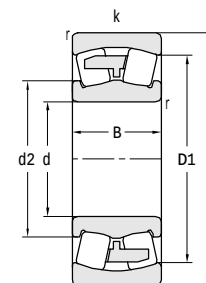
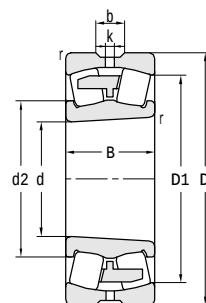
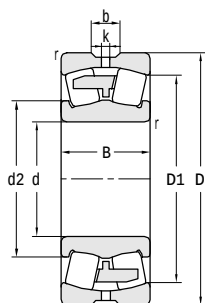
Principal dimensions				Basic load ratings		Limit speed ratings		Designations
d	D	B	r _{min}	C _r	C _{0r}	Grease	Oil	
mm				kN		r/min		
480	790	308	7.5	8550	14900	240	320	24196CAK30/W33
	790	308	7.5	8550	14900	240	320	24196CAK30F3/W33
	870	310	7.5	6750	15200	280	360	23296/W33
	870	310	7.5	6750	15200	280	360	23296F3
	870	310	7.5	9200	15200	300	450	23296CA/W33
	870	310	7.5	9200	15200	300	450	23296CAK 23296CAK/W33
	870	310	7.5	9200	15200	300	450	23296CAF3 23296CAF3/W33
	870	310	7.5	9200	15200	300	450	23296CAKF3 23296CAKF3/W33
500	620	90	3	1400	3800	420	520	238/500CA/W33 238/500CA/W20
	620	90	3	1400	3800	420	520	238/500CAK/W33
	670	128	5	2800	5900	450	900	239/500CA/W33
	670	128	5	2800	5750	450	900	239/500CAF1 239/500CAF1/W33
	670	128	5	2800	5750	450	900	239/500CAF3/W33
	670	128	5	2800	5750	450	900	239/500CAF1/W33YA1 239/500CAF3/W33YA1
	670	128	5	2800	5750	450	900	239/500CAK/W33
	720	167	6	4100	7700	450	800	230/500CAF3 230/500CAF3/W33
	720	167	6	4100	7900	450	800	230/500CA/W33
	720	167	6	4100	7700	450	800	230/500CAKF3 230/500CAKF3/W33
	720	167	6	4100	7700	450	800	230/500CAKF3/W33X
	720	167	6	4100	7700	450	800	230/500CAF3/HAW33X
	720	167	6	4100	7700	450	800	230/500CAKF3/HAW33X
	720	218	6	5200	10450	420	520	240/500CA/W33 240/500CA
	720	218	6	5200	10450	420	520	240/500CAK30/W33
	720	218	6	5200	10450	420	520	240/500CAF3/W33
	830	264	7.5	7550	13800	350	650	231/500CA/W33 231/500CAK/W33
	830	325	7.5	9300	16100	300	380	241/500CAK30/W33
	830	325	7.5	9300	16100	300	380	241/500CA/W33
	920	336	7.5	10500	17200	300	450	232/500CAF3/W33
	920	336	7.5	10500	18600	300	450	232/500CAK/W33 232/500CA/W33
530	650	90	3	1800	5350	400	500	238/530CAF1/W33
	650	118	3	1800	5350	380	480	248/530CA/W33 248/530CA/W20
	650	118	3	1800	5350	380	480	248/530CAK30/W33
	710	136	5	3100	6700	400	800	239/530CAF3/W33YA1
	710	136	5	3100	7100	400	800	239/530CA/W33

Other dimensions				Contact surface and chamfer dimensions			Calculation coefficient				Weight
d2	D1	b	k	da	Da	ra	e	Y1	Y2	Y0	
mm				mm			mm				kg
568	673	22.3	8	513	759	6	0.37	1.80	2.70	1.80	584
568	673	22.3	8	513	759	6	0.37	1.80	2.70	1.80	581
581	736	22.3	12	516	834	6	0.35	1.90	2.90	1.80	910
581	736			516	834	6	0.35	1.90	2.90	1.80	909
581	732	22.3	12	516	834	6	0.35	1.90	2.90	1.80	853
581	732			516	834	6	0.35	1.90	2.90	1.80	859
581	732	22.3	12	516	834	6	0.35	1.90	2.90	1.80	858
581	732	22.3	12	516	834	6	0.35	1.90	2.90	1.80	848
542	586	16.7	8	512	606	2.5	0.12	5.60	8.40	5.60	62
542	586	16.7	8	512	606	2.5	0.12	5.60	8.40	5.60	54
555	619	22.3	12	522	648	4	0.17	4.00	5.90	4.00	120
555	619	22.3	12	522	648	4	0.17	4.00	5.90	4.00	120
555	619	22.3	12	522	648	4	0.17	4.00	5.90	4.00	119
555	619	22.3	12	522	648	4	0.17	4.00	5.90	4.00	120
555	619	22.3	12	522	648	4	0.17	4.00	5.90	4.00	116
568	653	22.3	12	528	692	5	0.21	3.20	4.80	3.20	229
568	653	22.3	12	528	692	5	0.21	3.20	4.80	3.20	230
568	653	22.3	12	528	692	5	0.21	3.20	4.80	3.20	228
568	653	22.3	8	528	692	5	0.21	3.20	4.80	3.20	227
568	653	22.3	8	528	692	5	0.21	3.20	4.80	3.20	228
568	653	22.3	8	528	692	5	0.21	3.20	4.80	3.20	227
565	645	22.3	12	523	698	5	0.26	2.60	3.90	2.50	297
565	645	22.3	12	523	698	5	0.26	2.60	3.90	2.50	298
565	645	22.3	12	523	698	5	0.26	2.60	3.90	2.50	295
603	726	22.3	12	536	794	6	0.30	2.30	3.40	2.20	588
588	712	22.3	12	531	798	6	0.37	1.80	2.70	1.80	712
588	712	22.3	12	531	798	6	0.37	1.80	2.70	1.80	719
620	774	22.3	12	536	884	6	0.35	1.90	2.90	1.80	977
620	774	22.3	12	536	884	6	0.35	1.90	2.90	1.80	982
575	613	22.4	12	552	652	2.5	0.12	5.60	8.40	5.60	64.2
573	612	22	8	543	636	2.5	0.15	4.50	6.70	4.50	91
573	612	22	8	543	636	2.5	0.15	4.50	6.70	4.50	86
586	658	22.3	12	548	690	4	0.17	4.00	5.90	4.00	154
586	658	22.3	12	548	690	4	0.17	4.00	5.90	4.00	155

Spherical Roller Bearing(CA)

ZWZ

d 530~580 mm



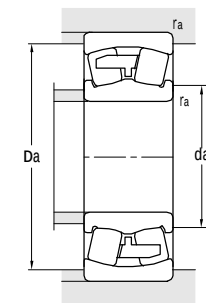
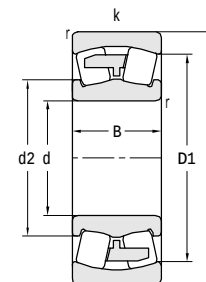
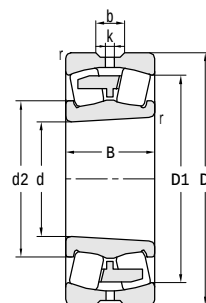
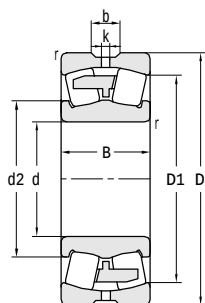
Principal dimensions				Basic load ratings		Limit speed ratings		Designations
d	D	B	r _{min}	C _r	C _{0r}	Grease	Oil	
mm				kN		r/min		
530	710	136	5	3100	7100	400	800	239/530CAK/W33
	710	136	5	3100	7100	400	800	239/530CA/HCRW33
	780	185	6	5000	10200	400	700	230/530CA 230/530CA/W33X
	780	185	6	5000	10200	400	700	230/530CAF3 230/530CAF3/W33X
	780	185	6	5000	10200	400	700	230/530CAK/W33 230/530CAK
	780	185	6	5000	10200	400	700	230/530CA/HCRW33
	780	250	6	6350	12700	280	360	240/530CA/W33
	780	250	6	6350	12700	280	360	240/530CA/HCRW33
	780	250	6	6350	13200	280	360	240/530CA/HCRW33
	870	272	7.5	8050	15300	300	600	231/530CA/W33
	870	272	7.5	8050	13300	300	600	231/530CAK/W33
	870	335	7.5	10000	18300	190	280	241/530CA/W33
	870	335	7.5	10000	18000	190	280	241/530CAK30/W33
	980	335	9.5	11000	20300	250	400	232/530CAK30/W33
560	750	140	5	3400	7200	400	800	239/560CAF1 239/560CAF3
	750	140	5	3400	7200	400	800	239/560CAF3/W33 239/560CA/W33
	820	195	6	5500	10500	400	800	230/560CA 230/560CAF3
	820	195	6	5500	10500	400	800	230/560CAF3/W33 230/560CA/W33
	820	195	6	5500	10500	400	800	230/560CAF3/W33
	820	195	6	5500	10500	400	800	230/560CAK/W33 230/560CAK30/W33
	820	258	6	6950	13800	220	300	240/560CA/W33 240/560X3CA/C3W33-QL
	820	258	6	6950	13800	220	300	240/560CAK30/W33
	920	280	7.5	9050	15900	300	550	231/560CA/W33 231/560CAF3/W33
	920	280	7.5	9050	15700	300	550	231/560CAK/W33 231/560CAK30/W33
	920	280	7.5	9050	15700	300	550	231/560CA/HCRW33
	920	355	7.5	9500	20100	150	400	241/560CAF3/HCRW33
	920	355	7.5	11400	20500	120	160	241/560CAF3K30/W33 241/560CAF3K30/HCW33
	920	355	7.5	11400	20500	120	160	241/560CA/W33 241/560CA/HCW33
	920	355	7.5	11400	20500	120	160	241/560CAK30/W33 241/560CAK30/HCW33
	920	355	7.5	10000	20000	120	160	241/560K30/W33 241/560/W33YA3
	1030	365	9.5	11150	21000	250	400	232/560CA/W33
	1030	365	9.5	11150	21000	250	400	232/560CAK/W33
580	780	130	5	3050	6800	220	300	26/580CAK3/W33
	870	240	6	6400	1400	220	300	26/580CAK3/W33-1

Other dimensions				Contact surface and chamfer dimensions			Calculation coefficient				Weight
d2	D1	b	k	da	Da	ra	e	Y1	Y2	Y0	
mm				mm			mm				kg
586	658	22.3	12	548	690	4	0.17	4.00	5.90	4.00	150
586	658	22.3	12	548	690	4	0.17	4.00	5.90	4.00	155
614	703	24	12	558	752	5	0.22	3.00	4.60	2.80	339
614	703	24	12	558	752	5	0.22	3.00	4.60	2.80	335
614	703	24	12	558	752	5	0.22	3.00	4.60	2.80	329
614	703	24	12	558	752	5	0.22	3.00	4.60	2.80	338
605	691	22.3	12	553	758	5	0.29	2.30	3.50	2.40	416
605	691	22.3	12	553	758	5	0.29	2.30	3.50	2.40	416
605	691	24	12	553	758	5	0.29	2.30	3.50	2.40	420
635	762	22.3	12	560	837	6	0.30	2.30	3.40	2.20	665
635	762	22.3	12	560	837	6	0.30	2.30	3.40	2.20	640
622	748	22.3	12	560	837	6	0.37	1.80	2.80	1.80	813
622	748	22.3	12	560	837	6	0.37	1.80	2.80	1.80	825
656	818	22.3	12	565	932	8	0.36	1.87	2.79	1.83	1200
621	693			582	728	4	0.16	4.20	6.30	4.00	177
621	693	22.3	12	582	728	4	0.16	4.20	6.30	4.00	178
644	741			588	792	5	0.22	3.14	4.67	3.07	363
644	741	22.3	9	588	792	5	0.22	3.14	4.67	3.07	362
644	741	22.3	9	588	792	5	0.22	3.14	4.67	3.07	351
644	741	22.3	9	588	792	5	0.22	3.14	4.67	3.07	353
640	721	22.3	12	585	798	5	0.28	2.40	3.60	2.50	471
640	721	22.3	12	585	798	5	0.28	2.40	3.60	2.50	464
677	803	22.3	12	596	884	6	0.30	2.30	3.40	2.20	756
677	803	22.3	12	596	884	6	0.30	2.30	3.40	2.20	745
677	8.3	22.3	12	596	884	6	0.30	2.30	3.40	2.20	756
634	796	22.3	12	596	884	6	0.37	1.80	2.80	1.80	964
634	796	22.3	12	596	884	6	0.37	1.80	2.80	1.80	950
634	796	22.3	12	596	884	6	0.37	1.80	2.80	1.80	973
634	796	22.3	12	596	884	6	0.37	1.80	2.80	1.80	955
662	777	22.3	12	596	884	6	0.37	1.80	2.80	1.80	956
705	877	22.3	12	600	990	8	0.35	1.90	2.90	1.80	1380
705	877	22.3	12	600	990	8	0.35	1.90	2.90	1.80	1340
646	726	22.3	12	611	750	4					176
671	774	22.3	12	622	735	5					512

Spherical Roller Bearing(CA)

ZWZ

d 600~670 mm



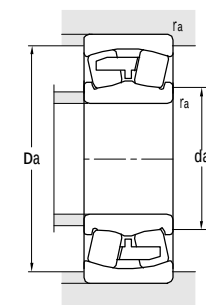
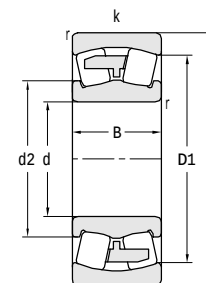
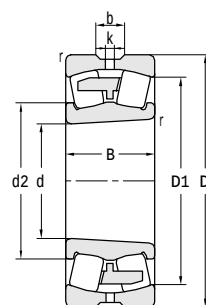
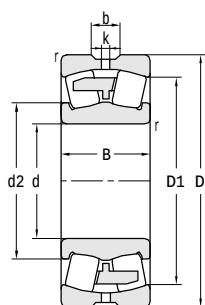
Principal dimensions				Basic load ratings		Limit speed ratings		Designations
d	D	B	r _{min}	C _r	C _{0r}	Grease	Oil	
mm				kN		r/min		
600	800	150	5	3750	8400	400	700	239/600CA 239/600CA/W33
	800	150	5	3750	8400	400	700	239/600CAK/W33
	800	200	5	4250	11200	320	400	249/600CAF1/W33 249/600CAF3/W33
	870	200	6	5900	11600	350	650	230/600CAF3 230/600CAF3/W33
	870	200	6	5900	11600	350	650	230/600CAK 230/600CAK/W33
	870	200	6	5900	11600	350	650	230/600CAKF3
	870	200	6	5900	11600	350	650	230/600CA/W33
	870	272	6	8100	16500	300	500	240/600CA/W33
	870	272	6	8100	16500	300	500	240/600CA/HCRW33
	870	272	6	8100	16500	300	500	240/600/W33
	980	300	7.5	10100	18800	300	500	231/600CAF3/W33
	980	375	7.5	10900	22400	300	500	241/600CA
	980	375	7.5	10900	22400	300	500	241/600CA/HCW33 241/600CA/HCRW33
	980	375	7.5	10900	22400	300	500	241/600CAK30/W33
	980	375	7.5	10900	22400	300	500	241/600CA/W33 241/600CAF3/W33X
	1090	388	9.5	13100	25000	250	350	232/600CAK/W33 232/600CAK/W33
628	920	212	7.5	5600	12800	260	340	230/628CAF3/W33
630	780	112	4	2200	6300	300	400	238/630CAF3/W33
	820	112	4	2200	6300	270	350	238/670CA/W33
	820	112	4	2200	6300	270	350	238/670CAK/W33
	820	150	4	3100	9600	270	350	248/670CA/W33
	850	212	7.5	4750	12200	240	330	249/630X2CAF3/W33
	850	165	6	4500	9750	300	600	239/630CA 239/630CAK/W33
	850	165	6	4500	9750	300	600	239/630CA/W33
	920	212	7.5	6500	12800	300	600	230/630CA/W33
	920	212	7.5	6500	12800	300	600	230/630CAF3 230/630CAF3/W33
	920	290	7.5	7350	17100	220	300	240/630/W33
	1030	315	7.5	10200	20200	200	500	231/630CA/W33
	1030	315	7.5	10200	20200	200	500	231/630CAK/W33
	1030	400	7.5	12000	25600	160	210	241/630CA/W33 241/630CAF3/W33
	1030	400	7.5	12000	25600	160	210	241/630CAF3/HBW33
	1030	400	7.5	12000	25600	160	210	241/630CAK30/W33
670	820	112	4	2410	6600	300	600	238/670CA/W33

