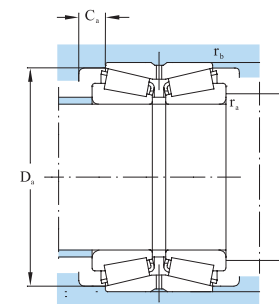
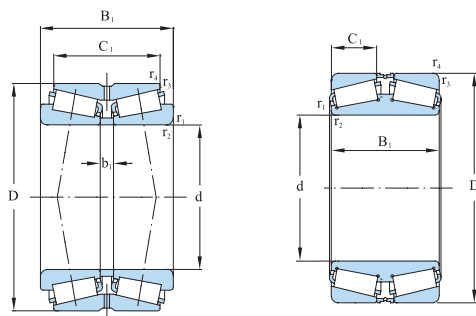


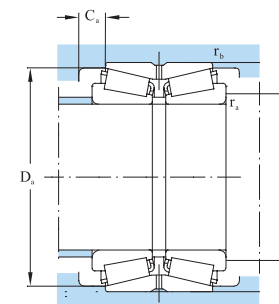
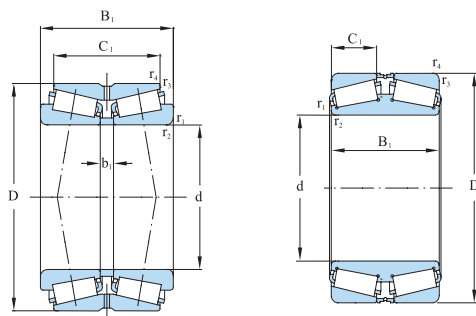
Double row apered roller bearings



Designations	Boundary dimensions							Basic load ratings	
	d	D	B ₁	C ₁	b ₁	r _{1,2} min	r _{3,4} min	Cr	Cor
	mm							kN	
350305B	25	62	42	31.5	8	1.5	0.6	66.5	100
350306B	30	72	47	33.5	9	1.5	0.6	85	125
350307B	35	80	51	35.5	9	2.0	0.6	108	160
352208	40	80	55	43.5	9	1.5	0.6	128	188
350308B		90	56	39.5	10	2.0	0.6	132	170
97210	50	90	49	39	9	1.8	0.9	125	184
352210		90	55	43.5	9	1.5	0.6	145	218
350310B		110	64	43.5	10	2.5	0.6	175	260
3187111	55	90	54	21	—	0.5	1.5	165	310
352211		100	60	48.5	10	2.0	0.6	175	270
350311B		120	70	49	12	2.5	0.6	208	305
352212	60	110	66	54.5	10	2.0	0.6	215	330
350312B		130	74	51	12	3.0	1.0	235	350
352213	65	120	73	61.5	11	2.0	0.6	260	410
350313B		140	79	53	13	3.0	1.0	268	410
352214	70	125	74	61.5	12	2.0	0.6	272	440
350314B		150	83	67	13	3.0	1.0	302	460
352215		130	74	61.5	12	2.0	0.6	275	445
350315B	75	160	88	60	14	3.0	1.0	338	510
187216		140	56.75	22	—	0.7	2.0	228	356
352216		140	78	63.5	12	2.5	0.6	320	530
350316B	80	170	94	63	16	3.0	1.0	370	590
352217		150	86	69	14	2.5	0.6	368	600
350317B		180	99	66	17	4.0	1.0	408	660
352218	90	160	94	77	14	2.5	0.6	440	720
350318B		190	103	70	17	4.0	1.0	455	738
352219	95	170	100	83	14	3.0	1.0	492	835
350319B		200	109	74	19	4.0	1.0	502	830
352220	100	180	107	87	15	3.0	1.0	555	925
350320B		215	124	81	22	4.0	1.0	602	1010
350620D1		190	125	100	—	3.0	1.3	575	1050
352221	105	190	115	95	15	3.0	1.0	618	1080

