

Spherical Roller and Plain Bearings



Spherical Roller Bearings

Spherical Roller Bearings have two Raceways on Inner Ring, and one Spherical Raceway on the Outer Ring. As the name implies, the Rolling Elements of the Bearing have a spherical profile.

Spherical Roller Bearings

Spherical roller bearings have two rows of rollers, a common sphered outer ring raceway and two inner ring raceways inclined at an angle to the bearing axis. The centre point of the sphere in the outer ring raceway is at the bearing axis. Therefore, the bearings are self-aligning and insensitive to misalignment of the shaft relative to the housing, which can be caused, for example, by shaft deflection. Spherical roller bearings are designed to accommodate heavy radial loads, as well as heavy axial loads in both directions.

Spherical Roller Bearings are

- Capable of carrying both radial loads and axial loads
- Suitable for low and medium speed applications
- Suitable for applications where some mis-alignment of Shaft can arise KG can offer following variants
- Single Row type - 202 series (details available on request)
- Double Row type - 213, 222, 223, 230, 231, 232, 239, 240, 241
- Plain type - GE
- With C2, CN, C3 and C4 radial clearance
- Pressed Steel or machined Brass Cage

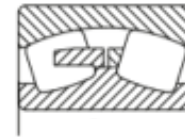


Spherical Roller Bearings

Apart from the list of items presented in the following pages, many other type of Spherical Roller Bearings can also be developed to meet specific application requirements. Technical information for Bearings not appearing in our production program, is available on request.

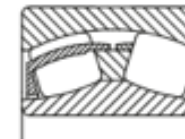
MB design

These bearing have fixed rib and machined cages guided on the inner ring rib. **KG can offer this design bearings upon request.**



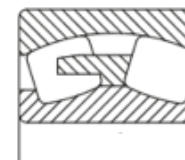
C design

This bearing have central guide floating on the inner ring, symmetrical rollers with larger dimensions so that the load carrying capacity increases. Special pressed sheet cage. Bearings of this design are of small and medium sizes



CA

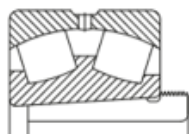
These bearings have side shoulders and an one-piece machined brass cage. They also have symmetrical rollers with larger dimensions so that the load carrying capacity increases. This design is available for medium and large-sized bearings
Bearing with Cylindrical bore, lubrication groove and holes in the outer ring



With withdrawal sleeves



Tapered bore, lubrication groove and holes in the outer ring (taper 1:12, 1:30)

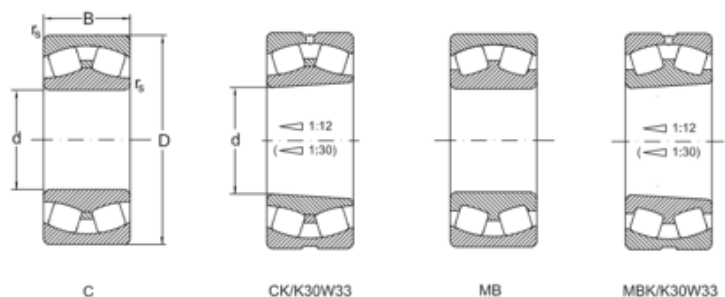


KG standard suffixes for Spherical Roller Bearings

A	Modified internal design.
C2	Radial internal clearance less than normal.
CN	Normal radial internal clearance. Generally, no special suffix is used in KG Bearings for normal radial internal clearance.
C3	Radial internal clearance higher than normal.
C4	Radial internal clearance higher than C3.
C	Pressed Steel Cage.
CA	Machined Brass Cage, one-piece Cage.
K	Tapered Bore, with taper of 1:12.
K30	Tapered Bore, with taper of 1:30.
MB	Machined Brass Cage, split type.
Q1-Q3	KG internal reference codes. For details please contact KG International FZCO.
W33	Oil groove with oil holes in the Outer Ring.

