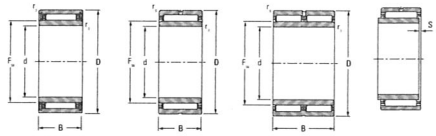
NEEDLE ROLLER BEARINGS WITH INNER RINGS

METRIC SERIES
NKJ, NKJS, NA48
NA49, NA69 SERIES



NKJ ($d \leq 7$)

NKJ ($d \geq 9$), NKJS, NA48, NA49, NA69 ($d \leq 30$)

NA69 ($d \geq 32$)

Shaft Dia.	d	D	B	F_w	$r_{1,min.}$	$g^{(2)}$	Bearing Designation	Load Ratings Dynamic C	Load Ratings Static C_0	Fatigue Load Limit C_u	Speed Ratings Grease	Speed Ratings Oil	Approx. Wt.
mm in	mm in	mm in	mm in	mm in	mm in	mm in		kN lbf		kN	min^{-1}		kg lbs
17 0.6693	17 0.6693	29 1.1417	20 0.787	21 0.8268	0.3 0.012	1.5 0.059	NKJ17/20A	18.1 4070	26.5 6050	4.80	14000	21000	0.059 0.13
	17 0.6693	30 1.1811	13 0.512	22 0.8661	0.3 0.012	1 0.039	NA4903	12.2 2740	16.4 3690	2.50	13000	20000	0.04 0.088
	17 0.6693	30 1.1811	23 0.906	22 0.8661	0.3 0.012	1 0.039	NA6903A	19.8 4450	30.6 6880	4.75	13000	20000	0.084 0.185
	17 0.6693	37 1.4567	20 0.787	24 0.9449	0.6 0.024	1 0.039	NKJS17A	29.1 6540	32.8 7370	5.30	13000	20000	0.106 0.238
20 0.7874	20 0.7874	32 1.2598	16 0.63	24 0.9449	0.3 0.012	1.5 0.059	NKJ20/16A	16.2 3640	24.3 5460	3.70	12000	16000	0.053 0.117
	20 0.7874	32 1.2598	20 0.787	24 0.9449	0.3 0.012	1.5 0.059	NKJ20/20A	19.3 4340	30.3 6810	4.80	12000	16000	0.067 0.148
	20 0.7874	37 1.4567	17 0.669	25 0.9843	0.3 0.012	1.5 0.059	NA4904	21.3 4790	25.5 5730	6.75	12000	16000	0.084 0.185
	20 0.7874	37 1.4567	30 1.181	25 0.9843	0.3 0.012	1.5 0.059	NA6904A	36.6 8230	51 11500	7.95	12000	16000	0.133 0.293
	20 0.7874	37 1.4567	20 0.787	28 1.1024	0.6 0.024	1 0.039	NKJS20A	30.3 6810	38.4 8630	6.15	11000	16000	0.13 0.287
22 0.8661	22 0.8661	34 1.3386	16 0.63	26 1.0236	0.3 0.012	1.5 0.059	NKJ22/16A	16.6 3730	25.7 5780	3.95	11000	17000	0.058 0.128
	22 0.8661	34 1.3386	20 0.787	26 1.0236	0.3 0.012	2 0.079	NKJ22/20A	19.7 4430	32 7190	5.05	11000	17000	0.071 0.157
	22 0.8661	39 1.5354	17 0.669	28 1.1024	0.3 0.012	1.5 0.059	NA4905	23.3 5240	29.6 6650	4.55	10000	16000	0.089 0.196
	22 0.8661	39 1.5354	30 1.181	28 1.1024	0.3 0.012	1 0.039	NA6905A	30.6 6880	50.7 11400	7.65	10000	16000	0.163 0.359
25 0.9843	25 0.9843	38 1.4961	20 0.787	29 1.1417	0.3 0.012	2 0.079	NKJ25/20A	23.4 5260	36.4 8180	5.80	9800	15000	0.086 0.19
	25 0.9843	38 1.4961	30 1.181	29 1.1417	0.3 0.012	2 0.079	NKJ25/30A	29.8 6700	56.4 12700	8.70	9800	15000	0.13 0.287
	25 0.9843	42 1.6535	17 0.669	30 1.1811	0.3 0.012	1.5 0.059	NA4905	24.3 5460	31.7 7130	4.90	9700	15000	0.099 0.218
	25 0.9843	42 1.6535	30 1.181	30 1.1811	0.3 0.012	1.5 0.059	NA6905A	39.7 8920	59.6 13400	9.30	9700	15000	0.178 0.392
	25 0.9843	47 1.8504	22 0.866	32 1.2598	0.6 0.024	1.5 0.059	NKJS25A	36 8090	36.2 8140	7.40	9200	14000	0.174 0.384
28 1.1024	28 1.1024	42 1.6535	20 0.787	32 1.2598	0.3 0.012	2 0.079	NKJ28/20A	24.8 5580	40.4 9080	6.45	8800	14000	0.104 0.229
	28 1.1024	42 1.6535	30 1.181	32 1.2598	0.3 0.012	2 0.079	NKJ28/30A	38.9 8750	72.2 16200	11.2	8800	14000	0.156 0.344

