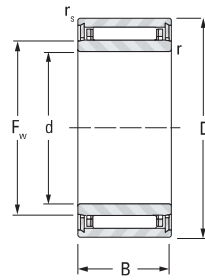
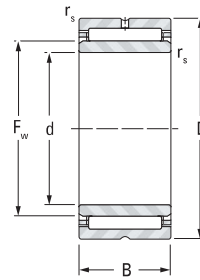


NEEDLE ROLLER BEARINGS WITH INNER RINGS

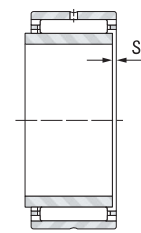
METRIC SERIES



NKJ
($d \leq 7$)



NKJ, NKJS
NA49, NA69



Shaft Dia.	d	D	B	F _w	r _s min	s ⁽¹⁾	Bearing Designation	Load Ratings		Speed Rating		C _g	Approx. Wt.
								Dynamic	Static				
								C	C ₀	Oil	Grease		
mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.		kN lbf.		min ⁻¹			kg lbs.
5 0,1969	5 0,1969	15 0,5906	12 0,472	8 0,3150	0,3 0,012	1,5 0,059	NKJ5/12	4,57 1030	4,89 1100	41000	26000	0,0148	0,014 0,031
	5 0,1969	15 0,5906	16 0,630	8 0,3150	0,3 0,012	1,5 0,059	NKJ5/16	5,22 1170	5,78 1300	41000	26000	0,0154	0,017 0,037
6 0,2362	6 0,2362	16 0,6299	12 0,472	9 0,3543	0,3 0,012	1,5 0,059	NKJ6/12	4,27 960	4,60 1030	40000	26000	0,0153	0,015 0,033
	6 0,2362	16 0,6299	16 0,630	9 0,3543	0,3 0,012	1,5 0,059	NKJ6/16	5,57 1250	6,47 1450	40000	26000	0,0167	0,019 0,042
7 0,2756	7 0,2756	17 0,6693	12 0,472	11,5 0,4528	0,3 0,012	1,5 0,059	NKJ7/12	5,40 1210	6,43 1450	39000	25000	0,0174	0,017 0,037
	7 0,2756	17 0,6693	16 0,630	11,5 0,4528	0,3 0,012	1,5 0,059	NKJ7/16TN	5,30 1190	6,27 1410	39000	25000	0,0173	0,021 0,046
9 0,3543	9 0,3543	19 0,7480	12 0,472	12 0,4724	0,3 0,012	1,5 0,059	NKJ9/12	6,86 1540	7,60 1710	30000	19000	0,0189	0,018 0,040
	9 0,3543	19 0,7480	16 0,630	12 0,4724	0,3 0,012	1,5 0,059	NKJ9/16	6,78 1520	9,03 2030	30000	19000	0,0204	0,024 0,053
10 0,3937	10 0,3937	22 0,8661	13 0,512	14 0,5512	0,3 0,012	1,0 0,039	NA4900	9,39 2110	10,3 2320	24000	16000	0,0211	0,025 0,055
	10 0,3937	22 0,8661	16 0,630	14 0,5512	0,6 0,024	1,5 0,059	NKJ10/16	12,4 2790	14,8 3330	24000	16000	0,0231	0,032 0,071
	10 0,3937	22 0,8661	20 0,787	14 0,5512	0,3 0,012	1,5 0,059	NKJ10/20	14,7 3300	18,4 4140	24000	16000	0,0244	0,040 0,088
12 0,4724	12 0,4724	24 0,9449	13 0,512	16 0,6299	0,3 0,012	1,0 0,039	NA4901	10,5 2360	12,0 2700	28000	18000	0,0233	0,028 0,062
	12 0,4724	24 0,9449	16 0,630	16 0,6299	0,3 0,012	1,5 0,059	NKJ12/16	13,0 2920	16,2 3640	28000	18000	0,0250	0,036 0,079
	12 0,4724	24 0,9449	20 0,787	16 0,6299	0,3 0,012	1,5 0,059	NKJ12/20	15,4 3460	20,2 4540	28000	18000	0,0264	0,046 0,101
	12 0,4724	24 0,9449	22 0,866	16 0,6299	0,3 0,012	1,0 0,039	NA6901	16,1 3620	21,3 4790	28000	18000	0,0267	0,051 0,110
15 0,5906	15 0,5906	27 1,0630	16 0,630	19 0,7480	0,3 0,012	1,5 0,059	NKJ15/16	14,1 3170	19,0 4270	24000	15000	0,0279	0,042 0,093
	15 0,5906	27 1,0630	20 0,787	19 0,7480	0,3 0,012	1,5 0,059	NKJ15/20	16,8 3780	23,6 5310	24000	15000	0,0295	0,054 0,119
	15 0,5906	28 1,1024	13 0,512	20 0,7874	0,3 0,012	1,0 0,039	NA4902	11,8 2650	15,3 3440	22000	14000	0,0270	0,037 0,082
	15 0,5906	28 1,1024	23 0,906	20 0,7874	0,3 0,012	1,5 0,059	NA6902	18,4 4140	26,9 6050	22000	14000	0,0311	0,067 0,148
17 0,6693	17 0,6693	29 1,1417	16 0,630	21 0,8268	0,3 0,012	2,0 0,079	NKJ17/16	15,3 3440	21,6 4860	21000	14000	0,0301	0,047 0,104