Other dimensions				Contact surface and chamfer dimensions			Calculation coefficient				Weight
d2	D1	b	k	da	Da	ra	e	Y1	Y2	Y0	
mm				mm			mm				kg
668	742	22.3	12	622	778	4	0.17	4.00	5.90	4.00	220
668	742	22.3	12	622	778	4	0.17	4.00	5.90	4.00	213
666	728	22.3	12	622	760	4	0.22	3.00	4.60	2.80	287
685	787	22.3	9	628	842	5	0.22	3.00	4.60	2.80	442
685	787	22.3	9	628	842	5	0.22	3.00	4.60	2.80	420
685	787			628	842	5	0.22	3.00	4.60	2.80	430
685	787	22.3	9	628	842	5	0.22	3.00	4.60	2.80	431
682	770	22.3	12	628	850	5	0.30	2.30	3.40	2.80	551
682	770	22.3	12	628	850	5	0.30	2.30	3.40	2.80	551
680	770	22.3	12	628	850	5	0.30	2.30	3.40	2.20	550
717	855	22.3	12	660	996	6	0.29	2.30	3.50	2.40	894
709	827	22	8	636	944	6	0.36	1.90	2.82	1.85	1151
709	827	22	8	636	944	6	0.36	1.90	2.82	1.85	1150
709	827	22	8	636	944	6	0.36	1.90	2.82	1.85	1134
709	827	22	8	636	944	6	0.36	1.90	2.82	1.85	1151
750	920			700	1000	8	0.35	1.93	2.88	1.80	1557
721	831	22.3	9	666	884	6	0.21	3.20	4.80	3.20	481
682	738	16.7	9	645	765	3	0.12	5.60	8.40	5.60	123
722	778	16.7	9	686	805	3	0.11	6.10	9.10	6.30	136
722	778	16.7	9	686	805	3	0.11	6.10	9.10	6.30	128
716	771	16.7	9	686	805	3	0.16	4.20	6.30	4.00	315
703	774	22.3	12								355
705	786	22.3	12	658	822	5	0.17	4.00	5.90	4.00	292
705	786	22.3	12	658	822	5	0.17	4.00	5.90	4.00	290
721	831	22.3	9	666	884	6	0.21	3.20	4.80	3.20	470
721	831	22.3	9	666	884	6	0.21	3.20	4.80	3.20	471
722	815	22.3	10	666	884	6	0.30	2.30	3.40	2.20	661
756	918	22.3	12	668	996	6	0.30	2.30	3.40	2.20	1040
756	918	22.3	12	668	996	6	0.30	2.30	3.40	2.20	1020
736	885	22.3	12	662	996	6	0.37	1.80	2.70	1.80	1440
736	885	22.3	12	662	996	6	0.37	1.80	2.70	1.80	1330
736	885	22.3	12	662	996	6	0.37	1.80	2.70	1.80	1400
721	778	16.7	9	693	805	3					128

Spherical Roller Bearing(CA)

ZWZ

d 670~710 mm



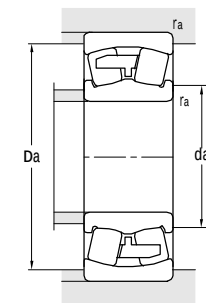
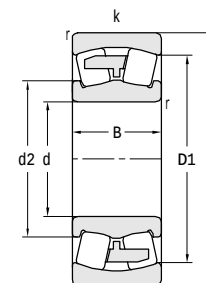
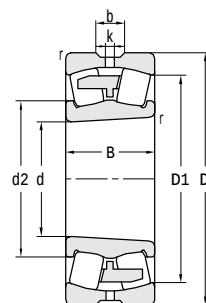
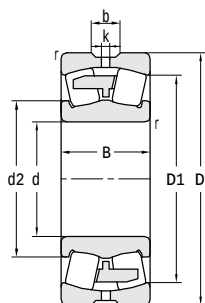
Principal dimensions				Basic load ratings		Limit speed ratings		Designations
d	D	B	r _{min}	C _r	C _{0r}	Grease	Oil	
mm				kN		r/min		
670	900	170	6	4850	10600	300	600	239/670CAF3/W33
	980	230	7.5	7400	14200	300	500	230/670CAF3
	980	230	7.5	7400	15000	300	500	230/670CAKF3/W33
	980	230	7.5	7400	14200	300	500	230/670CA/W33
	980	308	7.5	9700	19900	250	450	240/670CA
	1090	336	7.5	10800	22700	200	450	231/670CA/W33
	1090	336	7.5	10800	21200	200	450	231/670CAK/W33
	1090	412	7.5	14000	31500	150	200	241/670CA/W33
	1090	412	7.5	14000	31500	150	200	241/670CAK30/W33
	1220	438	12	15600	30500	200	350	232/670CA/W33
	1220	438	12	15600	30500	160	350	232/670CAK/W33
								232/670CA/HCW33
680	980	160	6	4900	9950	300	500	26/680CAF3/W33
690	950	230	7.5	5930	14270	250	450	206/690CA/W33-1
	990	180	6	5500	11800	220	310	206/690CAF3/W33
700	950	180	6	5000	11900	220	300	206/700CAF3/W33
710	870	118	4	2680	7500	260	350	238/710CAF3/W33
	950	180	6	5400	12000	300	550	239/710CAF1/W33
	950	180	6	5400	12000	250	310	239/710CA/W33
	950	243	6	6600	15100	250	450	249/710CAF1/W33X
	1030	200	7.5	6500	14000	300	500	220/710X2CAF3/C9W33
	1030	200	7.5	6500	14000	300	500	220/710X2CAF3/C9W33
	1030	236	7.5	8050	16200	300	500	230/710CAF3/W33
	1030	236	7.5	8050	16200	300	500	230/710CAKF3/W33
	1030	236	7.5	8050	15700	300	500	230/710/W33
	1030	315	7.5	8900	21600	180	250	240/710CA/W33
	1030	315	7.5	8900	21600	180	250	240/710CAK30/W33
	1150	345	9.8	11800	25200	200	400	231/710CA/W33
	1150	345	9.8	11800	25200	200	400	231/710CAK/W33
	1150	438	9.5	14400	30800	90	120	241/710CAF1/W33
	1150	438	9.5	14400	30800	90	120	241/710CA/W33
	1150	438	9.5	14400	30800	90	120	241/710CAK/W33
	1150	438	9.5	13200	31000	105	140	241/710K30/HCW33
								239/710CAF3/W33

Other dimensions				Contact surface and chamfer dimensions			Calculation coefficient				Weight
d2	D1	b	k	da	Da	ra	e	Y1	Y2	Y0	
mm				mm			mm				kg
743	831	22.3	12	692	876	5	0.17	4.00	5.90	4.00	321
760	885	22.3	12	706	944	6	0.22	3.00	4.60	3.20	601
760	885	22.3	12	706	944	6	0.22	3.00	4.60	3.20	596
760	885	22.3	12	706	944	6	0.22	3.00	4.60	3.20	604
760	866	22.3	12	700	952	6	0.28	2.40	3.60	2.50	807
801	958	22.3	12	700	1056	6	0.30	2.30	3.40	2.20	1256
801	958	22.3	12	700	1056	6	0.30	2.30	3.40	2.20	1240
786	934	22.3	12	705	1056	6	0.36	1.87	2.79	1.83	1530
786	934	22.3	12	705	1056	6	0.36	1.87	2.79	1.83	1507
832	1027	22.3	12	718	1170	10	0.35	1.90	2.90	1.80	2320
832	1027	22.3	12	718	1170	10	0.35	1.90	2.90	1.80	2250
774	906	22.3	12	708	950	5					406
773	868		12	725	915	6					489
780	907	22.3	12	705	975	5	0.16				461
780	877	13.3	12	715	935	5	0.16				378
761	824	22.3	12	725	855	3	0.11	6.10	9.10	6.30	156
787	882	22.3	12	733	927	5	0.17	4.00	5.90	4.00	364
787	882	22.3	12	733	927	5	0.17	4.00	5.90	4.00	367
791	864	22.3	12	733	927	5	0.22	3.00	4.60	2.80	500
802	944	22.3	12	746	994	6					566
808	939	22.3	12								
814	939	22.3	12	746	994	6	0.21	3.20	4.80	3.20	669
814	939	22.3	12	746	994	6					649
814	939	22.3	12	746	994	6	0.21	3.20	4.80	3.20	580
806	918	22.3	12	738	1002	6	0.27	2.50	3.70	2.50	910
806	918	22.3	12	738	1002	6	0.27	2.50	3.70	2.50	893
851	1016	22.3	12	750	1110	8	0.28	2.40	3.60	2.50	1480
851	1016	22.3	12	750	1110	8	0.28	2.40	3.60	2.50	1430
838	982	22.3	12	754	1106	8	0.35	1.90	2.90	1.80	1791
838	982	22.3	12	754	1106	8	0.35	1.90	2.90	1.80	1801
838	982	22.3	12	754	1106	8	0.35	1.90	2.90	1.80	1761
836	974	23.5	12.5	754	1106	8	0.38	1.80	2.60	1.70	1800

Spherical Roller Bearing(CA)

ZWZ

d 710~800 mm



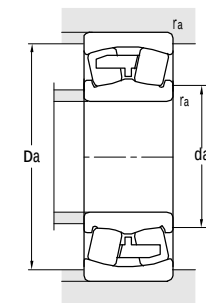
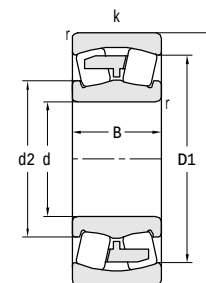
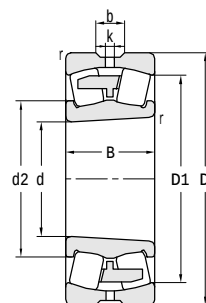
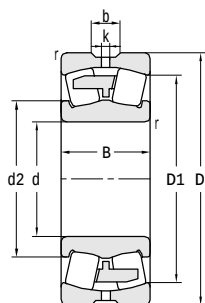
Principal dimensions				Basic load ratings		Limit speed ratings		Designations
d	D	B	r _{min}	C _r	C _{0r}	Grease	Oil	
mm				kN		r/min		
710	1150	438	9.5	14400	30800	160	210	241/710CAK30/W33 241/710CAK30 232/710CA/W33
	1280	450	12	17200	33400	160	300	
750	920	128	5	3100	9000	240	310	238/750CA/W33 238/750CAK/W33 248/750F1 248/750F3 248/750CA/W33 239/750CA/W33 239/750CAK/W33 249/750CA/W33 249/750CAK30/W33 230/750CA 230/750CAF1/W33XYA7 230/750CAF3 230/750CAF3/W33 240/750CA/W33 240/750CA 240/750CAK30/W33 231/750CA/W33 231/750CAK/W33 241/750CA/W33 241/750CAK30/W33 241/750CAK30F3/W33 241/750CAK30HAW33 232/750CAF1/W33 232/750CAF3/W33 232/750CAK/W33 232/750CAK30/W33
	920	128	5	2800	8100	240	310	
	920	170	5	3550	11000	220	300	
	920	170	5	3650	11300	220	300	
	1000	185	6	5800	12800	300	500	
	1000	185	6	5800	13700	300	500	
	1000	250	6	7400	18500	250	450	
	1000	250	6	7400	17100	250	450	
	1090	250	7.5	9350	18000	250	450	
	1090	250	7.5	9350	18000	250	450	
	1090	335	7.5	9730	25000	170	220	
	1090	335	7.5	9730	25000	170	220	
	1220	365	9.5	13350	28100	200	400	
	1220	365	9.5	13350	28100	200	400	
	1220	475	9.5	16400	37000	130	170	
	1220	475	9.5	16400	37000	130	170	
	1220	475	9.5	16400	37000			
	1220	475	9.5	16400	37000			
	1360	475	15	19000	37500	90	120	
	1360	475	15	19000	37500	90	120	
	1360	475	15	19000	37500			
800	980	180	5	3900	12200	250	500	248/800CA/W33 239/800CA/W33 239/800CAK/W33 249/800CA/W33 249/800CAK30/W33 249/800CAK30HAW33 249/800CAF3/W33 249/800CAF3/W33 230/800CAF3/W33 230/800CAF3/W33 240/800CAF3/W33 240/800CAF3/W33 240/800CAF3/W33 240/800CAF3/W33 240/800CAF3/W33 240/800CAF3/W33 240/800CAF3/W33 240/800CAF3/W33 240/800CAF3/W33 240/800CAF3/W33 240/800CAF3/W33
	1060	195	6	6200	14200	250	500	
	1060	195	6	6200	14200	250	500	
	1060	258	6	7750	18700	250	400	
	1060	258	6	7750	18700	250	400	
	1060	258	6	7750	19300	250	400	
	1150	258	7.5	9700	19400	250	450	
	1150	345	7.5	10500	27000	170	220	
	1150	345	7.5	10500	27000	170	220	
	1150	345	7.5	10500	27000	170	220	
	1150	400	7.5	12000	29900	150	200	
	1150	400	7.5	12000	29900	150	200	

Other dimensions				Contact surface and chamfer dimensions			Calculation coefficient				Weight
d2	D1	b	k	da	Da	ra	e	Y1	Y2	Y0	
mm				mm			mm				kg
876	1096	22.3	12	758	1232	8	0.35	1.90	2.90	1.80	1793
876	1096	22.3	12	758	1232	10	0.35	1.90	2.90	1.80	2571
806	873	22.3	12	770	902	4	0.11	6.10	9.10	6.30	186
806	873	22.3	12	770	902	4	0.11	6.10	9.10	6.30	180
808	864	22.3	12	770	902	4	0.16	4.20	6.30	4.00	249
808	864	22.3	12	770	902	4	0.16	4.20	6.30	4.00	253
831	930	22.3	12	772	976	5	0.16	4.20	6.30	4.00	414
831	930	22.3	12	772	976	5	0.16	4.20	6.30	4.00	401
830	916	22.3	12	773	976	5	0.22	3.00	4.60	2.80	566
830	916	22.3	12	773	976	5	0.22	3.00	4.60	2.80	558
847	987	22.3	12	786	1054	6	0.21	3.20	4.80	3.20	789
847	987	22.3	12	786	1054	6	0.21	3.20	4.80	3.20	786
852	970	22.3	12	779	1062	6	0.28	2.40	3.60	2.50	1070
852	970	22.3	12	779	1062	6	0.28	2.40	3.60	2.50	1070
898	1080	22.3	12	798	1180	8	0.28	2.40	3.60	2.50	1760
898	1080	22.3	12	798	1180	8	0.28	2.40	3.60	2.50	1760
872	1039	22.3	12	792	1175	8	0.35	1.90	2.90	1.80	2170
872	1039	22.3	12	792	1175	8	0.35	1.90	2.90	1.80	2135
872	1039	22.3	12	792	1175	8	0.35	1.90	2.90	1.80	2146
872	1039	22.3	12	792	1175	8	0.35	1.90	2.90	1.80	2160
930	1145	22.3	12	876	1536	14	0.36	1.87	2.79	1.83	3100
930	1145	22.3	12	876	1536	14	0.36	1.87	2.79	1.83	3012
930	1145	22.3	12	876	1536	14	0.36	1.87	2.79	1.83	2975
930	1145	22.3	12	876	1536	14	0.36	1.87	2.79	1.83	3028
860	920	22.3	12	820	962	4	0.15	4.50	6.70	4.50	330
883	985	22.3	12	823	1036	5	0.16	4.20	6.30	4.00	480
883	985	22.3	12	823	1036	5	0.16	4.20	6.30	4.00	460
880	971	22.3	12	823	1036	5	0.21	3.20	4.80	3.20	648
880	971	22.3	12	823	1036	5	0.21	3.20	4.80	3.20	635
880	971	22.3	12	823	1036	5	0.21	3.20	4.80	3.20	634
900	1029	22.3	12	836	1114	6	0.20	3.40	5.00	3.20	894
900	1029	22.3	12	836	1114	6	0.27	2.50	3.70	2.50	1092
900	1029	22.3	12	836	1114	6	0.27	2.50	3.70	2.50	1094
900	1029	22.3	12	836	1114	6	0.27	2.50	3.70	2.50	1330

Spherical Roller Bearing(CA)

