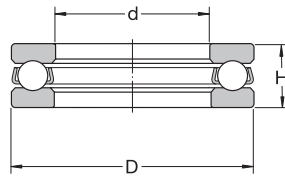


Single direction thrust ball bearings

d 3 - 40 mm

d 0.118 - 1.575 in



Principal dimensions						Basic load ratings		Fatigue load limit P_u	Minimum load factor A	Speed ratings		Mass kg	Designation
d	D	H	d	D	H	dynamic	static			Refer- ence speed	Limiting speed		
mm			in			kN		kN	–	r/min		kg	–
3	8	3.5	0.118	0.315	0.138	1	1	0.028	0.000003	26 000	36 000	0.003	BA 3
4	10	4	0.157	0.394	0.157	1	1	0.044	0.000008	22 000	30 000	0.003	BA 4
5	12	4	0.197	0.472	0.157	1	2	0.06	0.000013	20 000	28 000	0.004	BA 5
6	14	5	0.236	0.551	0.197	2	2	0.085	0.000027	17 000	24 000	0.004	BA 6
7	17	6	0.276	0.669	0.236	3	3	0.12	0.00005	14 000	19 000	0.005	BA 7
8	19	7	0.315	0.748	0.276	3	4	0.15	0.000085	12 000	17 000	0.007	BA 8
9	20	7	0.354	0.787	0.276	4	5	0.17	0.00011	12 000	16 000	0.01	BA 9
10	24	9	0.394	0.945	0.354	10	15	0.56	0.0012	9 500	13 000	0.02	51100
	26	11		1.024	0.433	13	19	0.7	0.0018	8 000	11 000	0.03	51200
12	26	9	0.472	1.024	0.354	10	17	0.62	0.0014	9 000	13 000	0.022	51101
	28	11		1.102	0.433	13	21	0.77	0.0022	8 000	11 000	0.034	51201
15	28	9	0.591	1.102	0.354	9	15	0.56	0.0012	8 500	12 000	0.023	51102
	32	12		1.260	0.472	17	27	1	0.0038	7 000	10 000	0.046	51202
17	30	9	0.669	1.181	0.354	10	17	0.62	0.0014	8 500	12 000	0.025	51103
	35	12		1.378	0.472	17	30	1.1	0.0047	6 700	9 500	0.053	51203
20	35	10	0.787	1.378	0.394	14	25	0.92	0.0033	7 500	10 000	0.037	51104
	40	14		1.575	0.551	23	41	1.53	0.0085	6 000	8 000	0.083	51204
25	42	11	0.984	1.654	0.433	16	32	0.92	0.0033	6 300	9 000	0.056	51105
	47	15		1.850	0.591	28	55	2.04	0.015	5 300	7 500	0.11	51205
	52	18		2.047	0.709	35	60	2.24	0.018	4 500	6 300	0.17	51305
	60	24		2.362	0.945	55	97	3.6	0.048	3 600	5 000	0.34	51405
30	47	11	1.181	1.850	0.433	17	36	1.34	0.0067	6 000	8 500	0.063	51106
	52	16		2.047	0.630	26	51	1.9	0.013	4 800	6 700	0.13	51206
	60	21		2.362	0.827	38	71	2.65	0.026	3 800	5 300	0.26	51306
	70	28		2.756	1.102	73	137	5.1	0.097	3 000	4 300	0.52	51406
35	52	12	1.378	2.047	0.472	17	41	1.53	0.0086	5 600	7 500	0.08	51107
	62	18		2.441	0.709	35	74	2.7	0.028	4 000	5 600	0.22	51207
	68	24		2.677	0.945	49	97	3.55	0.048	3 400	4 800	0.39	51307
	80	32		3.150	1.260	87	170	6.2	0.15	2 600	3 800	0.79	51407
40	60	13	1.575	2.362	0.512	23	55	2.04	0.015	5 000	7 000	0.12	51108
	68	19		2.677	0.748	47	106	4	0.058	3 800	5 300	0.28	51208
	78	26		3.071	1.024	62	122	4.5	0.077	3 000	4 300	0.53	51308
	90	36		3.543	1.417	112	224	8.3	0.26	2 400	3 400	1.1	51408