⁽¹⁾ Max. axial displacement.

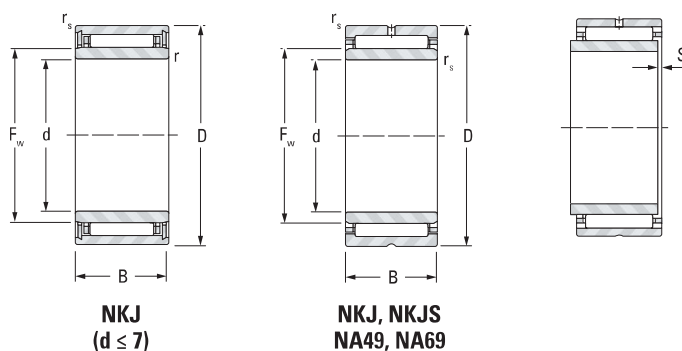
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NEEDLE ROLLER BEARINGS

NEEDLE ROLLER BEARINGS WITH INNER RINGS – continued

METRIC SERIES



Shaft Dia.	d	D	B	F _w	r _s min	s ⁽¹⁾	Bearing Designation	Load Ratings		Speed Rating		C _g	Approx. Wt.
								Dynamic	Static				
								C	C ₀	Oil	Grease		
mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.		kN lbf.		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	NKJ17/20	18,1 4070	23,9 5370	21000	14000	0,0317	0,059 0,130
	17 0,6693	30 1,1811	13 0,512	22 0,8661	0,3 0,012	1,0 0,039	NA4903	12,2 2740	16,4 3690	20000	13000	0,0286	0,040 0,088
	17 0,6693	30 1,1811	23 0,906	22 0,8661	0,6 0,024	1,0 0,039	NA6903	19,8 4450	30,6 6880	20000	13000	0,0334	0,084 0,185
	17 0,6693	37 1,4567	20 0,787	24 0,9449	0,6 0,024	1,0 0,039	NKJS17	29,1 6540	32,8 7370	20000	13000	0,0325	0,108 0,238
20 0,7874	20 0,7874	32 1,2598	16 0,630	24 0,9449	0,3 0,012	1,5 0,059	NKJ20/16	16,2 3640	24,3 5460	18000	12000	0,0328	0,053 0,117
	20 0,7874	32 1,2598	20 0,787	24 0,9449	0,3 0,012	1,5 0,059	NKJ20/20	19,3 4340	30,3 6810	18000	12000	0,0346	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	18000	12000	0,0318	0,084 0,185
	20 0,7874	37 1,4567	30 1,181	25 0,9843	0,3 0,012	1,5 0,059	NA6904	36,6 8230	51,0 11500	18000	12000	0,0378	0,133 0,293
	20 0,7874	42 1,6535	20 0,787	28 1,1024	0,6 0,024	1,0 0,039	NKJS20	30,3 6810	38,4 8630	16000	11000	0,0364	0,130 0,287
22 0,8661	22 0,8661	34 1,3386	16 0,630	26 1,0236	0,3 0,012	1,5 0,059	NKJ22/16	16,6 3730	25,7 5780	17000	11000	0,0344	0,058 0,128
	22 0,8661	34 1,3386	20 0,787	26 1,0236	0,3 0,012	2,0 0,079	NKJ22/20	19,7 4430	32,0 7190	17000	11000	0,0363	0,071 0,157
	22 0,8661	39 1,5354	17 0,669	28 1,1024	0,3 0,012	1,5 0,059	NA49/22	23,3 5240	29,6 6650	16000	10000	0,0346	0,089 0,196
	22 0,8661	39 1,5354	30 1,181	28 1,1024	0,3 0,012	1,0 0,039	NA69/22	30,6 6880	50,7 11400	16000	10000	0,0487	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 0,079	NKJ25/20	23,4 5260	36,4 8180	15000	9800	0,0383	0,086 0,190
	25 0,9843	38 1,4961	30 1,181	29 1,1417	0,3 0,012	2,0 0,079	NKJ25/30	29,8 6700	56,4 12700	15000	9800	0,0438	0,130 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	15000	9700	0,0362	0,099 0,218
	25 0,9843	42 1,6535	30 1,181	30 1,1811	0,3 0,012	1,5 0,059	NA6905	39,7 8920	59,6 13400	15000	9700	0,0424	0,178 0,392
	25 0,9843	47 1,8504	22 0,866	32 1,2598	0,6 0,024	1,5 0,059	NKJS25	36,0 8090	36,2 8140	14000	9200	0,0398	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 0,079	NKJ28/20	24,8 5580	40,4 9080	14000	8800	0,0411	0,104 0,229
	28 1,1024	42 1,6535	30 1,181	32 1,2598	0,3 0,012	2,0 0,079	NKJ28/30	35,6 8000	64,3 14500	14000	8800	0,0461	0,156 0,344

⁽¹⁾ Max. axial displacement.

Continued on next page.

