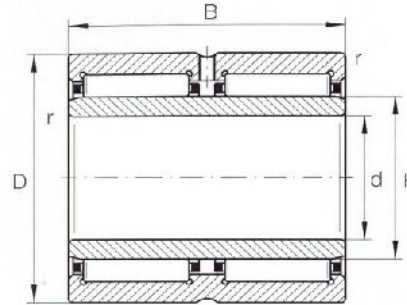
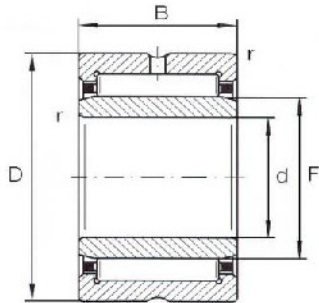




Needle Roller Bearings



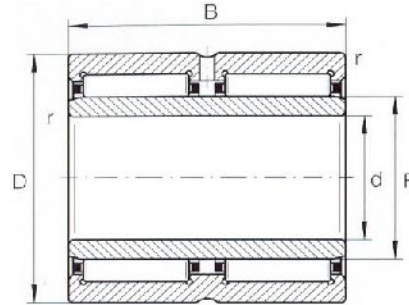
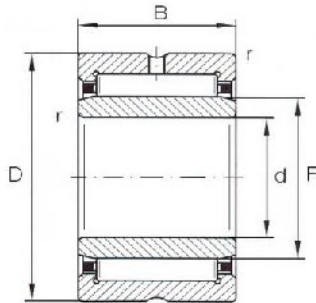
Dimension table . Dimensions in mm

Shaft diameter	Designation				Mass ≈ g	Dimensions						Basic load ratings		Limiting speed nG min ⁻¹
	NKI	NKIS	NA 49	NA 69		d	F	D	B	r min	s ¹	C N	C ₀ N	
5	NKI 5/12 TN	-	-	-	11.5	5	8	15	12	0.3	1.5	3 753	3 895	30 400
	NKI 5/16 TN	-	-	-	15.3	5	8	15	16	0.3	2	4 845	5 510	30 400
6	NKI 6/12 TN	-	-	-	13.5	6	9	16	12	0.3	1.5	4 275	4 750	28 500
	NKI 6/16 TN	-	-	-	17.4	6	9	16	16	0.3	2	5 605	6 745	28 500
7	NKI 7/12 TN	-	-	-	13.7	7	10	17	12	0.3	1.5	4 513	5 225	27 550
	NKI 7/16 TN	-	-	-	18.2	7	10	17	16	0.3	2	5 890	7 410	27 550
9	NKI 9/12	-	-	-	16.6	9	12	19	12	0.3	1.5	6 080	6 745	25 650
	NKI 9/16	-	-	-	21.9	9	12	19	16	0.3	2	8 550	10 450	25 650
10	NKI 10/16	-	-	-	29.4	10	14	22	16	0.3	0.5	9 595	10 925	23 750
	NKI 10/20	-	-	-	37.1	10	14	22	20	0.3	0.5	12 160	14 820	23 750
	-	-	NA 4900	-	23	10	14	22	13	0.3	0.5	8 075	8 740	23 750
12	NKI 12/16	-	-	-	33.3	12	16	24	16	0.3	0.5	10 735	13 205	22 800
	NKI 12/20	-	-	-	41.9	12	16	24	20	0.3	0.5	13 680	17 860	22 800
	-	-	NA 4901	-	26	12	16	24	13	0.3	0.5	8 930	10 355	22 800
15	-	-	NA 6901	-	46	12	16	24	22	0.3	1	15 200	20 520	22 800
	NKI 15/16	-	-	-	38.8	15	19	27	16	0.3	0.5	12 350	16 530	20 900
	NKI 15/20	-	-	-	48.7	15	19	27	20	0.3	0.5	15 675	22 420	20 900
	-	NKIS 15	-	-	92	15	22	35	20	0.6	0.5	23 275	26 600	19 000
	-	-	NA 4902	-	34	15	20	28	13	0.3	0.5	10 070	12 920	20 900
17	-	-	-	NA 6902	63.6	15	20	28	23	0.3	1	16 435	24 225	20 900
	NKI 17/16	-	-	-	42.4	17	21	29	16	0.3	0.5	12 825	17 765	19 950
	NKI 17/20	-	-	-	53.4	17	21	29	20	0.3	0.5	16 245	24 225	19 950
	-	NKIS 17	-	-	98	17	24	37	20	0.6	0.5	24 700	29 450	17 100
	-	-	NA 4903	-	37	17	22	30	13	0.3	0.5	10 450	13 870	19 950
-	-	-	NA 6903	72	17	22	30	23	0.3	1	17 670	27 550	20 000	

