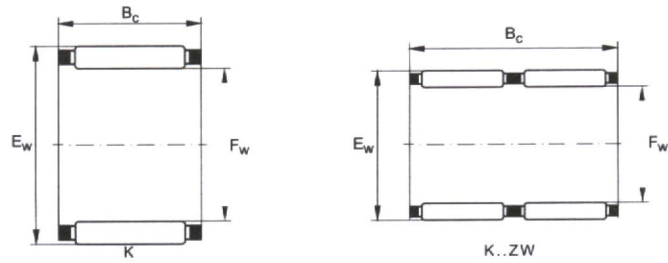
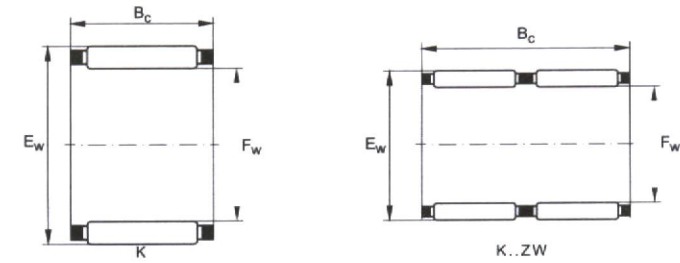


## Needle bearing

UBC provide various bearing designations both in Metric and English, including bearings with solid rings, bearings with pressed steel outer ring, radial needle roller bearings and cage assembly, thrust needle roller bearings, and thrust needle roller and cage assembly. Those bearings are widely used in various applications, such as automobile, motor cycle, electrical tools, textile machines, agriculture machines, printings machines, engineering machines and automation instruments. Please contact UBC if detail technical parameters required.

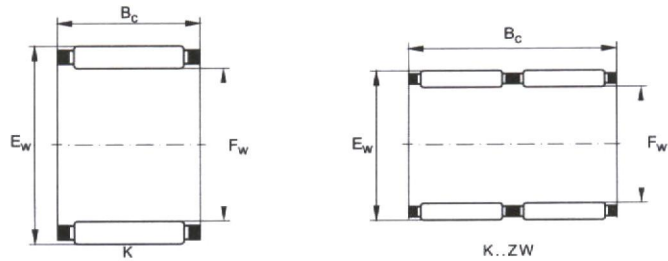


Shaft Diameter (mm)	Designation	Weight ≈ g	Main designation (mm)			Principal dimensions		Limiting Speed (oil) r/min
			Fw	Ew	Bc	Dynamic C (KN)	Static Co (KN)	
3	K3×5×7 TN	0.3	3	5	7	1.54	1.29	50000
	K3×5×9 TN	0.4	3	5	9	1.71	1.48	50000
	K3×6×7 TN	0.4	3	6	7	1.40	0.97	47000
4	K4×7×7 TN	0.5	4	7	7	1.74	1.27	43000
	K4×7×10 TN	0.7	4	7	10	2.33	1.84	43000
5	K5×8×8 TN	0.7	5	8	8	2.35	1.92	39000
	K5×8×10 TN	0.9	5	8	10	3	2.65	39000
6	K6×9×8 TN	0.8	6	9	8	2.6	2.28	37000
	K6×9×10 TN	1.1	6	9	10	3.35	3.15	37000
	K6×10×13 TN	1.9	6	10	13	3.8	3.1	35000
7	K7×9×7 TN	0.6	7	9	7	1.73	1.77	35000
	K7×10×8 TN	0.9	7	10	8	2.85	2.65	34000
	K7×10×10 TN	1	7	10	10	3.65	3.6	34000
8	K8×11×8 TN	1	8	11	8	3.1	3	32000
	K8×11×10 TN	1.2	8	11	10	3.95	4.1	32000
	K8×11×13 TN	1.7	8	11	13	5.1	5.8	32000
	K8×12×10 TN	2	8	12	10	5	4.7	32000
9	K9×12×10 TN	1.5	9	12	10	4.5	5	31000
	K9×12×13 TN	2.1	9	12	13	5.9	7.1	31000
10	K10×13×10 TN	1.6	10	13	10	4.75	5.5	29000
	K10×13×13 TN	2.3	10	13	13	6.2	7.8	29000
	K10×13×16 TN	2.9	10	13	16	7.1	9.3	29000
	K10×14×10 TN	2.5	10	14	10	5.8	6	29000
	K10×14×13 TN	4.6	10	14	13	7.5	8.4	29000
	K10×16×12 TN	5.5	10	16	12	8.1	7.2	28000
12	K12×15×10 TN	2.9	12	15	10	4.9	6.1	27000
	K12×15×13 TN	2.3	12	15	13	6.4	8.5	27000
	K12×16×13 TN	5.5	12	16	13	8	9.4	27000
	K12×17×13 TN	4.9	12	17	13	9.6	10.4	26000
	K12×18×12 TN	6	12	18	12	10	9.9	26000