Shaft Dia.	d	D	B	F _w	r _s min	s ⁽¹⁾	Bearing Designation	Load Ratings		Speed Rating		C _g	Approx. Wt.
								Dynamic	Static				
								C	C ₀	Oil	Grease		
mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.		kN lbf.		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	14000	9000	0.0378	0.108 0.238
	28 1.1024	45 1.7717	30 1.181	32 1.2598	0.3 0.012	1.5 0.059	NA69/28	37.1 8340	55.4 12500	14000	9000	0.0434	0.190 0.419
30 1.1811	30 1.1811	45 1.7717	20 0.787	35 1.3780	0.3 0.012	1.5 0.059	NKJ30/20	26.1 5870	44.4 9980	12000	8000	0.0437	0.120 0.265
	30 1.1811	45 1.7717	30 1.181	35 1.3780	0.3 0.012	1.5 0.059	NKJ30/30	37.4 8410	70.6 15900	12000	8000	0.0491	0.179 0.395
	30 1.1811	47 1.8504	17 0.669	35 1.3780	0.3 0.012	1.5 0.059	NA4906	25.9 5820	36.0 8090	13000	8200	0.0399	0.114 0.251
	30 1.1811	47 1.8504	30 1.181	35 1.3780	0.3 0.012	1.0 0.039	NA6906	42.6 9580	68.2 15300	13000	8200	0.0467	0.205 0.452
	30 1.1811	52 2.0472	22 0.866	37 1.4567	0.6 0.024	1.5 0.059	NKJS30	39.0 8770	53.4 12000	12000	7900	0.0438	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 0.079	NKJ32/20	26.6 5980	46.4 10400	12000	7600	0.0453	0.127 0.280
	32 1.2598	47 1.8504	30 1.181	37 1.4567	0.3 0.012	1.5 0.059	NKJ32/30	38.2 8590	73.9 16600	12000	7600	0.0508	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	32.0 7190	49.3 11100	11000	7100	0.0457	0.169 0.373
	32 1.2598	52 2.0472	36 1.417	40 1.5748	0.6 0.024	1.0 0.039	NA69/32	48.6 10900	84.5 19000	11000	7100	0.0620	0.313 0.690
35 1.3780	35 1.3780	50 1.9685	20 0.787	40 1.5748	0.3 0.012	2.0 0.079	NKJ35/20	27.8 6250	50.4 11300	11000	7000	0.0479	0.135 0.298
