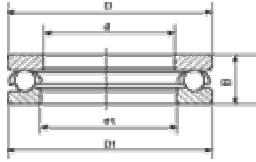
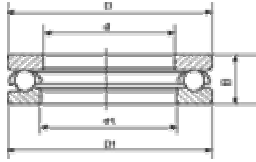


# Thrust Ball Bearings Single direction thrust ball bearings



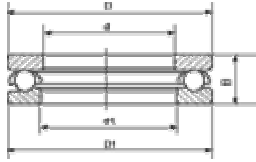
Boundary Dimensions						Rating		Limiting Speed		Bearing Designation			Other dimensions						Mass (kg) Approx							
(mm)						(kN)		(rpm)		Plan housing washer type	Spherical housing washer type	With spherical seating washer	(mm)						Plan housing washer type	Spherical housing washer type	With spherical seating washer					
d	D	T	T1	T2	r	Cr	Cor	Grease	Oil				d1	D1	D2	D3	A	R	C	da	Da	ra				
10	24	9			0.3	10	14	6500	10000	51100			24	11							18	16	0.3	0.02		
	26	11	11.6	13	0.6	12.7	17.1	5700	8800	51200	53200	53200U	26	12	18	28	8.5	22	3.5	20	16	0.6	0.03	0.029	0.037	
12	26	9			0.3	10.3	15.4	6500	10000	51101			26	13							20	18	0.3	0.022		
	28	11	11.4	13	0.6	13.2	19	5400	8300	51201	53201	53201U	28	14	20	30	11.5	25	3.5	22	18	0.6	0.034	0.031	0.043	
15	28	9			0.3	10.5	16.8	6100	9400	51102			28	16							23	20	0.3	0.024		
	32	12	13.3	15	0.6	16.6	24.8	4900	7500	51202	53202	53202U	32	17	24	35	12	28	4	25	22	0.6	0.046	0.048	0.062	
17	30	9			0.3	10.5	18.2	6100	9400	51103			30	18							25	22	0.3	0.028		
	35	12	13.2	15	0.6	17.2	27.3	4900	7500	51203	53203	53203U	35	19	26	38	16	32	4	28	24	0.6	0.053	0.055	0.07	
20	35	10			0.3	14.2	24.7	5100	7900	51104			35	21							29	26	0.3	0.04		
	40	14	14.7	17	0.6	22.3	37.7	3900	6000	51204	53204	53204U	40	22	30	42	18	36	5	32	28	0.6	0.082	0.08	0.1	
25	42	11			0.6	19.5	37.2	4400	6800	51105			42	26							35	32	0.6	0.059		
	47	15	16.7	19	0.6	27.8	50.4	3600	5500	51205	53205	53205U	47	27	36	50	19	40	5.5	38	34	0.6	0.012	0.12	0.152	
	52	18	19.8	22	1	35.7	61.4	3100	4800	51305	53305	53305U	52	27	38	55	21	45	6	41	36	1	0.018	0.18	0.224	
	60	24	26.4	29	1	55.6	89.4	2600	4000	51405	53405	53405U	60	27	42	62	19	50	8	46	39	1	0.34	0.35	0.442	
30	47	11			0.6	20.4	42.2	4300	6600	51106			47	32							40	37	0.6	0.068		
	52	16	17.8	20	0.6	29.3	58.2	3400	5200	51206	53206	53206U	52	32	42	55	22	45	5.5	43	39	0.6	0.15	0.16	0.193	
	60	21	22.6	25	1	42.8	78.7	2700	4200	51306	53306	53306U	60	32	45	62	22	50	7	48	42	1	0.27	0.27	0.326	
	70	28	30.1	33	1	72.8	126	2200	3400	51406	53406	53406U	70	32	50	75	20	56	9	54	46	1	0.53	0.53	0.66	
35	52	12			0.6	20.4	44.7	3900	60000	51107			52	37							45	42	0.6	0.09		
	62	18	19.9	22	1	39.2	78.2	2900	4500	51207	53207	53207U	62	37	48	65	24	50	7	51	46	1	0.22	0.22	0.277	
	68	24	25.6	28	1	55.5	105	2400	3700	51307	53307	53307U	68	37	52	72	24	56	7.5	55	48	1	0.39	0.4	0.484	
	80	32	34	37	1.1	87.1	155	1900	2900	51407	53407	53407U	80	37	58	85	23	64	10	62	53	1	0.79	0.79	0.96	