ZWZ

d 800~900 mm



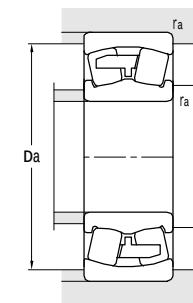
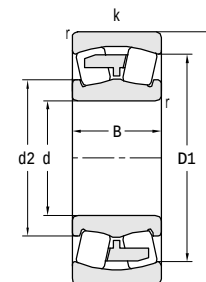
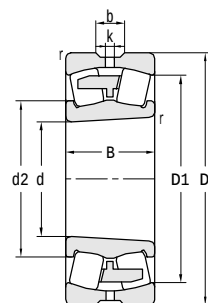
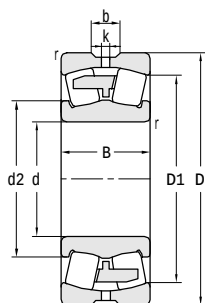
Principal dimensions				Basic load ratings		Limit speed ratings		Designations
d	D	B	r _{min}	C _r	C _{0r}	Grease	Oil	
mm				kN		r/min		
800	1280	375	9.5	14350	30550	150	350	231/800CA/W33
	1280	375	9.5	14350	30550	150	350	231/800CAK/W33
	1280	475	9.5	17500	38400	130	170	241/800CAF3/W33
	1280	475	9.5	17500	38400	130	170	241/800CAK30/W33
	1420	488	15	19900	41000	100	150	232/800CAK30/W33
	1420	488	15	19900	41000	100	150	232/800CAKF3/W33
850	1030	136	5	3400	10000	180	250	238/850CA/W33
	1030	136	5	3400	10000	180	250	238/850CAK/W33
	1120	200	6	5800	15100	250	450	239/850CA/W33
	1120	200	6	5800	15100	250	450	239/850CAK/W33
	1120	272	6	7920	22100	200	350	249/850CA/W33
	1120	272	6	7920	22100	200	350	249/850CAK30/W33
	1220	272	7.5	9050	22500	200	400	230/850CAF1
	1220	272	7.5	9700	22500	200	400	230/850CAKF1
	1220	272	7.5	9950	23000	200	400	230/850CAF3/W33
	1220	365	7.5	12000	29900	160	200	240/850CAF1/W33X
	1220	365	7.5	12000	29900	160	200	240/850CAF1/W33
	1220	365	7.5	12000	29900	160	200	240/850CAF3/W33X
	1220	365	7.5	12000	29900	160	200	240/850CAF3/W33
	1220	365	7.5	12000	29900	160	200	240/850CAF3/W33
	1220	365	7.5	12000	29900	160	200	240/850CAF3/W33
	1220	365	7.5	12000	29900	160	200	240/850CAF3/W33
	1220	365	7.5	12000	29900	160	200	240/850CAF3/W33
	1220	365	7.5	12000	29900	160	200	240/850CAF3/W33
	1360	400	12	15600	33450	150	350	231/850CA/W33
	1360	400	12	15600	33450	150	350	231/850CAK/W33
	1360	500	12	19200	42700	105	140	241/850CA/W33
	1360	500	12	19200	42700	105	140	241/850CA30K/W33
884	1320	365	7.5	12900	28900	110	150	240/884/HCC9YA1
900	1090	190	5	4900	15500	210	375	248/900CA/W33
	1180	206	6	6250	16490	200	400	239/900CAF1/W33
	1180	206	6	6250	16490	200	400	239/900CA/C3W33-QL
	1180	206	6	6250	16490	200	400	239/900CA/W33
	1180	206	6	6250	16490	200	400	239/900CAKF3/W33
	1270	365	7.5	11400	28400	160	210	240/900X3/HCC
	1270	365	7.5	11400	28400	160	210	240/900X3/HCCYA3
	1270	365	7.5	11400	28400	160	210	240/900X3/W33
	1270	365	7.5	11400	28400	160	210	240/900X3/HCC9YA1

Other dimensions				Contact surface and chamfer dimensions			Calculation coefficient				Weight
d2	D1	b	k	da	Da	ra	e	Y1	Y2	Y0	
mm				mm			mm				kg
948	1140	22.3	12	842	1238	8	0.28	2.40	3.60	2.50	1960
948	1140	22.3	12	842	1238	8	0.28	2.40	3.60	2.50	1900
938	1102	22.3	12	842	1238	8	0.35	1.90	2.90	1.80	2350
938	1102	22.3	12	842	1238	8	0.35	1.90	2.90	1.80	2313
989	1198	22.3	12	899	1328	14	0.35	2.80	1.90	1.90	3419
989	1198	22.3	12	918	1328	14	0.35	2.80	1.90	1.90	3301
910	980	22.3	12	866	1012	4	0.11	6.10	9.10	6.30	232
910	980	22.3	12	866	1012	4	0.11	6.10	9.10	6.30	236
938	1045	22.3	12	872	1097	5	0.16	4.20	6.30	4.00	570
938	1045	22.3	12	872	1097	5	0.16	4.20	6.30	4.00	550
938	1028	22.3	12	872	1097	5	0.22	3.00	4.60	2.80	750
938	1028	22.3	12	872	1097	5	0.22	3.00	4.60	2.80	730
954	1108			886	1184	6	0.20	3.40	5.00	3.20	1074
954	1108			886	1184	6	0.20	3.40	5.00	3.20	1070
954	1108	22.3	12	886	1184	6	0.20	3.40	5.00	3.20	1073
956	1086	22.3	12	886	1184	6	0.27	2.50	3.70	2.50	1410
956	1086	22.3	12	886	1184	6	0.27	2.50	3.70	2.50	1410
956	1086	22.3	12	886	1184	6	0.27	2.50	3.70	2.50	1416
956	1086	22.3	12	886	1184	6	0.27	2.50	3.70	2.50	1416
956	1086	22.3	12	886	1184	6	0.27	2.50	3.70	2.50	1275
956	1086	22.3	12	886	1184	6	0.27	2.50	3.70	2.50	1410
1008	1204	22.3	12	898	1312	10	0.28	2.40	3.60	2.50	2260
1008	1204	22.3	12	898	1312	10	0.28	2.40	3.60	2.50	2180
986	1180	22.3	12	898	1312	10	0.35	1.90	2.90	1.80	2750
986	1180	22.3	12	898	1312	10	0.35	1.90	2.90	1.80	2720
1038	1184	24	12	936	1258	6	0.28	2.40	3.60	2.50	1811
963	1031	22.3	12	918	1073	4	0.14	4.80	7.20	4.50	370
988	1096	22.3	12	928	1150	5	0.15	4.50	6.70	4.50	611
988	1096	22.3	12	928	1150	5	0.15	4.50	6.70	4.50	616
988	1096	22.3	12	928	1150	5	0.15	4.50	6.70	4.50	591
1007	1139	24	12	936	1236	6	0.28	2.40	3.60	2.50	1434
1007	1139	24	12	936	1236	6	0.28	2.40	3.60	2.50	1434
1007	1139		12	936	1236	6	0.28	2.40	3.60	2.50	1434

Spherical Roller Bearing(CA)

ZWZ

d 900~1000 mm



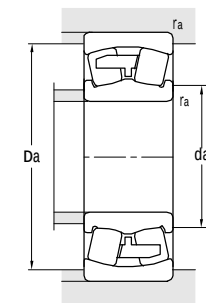
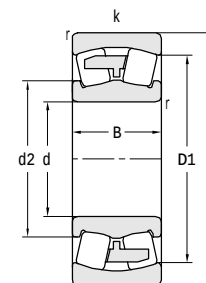
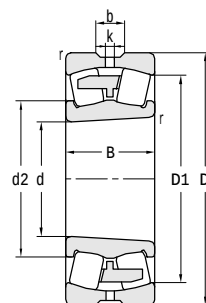
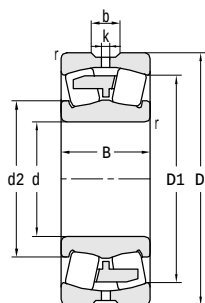
Principal dimensions				Basic load ratings		Limit speed ratings		Designations
d	D	B	r _{min}	C _r	C _{0r}	Grease	Oil	
mm				kN		r/min		
900	1280	280	7.5	9800	22500	200	350	230/900CA/W33
	1280	280	7.5	10100	23300	200	350	230/900CAF3/W33
	1280	280	7.5	9600	22000	200	350	230/900CAK/W33
	1280	375	7.5	13300	34000	140	190	240/900CA/W33
	1280	375	7.5	10000	28000	150	190	240/900/W33
	1280	480	7.5	15800	40400	140	170	240/900X2CA/C3W33-QL
	1270	365	7.5	10800	26600	140	170	240/900X3/W33
	1270	365	7.5	9900	28400	140	170	240/900X3/H3
	1270	365	7.5	11800	29700	140	170	240/900X3F3/H3 240/900X3F3/HCRYA3
	1270	365	7.5	11800	29700	140	170	240/900X3/HCC9YA1
	1320	365	7.5	10500	27600	130	170	240/900X3/HCC9-1
	1420	515	12	20300	46500	95	140	241/900CA/W33
	1420	515	12	20300	46500	95	140	241/900CAK/W33
	1420	515	12	20300	46500	95	140	241/900CAF3/W33
	1420	515	12	20300	46500	95	140	241/900CAK30/W33 241/900CAK30F3/W33
	1580	515	15	23600	49000	90	110	232/900CAK30/W33
	1580	515	15	23600	49000	90	110	232/900CAK30F3/W33
950	1250	224	7.5	7350	19000	200	400	239/950CA/W33
	1250	300	7.5	8900	25200	150	300	249/950CA/W33
	1250	300	7.5	8900	25200	150	300	249/950CAK30/W33
	1360	300	7.5	11600	27650	150	350	230/950CAF3/W33
	1360	412	7.5	14600	39000	125	160	240/950CA/W33
	1360	412	7.5	14000	37000	125	160	240/950CAK30/W33
	1500	438	12	18500	41600	90	130	231/950CA
	1500	545	7.5	22700	52200	90	120	241/950CA/W33
	1500	545	7.5	22700	52200	90	120	241/950CAK30/W33
1000	1220	165	6	4400	13600	150	300	238/1000CAKF1A/W20 238/1000CAKF3A/W20
	1220	165	6	4580	13600	150	300	238/1000CA/C3W33-QL
	1320	315	7.5	10400	29000	150	300	249/1000CA/W33
	1320	315	7.5	10400	29000	150	300	249/1000CAK30/W33
	1420	260	7.5	10600	24000	150	170	220/1000X2CAF3/W33
	1420	308	7.5	12700	30500	150	175	230/1000CAF1/W33 230/1000CAF3/W33
	1420	412	7.5	14600	40500	110	150	240/1000CAF3/W33
	1420	412	7.5	15600	40000	110	150	240/1000/W33

Other dimensions				Contact surface and chamfer dimensions			Calculation coefficient				Weight
d2	D1	b	k	da	Da	ra	e	Y1	Y2	Y0	
mm				mm			mm				kg
1024	1175	22.3	12	928	1250	6	0.20	3.40	5.00	3.20	1220
1024	1175	22.3	12	928	1250	6	0.20	3.40	5.00	3.20	1168
1024	1175	22.3	12	928	1250	6	0.20	3.40	5.00	3.20	1180
1010	1136	22.3	12	936	1244	6	0.26	2.60	3.90	2.50	1570
1008	1136	24	12	936	1244	6	0.26	2.60	3.90	2.50	1520
1000	1136	25	25	936	1244	6	0.26	2.60	3.90	2.50	1976
1139	1007	24	12	850	1220	6					1440
1007	1139	24	12	850	1220	6					1434
1139	1007	24	12	850	1220	6					1434
1139	1007	24	12	850	1220	6					1434
1021	1184	24	12	940	1282	6	0.26	2.60	3.90	2.50	1730
1042	1233	22.3	12	948	1372	10	0.35	1.90	2.90	1.80	3060
1042	1233	22.3	12	948	1372	10	0.35	1.90	2.90	1.80	3400
1042	1233	22.3	12	948	1372	10	0.35	1.90	2.90	1.80	3042
1042	1233	22.3	12	948	1372	10	0.35	1.90	2.90	1.80	3360
1114	1354	20	20	960	1500	14					4360
	1354		20	960	1500	14					
1046	1163	22.3	12	978	1222	6	0.15	4.50	6.70	4.50	759
1048	1149	22.3	12	978	1222	6	0.21	3.20	4.80	3.20	1030
1048	1149	22.3	12	978	1222	6	0.21	3.20	4.80	3.20	1000
1075	1234	22.3	12	978	1330	6	0.20	3.40	5.00	3.20	1440
1072	1212	22.3	12	978	1330	6	0.27	2.50	3.70	2.50	1971
1072	1212	22.3	12	978	1330	6	0.27	2.50	3.70	2.50	2000
1121	1319										2997
1104	1304	22.3	12	998	1452	6	0.35	1.90	2.90	1.80	3600
1104	1304	22.3	12	998	1452	6	0.35	1.90	2.90	1.80	3540
1069	1154		9	972	1260	5	0.11	5.92	8.81	5.78	402
1069	1154	22.3	12	972	1260	5	0.11	5.92	8.81	5.78	407
1108	1211	22.3	12	965	1291	6	0.21	3.20	4.80	3.20	1188
1108	1211	22.3	12	965	1291	6	0.21	3.20	4.80	3.20	1200
1129	1304	22.3	12	965	1380	6					1332
1140	1303	22.3	12	965	1392	6	0.19	3.60	5.30	3.60	1590
1130	1267	22.3	12	965	1392	6	0.26	2.60	3.90	2.50	2130
1127	1273	22.3	12	965	1385	6					2150

Spherical Roller Bearing(CA)

ZWZ

d 1000~1180 mm



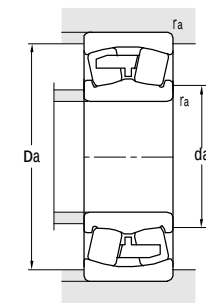
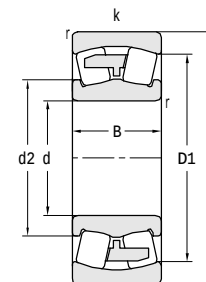
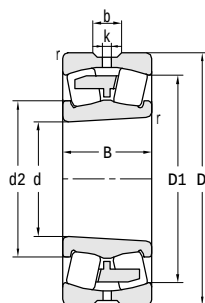
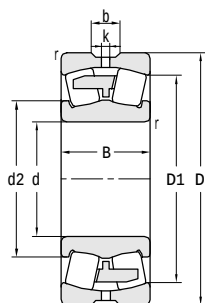
Principal dimensions				Basic load ratings		Limit speed ratings		Designations
d	D	B	r _{min}	C _r	C _{0r}	Grease	Oil	
mm				kN		r/min		
1000	1580	462	12	20300	45600	95	130	231/1000CA/W33
	1580	462	12	20300	45600	95	130	231/1000CAK/W33
	1580	580	12	25300	58900	85	110	241/1000CA/W33
	1580	580	12	25300	58900	85	110	241/1000CAK30/W33
1060	1280	165	6	4500	14200	150	195	238/1060CA/W33
	1280	165	6	4500	14200	150	195	238/1060CAK/W33
	1280	218	6	5800	19000	125	160	248/1060CA/W33
	1280	218	6	5800	19000	125	160	248/1060CAK30/W33
	1400	250	7.5	9870	26300	145	170	239/1060CAF3/W33
	1400	250	7.5	9000	24700	145	170	239/1060CAKF3/W33X
	1400	250	7.5	9870	26300	145	170	239/1060CAKF3/W33
	1400	260	7.5	9450	25400	145	170	239/1060X2CAF3/W33
	1400	335	7.5	11150	31500	145	170	249/1060CAF3/W33
	1400	335	7.5	11150	31500	120	150	249/1060CA/W33
	1400	335	7.5	11150	31500	120	150	249/1060CAK30/W33
	1500	325	9.5	13380	32300	120	160	230/1060CA/W33
	1500	325	9.5	13100	32300	120	160	230/1060CAK/W33
	1500	438	9.5	17000	44100	110	150	240/1060F3/HCW33
	1500	438	9.5	17000	44100	110	150	240/1060F3/W33
	1500	438	9.5	17200	45000	100	145	240/1060CA/W33
	1500	530	9.5	20000	52500	100	145	240/1060X2CAF3/W33
	1500	438	9.5	17200	45000	100	145	240/1060CAK30/W33
								239/1060CAKF3/C9W33
								240/1060F3/W33X
								240/1060CAF1/W33
1120	1360	243	6	6900	22800	105	250	248/1120CA/W33
	1360	243	6	6900	22800	105	250	248/1120CAK30/W33
	1460	335	7.5	12000	35200	100	250	249/1120CAF3/W33
	1580	345	9.5	15000	38100	100	200	230/1120CAF3/W33X
	1580	462	9.5	18100	48500	100	200	240/1120CA/W33
	1580	462	9.5	17800	47500	100	200	240/1120CAK30/W33
	1750	630	15	29500	72000	70	80	241/1120K30F3/W33X
1180	1420	180	6	5500	17600	150	190	238/1180CAKF1A/W20
	1420	180	6	5500	17600	150	190	238/1180CAF3A/W20
	1420	243	6	7300	25600	130	160	248/1180CA/W33

