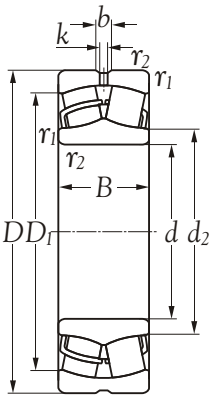
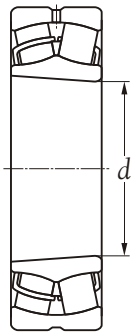
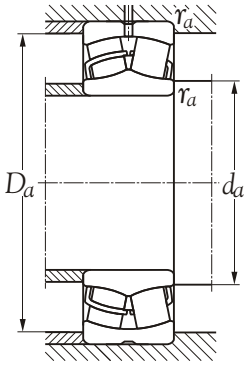
Technical Information

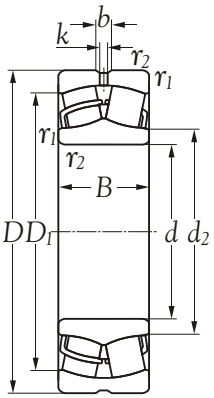


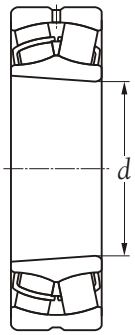


Inner bore	Bearing number	Principal dimensions		Basic load ratings		Max runout speed		Mass
				dynamic	static	grease	oil	
d		D	B	C	Co			
mm		mm		N		r/min		kg
40	22308 CC	90	33	92000	97600	3100	3900	1.00
40	22308 CCK	90	33	92000	97600	3100	3900	1.00
40	22308 E	90	33	101600	109600	3000	3700	1.00
40	22308 EK	90	33	101600	109600	3000	3700	1.00
50	22310 CC	110	40	140800	160000	2300	3000	1.85
50	22310 CCK	110	40	140800	160000	2300	3000	1.85
50	22310 E	110	40	159200	179200	2300	3000	1.85
50	22310 EK	110	40	159200	179200	2300	3000	1.85
55	22311 CC	120	43	159200	18500	2200	2800	2.35
55	22311 CCK	120	43	159200	18500	2200	2800	2.35
55	22311 E	120	43	188000	224000	2200	2800	2.35
55	22311 EK	120	43	188000	224000	2200	2800	2.35
60	22312 CC	130	46	188000	224000	21000	2600	2.95
60	22312 CCK	130	46	188000	224000	21000	2600	2.95
60	22312 E	130	46	216800	268000	1900	2500	2.90
60	22312 EK	130	46	216800	268000	1900	2500	2.90
65	22313 CC	140	48	202400	240000	1800	2300	3.55
65	22313 CCK	140	48	202400	240000	1800	2300	3.55
65	22313 E	140	48	239200	288000	1800	2300	3.55
65	22313 EK	140	48	239200	288000	1800	2300	3.55
70	22314 EK	150	51	276000	344000	1500	2100	4.30
75	22315 CC/W33	160	55	276000	344000	1500	2100	5.25
75	22315 CCK/W33	160	55	276000	344000	1500	2100	5.25
75	22315 E	160	55	308000	380000	1500	2100	5.25
75	22315 EK	160	55	308000	380000	1500	2100	5.25
80	22316 CCK/W33	170	58	299200	364000	1400	1900	6.20
80	22316 E	170	58	344800	432000	1400	1900	6.20
80	22316 EK	170	58	344800	432000	1400	1900	6.20
85	22317 CCK/W33	180	60	336000	416000	1300	1800	7.25
85	22317 E	180	60	381600	496000	1300	1800	7.25
85	22317 EK	180	60	381600	496000	1300	1800	7.25
90	22318 CC/W33	190	64	381600	488000	1200	1600	8.60
90	22318 CCK/W33	190	64	381600	488000	1200	1600	8.60
90	22318 E	190	64	428000	556000	1200	1600	8.60

