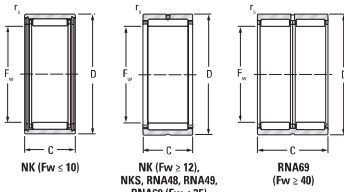




## NEEDLE ROLLER BEARINGS

### NEEDLE ROLLER BEARINGS WITHOUT INNER RINGS

METRIC SERIES  
NK, NKS, RNA48, RNA49  
RNA69 SERIES



Shaft Dia. mm in	F <sub>sw</sub> mm in	D mm in	C mm in	r <sub>a, min.</sub> mm in	Bearing Designation	Load Ratings		Fatigue Load Limit C <sub>10</sub> kN lbf	Speed Ratings		Approx. Wt. kg lbf
						Dynamic C kN lbf	Static C <sub>0</sub> kN lbf		Grease	Oil	
5 0.1969	5 0.1969	10 0.394	0.394	0.2	NK5/10TN	219 490	1.71 384	0.269	31600	47000	0.004 0.009
5 0.1969	5 0.1969	12 0.472	0.396	0.2	NK5/12TN	304 663	2.63 591	0.463	31600	47000	0.004 0.009
6 0.2362	6 0.2362	12 0.472	0.394	0.2	NK6/10	319 717	2.5 552	0.423	29000	44000	0.005 0.011
6 0.2362	6 0.2362	12 0.472	0.394	0.2	NK6/12TN	307 690	2.74 616	0.423	29000	44000	0.006 0.013
7 0.2756	7 0.2756	14 0.394	0.394	0.3	NK7/10TN	274 616	2.44 543	0.370	28000	42000	0.007 0.015
7 0.2756	7 0.2756	14 0.394	0.394	0.3	NK7/12TN	34 794	3.22 724	0.480	28000	42000	0.009 0.020
8 0.315	8 0.315	16 0.566	0.472	0.2	NK8/12	457 1030	4.29 950	0.749	26000	41000	0.011 0.024
8 0.315	8 0.315	16 0.566	0.472	0.2	NK8/12ASR1	457 1030	4.89 1100	0.749	26000	41000	0.011 0.024
8 0.315	8 0.315	16 0.566	0.472	0.2	NK8/16	522 1170	5.78 1300	0.880	26000	41000	0.013 0.029
8 0.315	8 0.315	16 0.566	0.472	0.2	NK8/12	427 960	4.6 1030	0.730	26000	40000	0.012 0.026
9 0.3543	9 0.3543	16 0.566	0.472	0.2	NK9/16	557 1250	6.47 1450	0.980	26000	40000	0.015 0.033
10 0.3937	10 0.3937	17 0.635	0.472	0.2	NK10/12	54 1210	6.43 1450	0.980	25000	39000	0.013 0.029
10 0.3937	10 0.3937	17 0.635	0.472	0.2	NK10/16TN	63 1410	6.27 1410	0.940	25000	39000	0.015 0.033
12 0.4724	12 0.4724	18 0.748	0.472	0.2	NK12/12A	636 1410	7.6 1710	1.15	19000	30000	0.013 0.029
12 0.4724	12 0.4724	18 0.748	0.472	0.2	NK12/16	578 1300	8.03 2000	1.49	24000	37000	0.018 0.040
14 0.5512	14 0.5512	22 0.891	0.512	0.2	RNA4900	539 1210	10.3 2300	1.55	16000	24000	0.018 0.040
14 0.5512	14 0.5512	22 0.891	0.512	0.2	NK14/16A	124 2790	16.8 3750	2.25	16000	24000	0.023 0.051
14 0.5512	14 0.5512	22 0.891	0.512	0.2	NK14/20A	142 3300	18.4 4140	2.80	16000	24000	0.028 0.060
15 0.5906	15 0.5906	23 0.930	0.53	0.2	NK15/16A	124 2790	15 3370	2.30	15000	24000	0.024 0.053
15 0.5906	15 0.5906	23 0.930	0.53	0.2	NK15/20A	142 3300	18.6 4140	2.95	15000	24000	0.031 0.068
16 0.6299	16 0.6299	24 0.949	0.512	0.2	RNA4901	165 3660	12.3 2770	1.85	18000	28000	0.020 0.044
16 0.6299	16 0.6299	24 0.949	0.512	0.2	NK16/16A	13 2920	16.2 3640	2.50	18000	28000	0.025 0.055