- TN = plastic cage, permissible operating temperature : +120oC(continuous operation)
- +With closing rings, without lubrication hole and groove.
- Permissible axial displacement of inner ring from central position with respect to outer ring.



Needle Roller Bearings

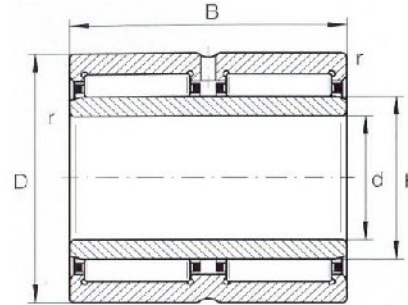
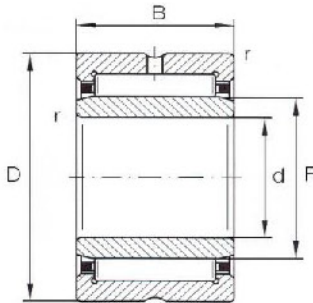


Dimension table . Dimensions in mm

Shaft diameter	Designation				Mass ≈ g	Dimensions						Basic load ratings		Limiting speed nG min ⁻¹
	NKI	NKIS	NA 49	NA 69		d	F	D	B	r min	s ¹	C N	C ₀ N	
20	NKI 20/16	-	-	-	49	20	24	32	16	0.3	0.5	14 250	21 185	18 050
	NKI 20/20	-	-	-	61	20	24	32	20	0.3	0.5	18 050	28 975	18 050
	-	NKIS 20	-	-	129	20	28	42	20	0.6	0.5	27 075	34 675	15 200
	-	-	NA 4904	-	75.2	20	25	37	17	0.3	0.8	19 950	24 225	16 150
	-	-	-	NA 6904	141	20	25	37	30	0.3	1	34 200	48 450	16 150
22	NKI 22/16	-	-	-	52	22	26	34	16	0.3	0.5	14 535	22 420	17 100
	NKI 22/20	-	-	-	65.4	22	26	34	20	0.3	0.5	18 430	30 400	17 100
	-	-	NA 49/22	-	80	22	28	39	17	0.3	0.8	21 660	28 025	15 200
	-	-	-	NA 69/22	150	22	28	39	30	0.3	0.5	35 625	52 250	15 200
25	NKI 25/20	-	-	-	79.4	25	29	38	20	0.3	1	20 805	32 300	15 200
	NKI 25/30	-	-	-	124	25	29	38	30	0.3	1.5	30 875	54 150	15 200
	-	NKIS 25	-	-	162	25	32	47	22	0.6	1	31 825	41 325	13 300
	-	-	NA 4905	-	88	25	30	42	17	0.3	0.8	22 420	29 925	14 250
	-	-	-	NA 6905	161	25	30	42	30	0.3	1	37 050	56 050	14 250
28	NKI 28/20	-	-	-	96.5	28	32	42	20	0.3	1	21 945	35 625	13 300
	NKI 28/30	-	-	-	146	28	32	42	30	0.3	1.5	32 775	59 850	13 300
	-	-	NA 49/28	-	97.7	28	32	45	17	0.3	0.8	23 180	31 825	12 350
	-	-	-	NA 69/28	182	28	32	45	30	0.3	1	38 475	59 850	14 000
30	NKI 30/20	-	-	-	112	30	35	45	20	0.3	0.5	23 085	39 425	12 350
	NKI 30/30	-	-	-	170	30	35	45	30	0.3	1	34 675	65 550	12 350
	-	NKIS 30	-	-	184	30	37	52	22	0.6	1	34 675	47 500	11 400
	-	-	NA 4906	-	101	30	35	47	17	0.3	0.8	23 750	33 725	12 350
	-	-	-	NA 6906	192	30	35	47	30	0.3	1	41 325	67 450	12 350
32	NKI 32/20	-	-	-	118	32	37	47	20	0.3	0.5	23 655	41 325	11 400
	NKI 32/30	-	-	-	180	32	37	47	30	0.3	1	35 150	69 350	11 400
	-	-	NA 49/32	-	158	32	40	52	20	0.6	0.8	28 975	45 125	11 400
	-	-	-	NA 69/32	288	32	40	52	36	0.6	0.5	44 850	77 900	11 400
35	NKI 35/20	-	-	-	127	35	40	50	20	0.3	0.5	24 700	44 650	11 400
	NKI 35/30	-	-	-	193	35	40	50	30	0.3	1	37 050	75 050	11 400
	-	NKIS 35	-	-	220	35	43	58	22	0.6	0.5	37 050	54 150	10 450
	-	-	NA 4907	-	170	35	42	55	20	0.6	0.8	29 925	47 500	10 450
	-	-	-	NA 6907	310	35	42	55	36	0.6	0.5	45 600	81 700	10 450



