

Townsend Bearings



Self Aligning Ball Bearings

(an extract from our main Bearing Catalogue)



**Townsend
Bearings**



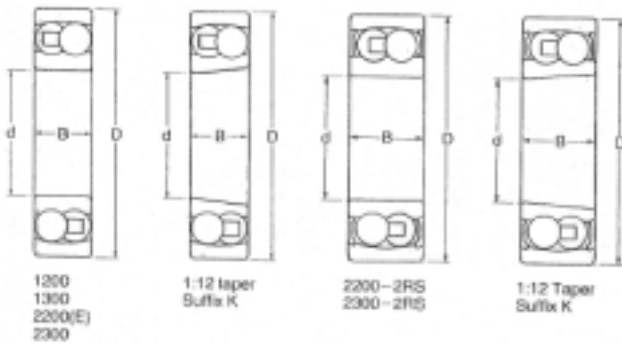
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Townsend Bearings

Double Row Self-Aligning
Ball Bearings (METRIC)
Shaft Dia. 5 - 25mm

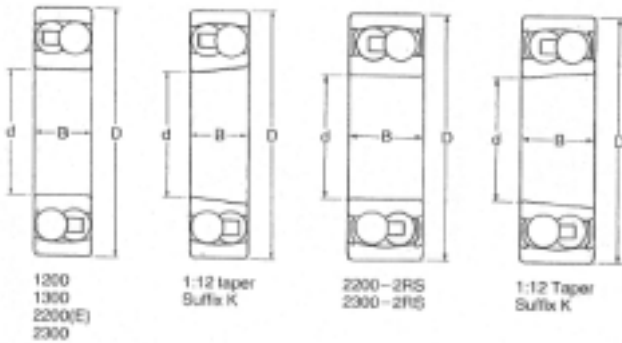


Primary dimensions		Basic bearing		Basic Load ratings		Limiting speeds		mass	
d	D	B	cylindrical bore	tapered bore	dynamic C ₁	static C _{0r}	grease rev/min	oil	kg
mm					N				
5	19	6	135		2 700	500	30 000	36 000	0,009
6	19	6	126		2 650	490	30 000	36 000	0,009
7	22	7	127		2 860	583	30 000	36 000	0,014
8	22	7	108		2 810	568	30 000	36 000	0,013
9	26	8	129		4 060	822	26 000	32 000	0,021
10	30	9	1200		5 500	1 530	24 000	30 000	0,034
	30	14	2200		7 200	2 040	24 000	30 000	0,047
	35	11	1300		6 750	1 730	10 809	21 500	0,059
	35	17	2300		10 500	2 180	21 500	29 000	0,091
12	32	10	1201		5 600	1 660	24 000	30 000	0,040
	32	14	2201		7 500	2 240	24 000	30 000	0,053
	37	12	1301		9 500	2 800	18 000	22 500	0,067
	37	17	2301		11 300	2 540	20 000	27 000	0,100
15	35	11	1202		7 500	2 280	20 000	26 000	0,049
	35	14	2201		7 650	2 400	20 000	26 000	0,060
	42	13	1301		9 500	3 000	17 000	20 000	0,094
	42	17	2301		12 000	3 750	16 000	19 000	0,110
17	40	12	1203		8 000	2 650	18 000	22 000	0,074
	40	16	2203		9 800	3 150	17 000	20 000	0,088
	40	16	2203-RS		8 000	2 650	14 000		0,100
	47	14	1303		12 500	4 150	15 000	18 000	0,136
	47	19	2303		14 300	4 550	14 000	17 000	0,179
	47	19	2303-RS		12 500	4 150	11 000		0,180
20	47	14	1204	1204K	10 000	3 450	15 000	18 000	0,117
	47	18	2204E	2204EK	14 300	4 650	14 000	17 000	0,140
	47	18	2304-2RS		10 000	3 450	11 000		0,160
	52	15	1304	1304K	12 500	4 400	13 000	16 000	0,172
	52	21	2304	2304K	18 000	6 100	13 000	16 000	0,234
	52	21	2304-2RS		12 500	4 400	10 000		0,240
25	52	15	1205	1205K	12 200	4 400	13 000	16 000	0,137
	52	18	2205E	12205EK	17 000	5 850	12 000	15 000	0,160
	52	18	2205-2RS	2205K-2RS	12 200	4 400	9 500		0,170
	62	17	1305	1305K	18 000	6 700	11 000	14 000	0,275
	62	24	2305	2305K	24 500	8 500	10 000	13 000	0,371
	62	24	2305-2RS		18 000	6 700	8 000		0,380

