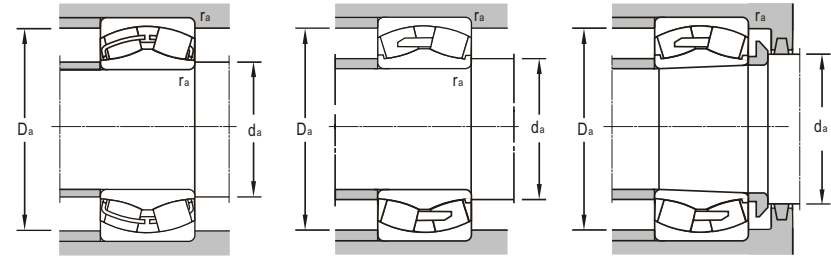
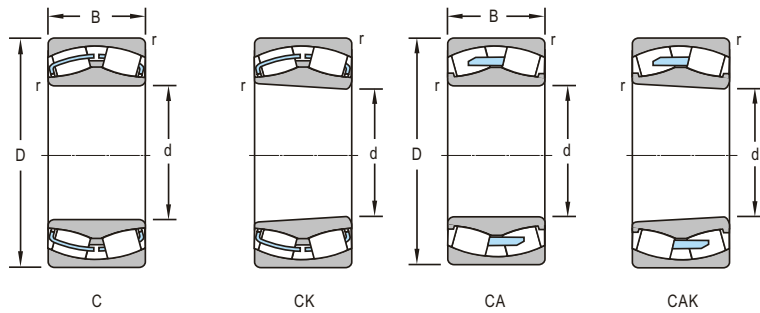


d 25~70mm

Boundary Dimensions				Basic Load Ratings		Limiting Speeds	
<i>d</i>	<i>D</i>	<i>B</i>	<i>r_{min}</i>	Dynamic <i>C</i>	Static <i>C₀</i>	Grease	Oil
mm				kN		r/min	
25	52	18	1	36.1	36.6	8500	11000
30	62	20	1	51.7	55	7500	9500
	68	20	1	51.7	55	7400	9400
35	72	23	1.1	68.9	72.5	6300	8000
40	80	23	1.1	86.9	93.9	6000	7500
	90	33	1.5	123	133	4500	5600
	90	33	1.5	121	129	4400	5500
45	85	23	1.1	86.7	101	5300	6700
	85	23	1.1	78.6	91.9	5200	6600
	100	36	1.5	141	154	3800	4800
50	90	23	1.1	90.3	97	5000	6300
	90	23	1.1	81.5	95.4	5000	6300
	110	40	2	176	193	3400	4300
	110	40	2	175	192	3300	4200
55	100	25	1.5	109	130	4500	5600
	100	25	1.5	109	130	4500	5600
	120	43	2	210	243	3200	4000
60	110	28	1.5	129	157	4000	5000
	130	46	2.1	246	288	2900	3800
	130	46	2.1	233	260	2900	3800
	130	46	2.1	233	274	2900	3800
65	120	31	1.5	144	178	3800	4800
	120	31	1.5	156	195	3800	4800
	140	33	2.1	203	242	3800	3600
	140	48	2.1	285	315	2600	3400
	140	48	2.1	285	315	2600	3400
70	125	31	1.5	163	207	3600	4500
	125	31	1.5	156	199	3500	4400
	150	35	2.1	216	276	2600	3400
	150	51	2.1	306	370	2400	3200
	150	51	2.1	311	352	2000	2800
	150	51	2.1	293	351	2000	2800

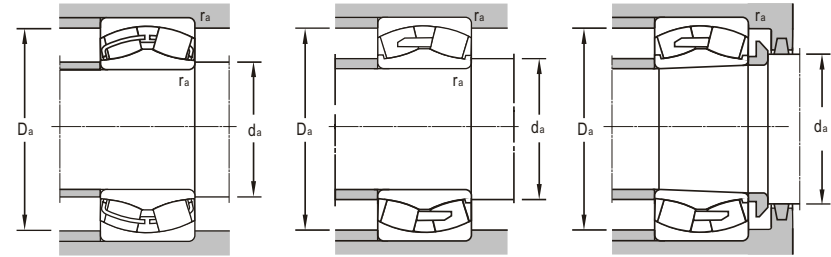
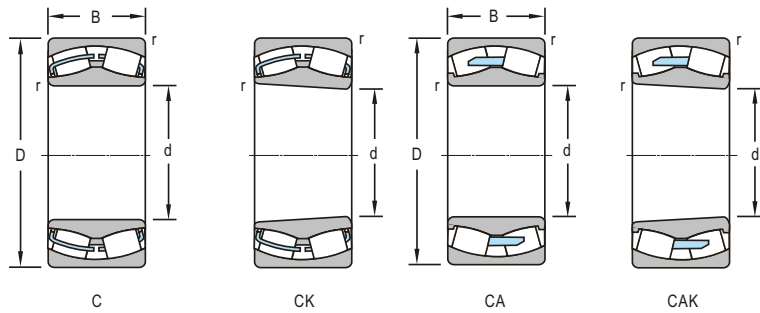
Bearing Designations				Mounting Dimensions			Calculation Factors				Mass
Cylindrical Bore	Present		Original Tapered Bore	<i>d_{amin}</i>	<i>D_{amax}</i>	<i>r_{amax}</i>	<i>e</i>	<i>Y₁</i>	<i>Y₂</i>	<i>Y₀</i>	kg
	Tapered Bore	Cylindrical Bore									
22205CA/W33	22205CAK/W33			31	46	1	0.36	1.9	2.8	1.8	0.178
22206C/W33	22206CK/W33			36	56	1	0.33	2	3	2	0.281
22206X1CN	22206X1CNK			36	62	1	0.33	2	3	2	0.369
22207/W33	22207K/W33	3507Y	113507Y	42	65	1	0.35	1.9	2.9	1.8	0.477
22208C/W33	22208CK/W33	53508Y	153508Y	47	73	1	0.28	2.4	3.6	2.5	0.575
22308C/W33	22308CK/W33	3509Y	113509Y	49	81	1.5	0.37	1.8	2.7	1.8	1.02
22308/W33	22308K/W33	3608Y	113608Y	49	81	1.5	0.42	1.6	2.4	1.6	1.05
22209C/W33	22209CK/W33	53509Y	153509Y	52	78	1	0.27	2.5	3.7	2.5	0.618
22209/W33	22209K/W33	3509Y	113509Y	52	78	1	0.3	2.3	3.4	2.2	0.617
22309C/W33	22309CK/W33			54	91	1.5	0.37	1.8	2.7	1.8	1.37
22210C/W33	22210CK/W33	53510Y	153510Y	57	83	1	0.25	2.7	4	2.7	0.65
22210CA/W33	22210CAK/W33			57	83	1	0.25	2.7	4	2.7	0.614
22310C/W33	22310CK/W33			64	91	2	0.38	1.7	2.6	1.7	1.83
22310/W33	22310K/W33	3610Y	113610Y	64	91	2	0.38	1.7	2.6	1.7	1.8
22211C/W33	22211CK/W33	53511Y	153511Y	66	88	1.5	0.25	2.7	4	2.7	0.88
22211CA/W33	22211CAK/W33			66	88	1.5	0.25	2.7	4	2.7	0.82
22311C/W33	22311CK/W33			66	109	2	0.37	1.8	2.7	1.8	2.38
22212C/W33	22212CK/W33	53512Y	153512Y	69	101	1.5	0.25	2.7	4	2.7	1.22
22312C/W33	22312CK/W33			72	118	2	0.36	1.9	2.8	1.8	2.95
22312/W33	22312K/W33	3612Y	113612Y	72	118	2	0.4	1.7	2.5	1.6	2.88
22312CA/W33	22312CAK/W33			72	118	2	0.37	1.8	2.7	1.8	2.96
22213C/W33	22213CK/W33	53513Y	153513Y	74	111	1.5	0.26	2.6	3.9	2.5	1.58
22213CA/W33	22213CAK/W33	53513HY	153513HY	74	111	1.5	0.27	2.5	3.7	2.5	1.52
21313		3313		77	128	2	0.25	2.7	4	2.7	2.58
22313/W33	22313K/W33			77	128	2	0.35	1.9	2.9	1.8	1.6
22313CA/W33	22313CAK/W33			77	128	2	0.35	1.9	2.9	1.8	3.54
22214C/W33	22214CK/W33	53514Y	153514Y	79	116	1.5	0.24	2.8	4.2	2.8	1.69
22214/W33	22214K/W33	3514Y	113514Y	79	116	1.5	0.27	2.5	3.7	2.5	1.64
21314		3314		82	138	2	0.25	2.7	4	2.7	3.01
22314C/W33	22314CK/W33	53614Y	153614Y	82	138	2	0.35	1.9	2.9	1.8	4.4
22314/W33	22314K/W33	3614Y	113614Y	82	138	2	0.37	1.8	2.7	1.8	4.21
22314CA/W33	22314CAK/W33			82	138	2	0.36	1.9	2.8	1.8	4.22