Needle Roller Bearings



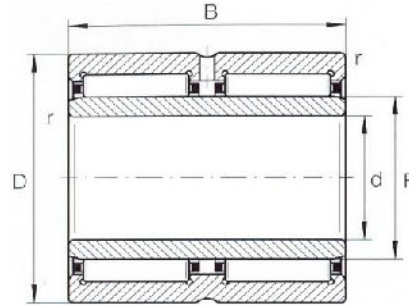
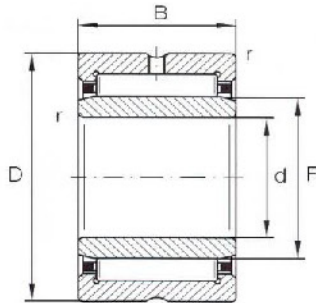
Dimension table . Dimensions in mm

Shaft diameter	Designation				Mass ≈ g	Dimensions						Basic load ratings		Limiting speed nG min ⁻¹
	NKI	NKIS	NA 49	NA 69		d	F	D	B	r min	s ¹	dyn. C N	stat. C ₀ N	
38	NKI 38/20	-	-	-	136	38	43	53	20	0.3	0.5	25 650	48 450	10 450
	NKI 38/30	-	-	-	207	38	43	53	30	0.3	1	38 475	80 750	10 450
40	NKI 40/20	-	-	-	142	40	45	55	20	0.3	0.5	26 125	50 350	9 500
	NKI 40/30	-	-	-	216	40	45	55	30	0.3	1	38 950	83 600	9 500
	-	NKIS 40	-	-	281	40	50	65	22	1	0.5	40 375	63 650	9 025
	-	-	NA 4908	-	230	40	48	62	22	0.6	1	40 850	63 650	9 025
	-	-	-	NA 6908	430	40	48	62	40	0.6	0.5	62 700	110 200	9 025
42	NKI 42/20	-	-	-	148	42	47	57	20	0.3	0.5	27 075	53 200	9 500
	NKI 42/30	-	-	-	222	42	47	57	30	0.3	1	40 850	89 300	9 500
45	NKI 45/25	-	-	-	229	45	50	62	25	0.6	1.5	36 100	70 300	8 550
	NKI 45/35	-	-	-	322	45	50	62	35	0.6	2	47 500	100 700	8 550
	-	NKIS 45	-	-	336	45	55	72	22	1	0.5	42 750	70 300	8 075
	-	-	NA 4909	-	271	45	52	68	22	0.6	1	42 750	69 350	8 075
	-	-	-	NA 6909	495	45	52	68	40	0.6	0.5	65 550	120 650	8 075
50	NKI 50/25	-	-	-	270	50	55	68	25	0.6	1.5	38 000	77 900	8 075
	NKI 50/35	-	-	-	379	50	55	68	35	0.6	2	50 350	112 100	8 075
	-	NKIS 50	-	-	518	50	60	80	28	1.1	2	59 850	93 100	7 125
	-	-	NA 4910	-	274	50	58	72	22	0.6	1	44 650	76 000	7 600
	-	-	-	NA 6910	515	50	58	72	40	0.6	0.5	69 350	132 050	7 600
55	NKI 55/25	-	-	-	272	55	60	72	25	0.6	1.5	39 900	85 500	7 125
	NKI 55/35	-	-	-	379	55	60	72	35	0.6	2	53 200	123 500	7 125
	-	NKIS 55	-	-	558	55	65	85	28	1.1	2	63 650	102 600	6 650
	-	-	NA 4911	-	393	55	63	80	25	1	1.5	55 100	95 000	7 125
	-	-	-	NA 6911	780	55	63	80	45	1	1.5	85 500	167 200	7 125
60	NKI 60/25	-	-	-	394	60	68	82	25	0.6	1	41 325	84 550	6 650
	NKI 60/35	-	-	-	553	60	68	82	35	0.6	1	58 900	132 050	6 650
	-	NKIS 60	-	-	560	60	70	90	28	1.1	2	64 600	107 350	6 175
	-	-	NA 4912	-	426	60	68	85	25	1	1.5	57 000	102 600	6 650
	-	-	-	NA 6912	808	60	68	85	45	1	1.5	89 300	181 450	6 650

- Permissible axial displacement of inner ring from central position with respect to outer ring.



Needle Roller Bearings



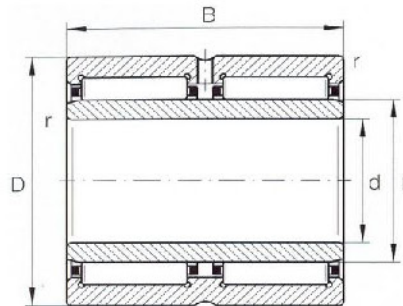
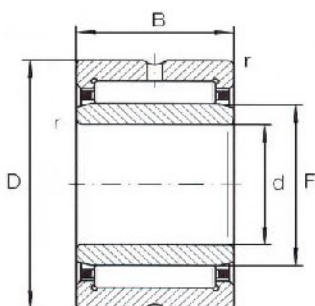
Dimension table . Dimensions in mm