Spherical Plain Bearings

Spherical Plain Bearings (also known as “Spherical Plain Bearings” “Spherical Ball Bushing Bearings” and “Ball Bushings”) have an inner ring with a sphere convex outside surface and an outer ring with a correspondingly sphere, but concave inside surface. Their design makes them particularly suitable for bearing arrangements where alignment movements between shaft and housing have to accommodate, or where oscillating or recurrent tilting movements must be permitted at relatively slow sliding speeds.



Note: Most of the Bearings listed in the following pages of this chapter are available with above suffixes, subject to design or manufacturing constraints.

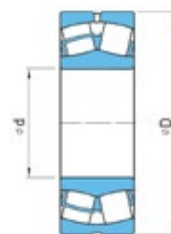
Series: **213**



C Type

Principal dimensions			Designation	Basic Load Ratings		Speed ratings		Mass
d	D	B		Dynamic	Static	Reference speed	Limiting speed	
mm				C	C ₀			
				N		r/min		
20	52	15	21304CW33	40500	33500	15,000	10,100	0.16
25	62	17	21305CW3	48000	41500	9,300	12,000	0.28
30	72	19	21306CW33	64000	61000	8,200	10,000	0.41
35	80	21	21307CW33	76500	72000	7,300	9,500	0.55
40	90	23	21308CW33	104000	108000	7,000	9,500	0.75
45	100	25	21309CW33	125000	127000	6,300	8,500	0.99
50	110	27	21310CW33	156000	166000	5,600	7,500	1.35
55	120	29	21311CW33	156000	166000	5,600	7,500	1.70
60	130	31	21312CW33	212000	240000	4,800	6,300	2.10
65	140	33	21313CW33	236000	270000	4,300	6,000	2.55
70	150	35	21314CW33	285000	325000	4,000	5,600	3.10
75	160	37	21315CW33	285000	325000	4,000	5,600	3.75
80	170	39	21316CW33	325000	375000	3,800	5,300	4.45
85	180	41	21317CW33	325000	375000	3,800	5,300	5.20
90	190	43	21318CW33	380000	450000	3,600	4,800	6.10
95	200	45	21319CW33	425000	490000	3,400	4,500	7.05
100	215	47	21320CW33	425000	490000	3,400	4,500	8.60

Series: **222**



C Type

Principal dimensions			Designation	Basic Load Ratings		Speed ratings		Mass
d	D	B		Dynamic	Static	Reference speed	Limiting speed	
mm				C	C ₀			
				N		r/min		
25	52	18	22205CW33	49000	44000	13,000	17,000	0.26
30	62	20	22206CW33	64000	60000	10,000	14,000	0.29
35	72	23	22207CW33	86500	85000	9,000	12,000	0.45
40	80	23	22208CW33	96500	90000	8,000	11,000	0.53
45	85	23	22209CW33	102000	98000	7,500	10,000	0.58
50	90	23	22210CW33	104000	108000	7,000	9,500	0.63
55	100	25	22211CW33	125000	127000	6,300	8,500	0.84
60	110	28	22212CW33	156000	166000	5,600	7,500	1.15
65	120	31	22213CW33	193000	216000	5,000	7,000	1.55
70	125	31	22214CW33	208000	228000	5,000	6,700	1.55
75	130	31	22215CW33	212000	240000	4,800	6,300	1.70
80	140	33	22216CW33	236000	270000	4,300	6,000	2.10
85	150	36	22217CW33	285000	325000	4,000	5,600	2.70
90	160	40	22218CW33	325000	375000	3,800	5,300	3.40
95	170	43	22219CW33	380000	450000	3,600	4,800	4.15
100	180	46	22220CW33	425000	490000	3,400	4,500	4.90
110	200	53	22222CW33	560000	640000	3,000	4,000	7.00
120	215	58	22224CW33	630000	765000	2,800	3,800	8.70
130	230	64	22226CW33	735000	930000	2,600	3,600	11.00
140	250	68	22228CW33	710000	900000	2,400	3,200	14.00
150	270	73	22230CW33	850000	1080000	2,200	3,000	18.00
160	290	80	22232CW33	1000000	1290000	2,000	2,800	22.50
170	310	86	22234CW33	1120000	1460000	1,900	2,600	28.50
180	320	86	22236CW33	1180000	1560000	1,800	2,600	29.50
190	340	92	22238CW33	1270000	1700000	1,700	2,400	36.50
200	360	98	22240CW33	1460000	1930000	1,600	2,200	43.50
220	400	108	22244CW33	1760000	2360000	1,500	2,000	60.50
240	440	120	22248CW33	2200000	3000000	1,300	1,800	83.00
260	480	130	22252CW33	2650000	3550000	1,200	1,600	110.00
280	500	130	22256CW33	2700000	3750000	1,100	1,500	115.00
300	540	140	22260CW33	3150000	4250000	1,000	1,400	135.00