d 75~110mm

Boundary Dimensions	Basic Load Ratings		Limiting Speeds				
	Dynamic C	Static C ₀	Grease	Oil			
<i>d</i> <i>D</i> <i>B</i> <i>r</i> _{min}	kN		r/min				
mm							
75	130	31	1.5	162	212	3400	4300
	130	31	1.5	155	211	3400	4300
	160	55	2.1	350	427	2200	3000
80	140	33	2	187	248	3200	4000
	140	33	2	186	252	3200	4000
	170	58	2.1	400	504	2000	2800
	170	58	2.1	388	446	2000	2800
85	150	36	2	204	262	3000	3800
	150	36	2	192	250	3000	3800
	180	60	3	392	498	1900	2600
	180	60	3	426	512	1900	2600
90	140	50	1.5	265	440	2700	3500
	160	40	2	257	340	2600	3400
	160	40	2	250	334	2600	3400
	160	52.4	2	305	434	1900	2600
	190	64	3	494	636	1800	2400
90	190	64	3	483	594	1800	2400
	190	64	3	475	583	1800	2400
	190	64	3	475	583	1800	2400
95	170	43	2.1	284	380	2400	3200
	200	67	3	509	637	1700	2200
	200	67	3	509	637	1700	2200
	200	67	3	517	617	1600	2100
	200	67	3	517	617	1600	2100
100	180	46	2.1	331	441	2200	3000
	180	46	2.1	331	441	2100	2900
	180	46	2.1	314	416	2100	2900
	180	60.3	2.1	420	605	1700	2200
	215	73	3	543	698	1600	2100
	215	73	3	623	792	1700	2200
	215	73	3	614	785	1600	2100
	215	73	3	614	785	1600	2100
	215	73	3	614	785	1600	2100
105	175	56	2	351	564	1900	2600
	175	56	2	351	564	1900	2600
110	170	45	2	293	465	2200	3000
	170	45	2	293	465	2200	3000

Bearing Designations				Mounting Dimensions			Calculation Factors				Mass
Cylindrical Bore	Tapered Bore	Original		<i>d</i> _{amin}	<i>D</i> _{amax}	<i>r</i> _{amax}	<i>e</i>	<i>Y</i> ₁	<i>Y</i> ₂	<i>Y</i> ₀	
		Cylindrical Bore	Tapered Bore								
22215C/W33	22215 CK/W	53515Y	153515Y	84	121	1.5	0.22	3	4.5	2.9	1.73
22215/W33	22215K/W33	3515Y	113515Y	84	121	1.5	0.26	2.6	3.9	2.5	1.75
22315C/W33	22315CK/W33			87	148	2	0.35	1.9	2.9	1.8	5.4
22216C/W33	22216CK/W33	53516Y	15316Y	90	130	2	0.22	3	4.5	2.9	2.23
22216/W33	22216K/W33	3516Y	113516Y	90	130	2	0.25	2.7	4	2.7	2.23
22316C/W33	22316CK/W33	53616Y	153616Y	92	158	2	0.34	2	2.9	1.9	6.59
22316/W33	22316K/W33	3616Y	113616Y	92	158	2	0.37	1.8	2.7	1.8	6.19
22217C/W33	22217CK/W33	53517Y	153517Y	95	140	2	0.23	2.9	4.4	2.8	2.8
22217/W33	22217K/W33	3517Y	113517Y	95	140	2	0.26	2.6	3.9	2.5	2.79
22317MA/W33/C4				99	166	2.5	0.33	2	3	2	7.59
22317/W33	22317K/W33	3617Y	113617Y	99	166	2.5	0.37	1.8	2.7	1.8	7.07
24018C	24018CK			100	130	1.5	0.32	2.1	3.1	2	2.97
22218C/W33	22218CK/W33	53518Y	153518Y	101	149	2	0.23	2.9	4.4	2.8	3.24
22218/W33	22218K/W33	3518Y	113518Y	101	149	2	0.27	2.5	3.7	2.5	3.11
23218C/W33	23218CK/W33	3053218Y	3153218Y	101	149	2	0.31	2.2	3.3	2.2	4.61
22318C/W33	22318CK/W33	53618Y	153618Y	104	176	2.5	0.34	2	2.9	1.9	9.12
22318CA/W33	22318CAK/W33	53618HY	153618HY	104	176	2.5	0.35	1.9	2.9	1.8	8.72
22318/W33	22318K/W33	3618Y	113618Y	104	176	2.5	0.37	1.8	2.7	1.8	8.6
22219C/W33	22219CK/W33			107	158	2	0.24	2.8	4.2	2.8	4.2
22319CA/W33	22319CAK/W33			109	186	2.5	0.35	1.9	2.9	1.8	9.95
22319ZMA/W33/C4				109	186	2.5	0.33	2	3	2	10.3
22319/W33	22319K/W33	3619Y	113619Y	109	186	2.5	0.38	1.7	2.6	1.7	9.93
22220C/W33	22220CK/W33	53520Y	153520Y	112	168	2	0.24	2.8	4.2	2.8	4.95
22220CA/W33	22220CAK/W33			112	168	2	0.24	2.8	4.2	2.8	4.97
22220/W33	22220K/W33	3520Y	113520Y	112	168	2	0.27	2.5	3.7	2.5	5.03
23220C/W33	23220CK/W33	3053220Y	3153220Y	112	168	2	0.33	2	3	2	6.71
22320CA/W33				114	201	2.5	0.35	2.9	1.8	1.8	13.2
22320C/W33	22320CK/W33	53620Y	153620Y	114	201	2.5	0.36	1.9	2.8	1.8	13.6
22320CA/W33	22320CAK/W33	53620HY	153620HY	114	201	2.5	0.35	1.9	2.9	1.8	12.4
22320/W33	22320K/W33	3620Y	113620Y	114	201	2.5	0.37	1.8	2.7	1.8	13
23121/W33	23121K/W33	3003721Y	3113721Y	115	165	2	0.32	2.1	3.1	2	6.64
23121N		3203721		115	165	2	0.32	2.1	3.1	2	6.59
23022/W33	23022 K/W33	3003122 Y	3113122 Y	120	160	2	0.26	2.6	3.9	2.5	4.2
23022N		3203122		120	160	2	0.26	2.6	3.9	2.5	4.18



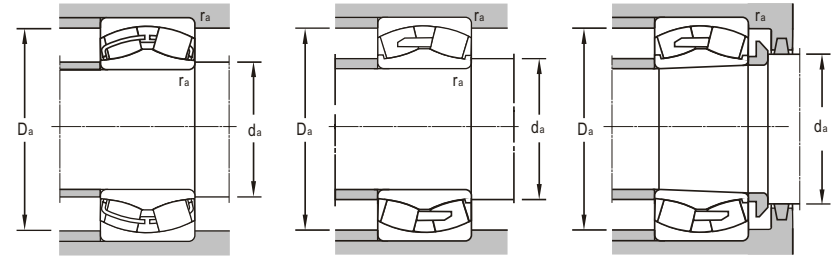
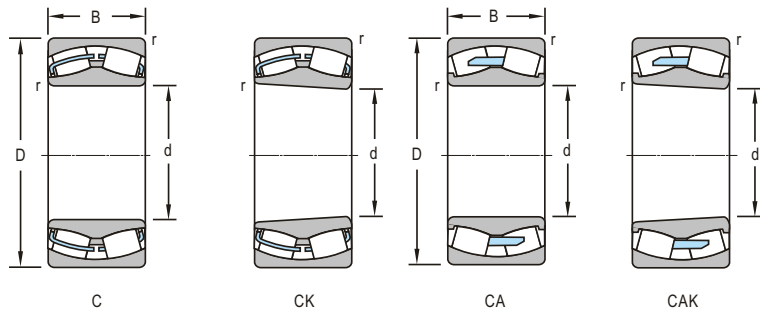
d 110~130mm

Boundary Dimensions				Basic Load Ratings		Limiting Speeds		
d	D	B	r _{min}	Dynamic C	Static C ₀	Grease	Oil	
mm				kN		r/min		
110	170	60	2	359	605	1700	2500	
	170	60	2	359	605	1700	2500	
	180	56	2	365	562	1900	2600	
	180	56	2	365	562	1900	2600	
	180	69	2	483	754	1600	2000	
	180	69	2	435	721	1500	1800	
	200	53	2.1	426	588	2000	2800	
	200	53	2.1	366	531	1900	2700	
	200	69.8	2.1	515	760	1600	2000	
	240	80	3	629	795	1600	2000	
	240	80	3	728	963	1600	2000	
	240	80	3	739	982	1600	2000	
	240	80	3	750	915	1500	1900	
	240	92.1	3	799	998	1400	1700	
120	180	46	2	315	527	1800	2500	
	180	46	2	315	527	1800	2500	
	180	60	2	395	686	1500	2000	
	180	60	2	395	686	1600	2000	
	200	62	2	410	660	1700	2300	
	200	62	2	410	660	1700	2300	
	200	80	2	561	919	1300	1700	
	200	80	3	561	919	1300	1700	
	200	80	2	589	949	1400	1800	
	215	58	2.1	495	689	1900	2600	
	215	58	2.1	489	656	1800	2500	
	215	76	2.1	595	910	1500	1900	
	260	86	3	746	954	1400	1800	
	260	86	3	842	1110	1400	1800	
	130	200	52	2	400	655	1700	2300
		200	52	2	400	655	1700	2300
210		64	2	499	777	1600	2200	
210		80	2	581	982	1300	1700	
210		80	2	581	982	1300	1700	
210		80	2	633	1070	1300	1700	
230		64	3	582	830	1800	2400	
230		64	3	552	786	1700	2300	
230		64	3	564	800	1700	2300	
230		80	3	700	1080	1300	1700	
280		93	4	930	1250	1300	1700	