## Heavy-Duty Needle Roller Bearings

Shaft Dia. mm in	F <sub>sw</sub> mm in	D mm in	C mm in	r <sub>a, min.</sub> mm in	Bearing Designation	Load Ratings		Fatigue Load Limit C <sub>10</sub> kN	Speed Ratings		Approx. Wt. kg lbf
						Dynamic C kN lbf	Static C <sub>0</sub> kN lbf		Grease	Oil	
16 0.6299	16 0.6299	24 0.949	0.512	0.2	NK16/20A	15.4 3460	20.2 4540	3.20	18000	28000	0.028 0.079
16 0.6299	16 0.6299	24 0.949	0.512	0.2	RNA4901	16.1 3620	21.3 4750	3.30	18000	28000	0.036 0.079
17 0.6693	17 0.6693	25 0.984	0.53	0.2	NK17/16A	13.6 3000	17.6 3900	2.70	17000	27000	0.027 0.060
17 0.6693	17 0.6693	25 0.984	0.53	0.2	NK17/20A	15.4 3460	20.4 4550	3.25	17000	27000	0.034 0.075
18 0.7087	18 0.7087	26 1.0238	0.53	0.2	NK18/16A	13.6 3000	17.7 3900	2.70	16000	25000	0.028 0.062
18 0.7087	18 0.7087	26 1.0238	0.53	0.2	NK18/20A	16.1 3620	22.0 4950	3.50	16000	25000	0.035 0.077
18 0.7087	18 0.7087	26 1.0238	0.53	0.2	NK18/20A	16.1 3620	22.0 4950	3.50	16000	25000	0.035 0.077
18 0.7087	18 0.7087	26 1.0238	0.53	0.2	NK18/20A	16.1 3620	22.0 4950	3.50	16000	25000	0.035 0.077
19 0.748	19 0.748	27 1.063	0.53	0.2	NK19/16A	11.8 2650	16.2 3640	2.45	17000	26000	0.025 0.059
19 0.748	19 0.748	27 1.063	0.53	0.2	NK19/16A	11.8 2650	16.2 3640	2.45	17000	26000	0.025 0.059
19 0.748	19 0.748	27 1.063	0.53	0.2	NK19/20A	14.8 3290	23.6 5310	3.75	15000	24000	0.037 0.082
20 0.7874	20 0.7874	28 1.1024	0.572	0.2	RNA4902	11.8 2650	15.3 3400	2.35	14000	22000	0.023 0.051
20 0.7874	20 0.7874	28 1.1024	0.572	0.2	NK20/16A	11.1 2470	19.1 4250	2.90	14000	22000	0.020 0.046
20 0.7874	20 0.7874	28 1.1024	0.572	0.2	NK20/20A	17.5 3900	25.3 5600	4.00	14000	22000	0.038 0.084
20 0.7874	20 0.7874	28 1.1024	0.572	0.2	RNA4902A	16.4 4140	26.8 6000	4.20	14000	22000	0.042 0.093
20 0.7874	20 0.7874	28 1.1024	0.572	0.2	NK20A	24.4 5400	26.7 6000	4.30	15000	24000	0.058 0.128
21 0.8268	21 0.8268	29 1.1417	0.53	0.2	NK21/16A	16.3 3640	22.8 5050	3.30	14000	21000	0.032 0.071
21 0.8268	21 0.8268	29 1.1417	0.53	0.2	NK21/20A	18.1 4070	25.9 5800	4.25	14000	21000	0.040 0.088
22 0.8661	22 0.8661	30 1.1811	0.572	0.2	RNA4903	12.2 2740	16.4 3640	2.50	13000	20000	0.025 0.055
22 0.8661	22 0.8661	30 1.1811	0.572	0.2	NK22/16A	16.2 3600	21.7 4850	3.30	13000	20000	0.033 0.073
22 0.8661	22 0.8661	30 1.1811	0.572	0.2	NK22/20A	18 4000	27 6070	4.30	13000	20000	0.041 0.090
22 0.8661	22 0.8661	30 1.1811	0.572	0.2	RNA4903A	15.8 3500	30.6 6800	4.75	13000	20000	0.056 0.123
22 0.8661	22 0.8661	30 1.1811	0.572	0.2	NK22A	22.9 5100	27.1 6000	4.30	14000	21000	0.069 0.152
24 0.9449	24 0.9449	32 1.2598	0.53	0.2	NK24/16A	16.2 3640	24.3 5400	3.70	12000	18000	0.038 0.077
24 0.9449	24 0.9449	32 1.2598	0.53	0.2	NK24/20A	19.4 4340	30.3 6810	4.80	12000	18000	0.045 0.099
24 0.9449	24 0.9449	32 1.2598	0.53	0.2	NK24A	25.1 5590	32.8 7370	5.30	13000	20000	0.073 0.161
25 0.9843	25 0.9843	33 1.2992	0.53	0.2	NK25/16A	16.1 3600	24.4 5400	3.75	11000	17000	0.037 0.082
25 0.9843	25 0.9843	33 1.2992	0.53	0.2	NK25/20A	18.1 4000	30.4 6800	4.80	11000	17000	0.047 0.104
25 0.9843	25 0.9843	33 1.2992	0.53	0.2	RNA4904	21.3 4750	25.5 5700	3.95	12000	18000	0.061 0.134
25 0.9843	25 0.9843	33 1.2992	0.53	0.2	RNA4904A	36.6 8200	51.0 11500	7.95	12000	18000	0.091 0.201