Other dimensions				Contact surface and chamfer dimensions			Calculation coefficient				Weight
d2	D1	b	k	da	Da	ra	e	Y1	Y2	Y0	
mm				mm			mm				kg
1181	1404	22.3	12	965	1532	10	0.28	2.40	3.50	2.50	3520
1181	1404	22.3	12	965	1532	10	0.28	2.40	3.50	2.50	3410
1160	1372	22.3	12	965	1532	10	0.35	1.90	2.90	1.80	4350
1160	1372	22.3	12	965	1532	10	0.35	1.90	2.90	1.80	4260
1134	1218	22.3	12	1082	1258	5	0.11	6.10	9.10	6.30	440
1134	1218	22.3	12	1082	1258	5	0.11	6.10	9.10	6.30	425
1136	1211	22.3	12	1082	1258	5	0.14	4.80	7.20	4.50	576
1136	1211	22.3	12	1082	1258	5	0.14	4.80	7.20	4.50	565
1170	1304	22.3	12	1090	1365	6	0.16	4.20	6.30	4.00	1075
1170	1304	22.3	12	1090	1365	6	0.16	4.20	6.30	4.00	1041
1170	1304	22.3	12	1090	1365	6	0.16	4.20	6.30	4.00	1041
1170	1300	22.3	12	1090	1365	6					1111
1170	1304	22.3	12	1090	1365	6	0.16	4.20	6.30	4.00	1441
1164	1285	22.3	12	1090	1365	6	0.21	3.20	4.80	3.20	1420
1164	1285	22.3	12	1090	1365	6	0.21	3.20	4.80	3.20	1390
1200	1377	22.3	12	1093	1465	8	0.19	3.60	5.30	3.60	2300
1200	1377	22.3	12	1093	1465	8	0.19	3.60	5.30	3.60	2210
1185	1339	22.3	12	1093	1465	8	0.27	2.50	3.70	2.50	2500
1185	1339	22.3	12	1093	1465	8	0.27	2.50	3.70	2.50	2500
1190	1339	22.3	12	1093	1465	8	0.26	2.60	3.90	2.50	2540
1190	1339	22.3	12	1093	1465	8	0.26	2.60	3.90	2.50	3010
1190	1339	22.3	12	1093	1465	8	0.26	2.60	3.90	2.50	2540
1198	1278	22.3	12	1140	1335	5	0.15	4.50	6.70	4.50	740
1198	1278	22.3	12	1140	1335	5	0.15	4.50	6.70	4.50	725
1235	1348	22.3	12	1146	1431	6	0.20	3.40	5.00	3.20	1500
1286	1443	40	25	1155	1545	8	0.19	3.40	5.00	3.20	2210
1268	1421	22.3	12	1155	1545	8	0.26	2.60	3.90	2.50	2940
1268	1421	22.3	12	1155	1545	8	0.26	2.60	3.90	2.50	2850
1297	1509		16								5610
1254	1349		9	1180	1450	5	0.11	6.28	9.35	6.14	577
1254	1349		9	1180	1450	5	0.11	6.28	9.35	6.14	580
1250	1344	22.3	12	1180	1450	5	0.14	4.80	7.20	4.50	790

Spherical Roller Bearing(CA)

ZWZ

d 1180~2000 mm



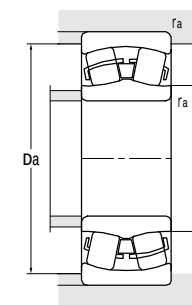
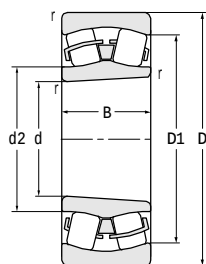
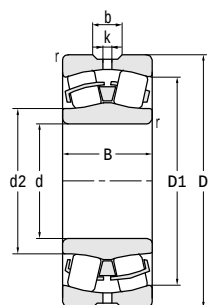
Principal dimensions				Basic load ratings		Limit speed ratings		Designations
d	D	B	r _{min}	C _r	C _{0r}	Grease	Oil	
mm				kN		r/min		
1180	1420	243	6	7300	25600	130	160	248/1180CAK30/W33
	1540	272	7.5	10750	30000	110	150	239/1180CAKF3/W33X 239/1180CAKF1/W33X
	1540	272	7.5	10750	30000	110	150	239/1180CAF3/W33 239/1180CAF3/W33
	1540	355	7.5	13900	40000	110	150	249/1180CAF1/W33X 249/1180CAF3/W33X
	1540	355	7.5	13900	40000	110	150	249/1180CAK30F3/W33
	1660	355	9.5	15000	36000	110	150	230/1180CA/HCRW33X 230/1180/HCRW33X
	1660	355	9.5	10700	29600	110	150	230/1180CAF3/W33X
	1660	355	9.5	10700	29600	110	150	230/1180F3/HCRC9W33X
1200	1500	280	7.5	10100	31000	130	150	206/1200CA/W33
1250	1750	375	9.5	17350	43650	100	120	230/1250CA/W33
	1750	375	9.5	17350	43650	100	120	230/1250CAK/W33
1320	1600	280	6	9820	33500	85	120	248/1320CA/W33
	1600	280	6	9300	31800	85	120	248/1320CA30/W33
	1720	400	7.5	15600	46500	80	110	249/1320CA/W33 249/1320CAF3/W33
	1720	400	7.5	16400	49000	80	110	249/1320CAF3/HBW33 249/1320CAF3/W33
	1720	400	7.5	15300	46500	80	110	249/1320CAK30/W33
	1850	530	12	23200	63300	70	85	240/1320CAF3/W33T
1350	1650	315	7.5	11600	39500	80	110	206/1350CAF3/W33
1400	1820	425	9.5	20000	58500	70	85	249/1400CAF3/W33
1440	1760	315	7.5	11500	39700	70	85	206/1440F3/W20
1500	1820	315	7.5	12000	42700	67	83	248/1500CA/W33
	1820	315	7.5	12000	42700	67	83	248/1500CAK30F3/W20
1600	2100	450	9.5	24500	74300	60	70	249/1600X3CA/W33
1800	2180	375	9.5	16700	59800	60	70	248/1800CA/W33
	2180	375	9.5	16700	59800	60	70	248/1800CAK30/W33
2000	2700	550	10	38000	107000	45	56	206/2000F1/C9W33X

Other dimensions				Contact surface and chamfer dimensions			Calculation coefficient				Weight
d2	D1	b	k	da	Da	ra	e	Y1	Y2	Y0	
mm				mm			mm				kg
1250	1344	22.3	12	1180	1450	5	0.14	4.80	7.20	4.50	770
1296	1432	24	12	1216	1536	6	0.16	4.20	6.30	4.00	1346
1296	1432	24	12	1216	1536	6	0.16	4.20	6.30	4.00	1391
1290	1422	22.3	12	1216	1536	6	0.20	3.42	5.09	3.34	1772
1290	1422	22.3	12	1216	1536	6	0.20	3.42	5.09	3.34	1742
1328	1509	24	12	1240	1600	8	0.20	3.42	5.09	3.34	2476
1328	1509	24	12	1240	1600	8	0.20	3.42	5.09	3.34	2460
1328	1509	24	12	1240	1600	8	0.20	3.42	5.09	3.34	2460
1296	1406	22.3	12	1236	1460	6					1150
1412	1610	22.3	12	1285	1715	8	0.19	3.60	5.30	3.60	2850
1412	1610	22.3	12	1285	1715	8	0.19	3.60	5.30	3.60	2760
1418	1513	22.3	12	1342	1578	5	0.15	4.50	6.70	4.50	1175
1418	1513	22.3	12	1342	1578	5	0.15	4.50	6.70	4.50	1150
1446	1588	24	12	1350	1691	6	0.21	3.20	4.80	3.20	2510
1446	1588	24	12	1350	1691	6	0.21	3.20	4.80	3.20	2500
1446	1588	24	12	1350	1691	6	0.21	3.20	4.80	3.20	2460
1485	1662	40	25	1390	1765	11	0.25	2.70	4.00	2.60	4540
1450	1553	22.3	12	1390	1614	6					1473
1528	1681	22.3	12	1452	1768	8	0.20	3.42	5.09	3.34	2920
1543	1652		12	1475	1723	6					1685
1608	1710	24	12	1528	1792	6	0.15	4.50	6.70	4.50	1730
1608	1710		12	1528	1792	6	0.15	4.50	6.70	4.50	1717
1755	1938	22.30	12.0								4300
1935	2058	24	12	1832	2145	8	0.15	4.50	6.70	4.50	2920
1935	2058	24	12	1832	2145	8	0.15	4.50	6.70	4.50	2870
1540	2502	52.3	25	2060	2645	8					9110

Spherical Roller Bearing(C)

ZWZ

d 40~75 mm



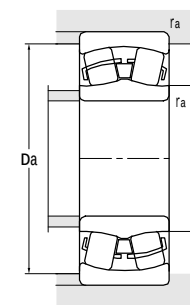
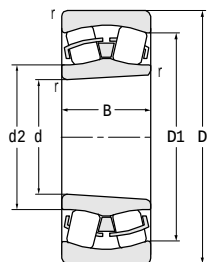
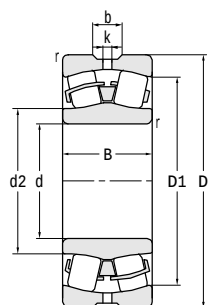
Principal dimensions				Basic load ratings		Limit speed ratings		Designations	
d	D	B	r _{min}	C _r	C _{0r}	Grease	Oil		
mm				kN		r/min			
40	80	23	1.1	91.7	85.5	6000	7500	22208C	22208C/W33
	80	23	1.1	94	87	6000	7500	22208CK	22208CK/W33
	90	33	1.5	143	133	4500	5600	22308C	22308C/W33
	90	33	1.5	143	133	4500	5600	22308CK	22308CK/W33
45	100	36	1.5	174	174	3800	4800	22309C	22309CK
	100	36	1.5	174	174	3800	4800	22309C/W33	
50	90	23	1.1	98.8	103	5000	6300	22210C	
	110	40	2	209	213	3400	4300	22310C	22310C/W33
	110	40	2	209	213	3400	4300	22310CK	22310CK/W33
55	100	25	1.5	119	121	4500	5600	22211C	22211C/W33
	100	25	1.5	119	120	4500	5600	22211CK/W33	
	120	43	2	257	266	3200	4000	22311C	22311C/W33
	120	43	2	257	266	3200	4000	22311CK	22311CK/W33
60	110	28	1.5	148	158	4300	5300	22212C	22212C/W33
	110	28	1.5	148	158	4300	5300	22212CK	22212CK/W33
	130	31	2.1	201	228	3400	4300	21312C/W33	
	130	46	2.1	295	318	2800	3600	22312C	22312C/W33
	130	46	2.1	295	318	2800	3600	22312CK	22312CK/W33
65	120	31	1.5	183	205	3800	4800	22213C	22213C/W33
	120	31	1.5	183	205	3800	4800	22213CK	22213CK/W33
	140	48	2.1	323	342	2600	3400	22313C	22313C/W33
	140	48	2.1	323	342	2600	3400	22313CK	22313CK/W33
70	125	31	1.5	198	217	3600	4500	22214C	22214C/W33
	125	31	1.5	198	217	3600	4500	22214CK	22214CK/W33
	150	51	2.1	380	408	2200	3000	22314C	22314C/W33
	150	51	2.1	380	408	2200	3000	22314CK	22314CK/W33
75	130	31	1.5	201	228	3400	4300	22215C	22215C/W33
	130	31	1.5	201	228	3400	4300	22215CK	22215CK/W33

Other dimensions				Contact surface and chamfer dimensions			Calculation coefficient				Weight
d2	D1	b	k	da	Da	ra	e	Y1	Y2	Y0	
mm				mm			mm				kg
50.4	68.9	5.5	2	47	73	1	0.28	2.40	3.50	2.50	0.523
50.4	68.9	5.5	2	47	73	1	0.28	2.40	3.50	2.50	0.521
56	74	5.5	2.5	49	81	1.5	0.38	1.80	2.70	1.80	1.04
56	74	5.5	2.5	49	81	1.5	0.38	1.80	2.70	1.80	1.02
57.4	81.4			54	91	1.5	0.26	2.60	3.90	2.50	1.56
57.4	81.4			54	91	1.5	0.26	2.60	3.90	2.50	1.51
62.5	81.6			57	83	1	0.25	2.60	3.90	2.50	0.642
62.9	90.6	5.5	2.5	61	100	2	0.38	1.80	2.70	1.80	1.96
62.9	90.6	5.5	2.5	61	100	2	0.38	1.80	2.70	1.80	1.89
65.7	87.3	5.5	2	62	91	1.5	0.24	2.80	4.20	2.80	0.856
65.7	87.3	5.5	2	62	91	1.5	0.24	2.80	4.20	2.80	0.844
69	99.5	5.5	2.5	65	110	2	0.37	1.90	2.90	1.80	2.37
69	99.5	5.5	2.5	65	110	2	0.37	1.90	2.90	1.80	2.32
75.5	95	5.5	2	69	101	1.5	0.24	2.80	4.20	2.80	1.11
75.5	95	5.5	2	69	101	1.5	0.24	2.80	4.20	2.80	1.11
87.8	115	5.5	3	72	118	2	0.22	3.00	4.60	2.80	2.08
81.4	108	5.5	3	72	118	2	0.37	1.90	2.90	1.80	3.25
81.4	108	5.5	3	72	118	2	0.37	1.90	2.90	1.80	3.21
81.5	103	5.5	2.5	74	111	1.5	0.25	2.70	4.00	2.50	1.55
81.5	103	5.5	2.5	74	111	1.5	0.25	2.70	4.00	2.50	1.52
81.4	116			77	128	2	0.35	1.90	2.90	1.80	4.97
88.6	116	5.5	3	77	128	2	0.35	1.90	2.90	1.80	4.92
88.6	116	5.5	3	77	128	2	0.35	1.90	2.90	1.80	4.88
86.8	109	6	2.5	79	116	1.5	0.24	3.00	4.60	2.80	1.63
86.8	109	6	2.5	79	116	1.5	0.24	3.00	4.60	2.80	1.59
95.8	125	8.3	4	82	138	2	0.35	1.90	2.90	1.80	4.48
95.8	125	8.3	4	82	138	2	0.35	1.90	2.90	1.80	4.45
92	114	5.5	2.5	84	121	1.5	0.24	3.00	4.60	2.80	1.71
92	114	5.5	2.5	84	121	1.5	0.24	3.00	4.60	2.80	1.70

Spherical Roller Bearing(C)

ZWZ

d 75~100 mm



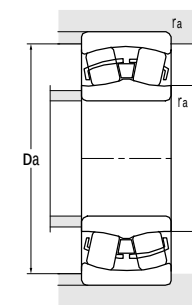
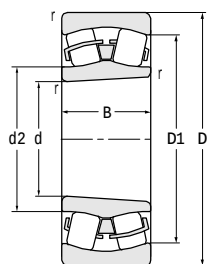
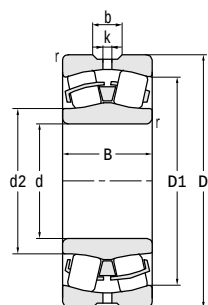
Principal dimensions				Basic load ratings		Limit speed ratings		Designations	
d	D	B	r _{min}	C _r	C _{0r}	Grease	Oil		
mm				kN		r/min			
75	160	55	2.1	418	451	2200	3000	22315C	22315C/W33
	160	55	2.1	418	451	2200	3000	22315CK	22315CK/W33
80	140	33	2	224	257	3200	4000	22216C	22216C/W33
	140	33	2	224	257	3200	4000	22216CK	22216CK/W33
	170	58	2.1	466	513	2000	2800	22316C	22316C/W33
	170	58	2.1	466	513	2000	2800	22316CK	22316CK/W33
85	150	36	2	271	309	2800	3600	22217C/W33	
	150	36	2	271	309	2800	3600	22217CK	22217CK/W33
	180	60	3	523	589	1900	2600	22317C	22317C/W33
	180	60	3	523	589	1900	2600	22317CK	22317CK/W33
90	150	72	2	320	500			24118X2C/HG2	
	160	40	2	309	356	2600	3400	22218C	22218C/W33
	160	40	2	255	356	2600	3400	22218CK	22218CK/W33
	160	52.4	2	337	480	1900	2600	23218C	
	190	64	3	580	660	1800	2400	22318C	22318C/W33
	190	64	3	580	660	1800	2400	22318CK	22318CK/W33
95	170	43	2.1	361	428	2400	3200	22219C	22219C/W33
	170	43	2.1	361	428	2400	3200	22219CK	22219CK/W33
	200	67	3	637	727	1800	2400	22319C	22319C/W33
	200	67	3	637	727	1800	2400	22319CK	22319CK/W33
100	150	37	1.5	206	325	2400	3200	23020C	23020C/W33
	150	37	1.5	206	325	2400	3200	23020CK	23020CK/W33
	165	52	2	347	515	2000	2800	23120C	23120C/W33
	165	52	2	347	515	2000	2800	23120CK	23120CK/W33
	180	46	2.1	404	466	2200	3000	22220C	22220C/W33
	180	46	2.1	404	466	2200	3000	22220CK	22220CK/W33
	180	60.3	2.1	451	600	1700	2200	23220C	23220C/W33
	180	60.3	2.1	365	605	1700	2200	23220C/HG2W33	
	215	73	3	774	903	1700	2200	22320C	22320C/W33
	215	73	3	774	903	1700	2200	22320CK	22320CK/W33