	35 1.3780	50 1.9685	30 1.181	40 1.5748	0.3 0.012	1.5 0.059	NKJ35/30	40.0 8990	80.2 18000	11000	7000	0.0537	0.208 0.459
	35 1.3780	55 2.1654	20 0.787	42 1.6535	0.6 0.024	1.5 0.059	NA4907	32.8 7370	51.7 11600	10000	6700	0.0472	0.179 0.395
	35 1.3780	55 2.1654	36 1.417	42 1.6535	0.6 0.024	1.0 0.039	NA6907	49.9 11200	88.7 19900	10000	6700	0.0540	0.340 0.750
	35 1.3780	58 2.2835	22 0.866	43 1.6929	0.6 0.024	1.0 0.039	NKJS35	41.6 9350	60.7 13600	10000	6700	0.0481	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 0.079	NKJ38/20	29.0 6520	54.4 12200	9900	6400	0.0504	0.146 0.322
	38 1.4961	53 2.0866	30 1.181	43 1.6929	0.3 0.012	1.5 0.059	NKJ38/30	41.6 9350	86.6 19500	9900	6400	0.0565	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 0.079	NKJ40/20	29.5 6630	56.4 12700	9400	6100	0.0519	0.152 0.335
	40 1.5748	55 2.1654	30 1.181	45 1.7717	0.3 0.012	1.5 0.059	NKJ40/30	42.3 9510	89.8 20200	9400	6100	0.0582	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	9100	5900	0.0519	0.248 0.547
	40 1.5748	62 2.4409	40 1.575	48 1.8898	0.6 0.024	1.5 0.059	NA6908	70.8 15900	124 27900	9100	5900	0.0717	0.473 1.043
	40 1.5748	65 2.5591	22 0.866	50 1.9685	1.0 0.039	1.0 0.039	NKJS40	45.5 10200	71.3 16000	8700	5700	0.0535	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 0.079	NKJ42/20	30.0 6740	58.5 13200	9000	5900	0.0534	0.159 0.351
	42 1.6535	57 2.2441	30 1.181	47 1.8504	0.3 0.012	1.5 0.059	NKJ42/30	39.9 8970	84.1 18900	9000	5900	0.0584	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 0.118	NKJ45/25	40.7 9150	79.3 17800	8500	5500	0.0580	0.223 0.492

⁽¹⁾ Max. axial displacement.

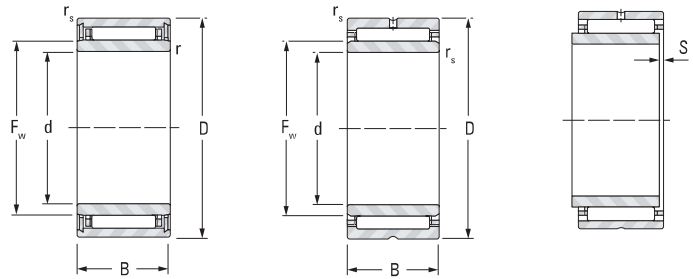
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NEEDLE ROLLER BEARINGS