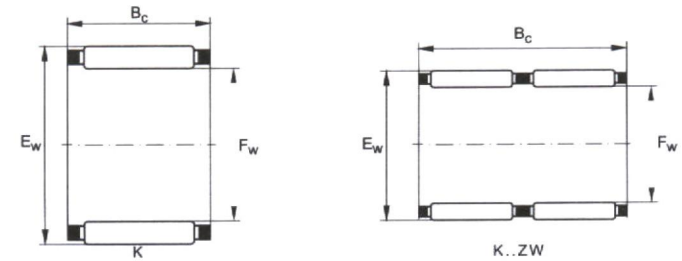
Shaft Diameter (mm)	Designation	Weight ≈ g	Main designation (mm)			Principal dimensions		Limiting Speed (oil) r/min
			Fw	Ew	Bc	Dynamic C (KN)	Static Co (KN)	
14	K14×18×10	4	14	18	10	7.1	8.5	25000
	K14×18×13	6.5	14	18	13	8.2	10.1	25000
	K14×18×15 TN	5	14	18	15	9.5	12.3	25000
	K14×18×17	8	14	18	17	10.8	14.4	25000
	K14×20×12	8.5	14	20	12	10.3	10.6	25000
15	K15×18×17 TN	4.6	15	18	17	8	12.1	24000
	K15×19×10	5	15	19	10	7.5	9.2	25000
	K15×19×13	7	15	19	13	8.5	10.9	24000
	K15×19×17	9.5	15	19	17	11.3	15.6	24000
	K15×20×13	7	15	20	13	9.9	11.5	24000
15	K15×21×15	11	15	21	15	14.3	16.4	24000
	K15×21×21	17	15	21	21	19.4	24.3	24000
	K16×20×10	5.5	16	20	10	7.8	9.9	24000
16	K16×20×13	7.5	16	20	13	8.9	11.8	24000
	K16×20×17	10	16	20	17	11.7	16.8	24000
	K16×22×12	10	16	22	12	11.5	12.5	23000
	K16×22×16	12	16	22	16	14.8	17.5	23000
	K16×22×20	17	16	22	20	18.3	22.8	23000
	K16×24×20	22	16	24	20	21.4	23.5	22000
17	K17×21×10	5.5	17	21	10	8.1	10.6	23000
	K17×21×13	6.5	17	21	13	10.4	14.6	23000
	K17×21×17	9.5	17	21	17	12.2	17.9	23000
18	K18×22×10	6	18	22	10	8.4	11.3	22000
	K18×22×13	8	18	22	13	9.2	12.7	22000
	K18×22×17	11	18	22	17	12.1	18	22000
	K18×24×12	12	18	24	12	12.8	14.9	22000
	K18×24×13	13	18	24	13	13.1	15.3	22000
	K18×24×20	18	18	24	20	20.2	27	22000
18	K18×25×22	23	18	25	22	23.1	29	22000
	K19×23×13	8	19	23	13	9.5	13.5	22000
19	K19×23×17	11	19	23	17	12.5	19.2	22000

TN is plastics cage and running temperature in +120°C

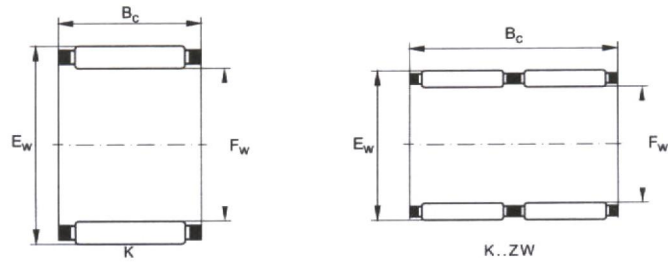


Shaft Diameter (mm)	Designation	Weight ≈ g	Main designation (mm)			Principal dimensions		Limiting Speed (oil) r/min
			Fw	Ew	Bc	Dynamic C (KN)	Static Co (KN)	
20	K20×24×10	6.5	20	24	10	8.9	12.6	21000
	K20×24×13	9	20	24	13	9.8	14.3	21000
	K20×24×17	12	20	24	17	12.9	20.4	21000
	K20×26×12	11	20	26	12	31.4	16.2	21000
	K20×26×13	12	20	26	13	14.4	17.9	21000
	K20×26×17	16	20	26	17	19.2	26	21000
	K20×26×20	19	20	26	20	21.1	29	21000
	K20×28×16	20	20	28	16	19.8	22.4	20000
	K20×28×20	27	20	28	20	23.9	28.5	20000
	K20×28×25	32	20	28	25	30.5	39	20000
K20×30×30	49	20	30	30	35.5	41.5	20000	
21	K21×25×13	9	21	25	13	10.1	15.1	21000
22	K22×26×10	7.5	22	26	10	9.1	13.4	20000
	K22×26×13	9.5	22	26	13	10.4	15.9	20000
	K22×26×17	12	22	26	17	13.7	22.7	20000
	K22×28×17	18	22	28	17	19.4	27	20000
	K22×29×16	16	22	29	16	20	25.5	19000
	K22×30×15 TN	18	22	30	15	20.1	23.4	19000
K22×32×24	43	22	32	24	34	40	18000	
23	K23×35×16 TN	29	23	35	16	24.5	23.9	17000
24	K24×28×10	8.5	24	28	10	9.6	14.8	19000
	K24×28×13	10	24	28	13	11	17.6	19000
	K24×28×17	13	24	28	17	14.5	25	19000
	K24×30×17	19	24	30	17	19.5	27.5	18000
K24×30×31 ZW	32	24	30	31	27.5	43.5	18000	