Other dimensions				Contact surface and chamfer dimensions			Calculation coefficient				Weight
d2	D1	b	k	da	Da	ra	e	Y1	Y2	Y0	
mm				mm			mm				kg
101	133	8.3	4	87	148	2	0.35	1.90	2.90	1.80	5.39
101	133	8.3	4	87	148	2	0.35	1.90	2.90	1.80	5.37
95.1	122	5.5	2.5	91	129	2	0.22	3.00	4.60	2.80	2.10
95.1	122	5.5	2.5	91	129	2	0.22	3.00	4.60	2.80	2.09
109	142	8.3	4	92	158	2	0.34	1.90	2.90	1.80	6.60
109	142	8.3	4	92	158	2	0.34	1.90	2.90	1.80	6.56
105	132	6.5	3	96	139	2	0.23	3.00	4.60	2.80	2.73
105	132	6.5	3	96	139	2	0.23	3.00	4.60	2.80	2.64
107	150	8.3	4	99	166	2.5	0.33	2.00	3.00	2.00	7.38
107	150	8.3	4	99	166	2.5	0.33	2.00	3.00	2.00	7.23
101	120			100	135	2					4.75
106	139	8.3	2.5	101	149	2	0.23	2.80	4.20	2.80	4.50
106	139	8.3	2.5	101	149	2	0.23	2.80	4.20	2.80	4.35
106	136			101	149	2	0.31	2.20	3.30	2.20	4.66
113	159	8.3	5	104	176	2.5	0.35	2.00	3.00	2.00	10.1
113	159	8.3	5	104	176	2.5	0.35	2.00	3.00	2.00	9.25
114	148	8.3	3	107	158	2	0.24	2.80	4.20	2.80	4.16
114	148	8.3	3	107	158	2	0.24	2.80	4.20	2.80	4.07
128	167	8.3	5	109	186	2.5	0.34	2.00	3.00	2.00	10.2
128	167	8.3	5	109	186	2.5	0.34	2.00	3.00	2.00	10.0
116	135	5.5	3	110	140	2	0.22	2.90	4.40	2.80	2.32
116	135	5.5	3	110	140	2	0.22	2.90	4.40	2.80	2.28
121	143	5.5	3	110	155	2	0.30	2.30	3.40	2.20	4.43
121	143	5.5	3	110	155	2	0.30	2.30	3.40	2.20	4.39
124	156	8.3	3	112	168	2	0.24	2.80	4.20	2.80	5.30
124	156	8.3	3	112	168	2	0.24	2.80	4.20	2.80	5.25
125	153	8.3	4.5	112	168	2	0.33	2.00	3.00	2.00	6.65
117	153	10	4.5	112	168	2					6.9
138	179	11.1	5	114	201	2.5	0.35	2.00	3.00	2.00	13.1
138	179	11.1	5	114	201	2.5	0.35	2.00	3.00	2.00	12.9

Spherical Roller Bearing(C)

ZWZ

d 105~130 mm



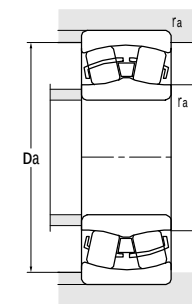
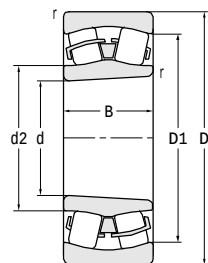
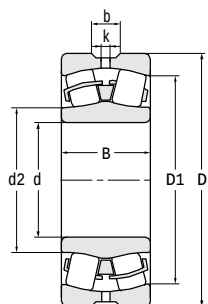
Principal dimensions				Basic load ratings		Limit speed ratings		Designations	
d	D	B	r _{min}	C _r	C _{0r}	Grease	Oil		
mm				kN		r/min			
105	175	56	2	365	560	1900	2700	23121C	23121C/W33
	175	56	2	365	560	1900	2700	23121CK	23121CK/W33
110	170	45	2	295	460	2200	3000	23022C	23022C/W33
	170	45	2	295	460	2200	3000	23022C/W33-2RS2	
	170	45	2	295	460	2200	3000	23022CK	23022CK/W33
	180	56	2	409	590	1900	2600	23122C	23122C/W33
	180	56	2	409	590	1900	2600	23122CK	23122CK/W33
	180	69	2	494	713	1000	1400	24122C/W24	
	200	53	2.1	530	610	2000	2800	22222C	22222C/W33
	200	53	2.1	530	610	2000	2800	22222CK	22222CK/W33
	200	69.8	2.1	570	830	1600	2000	23222C	
	240	80	3	761	996	1600	2000	22322C	22322C/W33
	240	80	3	761	996	1600	2000	22322CK	22322CK/W33
120	180	46	2	340	495	2000	2800	23024C	
	180	46	2	340	495	2000	2800	23024CK	
	200	62	2	490	715	1800	2400	23124C	23124C/W33
	200	62	2	490	715	1800	2400	23124CK	23124CK/W33
	200	80	2	620	925	1400	1800	24124C	
	215	58	2.1	600	730	1900	2600	22224C	22224C/W33
	215	58	2.1	600	730	1900	2600	22224CK	
	215	58	2.1	600	730	1900	2600	22224C/C9	
	215	58	2.1	600	730	1900	2600	22224CK	22224CK/W33
	215	76	2.1	660	940	1500	1900	23224C	
	260	86	3	920	1120	1400	1800	22324C	22324C/W33
	260	86	3	920	1120	1400	1800	22324CK	22324CK/W33
130	200	52	2	410	650	1900	2600	23026C	23026C/W33
	200	52	2	410	650	1900	2600	23026CK	23026CK/W33
	210	64	2	530	790	1700	2200	23126C	23126C/W33
	210	64	2	530	790	1700	2200	23126CK	23126CK/W33
	210	80	2	650	990	1700	2200	24126C/W33	
	210	80	2	650	1000	1700	2200	24126CK30/W33	
	230	64	3	700	880	1800	2400	22226C	22226C/W33
	230	64	3	700	880	1800	2400	22226CK	22226CK/W33

Other dimensions				Contact surface and chamfer dimensions			Calculation coefficient				Weight
d2	D1	b	k	da	Da	ra	e	Y1	Y2	Y0	
mm				mm			mm				kg
127	151	5.5	3	115	165	2	0.30	2.20	3.30	2.20	5.36
127	151	5.5	3	115	165	2	0.30	2.20	3.30	2.20	5.19
128	150	7.5	3	120	160	2	0.24	2.90	4.40	2.80	3.68
128	150	7.5	3	120	160	2	0.24	2.90	4.40	2.80	3.74
128	150	7.5	3	120	160	2	0.24	2.90	4.40	2.80	3.57
132	156	5.5	3	120	170	2	0.30	2.30	3.40	2.20	5.69
132	156	5.5	3	120	170	2	0.30	2.30	3.40	2.20	5.67
133	153		6	120	170	2	0.35	1.90	2.90	1.80	6.90
133	173	8.3	4	122	188	2	0.26	2.70	4.00	2.50	7.32
133	173	8.3	4	122	188	2	0.26	2.70	4.00	2.50	7.16
138	168			122	188	2	0.33	2.00	3.00	2.00	9.73
151	197	13.9	6	122	188	2.5	0.34	2.20	3.30	2.20	18.2
151	197	13.9	6	122	188	2.5	0.34	2.20	3.30	2.20	17.7
134	162			130	170	2	0.22	3.00	4.60	2.80	4.46
134	162			130	170	2	0.22	3.00	4.60	2.80	4.32
146	174	5.5	3	130	190	2	0.29	2.40	3.60	2.50	7.97
146	174	5.5	3	130	190	2	0.29	2.40	3.60	2.50	7.96
146	167			130	190	2	0.38	1.80	2.70	1.80	10.0
149	187	11.1	4	132	203	2	0.25	2.60	3.90	2.50	9.78
149	187	11.1	4	132	203	2	0.25	2.60	3.90	2.50	9.75
149	187	11.1	4	132	203	2	0.25	2.60	3.90	2.50	9.78
149	187	11.1	4	132	203	2	0.25	2.60	3.90	2.50	9.66
150	182			132	203	2	0.34	1.90	2.90	1.80	11.5
165	218	13.9	6	134	246	2.5	0.35	1.90	2.90	1.80	23.8
165	218	13.9	6	134	246	2.5	0.35	1.90	2.90	1.80	21.9
153	179	9.5	4	140	190	2	0.24	2.90	4.40	2.80	6.12
153	179	9.5	4	140	190	2	0.24	2.90	4.40	2.80	5.94
156	183	8.3	4	140	200	2	0.28	2.40	3.50	2.50	9.66
156	183	8.3	4	140	200	2	0.28	2.40	3.50	2.50	9.21
146	178	8.3	4	140	200	2					10.9
146	178	8.3	4	140	200	2					10.9
162	200	10	5	144	216	2.5	0.26	2.50	3.70	2.50	11.5
162	200	10	5	144	216	2.5	0.26	2.50	3.70	2.50	11.3

Spherical Roller Bearing(C)

ZWZ

d 30–60 mm



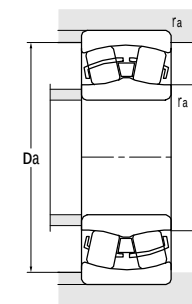
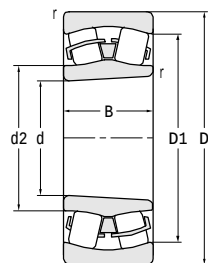
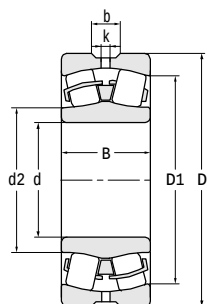
Principal dimensions				Basic load ratings		Limit speed ratings		Designations	
d	D	B	r _{min}	C _r	C _{0r}	Grease	Oil		
mm				kN		r/min			
130	280	93	4	1060	1320	1300	1700	22326C	22326C/W33
	280	93	4	1060	1320	1300	1700	22326CK	22326CK/W33
140	210	53	2	440	715	1800	2400	23028C	23028C/W33
	210	53	2	440	715	1800	2400	23028CK	23028CK/W33
	225	68	2.1	600	935	1600	2000	23128C	23128C/W33
	225	68	2.1	600	935	1600	2000	23128CK	23128CK/W33
	250	68	3	670	860	1700	2200	22228C	22228C/W33
	250	68	3	670	860	1700	2200	22228CK	22228CK/W33
	250	88	3	810	1300	1200	1600	23228C/W33	
	300	102	3.7	1230	1590	1100	1500	22328C	22328C/W33
	300	102	3.7	1230	1590	1100	1500	22328CK	22328CK/W33
150	225	56	2.1	485	730	1700	2200	23030C	23030C/W33
	225	56	2.1	485	730	1700	2200	23030CK	23030CK/W33
	250	80	2.1	790	1230	1400	1800	23130C	23130C/W33
	250	80	2.1	790	1230	1400	1800	23130CK	23130CK/W33
	250	100	2.1	970	1450	800	1000	24130C	
	270	73	3	810	1100	1600	2000	22230C	22230C/W33
	270	96	3	1030	1390	1100	1500	23230C	
	320	108	4	1320	1820	1000	1400	22330C	
160	240	60	2.1	555	875	1700	2200	23032C	23032C/W33
	240	60	2.1	555	875	1700	2200	23032CK	23032CK/W33
	270	86	2.1	930	1420	1300	1700	23132C	23132C/W33
	270	86	2.1	930	1420	1300	1700	23132CK	23132CK/W33
	270	109	2.1	1120	1690	700	900	24132C/W33	
	290	80	3	950	1280	1500	1900	22232C	22232C/W33
	290	80	3	950	1280	1500	1900	22232CK	22232CK/W33
	290	104	3	1160	1760	1000	1400	23232C	23232C/W33
	290	104	3	1160	1760	1000	1400	23232CK/W33	
	340	114	4	1520	2050	950	1300	22332C	22332C/W33
	340	114	4	1520	2050	950	1300	22332CK	22332CK/W33
170	260	67	2.1	670	1150	1600	2000	23034C	23034C/W33
	260	67	2.1	670	1150	1600	2000	23034CK	23034CK/W33

Other dimensions				Contact surface and chamfer dimensions			Calculation coefficient				Weight
d2	D1	b	k	da	Da	ra	e	Y1	Y2	Y0	
mm				mm			mm				kg
178	232	16.7	6	148	262	3	0.34	1.90	2.90	1.80	24.9
178	232	16.7	6	148	262	3	0.34	1.90	2.90	1.80	24.3
162	188	8.3	4.5	150	200	2	0.22	3.00	4.60	2.80	6.37
162	188	8.3	4.5	150	200	2	0.22	3.00	4.60	2.80	6.17
166	196	8.3	5	152	213	2	0.28	2.40	3.60	2.50	10.8
166	196	8.3	5	152	213	2	0.28	2.40	3.60	2.50	10.5
176	218	11.1	5	154	236	2.5	0.26	2.60	3.90	2.50	14.5
176	218	11.1	5	154	236	2.5	0.26	2.60	3.90	2.50	14.5
164	212	11.1	6	154	236	2.5					18.1
191	249	16.7	7	158	282	3	0.34	1.90	2.90	1.80	35.2
191	249	16.7	7	158	282	3	0.34	1.90	2.90	1.80	34.8
174	201	8.3	4.5	162	213	2	0.22	3.00	4.60	2.80	7.44
174	201	8.3	4.5	162	213	2	0.22	3.00	4.60	2.80	7.42
173	216	11.1	5	162	238	2	0.30	2.30	3.40	2.20	16.3
173	216	11.1	5	162	238	2	0.30	2.30	3.40	2.20	15.8
180	208			162	238	2	0.37	1.80	2.70	1.80	18.7
179	234	12	6	164	256	2.5	0.26	2.60	3.90	2.50	18.6
177	228			164	256	2.5	0.35	1.90	2.90	1.80	25.7
188	270			168	302	3					42.5
180	216	11.1	4	172	228	2	0.22	3.00	4.60	2.80	8.99
180	216	11.1	4	172	228	2	0.22	3.00	4.60	2.80	8.76
188	234	13.9	6	172	258	2	0.30	2.30	3.40	2.20	22
188	234	13.9	6	172	258	2	0.30	2.30	3.40	2.20	21.4
193	225	8.3	4	172	258	2	0.40	1.69	2.51	1.65	24.8
201	249	13.9	5	174	276	2.5	0.27	2.50	3.70	2.50	23.2
201	249	13.9	5	174	276	2.5	0.27	2.50	3.70	2.50	22.7
201	244	13.9	7	174	276	2.5	0.35	1.90	2.90	1.80	29.7
200	244	13.9	7	174	276	2.5	0.35	1.90	2.90	1.80	29.0
189	284	16.7	7	178	322	3	0.35	1.90	2.90	1.80	51.6
216	284	16.7	7	178	322	3	0.35	1.90	2.90	1.80	50.9
192	231	11.1	5	182	248	2	0.23	2.90	4.40	2.80	14.3
192	231	11.1	5	182	248	2	0.23	2.90	4.40	2.80	13.8

Spherical Roller Bearing(C)

