

Static load values Co in lbf (kN)

Co indicates the permitted radial load at standstill which a rod end bearing at its weakest cross section can withstand without causing permanent deformation when the load is at rest. The Co values listed in the catalog tables have been calculated based on the respective material characteristics and were verified on a representative number of rod end bearings in a tensile test at room temperature. An 80% utilisation of the yield strength was applied in each case, so that a safety factor of 1.25 is included. The static load value Co is also used to determine the permissible **axial load**, which is primarily limited by the axial fixing of the internal ring. Tests were carried out to determine the permissible axial load Fa at the largest tilting angle:

Fa = 0.4 Co for type N

Fa = 0.2 Co for types NH, W, WH, WK

d _i Size	GN 648.1		GN 648.2		GN 648.5	GN 648.6	GN 648.8		GN 648.9
	Type N	Type W	Type N	Type W	Type NH / WH / WK	Type NH / WH / WK	Type N	Type W	Type WK
5 0.20	9.9 kN 2226 lbf	8 kN 1798 lbf	4.3 kN 967 lbf	4.3 kN 967 lbf	11.8 kN 2653 lbf	6.2 kN 1394 lbf	19.8 kN 4451 lbf	12.5 kN 2810 lbf	12.5 kN 2810 lbf
6 0.24	11.9 kN 2675 lbf	8.9 kN 2001 lbf	6 kN 1349 lbf	6 kN 1349 lbf	13.1 kN 2945 lbf	8.8 kN 1978 lbf	25.8 kN 5800 lbf	15.5 kN 3485 lbf	15.5 kN 3485 lbf
8 0.31	17.1 kN 3844 lbf	14.1 kN 3170 lbf	11 kN 2473 lbf	11 kN 2473 lbf	20.7 kN 4654 lbf	16.1 kN 3619 lbf	42.6 kN 9577 lbf	27.8 kN 6250 lbf	27.8 kN 6250 lbf
10 0.39	21.4 kN 4811 lbf	19.3 kN 4339 lbf	17.4 kN 3912 lbf	17.4 kN 3912 lbf	28.3 kN 6362 lbf	25.5 kN 5733 lbf	60 kN 13489 lbf	39.0 kN 8768 lbf	39.0 kN 8768 lbf
12 0.47	27 kN 6070 lbf	23.5 kN 5283 lbf	25.5 kN 5733 lbf	23.5 kN 5283 lbf	34.5 kN 7756 lbf	34.5 kN 7756 lbf	80 kN 17985 lbf	53.5 kN 12027 lbf	53.5 kN 12027 lbf
14 0.55	24.5 kN 5508 lbf	21 kN 4721 lbf	25.4 kN 5710 lbf	21 kN 4721 lbf	39.5 kN 8880 lbf	39.5 kN 8880 lbf	102.5 kN 23043 lbf	70 kN 15737 lbf	70 kN 15737 lbf
16 0.63	37 kN 8318 lbf	32 kN 7194 lbf	36.5 kN 8206 lbf	32 kN 7194 lbf	60.5 kN 13601 lbf	60.5 kN 13601 lbf	128.5 kN 28888 lbf	88 kN 19783 lbf	88 kN 19783 lbf
18 0.71	43 kN 9667 lbf	38.5 kN 8655 lbf	43 kN 9667 lbf	38.5 kN 8655 lbf	73 kN 16411 lbf	73 kN 16411 lbf	157 kN 35295 lbf	106.5 kN 23942 lbf	106.5 kN 23942 lbf
20 0.79	49.5 kN 11128 lbf	44 kN 9892 lbf	49.5 kN 11128 lbf	44 kN 9892 lbf	83 kN 18659 lbf	83 kN 18659 lbf	188.5 kN 42376 lbf	130 kN 29225 lbf	130 kN 29225 lbf
22 0.87	57 kN 12814 lbf	53 kN 11915 lbf	57 kN 12814 lbf	53 kN 11915 lbf	100 kN 22481 lbf	100 kN 22481 lbf	229 kN 51481 lbf	162 kN 36419 lbf	162 kN 36419 lbf
25 0.98	68 kN 15287 lbf	62 kN 13938 lbf	68 kN 15287 lbf	61 kN 13713 lbf	118 kN 26527 lbf	118 kN 26527 lbf	293 kN 65869 lbf	204 kN 45861 lbf	204 kN 45861 lbf
30 1.18	82 kN 18434 lbf	82 kN 18434 lbf	82 kN 18434 lbf	82 kN 18434 lbf	155 kN 34845 lbf	155 kN 34845 lbf	381 kN 85652 lbf	281 kN 63171 lbf	281 kN 63171 lbf

