

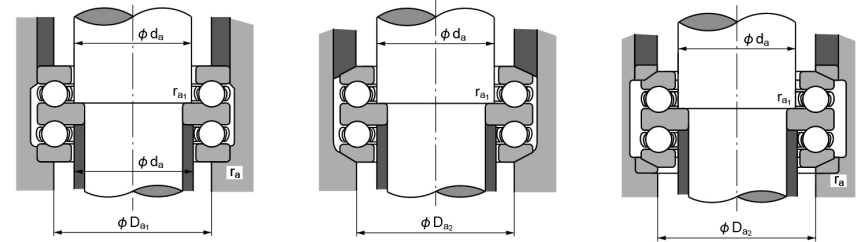
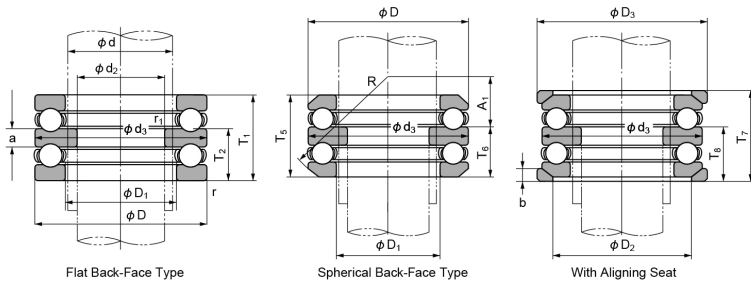
Boundary Dimensions (mm)								Basic Load Rating (KN)		Limiting Speed (rpm)		Bearing Designation		
d	dz	D	T1	T5	T7	r	r1	Cr	Cor	Grease	Oil	Flat Back-Face Type	Spherical Back-Face Type	With Aligning Seat
15	10	32	22	24.6	28	0.6	0.3	16.60	24.80	5100	7600	52202	54202	54202U
20	15	40	26	27.4	32	0.6	0.3	22.20	37.50	4200	6300	52204	54204	54204U
25	20	47	28	31.4	36	0.6	0.3	27.80	50.50	3700	5600	52205	54205	54205U
25	20	52	34	37.6	42	1	0.3	35.50	61.50	3200	4900	52305	54305	54305U
25	15	60	45	49.8	55	1	0.6	55.50	89.50	2600	3900	52405	54405	54405U
30	25	52	29	32.6	37	0.6	0.3	29.30	58.00	3400	5200	52206	54206	54206U
30	25	60	38	41.2	46	1	0.3	42.50	78.50	2800	4200	52306	54306	54306U
30	20	70	52	56.2	62	1	0.6	72.50	126.00	2200	3300	52406	54406	54406U
35	30	62	34	37.8	42	1	0.3	39.00	78.00	2900	4400	52207	54207	54207U
35	30	68	44	47.2	52	1	0.3	55.50	105.00	2400	3700	52307	54307	54307U
35	25	80	59	63	69	1.1	0.6	87.00	155.00	1900	2900	52407	54407	54407U
40	30	68	36	38.6	44	1	0.6	47.00	98.50	2700	4100	52208	54208	54208U
40	30	78	49	54	59	1	0.6	69.00	135.00	2200	3300	52308	54308	54308U
40	30	90	65	69.4	77	1.1	0.6	112.00	205.00	1700	2600	52408	54408	54408U
45	35	73	37	39.6	45	1	0.6	47.50	105.00	2600	3900	52209	54209	54209U
45	35	85	52	56.2	62	1	0.6	80.00	163.00	2000	3000	52309	54309	54309U
45	35	100	72	78.8	86	1.1	0.6	129.00	243.00	1600	2400	52409	54409	54409U
50	40	78	39	42	47	1	0.6	48.50	112.00	2400	3600	52210	54210	54210U
50	40	95	58	64.6	70	1.1	0.6	96.50	202.00	1800	2700	52310	54310	54310U
50	40	110	78	83.2	92	1.5	0.6	148.00	283.00	1400	2100	52410	54410	54410U
55	45	90	45	49.6	55	1	0.6	69.50	159.00	2100	3100	52211	54211	54211U
55	45	105	64	72.6	78	1.1	0.6	120.00	246.00	1600	2400	52311	54311	54311U
55	45	120	87	92	101	1.5	0.6	178.00	360.00	1300	1900	52411	54411	54411U
60	50	95	46	50	56	1	0.6	73.50	179.00	2000	3000	52212	54212	54212U
60	50	110	64	70.6	78	1.1	0.6	123.00	267.00	1600	2400	52312	54312	54312U
60	50	130	93	99	107	1.5	0.6	213.00	435.00	1200	1800	52412	54412	54412U
65	55	100	47	50.4	57	1	0.6	75.00	189.00	1900	2800	52213	54213	54213U
65	55	115	65	71.8	79	1.1	0.6	127.00	287.00	1500	2300	52313	54313	54313U
65	60	140	101	109.4	119	2	1	231.00	495.00	1100	1600	52413	54413	54413U
70	55	105	47	50.6	57	1	1	76.00	199.00	1800	2800	52214	54214	54214U