NEEDLE ROLLER BEARINGS WITH INNER RINGS — continued

METRIC SERIES



NKJ
($d \leq 7$)

NKJ, NKJS
NA49, NA69

Shaft Dia.	d	D	B	F _w	r _s min	s ⁽¹⁾	Bearing Designation	Load Ratings		Speed Rating		C _g	Approx. Wt.
								Dynamic	Static	Oil	Grease		
								C	C ₀				
mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.		kN lbf.		min ⁻¹			kg lbs.
45 1.7717	45 1.7717	62 2.4409	35 1.378	50 1.9685	0.6 0.024	3.0 0.118	NKJ45/35	55.0 12400	117 26300	8500	5500	0.0636	0.345 0.761
	45 1.7717	68 2.6772	22 0.866	52 2.0472	0.6 0.024	2.0 0.079	NA4909	46.8 10500	74.8 16800	8400	5400	0.0550	0.291 0.642
	45 1.7717	68 2.6772	40 1.575	52 2.0472	0.6 0.024	1.5 0.059	NA6909	74.7 16800	137 30800	8400	5400	0.0759	0.55 1.232
	45 1.7717	72 2.8346	22 0.866	55 2.1654	1.0 0.039	1.0 0.039	NKJS45	47.9 10800	78.4 17600	7900	5100	0.0571	0.360 0.794
50 1.9685	50 1.9685	68 2.6772	25 0.984	55 2.1654	0.6 0.024	3.0 0.118	NKJ50/25	46.1 10400	87.3 19600	7800	5000	0.0605	0.288 0.635
	50 1.9685	68 2.6772	35 1.378	55 2.1654	0.6 0.024	3.0 0.118	NKJ50/35	62.3 14000	129 29000	7800	5000	0.0667	0.406 0.895
	50 1.9685	72 2.8346	22 0.866	58 2.2835	0.6 0.024	2.0 0.079	NA4910	48.9 11000	82.0 18400	7400	4800	0.0591	0.296 0.653
	50 1.9685	72 2.8346	40 1.575	58 2.2835	0.6 0.024	1.5 0.059	NA6910	75.7 17000	144 32400	7400	4800	0.0806	0.577 1.272
	50 1.9685	80 3.1496	28 1.102	60 2.3622	1.1 0.043	1.5 0.059	NKJS50	66.9 15000	103 23200	7300	4800	0.0612	0.523 1.153
55 2.1654	55 2.1654	72 2.8346	25 0.984	60 2.3622	0.6 0.024	3.0 0.118	NKJ55/25	44.3 9960	94.0 21100	7000	4600	0.0654	0.290 0.639
	55 2.1654	72 2.8346	35 1.378	60 2.3622	0.6 0.024	3.0 0.118	NKJ55/35	59.9 13500	139 31200	7000	4600	0.0721	0.410 0.904
	55 2.1654	80 3.1496	25 0.984	63 2.4803	1.0 0.039	2.5 0.098	NA4911	62.0 13900	107 24100	6900	4500	0.0645	0.426 0.939
	55 2.1654	80 3.1496	45 1.772	63 2.4803	1.0 0.039	2.5 0.098	NA6911	94.2 21200	172 38700	6900	4500	0.0852	0.800 1.764
	55 2.1654	85 3.3465	28 1.102	65 2.5591	1.1 0.043	1.5 0.059	NKJS55	71.0 16000	114 25600	6700	4400	0.0650	0.569 1.254
60 2.3622	60 2.3622	82 3.2283	25 0.984	68 2.6772	0.6 0.024	2.0 0.079	NKJ60/25	49.0 11000	101 22700	6200	4000	0.0691	0.440 0.970
	60 2.3622	82 3.2283	35 1.378	68 2.6772	0.6 0.024	2.5 0.098	NKJ60/35	66.2 14900	149 33500	6200	4000	0.0760	0.520 1.146
	60 2.3622	85 3.3465	25 0.984	68 2.6772	1.0 0.039	1.5 0.059	NA4912	64.8 14600	116 26100	6300	4100	0.0681	0.457 1.008
	60 2.3622	85 3.3465	45 1.772	68 2.6772	1.0 0.039	2.0 0.079	NA6912	99.3 22300	189 42500	6400	4100	0.0901	0.829 1.828
	60 2.3622	90 3.5433	28 1.102	70 2.7559	1.1 0.043	1.5 0.059	NKJS60	72.6 16300	120 27000	6200	4000	0.0679	0.607 1.338
65 2.5591	65 2.5591	90 3.5433	25 0.984	72 2.8346	1.0 0.039	1.5 0.059	NA4913	66.0 14800	121 27200	5900	3900	0.0705	0.489 1.078