ZWZ

d 30–60 mm



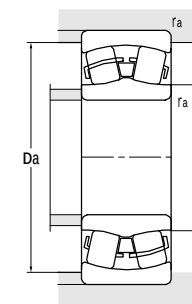
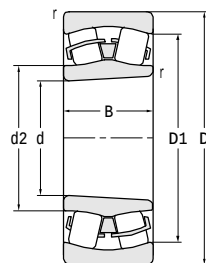
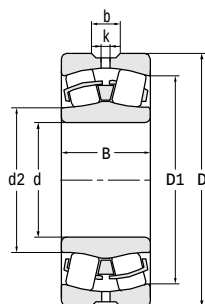
Principal dimensions				Basic load ratings		Limit speed ratings		Designations
d	D	B	r _{min}	C _r	C _{0r}	Grease	Oil	
mm				kN		r/min		
170	280	88	2.1	990	1520	1200	1600	23134C
	280	88	2.1	990	1520	1200	1600	23134CK
	310	86	4	1060	1450	1300	1700	22234C
	310	86	4	1060	1450	1300	1700	22234CK
	360	120	4	1670	2050	950	1300	22334C
180	280	74	2.1	790	1290	1400	1800	23036C
	280	74	2.1	790	1290	1400	1800	23036CK
	300	96	3	1140	1720	1100	1500	23136C/W33
	320	86	4	1120	1550	1300	1700	22236C
	320	86	4	1120	1550	1300	1700	22236CK
	380	126	4	1900	2400	900	1200	22336C
	380	126	4	1900	2400	900	1200	22336CK
190	290	75	2.1	820	1270	1300	1700	23038C
	320	128	3	1370	2330	600	750	24138CK30/W33
	340	92	4	1210	1700	1200	1600	22238C
	340	92	4	1210	1700	1200	1600	22238CK
	400	132	5	2010	2520	850	1100	22338C
	400	132	5	2010	2780	850	1100	22338CK
	400	132	5	2010	2780	850	1100	22338CK
200	310	82	2.1	950	1560	1200	1600	23040C
	310	82	2.1	950	1560	1200	1600	23040CK
	340	112	3	1370	2330	950	1300	23140C/W33
	360	98	4	1390	1950	1100	1500	22240C
	420	138	5	2000	2870	850	1100	22340C
	420	138	5	2000	2870	850	1100	22340CK
220	340	90	3	1058	1987	1100	1500	23044C/W33-ZH
240	360	92	3	1130	2080	1000	1400	23048C/W33
	360	118	3	1420	2790	800	1000	24048C/W33
	400	128	4	1980	3040	850	1100	23148C
	400	128	4	1980	3040	850	1100	23148CK
	440	160	4	2400	3950	670	850	23248CK30/W33

Other dimensions				Contact surface and chamfer dimensions			Calculation coefficient				Weight
d2	D1	b	k	da	Da	ra	e	Y1	Y2	Y0	
mm	mm			mm	mm	mm	mm				kg
204	243			182	268	2	0.30	2.30	3.40	2.20	22
204	243	8.3	5	182	268	2	0.30	2.30	3.40	2.20	21.3
215	268	16.7	6	188	292	3	0.27	2.50	3.70	2.50	29.3
215	268	16.7	6	188	292	3	0.27	2.50	3.70	2.50	28.6
211	299			188	342	3	0.37	1.80	2.70	1.80	59.7
214	247	13.9	7.5	192	268	2	0.25	2.70	4.00	2.60	17.3
214	247	13.9	7.5	192	268	2	0.25	2.70	4.00	2.60	17.1
216	259	13.9	6	194	286	2.5	0.30	2.30	3.40	2.20	26.3
224	278	16.7	6	198	302	3	0.26	2.60	3.90	2.50	30.1
224	278	16.7	6	198	302	3	0.26	2.60	3.90	2.50	29.4
242	316	22.3	8	198	362	3	0.34	1.99	2.96	1.94	70.1
242	316	22.3	8	198	362	3	0.34	1.99	2.96	1.94	68.8
215	259			202	278	2	0.23	2.90	4.40	2.80	16.9
211	267	11.1	6	204	306	2.5					40.7
235	293	16.7	6	208	322	3	0.26	2.60	3.90	2.50	36.7
235	293	16.7	6	208	322	3	0.26	2.60	3.90	2.50	35.9
238	334			212	378	4	0.34	1.99	2.96	1.94	80.8
257	334	22.3	8	212	378	4	0.34	1.99	2.96	1.94	82.4
257	334	22.3	8	212	378	4	0.34	1.99	2.96	1.94	81.4
237	276	13.9	7.5	212	298	2	0.25	2.70	4.00	2.60	24.8
237	276	13.9	7.5	212	298	2	0.25	2.70	4.00	2.60	24.6
230	292	16.7	9	214	326	2.5					42.3
237	309			218	342	3	0.26	2.60	3.90	2.50	43.7
269	350	22.3	8	222	398	4	0.34	1.99	2.96	1.94	92.3
269	350	22.3	8	222	398	4	0.34	1.99	2.96	1.94	90.3
252	305	13.9	7.5	240	320	2.5					29.8
271	326	13.9	7.5	260	335	2.5					33.1
264	316	11.1	6	254	346	2.5					42.3
289	345	16.7	8	258	382	3	0.31	2.21	3.29	2.16	65.9
289	345	16.7	8	258	382	3	0.31	2.21	3.29	2.16	63.9
282	369	22.3	12	258	422	3					107

Spherical Roller Bearing(C)

ZWZ

d 30–60 mm



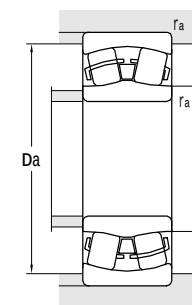
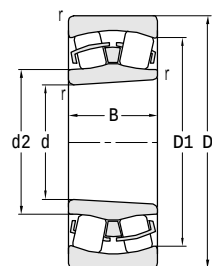
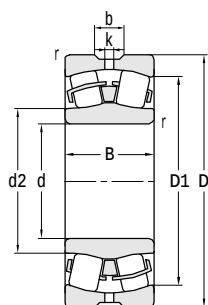
Principal dimensions				Basic load ratings		Limit speed ratings		Designations
d	D	B	r _{min}	C _r	C _{0r}	Grease	Oil	
mm				kN		r/min		
240	440	160	4	2400	3950	670	850	23248CK/W33
260	400	104	4	1520	2560	900	1200	23052C
	400	104	4	1520	2560	900	1200	23052CK
	440	144	4	2250	4020	800	1000	23152C/W33
	480	130	5	2520	3600	850	1100	22252C/W33-ZH
	540	165	6	3370	4650	630	800	22352C/C9W33
280	420	106	4	1640	2940	850	1100	23056C
	420	106	4	1640	2940	850	1100	23056CK
	460	146	5	2230	4060	750	950	23156C/W33
300	460	118	4	1840	3440	600	750	23060C/W33-ZH
	460	160	4	2570	4780	600	750	24060C/W33
	500	200	5	3560	5990	600	750	SX-24160C
320	480	160	4	2700	5200	560	700	24064C/W33
	580	208	5	3950	7010	500	630	23264CK/W33
340	520	133	5	2340	4430	530	670	23068C/W33-ZH
	520	180	5	3280	5890	530	670	24068C/W33
	520	180	5	3280	5890	530	670	24068CK30/W33
	521	181	5	3280	6170	530	670	24068CK30/W33
360	540	134	5	2610	4680	670	850	23072C/W33
380	560	180	5	3420	7000	480	600	24076C/W33

Other dimensions				Contact surface and chamfer dimensions			Calculation coefficient				Weight
d2	D1	b	k	da	Da	ra	e	Y1	Y2	Y0	
mm				mm			mm				kg
282	369	22.3	12	258	422	3					107
306	357	16.7	7	278	382	3	0.23	2.90	4.40	2.80	48
306	357	16.7	7	278	382	3	0.23	2.90	4.40	2.80	47.7
300	379	16.7	9	278	422	3					90.2
330	410	22.3	12	282	458	4					110
349	455	22.3	8	288	512	5	0.31	2.20	3.30	2.20	185
323	377	16.7	7	298	402	3	0.23	2.91	4.40	2.84	55.1
323	377	16.7	7	298	402	3	0.23	2.91	4.40	2.84	54
320	400	16.7	9	302	438	4					97.2
338	412	16.7	9	323	437	3					71.8
342	399	13.9	7	318	442	3	0.32	2.09	3.11	2.04	97.3
356	420	13.9	6	322	478	4	0.39	1.75	2.61	1.71	161
354	423	22	8	335	465	3	0.32	2.09	3.11	2.04	97.9
379	488	22.3	12	342	558	4					241
383	467	22.3	12	316	495	4					102
377	453	16.7	9	358	502	4	0.33	2.00	3.00	2.00	139
377	453	16.7	9	358	502	4	0.33	2.00	3.00	2.00	137
377	453	16.7	9	358	502	4	0.33	2.00	3.00	2.00	137
419	486	22.3	8	382	518	4	0.23	2.90	4.40	2.80	108
435	494	16.7	9	402	538	4	0.3	2.3	3.4	2.2	152

Spherical Roller Bearing(CC)

ZWZ

d 45~110 mm



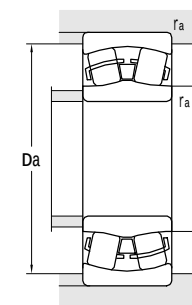
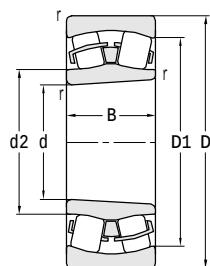
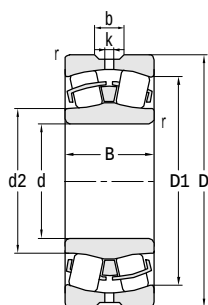
Principal dimensions				Basic load ratings		Limit speed ratings		Designations
d	D	B	r _{min}	C _r	C _{0r}	Grease	Oil	
mm				kN		r/min		
45	100	36	1.5	130	155	3700	4700	22309CC
50	90	23	1.1	80	95	4800	6100	22210CC
55	100	25	1.5	95	115	4400	5500	22211CC
60	110	28	1.5	115	140	3900	4900	22212CC
	130	46	205	255	2.1	2900	3700	22312CC
65	120	31	1.5	170	216	2800	3600	22213S/W33
	140	48	2.1	235	275	2500	3300	22313CC
70	125	31	1.5	135	175	3500	4400	22214CC
	150	51	2.1	285	355	2300	3100	22314CC/W33
75	130	1.5	31	145	190	3300	4200	22215CC
	160	55	2.1	310	405	2100	2900	22315CC/W33
80	140	33	2	160	210	3100	3900	22216CC
	170	58	2.1	325	410	1900	2700	22316CC/W33
85	150	36	2	246	325	3000	3800	22217CC/W33
	180	60	3	395	495	1800	2500	22317CC/W33
90	160	52.4	2	345	440	2700	3600	23218CC/W33
	190	64	3	477	610	1800	2400	22318CC
								22318CC/W33
95	170	43	2.1	265	355	2300	3100	22219CC/W33
	200	67	3	485	645	1700	2300	22319CC/W33
100	165	52	2	300	450	1900	2700	23120CC/W33
	180	46	2.1	290	390	2100	2900	22220CC/W33
	180	60.3	2.1	460	610	2300	3300	23220CC/W33
	215	73	3	774	903	1700	2200	22320CC/W33
110	170	45	2	300	460	3000	4100	23022CC/W33

Other dimensions				Contact surface and chamfer dimensions			Calculation coefficient				Weight
d2	D1	b	k	da	Da	ra	e	Y1	Y2	Y0	
mm				mm			mm				
57.6	82.5	-	-	54	91	1.5	0.37	1.80	2.70	1.80	1.35
60	79.2			57	83	1	0.24	2.80	4.20	2.80	0.6
66	88.1			64	91	1.5	0.24	2.80	4.20	2.80	0.82
72.7	96.6			69	101	1.5	0.24	2.8	4.20	2.80	1.1
74.9	109			72	118	2	0.35	1.9	2.90	1.80	2.95
77	106	5.5	3	74	111	1.5	0.24	2.80	4.20	2.80	1.57
82	118			77	128	2	0.35	1.90	2.90	1.80	3.55
84.6	111			79	116	1.5	0.23	2.90	4.40	2.80	1.55
88	127	8.3	4.5	82	138	2	0.35	1.90	2.90	1.80	4.3
89.7	116			84	121	1.5	0.22	3.00	4.60	2.80	1.65
94.2	134	8.3	4.5	87	148	2	0.35	1.90	2.90	1.80	5.25
95.1	124			90	130	2	0.22	3.00	4.60	2.80	2.05
100	144	8.3	4.5	92	158	2	0.35	1.90	2.90	1.80	6.2
101	133	5.5	3	96	139	2	0.22	3.00	4.60	2.80	2.68
106	154	8.3	4.5	99	166	2.5	0.33	2.00	3.00	2.00	7.25
106	137	5.5	3	101	149	2	0.31	2.20	3.30	2.20	4.54
159	159	11.1	6	104	176	2.5	0.35	1.90	2.90	1.80	8.72
113	149	8.3	4.5	107	158	2	0.24	2.80	4.20	2.80	4
118	168	11.1	6	109	186	2.5	0.35	1.90	2.90	1.80	10
115	145	5.5	3	110	155	2	0.3	2.30	3.40	2.20	4.4
120	157	8.3	4.5	112	168	2	0.24	2.80	4.20	2.80	4.85
117	153	8.3	4.5	112	168	2	0.33	2.00	3.00	2.00	6.47
138	179	11.1	5	114	201	2.5	0.35	1.90	2.90	1.80	13.4
126	151	5.5	3	120	160	2	0.23	2.90	4.40	2.80	3.69

Spherical Roller Bearing(CC)

ZWZ

d 110~170 mm



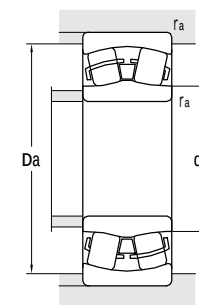
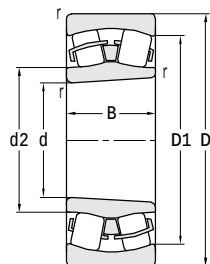
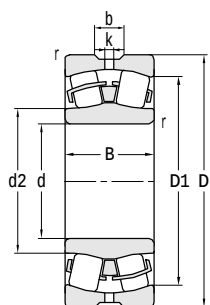
Principal dimensions				Basic load ratings		Limit speed ratings		Designations
d	D	B	r _{min}	C _r	C _{0r}	Grease	Oil	
mm				kN		r/min		
110	180	56	2	355	565	1800	2500	23122CC/W33
	200	53	2.1	370	520	1900	2700	22222CC/W33
	240	80	3	770	1020	1600	2000	22322CC/W33
120	180	46	2	345	510	3000	3900	23024CC/W33
	180	60	2	420	670	2300	3300	24024CC/W33
	200	62	2	400	645	1700	2300	23124CC/W33
	200	80	2	545	910	850	1100	24124CC/W33
	215	58	2.1	510	730	1900	2600	22224CC/W33
	215	76	2.1	560	880	1400	1800	23224CC/W33
	260	86	3	840	1100	1300	1700	22324CC/W33
130	210	64	2	450	710	1600	2100	23126CC/W33
	230	64	3	500	750	1700	2300	22226CC/W33
	230	80	3	630	1000	1200	1600	23226CC/W33
	280	93	4	1090	1310	1750	2300	22326CC/W33
140	225	68	2.1	495	850	1500	1900	23128CC/W33
	250	68	3	600	900	1700	2200	22228CC/W33
	300	102	4	1100	1500	1000	1400	22328CC/W33
150	225	56	2.1	400	700	1600	2100	23030CC/W33
	225	75	2.1	635	1080	1750	2500	24030CC/W33
	250	80	2.1	675	1140	1300	1700	23130CC/W33
	270	73	3	700	1000	1500	1900	22230CC/W33
	270	73	3	810	1100	1600	2000	22230CS/W33
	320	108	4	1200	1710	900	1300	22330CC/W33
160	240	60	2.1	470	810	1600	2100	23032CC/W33
	270	86	2.1	790	1300	1200	1600	23132CC/W33
	270	109	2.1	1000	1700	650	850	24132CC/W33
	290	80	3	845	1250	1400	1800	22232CC/W33
	340	114	4	1350	1940	900	1200	22332CC/W33
170	260	67	2.1	600	1040	1500	1900	23034CC/W33