Dimensions (mm)													Abutment and Fillet Dimensions (mm)					Mass Approx (kg)		
d3	D1	D2	D3	T2	T6	T8	a	b	A1	R	da	Da1	Da2	ra	ra1	Flat Back-Face Type	Spherical Back-Face Type	With Aligning Seat		
(max)	(min)										(min)	(max)	(max)	(max)	(max)					
32	17	24	35	13.5	14.8	16.5	5	4	10.5	28	15	22	24	0.6	0.3	0.085	0.090	0.116		
40	22	30	42	16	16.7	19	6	5	16	36	20	28	30	0.6	0.3	0.150	0.147	0.189		
47	27	36	50	17.5	19.2	21.5	7	5.5	16.5	40	25	34	36	0.6	0.3	0.230	0.241	0.305		
52	27	38	55	21	22.8	25	8	6	18	45	25	36	38	1	0.3	0.330	0.340	0.431		
60	27	42	62	28	30.4	33	11	8	15	50	25	39	42	1	0.6	0.630	0.650	0.796		
52	32	42	55	18	19.8	22	7	5.5	20	45	30	39	42	0.6	0.3	0.272	0.291	0.356		
60	32	45	62	23.5	25.1	27.5	9	7	19.5	50	30	42	45	1	0.3	0.490	0.495	0.607		
70	32	50	75	32	34.1	37	12	9	16	56	30	46	50	1	0.6	1.000	1.000	1.260		
62	37	48	65	21	22.9	25	8	7	21	50	35	46	48	1	0.3	0.420	0.431	0.550		
68	37	52	72	27	28.6	31	10	7.5	21	56	35	48	52	1	0.3	0.710	0.711	0.881		
80	37	58	85	36.5	38.5	41.5	14	10	18.5	64	35	53	58	1	0.6	1.440	1.430	1.780		
68	42	55	72	22.5	23.8	26.5	9	7	25	56	40	51	55	1	0.6	0.540	0.542	0.686		
78	42	60	82	30.5	33	35.5	12	8.5	23.5	64	40	55	60	1	0.6	1.060	1.100	1.330		
90	42	65	95	40	42.2	46	15	12	22	72	40	60	65	1	0.6	2.030	2.000	2.520		
73	47	60	78	23	24.3	27	9	7.5	23	56	45	56	60	1	0.6	0.620	0.617	0.796		
85	47	65	90	32	34.1	37	12	10	21	64	45	61	65	1	0.6	1.290	1.280	1.630		
100	47	72	105	44.5	47.9	51.5	17	13	23.5	80	45	67	72	1	0.6	2.710	2.760	3.400		
78	52	62	82	24	25.5	28	9	7.5	30.5	64	50	61	62	1	0.6	0.710	0.697	0.899		
95	52	72	100	36	39.3	42	14	11	23	72	50	68	72	1	0.6	1.860	1.920	2.370		
110	52	80	115	48	50.6	55	18	14	30	90	50	74	80	1.5	0.6	3.560	3.520	4.360		
90	57	72	95	27.5	29.8	32.5	10	9	32.5	72	55	69	72	1	0.6	1.120	1.140	1.540		
105	57	80	110	39.5	43.8	46.5	15	12	25.5	80	55	75	80	1	0.6	2.510	2.650	3.220		
120	57	88	125	53.5	56	60.5	20	16	22.5	90	55	81	88	1.5	0.6	4.700	4.550	5.640		
95	62	78	100	28	30	33	10	9	30.5	72	60	74	78	1	0.6	1.250	1.260	1.590		
110	62	85	115	39.5	42.8	46.5	15	12	36.5	90	60	80	85	1	0.6	2.680	2.760	3.390		
130	62	95	135	57	60	64	21	16	28	100	60	88	95	1.5	0.6	6.330	6.200	7.450		
100	67	82	105	28.5	30.2	33.5	10	9	38.5	80	65	79	82	1	0.6	1.360	1.350	1.720		
115	67	90	120	40	43.4	47	15	13	34.5	90	65	85	90	1	0.6	2.900	2.980	3.670		
140	68	100	145	62	66.2	71	23	18	34	112	65	95	100	2	1	8.030	8.010	9.670		
105	72	88	110	28.5	30.3	33.5	10	9	36.5	80	70	84	88	1	1	1.480	1.480	1.860		

