

Thrust Ball Bearing  
d 70-100mm

Basic Size			Basic load rating		Code	Limiting Speed		d
d	D	H	dynamic C	static C <sub>0</sub>		grease	oil	
mm			kN		-	r/min		mm
70	125	40	148	340	51314M	1200	1800	70
70	125	40	148	340	51314	1200	1800	70
70	150	60	255	560	51414M	850	1300	70
75	135	44	230	438	51315	800	1200	75
75	160	65	230	438	51415M	800	1200	75
75	160	65	230	438	51415	800	1200	75
80	140	44	244	485	51316M	750	1100	80
80	140	44	244	485	51316	750	1100	80
80	170	68	244	485	51416	750	1100	80
85	110	19	38	132	51117	1600	2800	85
85	150	49	172	373	51317	850	1600	85
85	150	49	206	489	51317	850	1600	85
85	180	72	259	534	51417M	700	1000	85
85	180	72	259	534	51417	700	1000	85
90	135	35	115	315	51218	1200	1800	90
90	155	50	179	408	51318	800	1400	90
90	190	77	179	408	51418M	800	1400	90
90	190	77	325	825	51418	670	950	90
100	135	25	85.2	290	51120	1700	2400	100
100	135	25	79.3	260	51120M	1700	2400	100
100	150	38	124	345	51220	1300	1800	100
100	170	55	229	610	51320	950	1400	100
100	170	55	225	600	51320M	950	1400	100
100	210	85	371	1060	51420F	700	950	100

Thrust Ball Bearing  
d 110-170mm

Basic Size			Basic load rating		Code	Limiting Speed		d
d	D	H	dynamic C	static C <sub>0</sub>		grease	oil	
mm			kN		-	r/min		mm
110	145	25	87.1	315	51122	1600	2200	110
110	145	25	80.6	280	51122M	1600	2200	110
110	160	38	130	390	51222	1200	1700	110
110	190	63	276	780	51322MP	850	1200	110
110	230	95	410	1220	51422F	630	850	110
120	155	25	88.4	335	51124	1600	2200	120
120	155	25	83.2	300	51124M	1600	2200	120
120	170	39	140	440	51224	1100	1600	120
120	210	70	325	980	51324MP	800	1100	120
120	250	102	423	1320	51424F	600	800	120
130	170	30	111	425	51126	1400	1900	130
130	190	45	186	585	51226	950	1400	130
130	225	75	358	1140	51326MP	750	1000	130
130	270	110	520	1730	51426F	560	750	130
140	180	31	111	440	51128	1300	1800	140
140	180	31	106	405	51128M	1300	1800	140
140	200	46	190	620	51228F	950	1400	140

140	240	80	397	1320	51328MP	700	950	140
140	280	112	520	1730	51428F	530	700	140
150	190	31	111	440	51130F	1200	1700	150
150	215	50	238	800	51230MP	900	1300	150
150	250	80	410	1400	51330MP	670	900	150
150	300	120	559	1960	51430F	500	670	150
160	200	31	112	465	51132F	1200	1700	160
160	225	51	242	850	51232MP	850	1200	160
160	270	87	449	1660	51332M	630	850	160
170	215	34	133	540	51134F	1100	1600	170
170	240	55	286	1020	51234MP	800	1100	170
170	280	87	468	1760	51334M	600	800	170

Thrust Ball Bearing

d 180-340mm

Basic Size			Basic load rating		Code	Limiting Speed		d
d	D	H	dynamic	static		grease	oil	
			C	C <sub>0</sub>				
mm			kN		-	r/min		mm
180	225	34	135	570	51136F	1000	1500	180
180	250	56	296	1080	51236MP	800	1100	180
180	300	95	520	2000	51336M	560	750	180
190	240	37	172	710	51138F	950	1400	190
190	270	62	332	1270	51238MP	750	1000	190
190	320	105	540	2120	51338M	530	700	190
200	250	37	168	710	51140F	950	1400	200
200	280	62	338	1320	51240MP	750	1000	200
200	340	110	624	2600	51340M	480	630	200
220	270	37	178	800	51144F	900	1300	220
220	300	63	351	1460	51244MP	700	950	220
240	300	45	234	1040	51148F	800	1100	240
240	340	78	462	2000	51248MP	600	800	240
260	320	45	238	1100	51152F	800	1100	260
260	360	79	475	2160	51252MP	560	750	260
260	480	175	1110	5500	51452F	300	400	260
280	350	53	319	1460	51156F	700	950	280
280	380	80	494	2320	51256MP	560	750	280
300	380	62	364	1760	51160F	630	850	300
300	420	95	605	3000	51260	480	630	300
320	380	30	114	735	51064F	900	1300	320
320	400	48	242	1320	59164F	700	950	320
320	400	63	371	1860	51164F	600	800	320
320	440	95	572	3000	51264F	450	600	320
340	420	64	377	1960	51168F	600	800	340
340	460	96	605	3200	51268F	450	600	340
340	540	160	1040	5850	51368F	300	400	340