Bearing Designations				Mounting Dimensions			Calculation Factors				Mass
Cylindrical Bore	Present		Original Cylindrical Bore	d _{amin}	D _{amax}	r _{amax}	e	Y ₁	Y ₂	Y ₀	kg
	Tapered Bore	Tapered Bore									
24022CG/W33CA52				119	161	2	0.33	2	3	2	5.14
24022C	24022CK30			120	160	2	0.32	2.1	3.1	2	5.18
23122/W33	23122 K/W33	3003722Y	3113722Y	120	170	2	0.32	2.1	3.1	2	6.25
23122N		3203722		120	170	2	0.32	2.1	3.1	2	6.2
24122C/W33	24122K30/W33	4053722Y	4453722Y	120	170	2	0.35	1.9	2.9	1.8	6.88
24122CA/W33	24122CAK30/W33			120	170	2	0.36	1.9	2.8	1.8	6.86
22222C/W33	22222CK/W33	53522Y	153522Y	122	188	2	0.25	2.7	4	2.7	7.25
22222/W33	22222K/W33	3522Y	113522Y	122	188	2	0.28	2.4	3.6	2.5	7.37
23222C/W33	23222 CK/W33	3053222Y	3153222Y	122	188	2	0.35	1.9	2.9	1.8	9.66
22322 ZMA/W33				124	226	2.5	0.33	2	3	2	18
22322CA/C3W33YA				124	226	2.5	0.35		2.9	1.8	17.7
22322CA/W33	22322CAK/W33	53622HY	153622HY	124	226	2.5	0.35	1.9	2.9	1.8	17.5
22322/W33	22322K/W33	3622Y	113622Y	124	226	2.5	0.37	1.8	2.7	1.8	18
23322/W33	23322K/W33	3003322Y	3113322Y	124	226	2.5	0.44	1.5	2.3	1.5	23.6
23024/W33	23024K/W33	3003124Y	4453124HY	130	170	2	0.25	2.7	4	2.7	4.63
23024N		3203124		130	170	2	0.25	2.7	4	2.7	4.61
24024CA/W33	24024CAK30/W33			130	170	2	0.3	2.3	3.4	2.2	5.41
24024C/W33		4053124Y		130	170	2	0.3	2.3	3.4	2.2	5.41
23124/W33	23124K/W33	3003724Y	3113724Y	130	190	2	0.32	2.1	3.1	2	7.61
23124N		3203724		130	190	2	0.32	2.1	3.1	2	7.57
24124CA/W33	24124CAK30/W33			130	190	2	0.38	1.7	2.6	1.7	10
24124CA/C3/YB				131	189	2	0.37	1.8	2.7	1.8	10
24124C/W33	24124CK30/W33	4053724Y	4453724Y	130	190	2	0.38	1.7	2.6	1.7	10
22224C/W33	22224CK/W33	53524Y	153524Y	132	203	2	0.25	2.7	4	2.7	9.08
22224/W33	22224K/W33	3524Y	113524Y	132	203	2	0.28	2.4	3.6	2.5	9.13
23224C/W33	23224CK/W33	3053224Y	3153224Y	132	203	2	0.35	1.9	2.9	1.8	12
22324 ZMA/W33				134	246	2.5	0.35	1.9	2.9	1.8	22.6
22324C/W33	22324CK/W33	53624Y	53624HY	134	246	2.5	0.4	1.7	2.5	1.6	22.7
23026/W33	23026K/W33	3003126Y	3113126Y	140	190	2	0.26	2.6	3.9	2.5	6.8
23026N		3203126		140	190	2	0.26	2.6	3.9	2.5	6.72
23126CA/W33	23126CAK30/W33			140	200	2	0.36	1.9	2.8	1.8	9.55
24126 CA/C3W33				141	199	2	0.35		2.9	1.8	10.8
24126 CA/W33				141	199	2	0.35		2.9	1.8	10.8
24126C/W33	24126CAK30/W34	4053726Y	4453726Y	140	200	2	0.36	1.9	2.8	1.8	10.9
22226C/W33	22226CK/W33	53526Y	153626Y	144	216	2.5	0.35	1.9	2.9	1.8	11.7
22226CA/W33	22226CAK/W33			144	216	2.5	0.27	2.5	3.7	2.5	11.4
22226/W33	22226K/W33	3526Y	113526Y	144	216	2.5	0.29	2.4	3.5	2.3	11.1
23226C/W33	23226K/W33	3053226Y	3153226Y	144	216	2.5	0.33	2	3	2	14.4
22326CA/W33	22326CAK/W33	53626HY	153626HY	148	262	3	0.35	1.9	2.9	1.8	27.1



Spherical Roller Bearings



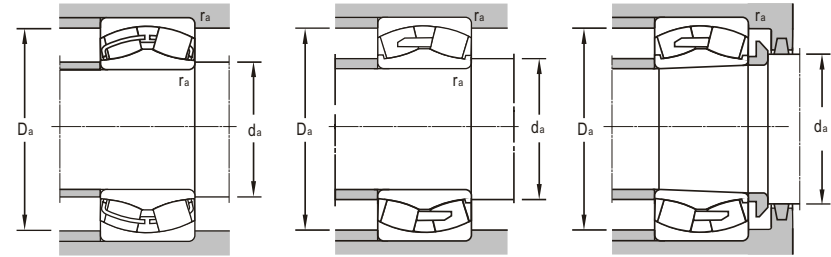
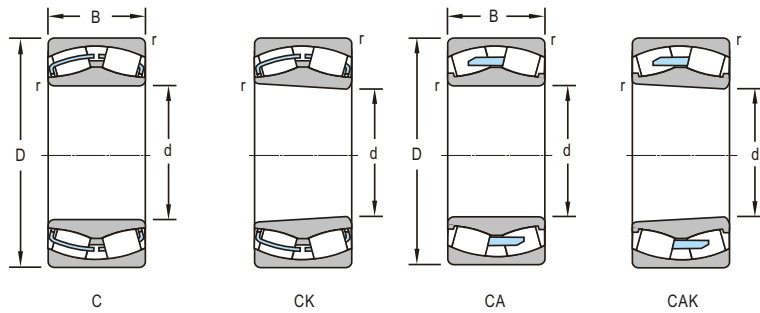
d 130~160mm

Boundary Dimensions				Basic Load Ratings		Limiting Speeds		
<i>d</i>	<i>D</i>	<i>B</i>	<i>r</i> _{min}	Dynamic <i>C</i>	Static <i>C</i> ₀	Grease	Oil	
mm				kN		r/min		
130	280	93	4	836	1090	1200	1600	
	280	93	4	836	1090	1300	1700	
140	210	53	2	395	705	1600	2100	
	210	53	2	395	705	1600	2100	
	210	69	2	530	910	1400	1800	
	225	68	2.1	560	925	1500	1800	
	225	85	2.1	620	1060	1100	1500	
	225	85	2.1	649	1120	1100	1500	
	250	68	3	642	931	1700	2200	
	250	68	3	636	897	1500	1900	
	250	68	3	662	905	1500	1900	
	250	88	3	835	1300	1200	1600	
	300	102	4	978	1290	1100	1500	
	300	102	4	1120	1550	1100	1500	
	300	102	4	1100	1420	1100	1500	
	150	225	56	2.1	407	725	1500	1900
225		75	2.1	580	1060	1450	1850	
250		80	2.1	683	1170	1300	1600	
250		100	2.1	951	1570	1000	1400	
250		100	2.1	861	1420	900	1300	
270		73	3	749	1050	1600	2000	
270		73	3	736	1030	1500	1900	
270		96	3	907	1350	1100	1500	
320		108	4	1140	1580	1000	1400	
320		108	4	1210	1660	1000	1400	
320		108	4	1210	1660	1000	1400	
320		108	4	1220	1680	1000	1400	
160		240	60	2.1	495	875	1500	1900
		240	60	2.1	495	875	1500	1900
	240	80	2.1	660	1220	1100	1500	
	240	80	2.1	628	1140	1100	1500	
	270	86	2.1	820	1200	1200	1600	
	270	86	2.1	833	1290	1200	1600	
	270	109	2.1	1070	1750	950	1300	
	270	109	2.1	958	1590	900	1200	
	290	80	3	850	1230	1400	1800	
	290	80	3	876	1230	1350	1700	
	290	104	3	1020	1550	900	1300	