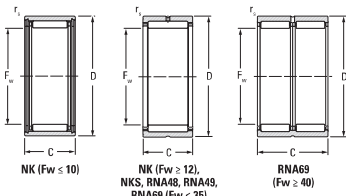
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**NEEDLE ROLLER BEARINGS**

**NEEDLE ROLLER BEARINGS WITHOUT INNER RINGS**

**METRIC SERIES**  
**NK, NKS, RNA48, RNA49, RNA69 SERIES**



Shaft Dia. mm in	F <sub>w</sub> mm in	D mm in	C mm in	r <sub>a, max.</sub> mm in	Bearing Designation	Load Ratings			Speed Ratings		Approx. Wt. kg lbs
						Dynamic C	Static C <sub>0</sub>	Fatigue Load Limit C <sub>e</sub>	Grease	Oil	
25 0.9843	25 0.9843	39 1.4961	20 0.787	0.3 0.024	NK325A	29.1 6540	33 7420	5.39	12600	18000	0.276 0.158
28 1.0928	28 1.0928	34 1.3386	18 0.709	0.3 0.012	NK2616A	16.6 3730	25.7 5780	3.95	11000	17000	0.239 0.136
28 1.0928	28 1.0928	34 1.3386	20 0.787	0.3 0.012	NK2820A	18.7 4190	32 7150	5.05	11000	17000	0.268 0.150
28 1.1024	28 1.1024	37 1.4567	20 0.787	0.3 0.012	NK2820A	22.6 5080	34.1 7730	5.50	10000	16000	0.357 0.198
28 1.1024	28 1.1024	37 1.4567	30 1.181	0.3 0.012	NK2830A	29 6520	53.8 12100	8.30	10000	16000	0.488 0.274
28 1.1024	28 1.1024	39 1.5354	17 0.669	0.3 0.012	RNA49/22	23.3 5190	29.6 6630	4.55	10000	16000	0.299 0.168
28 1.1024	28 1.1024	39 1.5354	30 1.181	0.3 0.012	RNA49/22A	30.6 6880	50.7 11400	3.95	10000	16000	0.397 0.226
28 1.1024	28 1.1024	42 1.6535	20 0.787	0.3 0.024	NKS32A	30.3 6810	38.4 8630	6.15	11000	16000	0.304 0.170
29 1.1417	29 1.1417	38 1.4961	20 0.787	0.3 0.012	NK2920A	23.4 5200	36.4 8180	5.80	9800	15000	0.269 0.150
29 1.1417	29 1.1417	38 1.4961	30 1.181	0.3 0.012	NK2930A	28.6 6370	56.4 12500	8.70	9700	15000	0.390 0.218
30 1.1811	30 1.1811	40 1.5748	20 0.787	0.3 0.012	NK3020A	24.2 5440	38.3 8610	6.10	9500	15000	0.271 0.157
30 1.1811	30 1.1811	40 1.5748	30 1.181	0.3 0.012	NK3030A	34.7 7800	61 13700	3.45	9500	15000	0.497 0.278
30 1.1811	30 1.1811	42 1.6535	17 0.669	0.3 0.012	RNA49/25	24.3 5460	31.7 7130	4.90	9700	15000	0.271 0.157
30 1.1811	30 1.1811	42 1.6535	30 1.181	0.3 0.012	RNA49/25A	30.7 6820	50.6 11400	5.39	9700	15000	0.377 0.209
30 1.1811	30 1.1811	45 1.7717	22 0.866	0.3 0.024	NKS30A	34.3 7710	42.8 9620	6.85	9900	15000	0.314 0.176
32 1.2598	32 1.2598	42 1.6535	20 0.787	0.3 0.012	NK3220A	24.8 5500	40.4 9080	6.45	8800	14000	0.274 0.153
32 1.2598	32 1.2598	42 1.6535	30 1.181	0.3 0.012	NK3230A	35.6 7900	64.3 14300	9.95	8800	14000	0.412 0.237
32 1.2598	32 1.2598	45 1.7717	17 0.669	0.3 0.012	RNA49/28	25.4 5640	33.8 7600	5.20	9000	14000	0.280 0.176
32 1.2598	32 1.2598	45 1.7717	30 1.181	0.3 0.012	RNA49/28A	43.2 9710	62.5 14100	9.75	9100	14000	0.440 0.249
32 1.2598	32 1.2598	47 1.8504	22 0.866	0.3 0.024	NKS32A	38 8480	46.2 10400	7.40	9200	14000	0.329 0.185
35 1.378	35 1.378	47 1.7717	20 0.787	0.3 0.012	NKS3520A	28.1 6310	44.4 9980	7.05	8900	12000	0.281 0.179
35 1.378	35 1.378	47 1.7717	30 1.181	0.3 0.012	NKS3530A	37.4 8410	70.6 15900	11.0	8900	12000	0.322 0.189