⁽¹⁾ Max. axial displacement.

Continued on next page.

Shaft Dia.	d	D	B	F _w	r _s min	s ⁽¹⁾	Bearing Designation	Load Ratings		Speed Rating		C _g	Approx. Wt.
								Dynamic	Static				
								C	C ₀	Oil	Grease		
mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.		kN lbf.		min ⁻¹			kg lbs.
65 2.5591	65 2.5591	90 3.5433	25 0.984	73 2.8740	0.6 0.024	2.0 0.079	NKJ65/25	61.5 13800	119 26800	5800	3800	0.0717	0.500 1.102
	65 2.5591	90 3.5433	35 1.378	73 2.8740	0.6 0.024	2.0 0.079	NKJ65/35	82.5 18500	173 38900	5800	3800	0.0787	0.690 1.521
	65 2.5591	90 3.5433	45 1.772	72 2.8346	1.0 0.039	2.0 0.079	NA6913	107 24100	213 47900	6000	3900	0.0952	0.945 2.083
	65 2.5591	95 3.7402	28 1.102	75 2.9528	1.1 0.043	1.5 0.059	NKJS65	76.5 17200	132 29700	5800	3700	0.0716	0.655 1.444
70 2.7559	70 2.7559	95 3.7402	25 0.984	80 3.1496	1.0 0.039	2.0 0.079	NKJ70/25	65.0 14600	131 29400	5300	3400	0.0766	0.561 1.237
	70 2.7559	95 3.7402	35 1.378	80 3.1496	1.0 0.039	3.5 0.138	NKJ70/35	79.7 17900	184 41400	5300	3400	0.0846	0.779 1.717
	70 2.7559	100 3.9370	28 1.102	80 3.1496	1.1 0.043	1.5 0.059	NKJS70	80.1 18000	143 32100	5400	3500	0.0752	0.772 1.702
	70 2.7559	100 3.9370	30 1.181	80 3.1496	1.0 0.039	2.5 0.098	NA4914	86.3 19400	157 35300	5400	3500	0.0770	0.772 1.702
	70 2.7559	100 3.9370	54 2.126	80 3.1496	1.0 0.039	2.0 0.079	NA6914	137 30800	286 64300	5400	3500	0.1061	1.450 3.197
75 2.9528	75 2.9528	105 4.1339	25 0.984	85 3.3465	1.0 0.039	2.0 0.079	NKJ75/25	76.4 17200	137 30800	5000	3300	0.0764	0.640 1.411
	75 2.9528	105 4.1339	30 1.181	85 3.3465	1.0 0.039	2.5 0.098	NA4915	92.4 20800	175 39300	5000	3300	0.0812	0.817 1.801
	75 2.9528	105 4.1339	32 1.260	90 3.5433	1.1 0.043	1.5 0.059	NKJS75	91.5 20600	176 39600	4700	3100	0.0834	1.060 2.337