TN is plastics cage and running temperature in +120°C

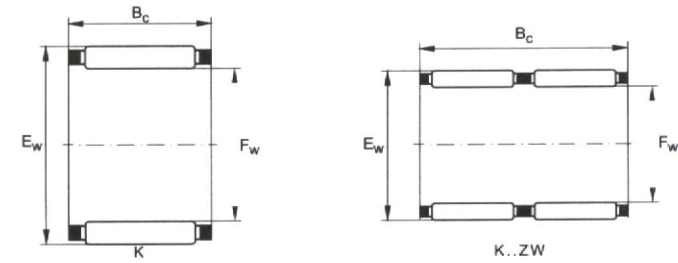


Shaft Diameter (mm)	Designation	Weight ≈ g	Main designation (mm)			Principal dimensions		Limiting Speed (oil) r/min
			Fw	Ew	Bc	Dynamic C (KN)	Static Co (KN)	
25	K25×29×10	8.5	25	29	10	9.9	15.4	18000
	K25×29×13	11	25	29	13	11.3	18.4	18000
	K25×29×17	14	25	29	17	14.9	26	18000
	K25×30×17	16	25	30	17	18.7	30	18000
	K25×30×20	18	25	30	20	21.7	36.5	18000
	K25×30×26 ZW	19	25	30	26	21.4	35.5	18000
	K25×31×17	19	25	31	17	19.6	28.5	18000
	K25×31×21	20	25	31	21	24.7	38	18000
	K25×32×16	21	25	32	16	20.8	27.5	17000
	K25×33×20	33	25	33	20	28.5	38	17000
	K25×33×24	39	25	33	24	34	47	17000
	K25×35×30	65	25	35	30	47	62	16000
26	K26×30×13	11	26	30	13	11.6	19.2	18000
	K26×30×17	15	26	30	17	15.2	27.5	18000
	K26×30×22 ZW	12	26	30	22	15.7	28.5	18000
28	K28×33×13	13	28	33	13	15.3	24.2	16000
	K28×33×17	17	28	33	17	19.7	33.5	16000
	K28×34×17	24	28	34	17	21.8	33.5	16000
	K28×35×16	24	28	35	16	21.5	29.5	16000
	K28×35×18	27	28	35	18	24	34	16000
K28×40×25	70	28	40	25	45.5	55	14000	
30	K30×34×13	14	30	34	13	12.3	21.7	15000
	K30×35×13	14	30	35	13	15.6	25.5	15000
	K30×35×17	19	30	35	17	19.6	34	15000
	K30×35×27	30	30	35	27	30.5	59	15000
	K30×37×16	27	30	37	16	23.1	33.5	15000
	K30×37×18	30	30	37	18	26	38.5	15000
	K30×40×18	48	30	40	18	32	40	14000
	K30×40×30	73	30	40	30	49	69	15000



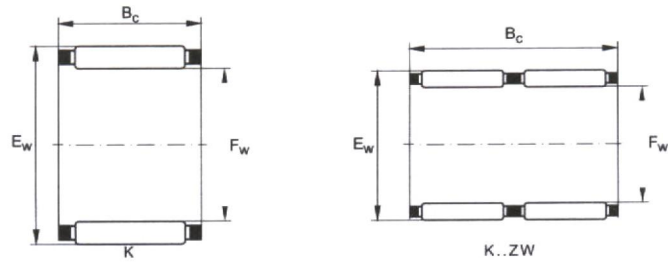
Shaft Diameter (mm)	Designation	Weight ≈ g	Main designation (mm)			Principal dimensions		Limiting Speed (oil) r/min
			Fw	Ew	Bc	Dynamic C (KN)	Static Co (KN)	
32	K32×37×13	18	32	37	13	15.5	25.5	14000
	K32×37×17	19	32	37	17	19.9	35.5	14000
	K32×37×27	30	32	37	27	30	60	14000
	K32×38×20	30	32	38	20	26.5	45	14000
	K32×39×16	37	32	39	16	23.8	35.5	14000
	K32×39×18	31	32	39	18	26.5	41	14000
	K32×40×25	49	32	40	25	37.5	58	14000
	K32×40×42 ZW TN	77	32	40	42	50	84	14000
35	K32×46×32	119	32	46	32	66	84	13000
	K35×40×13	19	35	40	13	16.2	28	13000
	K35×40×17	21	35	40	17	20.8	38.5	13000
	K35×40×25	31	35	40	25	29.5	60	13000
	K35×40×27 TN	39	35	40	27	25	48.5	13000
	K35×42×16	34	35	42	16	24.4	37.5	13000
	K35×42×18	34	35	42	18	27.5	43	13000
	K35×42×20	37	35	42	20	30	49	13000
	K35×42×30	67	35	42	30	39	68	13000
	K35×45×20	56	35	45	20	37	50	12000
K35×45×30	80	35	45	30	53	79	12000	
37	K37×42×17	22	37	42	17	22.4	43	12000
38	K38×43×17	29	38	43	17	20.5	38.5	12000
	K38×43×27	43	38	43	27	31.5	68	12000
	K38×46×20	47	38	46	20	35.5	57	12000
	K38×46×32	76	38	46	32	55	99	12000
39	K39×44×26 ZW	45	39	44	26	27.5	56	12000

TN is plastics cage and running temperature in +120°C

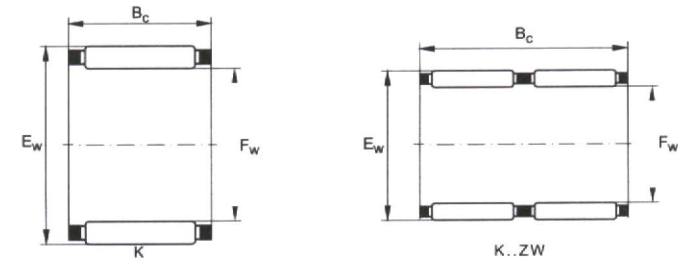


Shaft Diameter (mm)	Designation	Weight ≈ g	Main designation (mm)			Principal dimensions		Limiting Speed (oil) r/min
			Fw	Ew	Bc	Dynamic C (KN)	Static Co (KN)	
40	K40×45×13	22	40	45	13	17.6	32.5	12000
	K40×45×17	31	40	45	17	21.4	41.5	12000
	K40×45×27	46	40	45	27	33	73	12000
	K40×47×18	39	40	47	18	29.5	50	11000
	K40×47×20	42	40	47	20	32.5	57	11000
	K40×48×20	49	40	48	20	36	59	11000
42	K42×47×13	18	42	47	13	17.8	33.5	11000
	K42×47×17	32	42	47	17	21.7	43	11000
	K42×47×30 ZW	54	42	47	30	33.5	76	11000
43	K42×50×20	53	42	50	20	35	57	11000
	K43×48×17	30	43	48	17	21.6	43	11000
	K43×48×27	50	43	48	27	33.5	75	11000
45	K45×50×17	34	45	50	17	22.5	46	10000
	K45×50×27	51	45	50	27	34.5	80	10000
	K45×52×18	42	45	52	18	31.5	57	10000
	K45×53×20	55	45	53	20	39	67	10000
	K45×53×21	60	45	53	21	38.5	67	10000
	K45×53×28	81	45	53	28	52	98	10000
	K45×59×18 TN	72	45	59	18	44	54	9500
47	K45×59×32	148	45	59	32	73	103	9500
	K47×52×17	35	47	52	17	23.5	49	10000
	K47×52×27	51	47	52	27	35	83	10000