Series: **223**



C Type

Principal dimensions			Designation	Basic Load Ratings		Speed ratings		Mass
d	D	B		Dynamic	Static	Reference speed	Limiting speed	
mm				C	C ₀	r/min	kg	
				N				
40	90	33	22308CW33	150000	140000	6,000	8,000	1.05
45	100	36	22309CW33	183000	183000	5,300	7,000	1.40
50	110	40	22310CW33	220000	224000	4,800	6,300	1.90
55	120	43	22311CW33	270000	280000	4,300	5,600	2.45
60	130	46	22312CW33	310000	335000	4,000	5,300	3.10
65	140	48	22313CW33	340000	360000	3,800	5,000	3.75
70	150	51	22314CW33	400000	430000	3,400	4,500	4.55
75	160	55	22315CW33	440000	475000	3,200	4,300	5.55
80	170	58	22316CW33	490000	540000	3,000	4,000	6.60
85	180	60	22317CW33	550000	620000	2,800	3,800	7.65
90	190	64	22318CW33	610000	695000	2,600	3,600	9.05
95	200	67	22319CW33	670000	765000	2,600	3,400	10.50
100	215	73	22320CW33	815000	950000	2,400	3,000	13.50
110	240	80	22322CW33	950000	1120000	2,000	2,800	18.50
120	260	86	22324CW33	965000	1120000	2,000	2,600	23.00
130	280	93	22326CW33	1120000	1320000	1,800	2,400	29.00
140	300	102	22328CW33	1290000	1560000	1,700	2,200	36.50
150	320	108	22330CW33	1460000	1760000	1,600	2,000	43.50
160	340	114	22332CW33	1600000	1960000	1,500	1,900	52.00
170	360	120	22334CW33	1760000	2160000	1,400	1,800	61.00
180	380	126	22336CW33	2000000	2450000	1,300	1,700	71.50
190	400	132	22338CW33	2120000	2650000	1,200	1,600	82.50
200	420	138	22340CW33	2320000	2900000	1,200	1,500	95.00
220	460	145	22344CW33	2700000	3450000	1,000	1,400	120.00
240	500	155	22348CW33	3100000	4000000	950	1,300	155.00
260	540	165	22352CW33	3550000	4550000	850	1,100	190.00
280	580	175	22356CW33	4000000	5200000	800	1,100	235.00

Series: **230**



C Type

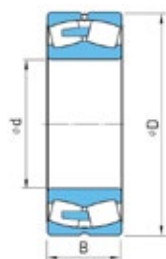
Principal dimensions			Designation	Basic Load Ratings		Speed ratings		Mass
d	D	B		Dynamic	Static	Reference speed	Limiting speed	
mm				C	C ₀	r/min	kg	
				N				
110	170	45	23022CW33	310000	440000	3,400	4,300	3.80
120	180	46	23024CW33	355000	510000	3,200	4,000	4.20
130	200	52	23026CW33	430000	610000	2,800	3,600	6.00
140	210	53	23028CW33	465000	680000	2,600	3,400	6.55
150	225	56	23030CW33	510000	750000	2,400	3,200	7.95
160	240	60	23032CW33	585000	880000	2,400	3,000	9.70
170	260	67	23034CW33	710000	1060000	2,200	2,800	13.00
180	280	74	23036CW33	830000	1250 000	2,000	2,600	17.00
190	290	75	23038CW33	865000	1340000	1,900	2,400	18.00
200	310	82	23040CW33	1000000	1530000	1,800	2,200	23.50
220	340	90	23044CW33	1220000	1860000	1,600	2,000	30.50
240	360	92	23048CW33	1290000	2080000	1,500	1,900	33.50
260	400	104	23052CW33	1600000	2550000	1,300	1,700	48.50
280	420	106	23056CW33	1730000	2850000	1,300	1,600	52.50
300	460	118	23060CW33	2120000	3450000	1,200	1,500	71.50
320	480	121	23064CW33	2240000	3800000	1,100	1,400	78.00
340	520	133	23068CW33	2700000	4550000	1,000	1,300	105.00
360	540	134	23072CW33	2750000	4800000	950	1,200	110.00