	75 2.9528	105 4.1339	35 1.378	85 3.3465	1.0 0.039	2.0 0.079	NKJ75/35	108 24300	214 48100	5000	3300	0.0854	1.050 2.315
	75 2.9528	105 4.1339	54 2.126	85 3.3465	1.0 0.039	2.0 0.079	NA6915	143 32100	308 69200	5000	3300	0.1110	1.554 3.426
80 3.1496	80 3.1496	110 4.3307	25 0.984	90 3.5433	1.0 0.039	2.0 0.079	NKJ80/25	79.5 17900	147 33000	4700	3100	0.0798	0.790 1.742
	80 3.1496	110 4.3307	30 1.181	90 3.5433	1.0 0.039	2.5 0.098	NA4916	91.5 20600	176 39600	4700	3100	0.0834	0.862 1.900
	80 3.1496	110 4.3307	32 1.260	95 3.7402	1.1 0.043	2.0 0.079	NKJS80	95.1 21400	188 42300	4500	2900	0.0869	1.140 2.513
	80 3.1496	110 4.3307	35 1.378	90 3.5433	1.0 0.039	2.0 0.079	NKJ80/35	113 25400	230 51700	4700	3100	0.0891	0.980 2.161
	80 3.1496	110 4.3307	54 2.126	90 3.5433	1.0 0.039	2.0 0.079	NA6916	126 28300	320 71900	4700	3000	0.1197	1.615 3.560
85 3.3465	85 3.3465	115 4.5276	26 1.024	95 3.7402	1.0 0.039	3.0 0.118	NKJ85/26	49.3 11100	114 25600	4400	2800	0.0839	0.862 1.900
	85 3.3465	115 4.5276	36 1.417	95 3.7402	1.0 0.039	2.0 0.079	NKJ85/36	114 25600	238 53500	4400	2800	0.0921	1.040 2.293
	85 3.3465	120 4.7244	30 1.181	100 3.9370	1.1 0.043	2.5 0.098	NA4917	110 24700	230 51700	4200	2800	0.0935	1.310 2.888
	85 3.3465	120 4.7244	63 2.480	100 3.9370	1.1 0.043	2.0 0.079	NA6917	150 33700	416 93500	4200	2700	0.1340	2.427 5.351
90 3.5433	90 3.5433	120 4.7244	26 1.024	100 3.9370	1.0 0.039	3.0 0.118	NKJ90/26	83.6 18800	163 36600	4200	2800	0.0857	0.780 1.720
	90 3.5433	120 4.7244	36 1.417	100 3.9370	1.0 0.039	2.5 0.098	NKJ90/36	118 26500	254 57100	4200	2800	0.0958	1.080 2.381
	90 3.5433	125 4.9213	35 1.378	105 4.1339	1.1 0.043	2.5 0.098	NA4918	114 25600	245 55100	4000	2600	0.0970	1.370 3.020