Shaft diameter	Designation				Mass ≈ g	Dimensions						Basic load ratings		Limiting speed nG min ⁻¹
	NKI	NKIS	NA 49	NA 69		d	F	D	B	r min	s ¹	C N	C ₀ N	
65	NKI 65/25	-	-	-	467	65	73	90	25	1	1	50 350	95 000	6 175
	NKI 65/35	-	-	-	659	65	73	90	35	1	1	71 250	148 200	6 175
	-	NKIS 65	-	-	641	65	75	95	28	1.1	2	67 450	116 850	5 700
	-	-	NA 4913	-	456	65	72	90	25	1	1.5	57 950	106 400	6 175
	-	-	-	NA 6913	833	65	72	90	45	1	1.5	90 250	188 100	6 175
70	NKI 70/25	-	-	-	521	70	80	95	25	1	0.8	53 200	113 050	5 700
	NKI 70/35	-	-	-	737	70	80	95	35	1	0.8	74 100	174 800	5 700
	-	-	NA 4914	-	728	70	80	100	30	1	1.5	79 800	148 200	5 700
	-	-	-	NA 6914	1 340	70	80	100	54	1	1	121 600	251 750	5 700
75	NKI 75/25	-	-	-	641	75	85	105	25	1	1	65 550	116 850	5 225
	NKI 75/35	-	-	-	908	75	85	105	35	1	1	93 100	183 350	5 225
	-	-	NA 4915	-	775	75	85	105	30	1	1.5	81 700	153 900	5 225
	-	-	-	NA 6915	1 450	75	85	105	54	1	1	123 500	261 250	5 225
80	NKI 80/25	-	-	-	677	80	90	110	25	1	1	68 400	125 400	4 750
	NKI 80/35	-	-	-	959	80	90	110	35	1	1	97 850	197 600	4 750
	-	-	NA 4916	-	878	80	90	110	30	1	1.5	84 550	165 300	4 750
	-	-	-	NA 6916	1 522	80	90	110	54	1	1	128 250	285 000	4 750
85	NKI 85/26	-	-	-	743	85	95	115	26	1	1.5	69 350	130 150	4 655
	NKI 85/36	-	-	-	1 040	85	95	115	36	1	1.5	101 650	211 850	4 655
	-	-	NA 4917	-	1 250	85	100	120	35	1.1	1	105 450	225 150	4 560
	-	-	-	NA 6917	2 200	85	100	120	63	1.1	1	157 700	380 000	4 560
90	NKI 90/26	-	-	-	778	90	100	120	26	1	1.5	72 200	138 700	4 465
	NKI 90/36	-	-	-	1 090	90	100	120	36	1	1.5	105 450	225 150	4 465
	-	-	NA 4918	-	1 312	90	105	125	35	1.1	1	108 300	237 500	4 370
	-	-	-	NA 6918	2 310	90	105	125	63	1.1	1	163 400	40 3750	4 370
95	NKI 95/26	-	-	-	816	95	105	125	26	1	1.5	74 100	147 250	4 275
	NKI 95/35	-	-	-	1145	95	105	125	36	1	1.5	108 300	237 500	4 275
	-	-	NA 4919	-	1371	95	110	130	35	1.1	1	110 200	247 000	4 180
	-	-	-	NA 6919	2 500	95	110	130	63	1.1	1	165 300	418 000	4 180

- Permissible axial displacement of inner ring from central position with respect to outer ring.