Bearing Designations				Mounting Dimensions			Calculation Factors				Mass
Cylindrical Bore	Present Tapered Bore	Original Cylindrical Bore	Original Tapered Bore	<i>d</i> _{amin}	<i>D</i> _{amax}	<i>r</i> _{amax}	<i>e</i>	<i>Y</i> ₁	<i>Y</i> ₂	<i>Y</i> ₀	kg
22326ZMB				148	262	3	0.35	1.9	2.9	1.8	28.6
22326 ZMA/W33				147	263	3	0.35	1.9	2.9	1.8	29.1
23028/W33	23028K/W33	3003128Y	3113128Y	150	200	2	0.24	2.8	4.2	2.8	7.65
23028H		3203128		150	200	2	0.24	2.8	4.2	2.8	7.64
24028C/W33	24028CK30/W33	4053128Y	4153128Y	150	200	2	0.28	2.4	3.6	2.5	8.09
23128CA/W33	23128CAK/W33	3053728HY	3153728HY	152	213	2	0.28	2.4	3.6	2.5	10.4
24128CA/W33	24128CAK30/W33			152	213	2	0.35	1.9	2.9	1.8	12.9
24128 CC/W33/C4				152	213	2	0.35	1.9	2.9	1.8	13
22228C/W33	22228CK/W33	53528Y	153528Y	154	236	2.5	0.26	2.6	3.9	2.5	14.2
22228CA/W33	22228CAK/W33	53528HY	153528HY	154	236	2.5	0.26	2.6	3.9	2.5	14.1
22228/W33	22228K/W33	3528Y	113528Y	154	236	2.5	0.29	2.4	3.5	2.3	14.5
23228C/W33	23228CK/W33	3053228Y	3153228Y	154	236	2.5	0.35	1.9	2.9	1.8	18.8
22328 ZMA/W33				157	283	3	0.35	1.9	2.9	1.8	36.3
22328CA/W33	22328CAK/W33	53628HY	153628HY	158	282	3	0.35	1.9	2.9	1.8	35.9
22328/W33	22328K/W33	3628Y	113628Y	158	282	3	0.38	1.7	2.6	1.7	36.9
23030/W33	23030K/W33	3003130Y	3113130Y	162	213	2	0.25	2.7	4	2.7	8.85
24030CC/W33C4S2				161	214	2	0.3	2.3	3.4	2.2	10.4
23130CA/W33	23130CAK/W33	3053730HY	3153730HY	162	238	2	0.3	2.3	3.4	2.2	18.2
24130C/W33	24130CK30/W33	4053730Y	4453730Y	162	238	2	0.37	1.8	2.7	1.8	20.3
24130CA/W33	24130CAK30/W33			162	238	2	0.38	1.7	2.6	1.7	19.5
22230C/W33	22230CK/W33	53530Y	153530Y	164	256	2.5	0.27	2.5	3.7	2.5	17.9
22230/W33	22230K/W33	3530Y	113530Y	164	256	2.5	0.29	2.4	3.5	2.3	17.5
23230C/W33	23230CK/W33	3053230Y	3153230Y	164	256	2.5	0.35	1.9	2.9	1.8	24.3
22330 ZMA/W33				167	303	3	0.35	1.9	2.9	1.8	44.5
22330CA/C3W33YA				167	303	3	0.35	1.9	2.9	1.8	42.5
22330/W33	22330K/W33	3630Y	113630Y	168	302	3	0.38	1.7	2.6	1.7	42
22330CA/W33	22330CAK/W33	53630HY	153630HY	168	302	3	0.35	1.9	2.9	1.8	41.7
23032N		3203132		172	228	2	0.25	2.7	4	2.7	13.4
23032/W33	23032K/W33	3003132Y	3113132Y	172	228	2	0.25	2.7	4	2.7	13.4
24032C/W33	24032CK30/W33	4053132Y	4453132Y	172	228	2	0.3	2.3	3.4	2.2	12.8
24032 CA/W33				171	229	2	0.3	2.3	3.4	2.2	12.8
23132	23132K			172	258	2	0.32	2.1	3.1	2	20.8
23132CA/W33	23132CAK/W33	3053732HY	3153732HY	172	258	2	0.31	2.2	3.3	2.2	20.3
24132C/W33	24132CK30/W33	4053732Y	4453732HY	172	258	2	0.38	1.7	2.6	1.7	19.5
24132CA/W33				172	258	2	0.38	1.7	2.6	1.7	25.3
22232CA/W33	22232CAK/W33	53532HY	153532HY	174	276	2.5	0.27	2.5	3.7	2.5	22.6
22232/W33	22232K/W33	3532Y	113532Y	174	276	2.5	0.3	2.3	3.4	2.2	22.3
23232CA	23232CAK			174	276	2.5	0.35	1.9	2.9	1.8	29.8



Spherical Roller Bearings



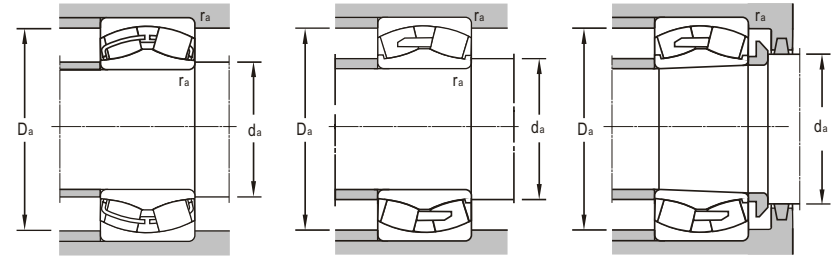
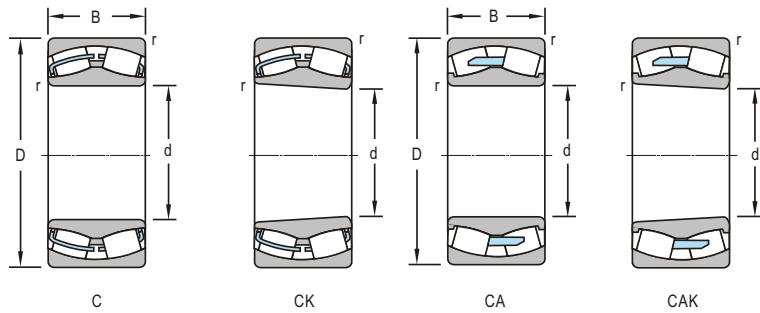
d 160~200mm

Boundary Dimensions				Basic Load Ratings		Limiting Speeds		
<i>d</i>	<i>D</i>	<i>B</i>	<i>r_{min}</i>	Dynamic <i>C</i>	Static <i>C₀</i>	Grease	Oil	
mm				kN		r/min		
160	340	114	4	1340	1840	930	1200	
	340	114	4	1140	1580	930	1200	
170	260	67	2.1	640	1040	1400	1800	
	260	67	2.1	640	1040	1400	1800	
	260	90	2.1	778	1310	1000	1400	
	310	86	4	981	1390	1200	1600	
	310	110	4	1200	1900	950	1300	
	360	120	4	1500	2140	930	1200	
180	280	74	2.1	710	1210	1300	1600	
	280	100	2.1	930	1610	900	1200	
	280	100	2.1	917	1710	900	1200	
	300	96	3	1060	1800	1100	1500	
	300	96	3	987	1720	1000	1400	
	300	96	3	987	1720	1000	1400	
	300	96	3	987	1720	1000	1400	
	300	118	3	1170	1930	900	1200	
	320	86	4	995	1510	1200	1600	
	320	112	4	1310	2090	900	1200	
	320	112	4	1310	2090	900	1200	
	380	126	4	1650	2330	900	1200	
	190	280	67	2.1	633	1120	1200	1500
		290	75	2.1	800	1500	1200	1500
290		100	2.1	938	1690	950	1300	
320		104	3	1050	1760	950	1300	
320		104	3	1140	1960	950	1300	
320		128	3	1290	2250	850	1100	
340		92	4	1140	1730	1200	1600	
340		92	4	1090	1640	1200	1600	
340		120	4	1490	2380	850	1100	
400		132	5	1850	2590	850	1100	
200		310	82	2.1	870	1510	1100	1400
		340	112	3	1230	2240	850	1200
	340	140	3	1530	2620	800	1000	
	340	140	3	1530	2620	800	1000	
	340	140	3	1660	2810	800	1000	
	360	98	4	1210	1870	1100	1500	
	360	128	4	1490	2370	800	1000	

Bearing Designations				Mounting Dimensions			Calculation Factors				Mass
Cylindrical Bore	Present	Tapered Bore	Original	<i>d_{amin}</i>	<i>D_{amax}</i>	<i>r_{amax}</i>	<i>e</i>	<i>Y₁</i>	<i>Y₂</i>	<i>Y₀</i>	kg
	Cylindrical Bore		Tapered Bore								
22332/W33	22332K/W33	3632Y	113632Y	178	322	3	0.38	1.7	2.6	1.7	50.3
22332MA/W33/CA				177	323	3	0.35	1.9	2.9	1.8	53.3
23034N			3203134	182	248	2	0.26	2.6	3.9	2.5	14.6
23034/W33	23034 K/W33		3003134 Y	182	248	2	0.26	2.6	3.9	2.5	14.6
24034C/W33	24034CK30/W33		4003134Y	182	248	2	0.33	2	3	2	19.3
22234/W33	22234K/W33		3534Y	188	292	3	0.3	2.3	3.4	2.2	27.6
23234CA/W33	23234CAK/W33		3053234HY	188	292	3	0.35	1.9	2.9	1.8	37.1
22334/W33	22334K/W33		3634Y	188	342	3	0.37	1.8	2.7	1.8	59.3
23036/W33	23036K/W33		3003136Y	192	268	2	0.26	2.6	3.9	2.5	19.3
24036/W33	24036K30/W33		4003136Y	192	268	2	0.35	1.9	2.9	1.8	22.3
24036CP69 W33				191	269	2	0.33	2	3	2	22.7
23136C/W33	23136CK/W33			194	286	2.5	0.3	2.3	3.4	2.2	27.2
23136/W33	23136K/W33		3003736 Y	194	286	2.5	0.32	2.1	3.1	2	26.8
23136/W33YA2			3003736KY	194	286	2.5	0.32	2.1	3.1	2	26.8
23136 N			3203736	194	286	2.5	0.32	2.1	3.1	2	26.4
24136/W33	24136K30/W33			194	286	2.5	0.38	1.7	2.6	1.7	33.7
22236/W33	22236K/W33		3536Y	198	302	3	0.28	2.4	3.6	2.5	29.3
23236CA/W33	23236CAK/W33		3053236HY	198	302	3	0.35	1.9	2.9	1.8	39.5
23236CA/W33YA2			3053236HKY	198	302	3	0.35	1.9	2.9	1.8	39.4
22336/W33	22336K/W33		3636Y	198	362	3	0.35	1.9	2.9	1.8	80.7
2638			3738	202	270	2	0.23	2.9	4.4	2.8	13.7
23038/W33	23038 K/W33		3003138 Y	202	278	2	0.26	2.6	3.9	2.5	20.3
24038C/W33	24038CK30/W33		4003138Y	202	278	2	0.31	2.2	3.3	2.2	23.9
23138/W33	23138K/W33			204	306	2.5	0.33	2	3	2	35.1
23138CA/W33	23138CAK/W33			204	306	2.5	0.31	2.2	3.3	2.2	45
24138CA	24138CAK30/W33			204	306	2.5	0.4	1.7	2.5	1.6	43.8
22238CA/W33	22238 CAK/W33		53538HY	208	322	3	0.26	2.6	3.9	2.5	35.5
22238/W33	22238K/W33		3538Y	208	322	3	0.29	2.4	3.5	2.3	35.5
23238CA/W33	23238CAK/W33		3053238HY	208	322	3	0.35	1.9	2.9	1.8	51
22338/W33	22338K/W33		3638Y	210	380	4	0.25	2.7	4	2.7	79.7
23040/W33	23040 K/W33		3003140Y	212	298	2	0.26	2.6	3.9	2.5	26
23140/W33	23140 K/W33		3003740Y	214	326	2.5	0.34	2	2.9	1.9	50.5
24140CA/W33				214	326	2.5	0.4	2.5	1.6		52.3
24140CA/C3/W33				214	326	2.5	0.4	2.5	1.6		52.3
24140C/W33	24140CK30/W33		4053740Y	214	326	2.5	0.4	1.7	2.5	1.6	51.9
22240/W33	22240K/W33		3540Y	218	342	3	0.29	2.4	3.5	2.3	44.7
23240/W33	23240K/W33			218	342	3	0.36	1.9	2.8	1.8	56.8