# Thrust Ball Bearings Single direction thrust ball bearings



Boundary Dimensions						Rating		Limiting Speed		Bearing Designation			Other dimensions						Mass (kg) Approx									
(mm)						(kN)		(rpm)		Plan housing washer type	Spherical housing washer type	With spherical seating washer	(mm)						Plan housing washer type	Spherical housing washer type	With spherical seating washer							
d	D	T	T1	T2	r	Cr	Cor	Grease	Oil				d1	D1	D2	D3	A	R	C	da	Da	ra						
40	60	13			0.6	26.9	62.8	3400	5300	51108			60	42						52	48	0.6				0.12		
	68	19	20.3	23	1	46.9	98.3	2700	4200	51208	53208	53208U	68	42	55	72	28.5	56	7	57	51	1				0.27	0.27	0.34
	78	26	28.5	31	1	69.3	135	2100	3300	51308	53308	53308U	78	42	60	82	28	64	8.5	63	55	1				0.55	0.57	0.69
	90	36	38.5	42	1.1	113	205	1700	2600	51408	53408	53408U	90	42	65	95	26	72	12	70	60	1				1.14	1.12	1.37
45	65	14			0.6	27.8	69.1	3200	5000	51109			65	47						57	53	0.6				0.15		
	73	20	21.3	24	1	47.7	105	2600	4000	51209	53209	53209U	73	47	60	78	26	56	7.5	62	56	1				0.32	0.31	0.397
	85	28	30.1	33	1	80	163	1900	3000	51309	53309	53309U	85	47	65	90	25	64	10	69	61	1				0.69	0.68	0.85
	100	39	42.4	46	1.1	130	242	1500	2300	51409	53409	53409U	100	47	72	105	29	80	12.5	78	67	1				1.47	1.5	1.82
50	70	14			0.6	28.8	75.4	3100	4800	51110			70	52						62	58	0.6				0.16		
	78	22	23.5	26	1	48.5	111	2300	3600	51210	53210	53210U	78	52	62	82	32.5	64	7.5	67	61	1				0.39	0.38	0.48
	95	31	34.3	37	1.1	91.6	186	1800	2700	51310	53310	53310U	95	52	72	100	28	72	11	77	68	1				1	1.01	1.24
	110	43	45.6	50	1.5	148	283	1400	2100	51410	53410	53410U	110	52	80	115	35	90	14	86	74	1.5				1.99	1.97	2.38
55	78	16			0.6	34.8	93.1	2800	4300	51111			78	57						69	64	0.6				0.24		
	90	25	27.3	30	1	69.4	159	2100	3200	51211	53211	53211U	90	57	72	95	35	72	9	76	69	1				0.61	0.62	0.77
	105	35	39.3	42	1.1	119	246	1600	2400	51311	53311	53311U	105	57	80	110	30	80	11.5	85	75	1				1.34	1.41	1.69
	120	48	50.5	55	1.5	178	359	1200	1900	51411	53411	53411U	120	57	88	125	28	90	15.5	94	81	1.5				2.64	2.57	3.1
60	85	17			1	41.4	113	2600	4000	51112			85	62						75	70	1				0.29		
	95	26	28	31	1	73.4	179	1900	3000	51212	53212	53212U	95	62	78	100	32.5	72	9	81	74	1				0.69	0.69	0.85
	110	35	38.3	42	1.1	124	267	1500	2300	51312	53312	53312U	110	62	85	115	41	90	11.5	90	80	1				1.43	1.47	1.78
	130	51	54	58	1.5	201	397	1100	1700	51412	53412	53412U	130	62	95	135	34	100	16	102	88	1.5				3.51	3.44	4.13
65	90	18			1	41.7	117	2400	3700	51113			90	67						80	75	1				0.34		
	100	27	28.7	32	1	74.8	189	1900	2900	51213	53213	53213U	100	67	82	105	40	80	9	86	79	1				0.77	0.75	0.93
	115	36	39.4	43	1.1	128	287	1400	2200	51313	53313	53313U	115	67	90	120	38.5	90	12.5	95	85	1				1.57	1.61	1.95
	140	56	60.2	65	2	232	493	1000	1600	51413	53412	53413U	140	68	100	145	40	112	17.5	110	95	2				4.47	4.47	5.28

# Thrust Ball Bearings Single direction thrust ball bearings



Boundary Dimensions						Rating		Limiting Speed		Bearing Designation			Other dimensions						Mass (kg) Approx								
(mm)						(kN)		(rpm)		Plan housing washer type	Spherical housing washer type	With spherical seating washer	(mm)						Plan housing washer type	Spherical housing washer type	With spherical seating washer						
d	D	T	T1	T2	r	Cr	Cor	Grease	Oil				d1	D1	D2	D3	A	R	C	da	Da	ra					
70	95	18			1	43	127	2300	3600	51114			95	72						85	80	1				0.36	
	105	27	28.8	32	1	73.6	189	1800	2800	51214	53214	53214U	105	72	88	110	38	80	9	91	84	1			0.81	0.8	0.99
	125	40	44.2	48	1.1	148	339	1300	1000	51314	53314	53314U	125	72	98	130	43	100	13	103	92	1			2.06	2.15	2.56
	150	60	63.6	69	2	250	553	940	1450	51414	53414	53414U	150	73	110	155	34	112	19.5	118	102	2			5.48	5.38	6.37
75	100	19			1	42.3	127	2200	3400	51115			100	77						90	85	1				0.42	
	110	27	28.3	32	1	77.4	209	1800	2700	51215	53215	53215U	110	77	92	115	49	90	9.5	96	89	1			0.86	0.85	1.06
	135	44	48.1	52	1.5	171	396	1200	1900	51315	53315	53315U	135	77	105	140	37	100	15	111	99	1.5			2.68	2.72	3.27
	160	65	69	75	2	252	560	880	1350	51415	53415	53415U	160	78	115	165	42	125	21	125	110	2			6.75	6.64	7.87