⁽¹⁾ Max. axial displacement.

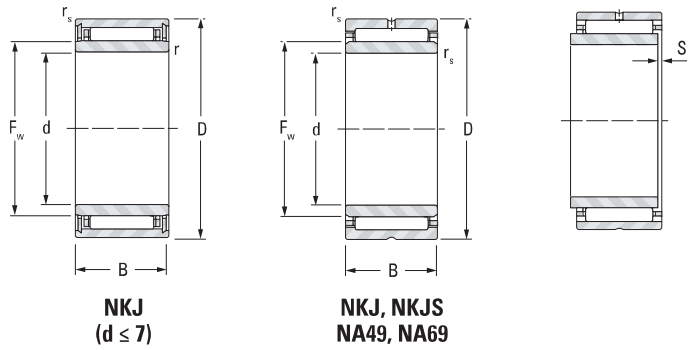
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NEEDLE ROLLER BEARINGS

NEEDLE ROLLER BEARINGS WITH INNER RINGS — continued

METRIC SERIES



Shaft Dia.	d	D	B	F _w	r _s min	s ⁽¹⁾	Bearing Designation	Load Ratings		Speed Rating		C ₉	Approx. Wt.
								Dynamic	Static				
								C	C ₀	Oil	Grease		
mm in.	mm in.	mm in.	mm in.	mm in.	mm in.	mm in.		kN lbf.		min ⁻¹			kg lbs.
90 3.5433	90 3.5433	125 4.9213	63 2.480	105 4.1339	1.1 0.043	2.0 0.079	NA6918	175 39300	427 96000	4000	2600	0.1323	2.640 5.820
95 3.7402	95 3.7402	125 4.9213	26 1.024	105 4.1339	1.0 0.039	2.5 0.098	NKJ95/26	52.2 11700	127 28600	3900	2600	0.0892	0.935 2.061
	95 3.7402	125 4.9213	36 1.417	105 4.1339	1.0 0.039	3.5 0.138	NKJ95/36	72.8 16400	195 43800	3900	2600	0.0992	1.300 2.866
	95 3.7402	130 5.1181	35 1.378	110 4.3307	1.1 0.043	2.5 0.098	NA4919	115 25900	253 56900	3800	2500	0.0999	1.430 3.153
	95 3.7402	130 5.1181	63 2.480	110 4.3307	1.1 0.043	2.0 0.079	NA6919	158 35500	458 103000	3800	2500	0.1434	2.670 5.88
100 3.9370	100 3.9370	130 5.1181	30 1.181	110 4.3307	1.1 0.043	2.0 0.079	NKJ100/30	103 23200	220 49500	3800	2500	0.0965	0.984 2.169
	100 3.9370	130 5.1181	40 1.575	110 4.3307	1.1 0.043	2.0 0.079	NKJ100/40	132 29700	301 67700	3800	2500	0.1043	1.410 3.109
	100 3.9370	135 5.3150	32 1.260	115 4.5276	1.1 0.043	2.0 0.079	NKJS100	104 23400	226 50800	3700	2400	0.0991	2.010 4.431
	100 3.9370	140 5.5118	40 1.575	115 4.5276	1.1 0.043	3.5 0.138	NA4920	139 31200	296 66500	3700	2400	0.1037	2.010 4.431
110 4.3307	110 4.3307	140 5.5118	30 1.181	120 4.7244	1.0 0.039	0.5 0.020	NA4822	90.3 20300	230 51700	3500	2300	0.1059	1.210 2.668
	110 4.3307	150 5.9055	40 1.575	125 4.9213	1.1 0.043	3.5 0.138	NA4922	147 33000	325 73100	3400	2200	0.1101	2.190 4.828
120 4.7244	120 4.7244	150 5.9055	30 1.181	130 5.1181	1.0 0.039	0.5 0.020	NA4824	94.2 21200	249 56000	3200	2100	0.1121	1.310 2.888
	120 4.7244	165 6.4961	45 1.772	135 5.3150	1.1 0.043	3.5 0.138	NA4924	177 39800	407 91500	3100	2000	0.1193	3.040 6.702
130 5.1181	130 5.1181	165 6.4961	35 1.378	145 5.7087	1.1 0.043	1.0 0.039	NA4826	112 25200	323 72600	2900	1900	0.1258	1.990 4.387
	130 5.1181	180 7.0866	45 1.772	150 5.9055	1.5 0.059	3.0 0.118	NA4926	201 45200	495 111000	2800	1800	0.1314	4.140 9.127
140 5.5118	140 5.5118	175 6.8898	35 1.378	155 6.1024	1.1 0.043	1.0 0.039	NA4828	116 26100	346 77800	2700	1700	0.1320	2.120 4.674
	140 5.5118	190 7.4803	50 1.969	160 6.2992	1.5 0.059	3.0 0.118	NA4928	214 48100	549 123000	2600	1700	0.1389	4.410 9.72
150 5.9055	150 5.9055	190 7.4803	40 1.575	165 6.4961	1.1 0.043	2.0 0.079	NA4830	142 31900	402 90400	2500	1600	0.1367	2.700 5.952
160 6.2992	160 6.2992	200 7.8740	40 1.575	175 6.8898	1.1 0.043	2.0 0.079	NA4832	146 32800	425 95500	2400	1500	0.1425	3.150 6.944

⁽¹⁾ Max. axial displacement.