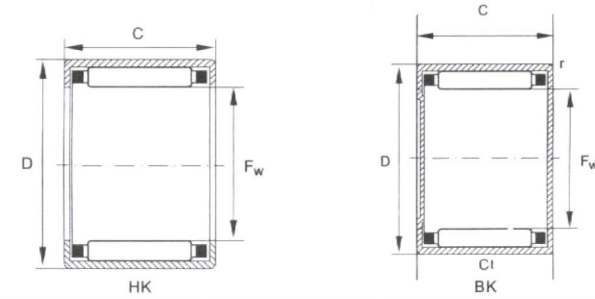
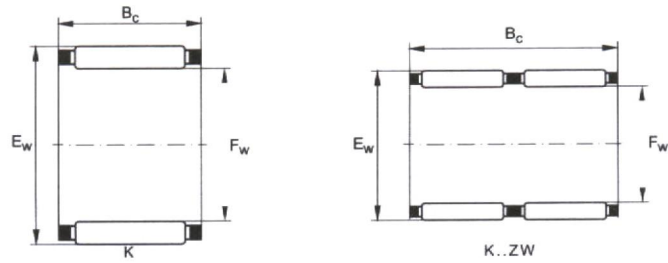
TN is plastics cage and running temperature in +120°C



Shaft Diameter (mm)	Designation	Weight ≈ g	Main designation (mm)			Principal dimensions		Limiting Speed (oil) r/min
			Fw	Ew	Bc	Dynamic C (KN)	Static Co (KN)	
50	K50×55×13.5	30	50	55	13.5	18.2	36.5	9500
	K50×55×17	35	50	55	17	22.1	47	9500
	K50×55×20	43	50	55	20	26.5	60	9500
	K50×55×30	65	50	55	30	39	97	9500
	K50×57×18	47	50	57	18	33.5	63	9000
	K50×58×20	75	50	58	20	35.5	62	9000
	K50×58×25	90	50	58	25	44	81	9000
52	K52×57×12	24	52	57	12	18	36.5	9000
55	K55×60×20	40	55	60	20	28.5	66	8500
	K55×60×27	60	55	60	27	38	97	8500
	K55×60×30	71	55	60	30	41	108	8500
	K55×62×18	52	55	62	18	35.5	70	8500
	K55×63×20	67	55	63	20	40	74	8500
	K55×63×25	80	55	63	25	51	101	8500
	K55×63×32	102	55	63	32	62	130	8500
58	K58×65×18	52	58	65	18	35	70	8000
	K58×65×36 ZW	127	58	65	36	49	107	8000
60	K60×65×20	52	60	65	20	29.5	72	8000
	K60×65×30	77	60	65	30	42.5	116	8000
	K60×66×33 ZW	104	60	66	33	46	112	8000
	K60×66×40 ZW	116	60	66	40	58	151	8000
	K60×68×20	71	60	68	20	43.5	85	7500
	K60×68×23	94	60	68	23	49.5	101	7500
	K60×68×25	89	60	68	25	53	111	7500
	K60×68×30 ZW	129	60	68	30	44.5	88	7500
K60×75×42	240	60	75	42	118	199	7500	
62	K60×70×40 ZW	174	62	70	40	66	146	7500
64	K64×70×16	53	64	70	16	28	60	7500



Shaft Diameter (mm)	Designation	Weight ≈ g	Main designation (mm)			Principal dimensions		Limiting Speed (oil) r/min
			Fw	Ew	Bc	Dynamic C (KN)	Static Co (KN)	
65	K65×70×20	56	65	70	20	30.5	77	7500
	K65×70×30	83	65	70	30	44	1274	7500
	K65×73×23	108	65	73	23	46	94	7000
	K65×73×30	141	65	73	30	57	123	7000
68	K68×74×20	71	68	74	20	35.5	84	7000
	K68×74×30	100	68	74	30	46.5	118	7000
	K68×74×35 ZW	120	68	74	35	48.5	125	7000
70	K70×76×20	71	70	76	20	36	86	6500
	K70×76×30	110	70	76	30	52	139	6500
	K70×78×30	120	70	76	30	60	135	6500
72	K72×80×20	98	72	80	20	41.5	85	6500
73	K73×79×20	75	73	79	20	37	90	6500
75	K75×81×20	79	75	81	20	37.5	94	6500
	K75×81×30	114	75	81	30	52	143	6500
	K75×83×23	124	75	83	23	50	109	6000
	K75×83×30	147	75	83	30	62	143	6000
	K75×83×35 ZW	182	75	83	35	63	147	6000
80	K75×83×40 ZW	211	75	83	40	73	177	6000
	K80×86×20	60	80	86	20	38.5	98	6000
	K80×88×30	138	80	88	30	71	176	6000
	K80×88×40 ZW	227	80	88	40	76	192	6000
85	K80×88×46 ZW	260	80	88	46	88	231	6000
	K85×92×20	102	85	92	20	44.5	108	5500
90	K90×97×20	109	90	97	20	45	113	5000
	K90×98×27	150	90	98	27	61	150	5000
	K90×98×30	172	90	98	30	68	172	5000
95	K95×103×30	165	95	103	30	69	180	4900
	K95×103×40 ZW	266	95	103	40	83	228	4900