Single direction thrust ball bearings
d 45 - 90 mm
d 1.772 - 3.543 in

Principal dimensions						Basic load ratings		Fatigue load limit P _u	Minimum load factor A	Speed ratings		Mass kg	Designation
d	D	H	d	D	H	dynamic	static			Refer- ence speed	Limiting speed		
mm			in			kN		kN	–	r/min		–	
45	65	14	1.772	2.559	0.551	24	61	2.28	0.019	4 500	6 300	0.14	51109
	73	20		2.874	0.787	39	87	3.2	0.038	3 600	5 000	0.3	51209
	85	28		3.346	1.102	76	153	5.6	0.12	2 800	4 000	0.66	51309
	100	39		3.937	1.535	130	265	9.8	0.37	2 200	3 000	1.4	51409
50	70	14	1.969	2.756	0.551	26	68	2.55	0.024	4 300	6 300	0.16	51110
	78	22		3.071	0.866	49	116	4.3	0.069	3 400	4 500	0.37	51210
	95	31		3.740	1.220	88	190	6.95	0.19	2 600	3 600	0.94	51310
	110	43		4.331	1.693	159	340	12.5	0.6	2 000	2 800	2	51410
55	78	16	2.165	3.071	0.630	31	85	3.1	0.039	3 800	5 300	0.23	51111
	90	25		3.543	0.984	62	146	5.4	0.11	2 800	4 000	0.59	51211
	105	35		4.134	1.378	104	224	8.3	0.26	2 200	3 200	1.3	51311
	120	48		4.724	1.890	178	390	14.3	0.79	1 800	2 400	2.55	51411
60	85	17	2.362	3.346	0.669	36	102	3.8	0.054	3 600	5 000	0.2	51112
	95	26		3.740	1.024	62	150	5.6	0.12	2 800	3 800	0.65	51212
	110	35		4.331	1.378	101	224	8.3	0.26	2 200	3 000	1.35	51312
	130	51		5.118	2.008	199	430	16	0.96	1 600	2 200	3.1	51412 M
65	90	18	2.559	3.543	0.709	37	108	4	0.06	3 400	4 800	0.33	51113
	100	27		3.937	1.063	64	163	6	0.14	2 600	3 600	0.78	51213
	115	36		4.528	1.417	106	240	8.8	0.3	2 000	3 000	1.5	51313
	140	56		5.512	2.205	216	490	18	1.2	1 500	2 200	4	51413 M
70	95	18	2.756	3.740	0.709	38	112	4.15	0.068	3 400	4 500	0.35	51114
	105	27		4.134	1.063	65	173	6.4	0.16	2 600	3 600	0.79	51214
	125	40		4.921	1.575	135	320	11.8	0.53	1 900	2 600	2	51314
	150	60		5.906	2.362	234	550	19.3	1.6	1 400	2 000	5	51414 M
75	100	19	2.953	3.937	0.748	44	146	5.5	0.11	3 200	4 300	0.4	51115
	110	27		4.331	1.063	68	183	6.8	0.17	2 400	3 400	0.83	51215
	135	44		5.315	1.732	163	390	14	0.79	1 700	2 400	2.6	51315
	160	65		6.299	2.559	251	610	20.8	1.9	1 300	1 800	6.75	51415 M
80	105	19	3.150	4.134	0.748	45	153	5.7	0.12	3 000	4 300	0.42	51116
	115	28		4.528	1.102	76	208	7.65	0.22	2 400	3 400	0.91	51216
	140	44		5.512	1.732	159	390	13.7	0.79	1 700	2 400	2.7	51316
	170	68		6.693	2.677	270	670	22.4	2.3	1 200	1 700	7.95	51416 M
85	110	19	3.346	4.331	0.748	46	163	6	0.14	3 000	4 300	0.44	51117
	125	31		4.921	1.220	98	275	9.8	0.39	2 200	3 000	1.2	51217
	150	49		5.906	1.929	190	465	16	1.1	1 600	2 200	3.55	51317
	180	72		7.087	2.835	286	750	24	2.9	1 200	1 600	9.45	51417 M
90	120	22	3.543	4.724	0.866	59	208	7.5	0.22	2 600	3 800	0.67	51118
	135	35		5.315	1.378	119	325	11.4	0.55	2 000	2 800	1.7	51218
	155	50		6.102	1.969	195	500	16.6	1.3	1 500	2 200	3.8	51318
	190	77		7.480	3.031	307	815	25.5	3.5	1 100	1 500	11	51418 M