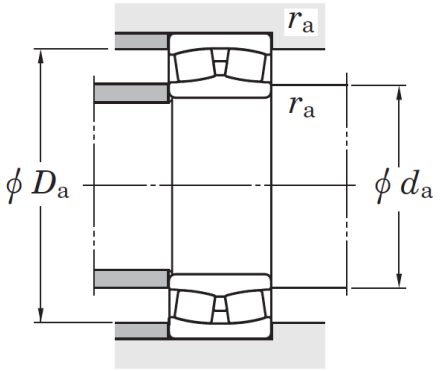
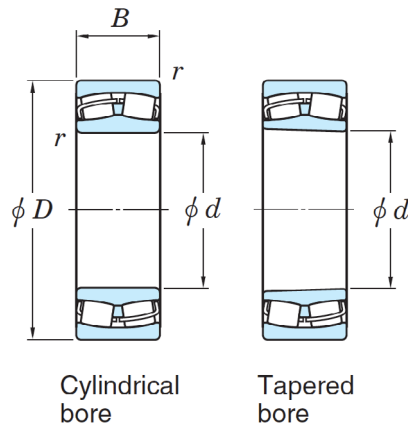
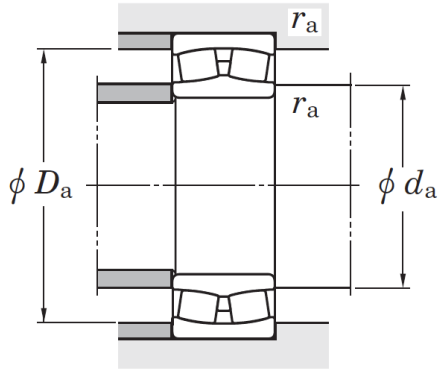
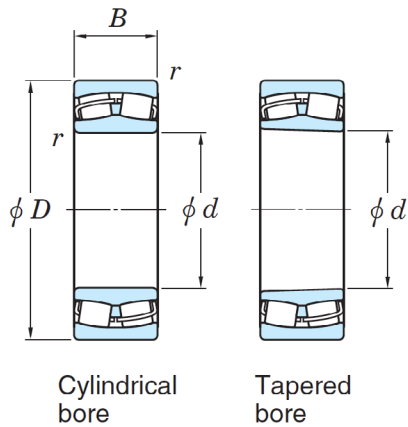


Spherical Roller Bearings
21300 Series

Spherical Roller Bearings
21300 Series



Boundary dimensions(mm)				Basic load ratings(kN)		Fatigue load limit(kN)	Limiting speeds		Bearing No.			Mounting dimensions(mm)					Constant	Axial load factors			Mass (kg)	
d	D	B	r min.	Cr	Cor	Cu	Grease lub.	Oil lub.	Cylindrical bore	Tapered bore		da		Da		ra	e	Y1	Y2	Y3	Cylindrical bore	Tapered min. bore
												min.	max.	max.	min.	max.						
35	80	21	1.5	86.8	75.8	5.9	6200	8300	-	21307RZKW33C3		43.5	46.5	71.5	68.5	1.5	0.27	2.49	3.71	2.43	0.572	0.564
90	190	43	3	413	416	32.9	2600	3400	21318RZW33C3	-		104	116	176	162	2.5	0.23	2.91	4.30	2.84	6.20	6.11
95	200	45	3	453	461	36.3	2500	3200	-	21319RZKW33C3		109	123	186	171	2.5	0.23	2.92	4.35	2.86	7.16	7.06

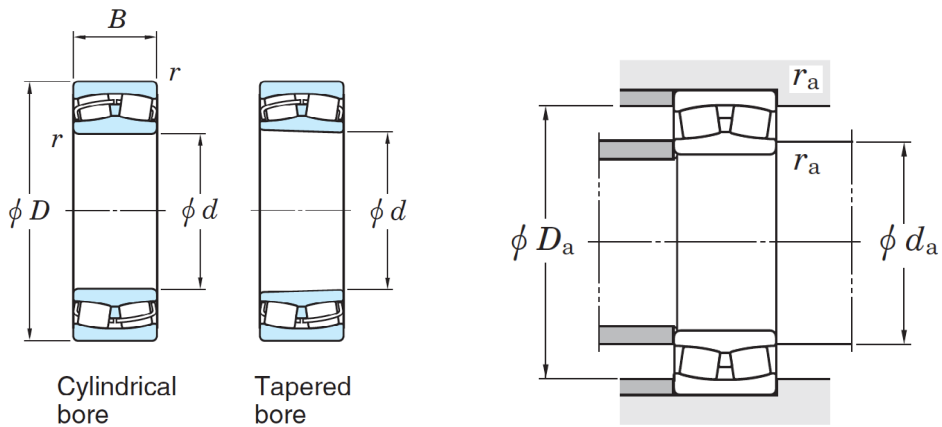
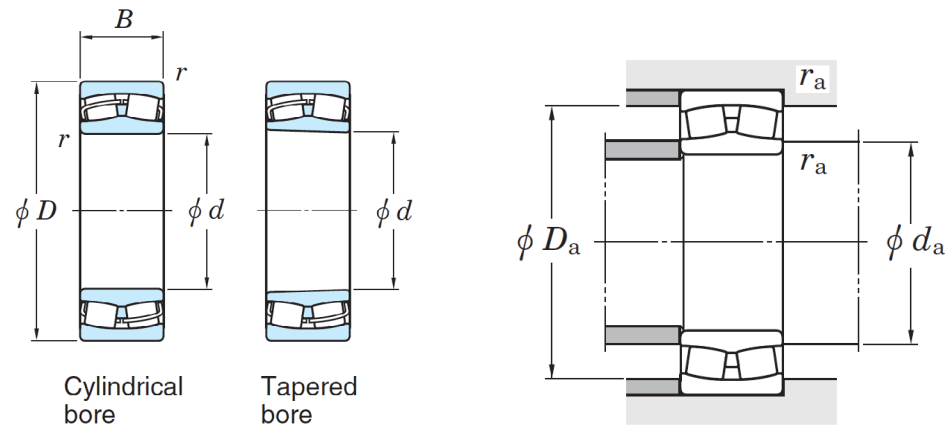
Spherical Thrust Bearings
22200 Series