Limiting speeds		Abutment and fillet dimensions					Calculation factors				Mass
grease	oil	d _a min	D _a min	C _a min	r _a max	r _b max	e	Y ₁	Y ₂	Y ₀	
r / min		mm									kg
4600	5600	32	59	5.5	1.5	0.6	0.83	0.80	1.20	0.80	—
4000	5000	37	68	7.0	1.5	0.6	0.83	0.80	1.20	0.80	—
3600	4500	44	76	8.0	2.0	0.6	0.83	0.80	1.20	0.80	—
3800	4500	47	75	6.0	1.5	0.6	0.37	1.80	2.70	1.80	1.18
3200	4000	49	87	8.5	2.0	0.6	0.83	0.80	1.20	0.80	1.56
3400	4500	49	87	6.0	1.8	0.9	0.42	1.61	2.39	1.57	1.24
3200	3800	57	86	6.0	1.5	0.6	0.42	1.60	2.40	1.60	1.36
2700	3400	60	105	10.5	2.1	0.6	0.83	0.80	1.20	0.80	2.65
3300	4400	—	—	—	—	—	0.31	2.16	3.22	2.12	1.73
2800	3400	64	96	6.0	2.0	0.6	0.40	1.70	2.50	1.60	1.85
2400	3000	65	114	10.5	2.1	0.6	0.83	0.80	1.20	0.80	3.92
2600	3200	69	105	6.0	2.0	0.6	0.40	1.70	2.50	1.60	—
2300	2800	72	124	11.5	2.5	1.0	0.83	0.80	1.20	0.80	—
2200	3000	74	115	6.0	2.0	0.6	0.40	1.70	2.50	1.60	2.49
2000	2600	77	134	13.0	2.5	1.0	0.83	0.80	1.20	0.80	5.16
2200	2800	79	120	6.5	2.0	0.6	0.42	1.60	2.40	1.60	3.56
1900	2400	82	143	13.0	2.5	1.0	0.83	0.80	1.20	0.80	6.23
2000	2600	84	126	6.5	2.0	0.6	0.44	1.60	2.30	1.50	3.68
1700	2200	87	153	14.0	2.5	1.0	0.83	0.80	1.20	0.80	—
2100	2800	—	—	—	—	—	0.42	1.61	2.39	1.57	3.28
1900	2400	90	135	7.5	2.1	0.6	0.42	1.60	2.40	1.60	4.85
1600	2200	92	161	15.5	2.5	1.0	0.83	0.80	1.20	0.80	—
1700	2200	95	143	8.5	2.1	0.6	0.42	1.60	2.40	1.60	5.85
1400	2200	99	171	16.5	3.0	1.0	0.83	0.80	1.20	0.80	—
1600	2200	100	153	8.5	2.1	0.6	0.42	1.60	2.40	1.60	7.35
1300	1900	104	181	16.5	3.0	1.0	0.83	0.80	1.20	0.80	—
1400	2000	107	163	8.5	2.5	1.0	0.42	1.60	2.40	1.60	9.04
1300	1700	109	189	17.5	3.0	1.0	0.83	0.80	1.20	0.80	—
1400	1900	112	172	10.0	2.5	1.0	0.42	1.60	2.40	1.60	10.70
1100	1400	114	204	21.5	3.0	1.0	0.83	0.80	1.20	0.80	—
1500	2000	—	—	—	—	—	0.36	1.85	2.76	1.81	14.90
1300	1700	117	182	10.0	2.5	1.0	0.42	1.60	2.40	1.60	13.10

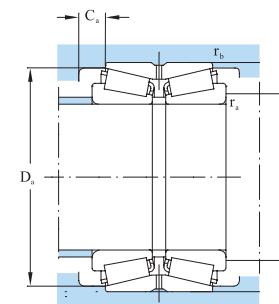
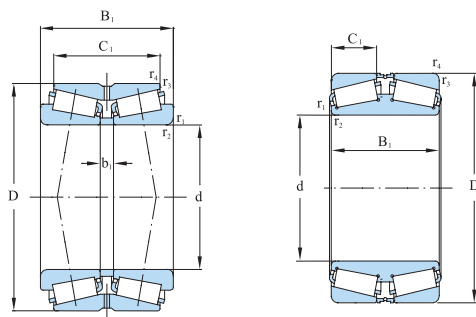
Double row apered roller bearings