Double Direction Thrust Ball Bearings

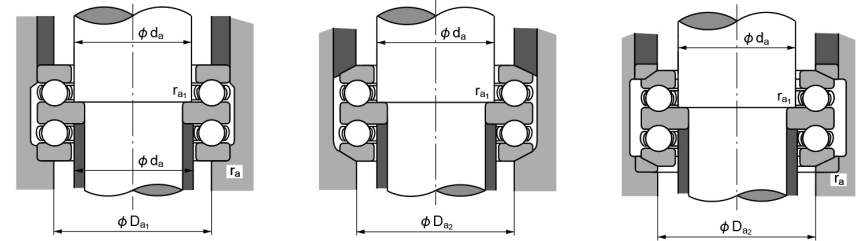
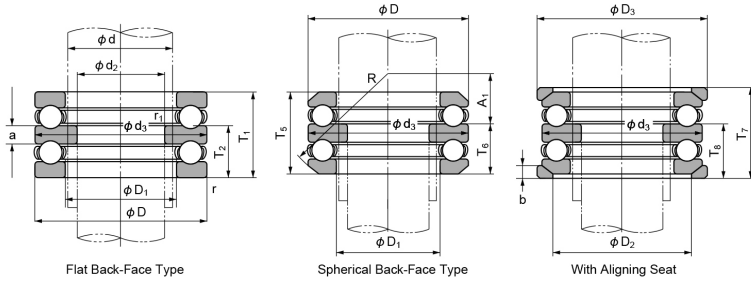


Double Direction Thrust Ball Bearings



Boundary Dimensions (mm)								Basic Load Rating (KN)		Limiting Speed (rpm)		Bearing Designation		
d	dz	D	T1	T5	T7	r	r1	Cr	Cor	Grease	Oil	Flat Back-Face Type	Spherical Back-Face Type	With Aligning Seat
							(min)	(min)						
70	55	125	72	80.4	88	1.1	1	148.00	340.00	1400	2100	52314	54314	54314U
70	55	150	107	114.2	125	2	1	250.00	555.00	1000	1500	52414	54414	54414U
75	60	110	47	49.6	57	1	1	77.50	209.00	1800	2700	52215	54215	54215U
75	60	135	79	87.2	95	1.5	1	170.00	395.00	1200	1900	52315	54315	54315U
75	60	160	115	123	135	2	1	252.00	560.00	950	1400	52415	54415	54415U
80	65	115	48	51	58	1	1	78.50	219.00	1700	2600	52216	54216	54216U
80	65	140	79	86.2	95	1.5	1	176.00	425.00	1200	1800	52316	54316	54316U
80	65	170	120	128.4	140	2.1	1	270.00	620.00	900	1300	52416	54416	54416U
85	70	125	55	59.2	67	1	1	95.50	264.00	1600	2400	52217	54217	54217U
85	70	150	87	95.2	105	1.5	1	206.00	490.00	1100	1700	52317	54317	54317U
85	65	180	128	138	150	2.1	1.1	288.00	685.00	850	1200	52417	54417	54417U
90	75	135	62	69	76	1.1	1	116.00	325.00	1400	2100	52218	54218	54218U
90	75	155	88	97.2	106	1.5	1	213.00	525.00	1100	1600	52318	54318	54318U
90	70	190	135	143.4	157	2.1	1.1	305.00	750.00	790	1100	52418	54418	54418U
100	85	150	67	72.8	81	1.1	1	146.00	410.00	1300	1900	52220	54220	54220U
100	85	170	97	105.4	115	1.5	1	236.00	595.00	1000	1500	52320	54320	54320U
100	80	210	150	160	176	3	1.1	345.00	895.00	710	1000	52420	54420	54420U
110	95	160	67	71.4	81	1.1	1	153.00	450.00	1200	1900	52222	54222	54222U
110	95	190	110	118.4	128	2	1	268.00	705.00	880	1300	52322	54322	54322U
110	90	230	166	-	-	3	1.1	435.00	1240.00	640	960	52422	-	-
120	100	170	68	71.6	82	1.1	1.1	152.00	470.00	1200	1800	52224	54224	54224U
120	100	210	123	131.2	143	2.1	1.1	267.00	870.00	790	1100	52324	54324	54324U
120	95	250	177	-	-	4	1.5	465.00	1340.00	580	880	52424	-	-
130	110	190	80	85.8	96	1.5	1.1	203.00	620.00	1000	1500	52226	54226	54226U
130	110	225	130	-	-	2.1	1.1	330.00	960.00	730	1100	52326	-	-
130	100	270	192	-	-	4	2	555.00	1750.00	540	810	52426	-	-
140	120	200	81	86.2	99	1.5	1.1	205.00	650.00	1000	1500	52228	54228	54228U
140	120	240	140	-	-	2.1	1.1	350.00	1050.00	680	1000	52328	-	-
140	110	280	196	-	-	4	2	545.00	1750.00	520	780	52428	-	-
150	130	215	89	95.6	109	1.5	1.1	213.00	650.00	940	1400	52230	54230	54230U