Dynamic load values C in lbf (kN)

They help to determine the service life of dynamically stressed rod end bearings.

d _i Size	GN 648.1 / GN 648.2		GN 648.5 / GN 648.6		GN 648.8		GN 648.9
	Type N	Type W	Type NH	Type WH / WK	Type N	Type W	Type WK
5 0.20	2.5 kN 562 lbf	7.5 kN 1686 lbf	3.3 kN 742 lbf	7.5 kN 1686 lbf	3.3 kN 742 lbf	7.5 kN 1686 lbf	7.5 kN 1686 lbf
6 0.24	3.2 kN 719 lbf	9.3 kN 2091 lbf	4.3 kN 967 lbf	9.3 kN 2091 lbf	4.3 kN 967 lbf	9.3 kN 2091 lbf	9.3 kN 2091 lbf
8 0.31	5.4 kN 1214 lbf	16.7 kN 3754 lbf	7.1 kN 1596 lbf	16.7 kN 3754 lbf	7.1 kN 1596 lbf	16.7 kN 3754 lbf	16.7 kN 3754 lbf
10 0.39	7.5 kN 1686 lbf	23.4 kN 5261 lbf	10 kN 2248 lbf	23.4 kN 5261 lbf	10 kN 2248 lbf	23.4 kN 5261 lbf	23.4 kN 5261 lbf
12 0.47	10 kN 2248 lbf	32 kN 7194 lbf	13.5 kN 3035 lbf	32 kN 7194 lbf	13.5 kN 3035 lbf	32 kN 7194 lbf	32 kN 7194 lbf
14 0.55	13 kN 2923 lbf	42 kN 9442 lbf	17 kN 3822 lbf	42 kN 9442 lbf	17 kN 3822 lbf	42 kN 9442 lbf	42 kN 9442 lbf
16 0.63	16 kN 3597 lbf	52.5 kN 11802 lbf	21.5 kN 4833 lbf	52.5 kN 11802 lbf	21.5 kN 4833 lbf	52.5 kN 11802 lbf	52.5 kN 11802 lbf
18 0.71	19.5 kN 4384 lbf	64 kN 14388 lbf	26 kN 5845 lbf	64 kN 14388 lbf	26 kN 5845 lbf	64 kN 14388 lbf	64 kN 14388 lbf
20 0.79	23.5 kN 5283 lbf	78 kN 17535 lbf	31.5 kN 7081 lbf	78 kN 17535 lbf	31.5 kN 7081 lbf	78 kN 17535 lbf	78 kN 17535 lbf
22 0.87	29 kN 6519 lbf	97 kN 21806 lbf	38 kN 8543 lbf	97 kN 21806 lbf	38 kN 8543 lbf	97 kN 21806 lbf	97 kN 21806 lbf
25 0.98	35 kN 7868 lbf	122 kN 27427 lbf	47 kN 10566 lbf	122 kN 27427 lbf	47 kN 10566 lbf	122 kN 27427 lbf	122 kN 27427 lbf
30 1.18	64 kN 14388 lbf	168 kN 37768 lbf	64 kN 14388 lbf	168 kN 37768 lbf	64 kN 14388 lbf	168 kN 37768 lbf	168 kN 37768 lbf

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