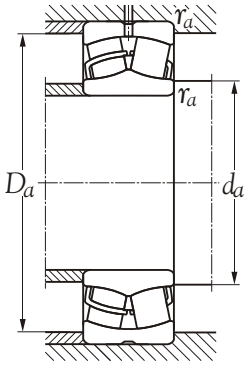


Inner bore d mm	Bearing number	Dimensions (mm)					Abutment and fillet Dimensions (mm)			Calculation factors			
		d_2	D_1	$r_{1,2}$ min	b	k	d_a min	D_a max	r_a max	e	Y_1	Y_2	Y_0
40	22308 CC	50.4	74.6	1.5			49	81	1.5	0.37	1.8	2.7	1.8
40	22308 CCK	50.4	74.6	1.5			49	81	1.5	0.37	1.8	2.7	1.8
40	22308 E	49.7	75.4	1.5	5.5	3.0	49	81	1.5	0.37	1.8	2.7	1.8
40	22308 EK	49.7	75.4	1.5	5.5	3.0	49	81	1.5	0.37	1.8	2.7	1.8
50	22310 CC	63.1	92.0	2.0			60	100	2.0	0.37	1.8	2.7	1.8
50	22310 CCK	63.1	92.0	2.0			60	100	2.0	0.37	1.8	2.7	1.8
50	22310 E	62.1	93.3	2.0	5.5	3.0	60	100	2.0	0.37	1.8	2.7	1.8
50	22310 EK	62.1	93.3	2.0	5.5	3.0	60	100	2.0	0.37	1.8	2.7	1.8
55	22311 CC	69.3	100.0	2.0			65	110	2.0	0.35	1.9	2.9	1.8
55	22311 CCK	69.3	100.0	2.0			65	110	2.0	0.35	1.9	2.9	1.8
55	22311 E	70.1	103.0	2.0	5.5	3.0	65	110	2.0	0.35	1.9	2.9	1.8
55	22311 EK	70.1	103.0	2.0	5.5	3.0	65	110	2.0	0.35	1.9	2.9	1.8
60	22312 CC	74.9	109.0	3.1			72	118	2.0	0.35	1.9	2.9	1.8
60	22312 CCK	74.9	109.0	3.1			72	118	2.0	0.35	1.9	2.9	1.8
60	22312 E	77.9	112.0	2.1	5.5	3.0	72	118	2.0	0.35	1.9	2.9	1.8
60	22312 EK	77.9	112.0	2.1	5.5	3.0	72	118	2.0	0.35	1.9	2.9	1.8
65	22313 CC	82.0	118.0	2.1			77	128	2.0	0.35	1.9	2.9	1.8
65	22313 CCK	82.0	118.0	2.1			77	128	2.0	0.35	1.9	2.9	1.8
65	22313 E	81.7	120.0	2.1	8.3	4.5	77	128	2.0	0.35	1.9	2.9	1.8
65	22313 EK	81.7	120.0	2.1	8.3	4.5	77	128	2.0	0.35	1.9	2.9	1.8
70	22314 EK	90.3	130.0	2.1	8.3	4.5	82	138	2.0	0.33	2.0	3.0	2.0
75	22315 CC/W33	94.2	134.0	2.1	8.3	4.5	87	148	2.0	0.35	1.9	2.9	1.8
75	22315 CCK/W33	94.2	134.0	2.1	8.3	4.5	87	148	2.0	0.35	1.9	2.9	1.8
75	22315 E	92.7	136.0	2.1	8.3	4.5	87	148	2.0	0.35	1.9	2.9	1.8
75	22315 EK	92.7	136.0	2.1	8.3	4.5	87	148	2.0	0.35	1.9	2.9	1.8
80	22316 CCK/W33	100.0	144.0	2.1	8.3	4.5	92	158	2.0	0.35	1.9	2.9	1.8
80	22316 E	98.2	144.0	2.1	8.3	4.5	92	158	2.0	0.35	1.9	2.9	1.8
80	22316 EK	98.2	144.0	2.1	8.3	4.5	92	158	2.0	0.35	1.9	2.9	1.8
85	22317 CCK/W33	106.0	154.0	3.0	8.3	4.5	99	166	2.5	0.33	2.0	3.0	2.0
85	22317 E	108.0	155.0	3.0	8.3	4.5	99	166	2.5	0.33	2.0	3.0	2.0
85	22317 EK	108.0	155.0	3.0	8.3	4.5	99	166	2.5	0.33	2.0	3.0	2.0
90	22318 CC/W33	112.0	160.0	3.0	11.1	6.0	104	176	2.5	0.35	1.9	2.9	1.8
90	22318 CCK/W33	112.0	160.0	3.0	11.1	6.0	104	176	2.5	0.35	1.9	2.9	1.8
90	22318 E	113.0	162.0	3.0	11.1	6.0	104	176	2.5	0.33	2.0	3.0	2.0