Dimensions (mm)													Abutment and Fillet Dimensions (mm)					Mass Approx (kg)		
d3	D1	D2	D3	T2	T6	T8	a	b	A1	R	da	Da1	Da2	ra	ra1	Flat Back-Face Type	Spherical Back-Face Type	With Aligning Seat		
(max)	(min)											(min)	(max)	(max)	(max)					
125	72	98	130	44	48.2	52	16	13	39	100	70	92	98	1	1	3.900	4.080	4.920		
150	73	110	155	65.5	69.1	74.5	24	20	28.5	112	70	102	110	2	1	9.710	9.500	11.500		
110	77	92	115	28.5	29.8	33.5	10	9.5	47.5	90	75	89	92	1	1	1.570	1.530	1.960		
135	77	105	140	48.5	52.6	56.5	18	15	32.5	100	75	99	105	1.5	1	4.830	4.930	6.040		
160	78	115	165	70.5	74.5	80.5	26	21	36.5	125	75	109	115	2	1	11.800	11.600	14.100		
115	82	98	120	29	30.5	34	10	10	45	90	80	94	98	1	1	1.69	1.67	2.11		
140	82	110	145	48.5	52.1	56.5	18	15	45.5	112	80	104	110	1.5	1	5.06	5.14	6.29		
170	83	125	175	73.5	77.7	83.5	27	22	30.5	125	80	116	125	2	1	14.0	13.7	16.5		
125	88	105	130	33.5	35.6	39.5	12	11	49.5	100	85	101	105	1	1	2.34	2.34	2.93		
150	88	115	155	53	57.1	62	19	18	39	112	85	111	115	1.5	1	6.43	6.41	8.05		
180	88	130	185	78.5	83.5	89.5	29	23	40.5	140	85	123	130	2	1	17.5	17.3	20.7		
135	93	110	140	38	41.5	45	14	14	42	100	90	108	110	1	1	3.22	3.25	4.12		
155	93	120	160	53.5	58.1	62.5	19	18	36.5	112	90	116	120	1.5	1	6.60	6.62	8.33		
190	93	140	195	82.5	86.7	93.5	30	26	34.5	140	90	130	140	2	1	19.6	19.1	23.0		
150	103	125	155	41	43.9	48	15	14	49	112	100	120	125	1	1	4.29	4.29	5.32		
170	103	135	175	59	63.2	68	21	18	42	125	100	128	135	1.5	1	8.90	8.92	10.8		
210	103	155	220	91.5	96.5	105	33	27	43.5	160	100	144	155	2.5	1	26.6	26.2	32.0		
160	113	135	165	41	43.2	48	15	14	62	125	110	130	135	1	1	4.68	4.60	5.74		
190	113	150	195	67	71.2	76	24	21	47	140	110	142	150	2	1	13.8	13.7	16.3		
229	113	-	-	102	-	37	-	-	-	110	158	-	-	2.5	1	34.9	-	-		
170	123	145	175	41.5	43.3	48.5	15	15	58.5	125	120	140	145	1	1	5.24	5.04	6.36		
210	123	165	220	75	79.1	85	27	22	58	160	120	156	165	2	1	17.2	16.9	21.0		
249	123	-	-	109	-	40	-	-	-	120	172	-	-	3	1.5	44.2	-	-		
190	133	160	195	49	51.9	57	18	17	63	140	130	154	160	1.5	1	7.72	7.58	9.43		
224	134	-	-	80	-	30	-	-	-	130	168	-	-	2	1	22.1	-	-		
269	134	-	-	117	-	42	-	-	-	130	186	-	-	3	2	56.5	-	-		
200	143	170	210	49.5	52.1	58.5	18	17	83.5	160	140	164	170	1.5	1	8.93	8.79	11.3		
239	144	-	-	85.5	-	31	-	-	-	140	180	-	-	2	1	27.8	-	-		
279	144	-	-	120	-	44	-	-	-	140	196	-	-	3	2	60.6	-	-		
215	153	180	225	54.5	57.8	64.5	20	21	74.5	160	150	176	180	1.5	1	10.6	10.3	13.8		