Other dimensions				Contact surface and chamfer dimensions			Calculation coefficient				Weight
d2	D1	b	k	da	Da	ra	e	Y1	Y2	Y0	
mm				mm			mm				
126	157	8.3	4.5	120	170	2	0.30	2.30	3.40	2.20	5.55
132	173	8.3	4.5	122	188	2	0.25	2.70	4.00	2.50	7
141	197	13.9	7.5	122	188	2.5	0.35	1.90	2.90	1.80	17.8
134	163	5.5	3	130	170	2	0.22	3.00	4.60	2.80	4.08
132	158	5.5	4	130	170	2	0.30	2.30	3.40	2.20	5.53
139	173	8.3	4.5	130	190	2	0.28	2.40	3.60	2.50	7.8
135	169	5.5	3	130	190	2	0.37	1.80	2.70	1.80	10
143	187	11.1	6	132	203	2	0.25	2.70	4.00	2.50	9.06
141	183	8.3	4.5	132	203	2	0.35	1.90	2.90	1.80	22
152	216	13.9	7.5	134	246	2.5	0.35	1.90	2.90	1.80	22
148	184	8.3	4.5	140	200	2	0.28	2.40	3.60	2.50	8.55
153	200	11.1	6	144	216	2.5	0.26	2.60	3.90	2.50	11
152	196	8.3	4.5	144	216	2.5	0.33	2.00	3.00	2.00	14
157	233	16.7	9	148	262	3	0.35	1.90	2.90	1.80	28.1
159	196	8.3	4.5	152	213	2	0.28	2.40	3.60	2.50	13
166	216	11.1	6	154	236	2.5	0.26	2.60	3.90	2.50	14
175	247	16.7	9	158	282	3	0.35	1.90	2.90	1.80	34.5
169	203	8.3	4.5	162	213	2	0.22	3.00	4.60	2.80	7.95
164	196	5.5	3	162	213	2	0.30	2.30	3.40	2.20	10.3
173	216	11.1	6	162	238	2	0.30	2.30	3.40	2.20	16
179	234	13.9	7.5	164	256	2.5	0.26	2.60	3.90	2.50	18
179	234	13.9	7.5	164	256	2.5	0.25	2.60	3.90	2.50	18.4
189	267	16.7	9	168	302	3	0.35	1.90	2.90	1.80	41.5
181	217	11.1	6	172	228	2	0.22	3.00	4.60	2.80	9.7
185	234	13.9	7.5	172	258	2	0.30	2.30	3.40	2.20	20.5
181	228	8.3	4.5	172	258	2	0.4	1.70	2.50	1.60	25
191	250	13.9	7.5	174	276	2.5	0.26	2.60	3.90	2.50	22.5
201	282	16.7	9	178	322	3	0.35	1.90	2.90	1.80	50
192	232	11.1	6	182	248	2	0.23	2.90	4.40	2.80	13

Spherical Roller Bearing(CC)

ZWZ

d 170~300 mm



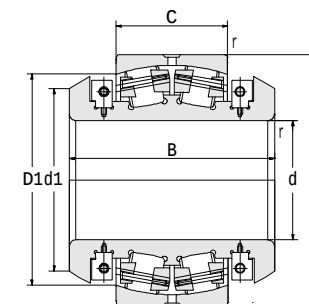
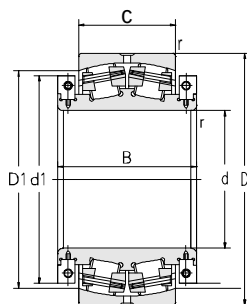
Principal dimensions				Basic load ratings		Limit speed ratings		Designations
d	D	B	r _{min}	C _r	C _{0r}	Grease	Oil	
mm				kN		r/min		
170	280	88	2.1	800	1400	1100	1500	23134CC/W33
310	86	4	900	1410	1200	1600		22234CC/W33
360	120	4	1490	2100	900	1200		22334CC/W33
180	280	74	2.1	700	1220	1300	1700	23036CC/W33
300	96	3	1160	1760	1600	2100		23136CC/W33
320	86	4	980	1500	1200	1600		22236CC/W33
380	126	4	1680	2390	850	1100		22336CC/W33
190	290	75	2.1	700	1280	1200	1600	23038CC/W33
340	92	4	1100	1650	1200	1500		22238CC/W33
340	120	4	1390	2300	800	1500		23238CC/W33
400	132	5	1800	2580	800	1000		22338CC/W33
200	360	98	4	1200	1880	1000	1400	22240CC/W33
420	138	5	1960	2800	800	1000		22340CC/W33
220	370	150	4	1800	3300	450	600	24144CC/W33
400	144	4	2000	3350	700	900		23244CC/W33
240	360	92	3	1100	2000	1000	1400	23048CC/W33
360	118	3	1300	2650	700	900		24048CC/W33
400	128	4	1700	3100	790	1000		23148CC/W33
400	160	4	2000	3800	450	650		24148CC/W33
260	440	144	4	2470	3900	1000	1400	23152CC/W33
280	420	140	4	1800	3700	600	800	24056CC/W33
300	420	90	3	1150	2440	900	1200	23960CC/W33

Other dimensions				Contact surface and chamfer dimensions			Calculation coefficient				Weight
d2	D1	b	k	da	Da	ra	e	Y1	Y2	Y0	
mm				mm			mm				kg
195	244	13.9	7.5	182	268	2	0.30	2.30	3.40	2.20	21.5
204	267	16.7	9	188	292	3	0.27	2.50	3.70	2.50	28.5
213	300	16.7	9	188	342	3	0.33	2.00	3.00	2.00	58.5
204	248	13.9	7.5	192	268	2	0.24	2.80	4.20	2.80	17
207	259	13.9	7.5	194	286	2.5	0.30	2.30	3.40	2.20	27
214	277	16.7	9	198	302	3	0.26	2.60	3.90	2.50	29.5
224	317	22.3	12	198	362	3	0.35	1.90	2.90	1.80	69
216	260	13.9	7.5	202	278	2	0.23	2.90	4.40	2.80	18
226	294	16.7	9	208	322	3	0.19	3.60	5.30	3.60	36.5
223	287	16.7	9	208	322	3	0.35	1.90	2.90	1.80	47.5
237	333	22.3	12	212	378	4	0.35	1.90	2.90	1.80	80
238	312	16.7	9	218	342	3	0.26	2.60	3.90	2.50	43.5
249	351	22.3	12	222	398	4	0.33	2.00	3.00	2.00	92.5
248	310	11.1	6	238	352	3	0.4	1.70	2.50	1.60	65
260	338	16.7	9	238	382	3	0.35	1.90	2.90	1.80	79.5
271	325	13.9	7.5	254	346	2.5	0.23	2.90	4.40	2.80	33.5
265	316	11.1	6	254	346	2.5	0.3	2.30	3.40	2.20	42.5
277	347	16.7	9	258	382	3	0.3	2.30	3.40	2.20	65.5
271	337	11.1	6	258	382	3	0.4	1.70	2.50	1.60	80.5
300	379	16.7	9	278	422	3	0.31	2.20	3.30	2.20	90.2
309	368	11.1	6	298	402	3	0.31	2.20	3.30	2.20	68.5
333	385	11.1	6	314	406	2.5	0.19	3.60	5.30	3.60	40.5

Spherical Roller Bearing(Split D)

ZWZ

d 120~800 mm



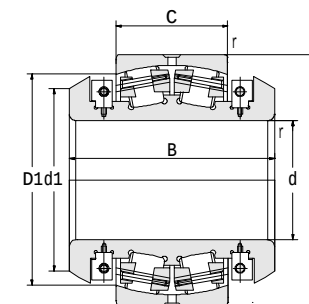
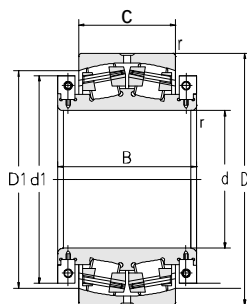
Principal dimensions					Basic load ratings	
d	D	B	C	r _{min}	C _r	C _{or}
mm					kN	
120	200	80	80	2	540	870
140	230	53	53	2	350	580
180	300	74	74	2.1	680	1050
280	500	176	176	5	2650	4400
300	500	160	160	5	1660	4800
360	540	134	134	5	2150	4480
400	600	148	148	5	2750	5800
420	620	150	150	6	2750	5850
460	700	165	165	6	3150	6500
530	780	185	185	6	3400	8100
560	870	200	200	6	5020	10500
600	980	375	375	7.5	10000	21500
630	920	212	212	7.5	5650	12500
670	980	230	230	7.5	6400	13500
710	950	243	243	6	5720	15100
	1030	236	236	7.5	6900	15500
750	1000	250	250	6	6310	16800
	1090	250	250	7.5	6810	15230
800	1060	258	258	6	6850	18500
	1150	258	258	7.5	6850	15600

Designations	Other dimensions		Calculation coefficient				Weight
	d1	D1	e	Y1	Y2	Y0	
	mm		mm				kg
24124D	165	168	0.37	1.8	2.7	1.8	18.5
23028D	181	190	0.22	3	4.6	2.8	15.2
23136X2D	221	247	0.24	2.8	4.2	2.8	32
23256D	420	438	0.35	1.9	2.9	1.9	178
23160D	419	434	0.3	2.3	3.4	2.2	135
23072D	477	481	0.23	2.9	4.4	2.8	158
23080D	523	540	0.23	2.9	4.4	2.8	210
23084D	542	561	0.22	3	4.6	2.8	160
23092X3D	605	635	0.21	3.2	4.8	3.2	346
230/530D	666	704	0.21	3.2	4.8	3.2	389
230/560X3D	734	785	0.22	3	4.6	2.8	585
241/600D	812	833	0.35	1.9	2.9	1.8	1370
230/630D	799	836	0.21	3.2	4.8	3.2	636
230/670D	862	890	0.21	3.2	4.8	3.2	820
249/710D	862	867	0.22	3	4.6	2.8	710
230/710D	902	938	0.21	3.2	4.8	3.2	895
249/750D	901	915	0.22	3	4.6	2.8	716
230/750D	931	992	0.2	3.4	5	3.2	961
249/800D	957	967	0.21	3.2	4.8	3.2	815
230/800D	885	1045	0.27	2.50	3.70	2.50	1087

Spherical Roller Bearing(Split D)

ZWZ

d 800~1250 mm



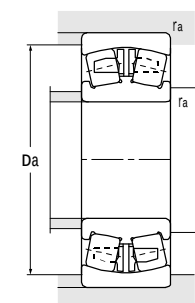
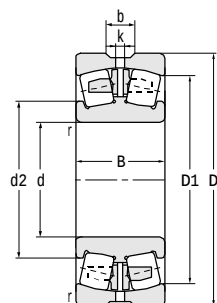
Principal dimensions					Basic load ratings	
d	D	B	C	r _{min}	C _r	C _{or}
mm					kN	
800	1150	540	258	7.5	6850	15600
	1150	490	325	7.5	12200	30500
850	1120	390	272	6	7350	20500
	1220	455	365	7.5	10900	25800
	1220	660	365	7.5	10900	25800
	1220	540	365	7.5	10900	25800
	1280	540	375	7.5	12200	30600
884	1320	478	365	9.5	11000	24900
900	1180	400	280	6	8100	22600
	1270	478	365	9.5	9800	24600
	1270	470	365	9.5	9800	24600
	1270	470	365	9.5	9850	24600
	1280	498	375	9.5	9800	24600
	1320	478	365	9.5	9800	24100
950	1250	420	300	7.5	8800	25200
	1360	420	300	7.5	9100	21000
	1360	640	300	7.5	9100	21000
1000	1470	530	345	9.5	14400	35900
	1420	556	412	7.5	13300	34500
1060	1460	500	335	7.5	11400	33000
	1500	585	438	9.5	15000	40000
	1500	611.5	438	9.5	15000	40000
	1500	575	438	9.5	15000	40000
1120	1460	500	335	7.5	11300	33000
	1540	525	355	7.5	14200	43000
1180	1540	500	355	7.5	10000	31500
1250	1750	560	375	9.5	19500	48000

Designations	Other dimensions		Calculation coefficient				Weight
	d1	D1	e	Y1	Y2	Y0	
	mm		mm				kg
230/800DW	885	1045	0.27	2.5	3.7	2.5	1367
240/800X2D	1045	1075					1990
249/850D	1010	1027	0.22	3	4.6	2.8	835
240/850D	1030	1092	0.27	2.5	3.7	2.5	1650
240/850WD	1030	1092	0.27	2.5	3.7	2.5	1931
240/850WBD	1060	1092	0.27	2.5	3.7	2.5	1781
240/850X3D	1124	1146	0.26	2.6	3.9	2.5	2380
240/884D/HC			0.25	2.7	4	2.6	2457
239/900X2	1059	1085	0.21	3.2	4.8	3.2	1120
240/900X3D	1118	1130	0.25	2.7	4	2.6	1970
240/900X3D-2	1118	1130	0.25	2.7	4	2.6	1970
240/900X3D-3	1118	1130	0.25	2.7	4	2.6	1880
240/900X2D/HC	1118	1130	0.25	2.7	4	2.6	2064
240/900X3D/HCC9-2	1140	1178	0.24	2.8	4.2	2.8	2050
249/950D	1132	1148	0.21	3.2	4.8	3.2	1320
230/950D	1169	1234	0.2	3.4	5	3.2	1956
230/950D-1	1050	1234	0.2	3.4	5	3.2	2338
230/100X3D	1271	1338	0.21	3.2	4.8	3.2	3030
240/1000D	1107	1276					2633
249/1060X1D	1331	1349	0.2	3.4	5	3.2	2476
240/1060D	1164	1349	0.2	3.4	5	3.2	3083
240/1060D-1	1164	1349	0.2	3.4	5	3.2	3089
240/1060D-2	1164	1349	0.2	3.4	5	3.2	3354
249/1120D	1331	1349	0.2	3.4	5	3.2	2100
240/1120X3D	1403	1419	0.2	3.4	5	3.2	2920
249/1180D	1394	1428	0.2	3.4	5	3.2	2254
230/1250D	1562	1607	0.19	3.6	5.3	3.6	3850

Spherical Roller Bearing(Vibration Screen VB)

ZWZ

d 80~170 mm

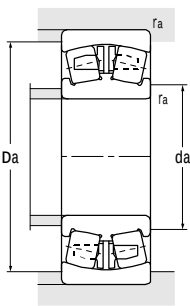
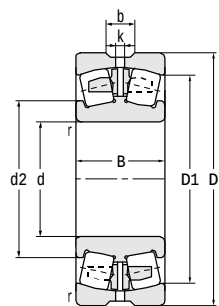


Principal dimensions				Basic load ratings		Limit speed ratings		Designations
d	D	B	r _{min}	C _r	C _{or}	Grease	Oil	
mm				kN		r/min		
80	170	58	2.1	345	495	2000	2800	22316/VBW33
85	180	60	3	355	505	1900	2600	22317Q1/VB
	180	60	3	355	505	1900	2600	22317Q1/VBW33
90	190	64	3	462	625	1800	2400	22318/VBW33
95	200	67	3	485	685	1800	2400	22319/VBW33
100	215	73	3	530	650	1800	2400	22320Q1/VB
	215	73	3	530	650	1800	2400	22320Q1/VBW33
105	175	56	2	402	550	1900	2700	22321Q1/VB
110	240	80	3	650	910	1600	2000	22322Q1/VB
	240	80	3	650	910	1600	2000	22322Q1/VBW33
120	260	86	3	840	1100	1400	1800	22324Q1/VB
	260	86	3	840	1100	1400	1800	22324Q1/VBW33
130	230	64	3	495	685	1800	2400	22226KQ1/VBW33
	280	93	4	840	1300	1300	1700	22326/VBHAC9W33
	280	93	4	840	1300	1300	1700	22326/VBW33
140	300	102	4	840	1300	1200	1600	22328Q1/VBW33
	300	118	4	1060	1450	1100	1500	23328Q1/VBW33
150	320	108	4	1160	1580	1100	1500	22330Q1/VBW33
160	290	80	3	950	1230	1500	1900	22232KQ1/VBW33
	340	114	4	1400	2050	950	1300	22332Q1/VBW33
	340	136	4	1520	1860	950	1300	23332Q1/VBW33
170	360	120	4	1500	2110	1300	1700	22334Q1/VBW33
	360	136	4	1880	2540	800	1000	23334X2Q1/VBHAC9W33

Other dimensions				Contact surface and chamfer dimensions			Calculation coefficient				Weight
d1	D1	b	k	da	Da	ra	e	y1	y2	y0	
mm				mm			mm				kg
109	142			92	158	2	0.34	1.99	2.96	1.94	6.24
115	150			99	166	2.5	0.34	1.99	2.96	1.94	8.19
	150			99	166	2.5	0.34	1.99	2.96	1.94	7.59
123	159	8.3	5	104	176	2.5	0.34	1.99	2.96	1.94	8.49
128	167	8.3	5	109	186	2.5	0.34	1.99	2.96	1.94	10.5
135	179			114	201	2.3	0.37	1.80	2.70	1.80	13.5
	179	11.1	5	114	201	2.3	0.37	1.80	2.70	1.80	13.5
127	151			115	165	2	0.31	2.20	3.30	2.20	5.48
150	197			124	226	2.5	0.37	1.80	2.70	1.80	18.9
	197	13.9	6	124	226	2.5	0.37	1.80	2.70	1.80	18.8
165	215			134	246	2.5	0.35	1.90	2.90	1.80	23.3
	215			134	246	2.5	0.35	1.90	2.90	1.80	23.3
172	210	11.1	6	144	216	2.5	0.30	2.50	3.70	2.50	11.2
178	232	16.7	6	148	262	3	0.36	1.88	2.79	1.83	28.6
	232	16.7	6	148	262	3	0.36	1.88	2.79	1.83	28.6
186	247	16.7	9	158	282	3	0.37	1.80	2.70	1.80	37.0
	270	16.7	9	158	280	3	0.42	1.69	2.51	1.65	41.8
203	265	16.7	9	168	302	3	0.37	1.80	2.70	1.80	44.6
201	249	13.9	5	174	276	2.5	0.27	2.50	3.70	2.50	22.5
	284	16.7	7	178	322	3	0.36	1.87	2.79	1.83	52.8
	284	22	8	178	322	3	0.35	1.90	2.90	1.80	60.6
215	268	16.7	6	188	292	3	0.27	2.50	3.70	2.50	61.7
	292	22.3	12	188	342	3	0.41	1.65	2.45	1.61	69.0