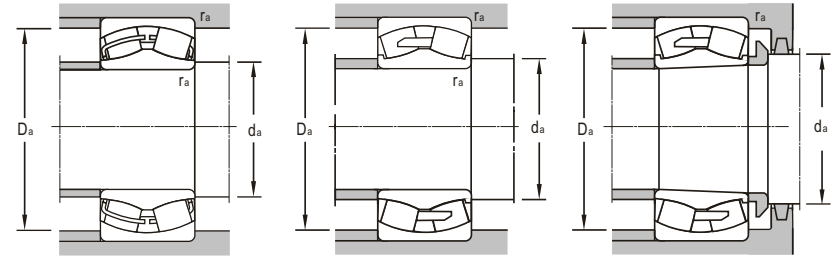
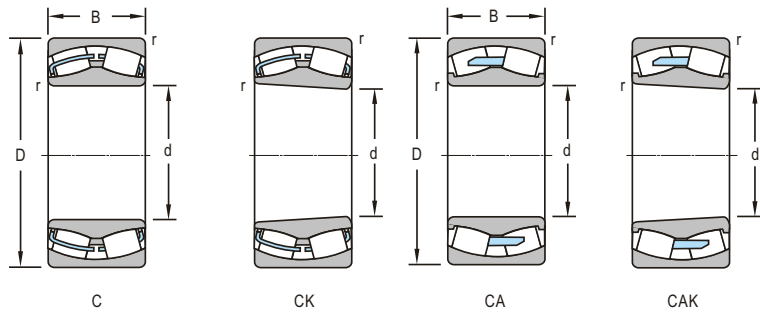
Spherical Roller Bearings



d 200 ~ 280mm

Boundary Dimensions				Basic Load Ratings		Limiting Speeds	
<i>d</i>	<i>D</i>	<i>B</i>	<i>r_{min}</i>	Dynamic <i>C</i>	Static <i>C₀</i>	Grease	Oil
mm				kN		r/min	
200	420	138	5	1900	2800	850	1100
220	320	76	3	758	1280	1000	1300
	340	90	3	1100	1750	1100	1500
	370	120	4	1530	2640	900	1200
	370	120	4	1540	2650	850	1100
	370	150	4	1870	3350	750	950
	400	108	4	1570	2430	950	1300
	400	108	4	1570	2430	950	1300
	400	144	4	1860	3100	750	950
460	145	5	2130	3170	750	950	
240	320	60	2.1	579	1220	1000	1400
	360	92	3	1160	1870	1000	1400
	360	118	3	1320	2610	800	1000
	400	128	4	1870	3000	850	1100
	400	128	4	1800	2950	850	1100
	400	160	4	1980	3710	670	850
	440	120	4	1720	2700	900	1200
	440	160	4	2280	3870	670	850
500	155	5	2400	3600	670	850	
250	365	87	3	956	1870	880	1100
260	360	75	2.1	883	1760	1000	1300
	400	104	4	1440	2570	900	1200
	400	140	4	1700	3260	700	900
	400	140	4	1700	3260	700	900
	440	144	4	2290	3510	800	1000
	440	144	4	2550	3900	800	1000
	440	180	4	2500	4560	720	900
	440	180	4	2470	4320	600	750
	440	180	4	2350	4320	600	750
	480	130	5	2160	3100	850	1100
	480	174	5	2800	4100	560	720
490	153	4	2420	3940	760	1050	
540	165	6	2860	4430	560	720	
280	380	75	2.1	911	1860	900	1200
	420	106	4	1560	2560	850	1100
	420	106	4	1540	2950	800	1000

Bearing Designations				Mounting Dimensions			Calculation Factors				Mass
Cylindrical Bore	Present Tapered Bore	Original Cylindrical Bore	Original Tapered Bore	<i>d_{amin}</i>	<i>D_{amax}</i>	<i>r_{amax}</i>	<i>e</i>	<i>Y₁</i>	<i>Y₂</i>	<i>Y₀</i>	kg
22340/W33	22340K/W33	3640Y	113640Y	222	398	4	0.37	1.8	2.7	1.8	93.5
2644		3844		232	308	2.5	0.23	2.9	4.4	2.8	21.6
23044/W33	23044K/W33	3003744Y	3113744Y	233	327	2.5	0.26	2.6	3.9	2.5	30.8
23144/W33	23144K/W33	3003744Y	3113744Y	237	353	3	0.32	2.1	3.1	2	53.5
23144CA/W33	23144CAK/W33	4053744Y	4453744Y	237	353	3	0.32	2.1	3.1	2	54.2
24144C/W33	24144CK30/W33	3544Y	113544Y	237	353	3	0.4	1.7	2.5	1.6	66.1
22244/W33	22244K/W33	3544Y	113544Y	237	383	3	0.29	2.4	3.5	2.3	62.4
22244CA/W33	22244CAK/W33	3644Y	113644Y	237	383	3	0.27	2.5	3.7	2.5	62.4
23244/W33	23244 K/W33	3003244Y	3113244Y	237	383	3	0.38	1.8	2.6	1.7	94.2
22344/W33	22344K/W33	3644Y	113644Y	240	440	4	0.35	1.9	2.9	1.8	130
23948CA/W33				251	309	2	0.15	4.5	6.7	4.5	13.4
23048/W33	23048 K/W33	3003148Y	3113148Y	253	347	2.5	0.25	2.7	4	2.7	37.4
24048CA/W33	24048CAK30/W33	3003148Y	3113148Y	253	347	2.5	0.3	2.3	3.4	2.2	42.4
23148/W33	23148K/W33	3003748Y	3113748Y	257	383	3	0.33	2	3	2	75.2
23148CA/W33	23148CAK/W33	3003748Y	3113748Y	257	383	3	0.3	2.3	3.4	2.2	65
24148/W33	24148K30/W33	4003748Y	4403748Y	257	383	3	0.41	1.7	2.5	1.6	81.6
22248/W33	22248K/W33	3548Y	113548Y	257	423	3	0.29	2.4	3.5	2.3	85
23248/W33	23248K/W33	3003248Y	3113248Y	257	423	3	0.37	1.8	2.7	1.8	109
22348/W33	22348K/W33	3648Y	113648Y	260	480	4	0.35	1.9	2.9	1.8	154
2650		3750		264	351	2.5	0.22	3	4.5	2.9	32.2
23952CA/W33				271	349	2	0.18	3.8	5.6	3.6	23.7
23052/W33	23052K/W33	3003152Y	3113152Y	275	385	3	0.26	2.6	3.9	2.5	51.2
24052CA/W33	24052CAK30/W33	3003152Y	3113152Y	275	385	3	0.33	2	3	2	63.4
24052CA/C9W33		3003752Y	3113752Y	275	385	3	0.33	2	3	2	63.3
23152/W33	23152K/W33	3003752Y	3113752Y	277	423	3	0.33	2	3	2	96
23152/S1				277	423	3	0.31	2.2	2.3	2.2	96
24152/W33	24152K30/W33	4053752Y	4453752Y	277	423	3	0.42	1.6	2.4	1.6	112
24152CA/W33	24152CAK30/W33	53552HY	153552HY	277	423	3	0.4	1.7	2.5	1.6	108
24152C/W33	24152CK30/W33	53552HY	153552HY	277	423	3	0.4	1.7	2.5	1.6	113
22252CA/W33	22252CAK/W33	3053252HY	3153252HY	280	460	4	0.27	2.5	3.7	2.5	105
23252CA/W33	23252CAK/W33	3053252HY	3153252HY	280	460	4	0.37	1.8	2.7	1.8	151
2652		3752		280	460	4	0.33	2	3	2	140
22352/W33	22352K/W33	3652Y	113652Y	286	514	5	0.34	2	2.9	1.9	193
23956CA/W33				291	369	2	0.16	4.2	6.3	4	25
23056/W33	23056K/W33	3003156Y	3113156Y	295	405	3	0.25	2.7	4	2.7	61.5
23056CA/W33	23056CAK/W33	3003156Y	3113156Y	295	405	3	0.23	2.9	4.4	2.8	51.7



