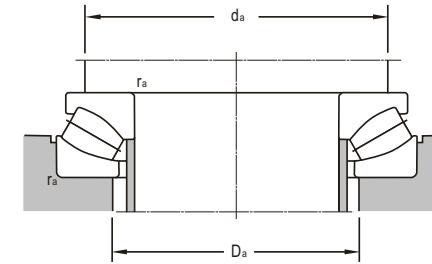
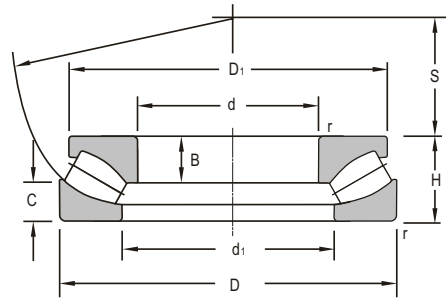


Thrust Ball Bearings

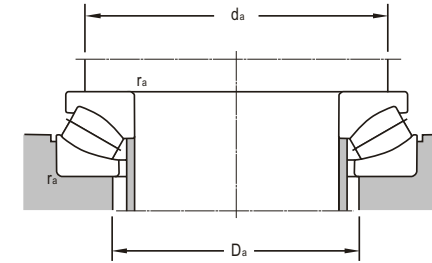
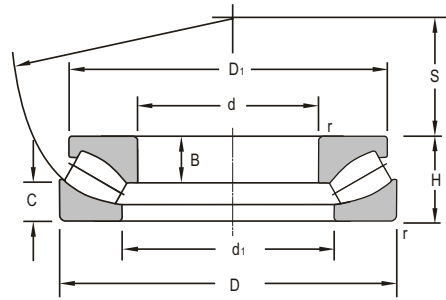
spherical-roller



d 90~220mm

Boundary Dimensions									Basic Load Ratings		Limiting Speeds	
d	d ₁	D	D ₁	B	C	H	S	r _{min}	Dynamic C	Static C ₀	Grease	Oil
mm									kN		r/min	
90	128	190	169.6	22	29	60	56	2.1	624	1750	1260	1800
100	129	170	153	15	20.8	42	58	1.5	410	1280	1120	1600
	140	210	187.6	24	32	67	62	3	762	2170	760	1000
110	135	190	175	30	24	48	64	2	347	970	1200	1800
	150	230	195	43	35	73	69	3	545	1479	800	1200
	150	230	195	43	35	73	69	3	545	1479	800	1200
	155	230	200	26	34.5	73	69	3	950	2790	800	1200
120	156.5	210	192.7	18	26.5	54	70	2.1	607	1940	1120	1600
130	184	270	240.6	31	41	85	81	4	1210	3570	800	1200
140	181	240	221.8	20	29	60	82	2.1	760	2530	980	1400
150	185	250	220	36	31	60	87	2.1	525	1670	850	1300
	207.6	300	270.5	32	43.5	90	92	4	1240	4390	770	1100
160	200	270	240	45	32	67	92	3	610	2240	800	1200
	218	320	289.5	34	46	95	99	5	1440	5050	760	1000
170	216	280	255	23	32	67	96	3	954	3220	900	1400
	236	340	300	62	52	103	104	5	1400	4120	650	950
	235	340	308.8	37	50	103	104	5	1820	5900	650	950
180	225	300	270	46	36	73	103	3	790	2713	700	1000
	230	300	276.8	25	34.5	73	103	3	967	3864	700	1000
	230	300	276.8	25	34.5	73	103	3	967	3864	700	1000
	250	360	325.5	39	53	109	110	5	1770	6460	630	900
190	224	270	250	30	24	48	110	2	420	1746	950	1500
	226	270	253.3	14	25.5	48	103	2	2100	2260	950	1500
	268	380	340	41	53.5	115	117	5	2070	7594	430	600
200	257	340	306.5	54	41	85	116	4	1450	5080	650	900
	257	340	306.5	29	41	85	116	4	1420	4930	800	1200
	270	400	340	62	62	122	122	5	1740	6054	430	600
	278	400	360	43	59	122	122	5	2760	9000	600	800
220	254	300	278	29	26	48	117	2	504	1932	438	1300