Spherical Thrust Bearings
22200 Series

Boundary dimensions(mm)				Basic load ratings(kN)		Fatigue load limit(kN)	Limiting speeds		Bearing No.			Mounting dimensions(mm)					Constant	Axial load factors			Mass (kg)	
d	D	B	r min.	Cr	Cor	Cu	Grease lub.	Oil lub.	Cylindrical bore	Tapered bore		da		Da		ra	e	Y1	Y2	Y3	Cylindrical bore	Tapered min. bore
												min.	max.	max.	min.	max.						
25	52	18	1	56.8	48.1	3.9	9600	12800	22205RZ	22205RZK		31	31	46	46	1	0.35	1.91	2.85	1.87	0.188	0.184
30	62	20	1	76.6	65.9	5.3	8100	10900	22206RZ	22206RZK		36	36.5	56	55.5	1	0.33	2.04	3.04	2	0.296	0.29
35	72	23	1.1	100	88.7	7.75	6900	9200	22207RZ	22207RZK		42	42.5	65	64	1	0.32	2.09	3.11	2.04	0.459	0.449
40	80	23	1.1	114	102	9.55	6200	8300	22208RZ	22208RZK		47	49	73	72.5	1	0.28	2.37	3.53	2.32	0.602	0.591
45	85	23	1.1	119	110	10.2	5800	7700	22209RZ	22209RZK		52	53.5	78	77.5	1	0.26	2.55	3.8	2.5	0.602	0.59
50	90	23	1.1	128	122	12.7	5400	7200	22210RZ	22210RZK		57	58.5	83	82.5	1	0.24	2.79	4.15	2.73	0.648	0.634
55	100	25	1.5	154	144	15	4700	6300	22211RZ	22211RZK		63.5	64	91.5	91.5	1.5	0.24	2.84	4.23	2.78	0.867	0.849
60	110	28	1.5	190	181	18.7	4300	5800	22212RZ	22212RZK		68.5	70	101.5	100	1.5	0.25	2.74	4.08	2.68	1.19	1.17
65	120	31	1.5	222	211	20.7	4000	5200	22213RZ	22213RZK		73.5	76	111.5	109	1.5	0.25	2.69	4	2.63	1.55	1.52
70	125	31	1.5	233	222	24.4	3700	5000	22214RZ	22214RZK		78.5	80	116.5	114	1.5	0.24	2.87	4.27	2.8	1.64	1.61
75	130	31	1.5	241	236	28.2	3600	4700	22215RZ	22215RZK		83.5	85.5	121.5	119	1.5	0.22	3.07	4.57	3	1.73	1.69
75	130	31	-	-	-	-	-	-	22215RHR	-		-	-	-	-	-	-	-	-	-	-	-
80	140	33	2	271	271	30.5	3300	4400	22216RZ	22216RZK		90	92	130	128	2	0.22	3.07	4.57	3	2.17	2.13
85	150	36	2	322	324	35.7	3000	4100	22217RZ	22217RZK		95	97	140	137	2	0.22	3.01	4.48	2.94	2.75	2.69
90	160	40	2	372	381	39.2	2900	3900	22218RZ	22218RZK		100	104	150	145	2	0.24	2.79	4.15	2.73	3.5	3.43
95	170	43	2.1	417	422	42.7	2800	3600	22219RZ	22219RZK		107	109	158	154	2	0.24	2.76	4.11	2.7	4.24	4.15
100	180	46	2.1	470	481	47.6	2600	3400	22220RZ	22220RZK		112	115	168	163	2	0.25	2.74	4.08	2.68	5.11	5
120	215	58	2.1	706	764	67.2	2100	2800	22224RZ(W)	22224RZK		132	138	203	193	2	0.26	2.6	3.87	2.54	9.31	9.1
130	230	64	3	821	914	74.4	1900	2600	22226RZ	22226RZK		144	148	216	206	2.5	0.26	2.55	3.8	2.5	11.6	11.3
140	250	68	3	947	1030	85.2	1800	2300	22228RZ	22228RZK		154	158	236	224	2.5	0.26	2.6	3.87	2.54	14.5	14.2
150	270	73	3	1080	1200	102	1700	2200	22230RZ	22230RZK		164	172	256	243	2.5	0.25	2.69	4	2.63	18.9	18.5