**Heavy-Duty Needle Roller Bearings**

Shaft Dia. mm in	F <sub>w</sub> mm in	D mm in	C mm in	r <sub>a, max.</sub> mm in	Bearing Designation	Load Ratings		Fatigue Load Limit C <sub>e</sub>	Speed Ratings		Approx. Wt. kg lbs
						Dynamic C	Static C <sub>0</sub>		Grease	Oil	
35 1.378	35 1.378	47 1.8504	18 0.709	0.3 0.012	RNA49/26	25.0 5620	36 8090	5.55	8200	13000	0.281 0.179
35 1.378	35 1.378	47 1.8504	30 1.181	0.3 0.012	RNA49/26A	42.6 9580	68.2 15300	10.6	8200	13000	0.418 0.236
35 1.378	35 1.378	50 1.9685	22 0.866	0.3 0.024	NKS35A	37.5 8430	49.9 11200	8.00	8400	13000	0.310 0.187
37 1.4567	37 1.4567	47 1.8504	20 0.787	0.3 0.012	NK3720A	26.6 5980	46.4 10400	7.40	7600	12000	0.284 0.165
37 1.4567	37 1.4567	47 1.8504	30 1.181	0.3 0.012	NK3730A	38.2 8500	73.9 16600	11.5	7600	12000	0.328 0.192
37 1.4567	37 1.4567	52 2.0472	22 0.866	0.3 0.024	NKS37A	39 8770	53.4 12000	8.55	7800	12000	0.324 0.195
38 1.4961	38 1.4961	48 1.8898	20 0.787	0.3 0.012	NK3820A	21.7 4880	40.9 9190	6.40	7300	11000	0.267 0.152
38 1.4961	38 1.4961	48 1.8898	30 1.181	0.3 0.012	NK3830A	31.9 7170	67 15100	10.4	7300	11000	0.321 0.188
40 1.5748	40 1.5748	50 1.9685	20 0.787	0.3 0.012	NK4020A	27.8 6290	51.9 11500	8.05	7000	11000	0.289 0.166
40 1.5748	40 1.5748	50 1.9685	30 1.181	0.3 0.012	NK4030A	40 8960	81.2 18000	12.4	7000	11000	0.327 0.192
40 1.5748	40 1.5748	52 2.0472	20 0.787	0.3 0.024	RNA49/32	32 7190	49.3 11000	7.85	7100	11000	0.300 0.170
40 1.5748	40 1.5748	52 2.0472	36 1.417	0.3 0.024	RNA49/32A	48.6 10900	84.5 19000	26.1	7100	11000	0.485 0.276
40 1.5748	40 1.5748	55 2.1654	22 0.866	0.3 0.024	NKS40A	46.3 10300	57 12800	9.15	7200	11000	0.340 0.193