Series: **230**



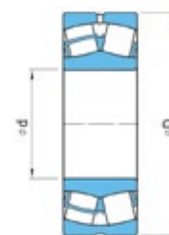
C Type



CA Type

Principal dimensions			Designation	Basic Load Ratings		Speed ratings		Mass	
d	D	B		Dynamic	Static	Reference speed	Limiting speed		
				C	C ₀				
mm				N		r/min			kg
380	560	135	23076CW33	2900000	5000000	900	1,200	115.00	
400	600	148	23080CW33	3400000	5850000	850	1,100	150.00	
420	620	150	23084CW33	3400000	6000000	600	1,100	155.00	
440	650	157	23088CW33	3650000	6550000	560	1,000	180.00	
460	680	163	23092CW33	3900000	6950000	560	950	205.00	
480	700	165	23096CW33	3900000	6800000	530	950	215.00	
500	720	167	230/500CAW33	4150000	7800000	500	900	225.00	
530	780	185	230/530CAW33	5100000	9300000	450	800	310.00	
560	820	195	230/560CAW33	5600000	10200000	430	750	355.00	
600	870	200	230/600CAW33	6000000	11400000	400	700	405.00	
630	920	212	230/630CAW33	6700000	12500000	380	670	485.00	
670	980	230	230/670CAW33	7650000	14600000	340	600	600.00	
710	1030	236	230/710CAW33	8300000	16300000	300	560	670.00	
750	1090	250	230/750CAW33	9650000	18600000	280	530	795.00	
800	1150	258	230/800CAW33	10000000	20000000	260	480	895.00	
850	1220	272	230/850CAW33	10800000	21600000	240	450	1,050.00	
900	1280	280	230/900CAW33	11600000	23200000	220	400	1,200.00	

Series: **231**



C Type

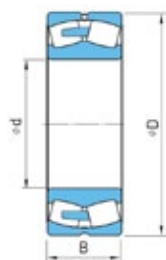
Principal dimensions			Designation	Basic Load Ratings		Speed ratings		Mass
d	D	B		Dynamic	Static	Reference speed	Limiting speed	
mm				C	C ₀	r/min	kg	
				N				
100	165	52	23120CW33	365000	490000	3,000	4,000	4.55
110	180	56	23122CW33	430000	585000	2,800	3,600	5.75
120	200	62	23124CW33	510000	695000	2,600	3,400	8.00
130	210	64	23126CW33	560000	780000	2,400	3,200	8.80
140	225	68	23128CW33	630000	900000	2,200	2,800	10.50
150	250	80	23130CW33	830000	1200000	2,000	2,600	16.00
160	270	86	23132CW33	980000	1370000	1,900	2,400	20.50
170	280	88	23134CW33	1040000	1500000	1,800	2,400	22.00
180	300	96	23136CW33	1200000	1760000	1,700	2,200	28.00
190	320	104	23138CW33	1370000	2080000	1,500	2,000	35.00
200	340	112	23140CW33	1600000	2360000	1,500	1,900	43.00
220	370	120	23144CW33	1800000	2750000	1,300	1,700	53.50
240	400	128	23148CW33	2080000	3200000	1,200	1,600	66.50
260	440	144	23152CW33	2550000	3900000	1,100	1,400	90.50
280	460	146	23156CW33	2650000	4250000	1,000	1,300	97.00
300	500	160	23160CW33	3200000	5100000	950	1,200	125.00
320	540	176	23164CW33	3750000	6000000	850	1,100	165.00
340	580	190	23168CW33	4250000	6800000	800	1,000	210.00



