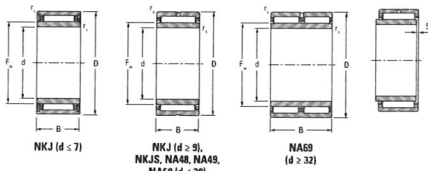


NEEDLE ROLLER BEARINGS

NEEDLE ROLLER BEARINGS WITH INNER RINGS

METRIC SERIES
NKJ, NKJS, NA48
NA49, NA69 SERIES



Shaft Dia. mm in	d mm in	D mm in	B mm in	F _u mm in	F _{max} mm in	α ¹⁾ °	Bearing Designation	Load Ratings		Fatigue Load Limit C ₁₀ kN lbf	Speed Ratings		Approx. Wt. kg lb
								Dyn. C	Static C ₀		Grease min ⁻¹	Oil min ⁻¹	
45 1.771	45 1.771	62 2.443	25 0.984	58 2.283	0.6 0.024	3	NKJ52SA	55 12400	117 26300	18.2	5500	8500	0.346 0.761
		68 2.677	22 0.866	52 2.047	0.6 0.024	2	NA48B	46.8 10300	74.8 16600	12.0	5400	8400	0.291 0.643
		68 2.677	40 1.575	52 2.047	0.6 0.024	1.5	NA48SA	74.2 16600	133 29800	21.7	5400	8400	0.55 1.22
		72 2.834	22 0.866	55 2.165	0.025	1	NKJ54SA	47.9 10600	78.4 17300	12.6	5100	7900	0.36 0.79
50 1.969	50 1.969	68 2.677	25 0.984	55 2.165	0.6 0.024	3	NKJ50SA	46.1 10300	82.3 18300	13.9	5500	7800	0.288 0.635
		68 2.677	26 1.024	55 2.165	0.6 0.024	1.18	NKJ50SA	62.3 14000	129 28600	20.0	5500	7800	0.408 0.899
		72 2.834	22 0.866	58 2.283	0.6 0.024	2	NA49B	49 11000	81 18000	13.2	4800	7400	0.296 0.653
		72 2.834	40 1.575	58 2.283	0.6 0.024	1.5	NA48SA	75.7 17000	144 32000	22.8	4800	7400	0.537 1.19
		80 3.150	28 1.102	60 2.362	0.6 0.024	1.5	NKJ58SA	66.9 14900	183 40900	18.5	4800	7300	0.523 1.15
55 2.165	55 2.165	72 2.834	26 1.024	60 2.362	0.6 0.024	1.18	NKJ52SA	64.3 14300	98 21800	14.9	4500	7000	0.25 0.55
		72 2.834	35 1.378	60 2.362	0.6 0.024	1.18	NKJ52SA	58.9 13000	136 30200	21.5	4500	7000	0.41 0.90
		80 3.150	25 0.984	63 2.480	0.025	2.5	NA48B	62 13900	187 41600	12.1	4500	6900	0.428 0.935
		80 3.150	45 1.771	63 2.480	0.025	2.5	NA48SA	94.2 21100	172 38300	27.8	4500	6900	0.8 1.76
		85 3.346	28 1.102	65 2.559	1.1 0.043	1.5	NKJ58SA	71 15800	194 43400	18.3	4400	6700	0.569 1.25
60 2.362	60 2.362	82 3.228	32 1.260	68 2.677	0.6 0.024	2	NKJ62SA	49 11000	121 27000	16.1	4000	6200	0.44 0.97
		82 3.228	35 1.378	68 2.677	0.6 0.024	2.5	NKJ62SA	66.2 14700	149 33000	23.2	4200	6200	0.52 1.16
		85 3.346	25 0.984	68 2.677	1.1 0.043	1.5	NA48B	64.8 14400	196 43700	18.6	4100	6300	0.457 1.00
		85 3.346	45 1.771	68 2.677	0.025	0.75	NA48SA	99.3 22200	189 42000	30.5	4100	6400	0.829 1.83
		90 3.543	28 1.102	70 2.755	1.1 0.043	1.5	NKJ68SA	72.5 16300	139 30700	19.3	4000	6200	0.487 1.08
65 2.559	65 2.559	90 3.543	25 0.984	72 2.834	0.025	1.5	NA48B	66 14800	121 27000	19.4	3900	5900	0.489 1.08