42 1.6535	42 1.6535	52 2.0472	20 0.787	0.3 0.012	NK4220A	28.3 6390	52.4 11800	8.35	6600	10000	0.285 0.167
42 1.6535	42 1.6535	52 2.0472	30 1.181	0.3 0.012	NK4230A	40.7 9190	82.2 18800	13.0	6600	10000	0.341 0.191
42 1.6535	42 1.6535	55 2.1654	20 0.787	0.3 0.024	RNA49/37	32.8 7370	51.7 11600	8.25	6700	10000	0.314 0.178
42 1.6535	42 1.6535	55 2.1654	36 1.417	0.3 0.024	RNA49/37A	48.9 11200	88.7 19900	13.7	6700	10000	0.428 0.241
43 1.6929	43 1.6929	53 2.0866	20 0.787	0.3 0.012	NK4320A	29 6530	54.4 12200	8.85	6400	9900	0.289 0.164
43 1.6929	43 1.6929	53 2.0866	30 1.181	0.3 0.012	NK4330A	41.6 9300	86.6 19500	13.4	6400	9900	0.324 0.186
43 1.6929	43 1.6929	58 2.2832	22 0.866	0.3 0.024	NKS43A	41.6 9300	60.7 13600	9.75	6700	10000	0.350 0.198
45 1.7717	45 1.7717	55 2.1654	20 0.787	0.3 0.012	NK4520A	29.5 6630	56.4 12500	9.00	6100	9400	0.300 0.170
45 1.7717	45 1.7717	55 2.1654	30 1.181	0.3 0.012	NK4530A	42.3 9510	82.8 20200	13.9	6100	9400	0.361 0.203
47 1.8504	47 1.8504	60 2.3622	22 0.866	0.3 0.024	NKS45A	43 9670	64.2 14400	10.3	6400	9800	0.356 0.200
47 1.8504	47 1.8504	60 2.3622	30 1.181	0.3 0.012	NK4730A	39 8740	58.5 13200	9.30	5900	9000	0.304 0.172
47 1.8504	47 1.8504	62 2.4409	20 0.787	0.3 0.012	NK4720A	43 9670	83.1 19500	14.4	5900	9000	0.458 0.258
48 1.8898	48 1.8898	62 2.4409	22 0.866	0.3 0.024	RNA49/40	44.2 9940	67.8 15000	10.9	5900	9100	0.354 0.200
48 1.8898	48 1.8898	62 2.4409	30 1.181	0.3 0.012	RNA49/40A	70.8 15900	124 27900	19.8	5900	9100	0.500 0.281
50 1.9685	50 1.9685	62 2.4409	25 0.984	0.3 0.012	NKS/50A	46.7 10400	79.3 17600	12.5	5500	8500	0.321 0.177

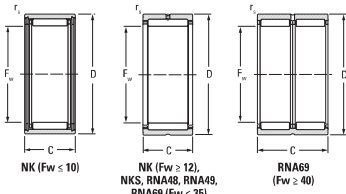
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## NEEDLE ROLLER BEARINGS