Thrust Ball Bearing

d 360-500mm

Basic Size			Basic load rating		Code	Limiting Speed		d
d	D	H	dynamic	static		grease	oil	
			C	C <sub>0</sub>				
mm			kN		-	r/min		mm
360	400	30	119	815	51072F	850	1200	360
360	440	48	255	1500	59172F	670	900	360
360	440	65	390	2080	51172F	560	750	360

360	500	110	741	4150	51272F	400	530	360
380	460	36	186	1140	351793	750	1000	380
380	460	48	255	1530	59176F	630	850	380
380	460	65	397	2200	51176F	560	750	380
380	520	112	728	4150	51276F	380	500	380
380	670	224	1650	10400	51476F	190	280	380
385	510	110	618	3450	350550	380	500	385
400	480	48	260	1630	59180F	630	850	400
400	480	65	403	2280	51180F	530	700	400
400	540	112	761	4500	51280F	380	500	400
420	500	48	265	1700	59184F	630	850	420
420	500	65	410	2400	51184F	530	700	420
420	580	130	884	5500	51284F	320	430	420
440	520	65	302	1630	BD1B634131	500	670	440
440	540	60	238	1500	59188F	530	700	440
440	540	80	527	3250	51188F	450	600	440
440	600	130	904	5700	51288F	420	430	440
460	560	80	527	3250	51192F	450	600	460
460	620	130	923	5850	51292F	320	430	460
480	580	80	540	3550	51196F	430	560	480
480	650	135	995	6550	51296F	300	400	480
500	540	30	133	1120	510/500F	750	1000	500
500	600	60	247	1660	591/500F	500	670	500
500	600	80	553	3600	511/500F	430	560	500
500	670	135	1010	6800	512/500F	280	380	500

Thrust Ball Bearing

d 530-800mm

Basic Size			Basic load rating		Code	Limiting Speed		d
d	D	H	dynamic	static		grease	oil	
			C	C <sub>0</sub>				
mm			kN		-	r/min		mm
530	580	38	203	1600	510/530F	630	850	530
530	590	36	178	1370	351/794	670	900	530
530	640	67	468	3150	591/530F	450	600	530
530	640	85	650	4400	511/530F	400	530	530
560	610	38	203	1660	510/560F	630	850	560
560	670	67	468	3250	591/560F	450	600	560
560	670	85	650	4650	511/560F	380	500	560
600	650	38	212	1800	510/600F	600	800	600
600	710	67	475	3400	591/600F	450	600	600
600	710	85	663	4800	511/600F	380	500	600
600	800	90	676	5000	350769	340	450	600
600	870	118	1120	8000	BD1-8000	260	360	600
630	680	38	221	1930	510/630F	600	800	630
630	750	73	540	4000	591/630F	400	530	630
630	750	95	728	5400	511/630F	340	450	630
670	730	45	286	2400	510/670F	530	700	670
670	800	75	540	4150	591/670F	360	480	670
670	800	105	852	6700	511/670F	300	400	670
710	780	53	358	2850	510/670F	450	600	710
710	850	85	676	5400	591/710JR	340	450	710
710	850	112	936	7650	511/710F	280	380	710
730	850	85	663	5400	350627A	340	450	730
750	820	53	364	3050	510/750F	450	600	750

750	900	90	741	6400	591/750F	300	400	750
750	900	120	1010	8650	511/750M	240	340	750
800	870	53	371	3200	510/800F	430	560	800
800	950	90	761	6550	591/800JR	300	400	800
800	950	120	1010	900	511/800F	240	340	800