Bearing Designations		Minimum Load Constant A	Mounting Dimensions			Mass
Present	Original		d _a	D _a	r _{max}	
			mm			kg
29418	9039320	0.41	135	158	2	7.78
29320		0.166	132	148	1.5	3.66
29420	9069322	0.64	150	175	2.5	10.5
	9069422					
9069322	9069422Y	0.138	145	165	2	5.46
9069422		0.393	165	192	2.5	12.8
9069422Y		0.393				12.8
29422/HE		0.393	165	192	2.5	13.4
29324		0.44	160	182	2	7.48
29428		1.7	195	227	3	21.9
29328	9069330	0.8	185	208	2	10.6
9069330		0.54	195	220	2	10.2
29430	9069332	2.6	220	253	3	28.2
9069332		0.736	210	236	2.5	13.5
29432		3.2	230	271	4	34.3
29334M/P6		1.9	220	245	2.5	15.1
9069434		4.1	245	288	4	38.8
29434	9069336	4.3	245	288	4	41.9
9069336		0.883	235	263	2.5	18.3
29336/P6		1.7	235	263	2.5	19.5
29336		1.7	235	263	2.5	19.4
29436	9069238	5.4	260	305	4	49.2
9069238	9039438	0.442	220	244	2	8
29238			220	244	2	7.87
29438	9069440	6.228	275	322	4	56.4
	9039440E					
LY-Z089		3	218	322	3	28.8
29340		4.1	265	295	3	28.7
9069440		5.685	290	338	4	60.6
29440E	9069244	5.978	290	338	4	71.1
	9069344					
9069244		0.491	260	277	2	11.2



d 220--360mm

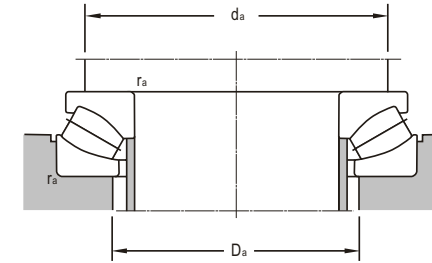
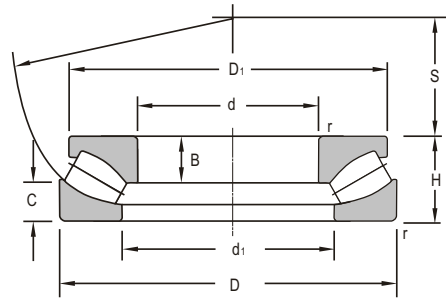
Boundary Dimensions									Basic Load Ratings		Limiting Speeds	
d	d ₁	D	D ₁	B	C	H	S	r _{min}	Dynamic C	Static C ₀	Grease	Oil
mm									kN		r/min	
220	254	300	283	15	24	48	117	2	654	2750	438	1300
	270	360	320	52	44	85	125	4	970	3769	560	800
	278	360	332.9	29	41	85	125	4	1500	5470	560	800
	290	420	360	76	58	122	132	6	1830	6624	400	560
	301.5	420	378.1	79	57	122	132	6	2260	8470	390	550
240	280	340	323.9	19	31.2	60	130	2.1	800	3450	770	1100
	290	380	340	52	44	85	135	4	1320	4251	560	800
	310	440	380	62	62	122	142	6	1920	7158	380	530
260	295	360	330	38	30	60	139	2.1	645	2877	700	1000
	302	360	340.8	19	30	60	139	2.1	944	4000	700	1000
	315	420	370	60	46	95	148	5	1390	5793	480	670
	327	420	390	32	45	95	148	5	2220	8300	600	800
	335	480	415	80	66	132	154	6	2120	8118	340	480
	346	480	434.9	48	63	132	154	6	2730	10800	450	600
	353	480	429	83	64	132	154	6	3220	11200	400	560
280	323	380	360.4	19	30	60	150	2.1	852	4330	700	1000
	335	440	390	62	46	95	158	5	1410	5980	450	630
	348	440	409.8	32	46	95	158	5	1980	7710	650	870
	348	440	409.8	61	46	95	158	5	2040	8010	650	970
	365	520	450	75	72	145	166	6	2550	9828	300	480
	372	520	475.6	52	70	145	166	6	3800	13450	400	550
300	365	480	425	58	52	109	168	5	1870	7640	400	560
320	385	500	445	68	55	109	180	5	2030	7915	380	530
	369	440	413	21	38	73	172	3	1300	5610	800	1100
	410	580	500	95	75	155	191	7.5	2930	11660	240	360
	424	580	528.5	55	74	155	191	7.5	3910	16180	350	500
	424	580	528.5	55	74	170	176	7.5	3910	16180	350	500
	424	580	530	70	74	170	176	7.5	4520	16300	350	500
340	390.5	460	436.5	21	37	73	183	3	1410	6440	800	1100
	410	540	480	74	62	122	192	5	2710	11000	420	600
	462	620	590	61	82	170	201	7.5	4550	17480	220	320
360	442	560	523.1	41	59.5	122	202	5	2744	12707	550	700
	460	640	555	87	85	170	210	7.5	3790	15440	190	300

