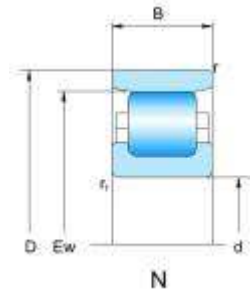


## Cylindrical Roller Bearing



1. Cylindrical roller bearings are available in many designs, dimension series and sizes. The majority are single row bearings with a cage. Single and double row full complement bearings (without cage) complete the standard assortment for general engineering. Bearings with a cage can accommodate heavy radial loads and operate at high speeds. Full complement bearings are suitable for very heavy radial loads at moderate speeds.

2. Single row cylindrical roller bearings can accommodate heavy radial loads and high speeds. They are manufactured in several different designs, the main difference being in the configuration of the flanges. The most popular are the NU, N, NJ and NUP designs.

3. Applications:

Electric motor, automotive, industrial transmission, double-row cylindrical roller bearings are greatly used for the spindles of machine tools

4. Models available:

- 1) NU, NJ, NUP and N design, single row cylindrical roller bearings, caged
- 2) NNU and NN design, double row cylindrical roller bearings, caged
- 3) Multi-row cylindrical roller bearings, caged.
- 4) NCF and NJG design, single row full complement cylindrical roller bearings
- 5) NNF design, double row full complement cylindrical roller bearings
- 6) Multi-row full complement cylindrical roller bearings, with four or eight rows of rollers.

Boundary dimensions (mm)					Basic load ratings (kN)		Limiting speeds (rpm)		Mass (Kg)	Bearing Number
d	D	B	r <sub>s</sub> min	r <sub>sl</sub> min	Cr	Cor	Grease	Oil	(Approx.)	
25	47	12	0.6	0.3	15.1	14.1	16,000	19,000	0.091	N1005
30	55	13	1	0.6	19.7	19.6	14,000	16,000	0.128	N1006
35	62	14	1	0.6	22.6	23.2	12,000	15,000	0.176	N1007
40	68	15	1	0.6	27.3	29.0	11,000	13,000	0.217	N1008
45	75	16	1	0.6	31.0	34.0	9,900	12,000	0.276	N1009
50	80	16	1	0.6	32.0	36.0	8,900	11,000	0.291	N1010
55	90	18	1.1	1	37.5	44.0	8,200	9,700	0.435	N1011
60	95	18	1.1	1	40.0	48.5	7,500	8,800	0.467	N1012
65	100	18	1.1	1	41.0	51.0	7,000	8,200	0.477	N1013
70	110	20	1.1	1	58.5	70.5	6,500	7,600	0.689	N1014
75	115	20	1.1	1	60.0	74.5	6,100	7,100	0.727	N1015
80	125	22	1.1	1	72.5	90.5	5,700	6,700	0.965	N1016
85	130	22	1.1	1	74.5	95.5	5,400	6,300	1.01	N1017
90	140	24	1.5	1.1	88.0	114	5,100	5,900	1.31	N1018
95	145	24	1.5	1.1	90.5	120	4,800	5,600	1.38	N1019
100	150	24	1.5	1.1	93.0	126	4,600	5,400	1.43	N1020
105	160	26	2	1.1	105	142	4,300	5,100	1.81	N1021
110	170	28	2	1.1	131	174	4,100	4,800	2.3	N1022
120	180	28	2	1.1	139	191	3,800	4,400	2.4	N1024
130	200	33	2	1.1	172	238	3,400	4,000	3.63	N1026
140	210	33	2	1.1	176	250	3,200	3,800	3.98	N1028
150	225	35	2.1	1.5	202	294	3,000	3,500	4.7	N1030

Boundary dimensions (mm)					Basic load ratings (kN)		Limiting speeds (rpm)		Mass (Kg)	Bearing Number
d	D	B	r <sub>s</sub> min	r <sub>sl</sub> min	Cr	Cor	Grease	Oil	(Approx.)	
40	80	18	1.1	1.1	43.5	43.0	9,400	11,000	0.37	N208
45	85	19	1.1	1.1	46.0	47.0	8,400	9,900	0.423	N209
50	90	20	1.1	1.1	48.0	51.0	7,600	9,000	0.46	N210
55	100	21	1.5	1.1	58.0	62.5	6,900	8,200	0.626	N211
60	110	22	1.5	1.5	68.5	75.0	6,400	7,600	0.802	N212
65	120	23	1.5	1.5	84.0	94.5	5,900	7,000	1	N213
70	125	24	1.5	1.5	83.5	95.0	5,500	6,500	1.1	N214
75	130	25	1.5	1.5	96.5	111	5,100	6,000	1.21	N215
80	140	26	2	2	106	122	4,800	5,700	1.47	N216
85	150	28	2	2	120	140	4,500	5,300	1.83	N217

90	160	30	2	2	152	178	4,300	5,000	2.25	N218
95	170	32	2.1	2.1	166	195	4,000	4,700	2.72	N219
100	180	34	2.1	2.1	183	217	3,800	4,500	3.26	N220
105	190	36	2.1	2.1	201	241	3,600	4,300	3.87	N221
110	200	38	2.1	2.1	240	290	3,400	4,000	4.54	N222
120	215	40	2.1	2.1	260	320	3,200	3,700	5.46	N224
130	230	40	3	3	270	340	2,900	3,400	6.17	N226
140	250	42	3	3	310	400	2,700	3,100	7.72	N228
150	270	45	3	3	345	435	2,500	2,900	9.72	N230

<http://www.bearing-fastener.com>