Thrust Ball Bearing

d 850-1400mm

Basic Size			Basic load rating		Code	Limiting Speed		d
d	D	H	dynamic	static		grease	oil	
			C	C <sub>0</sub>				
mm			kN		-	r/min		mm
850	920	53	377	3450	510/850M			850
850	1000	90	761	6800	591/850M			850
850	1000	120	1060	9500	511/850F			850
900	980	63	527	4900	510/900M			900
900	1060	95	630	7650	591/900M			900
900	1060	130	1140	10800	511/990F			900
950	1080	63	540	5100	510/950M			950
950	1120	103	852	8150	591/950M			950
950	1120	135	1330	12000	511/950F			950
980	1120	120	1010	10000	BD1B351883A			980
1000	1090	70	572	5500	510/1000M			1000
1000	1180	109	923	9150	591/1000JR			1000
1000	1180	140	1330	13200	511/1060M			1000
1060	1150	70	752	5850	510/1060M			1060
1060	1250	115	1010	10400	591/1060JR			1060
1060	1250	150	1430	15000	511/1060M			1060
1120	1320	160	1530	16300	511/1120F			1120
1180	1400	175	1780	20000	511/1180F			1180
1250	1500	150	1430	16000	351006A			1250
1380	1540	130	1330	16300	BD1B351890A			1380
1400	1630	180	1900	23600	511/1400JR			1400

Dimensions			Abutment and chamfer dimensions			Mass
d <sub>1</sub>	D <sub>1</sub>	r <sub>1,2</sub> min	d <sub>a</sub> min	D <sub>a</sub> max	r <sub>a</sub> max	
mm						kg
125	72	1.1	103	92	1	1.98
125	72	1.1	103	92	1	1.98
150	73	2	118	102	2	4.85
160	78	2	126	109	2	6.19
160	78	2	126	109	2	6.19
160	78	2	126	109	2	6.61
170	83	2.1	133	117	2	7.96
170	83	2.1	133	117	2	7.96
170	83	2.1	133	117	2	7.96
110	87	1	100	95	1	0.419
150	88	1.5	124	111	1.5	3.49
150	88	1.5	124	111	1.5	3.49
177	88	2.1	141	124	2	9.37
177	88	2.1	141	124	2	9.37
135	93	1.1	117	108	1	1.65
155	93	1.5	129	116	1.5	4.02
155	93	1.5	129	116	1.5	4.02
187	93	2.1	149	131	2.1	9.86
135	102	1	121	114	1	0.97
135	102	1	121	114	1	1.05
150	103	1.1	130	120	1	2.20
170	103	1.5	142	128	1.5	4.95
170	103	1.5	142	128	1.5	5.40
205	103	3	165	145	2.5	15.0

Dimensions			Abutment and chamfer dimensions			Mass
d <sub>1</sub>	D <sub>1</sub>	r <sub>1,2</sub> min	d <sub>a</sub> min	D <sub>a</sub> max	r <sub>a</sub> max	
mm						kg
145	112	1	131	124	1	1.05
145	112	1	131	124	1	1.15
160	113	1.1	140	130	1	2.40
187	113	2	158	142	2	7.85
225	113	3	181	159	2.5	20.0
155	122	1	141	134	1	1.15
155	122	1	141	134	1	1.25
170	123	1.1	150	140	1	2.65
205	123	2.1	173	157	2	11.0
245	123	4	197	173	3	25.5
170	132	1	154	146	1	1.35
187	133	1.5	166	154	1.5	4.00
220	134	2.1	186	169	2	13.0
265	134	4	213	187	3	32.0
178	142	1	164	156	1	2.05
178	142	1	164	156	1	2.10
197	143	1.5	176	164	1.5	4.35

235	144	2.1	199	181	2	15.5
275	144	4	223	197	3	34.5
188	152	1	174	166	1	2.20
212	153	1.5	189	176	1.5	6.10
245	154	2.1	209	191	2	16.5
295	154	4	239	211	3	42.5
198	162	1	184	176	0.5	2.35
222	163	1.5	199	186	1.5	6.55
265	164	3	225	205	2.5	21.0
213	172	1.1	197	188	1	3.30
237	173	1.5	212	198	1.5	8.15
275	174	3	235	215	2.5	22.0

Dimensions			Abutment and chamfer dimensions			Mass
d <sub>1</sub>	D <sub>1</sub>	r <sub>1,2</sub> min	d <sub>a</sub> min	D <sub>a</sub> max	r <sub>a</sub> max	
			mm			kg
222	183	1.1	207	198	1	3.50
247	183	1.5	222	208	1.5	8.60
295	184	3	251	229	2.5	28.5
237	193	1.1	220	210	1	4.05
267	194	2	238	222	2	12.0
315	195	4	267	243	3	36.5
247	203	1.1	230	220	1	4.25
277	204	2	248	232	2	12.0
335	205	4	283	257	3	44.5
267	223	1.1	250	240	1	4.60
297	224	2	268	252	2	13.0
297	243	1.5	276	264	1.5	7.55
335	244	2.1	299	281	2	23.0
317	263	1.5	296	284	1.5	8.10
355	264	2.1	319	301	2	25.0
472	288	6	390	350	5	135
347	283	1.5	322	308	1.5	12.0
375	284	2.1	339	321	2	26.5
376	304	2	348	332	2	17.5
415	304	3	371	349	2.5	42.0
358.5	321.5	1	344	336	1	4.30
397	323	2	366	354	2	13.5
396	324	2	368	352	2	19.0
435	325	3	391	369	2.5	45.5
416	344	2	388	372	2	20.5
455	345	3	411	389	2.5	48.5
534	346	5	458	422	4	135