Shaft Diameter (mm)	Designation	Weight ≈ g	Main designation (mm)			Principal dimensions		Limiting Speed (oil) r/min
			Fw	Ew	Bc	Dynamic C (KN)	Static Co (KN)	
100	K100×107×21	120	100	107	21	48	127	4700
	K100×108×27	185	100	108	27	57	143	4700
	K100×108×30	180	100	108	30	71	188	4700
105	K105×112×21	129	105	112	21	47.5	127	4500
110	K110×117×24	172	110	117	24	56	158	4300
	K110×118×30	217	110	118	30	78	219	4300
115	K115×123×27	200	115	123	27	63	170	4100
120	K120×127×24	165	120	127	24	59	174	4000
125	K125×133×35	275	125	133	35	86	260	3800
130	K130×137×24	170	130	137	24	61	186	3700
135	K135×143×35	300	135	143	35	91	290	3500
145	K145×153×26	262	145	153	26	74	225	3300
150	K150×160×46	570	150	160	46	147	470	3200
155	K155×163×26	265	155	163	26	75	236	3100
160	K160×170×46	550	160	170	46	152	510	3000
165	K165×173×26	320	165	173	26	81	265	2900
175	K175×183×32	400	175	183	32	99	350	2700
185	K185×195×37	607	185	195	37	128	425	2600
195	K195×205×37	620	195	205	37	133	450	2500
210	K210×220×42	740	210	220	42	154	560	2300
220	K220×230×42	790	220	230	42	158	590	2200
240	K240×250×42	850	240	250	42	164	630	2000
265	K265×280×50	1810	265	280	50	255	860	1800

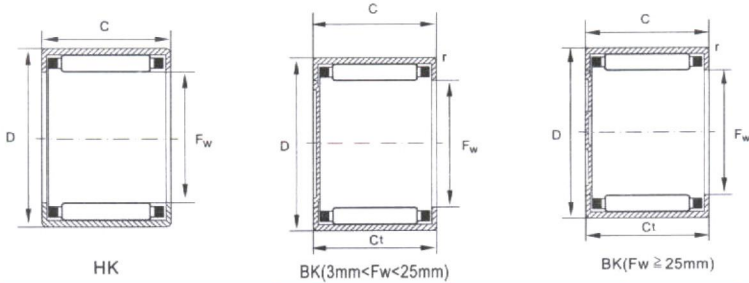
TN is plastics cage and running temperature in +120°C

Shaft Diameter (mm)	Main designation (mm)					Open end		Close end		Principal dimensions		Limiting Speed (oil) r/min
	Fw	D	C	Ct min	r min	Designation	Weight ≈g	Designation	Weight ≈g	Dynamic C (KN)	Static Co (KN)	
3	3	6.5	6	5.2	0.3	+HK 0306 TN	1	+BK 0306 TN	1	1.23	0.84	46000
4	4	8	8	6.4	0.3	+HK 0408	2	+BK 0408	2.1	1.78	1.31	41000
5	5	9	9	7.4	0.4	+HK 0509	2	+BK 0509	2.1	2.4	1.99	38000
6	6	10	8	-	0.4	+HK 0608	2.1	-	-	2.03	1.65	35000
	6	10	9	7.4	0.4	HK 0609	2.5	BK 0609	2.6	2.85	2.6	35000
7	7	11	9	7.4	0.4	HK 0709	2.6	BK 0709	2.9	3.1	2.95	31000
8	8	12	8	6.4	0.4	HK 0808	2.7	BK 0808	3	2.75	2.6	28000
	8	12	10	8.4	0.4	HK 0810	3	BK 0810	3.4	3.8	3.95	28000
9	9	13	8	-	0.4	HK 0908	3	-	-	3.55	3.75	25000
	9	13	10	8.4	0.4	HK 0910	4	BK 0910	4.3	4.25	4.65	25000
	9	13	12	10.4	0.4	HK 0912	4.6	BK 0912	4.9	5.3	6.3	25000
10	10	14	10	8.4	0.4	HK 1010	4.1	BK 1010	4.3	4.4	5.1	23000
	10	14	12	10.4	0.4	HK 1012	4.8	BK 1012	5	5.5	6.8	23000
	10	14	15	13.4	0.4	HK 1015	6	BK 1015	6.2	6.8	8.8	23000
12	12	16	10	8.4	0.4	HK 1210	4.6	BK 1210	5.2	4.95	6.2	20000
	12	18	12	9.3	0.8	HK 1212	9	BK 1212	10	6.5	7.3	19000
13	13	19	12	9.3	0.8	HK 1312	10	BK 1312	11	6.8	7.9	18000
14	14	20	12	9.3	0.8	HK 1412	10.5	BK 1412	12	7.1	8.5	16000
15	15	21	12	9.3	0.8	HK 1512	11	BK 1512	13	7.9	9.4	16000
	15	21	16	13.3	0.8	HK 1516	15	BK 1516	17	10.5	14.4	16000
	15	22	22	-	0.8	°HK 1522	20	-	-	13.4	19.5	16000
16	16	22	12	9.3	0.8	HK 1612	12	BK 1612	14	7.6	9.7	15000
	16	22	16	13.3	0.8	HK 1616	16	BK 1616	18	10.9	15.3	15000
	16	23	22	19.3	0.8	°HK 1622	22	°BK 1622	24	13.1	19.4	15000
17	17	24	12	-	0.8	HK 1712	12	-	-	7.9	10.3	14000
18	18	24	12	9.3	0.8	HK 1812	13	BK 1812	15	8.1	10.9	13000
	18	26	16	13.3	0.8	HK 1816	18	BK 1816	20	11.6	17.3	13000
20	20	26	10	-	0.8	HK 2010	12	-	-	6.4	8.2	12000
	20	26	12	-	0.8	HK 2012	14	-	-	8.6	12.1	12000
	20	26	16	13.3	0.8	HK 2016	19	BK 2016	22	12.7	20.1	12000
	20	26	20	17.3	0.8	HK 2020	24	BK 2020	27	15.7	26	12000
	20	26	30	-	0.8	°HK 2030	35	-	-	21.8	40	12000
22	22	28	10	-	0.8	HK 2210	13	-	-	7.5	10.5	11000
	22	28	12	9.3	0.8	HK 2212	15	BK 2212	18	9.1	13.4	11000
	22	28	16	13.3	0.8	HK 2216	21	BK 2216	24	13.4	22.1	11000
	22	28	20	-	0.8	HK 2220	26	-	-	16.5	29	11000