Designations	Boundary dimensions							Basic load ratings	
	d	D	B ₁	C ₁	b ₁	r _{1,2} min	r _{3,4} min	Cr	Cor
	mm							kN	
350321B	105	225	127	83	21	4.0	1.0	640	1080
352122	110	180	95	76	11	2.0	0.6	422	840
352222		200	121	101	15	3.0	1.0	698	1210
350322B		240	137	87	23	4.0	1.0	752	1290
352124	120	200	110	90	14	2.0	0.6	550	1060
187224E		215	87	34	—	0.8	2.5	520	890
57524		215	132	106	16	2.5	0.9	775	1470
352224		215	132	109	16	3.0	1.0	775	1360
350324B	130	260	148	96	24	4.0	1.0	862	1490
352926		180	70	56	10	2.0	0.5	258	565
352026		200	95	75	11	2.5	0.7	440	870
1-7006		210	64	57	6	2.5	0.6	325	575
352126		210	110	90	14	2.0	0.6	550	1070
97826U		214	115.6	18	20	2.3	0.7	550	1070
352226		230	145	117.5	17	4.0	1.0	895	1630
97526/EY		230	149	120	16	4.0	0.8	840	1700
197726		230	150	150	16	3.0	1.0	842	957
350626D1		235	145	115	—	2.3	1.3	805	1560
350326B		280	156	100	24	5.0	1.1	968	1640
352028	140	210	95	75	11	2.5	0.6	455	950
352128		225	115	90	15	2.5	1.0	580	1180
352228		250	153	125.5	17	4.0	1.0	1050	1840
187328		250	157	128	21	4.0	1.0	1040	2080
352228/YA		300	154	47	14	1.3	4.0	1099	1842
350328B	150	300	168	108	28	5.0	1.1	1110	1940
32930/DF		210	76	30	—	0.5	2.0	415	920
2057930		210	80	62	8	2.5	0.7	350	795
352930		210	80	62	8	2.5	0.7	350	795
97830		225	112	88	22	3.0	1.0	1000	1690
352130		250	138	112	18	2.5	1.0	785	1560
350630X2		270	109	87	19	4.0	1.0	647	678
352230		270	164	130	18	4.0	1.0	1170	2140

Limiting speeds		Abutment and fillet dimensions					Calculation factors				Mass
grease	oil	d _a min	D _a min	C _a min	r _a max	r _b max	e	Y ₁	Y ₂	Y ₀	
r / min		mm									kg
1100	1400	119	213	22.0	3.0	1.0	0.83	0.80	1.20	0.80	—
1300	1700	120	173	10.5	2.0	0.6	0.25	2.70	4.00	2.60	10.00
1200	1600	122	192	10.0	2.5	1.0	0.42	1.60	2.10	1.60	15.50
1000	1300	124	226	25.0	3.0	1.0	0.83	0.80	1.20	0.80	—
1100	1500	—	—	—	—	—	0.30	2.25	3.43	2.20	12.60
1400	1900	—	—	—	—	—	0.44	1.55	2.31	1.52	18.90
1400	1900	—	—	—	—	—	0.41	1.64	2.44	1.60	13.40
1100	1400	132	206	11.5	2.5	1.0	0.44	1.60	2.30	1.50	19.60
900	1200	134	246	26.0	3.0	1.0	0.83	0.80	1.20	0.80	—
1400	1900	—	—	—	—	—	0.27	2.49	3.71	2.43	4.87
1300	1800	—	—	—	—	—	0.35	1.94	2.88	1.89	9.72
1300	1700	—	—	—	—	—	0.32	2.08	3.10	2.04	8.06
1300	1700	—	—	—	—	—	0.32	2.13	3.17	2.08	13.90
1300	1700	—	—	—	—	—	0.32	2.13	3.17	2.08	15.70
1000	1300	144	221	14.0	3.0	1.0	0.44	1.60	2.30	1.50	24.10
1300	1700	—	—	—	—	—	0.26	2.55	3.80	2.50	25.60
1200	—	141	203	12.0	2.5	1.0	0.26	2.60	3.80	2.50	30.20
1300	1700	—	—	—	—	—	0.39	1.74	2.59	1.70	24.70
800	1100	147	263	28.0	4.0	1.0	0.83	0.80	1.20	0.80	—
1200	1700	—	—	—	—	—	0.35	1.94	2.88	1.89	8.36
1200	1700	—	—	—	—	—	0.34	2.00	2.98	1.96	15.50
850	1100	154	240	14.0	3.0	1.0	0.44	1.60	2.30	1.50	30.10
900	1300	—	—	—	—	—	0.83	0.818	1.22	0.80	50.30
1200	1600	—	—	—	—	—	0.44	1.55	2.31	1.52	31.70
700	1000	157	283	30.0	4.0	1.0	0.83	0.80	1.20	0.80	—
1200	1500	—	—	—	—	—	0.33	2.06	3.06	2.01	7.99
1200	1500	—	—	—	—	—	0.27	2.48	2.69	2.42	9.12
1200	1500	—	—	—	—	—	0.27	2.48	2.69	2.42	9.32
1200	1500	—	—	—	—	—	0.39	1.73	2.58	1.69	25.80
1100	1500	—	—	—	—	—	0.25	2.74	4.08	2.68	37.30
1100	1500	—	—	—	—	—	0.44	1.55	2.31	1.52	24.50
800	1100	164	256	17.0	3.0	1.0	0.44	1.60	2.30	1.50	43.80