Needle Roller Bearings

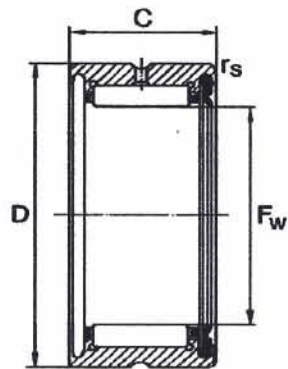


Dimension table . Dimensions in mm

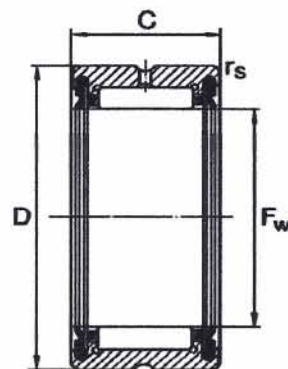
Shaft diameter	Designation				Mass ≈ g	Dimensions						Basic load ratings		Limiting speed nG min ⁻¹
	NKI	NKIS	NA 49	NA 69		d	F	D	B	r min	s ¹	C N	C ₀ N	
100	NKI 100/30	-	-	-	990	100	110	130	30	1.1	1.5	93 100	199 500	4 085
	NKI 100/40	-	-	-	1 330	100	110	130	40	1.1	2	120 650	275 500	4 085
110	-	-	NA 4920	-	1 900	100	115	140	40	1.1	2	121 600	256 500	3 895
	-	-	NA 4922	-	2 070	110	125	150	40	1.1	2	125 400	275 500	3 610
	-	-	-	NA 4822	1 080	110	120	140	30	1	0.8	89 300	205 200	3 705
120	-	-	NA 4924	-	2 860	120	135	165	45	1.1	2	171 950	370 500	3 230
	-	-	-	NA 4824	1 170	120	130	150	30	1	0.8	94 050	227 050	3 420
130	-	-	NA 4926	-	3 900	130	150	180	50	1.5	1.5	192 850	446 500	3 040
	-	-	-	NA 4826	1 810	130	145	165	35	1.1	1	112 100	294 500	3 135
140	-	-	NA 4928	-	4 150	140	160	190	50	1.5	1.5	198 550	475 000	2 850
	-	-	-	NA 4928	1 920	140	155	175	35	1.1	1	114 000	308 750	2 945
150	-	-	-	NA 4830	2 720	150	165	190	40	1.1	1.5	144 400	380 000	2 755
160	-	-	-	NA 4832	2 890	160	175	200	40	1.1	1.5	152 000	413 250	2 565
170	-	-	-	NA 4834	3 960	170	185	215	45	1.1	1.5	175 750	484 500	2 375
180	-	-	-	NA 4836	4 200	180	195	225	45	1.1	1.5	184 300	522 500	2 280
190	-	-	-	NA 4838	5 610	190	210	240	50	1.5	1.5	215 650	655 500	2 185
200	-	-	-	NA 4840	5 840	200	220	250	50	1.5	1.5	218 500	684 000	2 090
220	-	-	-	NA 4844	6 380	220	240	270	50	1.5	1.5	230 850	750 500	1 900
240	-	-	-	NA 4848	10 000	240	265	300	60	2	2	337 250	1 026 000	1 710