TN is plastics cage and running temperature in +120°C

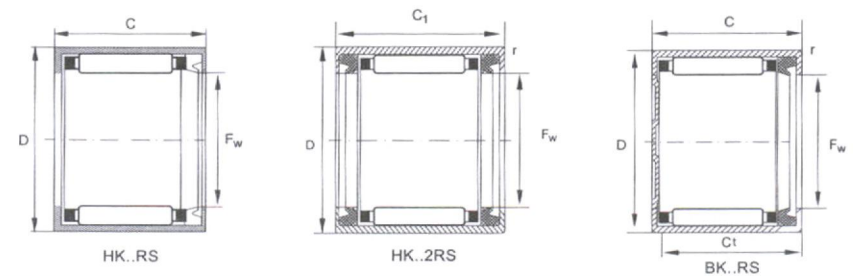
+ no lubrication holes

° standard design of double row bearings with lubrication holes

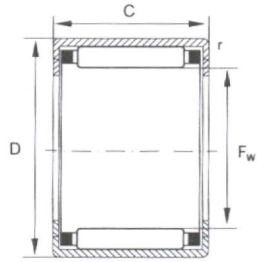


Shaft Diameter (mm)	Main designation (mm)					Open end		Close end		Principal dimensions		Limiting Speed (oil) r/min
	Fw	D	C	Ct min	r min	Designation	Weight ≈g	Designation	Weight ≈g	Dynamic C (kN)	Static Co (kN)	
25	25	32	12	-	0.8	HK 2512	20	-	-	11	15.2	10000
	25	32	16	-	0.8	HK 2516	27	-	-	15.5	24	10000
	25	32	20	17.3	0.8	HK 2520	33	BK 2520	38	19.9	33	10000
	25	32	26	23.3	0.8	HK 2526	44	BK 2526	48	25.5	45	10000
	25	32	38	35.3	0.8	°HK 2538	64	°BK 2538	68	34	66	10000
28	28	35	16	-	0.8	HK 2816	29	-	-	16.4	26.5	9000
	28	35	20	-	0.8	HK 2820	36	-	-	20.9	36	9000
	30	37	12	9.3	0.8	HK 3013	23	BK 3013	28	12.1	18.2	8500
30	30	37	16	13.3	0.8	HK 3016	31	BK 3016	38	17.2	29	8500
	30	37	20	17.3	0.8	HK 3020	39	BK 3020	47	22	39.5	8500
	30	37	26	23.3	0.8	HK 3026	51	BK 3026	58	28	54	8500
	30	37	38	35.3	0.8	°HK 3038	76	°BK 3038	84	37.5	79	8500
	35	35	42	12	-	0.8	HK 3512	27	-	-	13.1	21.3
35		42	16	-	0.8	HK 3516	36	-	-	18.7	33.5	7500
35		42	20	17.3	0.8	HK 3520	44	BK 3520	53	23.8	46	7500
40	40	47	12	-	0.8	HK 4012	30	-	-	14	24.3	6500
	40	47	16	-	0.8	HK 4016	39	-	-	20	38.5	6500
	40	47	20	17.3	0.8	HK 4020	54	BK 4020	62	25.5	52	6500
45	45	52	12	-	0.8	HK 4512	33	-	-	14.9	27.5	6500
	45	52	16	-	0.8	HK 4516	46	-	-	21.3	43	6500
	45	52	20	17.3	0.8	HK 4520	56	BK 4520	72	27	59	6500
50	50	58	20	-	0.8	HK 5020	70	-	-	31	63	5000
	50	58	25	-	0.8	HK 5025	90	-	-	38.5	84	5000
55	55	63	20	-	0.8	HK 5520	74	-	-	31.5	67	4700
	55	63	28	-	0.8	HK 5028	105	-	-	44	103	4700
60	60	68	12	-	0.8	HK 6012	49	-	-	17.4	32	4400
	60	68	20	-	0.8	HK 6020	81	-	-	33.5	75	4400
60	68	32	-	0.8	HK 6032	136	-	-	53	135	4400	

TN is plastics cage and running temperature in +120°C  
 + no lubrication holes  
 ° standard design of double row bearings with lubrication holes