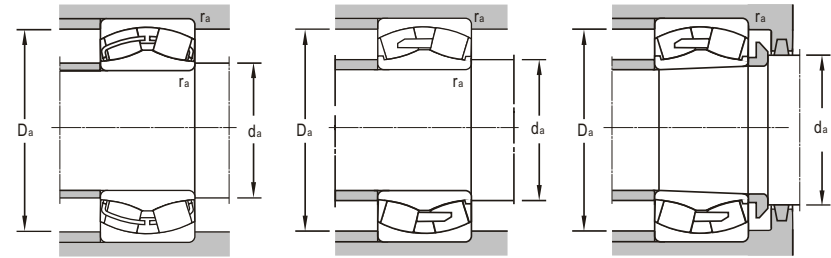
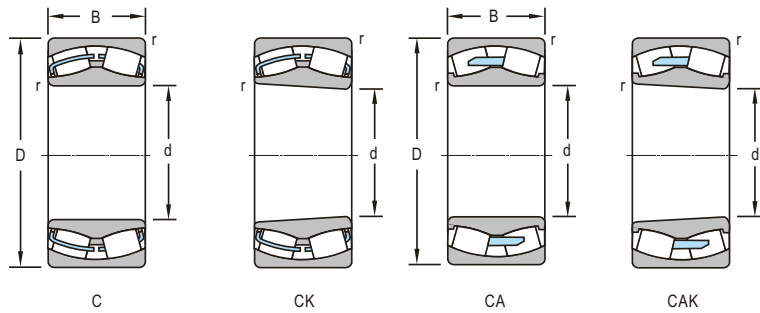
d 280~360mm

Boundary Dimensions				Basic Load Ratings		Limiting Speeds	
<i>d</i>	<i>D</i>	<i>B</i>	<i>r_{min}</i>	Dynamic <i>C</i>	Static <i>C₀</i>	Grease	Oil
mm				kN		r/min	
280	420	140	4	1780	3500	670	850
	460	146	5	2070	3960	750	950
	460	146	5	2380	3880	750	950
	460	180	5	2360	4420	560	700
	460	180	5	2400	4500	560	700
	460	180	5	2400	4590	560	700
	500	130	5	2110	3370	800	1000
	500	176	5	2560	4350	600	750
	500	180	5	2360	4420	600	750
	580	175	6	3180	4970	600	750
300	420	90	3	1260	2460	950	1300
	460	118	4	1910	3170	720	920
	460	118	4	2090	3370	800	1000
	460	160	4	2430	4490	600	750
	500	160	5	2580	4590	670	850
	500	160	5	2700	4920	650	850
	500	160	5	2880	4640	670	850
	500	200	5	3380	5940	530	670
	500	200	5	3120	5650	500	600
	500	200	5	3180	6100	450	550
	540	140	5	2480	3820	700	900
	320	440	90	3	1290	2430	900
480		121	4	1850	3450	720	900
480		121	4	2020	3580	800	1000
480		160	4	2570	5060	680	850
540		176	5	3390	5538	630	800
540		218	5	3470	6430	480	600
580		208	5	3500	6360	500	630
580		218	5	3470	6430	460	580
340	460	90	3	1310	2520	880	1180
	520	133	5	2430	4350	680	880
	520	180	5	2920	5580	510	650
	520	180	5	3110	5710	520	660
	580	190	5	3830	6240	600	750
	580	243	5	4180	7720	450	560
360	480	90	3	1330	2710	850	1100
	540	134	5	2480	4500	670	850

Bearing Designations				Mounting Dimensions			Calculation Factors				Mass
Cylindrical Bore	Present	Tapered Bore	Original	<i>d_{amin}</i>	<i>D_{amax}</i>	<i>r_{amax}</i>	<i>e</i>	<i>Y₁</i>	<i>Y₂</i>	<i>Y₀</i>	kg
	Cylindrical Bore		Tapered Bore								
mm											
24056CA/W33		24056CAK30/W33		295	405	3	0.3	2.3	3.4	2.2	71.3
23156/W33		23156K/W33		300	440	4	0.32	2.1	3.1	2	95
23156CA/W33		23156CAK/W33	3003756Y	300	440	4	0.31	2.2	3.3	2.2	96.2
24156 CA				300	440	4	0.37	1.8	2.7	1.8	119
24156 CA/YA				300	440	4	0.37	1.8	2.7	1.8	157
24156/W33		24156K30/W33		300	440	4	0.37	1.8	2.7	1.8	119
22256/W33		22256K/W33	3556Y	300	480	4	0.28	2.4	3.6	2.5	124
23256/W33		23256 K/W33	3003256Y	300	480	4	0.37	1.8	2.7	1.8	152
24156/W33/YA1				300	480	4	0.37	1.8	2.7	1.8	158
22356/W33		22356K/W33	3656Y	306	554	5	0.34	2	2.9	1.9	238
23960C/W33		23960CK/W33		313	407	2.5	0.19	3.6	5.3	3.5	39.5
23060/W33		23060K/W33	3003160Y	315	445	3	0.26	2.6	3.9	2.5	74.6
23060CA/W33		23060CAK/W33		315	445	3	0.24	2.8	4.2	2.8	76.6
24060CA/W33		24060CAK30/W33	4053160Y	315	445	3	0.32	2.1	3.1	2	101
23160/W33		23160K/W33	3003760Y	320	480	4	0.32	2.1	3.1	2	133
23160CC/C3/W33				320	480	4	0.3	2.3	3.4	2.2	127
23160CA/W33		23160CAK/W33		320	480	4	0.31	2.2	3.3	2.2	127
24160C/W33		24160CK30/W33	4053760Y	320	480	4	0.37	1.8	2.7	1.8	159
24160CA/W33		24160CAK30/W33		320	480	4	0.36	1.9	2.8	1.8	160
24160/W33		24160K30/W33		320	480	4	0.39	1.7	2.6	1.7	159
22260/W33		22260K/W33	3560Y	320	520	4	0.28	2.4	3.6	2.5	143
23964/W33		23964K/W33	3003964Y	333	427	2.5	0.19	3.6	5.3	3.5	45.1
23064/W33		23064K/W33	3003164Y	335	465	3	0.26	2.6	3.9	2.5	80.9
23064CA/W33		23064CAK/W33		335	465	3	0.24	2.8	4.2	2.8	77.4
24064/W33		24064K30/W33	4003164Y	335	465	3	0.32	2.1	3.1	2	103
23164CA/W33		23164CAK/W33		340	520	4	0.31	2.2	3.3	2.2	169
24164/W33		24164K30/W33	4003764Y	340	520	4	0.42	1.6	2.4	1.6	251
23264/W33		23264K/W33	3003264Y	340	560	4	0.37	1.8	2.7	1.8	259
24164/W33/YA				340	560	4	0.37	1.8	2.7	1.8	262
23968/W33		23968K/W33	3003968Y	353	447	2.5	0.18	3.8	5.6	3.7	50.5
23068/W33		23068K/W33	3003168Y	358	502	4	0.25	2.7	4	2.7	109
24068/W33		24068K30/W33	4003168Y	358	502	4	0.33	2	3	2	160
24068CA/W33		24068CAK30/W33		358	502	4	0.33	2	3	2	140
23168CA/W33		23168CAK/W33		360	560	4	0.31	2.2	3.3	2.2	209
24168CA/W33		24168CAK30/W33		360	560	4	0.39	1.7	2.6	1.7	280
23972/W33		23972K/W33	3003972Y	373	467	2.5	0.17	4	5.9	3.9	49.1
23072/W33		23072K/W33	3003172 Y	378	522	4	0.25	2.7	4	2.7	114



Spherical Roller Bearings



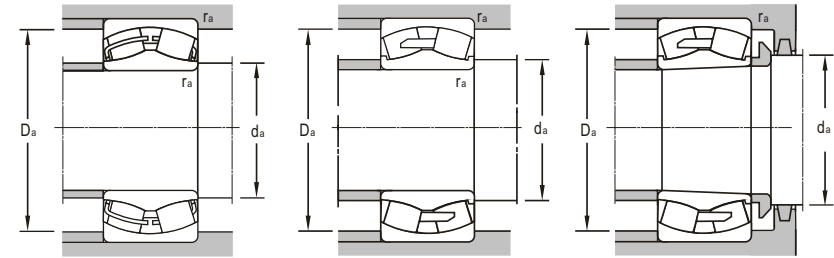
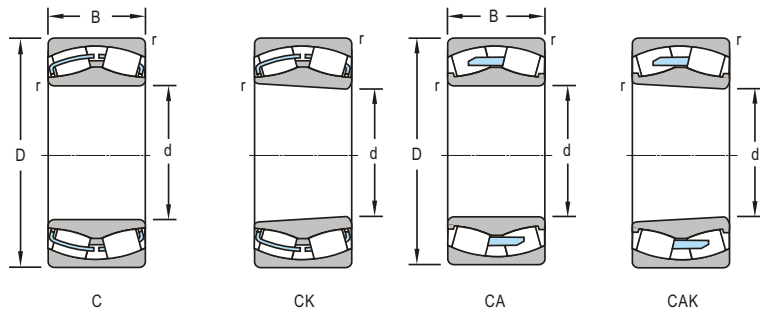
d 360~460mm