### NEEDLE ROLLER BEARINGS WITHOUT INNER RINGS

METRIC SERIES  
NK, NKS, RNA48, RNA49, RNA69 SERIES



Shaft Dia. mm in	F <sub>sw</sub> mm in	D mm in	C mm in	r <sub>a max.</sub> mm in	Bearing Designation	Load Ratings		Fatigue Load Limit C <sub>10</sub> kN lbf	Speed Ratings		Approx. Wt. kg lbf
						Dynamic C kN lbf	Static C <sub>0</sub> kN lbf		Grease mm <sup>2</sup>	Oil mm <sup>2</sup>	
50 1.9685	50 1.9685	62 2.4489	35 1.378	0.6 0.024	NK5035A	55 12400	117 26300	18.2	5500	8500	0.242 0.534
52 2.0472	52 2.0472	68 2.6772	35 1.378	0.6 0.024	NK5235A	45.5 10200	71.3 15800	11.4	5700	8700	0.178 0.395
55 2.1654	55 2.1654	68 2.6772	25 0.984	0.6 0.024	NK5525A	46.5 10400	87.3 19600	13.9	5000	7800	0.207 0.456
58 2.2835	58 2.2835	72 2.8346	22 0.866	0.6 0.024	NK5822A	48.2 10800	91.7 20600	15.5	4200	6500	0.257 0.567
60 2.3622	60 2.3622	72 2.8346	25 0.984	0.6 0.024	NK6025A	49.2 11000	97.2 21800	16.5	4000	7300	0.237 0.523
63 2.4803	63 2.4803	80 3.1496	25 0.984	0.6 0.024	NK6325A	50.9 11500	103 23200	16.5	4000	7300	0.237 0.523
65 2.5591	65 2.5591	80 3.1496	28 1.102	0.6 0.024	NK6528A	52.6 11900	109 24400	17.1	4500	6900	0.285 0.628
68 2.6772	68 2.6772	82 3.2283	25 0.984	0.6 0.024	NK6825A	54.3 12200	115 25600	18.3	4200	6700	0.262 0.579
70 2.7559	70 2.7559	85 3.3465	25 0.984	0.6 0.024	NK7025A	56.2 12600	121 26800	18.1	4000	6200	0.287 0.631

## Heavy-Duty Needle Roller Bearings

Shaft Dia. mm in	F <sub>sw</sub> mm in	D mm in	C mm in	r <sub>a max.</sub> mm in	Bearing Designation	Load Ratings		Fatigue Load Limit C <sub>10</sub> kN lbf	Speed Ratings		Approx. Wt. kg lbf
						Dynamic C kN lbf	Static C <sub>0</sub> kN lbf		Grease mm <sup>2</sup>	Oil mm <sup>2</sup>	
70 2.7559	70 2.7559	85 3.3465	25 0.984	0.6 0.024	NK7025A	56.2 12600	121 26800	18.1	4000	6200	0.287 0.631
72 2.8346	72 2.8346	90 3.5433	25 0.984	0.6 0.024	NK7225A	58.2 13100	127 28200	19.3	4000	6200	0.313 0.684
73 2.874	73 2.874	90 3.5433	28 1.102	0.6 0.024	NK7328A	59.2 13300	132 29700	21.1	3700	5900	0.413 0.911
75 2.9528	75 2.9528	92 3.622	25 0.984	0.6 0.024	NK7525A	60.2 13500	137 30300	19.0	3600	5600	0.284 0.625
77 3.0315	77 3.0315	95 3.7402	25 0.984	0.6 0.024	NK7725A	62.2 14000	143 31700	21.0	3400	5300	0.330 0.728
80 3.1496	80 3.1496	100 3.937	25 0.984	0.6 0.024	NK8025A	64.2 14500	149 33100	21.0	3400	5300	0.330 0.728
85 3.3465	85 3.3465	105 4.1339	25 0.984	0.6 0.024	NK8525A	66.2 15000	155 34500	22.2	3300	5000	0.296 0.652
88 3.4646	88 3.4646	110 4.3307	25 0.984	0.6 0.024	NK8825A	68.2 15500	161 35900	22.8	3100	4700	0.269 0.592
90 3.5433	90 3.5433	110 4.3307	30 1.181	0.6 0.024	NK9030A	70.2 16000	167 37300	23.8	3100	4700	0.269 0.592
95 3.7402	95 3.7402	115 4.5275	28 1.102	0.6 0.024	NK9528A	72.2 16500	173 38700	25.1	2900	4400	0.258 0.568
100 3.937	100 3.937	120 4.7244	26 1.024	0.6 0.024	NK10026A	74.2 17000	179 40100	26.1	2900	4400	0.258 0.568
100 3.937	100 3.937	120 4.7244	35 1.378	0.6 0.024	NK10035A	76.2 17500	185 41500	26.1	2900	4400	0.258 0.568
100 3.937	100 3.937	120 4.7244	40 1.575	0.6 0.024	NK10040A	78.2 18000	191 42900	26.1	2900	4400	0.258 0.568
105 4.1339	105 4.1339	125 4.9213	26 1.024	0.6 0.024	NK10526A	80.2 18500	197 44300	26.1	2900	4400	0.258 0.568