Double Row Self-Aligning
Ball Bearings (METRIC)
Shaft Dia. 30 - 60mm



**Townsend
Bearings**

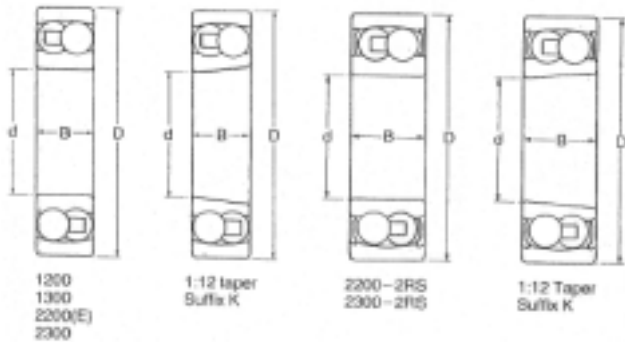


Primary dimensions		Basic bearing		Basic Load ratings		Limiting speeds		mass	
d	D	B	cylindrical bore	tapered bore	dynamic C ₁	static C _{0r}	grease rev/min	oil	kg
mm					N				
30	62	16	1206	1206K	15 600	6 200	11 000	14 000	0,220
	62	20	2206E	2206EK	25 500	9 000	9 500	12 000	0,250
	62	20	2206-2RS	2206K-2RS	15 600	6 200	8 000		0,280
	72	19	1306	1306K	21 200	8 500	9 000	11 000	0,408
	72	27	2306	2306K	31 500	11 400	8 500	10 000	0,552
	72	27	23062RS		21 200	8 500	6 700		0,570
35	72	17	1207	1207K	16 000	6 950	9 500	12 000	0,329
	72	23	2207E	2207EK	32 000	11 800	8 000	9 500	0,400
	72	23	2207-2RS	2207-2RS	16 000	6 950	7 000		0,450
	80	21	1307	1307	25 000	10 600	8 000	9 500	0,535
	80	31	2307	2307K	39 000	14 600	7 500	9 000	0,743
	80	31	2307-2RS		25 000	10 600	6 000		0,790
40	80	18	1208	1208K	19 300	8 800	8 500	10 000	0,417
	80	23	2208E	2208EK	31 500	12 500	7 500	9 000	0,490
	80	23	2208-2RS	2208-2RS	19 300	8 800	6 300		0,550
	90	23	1308	1308K	29 000	12 900	7 000	8 500	0,742
	90	33	2308	2308EK	45 000	17 600	6 700	8 000	1,00
	90	33	2308-2RS		29 000	12 900	5 300		1,05
45	85	19	1209	1209K	22 000	10 000	7 500	9 000	0,463
	85	23	2209E	2209EK	28 000	12 000	7 000	8 500	0,530
	85	23	2209-2RS	2209-2RS	22 000	10 000	5 600		0,580
	100	25	1309	1309K	38 000	17 000	6 300	7 500	0,994
	100	36	2309	2309K	54 000	22 000	6 000	7 000	1,32
	100	36	2309-2RS		38 000	17 000	4 800		1,40
50	90	20	1210	1210K	22 800	11 000	7 000	8 500	0,531
	90	23	2210E	2210EK	28 000	12 900	6 700	8 000	0,570
	90	23	2210-2RS	2210-2RS	22 800	11 000	5 300		0,630
	110	27	1310	1310K	41 500	19 300	5 600	6 700	1,29
	110	40	2310	2310EK	64 000	26 500	5 300	6 300	1,78
	110	40	2310-2RS		41 500	19 300	4 300		1,89
55	100	21	1211	1211K	27 000	13 700	6 300	7 500	0,693
	100	25	2211	2211K	26 500	13 400	6 300	7 500	0,831
	120	29	1311	1311K	51 000	24 000	5 000	6 000	1,64
	120	43	2311	2311K	75 000	31 500	4 800	5 600	2,29
60	110	22	1212	1212K	30 000	16 000	5 600	6 700	0,900
	110	28	2212	2212K	34 000	17 300	5 600	6 700	1,15
	130	31	1312	1312K	57 000	28 000	4 500	5 300	2,03
	130	46	2312	2312K	86 500	37 500	4 300	5 000	2,83