Boundary Dimensions				Basic Load Ratings		Limiting Speeds		
<i>d</i>	<i>D</i>	<i>B</i>	<i>r_{min}</i>	Dynamic <i>C</i>	Static <i>C₀</i>	Grease	Oil	
mm				kN		r/min		
360	540	134	5	2390	4700	600	760	
	540	180	5	3460	6350	500	630	
	540	180	5	3200	6160	480	620	
	600	192	5	3400	6700	560	700	
	600	243	5	4400	8370	430	530	
	600	243	5	4300	8210	430	530	
	600	243	5	4670	9040	430	530	
	650	232	6	4520	7930	420	510	
750	224	7.5	4900	7500	450	550		
380	520	106	4	1760	3420	800	1000	
	560	135	5	2280	4550	630	800	
	560	135	5	2480	5050	630	800	
	560	135	5	2610	4850	630	800	
	560	180	5	3240	6460	480	600	
	620	194	5	3450	6800	400	500	
	620	194	5	3700	7000	400	500	
	780	230	7.5	5340	8390	340	430	
400	590	142	5	2300	5000	700	900	
	600	148	5	2520	5450	540	670	
	600	148	5	2850	5610	540	670	
	650	200	6	3850	7540	380	480	
	720	256	6	5300	10100	340	430	
	720	315	6	6620	10400	310	390	
	820	243	7.5	5900	9360	360	450	
	401	720	256	6	5300	10100	340	430
420		620	150	5	2690	5750	450	560
		700	224	6	4850	9300	360	450
		700	280	6	5700	11300	300	380
	760	272	7.5	6450	11700	320	400	
440	600	118	4	2120	4570	550	700	
	650	157	6	2900	6050	430	530	
	720	226	6	4910	9600	340	430	
	720	280	6	5900	11900	280	360	
	720	280	6	6150	12300	300	380	
460	680	163	6	3150	6860	400	500	
	760	240	7.5	5450	10800	320	400	
	760	300	7.5	6660	13100	260	340	

Bearing Designations				Mounting Dimensions			Calculation Factors				Mass
Cylindrical Bore	Present		Original Cylindrical Bore	<i>d_{amin}</i>	<i>D_{amax}</i>	<i>r_{amax}</i>	<i>e</i>	<i>Y₁</i>	<i>Y₂</i>	<i>Y₀</i>	kg
	Tapered Bore	Tapered Bore									
23072CA/W33	23072CAK/W33	3053172HY	3153172HY	378	522	4	0.25	2.7	4	2.7	113
24072C/W33	24072CAK/W33	4053172Y	4453172Y	378	522	4	0.31	2.2	3.3	2.2	148
24072CA/W33	24072CAK/W33			378	522	4	0.31	2.2	3.3	2.2	148
23172W33	23172K/W33	3003772Y	3113772Y	380	580	4	0.32	2.1	3.1	2	221
24172W33	24172K/W33	4003772Y	4113772Y	380	580	4	0.42	1.6	2.4	1.6	273
24172CAK/W33				380	580	4	0.42	1.6	2.4	1.6	271
24172C				380	580	4	0.4	1.7	2.5	1.6	269
23272CAK/W33				386	624	5	0.35	1.9	2.9	1.8	332
22372W33	22372K/W33			390	724	5	0.31	2.2	3.3	2.2	489
23976W33	23976K/W33	3003976Y	3113976Y	395	505	3	0.19	3.6	5.3	3.5	73.5
23076W33	23076K/W33	3003176Y	3113176Y	398	542	4	0.24	2.8	4.2	2.8	122
23076C				398	542	4	0.22	3	4.6	2.8	116
23076CA/W33	23076CAK/W33			398	542	4	0.22	3	4.5	2.9	114
24076W33	24076K/W33			398	542	4	0.3	2.3	3.4	2.2	152
23176W33	23176K/W33	3003776Y	3113776Y	400	600	4	0.34	2	2.9	1.9	243
23176CAK/W33	23176CAK/W33			400	600	4	0.3	2.3	3.4	2.2	230
22376W33	22376K/W33			400	760	6	0.31	2.2	3.3	2.2	538
2680W33	2680K/W33			418	572	4	0.23	2.9	4.4	2.8	145
23080W33	23080K/W33	3003180Y	3113180Y	420	582	4	0.25	2.7	4	2.7	165
23080CA/C3W33				418	582	4	0.23	4.4	2.8		150
23180W33	23180K/W33	3003780Y	3113780Y	426	624	5	0.31	2.2	3.3	2.2	238
23280W33	23280K/W33	3003280Y	3113280Y	426	694	5	0.37	1.8	2.7	1.8	530
24280W33	24280K/W33			426	694	5	0.44	1.5	2.3	1.5	549
22380W33	22380K/W33	3680Y		432	788	6	0.37	1.8	2.7	1.8	650
		3G3-316		426	694	5	0.37	1.8	2.7	1.8	515
23084W33	24084K/W33	3003184Y	3113184Y	438	602	4	0.24	2.8	4.2	2.8	158
23184W33	23184K/W33	3003784Y	3113784Y	446	674	5	0.32	2.1	3.1	2	402
24184CA/W33	24184CAK/W33			446	674	5	0.38	1.7	2.6	1.7	434
23284CA/W33	23284CAK/W33	3053284HY	3153284HY	452	728	6	0.35	1.9	2.9	1.8	535
2398CA/W33				455	585	3	0.16	4.2	6.3	4	99
23088W33	23088K/W33	3003188Y	3113188Y	463	627	5	0.24	2.8	4.2	2.8	192
23188W33	23188K/W33	3003788Y	3113788Y	466	694	5	0.31	2.2	3.3	2.2	419
24188W33	24188K/W33			466	694	5	0.38	1.7	2.6	1.7	443
24188CAK/W33				466	694	5	0.37	1.8	2.7	1.8	446
23092W33	23092K/W33	3003192Y	3113192Y	483	657	5	0.23	2.9	4.4	2.8	220
23192W33	23192K/W33			492	728	6	0.31	2.2	3.3	2.2	468
24192W33	24192K/W33			492	728	6	0.37	1.8	2.7	1.8	539



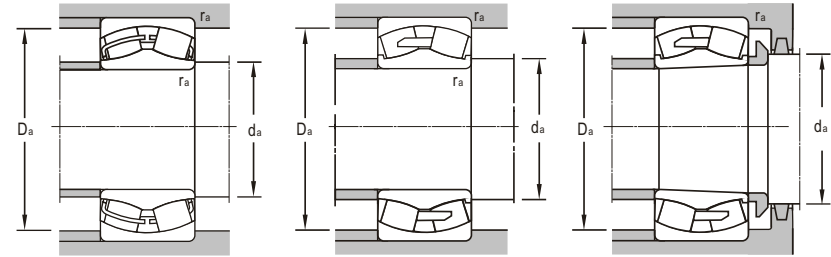
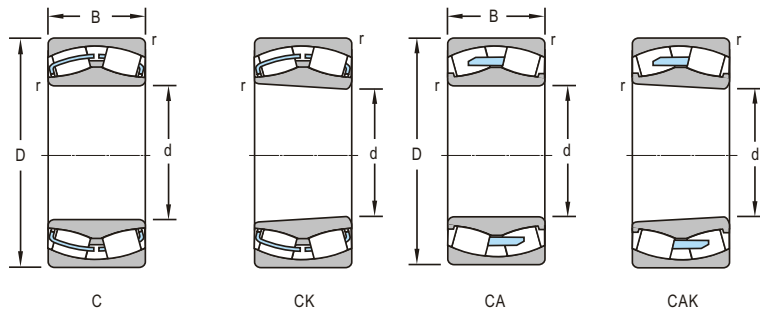
Spherical Roller Bearings



d 480~710mm

Boundary Dimensions				Basic Load Ratings		Limiting Speeds	
d	D	B	r _{min}	Dynamic C	Static C ₀	Grease	Oil
mm				kN		r/min	
480	650	128	5	2280	5480	400	500
	650	128	5	2900	5700	400	500
	700	165	6	3280	6910	380	480
	700	165	6	3540	7390	380	480
	790	248	7.5	5800	11400	300	380
	870	310	7.5	7350	13800	250	320
	870	310	7.5	7580	13800	260	340
494	670	128	5	2440	6060	400	500
	720	167	6	3500	7600	380	480
500	670	128	5	2440	6060	400	500
	720	167	6	3500	7600	380	480
530	780	185	6	3930	8550	340	430
	780	185	6	3560	8260	340	430
	780	185	6	4440	9320	340	430
	980	355	9.5	9960	18500	240	320
560	750	140	5	3150	7220	420	580
	820	195	6	4460	10020	300	380
	820	195	6	4700	10300	320	400
	820	258	6	6160	14000	340	420
	920	280	7.5	7990	16000	240	320
	920	280	7.5	7750	15300	240	320
	920	355	7.5	9450	19500	190	260
600	870	200	6	4810	11000	300	380
	980	375	7.5	10400	21300	180	240
630	920	212	7.5	5360	12200	260	340
670	900	170	6	4130	9840	260	340
	900	170	6	4260	10000	260	340
	980	230	7.5	6240	13700	240	320
	980	308	7.5	8440	19700	220	300
	1090	412	7.5	12500	26900	210	280
	1220	438	12	15500	30200	190	250
710	950	180	6	4290	10900	240	320