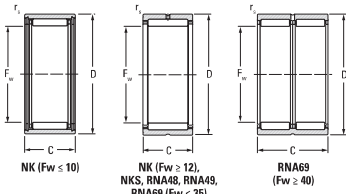
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**NEEDLE ROLLER BEARINGS**

**NEEDLE ROLLER BEARINGS WITHOUT INNER RINGS**

**METRIC SERIES**  
NK, NKS, RNA48, RNA49, RNA69 SERIES



NK (Fw ≤ 10)

NK (Fw ≥ 12),  
NKS, RNA48, RNA49,  
RNA69 (Fw ≤ 35)

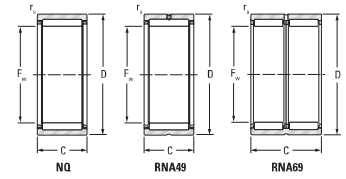
RNA69  
(Fw ≥ 40)

Shaft Dia. mm in	F <sub>w</sub> mm in	D mm in	C mm in	r <sub>min.</sub> mm in	Bearing Designation	Load Ratings			Speed Ratings		Approx. Wt. kg lbs.
						Dynamic C	Static C <sub>0</sub>	Fatigue Load Limit C <sub>L</sub>	Grease	Oil	
105 4.1339	105 4.1339	125 4.9213	35 1.378	1.1 0.043	RNA4818	114 25600	245 55100	37.8	2600	4000	0.246 1.545
	105 4.1339	125 4.9213	63 2.48	1.1 0.043	RNA6918A	154 34000	437 98200	66.0	2600	4000	1.500 3.300
110 4.3307	110 4.3307	130 5.1181	30 1.181	1.1 0.043	NK110/30A	105 23200	220 49200	33.6	2500	3800	0.260 1.455
	110 4.3307	130 5.1181	35 1.378	1.1 0.043	RNA4919	115 25900	253 56500	38.4	2500	3800	0.277 1.713
	110 4.3307	130 5.1181	40 1.575	1.1 0.043	NK110/40A	132 29700	301 67700	45.7	2500	3800	0.300 1.684
	110 4.3307	130 5.1181	63 2.45	1.1 0.043	RNA6919A	158 35000	459 102000	68.8	2500	3800	1.470 3.241
115 4.5278	115 4.5278	140 5.5118	40 1.575	1.1 0.043	RNA4820	120 31200	296 66500	43.8	2400	3700	1.220 2.690
120 4.7244	120 4.7244	140 5.5118	30 1.181	1 0.039	RNA4822	90.3 20300	230 51700	33.7	2300	3500	0.795 1.731
125 4.9213	125 4.9213	150 5.9055	40 1.575	1.1 0.043	RNA4822	147 33000	325 73100	47.0	2200	3400	1.320 2.910
130 5.1181	130 5.1181	160 6.2992	30 1.181	1 0.039	RNA4824	94.1 21300	240 53600	35.7	2100	3200	0.850 1.874
135 5.315	135 5.315	165 6.4961	45 1.772	1.1 0.043	RNA4824	177 39800	407 91500	58.5	2000	3100	1.380 3.365
145 5.7087	145 5.7087	185 6.4961	35 1.378	1 0.039	RNA4826	112 25200	323 72600	44.8	1900	2900	1.100 2.425
150 5.9055	150 5.9055	180 7.0866	50 1.969	1.5 0.059	RNA4828	201 45200	495 111000	68.7	1800	2800	2.420 5.355
155 6.1024	155 6.1024	175 6.8938	35 1.378	1.1 0.043	RNA4828	116 26100	346 77800	47.1	1700	2700	1.170 2.579
160 6.2992	160 6.2992	190 7.4833	50 1.969	1.5 0.059	RNA4828	214 48100	549 123000	74.8	1700	2600	2.540 5.644
165 6.4961	165 6.4961	180 7.4833	40 1.575	1.1 0.043	RNA4830A	142 31900	402 90400	53.5	1600	2500	1.540 3.395
175 6.8898	175 6.8898	200 7.874	40 1.575	1.1 0.043	RNA4832A	186 39000	425 95000	55.6	1500	2400	1.910 4.211