Series: **231**



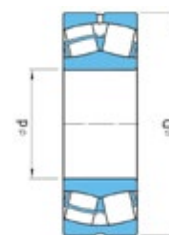
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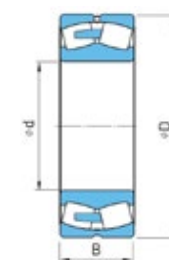
CA Type

Principal dimensions			Designation	Basic Load Ratings		Speed ratings		Mass
d	D	B		Dynamic	Static	Reference speed	Limiting speed	
mm				C	C ₀	r/min	kg	
				N				
360	600	192	23172CW33	4300000	6950000	750	1,000	220.00
380	620	194	23176CAW33	4400000	7100000	560	1,000	230.00
400	650	200	23180CAW33	4650000	7650000	530	950	265.00
420	700	224	23184CAW33	5600000	9300000	480	900	350.00
440	720	226	23188CAW33	6000000	10000000	450	850	360.00
460	760	240	23192CAW33	6400000	10800000	430	800	440.00
480	790	248	23196CAW33	6950000	12000000	400	750	485.00
500	830	264	231/500CAW33	7650000	12900000	380	700	580.00
530	870	272	231/530CAW33	8150000	14000000	360	670	645.00
560	920	280	231/560CAW33	9150000	16000000	340	630	740.00
600	980	300	231/600CAW33	10200000	18000000	320	560	895.00
630	1030	315	231/630CAW33	12000000	20800000	260	530	1,050.00
670	1090	336	231/670CAW33	12500000	22400000	240	500	1,250.00
710	1150	345	231/710CAW33	14000000	26000000	240	450	1,450.00
750	1220	365	231/750CAW33	15600000	29000000	220	430	1,700.00
800	1280	375	231/800CAW33	17300000	31500000	200	400	1,920.00
850	1360	400	231/850CAW33	18300000	34500000	180	360	2,200.00

Series: **232**



C Type



CA Type

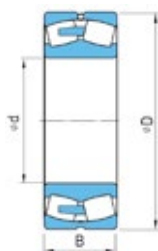
Principal dimensions			Designation	Basic Load Ratings		Speed ratings		Mass
d	D	B		Dynamic	Static	Reference speed	Limiting speed	
				C	C ₀			
mm				N		r/min		kg
90	160	52,4	23218CW33	355000	440000	2,800	3,800	4.65
100	180	60,3	23220CW33	475000	600000	2,400	3,400	6.85
110	200	69,8	23222CW33	600000	765000	2,200	3,200	9.85
120	215	76	23224CW33	695000	930000	2,000	2,800	12.00
130	230	80	23226CW33	780000	1060000	1,900	2,600	14.50
140	250	88	23228CW33	915000	1250000	1,700	2,400	19.00
150	270	96	23230CW33	1080000	1460000	1,600	2,200	24.50
160	290	104	23232CW33	1220000	1660000	1,500	2,200	31.00
170	310	110	23234CW33	1400000	1930000	1,400	2,000	37.50
180	320	112	23236CW33	1500000	2120000	1,300	1,900	39.50
190	340	120	23238CW33	1660000	2400000	1,300	1,800	48.00
200	360	128	23240CW33	1860000	2700000	1,200	1,700	58.00
220	400	144	23244CW33	2360000	3450000	1,100	1,500	81.50
240	440	160	23248CW33	2900000	4300000	950	1,300	110.00
260	480	174	23252CW33	3250000	4750000	850	1,200	140.00
280	500	176	23256CW33	3250000	4900000	800	1,100	150.00
300	540	192	23260CW33	3900000	5850000	750	1,000	190.00
320	580	208	23264CW33	4400000	6700000	700	950	240.00
340	620	224	23268CAW33	5100000	7800000	560	800	295.00
360	650	232	23272CAW33	5400000	8300000	530	750	335.00
380	680	240	23276CAW33	5850000	9150000	500	750	375.00
400	720	256	23280CAW33	6550000	10400000	480	670	450.00
420	760	272	23284CAW33	7350000	11600000	450	630	535.00
440	790	280	23288CAW33	7800000	12500000	430	600	590.00
460	830	296	23292CAW33	8500000	13700000	400	560	695.00
480	870	310	23296CAW33	9300000	15000000	380	530	800.00
500	920	336	232/500CAW33	10600000	17300000	360	500	985.00