Bearing Designations		Minimum Load Constant A	Mounting Dimensions			Mass
Present	Original		d _a	D _a	r _{max}	
			mm			kg
LY-Z092		0.491	260	277	2	9.04
9069344		2.059	285	316	3	32.5
29344		3.8	285	316	3	31.9
9069444	9069444	6.665	310	360	5	68.7
29444		6.7	310	360	5	71.3
29248E	9039248E	1.483	285	311	2	19.3
9069348	9069348	2.556	300	337	3	33.8
9069448	9069448	7.645	330	381	5	70
9069252	9069252	1.128	305	331	2	16.9
29252		1.5	305	331	2	17.1
9069352	9069352	4.705	330	372	4	45.6
29352 E	9039352E	6.5	330	372	4	53.6
9069452	9069452	9.81	360	419	5	91.8
29452		16	360	419	5	99.2
29452B		21	360	419	5	95.2
29256		1.7	325	351	2	18.1
9069356	9069356	5.097	350	394	4	48.4
29356		7	350	394	4	50.2
LY-Z088		7	350	394	4	50.7
9069456	9069456	14.5	390	446	5	115
29456		23	390	446	5	130
9069360	9069360	8.527	380	429	4	61.4
9069364	9069364	8.919	400	449	4	73.4
29264		2.8	375	406	2.5	29.4
9069464	9069464	20.1	435	507	6	171
29464		35	435	507	6	168
29464/P6		35	435	507	6	168
29464X2		35	435	507	6	185
29268		3.1	395	427	2.5	32.3
9069368	9069368	11	430	484	4	94.9
29468	9039468	30.19	465	541	6	226
29372		15	450	504	4	104
9069472	9069472	35.38	485	560	6	199



Thrust Ball Bearings

spherical-roller



d 380--750mm

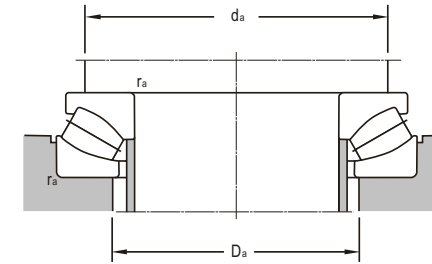
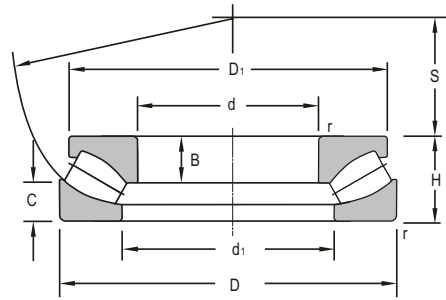
Boundary Dimensions									Basic Load Ratings		Limiting Speeds	
d	d ₁	D	D ₁	B	C	H	S	r _{min}	Dynamic C	Static C ₀	Grease	Oil
mm									kN		r/min	
380	439	520	497	27	41.8	85	202	4	1460	6800	550	750
400	450	540	500	55	42	85	212	4	1260	7060	430	600
	475	620	555	81	65	132	225	6	2860	12050	260	380
	510	710	620	113	93	185	236	7.5	4820	19060	260	380
420	514.5	650	608.3	48	68.5	140	235	6	3660	17600	400	500
440	508	600	570.2	30	48	95	235	5	2350	11100	550	750
	540	680	626	48	70.5	145	245	6	4440	18600	500	720
	575	780	710	74	100	206	260	9.5	7310	27700	500	700
460	527	620	690.8	30	47	95	245	5	2440	11800	430	600
	567	710	685	51	72	150	257	6	4310	19000	320	450
480	540	650	600	65	50	103	259	5	1950	10500	340	480
500	560	670	620	60	50	103	268	5	1950	10540	320	450
	569	670	637.3	33	52	103	268	5	2590	13000	400	560
	590	750	675	94	74	150	280	6	3520	16900	180	280
	590	750	675	94	74	150	280	6	3520	16900	180	280
	630	870	760	140	110	224	290	9.5	6290	27340	120	180
	652.5	870	794.5	81	107.5	224	290	9.5	7850	34600	200	300
530	601.5	710	681.2	39	57	109	288	5	3220	16400	400	550
	690	920	841.5	85	110.4	236	309	9.5	9000	41950	120	160
	700	920	840	145	116	236	309	9.5	8386	32630	120	160
560	625	750	695	72	58	115	300	5	2430	13320	260	380
600	688	800	780	39	65	122	321	5	3420	20500	240	340
	750	1030	900	156	130	258	360	12	9626	37580	100	130
630	705	850	785	84	64	132	338	6	3270	17760	190	300
	728	850	830	42	67	132	338	6	4634	24450	190	300
670	750	900	830	86	70	140	365	6	3670	20280	180	280
710	915	1220	1131.8	113	150	308	415	15	15500	67400	120	160
750	935	1280	1120	195	155	315	450	15	14340	58590	80	100