Spherical Roller Bearings
23000 Series

Spherical Roller Bearings
23000 Series



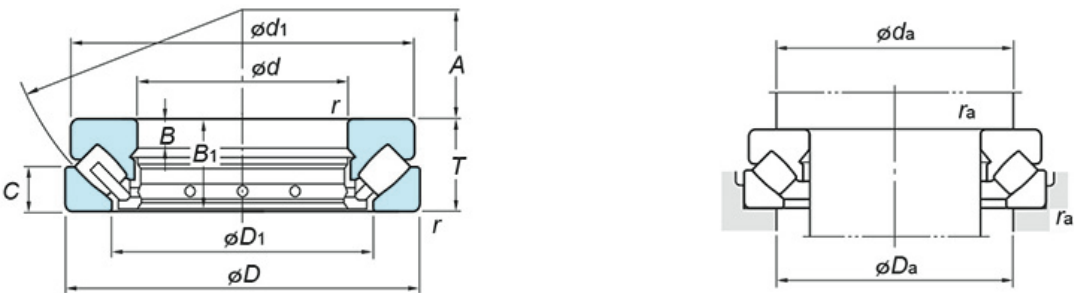
Boundary dimensions(mm)				Basic load ratings(kN)		Fatigue load limit(kN)	Limiting speeds		Bearing No.			Mounting dimensions(mm)					Constant	Axial load factors			Mass (kg)	
d	D	B	r min.	Cr	Cor	Cu	Grease lub.	Oil lub.	Cylindrical bore	Tapered bore		da		Da		ra	e	Y1	Y2	Y3	Cylindrical bore	Tapered min. bore
												min.	max.	max.	min.	max.						
100	165	52	2	412	510	48.5	2800	3600	-	23120RZKW33C3		110	114	155	147	2	0.29	2.33	3.47	2.28	4.52	4.38
110	180	56	2	484	605	53.7	2500	3300	-	23122RZKW33C3		120	125	170	161	2	0.29	2.36	3.51	2.31	5.72	5.54
130	210	64	2	621	799	68.4	2100	2800	-	23126RHKW33C3		140	147	200	187	2	0.28	2.42	3.61	2.37	8.71	8.44
90	160	52.4	2	421	482	42.9	2900	3900	-	23218RZKW33C3		100	103	150	141	2	0.32	2.14	3.19	2.09	4.63	4.50
110	200	69.8	2.1	672	792	65.4	2300	3000	-	23222RZKW33C3		122	127	188	173	2	0.34	1.99	2.96	1.94	9.76	9.48
130	230	80	3	880	1090	89.4	1900	2600	-	23226RHKW33C3		144	151	216	201	2.5	0.33	2.05	3.05	2.00	14.4	14.0
140	250	88	3	1020	1290	103	1800	2300	23228RZW33C3	-		154	161	236	214	2.5	0.34	1.99	2.96	1.95	19.0	18.4
150	270	96	3	1200	1540	121	1700	2200	-	23230RHAKW33C3		164	173	256	230	2.5	0.34	1.96	2.93	1.92	24.5	23.8

Spherical Roller Bearings
24100 Series

Spherical Roller Bearings
24100 Series

Boundary dimensions(mm)				Basic load ratings(kN)		Fatigue load limit(kN)	Limiting speeds		Bearing No.			Mounting dimensions(mm)					Constant	Axial load factors			Mass (kg)	
d	D	B	r min.	Cr	Cor	Cu	Grease lub.	Oil lub.	Cylindrical bore	Tapered bore		da		Da		ra	e	Y1	Y2	Y3	Cylindrical bore	Tapered min. bore
												min.	max.	max.	min.	max.						
150	250	100	2.1	1110	1590	116	1800	2300	24130RW33C3	-		162	166	238	213	2	0.38	1.77	2.64	1.73	19.9	19.6
160	270	109	2.1	1270	1720	145	1300	1700	24132RRW33C3	-		172	188	258	230	2	0.39	1.72	2.56	1.68	25.9	25.5

Spherical Thrust Bearings



Boundary dimensions(mm)				Basic load ratings(kN)		Limiting speed (min-1)	Bearing No.		Dimensions (mm)						Mounting dimensions (mm)			(Refer.) Mass (kg)
d	D	T	r min.	Cr	Cor	Oil lub.			d1	D1	B	B1	C	A	da	Da	ra	
85	150	39	1.5	400	1000	2600	29317R		143.5	114	13	37	19	50	115	135	1.5	2.87
90	155	39	1.5	412	1050	2500	29318R		148.5	117	13	37	19	52	120	140	1.5	3.06