Series: **239**



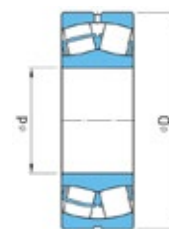
C Type



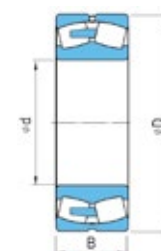
CA Type

Principal dimensions			Designation	Basic Load Ratings		Speed ratings		Mass
d	D	B		Dynamic	Static	Reference speed	Limiting speed	
mm				C	C ₀	r/min		
				N				
180	250	52	23936CW33	490000	830000	2,600	2,800	7.90
190	260	52	23938CW33	475000	800000	2,400	2,600	8.30
200	280	60	23940CW33	620000	1040000	2,200	2,400	11.50
220	300	60	23944CW33	630000	1080000	2,000	2,200	12.50
240	320	60	23948CW33	655000	1160000	1,900	2,000	13.50
260	360	75	23952CW33	1000000	1800000	1,700	1,900	23.50
280	380	75	23956CW33	965000	1760000	1,600	1,700	25.00
300	420	90	23960CW33	1370000	2500000	1,400	1,600	39.50
320	440	90	23964CW33	1430000	2700000	1,400	1,500	42.00
340	460	90	23968CW33	1460000	2800000	1,300	1,400	45.50
360	480	90	23972CW33	1400000	2750000	1,200	1,300	46.00
380	520	106	23976CW33	1960000	3800000	1,100	1,200	69.00
400	540	106	23980CW33	2000000	3900000	1,100	1,200	71.00
420	560	106	23984CW33	2040000	4150000	1,000	1,100	74.50
440	600	118	23988CW33	2450000	4900000	950	1,000	99.50
460	620	118	23992CAW33	2500000	5000000	600	1,000	105.00
480	650	128	23996CAW33	2900000	5700000	560	1,000	125.00
500	670	128	239/500CAW33	2900000	6000000	530	950	130.00
530	710	136	239/530CAW33	3200000	6700000	500	900	155.00
560	750	140	239/560CAW33	3450000	7200000	450	850	175.00
600	800	150	239/600CAW33	3900000	8300000	430	750	220.00
630	850	165	239/630CAW33	4650000	9800000	400	700	280.00
670	900	170	239/670CAW33	5000000	10800000	360	670	315.00
710	950	180	239/710CAW33	5600000	12000000	340	600	365.00
750	1000	185	239/750CAW33	6000000	13200000	320	560	420.00
800	1060	195	239/800CAW33	6400000	14300000	280	530	470.00
850	1120	200	239/850CAW33	6950000	15600000	260	480	560.00
900	1180	206	239/900CAW33	7500000	17000000	240	450	605.00