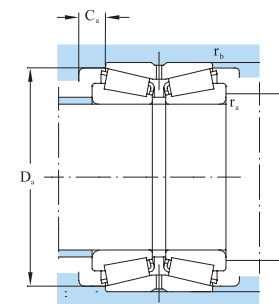
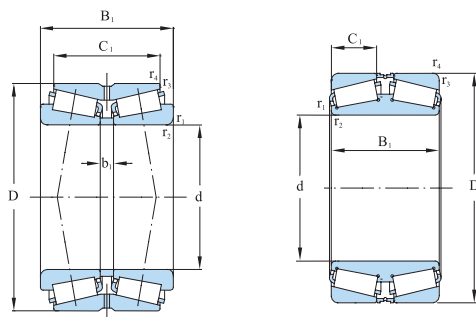
Double row apered roller bearings



Designations	Boundary dimensions							Basic load ratings	
	d	D	B ₁	C ₁	b ₁	r _{1,2} min	r _{3,4} min	Cr	Cor
	mm							kN	
352230/YA	150	270	169	138	23	4.0	1.0	1160	2330
197730		270	170	170	—	3.5	1.0	1190	1350
350330B		320	178	114	28	5.0	1.1	1260	2250
352932	160	220	82	65	10	2.5	0.7	375	860
352032		240	115	90	19	3.0	0.9	680	1330
352132X2/HA		270	140	120	10	2.5	1.0	970	1930
352132X2/HAC9		270	140	120	10	2.5	1.0	970	1930
350632X2D1		270	140	110	—	2.5	0.9	1560	2610
352132		270	150	120	10	2.5	1.0	880	1720
2097732Y		270	150	120	10	2.5	1.0	880	1720
352232		290	180	140	20	3.0	1.1	1200	2420
352232		290	178	144	18	4.0	1.0	1390	2840
350633	165	290	150	125	10	3.0	1.3	1100	2300
352934X2	170	230	82	65	10	2.5	0.7	380	890
87834		230	65	27	—	0.7	2.0	410	945
352034X2		260	120	95	12	3.0	0.9	685	1550
2057134		260	120	95	12	3.0	0.9	685	1550
352134		280	150	120	18	2.5	1.0	975	2000
352234	180	310	192	152	20	5.0	1.1	1580	3200
352936		250	95	74	11	2.5	0.7	460	1060
352036		280	134	108	14	3.0	0.9	855	1810
350636D1		285	108	79.4	—	2.5	2.3	665	1190
352136X2		300	164	134	20	3.0	1.0	1090	2350
352236		320	192	152	20	5.0	1.1	1620	3350
350636		340	180	140	14	5.0	1.1	1550	2860
352938X2		260	95	75	11	2.5	0.7	550	1450
32538X2	190	260	95	75	11	2.5	0.6	550	1450
352038		290	134	104	14	3.0	0.9	845	1860
352138		320	170	130	14	3.0	1.0	1200	2400
352940X2	200	280	110	85	14	3.0	0.9	610	1530
352040X2-1		310	151	118	19	3.0	1.0	905	2080
352040X2		310	151	120	19	3.0	1.0	905	2080