Boundary Dimensions (mm)							Basic Load Rating (KN)		Limiting Speed (rpm)		Bearing Designation			
d	dz	D	T1	T5	T7	r	r1	Cr	Cor	Grease	Oil	Flat Back-Face Type	Spherical Back-Face Type	With Aligning Seat
							(min)	(min)						
150	130	250	140	-	-	2.1	1.1	360.00	1130.00	670	1000	52330	-	-
150	120	300	209	-	-	4	2	615.00	2010.00	480	720	52430	-	-
160	140	225	90	97.4	110	1.5	1.1	223.00	720.00	900	1300	52232	54232	54232U
160	140	270	153	-	-	3	1.1	410.00	1340.00	610	920	52332	-	-
160	130	320	226	-	-	5	2	680.00	2410.00	440	670	52432	-	-
170	150	240	97	104.4	117	1.5	1.1	261.00	835.00	840	1200	52234	54234	54234U
170	150	280	153	-	-	3	1.1	420.00	1430.00	600	900	52334	-	-
170	135	340	236	-	-	5	2.1	755.00	2730.00	420	630	52434	-	-
180	150	250	98	102.4	118	1.5	2	266.00	875.00	810	1200	52236	54236	54236U
180	150	300	165	-	-	3	2	485.00	1700.00	550	820	52336	-	-
180	140	360	245	-	-	5	3	785.00	2980.00	400	600	52436	-	-
190	160	270	109	116.4	131	2	2	310.00	1060.00	740	1100	52238	54238	54238U
190	160	320	183	-	-	4	2	570.00	2100.00	500	750	52338	-	-
200	170	280	109	115.6	133	2	2	315.00	1110.00	720	1000	52240	54240	54240U
200	170	340	192	-	-	4	2	625.00	2380.00	470	710	52340	-	-
220	190	300	110	115.2	134	2	2	325.00	1210.00	690	1000	52244	54244	54244U

Dimensions (mm)											Abutment and Fillet Dimensions (mm)					Mass Approx (kg)		
d3	D1	D2	D3	T2	T6	T8	a	b	A1	R	da	Da1	Da2	ra	ra1	Flat Back-Face Type	Spherical Back-Face Type	With Aligning Seat
(max)	(min)										(min)	(max)	(max)	(max)	(max)			
249	154	-	-	85.5	-	-	31	-	-	-	150	190	-	2	1	29.2	-	-
299	153	-	-	128	-	-	46	-	-	-	150	210	-	3	2	73.9	-	-
225	163	190	235	55	58.7	65	20	21	70	160	160	186	190	1.5	1	12.2	11.9	15.6
269	164	-	-	93	-	-	33	-	-	-	160	204	-	2.5	1	37.7	-	-
319	164	-	-	138	-	-	50	-	-	-	160	224	-	4	2	90.3	-	-
240	173	200	250	59	62.7	69	21	22	87	180	170	198	200	1.5	1	15.2	14.7	19.1
279	174	-	-	93	-	-	33	-	-	-	170	214	-	2.5	1	39.8	-	-
339	174	-	-	143	-	-	50	-	-	-	170	238	-	4	2	108	-	-
249	183	210	260	59.5	61.7	69.5	21	22	109	200	180	208	210	1.5	2	16.0	15.2	19.9
299	184	-	-	101	-	-	37	-	-	-	180	228	-	2.5	2	50.9	-	-
359	184	-	-	149	-	-	52	-	-	-	180	252	-	4	2.5	126	-	-
269	194	230	280	66.5	70.2	77.5	24	23	93.5	200	190	222	230	2	2	21.6	21.2	26.5
319	195	-	-	112	-	-	40	-	-	-	190	242	-	3	2	64.9	-	-
279	204	240	290	66.5	69.8	78.5	24	23	121	225	200	232	240	2	2	22.7	22.3	28.0
339	205	-	-	117	-	-	42	-	-	-	200	256	-	3	2	77.8	-	-
299	224	260	310	67	69.6	79	24	25	114	225	220	252	260	2	2	23.9	22.9	29.6