Bearing Designations				Mounting Dimensions			Calculation Factors				Mass
Cylindrical Bore	Present Tapered Bore	Original Cylindrical Bore	Tapered Bore	d _{amin}	D _{amax}	r _{amax}	e	Y ₁	Y ₂	Y ₀	kg
23996/W33	23996K/W33	3003996Y	3113996Y	498	632	4	0.18	3.8	5.6	3.7	161
23996 CAF1/W33				498	632	4	0.18	3.8	5.6	3.6	125
23096/W33	23096K/W33	3003196Y	3113196Y	503	677	5	0.24	2.8	4.2	2.8	231
23096CAK/P53/W33				503	677	5	0.21	2.3	4.8	3.2	210
23196CA/W33	23196CAK/W33			512	758	6	0.3	2.3	3.4	2.2	492
23296/W33	23296K/W33	3003296Y	3113296Y	512	838	6	0.39	1.7	2.6	1.7	837
23296CA/W33	23296CAK/W33			512	838	6	0.36	1.9	2.8	1.8	857
23296CA/W33				512	838	6	0.35	1.9	2.9	1.8	881
239494/W33	239494K/W33			512	652	4	0.18	3.8	5.6	3.7	135
239500/W33	239500K/W33	30039500Y	31139500Y	518	652	4	0.18	3.8	5.6	3.7	130
230500/W33	230500K/W33	30031500Y	31131500Y	523	697	5	0.23	2.9	4.4	2.8	238
230530/W33	230530K/W33	30031530Y	31131530Y	553	757	5	0.23	2.9	4.4	2.8	313
230530 D-1				553	757	5	0.23	2.9	4.4	2.8	317
230530CAK/W33 YB				553	757	5	0.22	2.9	4.6	2.8	300
232530CA/W33	232530CAK30/W33			622	888	6	0.36	1.9	2.8	1.8	1210
239560CA/W33				578	732	4	0.16		6.3	4	168
230560/W33	230560K/W33	30031560Y	31131560T	583	797	5	0.23	2.9	4.4	2.8	365
230560CA/W33	230560CAK/W33			583	797	5	0.22	3	4.5	2.9	354
240560 CA/W33				583	797	5	0.28	2.4	3.6	2.5	472
231560/W33	231560K/W33	30037560Y	31137560Y	592	888	6	0.3	2.3	3.4	2.2	757
231560CA/W33S2				592	888	6	0.3	2.3	3.4	2.2	762
241560CA/W33	241560CAK30/W33			592	888	6	0.37	1.8	2.7	1.8	985
241560 CA-1/W33				592	888	6	0.37	1.8	2.7	1.8	947
230600/W33	230600K/W33	30031600Y	31131600Y	623	847	5	0.22	3	4.5	2.9	393
241600/W33	241600K30/W33	40037600Y	41137600Y	632	948	6	0.37	1.8	2.7	1.8	1079
230630/W33	230630K/W33	30031630Y	31131630Y	658	892	6	0.23	2.9	4.4	2.8	509
239670/W33	239670K/W33	30039670Y	31139670Y	693	877	5	0.18	3.8	5.6	3.7	317
239670 CAF1/W33				693	877	6	0.17	4	5.9	4	308
230670/W33	230670K/W33	30031670Y	31131670Y	698	952	6	0.23	2.9	4.4	2.8	655
240670CA/W33S2				698	952	6	0.28	2.4	3.6	2.5	806
241670CAK30C3/W33				702	1058	6	0.37	2.7	2.7	1.8	1507
232670CAK30C3/W33				718	1172	10	0.35	1.9	2.9	1.8	2275
239710/W33	239710K/W33	30039710Y	31139710Y	732	927	5	0.18	3.8	5.6	3.7	387



d 710~1440mm

Boundary Dimensions				Basic Load Ratings		Limiting Speeds	
<i>d</i>	<i>D</i>	<i>B</i>	<i>r_{min}</i>	Dynamic <i>C</i>	Static <i>C₀</i>	Grease	Oil
mm				kN		r/min	
710	1030	236	7.5	6530	15130	220	300
	1030	315	7.5	8890	20700	210	290
	1150	438	9.5	13700	29940	150	190
750	1090	250	7.5	7890	17600	200	280
	1090	335	7.5	9340	22300	190	240
	1090	335	7.5	9340	22300	180	260
	1360	475	15	18500	35700	150	210
800	1060	258	6	7170	19030	200	280
	1150	258	7.5	8630	20000	190	260
	1150	345	7.5	10000	25700	170	220
850	1030	136	5	3640	10300	170	210
	1120	200	6	6010	15300	190	260
	1120	200	6	6100	15800	190	260
	1220	272	7.5	9050	21100	180	240
	1220	365	7.5	10000	26000	160	200
	1220	365	7.5	10000	26000	160	200
	1220	365	7.5	11700	28900	160	200
900	1270	365	7.5	12200	31100	160	200
	1280	375	7.5	12200	31100	150	190
1000	1420	308	7.5	12000	29000	190	250
	1420	412	7.5	15000	40000	120	160
	1580	580	12	24500	56700	110	150
1120	1580	345	12	14400	34800	90	120
	1580	462	9.5	18500	48000	100	140
1180	1540	272	7.5	10400	27700	100	140
	1660	355	9.5	15500	38400	90	120
1200	1500	280	7.5	10000	29700	80	120
1250	1750	500	9.5	20000	52600	80	105
1320	1850	530	7.5	23900	64400	70	90
1440	1760	315	7.5	12000	39200	75	95

Bearing Designations				Mounting Dimensions			Calculation Factors				Mass
Cylindrical Bore	Present	Tapered Bore	Original	<i>d_{amin}</i>	<i>D_{amax}</i>	<i>r_{amax}</i>	<i>e</i>	<i>Y₁</i>	<i>Y₂</i>	<i>Y₀</i>	kg
	Cylindrical Bore		Tapered Bore								
mm											
230/710W33 240/710CA 241/710W33	230/710K/W33	4003/710Y	3113/710Y	738	1002	6	0.23	2.9	4.4	2.8	742
			3113/710Y	738	1002	6	0.27	3.7	2.5	890	
			4113/710Y	750	1110	8	0.38	1.7	2.6	1.7	1802
230/750W33 240/750W33 FD-240/750W33 232/750CAK30F1/C3W33	230/750K/W33	4003/800Y	4113/800Y	778	1062	6	0.22	3	4.5	2.9	855
			4113/800Y	782	1058	6	0.28	2.4	3.6	2.5	1060
			4113/800Y	778	1062	6	0.28	2.4	3.6	2.5	1060
			4113/800Y	808	1302	12	0.35	1.9	2.9	1.8	3043
249/800W33 230/800W33 240/800W33	249/800K30/W33	4003/1800Y	4113/1800Y	823	1037	5	0.22	3	4.5	2.9	638
			4113/1800Y	828	1122	6	0.21	3.2	4.8	3.1	986
			4113/1800Y	828	1122	6	0.29	2.4	3.5	3.3	1246
238/850CA/C4W33S2 FD-239/850CA/W33 239/850W33 230/850W33 240/850W33 240/850YA 240/850CA/C4W33S2	238/850K/W33	3003/850Y	3113/850Y	868	1012	4	0.11	6.1	9.1	6.3	232
			3113/850Y	876	1097	5	0.16	6.2	4.1	5.49	
			3113/850Y	873	1097	5	0.16	4.2	6.2	4.1	531
			3113/850Y	878	1192	6	0.21	3.2	4.8	3.1	1069
			4113/850Y	878	1192	6	0.28	2.4	3.6	2.5	1398
			4113/850Y	878	1192	6	0.28	2.4	3.6	2.5	1396
			4113/850Y	878	1192	6	0.27	2.5	3.7	2.5	1430
26/900/C3W33XVA3 240/900W33	240/900K30/W33	4003/1900Y	4113/1900Y	928	1242	6	0.27	2.5	3.7	2.5	1703
			4113/1900Y	928	1252	6	0.27	2.5	3.7	2.5	1783
230/1000CA/W33C4 240/1000W33 241/1000CAK30W33	230/1000K/W33	4003/11000Y	4113/11000Y	1028	1392	6	0.19		5.3	3.6	1609
			4113/11000Y	1028	1392	6	0.27	2.5	3.7	2.5	2117
			4113/11000Y	1048	1532	10	0.35	2.9	1.8	4.290	
230/1120CA/C4YB 240/1120 CA/W33	230/1120K/W33	4003/11000Y	4113/11000Y	1160	1540	10	0.19		3.5	2.3	2155
			4113/11000Y	1159	1541	8	0.26	2.6	3.9	2.5	2908
239/1180 CA/W33 230/1180W33	239/1180K/W33	4003/11000Y	4113/11000Y	1214	1506	6	0.16	4.2	6.3	4	1360
			4113/11000Y	1210	1630	8	0.2	3.4	5.1	3.3	2480
539/1200CA/W33C3				1236	1464	6	0.162		6.2	4.1	1150
240/1250CA/C4YB				1290	1710	8	0.26		3.8	2.5	3854
240/1320CAF/C3W33				1360	1810	6	0.26		3.8	2.5	4504
238/1440F3/C3W33				1480	1720	6	0.15		6.6	4.3	1597