Spherical Roller Bearing(Vibration Screen VB)

d 180~200 mm



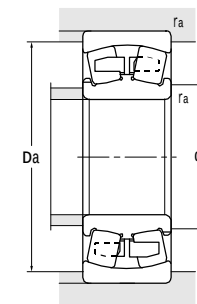
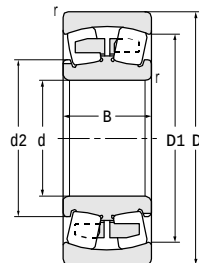
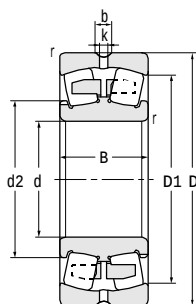
Principal dimensions				Basic load ratings		Limit speed ratings		Designations
d	D	B	r _{min}	C _r	C _{or}	Grease	Oil	
mm				kN		r/min		
180	380	126	4	1620	2400	900	1200	22336Q1/VBW33
190	340	120	4	1420	2400	850	1100	23238KQ1/VBW33
	400	132	5	1800	2630	850	1100	22338Q1/VBW33
200	420	138	5	1910	2860	850	1100	22340Q1/VBW33

Other dimensions				Contact surface and chamfer dimensions			Calculation coefficient				Weight
d1	D1	b	k	da	Da	ra	e	y1	y2	y0	
mm				mm			mm				kg
242	316	22.3	8	198	362	3	0.35	1.90	2.90	1.80	71.3
237	288	16.7	7	208	322	3	0.35	1.90	2.90	1.80	48
257	334	22.3	8	212	378	4	0.35	1.90	2.90	1.80	82.2
269	350	22.3	8	222	398	4	0.35	1.90	2.90	1.80	97

Spherical Roller Bearing(Continuous Casting Beraing CB)

ZWZ

d 65~160 mm



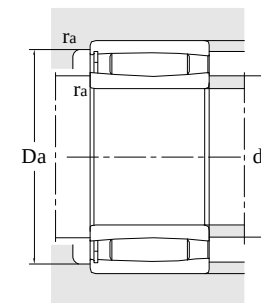
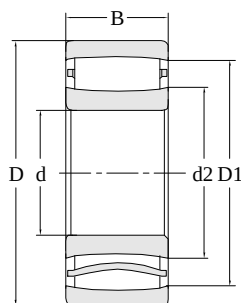
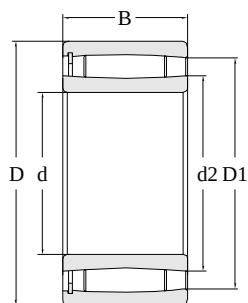
Principal dimensions				Basic load ratings		Limit speed ratings		Designations
d	D	B	r _{min}	C _r	C _{or}	Grease	Oil	
mm				kN		r/min		
65	100	35	1.1	110	165	3800	4800	24013CB-2RS/HG2
75	115	40	1.1	158	240	2900	3500	24015CB/HG2W33
90	160	52.4	2	300	440	1900	2600	23218CB/HG2W33
95	170	43	2.1	275	370	2400	3200	22219CB/HG2W33
100	180	60.3	2.1	400	570	1700	2200	23220CB/HG2W33
110	180	69	2	410	660	1000	1400	24122CB/HG2W33
120	180	60	2	365	630	1600	2000	24024CB/HG2W33
	200	62	2	430	650	1900	2600	23124CB/HG2W33
130	200	69	2	470	820	1800	2400	24026CB/HG2W33
140	210	69	2	460	860	1800	2400	24028CB/HG2W33
160	240	80	2.1	640	1180	1100	1500	24032CB/HG2W33

Other dimensions				Contact surface and chamfer dimensions			Calculation coefficient				Weight
d2	D1	b	k	da	Da	ra	e	y1	y2	y0	
mm				mm			mm				kg
75	87			74	90	1					0.966
88	101	5.5	3	82	106	1					1.48
111	137	5.7	3	101	149	2					4.5
120	149	8.4	4.5	107	158	2					4.29
125	153	8.4	4.5	112	168	2					6.44
131	154	5.5	3	120	170	2					6.95
138	158	5.5	4	130	170	2					553
	146	175	8.3	130	190	2					7.97
151	174	5.5	3	140	190	2					7.76
160	184	6	3	150	200	2					8.51
184	209	10	4.5	172	228	2					12.9

Spherical Roller Bearing(SDB)

ZWZ

d 75~220 mm



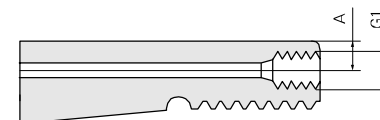
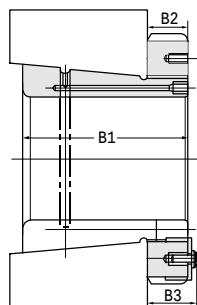
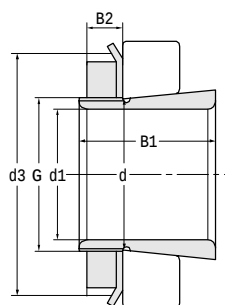
Principal dimensions				Basic load ratings		Limit speed ratings	Designations
d	D	B	r _{min}	C _r	C _{or}		
mm				kN		r/min	
75	105	40	1	204	325	1900	SDB5915V/HG2YAD
	105	40	1	204	325	1900	SDB5915V/YAD
	105	54	1	200	325	1600	SDB6915V-2RS/HG2
	105	54	1	200	325	1600	SDB6915V/HG2C9
85	120	46	1.1	275	465	1700	SDB5917V/YAD
90	125	46	1.1	200	400	1600	SDB5918V/C9
	125	46	1.1	200	400	1600	SDB5918V-2RS/C9
100	150	50	1.5	345	530	1400	SDB4020V/HG2W33AYAD
	150	67	1.5	495	865	1100	SDB5020V/C9YA7
120	180	60	2	510	850	1100	SDB4024V/HG2C9
	180	60	2	510	850	1100	SDB4024V/HG2W33A
	180	60	2	510	850	1100	SDB4024V/W33YAD
130	200	69	2	700	1085	850	SDB4026V/HG2YAD
	200	69	2	700	1100	850	SDB4026V/YAD
150	225	75	2.1	755	1330	750	SDB4030V/C9
160	240	80	2.1	890	1460	600	SDB4032V/HG2W33AYAD
220	340	90	3	1280	2030	220	SDB3044/C9

Other dimensions				Contact surface and chamfer dimensions			Calculation coefficient		Weight
d2	D1	b	k	da	Da	ra	k1	k2	
mm				mm			mm		kg
82	96			81	95	1	0.098	0.114	1.07
82	96			81	95	1	0.098	0.114	1.07
85	94			81	98	1	0.073	0.154	1.36
85	94			81	98	1	0.073	0.154	1.35
95	110			91	113	1	0.098	0.109	1.52
101	113			98	116	1	0.089	0.131	1.71
101	113			98	116	1	0.089	0.131	1.72
112	135	10	3	110	138	1.5	0.098	0.118	3.05
114	135			110	138	1.5	0.112	0.094	4.23
139	164			134	168	2	0.107	0.103	5.48
139	164	10	3	134	168	2	0.107	0.103	5.45
139	164	5.5	4	134	168	2	0.107	0.103	5.44
146	181			142	190	2	0.113	0.097	7.79
146	181			142	190	2	0.113	0.097	8.04
172	204			165	213	2	0.107	0.106	10.4
179	217	11	4	175	220	2	0.109	0.103	12.6
256	311			240	320	2.5	0.11	0.10	29.1

Spherical Roller Bearing(Adapter Sleeve)

ZWZ

d 60–200 mm



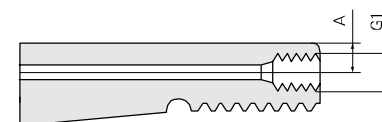
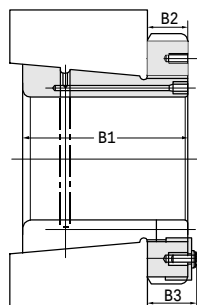
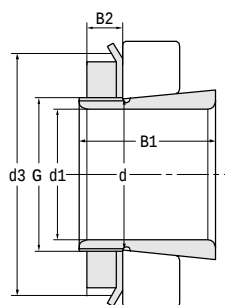
Principal dimensions								
d1	d	d3	B1	B2	B3	G	G1	A
mm								
60	65	85	65	14		M65x2		
70	80	105	46	17		M80x2		
	80	105	46	17		M80x2		
75	85	110	63	18		M85x2		
80	90	120	65	18		M90x2		
90	100	130	97	20		M100x2		
100	110	145	81	21		M110x2		
	110	145	105	21		M110x2		
110	120	145	72	22		M120x2		
	120	155	88	22		M120x2		
115	130	165	121	23		M130x2		
140	160	190	93	28		M160x3		
	160	210	119	28		M160x3		
	160	210	147	28		M160x3		
150	170	200	101	29		M170x3		
	170	220	122	29		M170x3		
160	180	210	109	30		M180x3		
	180	230	131	30		M180x3		
170	190	220	112	31		M190x3		
180	200	240	120	32		M200x3		
	200	250	150	32		M200x3		
200	220	260	126	30	41	Tr220x4	M6	4.2
	220	280	161	35		Tr220x4		

Designation	Lock nut	Locking device	Applicable hydraulic nut	Weight
Adapter sleeve with lock nut and locking devices.				kg
H2313	KM13	MB13	HMV13E	0.582
H216	KM16	MB16	HMV16E	0.966
H316	KM16	MB16	HMV16E	1.04
H317	KM17	MB17	HMV17E	1.17
H318	KM18	MB18	HMV18E	1.1
H2320	KM20	MB20	HMV20E	2.76
H3122	KM22	MB22	HMV22E	2.33
H2322	KM22	MB22	HMV22E	2.84
H3024	KML24	MBL24	HMV24E	1.95
H3124	KM24	MB24	HMV24E	2.39
H2326	KM26	MB26	HMV26E	4.72
H3032	KML32	MBL32	HMV32E	6.64
H3132	KM32	MB32	HMV32E	7.47
H2332	KM32	MB32	HMV32E	9.2
H3034	KML34	MBL34	HMV34E	6.31
H3134	KM34	MB34	HMV34E	8
H3036	KML36	MBL36	HMV36E	6.73
H3136	KM36	MB36	HMV36E	9.39
H3038	KML38	MBL38	HMV38E	7.62
H3040	KML40	MBL40	HMV40E	9.71
H3140	KM40	MB40	HMV40E	12
H3044	HML44	MSL44	HMV44E	11.2
H3144	HM44	MS44	HMV44E	15.3

Spherical Roller Bearing(Adapter Sleeve)

ZWZ

d 200~380 mm



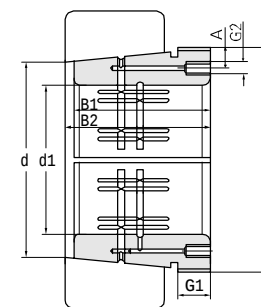
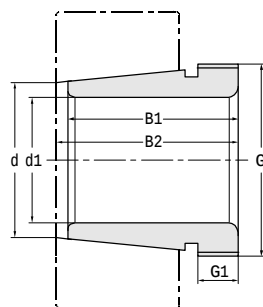
Principal dimensions								
d1	d	d3	B1	B2	B3	G	G1	A
mm								
200	220	280	161	35		Tr220x4	M6	4.2
	220	280	186	35		Tr220x4		
220	240	300	172	37		Tr240x4		
	240	300	172	37		Tr240x4	M6	4.2
240	260	310	116	34	46	Tr260x4	M6	4.2
	260	310	145	34	46	Tr260x4	M6	4.2
	260	330	190	39		Tr260x4		
	260	330	190	39		Tr260x4	M6	4
260	280	330	152	38	50	Tr280x4	M6	4.2
	280	350	195	38	51	Tr280x4	M6	4.2
	280	350	195	38	41	Tr280x4	M6	4.2
	280	350	224	41		Tr280x4		
280	300	360	168	42	54	Tr300x4	M6	4.2
	300	380	208	40	53	Tr300x4	M6	4.2
300	320	380	140	42	55	Tr320x5	M6	4
	320	400	226	42	56	Tr320x5	M6	4
	320	400	258	42	56	Tr320x5	M6	4
320	340	440	254	55	72	Tr340x5	M6	4
340	360	420	188	45	58	Tr360x5	M6	4
	360	460	259	58	75	Tr360x5	M6	4
360	380	450	193	48	62	Tr380x5	M6	4
	380	490	264	60	77	Tr380x5	M6	4
380	400	470	210	52	66	Tr400x5	M6	4
	400	520	272	62	82	Tr400x5	M6	4

Designation	Lock nut	Locking device	Applicable hydraulic nut	Weight
Adapter sleeve with lock nut and locking devices.				kg
OH3144XH	HM44	MB44	HMV44E	14.9
H2344	HM44	MB44	HMV44E	16.8
H3148	HM48	MB48	HMV48E	18.4
OH3148H	HM48	MB48	HMV48E	16
OH3952H	HML52	MSL48	HMV52E	14.8
H3052	HML52	MSL48	HMV52E	16
H3152	HM52	MB52	HMV52E	22.8
OH3152H	HM52	MB52	HMV52E	23.3
H3056	HML56	MSL56	HMV56E	18.4
H3156	KM56	MS52	HMV56E	25.2
OH3156H	HM56X2	MB56	HMV56E	25.9
H2356	HM56	MB56	HMV56E	29.6
H3060	HML60	MSL60	HMV60E	24
OH3160H	HM60	MS60	HMV60E	31.4
OH3964H	HML64	MSL64	HMV64E	21.4
OH3164H	HM64	MS64	HMV64E	32.5
H3264	HM64	MS64	HMV64E	40.8
OH3168H	HM68	MS68	HMV68E	52.4
OH3072H	HML72	MSL72	HMV72E	20.6
OH3172H	HM72	MS68	HMV72E	57.3
H3076	HML76	MSL76	HMV76E	43.5
H3176	HM76	MS76	HMV76E	62.9
H3080	HML80	MSL76	HMV80E	43.5
OH3180H	HM80	MS80	HMV80E	65

Spherical Roller Bearing(Withdrawal Sleeve)

ZWZ

d 95~1010 mm



Principal dimensions

d1	d	B1	B2	G	G1	G2	A
mm							
95	100	64	68	M110x2	11		
105	110	65	72	M120x2	11		
145	150	96	101	M160x3	15		
170	180	105	110	M200x3	17		
	180	116	122	M190x3	19		
200	220	130	136	Tr240x4	20		
220	240	154	161	Tr260x4	25		
	240	189	197	Tr260x4	30		
320	340	225	234	Tr360x5	33		
340	360	167	176	Tr380x5	30	G1/4	9
		269	289	Tr380x5	26	G1/4	9
360	380	170	180	Tr410x5	31	G1/4	9.5
400	420	186	196	Tr440x5	34		
440	460	202	213	Tr480x5	37		
460	480	295	307	Tr500x5	45	G1/4	9
510	530	225	235	Tr560x6	54		
540	560	250	261	Tr600x6	54		
560	580	180	190	Tr600x6	47		
	580	300	308	Tr620x6	60		
1010	1060	310	328	Tr1095x8	50	G1/4	15

Designation Withdrawal sleeve	Applicable nut for withdraw	Applicable hydraulic nut	Weight
			kg
AH3120	KM22	HMV22E	0.66
AH3122			0.76
AHX3130	KM32	HMV32E	1.8
AH2236	KM40		3.4
AHX3136	KM38	HMV38E	4.25
AH2244			9.23
AH3148	HM3052	HMV52E	15.9
AH2348	HM3052	HMV52E	15.9
AHX3168	HM3172	HMV72E	28.1
AOH3072	HM3076	HMV3076E	21
AOH24172	HM3176	HMV3076E	29.6
AOH3076			22.8
AHX3084	HM3088	HMV88E	26.9
AHX3092H	HM3096	HMV96E	34
AOH3196	HM31/500	HMV100E	60
AHX06/530			47.8
AH30/560-1			60.6
AH26/580			38
AH26/580-1			86
AOH239/1060			261