Dimensions			Abutment and chamfer dimensions			Mass
d <sub>1</sub>	D <sub>1</sub>	r <sub>1,2</sub> min	d <sub>a</sub> min	D <sub>a</sub> max	r <sub>a</sub> max	
			mm			kg
398.5	361.5	1	384	376	1	4.85
437	363	2	406	394	2	15.0
436	384	2	408	392	2	22.0

495	365	4	443	417	3	70.0
455	385	2	425	415	2	12.5
457	383	2	426	414	2	15.0
456	384	2	428	412	2	23.0
515	385	4	463	437	3	73.0
630	370	7.5	526	474	6	330
510	855	4.3	459	436	3	66.0
477	408	2	446	434	2	16.5
476	404	2	448	432	2	24.0
534	405	4	483	457	3	78.5
496	423	2	466	454	2	17.0
496	424	2	468	452	2	25.5
574	426	5	515	485	4	110
520	445	1.1	486	473	1	24.0
536	444	2.1	497	483	2	28.0
536	444	2.1	499	481	2	42.0
594	446	5	535	505	4	115
556	464	2.1	519	501	2	43.5
614	466	5	555	525	4	120
576	484	2.1	539	521	2	45.5
644	486	5	581	549	4	130
538.5	501.5	1	524	516	1	6.55
596	504	2.1	557	543	2	32.0
596	504	2.1	559	541	2	47.0
664	506	5	601	569	4	135

Dimensions			Abutment and chamfer dimensions			Mass
$d_1$	$D_1$	$r_{1,2}$ min	$d_a$ min	$D_a$ max	$r_a$ max	
mm						kg
578	532	1.1	560	550	1	11.0
585	535	1	564	556	1	12.5
636	534	1.5	593	577	2.5	43.5
636	534	3	595	575	2.5	58.5
608	562	1.1	590	580	1	11.5
666	564	3	623	607	2.5	45.5
666	564	3	625	606	2.5	58.5
648	602	1.1	630	620	1	12.0
706	604	3	663	647	2.5	48.0
706	604	3	665	645	2.5	65.0
790	610	5	711	689	4	117
862	608	5	750	720	4	220
678	632	1.1	660	650	1	12.5
746	634	3	699	681	2.5	62.5
746	634	3	701	679	2.5	84.0
727.5	672.5	1.5	705	695	1.5	21.0
795	675	4	744	726	3	74.0
795	675	4	747	723	3	105
777.5	712.5	1.5	746	734	1.5	28.0
845	715	4	790	770	3	88.5
845	715	4	793	767	3	130
850	730	3	800	780	2.5	88.0
817.5	752.5	1.5	791	779	1.5	30.0

895	755	4	836	814	3	105
895	755	4	839	811	3	155
867.5	802.5	1.5	841	829	1.5	32.5
945	805	4	886	864	3	110
945	805	4	889	861	3	155

Dimensions			Abutment and chamfer dimensions			Mass
$d_1$	$D_1$	$r_{1,2}$ min	$d_a$ min	$D_a$ max	$r_a$ max	
			mm			kg
917.56	852.5	1.5	891	879	1.5	34.5
995	855	4	936	914	3	115
995	855	4	939	911	3	165
977	903	2	948	932	2	49.0
1054	906	5	991	969	4	140
1054	906	5	995	965	4	205
1027	953	2	998	982	2	52.0
1114	956	5	1047	1023	4	170
1114	956	5	1051	1019	4	235
1115	985	5	1063	1037	4	185
1086.5	1003.5	2.1	1053	1037	2	68.5
1174	1006	5	1102	1078	4	210
1174	1006	5	1106	1074	4	275
1146.5	1063.5	2.1	1113	1097	2	72.5
1244	1066	5	1172	1138	4	240
1244	1066	5	1172	1138	4	330
1314	1126	5	1238	1202	4	395
1392	1188	6	1310	1270	5	495
1492	1258	6	1392	1358	5	515
1535	1385	5	1475	1445	4	310
1622	1408	8	1535	1495	6	665