Limiting speeds		Abutment and fillet dimensions					Calculation factors				Mass
grease	oil	d _a min	D _a min	C _a min	r _a max	r _b max	e	Y ₁	Y ₂	Y ₀	
r / min		mm									kg
1100	1500	—	—	—	—	—	0.44	1.55	2.31	1.52	39.40
1000	—	164	256	17.0	3.0	1.0	0.26	2.60	3.80	2.50	—
670	950	167	302	32.0	4.0	1.0	0.83	0.80	1.20	0.80	—
1100	1500	—	—	—	—	—	0.27	2.51	3.74	2.45	8.15
1100	1400	—	—	—	—	—	0.35	1.94	2.88	1.89	16.50
1000	1400	—	—	—	—	—	0.32	2.12	3.15	2.07	31.80
1000	1400	—	—	—	—	—	0.32	2.12	3.15	2.07	31.80
1000	1400	—	—	—	—	—	0.36	1.86	2.76	1.81	26.70
1000	1400	—	—	—	—	—	0.36	1.86	2.76	1.81	28.30
1000	1400	—	—	—	—	—	0.36	1.86	2.76	1.81	28.30
920	1200	—	—	—	—	—	0.40	1.70	2.53	1.66	46.20
700	1000	174	276	17.0	3.0	1.0	0.44	1.60	2.30	1.50	46.90
920	1200	—	—	—	—	—	0.31	2.20	3.27	2.15	41.10
1000	1400	—	—	—	—	—	0.28	2.39	3.56	2.34	8.11
1000	1400	—	—	—	—	—	0.29	2.36	3.51	2.31	6.79
1000	1300	—	—	—	—	—	0.31	2.18	3.24	2.13	20.40
1000	1300	—	—	—	—	—	0.31	2.18	3.24	2.13	20.00
950	1300	—	—	—	—	—	0.38	1.78	2.65	1.74	35.60
750	950	188	296	20.0	4.0	1.0	0.44	1.60	2.30	1.50	58.20
1000	1300	—	—	—	—	—	0.37	1.84	2.74	1.80	13.00
940	1300	—	—	—	—	—	0.28	2.43	3.61	2.37	28.50
940	1300	—	—	—	—	—	0.35	1.95	2.90	1.91	23.20
890	1200	—	—	—	—	—	0.26	2.46	3.93	2.58	39.90
670	850	198	306	20.0	4.0	1.0	0.45	1.50	2.20	1.50	63.80
840	1100	—	—	—	—	—	0.35	1.96	2.91	1.91	71.90
940	1300	—	—	—	—	—	0.38	1.76	2.62	1.72	13.30
940	1300	—	—	—	—	—	0.38	1.76	2.62	1.72	14.40
890	1200	—	—	—	—	—	0.37	1.83	2.72	1.79	28.80
840	1100	—	—	—	—	—	0.31	2.15	3.20	2.10	52.00
900	1200	—	—	—	—	—	0.39	1.72	2.56	1.68	18.10
840	1100	—	—	—	—	—	0.39	1.72	2.56	1.68	38.90
840	1100	—	—	—	—	—	0.39	1.72	2.56	1.68	38.30