Townsend Bearings

Double Row Self-Aligning
Ball Bearings (METRIC)
Shaft Dia. 65 - 110mm

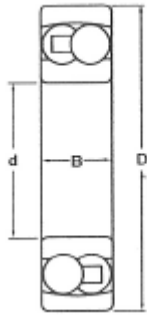


Primary dimensions		Basic bearing		Basic Load ratings		Limiting speeds		mass	
d	D	B	cylindrical bore	tapered bore	dynamic C ₁	static C _{0r}	grease rev/min	oil	kg
mm					N				
65	120	23	1213	1213K	31 000	17 300	5 300	6 300	1,15
	120	31	2213	2213K	44 000	22 400	5 000	6 000	1,52
	140	33	1313	1313K	62 000	31 000	4 300	5 900	2,52
	140	48	2313	2313K	95 000	43 000	4 000	4 806	3,43
70	125	24	1214		34 500	19 000	5 000	6 000	1,29
	125	31	2214		44 000	23 200	4 800	5 600	1,59
	150	35	1314		75 000	37 500	4 000	4 800	3,08
	150	51	2314		110 000	50 000	3 600	4 300	4,17
75	130	25	1215	1215K	40 400	15 400	2 700	5 300	1,46
	130	31	2215		47 500	18 800	2 700	5 300	1,65
	160	37	1315		82 500	29 900	2 300	4 600	3,62
	160	55	2315		107 000	37 300	2 300	4 700	4,45
80	140	26	1216		41 600	16 800	2 500	4 900	1,76
	170	39	1316		92 500	33 200	2 100	4 300	4,31
85	150	28	1217	1217K	51 000	20 300	2 300	4 600	2,19
	180	41	1317		102 000	37 700	2 000	4 000	4,76
90	160	30	1218		59 000	23 000	2 100	4 300	2,58
	190	43	1318		144 000	52 400	1 900	3 800	6,08
95	170	32	1219		68 500	23 100	2 000	4 000	3,23
	200	45	1319		162 000	63 100	1 800	3 500	7,21
100	180	34	1220	1220K	74 500	30 800	1 900	3 800	3,88
	215	47	1320		159 000	61 000	1 600	3 300	9,30
105	190	36	1221		82 500	35 100	1 700	3 500	4,66
110	200	38	1222	1222K	89 000	38 100	1 600	3 300	5,67

Double Row Self-Aligning
Ball Bearings (IMPERIAL)
Shaft Dia. ½ - 2½ inch



**Townsend
Bearings**



Primary dimensions			Basic bearing	Basic Load ratings		Limiting speeds		mass kg
d mm	D	B		dynamic C _r N	static C _{or}	grease rev/min	oil	
1/2	15/16	3/8	NLJ1/2	5 650	1 240	21 000	28 500	0,045
	1 5/8	5/8	NMJ1/2	12 100	2 720	9 300	18 500	0,113
5/8	1 9/16	7/16	NLJ5/8	8 250	2 030	18 000	24 500	0,059
	1 13/16	5/8	NMJ5/8	12 900	3 220	16 000	22 000	0,141
3/4	1 7/8	9/16	NLJ3/4	10 300	2 650	15 500	21 000	0,127
	2	1 1/16	NMJ3/4	12 900	3 370	15 000	20 000	0,191
7/8	2	9/16	NLJ7/8	12 900	3 370	14 400	19 500	0,145
	2 1/4	1 1/16	NMJ7/8	18 400	4 680	13 400	18 000	0,240
1	2 1/4	5/8	NLJ1	15 400	4 180	12 900	17 500	0,204
	2 1/2	3/4	NMJ1	21 300	5 470	6 100	12 100	0,304
1 1/8	2 1/2	5/8	NLJ1 1/8	16 300	4 700	11 700	16 000	0,249
	2 13/16	13/16	NMJ1 1/8	25 500	7 020	5 400	10 900	0,440
1 1/4	2 3/4	1 1/16	NLJ1 1/4	16 400	5 160	10 700	14 500	0,336
	3 1/8	7/8	NMJ1 1/4	30 300	8 830	4 900	9 800	0,594
1 3/8	3	1 1/16	NLJ1 3/8	19 100	5 880	4 900	9 800	0,408
	3 1/2	7/8	NMJ1 3/8	26 100	7 940	8 900	12 000	0,771
1 1/2	3 1/4	3/4	NLJ1 1/2	20 000	6 510	9 100	12 300	0,499
	3 3/4	15/16	NMJ1 1/2	34 100	10 600	8 300	11 100	0,925
1 5/8	3 1/2	3/4	NLJ1 5/8	22 700	7 400	8 400	11 400	0,594
	4	15/16	NMJ1 5/8	32 900	10 300	3 900	7 700	1,06
1 3/4	3 3/4	13/16	NLJ1 3/4	23 600	8 090	7 900	10 600	0,726
	4 1/4	1 1/16	NMJ1 3/4	44 500	14 500	3 600	7 200	1,35
1 7/8	4	13/16	NLJ1 7/8	27 800	9 990	7 200	9 800	0,835
	4 1/2	1 1/16	NMJ1 7/8	42 800	13 100	3 300	6 700	1,47
2	4	13/16	NLJ2	27 800	9 990	7 200	9 800	0,789
	4 1/2	1 1/16	NMJ2	42 800	13 100	3 300	6 700	1,41
2 1/4	4 1/2	7/8	NLJ2 1/4	31 500	11 500	3 200	6 400	1,09
	5	1 1/4	NMJ2 1/4	58 500	20 100	3 000	5 900	2,04
2 1/2	5	15/16	NLJ2 1/2	37 300	14 300	2 900	5 700	1,43
	5 1/2	1 1/4	NMJ2 1/2	60 500	19 600	2 700	5 400	2,51