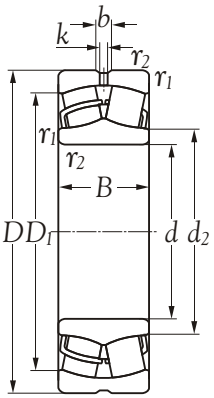


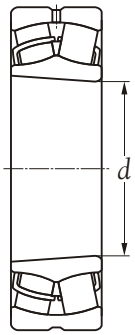


Inner bore	Bearing number	Principal dimensions		Basic load ratings		Max runout speed		Mass
				dynamic	static	grease	oil	
d		D	B	C	Co			
mm		mm		N		r/min		kg
90	22318 EK	190	64	428000	556000	1200	1600	8.6
95	22319 CC/W33	200	67	414400	536000	1200	1600	10.0
95	22319 CCK/W33	200	67	414400	536000	1200	1600	10.0
95	22319 E	200	67	469600	612000	1200	1600	10.0
100	22320 CC/W33	215	73	488000	640000	1100	1500	13.0
100	22320 CCK/W33	215	73	488000	640000	1100	1500	13.0
100	22320 E	215	73	561600	760000	1100	1500	13.0
90	22320 EK	215	73	561600	760000	1100	1500	13.0
110	22322 CC/W33	240	80	580000	772000	1100	1400	18.0
110	22322 CCK/W33	240	80	580000	772000	1100	1400	18.0
110	22322 E	240	80	662400	896000	1000	1300	17.5
110	22322 EK	240	80	662400	896000	1000	1300	17.5
120	22324 CC/W33	260	86	676000	896000	900	1200	22.0
120	22324 CCK/W33	260	86	676000	896000	900	1200	22.0
130	22326 CC/W33	280	93	782400	1056000	900	1100	28.5
130	22326 CCK/W33	280	93	782400	1056000	900	1100	28.5
140	22328 CC/W33	300	102	904000	1248000	700	1000	34.5
140	22328 CCK/W33	300	102	904000	1248000	700	1000	34.5
150	22330 CC/W33	320	108	1016000	1408000	700	900	41.5
150	22330 CCK/W33	320	108	1016000	1408000	700	900	41.5
160	22332 CC/W33	340	114	1104000	1568000	600	900	50.0
160	22332 CCK/W33	340	114	1104000	1568000	600	900	50.0
170	22334 CC/W33	360	120	1232000	1728000	600	900	58.5
170	22334 CCK/W33	360	120	1232000	1728000	600	900	58.5
180	22336 CC/W33	380	126	1384000	1960000	600	800	69.0
180	22336 CCK/W33	380	126	1384000	1960000	600	800	69.0
190	22338 CC/W33	400	132	1496000	2120000	500	700	80.0
190	22338 CCK/W33	400	132	1496000	2120000	500	700	80.0
200	22340 CC/W33	420	138	1616000	2320000	500	700	92.5
200	22340 CCK/W33	420	138	1616000	2320000	500	700	92.5
220	22344 CC/W33	460	145	1880000	2760000	500	600	120.0
220	22344 CCK/W33	460	145	1880000	2760000	500	600	120.0
240	22348 CC/W33	500	155	2136000	3200000	400	500	155.0
240	22348 CCK/W33	500	155	2136000	3200000	400	500	155.0