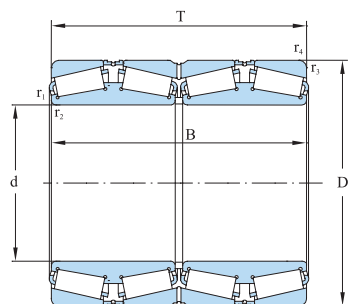
Double row apered roller bearings



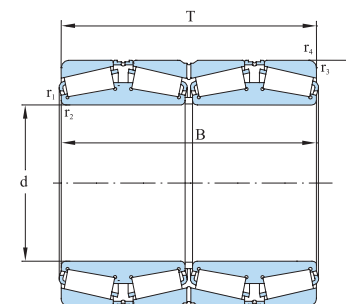
Designations	Boundary dimensions							Basic load ratings	
	d	D	B ₁	C ₁	b ₁	r _{1,2} min	r _{3,4} min	Cr	Cor
	mm							kN	
352140	200	340	184	150	20	3.0	1.0	1650	3400
352240		360	218	98	—	5.0	1.1	2140	4350
350641D1	205	320	150	110	—	3.7	1.3	730	1610
352944	220	300	110	88	14	3.0	0.8	640	1720
352044		340	165	130	21	4.0	1.1	1250	2730
352144		370	195	150	19	4.0	1.3	1530	3200
350645D1	225	360	146.5	111	—	3.0	1.1	1160	2290
350646D1	230	355	145	110	—	6.0	2.3	1070	2310
352948X2		320	105	82	9	3.0	0.9	605	1590
352948	240	320	110	87	14	3.0	0.9	605	1590
2097948K1		320	110	87	14	3.0	1.0	605	1590
352048		360	165	130	21	4.0	1.1	1330	2890
352148		400	210	163	20	3.7	1.3	1870	4050
2097952K	260	360	134	108	14	3.0	0.9	915	2500
352952		360	134	108	14	3.0	0.9	915	2500
352652D1		400	150	110	—	4.7	1.1	1280	2630
352052X2		400	186	146	22	5.0	1.3	1590	3750
352956	280	380	134	108	14	3.0	0.9	935	2650

Limiting speeds		Abutment and fillet dimensions					Calculation factors				Mass
grease	oil	d _a min	D _a min	C _a min	r _a max	r _b max	e	Y ₁	Y ₂	Y ₀	
r / min		mm									kg
800	1100						0.25	2.74	4.08	2.68	63.80
800	1100						0.41	1.66	2.47	1.62	93.30
940	1100						0.39	1.72	2.56	1.68	40.20
810	1100						0.31	2.18	3.24	2.13	21.20
760	1100						0.35	1.95	2.90	1.91	47.70
760	1100						0.37	1.83	2.72	1.79	76.30
760	1000						0.36	1.87	2.79	1.83	48.20
760	1000						0.36	1.87	2.79	1.83	—
760	1000						0.32	2.12	3.15	2.07	22.30
760	1000						0.32	2.12	3.15	2.07	23.00
760	1000						0.32	2.12	3.15	2.07	23.20
690	920						0.31	2.15	3.20	2.10	52.80
630	840						0.31	2.18	3.24	2.13	98.10
670	900						0.30	2.23	3.32	2.18	39.70
670	900						0.30	2.23	3.32	2.18	39.90
630	840						0.35	1.95	2.99	1.91	60.30
630	840						0.29	2.31	3.45	2.26	79.30
620	820						0.32	2.10	3.13	2.05	44.00

Four row tapered roller bearings



Designations	Boundary dimensions			
	d	D	B	T
	mm			
48680DW/48620/48620D	139.7	200.025	157.162	160.338
382930	150	210	165	165
381030X2		225	136	136
382034	170	260	230	230
381036X2	180	280	180	180
381040X2	200	310	200	200
382040		310	275	275
381041X2	205	320	205	205
382044	220	340	305	305
382048	240	360	310	310
382952/HC	260	360	265	265
381052X2		400	255	255
77752G		400	255	255
382052		400	345	345
77752		440	300	300



Boundary dimensions		Basic load ratings		Mass
$r_{1,2}$ min	$r_{3,4}$ min	Cr	Cor	
mm		kN		kg
1.1	1.8	535	1870	16.2
0.7	2.3	600	1590	21.2
3	2.5	540	1460	17.7
3	2.5	940	3100	43
3	2.5	835	2540	39.6
3	2.5	1970	1520	55.6
3	2.5	1230	4200	75.1
4	3.0	1060	2850	55.4
4	3.0	2290	5950	99.5
4	3.0	3300	2210	90.5
3	2.5	1730	5050	77.8
3.7	2.5	1480	4950	117
5	4.0	1910	4900	117
5	4.0	2850	7700	161
2	5.0	2670	5850	182