Townsend Bearings

Double Row Self-Aligning
Ball Bearings (IMPERIAL)
Shaft Dia. 2 $\frac{3}{4}$ - 6 inch



Primary dimensions			Basic bearing	Basic Load ratings		Limiting speeds		mass kg
d mm	D	B		dynamic C ₁ N	static C _{0r}	grease rev/min	oil	
2$\frac{3}{4}$	5 $\frac{1}{4}$	1 $\frac{5}{16}$	NLJ2 $\frac{3}{4}$	40 600	15 700	2 700	5 400	1,54
	6 $\frac{1}{4}$	1 $\frac{3}{8}$	NMJ2 $\frac{3}{4}$	74 500	26 100	2 400	4 700	3,73
3	5 $\frac{3}{4}$	1 $\frac{1}{16}$	NLJ3	43 100	16 500	2 400	4 900	2,11
	7	1 $\frac{9}{16}$	NMJ3	86 500	29 000	2 100	4 200	5,08
3$\frac{1}{4}$	6	1 $\frac{1}{16}$	NLJ3 $\frac{1}{4}$	58 500	20 700	2 300	4 600	2,24
	3 $\frac{1}{2}$	1 $\frac{9}{16}$	NMJ3 $\frac{1}{4}$	101 000	33 400	1 900	3 900	6,05
3$\frac{3}{8}$	7 $\frac{1}{2}$	1 $\frac{9}{16}$	NMJ3 $\frac{3}{8}$	101 000	33 300	1 900	3 800	5,81
3$\frac{1}{2}$	6 $\frac{1}{2}$	1 $\frac{1}{8}$	NLJ3 $\frac{1}{2}$	66 000	23 400	2 100	4 200	2,78
	8 $\frac{1}{8}$	1 $\frac{3}{4}$	NMJ3 $\frac{1}{2}$	133 000	46 400	3 500	4 800	7,76
3$\frac{3}{4}$	6 $\frac{3}{4}$	1 $\frac{1}{8}$	NLJ3 $\frac{3}{4}$	64 500	23 200	2 000	4 000	3,05
	8 $\frac{1}{4}$	1 $\frac{3}{4}$	NMJ3 $\frac{3}{4}$	135 000	50 700	1 700	3 400	7,94
4	7 $\frac{1}{4}$	1 $\frac{1}{4}$	NLJ4	75 500	27 200	1 800	3 700	3,75
	8 $\frac{1}{2}$	1 $\frac{3}{4}$	NMJ4	149 000	59 700	1 600	3 200	8,26
4$\frac{1}{4}$	7 $\frac{1}{2}$	1 $\frac{1}{4}$	NLJ4 $\frac{1}{4}$	77 500	29 500	1 700	3 500	4,05
	8 $\frac{3}{4}$	1 $\frac{3}{4}$	NMJ4 $\frac{1}{4}$	146 000	59 600	1 500	3 100	8,48
4$\frac{1}{2}$	8	1 $\frac{5}{16}$	NLJ4 $\frac{1}{2}$	85 500	33 800	1 600	3 200	4,94
	9 $\frac{3}{8}$	2	NMJ4 $\frac{1}{2}$	159 090	63 300	1 400	2 900	10,4
4$\frac{3}{4}$	8 $\frac{1}{4}$	1 $\frac{5}{16}$	NLJ4 $\frac{3}{4}$	84 000	32 800	1 500	3 100	5,13
	10	2	NMJ4 $\frac{3}{4}$	168 000	70 100	1 300	2 700	12,7
5	9	1 $\frac{3}{8}$	NLJ5	88 000	33 300	1 400	2 800	6,44
	10	2	NMJ5	168 000	70 100	1 300	2 600	12,2
5$\frac{1}{2}$	9 $\frac{1}{2}$	1 $\frac{3}{8}$	NLJ5 $\frac{1}{2}$	109 000	43 600	1 300	2 600	7,12
	11	2	NMJ5 $\frac{1}{2}$	191 000	88 000	1 200	2 300	15,3
6	10 $\frac{1}{2}$	1 $\frac{9}{16}$	NLJ6	120 000	49 000	1 200	2 300	9,43
	12	2 $\frac{1}{4}$	NMJ6	211 000	100 000	1 000	2 100	20,0



**Townsend
Bearings**

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