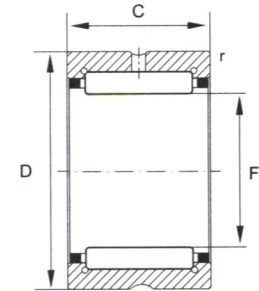
Shaft Diameter (mm)	Main designation (mm)						Open end			Close end		Principal dimensions		Limiting Speed (oil) r/min	
	Fw	D	C	Ct	r min	One side sealed Designation	Weight ≈g	Double sides sealed Designation	Weight ≈g	Designation	Weight ≈g	Dynamic C (kN)	Static Co (kN)		
8	8	12	10	12	-	0.4	HK 0810 RS	3	HK 0812.2 RS	3.3	-	-	2.75	2.6	20000
10	10	14	12	14	-	0.4	HK 1012 RS	4.2	HK 1014.2 RS	4.6	-	-	4.4	5.1	17000
12	12	18	14	16	-	0.8	HK 1214 RS	10	HK 1216.2 RS	11	-	-	6.5	7.3	14000
14	14	20	14	16	11.3	0.8	HK 1414 RS	12	HK 1416.2 RS	13	BK 1414 RS	13	7.1	8.5	12000
15	15	21	14	16	-	0.8	HK 1514 RS	12	HK 1516.2 RS	15	-	-	7.8	9.8	11000
	15	21	18	20	-	0.8	HK 1518 RS	16	HK 1520.2 RS	18	-	-	10.5	14.4	11000
16	16	22	14	16	11.3	0.8	HK 1614 RS	13	HK 1616.2 RS	14	BK 1614 RS	15	7.6	9.7	11000
	16	22	-	20	-	0.8	-	-	HK 1620.2 RS	18	-	-	10.9	15.3	11000
18	18	24	14	16	-	0.8	HK 1814 RS	14	HK 1816.2 RS	15	-	-	8.1	10.9	9500
	20	26	-	16	-	0.8	-	-	HK 2016.2 RS	18	-	-	8.6	12.1	8500
20	20	26	18	20	15.3	0.8	HK 2018 RS	21	HK 2020.2 RS	23	BK 2018 RS	24	12.7	20.1	8500
	22	28	14	16	-	0.8	HK 2214 RS	16	HK 2216.2 RS	18	-	-	9.1	13.4	8000
22	22	28	18	20	-	0.8	HK 2218 RS	24	HK 2220.2 RS	26	-	-	13.4	22.1	8000
	25	32	-	16	-	0.8	-	-	HK 2516.2 RS	27	-	-	11	15.2	7000
25	25	32	18	20	15.3	0.8	HK 2518 RS	29	HK 2520.2 RS	31	BK 2518 RS	34	15.6	24	7000
	25	32	-	24	-	0.8	-	-	HK 2524.2 RS	40	-	-	19.9	33	7000
	25	32	-	30	-	0.8	-	-	HK 2530.2 RS	47	-	-	25.5	45	7000
28	28	35	18	20	-	0.8	HK 2818 RS	31	HK 2820.2 RS	34	-	-	16.4	26.5	6000
	30	37	-	16	-	0.8	-	-	HK 3016.2 RS	31	-	-	12.1	18.2	6000
	30	37	18	20	-	0.8	HK 3018 RS	37	HK 3020.2 RS	36	-	-	17.2	29	6000
30	30	37	-	24	-	0.8	-	-	HK 3024.2 RS	44	-	-	22	39.5	6000
	35	42	-	16	-	0.8	-	-	HK 3516.2 RS	32	-	-	13.1	21.3	5000
35	35	42	18	20	-	0.8	HK 3518 RS	39	HK 3520.2 RS	41	-	-	18.7	33.5	5000
	40	47	-	16	-	0.8	-	-	HK 4016.2 RS	37	-	-	14	24.3	4500
40	40	47	18	20	-	0.8	HK 4018 RS	45	HK 4020.2 RS	48	-	-	20	38.5	4500
	45	52	18	20	-	0.8	HK 4518 RS	50	HK 4520.2 RS	54	-	-	21.3	43	4000
50	50	58	22	24	-	0.8	HK 5022 RS	76	HK 5024.2 RS	81	-	-	31	63	3600



NK(F<sub>w</sub> ≤ 10mm)

Shaft Diameter (mm)	Main designation (mm)				Designation				Principal dimensions			Limiting Speed (oil) r/min
	F <sub>w</sub>	D	C	r <sub>min</sub>	NK	RNA49	RNA69	Weight ≈g	Dynamic C (kN)	Static Co (kN)		
5	5	10	10	0.15	+NK 5/10 TN	-	-	3.1	2.35	1.92	37000	
	5	10	12	0.15	+NK 5/12 TN	-	-	3.7	3	2.65	37000	
6	6	12	10	0.15	+NK 6/10 TN	-	-	4.7	2.6	2.28	33000	
	6	12	12	0.15	+NK 6/12 TN	-	-	5.7	3.35	3.15	33000	
7	7	14	10	0.3	+NK 7/10 TN	-	-	6.9	2.85	2.65	31000	
	7	14	12	0.3	+NK 7/12 TN	-	-	8.2	3.65	3.6	31000	
8	8	15	12	0.3	+NK 8/12 TN	-	-	8.7	3.95	4.1	29000	
	8	15	16	0.3	+NK 8/16 TN	-	-	12	5.1	5.8	29000	
9	9	16	12	0.3	+NK 9/12 TN	-	-	10.3	4.5	5	28000	
	9	16	16	0.3	+NK 9/16 TN	-	-	12.8	5.9	7.1	28000	
10	10	17	12	0.3	+NK 10/12 TN	-	-	10.1	4.75	5.5	27000	
	10	17	16	0.3	+NK 10/16 TN	-	-	13.3	6.2	7.8	27000	
12	12	19	12	0.3	NK 12/12	-	-	12.1	6.4	7.1	25000	
	12	19	16	0.3	NK 12/16	-	-	15.9	9	11	25000	
14	14	22	16	0.3	NK 14/16	-	-	20.7	10.1	11.5	24000	
	14	22	20	0.3	NK 14/20	-	-	25.5	12.8	15.8	24000	
14	14	22	13	0.3	-	RNA 4900	-	16.5	8.5	9.2	25000	
	15	23	16	0.3	NK 15/16	-	-	21.8	10.7	12.7	23000	
15	15	23	20	0.3	NK 15/20	-	-	26.6	13.5	17.4	23000	
	16	24	16	0.3	NK 16/16	-	-	22.4	11.3	13.9	22000	
16	16	24	20	0.3	NK 16/20	-	-	28.4	14.4	18.8	22000	
	16	24	13	0.3	-	RNA 4901	-	17.4	9.4	10.9	24000	
16	16	24	22	0.3	-	-	RNA 6901	31	16	21.6	22000	
	17	25	16	0.3	NK 17/16	-	-	23.7	11.9	15	22000	
17	17	25	20	0.3	NK 17/20	-	-	29.8	15.1	20.4	22000	
	18	26	16	0.3	NK 18/16	-	-	24.9	12.5	16.2	21000	
18	18	26	20	0.3	NK 18/20	-	-	31.4	15.8	22	21000	
	19	27	16	0.3	NK 19/16	-	-	26.1	13	17.4	21000	
19	19	27	20	0.3	NK 19/20	-	-	32.2	16.5	23.6	21000	