Series: **240**



C Type



CA Type

Principal dimensions			Designation	Basic Load Ratings		Speed ratings		Mass
d	D	B		Dynamic	Static	Reference speed	Limiting speed	
mm				C	C ₀	r/min	kg	
				N				
120	180	60	24024CW33	430000	670000	2,400	3,400	5.45
130	200	69	24026CW33	540000	815000	2,000	3,000	8.05
140	210	69	24028CW33	570000	900000	2,000	2,800	8.55
150	225	75	24030CW33	655000	1040000	1,800	2,600	10.50
160	240	80	24032CW33	750000	1200000	1,700	2,400	13.00
170	260	90	24034CW33	930000	1460000	1,600	2,400	17.50
180	280	100	24036CW33	1080000	1730000	1,500	2,200	23.00
190	290	100	24038CW33	1120000	1800000	1,400	2,000	24.50
200	310	109	24040CW33	1290000	2120000	1,300	1,900	31.00
220	340	118	24044CW33	1560000	2600000	1,200	1,700	40.00
240	360	118	24048CW33	1600000	2700000	1,100	1,600	43.00
260	400	140	24052CW33	2040000	3450000	1,000	1,400	65.50
280	420	140	24056CW33	2160000	3800000	950	1,400	69.50
300	460	160	24060CW33	2700000	4750000	850	1,200	97.00
320	480	160	24064CW33	2850000	5100000	800	1,200	100.00
340	520	180	24068CW33	3450000	6200000	750	1,100	140.00
360	540	180	24072CW33	3550000	6550000	700	1,000	145.00
380	560	180	24076CW33	3600000	6800000	670	950	150.00
400	600	200	24080CW33	4300000	8000000	630	900	205.00
420	620	200	24084CAW33	4400000	8300000	530	900	210.00
440	650	212	24088CAW33	4800000	9150000	500	850	245.00
460	680	218	24092CAW33	5200000	10000000	480	800	275.00
480	700	218	24096CAW33	5300000	10400000	450	750	285.00
500	720	218	240/500CAW33	5500000	11000000	430	700	295.00
530	780	250	240/530CAW33	6700000	13200000	400	670	410.00
560	820	258	240/560CAW33	7350000	14600000	380	630	465.00
600	870	272	240/600CAW33	8150000	17000000	340	560	520.00



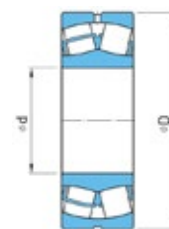
Series: **241**



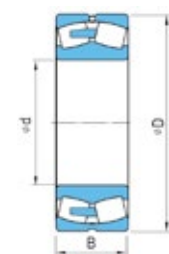
C Type

Principal dimensions			Designation	Basic Load Ratings		Speed ratings		Mass
d	D	B		Dynamic	Static	Reference speed	Limiting speed	
mm				C	C ₀			
				N		r/min		
100	165	65	24120CW33	455000	640000	2,400	3,200	5.65
110	180	69	24122CW33	520000	750000	2,000	3,000	7.10
120	200	80	24124CW33	655000	950000	1,900	2,600	10.50
130	210	80	24126CW33	680000	1000000	1,700	2,400	11.00
140	225	85	24128CW33	765000	1160000	1,600	2,200	13.50
150	250	100	24130CW33	1200000	1530000	1,400	2,000	20.00
160	270	109	24132CW33	1180000	1760000	1,300	1,900	25.00
170	280	109	24134CW33	1220000	1860000	1,200	1,800	27.50
180	300	118	24136CW33	1400000	2160000	1,100	1,600	34.50
190	320	128	24138CW33	1600000	2500000	1,100	1,500	43.00
200	340	140	24140CW33	1800000	2800000	1,000	1,400	53.50
220	370	150	24144CW33	2120000	3350000	850	1,200	67.00
240	400	160	24148CW33	2400000	3900000	750	1,100	83.00

Series: **241**



C Type



CA Type

Principal dimensions			Designation	Basic Load Ratings		Speed ratings		Mass	
d	D	B		Dynamic	Static	Reference speed	Limiting speed		
mm				C	C ₀	r/min			kg
				N					
260	440	180	24152CW33	3000000	4800000	670	950	110.00	
280	460	180	24156CW33	3100000	5100000	630	900	120.00	
300	500	200	24160CW33	3750000	6300000	560	800	160.00	
320	540	218	24164CW33	4250000	7100000	500	700	210.00	
340	580	243	24168CW33	5300000	8650000	430	630	280.00	
360	600	243	24172CW33	5600000	9300000	400	600	280.00	
380	620	243	24176CAW33	5700000	9800000	360	530	300.00	
400	650	250	24180CAW33	6200000	10600000	340	500	340.00	
420	700	280	24184CAW33	7350000	12600000	320	480	445.00	
440	720	280	24188CAW33	7500000	13200000	300	450	460.00	
460	760	300	24192CAW33	8300000	14600000	280	430	560.00	
480	790	308	24196CAW33	9000000	15600000	260	400	605.00	
500	830	325	241/500CAW33	9800000	17000000	260	380	700.00	