(2) Max. axial displacement

Shaft Dia.	d	D	B	F_w	$r_{1,min.}$	$g^{(2)}$	Bearing Designation	Load Ratings Dynamic C	Load Ratings Static C_0	Fatigue Load Limit C_u	Speed Ratings Grease	Speed Ratings Oil	Approx. Wt.
mm in	mm in	mm in	mm in	mm in	mm in	mm in		kN lbf		kN	min^{-1}		kg lbs
28 1.1024	28 1.1024	45 1.7717	17 0.669	32 1.2598	0.3 0.012	1.5 0.059	NA49/28	25.1 5640	33.8 7600	5.20	9000	14000	0.108 0.238
	28 1.1024	45 1.7717	30 1.181	32 1.2598	0.3 0.012	1.5 0.059	NA69/28A	43.2 9700	62.5 14100	11.0	9000	14000	0.19 0.419
30 1.1811	30 1.1811	45 1.7717	20 0.787	35 1.378	0.3 0.012	1.5 0.059	NKJ30/20A	26.1 5870	44.4 9980	7.05	8000	12000	0.12 0.265
	30 1.1811	45 1.7717	30 1.181	35 1.378	0.3 0.012	1.5 0.059	NKJ30/30A	37.4 8410	70.6 15900	11.0	8000	12000	0.179 0.395
	30 1.1811	47 1.8504	17 0.669	35 1.378	0.3 0.012	1.5 0.059	NA4906	25.9 5820	36 8090	5.55	8200	13000	0.114 0.251
	30 1.1811	47 1.8504	30 1.181	35 1.378	0.3 0.012	1 0.039	NA6906A	42.6 9580	68.2 15300	10.6	8200	13000	0.205 0.452
	30 1.1811	52 2.0472	22 0.866	37 1.4567	0.6 0.024	1.5 0.059	NKJS30A	39 8770	53.4 12000	8.55	7500	12000	0.198 0.437
32 1.2598	32 1.2598	47 1.8504	20 0.787	37 1.4567	0.3 0.012	2 0.079	NKJ32/20A	26.6 6000	46.4 10400	7.20	7600	12000	0.127 0.28
	32 1.2598	47 1.8504	30 1.181	37 1.4567	0.3 0.012	1.5 0.059	NKJ32/30A	38.2 8590	73.9 16600	11.5	7600	12000	0.192 0.423
	32 1.2598	52 2.0472	20 0.787	40 1.5748	0.6 0.024	1.5 0.059	NA49/32	32 7190	49.3 11100	7.85	7100	11000	0.169 0.373
	32 1.2598	52 2.0472	36 1.417	40 1.5748	0.6 0.024	1 0.039	NA69/32A	48.6 10900	84.5 19000	13.1	7100	11000	0.313 0.69
35 1.378	35 1.378	50 1.9685	20 0.787	40 1.5748	0.3 0.012	2 0.079	NKJ35/20A	27.8 6250	50.4 11300	8.05	7000	11000	0.135 0.298
	35 1.378	50 1.9685	30 1.181	40 1.5748	0.3 0.012	1.5 0.059	NKJ35/30A	40 8990	80.2 18000	12.4	7000	11000	0.206 0.455
	35 1.378	55 2.1654	20 0.787	42 1.6535	0.6 0.024	1.5 0.059	NA4907	32.8 7370	51.7 11600	8.25	6700	10000	0.179 0.395
	35 1.378	55 2.1654	36 1.417	42 1.6535	0.6 0.024	1 0.039	NA6907A	49.9 11200	88.7 19900	13.7	6700	10000	0.34 0.75
	35 1.378	58 2.2835	22 0.866	43 1.6929	0.6 0.024	1 0.039	NKJS35A	41.6 9350	60.7 13600	9.75	6700	10000	0.235 0.518
38 1.4961	38 1.4961	53 2.0866	20 0.787	43 1.6929	0.3 0.012	2 0.079	NKJ38/20A	29 6520	54.4 12200	9.65	6400	9900	0.146 0.322
	38 1.4961	53 2.0866	30 1.181	43 1.6929	0.3 0.012	1.5 0.059	NKJ38/30A	41.6 9350	86.6 19500	13.4	6400	9900	0.196 0.432
40 1.5748	40 1.5748	55 2.1654	20 0.787	45 1.7717	0.3 0.012	2 0.079	NKJ40/20A	29.5 6630	56.4 12700	9.00	6100	9400	0.152 0.335
	40 1.5748	55 2.1654	30 1.181	45 1.7717	0.3 0.012	1.5 0.059	NKJ40/30A	42.3 9510	89.8 20200	13.9	6100	9400	0.229 0.505
	40 1.5748	62 2.4409	22 0.866	48 1.8898	0.6 0.024	1.5 0.059	NA4908	44.2 9940	67.8 15200	10.9	5900	9100	0.248 0.547
	40 1.5748	62 2.4409	40 1.575	48 1.8898	0.6 0.024	1.5 0.059	NA6908A	70.8 15900	124 27900	19.8	5900	9100	0.473 1.043
	40 1.5748	65 2.5591	22 0.866	50 1.9685	1 0.039	1 0.039	NKJS40A	45.5 10200	71.3 16000	11.4	5700	8700	0.292 0.644
42 1.6535	42 1.6535	57 2.2441	20 0.787	47 1.8504	0.3 0.012	2 0.079	NKJ42/20A	30 6740	58.5 13200	9.30	5900	9000	0.159 0.351
	42 1.6535	57 2.2441	30 1.181	47 1.8504	0.3 0.012	1.5 0.059	NKJ42/30A	43 9670	93.1 20900	14.4	5900	9000	0.241 0.531
45 1.7717	45 1.7717	62 2.4409	25 0.984	50 1.9685	0.6 0.024	3 0.118	NKJ45/25A	40.7 9150	79.3 17800	12.5	5500	8500	0.223 0.492

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