**Heavy-Duty Needle Roller Bearings**

**NEEDLE ROLLER BEARINGS WITHOUT INNER RINGS**

**METRIC SERIES**  
NQ, RNA49, RNA69 SERIES



NQ

RNA49

RNA69

Shaft Dia. mm in	F <sub>w</sub> mm in	D mm in	C mm in	r <sub>min.</sub> mm in	Bearing Designation	Load Ratings			Fatigue Load Limit C <sub>L</sub>	Speed Ratings		Approx. Wt. kg lbs.
						Dynamic C	Static C <sub>0</sub>			Grease	Oil	
12 0.4724	12 0.4724	19 0.7480	12 0.4724	0.3	NQ12/12A0	5.3	5.45	0.820	—	—	3000	0.012
	12 0.4724	24 0.9448	9.8 0.386	0.3	12NQ2410A	5.0	6.3	0.960	—	—	3000	0.023
13 0.5118	13 0.5118	21 0.8268	12 0.4724	0.3	NQ132112	8.25	8.4	1.30	—	—	2400	0.015
14 0.5512	14 0.5512	22 0.8661	16 0.630	0.5	NQ1416D	11.8	13.8	2.10	—	—	2800	0.021
15 0.5906	15 0.5906	23 0.9055	16 0.630	0.5	NQ1516B	15.2	17.4	2.65	—	—	2100	0.021
	15 0.5906	24 0.9448	10 0.3937	0.3	15NQ2410D	8.65	8.65	1.30	—	—	2100	0.016
	15 0.5906	24 0.9448	12 0.4724	0.3	15NQ2412A	9.7	9.75	1.50	—	—	2100	0.019
	15 0.5906	25 0.9842	12 0.4724	0.6	NQ152512	10.7	11.1	1.70	—	—	2100	0.022
	15 0.5906	25 0.9842	16 0.630	0.5	NQ152516 <sup>(1)</sup>	11.8	14	2.10	—	—	2400	0.032
	15 0.5906	28 1.1024	12 0.4724	0.6	15NQ2812	10.7	11.1	1.70	—	—	2100	0.024
	15 0.5906	28 1.1024	12 0.4724	0.6	NQ152812-1	10.7	11.1	1.70	—	—	2100	0.024
	15 0.5906	28 1.1024	15 0.5906	1.0	15NQ2815	12.7	13.7	2.10	—	—	2100	0.042
16 0.6299	16 0.6299	23 0.9055	16 0.630	0.5	16NQ2316	13	16.2	2.50	—	—	2300	0.019
	16 0.6299	23 0.9055	22 0.8661	0.5	16NQ2322A	17	22.9	3.55	—	—	2300	0.026
17 0.6693	17 0.6693	25 0.9842	16 0.630	0.5	NQ1716D	11.4	16.2	2.45	—	—	2600	0.026
	17 0.6693	30 1.1811	13 0.5118	0.3	17NQ3013D	10.2	10.8	1.65	—	—	2700	0.041
	17 0.6693	32 1.2601	16 0.630	0.8	17NQ3216D	18.5	17.1	2.65	—	—	2900	0.053
18 0.7087	18 0.7087	29 1.1417	25 0.9842	0.3	NQ182925-1	24.2	27.5	4.30	—	—	2600	0.056
	18 0.7087	34 1.3386	20 0.7874	0.3	18NQ3420A0	17.1	21.2	3.25	—	—	2500	0.050
20 0.7874	20 0.7874	28 1.1024	16 0.630	0.3	NQ2016D	12.1	18.2	2.75	—	—	2200	0.030
	20 0.7874	28 1.1024	23 0.9055	0.3	NQ202823	18.5	27.1	4.25	—	—	2200	0.040
	20 0.7874	30 1.1811	15 0.5906	0.6	20NQ3015E0	11.4	15.1	2.25	—	—	2200	0.037

<sup>(1)</sup> With outer ring groove

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