260	-	-	-	NA 4852	10 600	260	285	320	60	2	2	351 500	1 102 000	1 615
280	-	-	-	NA 4856	15 300	280	305	350	69	2	2.5	427 500	1 235 000	1 520
300	-	-	-	NA 4860	21 800	300	330	380	80	2.1	2	589 000	1 681 500	1 330
320	-	-	-	NA 4864	23 000	320	350	400	80	2.1	2	598 500	1 757 500	1 330
340	-	-	-	NA 4868	24 200	340	370	420	80	2.1	2	608 000	1 843 000	1 235
360	-	-	-	NA 4872	25 600	360	390	440	80	2.1	2	627 000	1 919 000	1 140
380	-	-	-	NA 4876	42 600	380	415	480	100	2.1	2	950 000	2 755 000	1 045

- Permissible axial displacement of inner ring from central position with respect to outer ring.

Needle roller bearings



RNA 49..RS



RNA 49...2RS

Dimension table . Dimensions in mm

Shaft diameter	Designation		Mass = g	Dimensions				Basic load ratings		Limiting speed nG min ⁻¹
	RNA 49 RS	RNA 49 2RS		F	D	C	r min	dyn. C N	stat C ₀ N	
14	RNA 4900 RS	RNA 4900 2RS	16	14	22	13	0.3	6 460	6 555	12 350
16	RNA 4901 RS	RNA 4901 2RS	18	16	24	13	0.3	7 220	7 885	11 400
20	RNA 4902 RS	RNA 4902 2RS	21.5	20	28	13	0.3	8 170	9 785	9 500
22	RNA 4903 RS	RNA 4903 2RS	23	22	30	13	0.3	8 360	10 450	8 550
25	RNA 4904 RS	RNA 4904 2RS	56	25	37	17	0.3	16 435	18 905	7 125
30	RNA 4905 RS	RNA 4905 2RS	60	30	42	17	0.3	18 335	22 990	6 175
35	RNA 4906 RS	RNA 4906 2RS	69	35	47	17	0.3	20 045	27 075	5 225
42	RNA 4907 RS	RNA 4907 2RS	107	42	55	20	0.6	25 175	37 525	4 560
48	RNA 4908 RS	RNA 4908 2RS	154	48	62	22	0.6	34 200	50 350	3 990
52	RNA 4909 RS	RNA 4909 2RS	157	52	68	22	0.6	36 100	56 050	3 705
58	RNA 4910 RS	RNA 4910 2RS	160	58	72	22	0.6	38 000	60 800	3 325

- Limiting speed for grease lubrication.