¹⁾ Max. axial displacement

Heavy-Duty Needle Roller Bearings

Shaft Dia. mm in	d mm in	D mm in	B mm in	F _u mm in	F _{max} mm in	α ¹⁾ °	Bearing Designation	Load Ratings		Fatigue Load Limit C ₁₀ kN lbf	Speed Ratings		Approx. Wt. kg lb
								Dyn. C	Static C ₀		Grease min ⁻¹	Oil min ⁻¹	
65 2.559	65 2.559	90 3.543	25 0.984	73 2.874	0.6 0.024	2	NKJ62SA	61.5 13800	119 26600	19.0	3800	5800	0.5 1.10
		90 3.543	35 1.378	73 2.874	0.6 0.024	2	NKJ62SA	82.5 18500	172 38500	27.1	3800	5800	0.69 1.51
		95 3.740	40 1.575	72 2.834	0.025	0.75	NA48B	187 41600	232 51500	34.5	3900	6000	0.965 2.13
		95 3.740	28 1.102	75 2.953	1.1 0.043	1.5	NKJ68SA	76.5 17200	133 29700	21.1	3700	5800	0.605 1.34
70 2.755	70 2.755	95 3.740	25 0.984	80 3.149	0.025	0.75	NKJ70SA	66.4 14800	130 29200	20.8	3400	5300	0.561 1.23
		95 3.740	35 1.378	80 3.149	0.025	0.75	NKJ70SA	79.7 17900	184 41000	26.7	3400	5300	0.779 1.71
		100 3.937	28 1.102	80 3.149	1.1 0.043	1.5	NKJ70SA	88.1 19500	143 31700	22.9	3500	5400	0.772 1.70
		100 3.937	30 1.181	80 3.149	0.025	0.75	NA48B	86.3 19400	157 35000	25.1	3500	5400	0.772 1.70
		100 3.937	54 2.126	80 3.149	0.025	0.75	NA48SA	137 30600	286 64000	45.7	3500	5400	1.45 3.19
75 2.953	75 2.953	105 4.133	25 0.984	85 3.346	0.025	0.75	NKJ75SA	76.4 17200	137 30600	22.2	3300	5000	0.64 1.41
		105 4.133	30 1.181	85 3.346	0.025	0.75	NA48B	92.4 20800	135 29900	28.0	3300	5000	0.817 1.81
		105 4.133	35 1.378	85 3.346	0.025	0.75	NKJ75SA	106 24000	214 47600	33.6	3300	5000	1.06 2.35
		105 4.133	54 2.126	85 3.346	0.025	0.75	NA48SA	143 32000	308 68300	48.3	3300	5000	1.56 3.43
		110 4.331	32 1.26	85 3.346	1.1 0.043	1.5	NKJ75SA	91.5 20600	136 30300	28.1	3100	4700	1.06 2.33
80 3.149	80 3.149	110 4.331	25 0.984	90 3.543	0.025	0.75	NKJ80SA	79.5 17800	142 31500	23.8	3100	4700	0.78 1.74
		110 4.331	30 1.181	90 3.543	0.025	0.75	NA48B	91.5 20600	136 29900	28.1	3100	4700	0.862 1.9
		110 4.331	35 1.378	90 3.543	0.025	0.75	NKJ80SA	113 25400	230 51100	36.1	3100	4700	0.98 2.16
		110 4.331	54 2.126	90 3.543	0.025	0.75	NA48B	126 28100	329 73300	50.8	3000	4700	1.619 3.56
		115 4.527	32 1.26	95 3.740	0.043	2	NKJ85SA	95.1 21400	158 35000	30.0	2500	4500	1.14 2.51
85 3.346	85 3.346	115 4.527	25 0.984	95 3.740	0.025	0.75	NKJ85SA	80.2 18000	152 33600	32.6	2500	4400	0.862 1.9
		115 4.527	36 1.417	95 3.740	0.025	0.75	NKJ85SA	114 25500	238 52900	37.3	2800	4400	1.04 2.29
		120 4.724	25 0.984	100 3.937	1.1 0.043	2.5	NA48B	119 26400	220 49100	36.0	2800	4200	1.21 2.68
		120 4.724	63 2.480	100 3.937	0.043	0.75	NA48SA	158 35000	335 74500	64.7	2700	4200	2.427 5.35
90 3.543	90 3.543	120 4.724	25 0.984	100 3.937	0.025	0.75	NKJ90SA	83.6 18600	153 33900	25.8	2800	4200	0.78 1.72
		120 4.724	36 1.417	100 3.937	0.025	0.75	NKJ90SA	118 26200	254 56700	39.1	2800	4200	1.08 2.38
		125 4.921	35 1.378	100 3.937	0.043	0.75	NA48B	114 25600	245 54500	37.8	2600	4000	1.17 2.57

Continued on next page