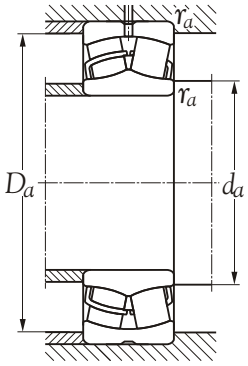


Inner bore d mm	Bearing number	Dimensions (mm)					Abutment and fillet Dimensions (mm)			Calculation factors			
		d_2	D_1	$r_{1,2}$ min	b	k	d_a min	D_a max	r_a max	e	Y_1	Y_2	Y_0
90	22318 EK	113	162	3	11.1	6.0	104	176	2.5	0.33	2.0	3.0	2.0
95	22319 CC/W33	118	168	3	11.1	6.0	109	186	2.5	0.35	1.9	2.9	1.8
95	22319 CCK/W33	118	168	3	11.1	6.0	109	186	2.5	0.35	1.9	2.9	1.8
95	22319 E	118	170	3	11.1	6.0	109	186	2.5	0.33	2.0	3.0	2.0
100	22320 CC/W33	125	180	3	11.1	6.0	114	201	2.5	0.33	2.0	3.0	2.0
100	22320 CCK/W33	125	180	3	11.1	6.0	114	201	2.5	0.33	2.0	3.0	2.0
100	22320 E	130	186	3	11.1	6.0	114	201	2.5	0.33	2.0	3.0	2.0
100	22320 EK	130	186	3	11.1	6.0	114	201	2.5	0.33	2.0	3.0	2.0
110	22322 CC/W33	140	200	3	13.9	7.5	124	226	2.5	0.35	1.9	2.9	1.8
110	22322 CCK/W33	140	200	3	13.9	7.5	124	226	2.5	0.35	1.9	2.9	1.8
110	22322 E	143	205	3	13.9	7.5	124	226	2.5	0.33	2.0	3.0	2.0
110	22322 EK	143	205	3	13.9	7.5	124	226	2.5	0.33	2.0	3.0	2.0
120	22324 CC/W33	152	216	3	13.9	7.5	134	246	2.5	0.35	1.9	2.9	1.8
120	22324 CCK/W33	152	216	3	13.9	7.5	134	246	2.5	0.35	1.9	2.9	1.8
130	22326 CC/W33	164	233	4	16.7	9.0	148	262	3.0	0.35	1.9	2.9	1.8
130	22326 CCK/W33	164	233	4	16.7	9.0	148	262	3.0	0.35	1.9	2.9	1.8
140	22328 CC/W33	175	247	4	16.7	9.0	158	282	3.0	0.35	1.9	2.9	1.8
140	22328 CCK/W33	175	247	4	16.7	9.0	158	282	3.0	0.35	1.9	2.9	1.8
150	22330 CC/W33	189	267	4	16.7	9.0	168	302	3.0	0.35	1.9	2.9	1.8
150	22330 CCK/W33	189	267	4	16.7	9.0	168	302	3.0	0.35	1.9	2.9	1.8
160	22332 CC/W33	201	282	4	16.7	9.0	178	322	3.0	0.35	1.9	2.9	1.8
160	22332 CCK/W33	201	282	4	16.7	9.0	178	322	3.0	0.35	1.9	2.9	1.8
170	22334 CC/W33	213	300	4	16.7	9.0	188	342	3.0	0.33	2.0	3.0	2.0
170	22334 CCK/W33	213	300	4	16.7	9.0	188	342	3.0	0.33	2.0	3.0.	2.0
180	22336 CC/W33	224	317	4	22.3	12.0	198	362	3.0	0.35	1.9	2.9	1.8
180	22336 CCK/W33	224	317	4	22.3	12.0	198	362	3.0	0.35	1.9	2.9	1.8
190	22338 CC/W33	237	333	5	22.3	12.0	212	378	4.0	0.35	1.9	2.9	1.8
190	22338 CCK/W33	237	333	5	22.3	12.0	212	378	4.0	0.35	1.9	2.9	1.8
200	22340 CC/W33	249	351	5	22.3	12.0	222	398	4.0	0.33	2.0	3.0	2.0
200	22340 CCK/W33	249	351	5	22.3	12.0	222	398	4.0	0.33	2.0	3.0	2.0
220	22344 CC/W33	279	389	5	22.3	12.0	242	438	4.0	0.31	2.2	3.3	2.2
220	22344 CCK/W33	279	389	5	22.3	12.0	242	438	4.0	0.31	2.2	3.3	2.2
240	22348 CC/W33	304	422	5	22.3	12.0	262	478	4.0	0.31	2.2	3.3	2.2
240	22348 CCK/W33	304	422	5	22.3	12.0	262	478	4.0	0.31	2.2	3.3	2.2





Inner bore d	Bearing number	Principal dimensions D	Principal dimensions B	Basic load ratings dynamic C	Basic load ratings static Co	Max runout speed grease	Max runout speed oil	Mass
mm		mm		N		r/min		kg
260	22352 CC/W33	540	165	2440000	3640000	400	500	190
260	22352 CCK/W33	540	165	2440000	3640000	400	500	190
280	22356 CC/W33	580	175	2760000	4160000	400	500	235
280	22356 CCK/W33	580	175	2760000	4160000	400	500	235



Inner bore d mm	Bearing number	Dimensions (mm)					Abutment and fillet Dimensions (mm)			Calculation factors			
		d_2	D_1	$r_{1,2}$ min	b	k	d_a min	D_a max	r_a max	e	Y_1	Y_2	Y_0
260	**22352 CC/W33**	329	457	6	22.3	12	288	512	5	0.31	2.2	3.3	2.2
260	**22352 CCK/W33**	329	457	6	22.3	12	288	512	5	0.31	2.2	3.3	2.2
280	**22356 CC/W33**	354	492	6	22.3	12	308	552	5	0.30	2.3	3.4	2.2
280	**22356 CCK/W33**	354	492	6	22.3	12	308	552	5	0.30	2.3	3.4	2.2