Bearing Designations		Minimum Load Constant A	Mounting Dimensions			Mass
Present	Original		d _a	D _a	r _{max}	
			mm			kg
29276 E	9039276E	5.6	440	480	3	50
9069280	9069280	6.763	460	500	3	49
9069380	9069380	20.59	500	557	5	134
9069480	9069480	53.8	540	622	6	3.88
29384		26	525	585	5	161
29288		12	510	554	4	72.7
29388EM		42	550	600	5	180
29488		110	595	670	8	396
29292		12	530	575	4	81
29392	9039392	34	575	628	5	217
9069296	9069296	14.99	555	603	4	89.4
90692/500	90692/500	15	575	622	4	89.6
292/500		16	575	622	4	95.7
90693/500	90693/500	39.99	615	683	5	203
90693/500K	90693/500K	40	630	675	5	203
90694/500	90694/500	110.8	670	765	8	520
294/500		130	670	765	8	521
292/530		22	620	655	4	114
294/530 E	90394/530E	179.2	700	810	8	624
90694/530	90694/530	137.8	700	810	8	573
90692/560	90692/560	23.92	645	697	4	127
292/600	90392/600	37.04	690	744	4	172
90694/600	90694/600	223	800	900	10	700
90692/630	90692/630	42.73	730	789	5	188
292/630	90392/630	52.95	730	789	5	218
90692/670	90692/670	55.67	790	825	5	218
294/710		560	925	1073	12	1400
90694/750	90694/750	412.8	1000	1130	12	1309



Thrust Ball Bearings

spherical-roller



d 750~1620mm

Boundary Dimensions									Basic Load Ratings		Limiting Speeds	
<i>d</i>	<i>d</i> ₁	<i>D</i>	<i>D</i> ₁	<i>B</i>	<i>C</i>	<i>H</i>	<i>S</i>	<i>r</i> _{min}	Dynamic <i>C</i>	Static <i>C</i> ₀	Grease	Oil
mm									kN		r/min	
750	964	1280	1183	122	152	315	436	15	159000	70800	140	200
800	1034	1360	1310	120	165	335	462	15	2000	91000	130	180
1060	1180	1400	1300	128	103	206	566	12	10500	58500	120	160
	1200	1400	1325	66	103	206	566	9.5	10500	58200	120	160
	1349	1770	1615	192	207	426	610	15	32200	146000	100	150
1180	1330	1520	1452	83	101	206	625	9.5	9900	56900	110	160
1320	1380	1540	1510	87	72	175	1446	6	4050	50400	70	90
1620	1700	1860	1799	45	80	150	850	6	6150	48400	50	70

Bearing Designations		Minimum Load Constant <i>A</i>	Mounting Dimensions			Mass
Present	Original		<i>d</i> _a	<i>D</i> _a	<i>r</i> _{max}	
			mm			kg
294/750		590	1000	1130	12	1650
294/800		680	1080	1185	12	1870
906921/1060	90692/1060	300	1225	1290	8	824
292/1060EF		300	1225	1290	8	784
294/1060EF/HC			1360	1570	10	3973
292/1180EF			1270	1430	8	855
691/1320	691/1320	140	1430	1470	8	480
292/1620			1740	1780	10	552