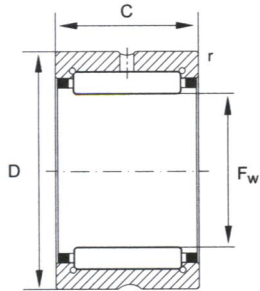
TN is plastics cage and running temperature in +120°C  
+ with flanged ring but no lubrication holes and groove.



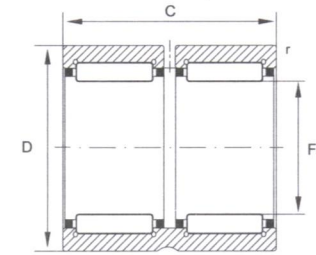
NK(F<sub>w</sub> ≥ 12mm)  
NKS  
RNA 49, RNA 69(F<sub>w</sub> ≤ 35mm)

Shaft Diameter (mm)	Main designation (mm)				Designation				Principal dimensions			Limiting Speed (oil) r/min
	F <sub>w</sub>	D	C	r <sub>min</sub>	NK	RNA49	RNA69	NSK	Weight ≈g	Dynamic C (kN)	Static Co (kN)	
20	20	28	16	0.3	NK 20/16	-	-	-	27	13	17.5	20000
	20	28	20	0.3	NK 20/20	-	-	-	33.9	16.4	23.8	20000
	20	28	13	0.3	-	RNA 4902	-	-	21.7	10.6	13.6	22000
	20	28	23	0.3	-	-	RNA 6902	-	39.7	17.3	25.5	20000
20	20	32	20	0.6	-	-	-	NSK 20	48.7	23	25	19000
	21	29	16	0.3	NK 21/16	-	-	-	28.1	13.5	18.7	20000
21	21	29	20	0.6	NK 21/20	-	-	-	35.2	17.1	25.5	20000
	22	30	16	0.3	NK 22/16	-	-	-	30	14	19.9	19000
22	22	30	20	0.3	NK 22/20	-	-	-	37	17.7	27	19000
	22	30	13	0.3	-	RNA 4903	-	-	22.2	11	14.6	21000
	22	30	23	0.3	-	-	RNA 6903	-	42.4	18.6	29	19000
	22	35	20	0.6	-	-	-	NSK 22	61.5	24.5	28	17000
24	24	32	16	0.3	NK 24/16	-	-	-	31.9	15	22.3	18000
	24	32	20	0.3	NK 24/20	-	-	-	40	19	30.5	18000
24	24	37	20	0.6	-	-	-	NSK 24	65.5	26	31	16000
	25	33	16	0.3	NK 25/16	-	-	-	32.6	14.9	22.4	17000
25	25	33	20	0.3	NK 25/20	-	-	-	42	18.8	30.5	17000
	25	37	17	0.3	-	RNA 4904	-	-	52.3	21	25.5	17000
	25	37	30	0.3	-	-	RNA 6904	-	100	36	51	16000
	25	38	20	0.6	-	-	-	NSK 25	68.1	27.5	33.5	16000
26	26	34	16	0.3	NK 26/16	-	-	-	34	15.3	23.6	16000
	26	34	20	0.3	NK 26/20	-	-	-	42	19.4	32	16000
28	28	37	20	0.3	NK 28/20	-	-	-	52.2	22	34	15000
	28	37	30	0.3	NK 28/30	-	-	-	82	33	57	15000
	28	39	17	0.3	-	RNA 49/22	-	-	50.2	22.8	29.5	16000
	28	39	30	0.3	-	-	RNA 69/22	-	98	37.5	55	15000
28	28	42	20	0.6	-	-	-	NSK 28	83.6	28.5	36.5	14000
	29	38	20	0.3	NK 29/20	-	-	-	53.7	21.9	34	15000
29	29	38	30	0.3	NK 29/30	-	-	-	84.3	32.5	57	15000
	30	40	20	0.3	NK 30/20	-	-	-	65	22.6	36	14000
30	30	40	30	0.3	NK 30/30	-	-	-	97.9	33.5	60	14000
	30	42	17	0.3	-	RNA 4905	-	-	61	23.6	31.5	15000
	30	42	30	0.3	-	-	RNA 6905	-	112	39	59	14000
	30	45	32	0.6	-	-	-	NSK 30	104	32	40	13000
32	32	42	20	0.3	NK 32/20	-	-	-	68	23.1	37.5	13000
	32	42	30	0.3	NK 32/30	-	-	-	102	34.5	63	13000
	32	45	17	0.3	-	RNA 49/28	-	-	73.2	24.4	33.5	13000
	32	45	30	0.3	-	-	RNA 69/28	-	73.5	40.5	63	13000
32	47	22	0.6	-	-	-	NSK 32	110	33.5	43.5	12000	





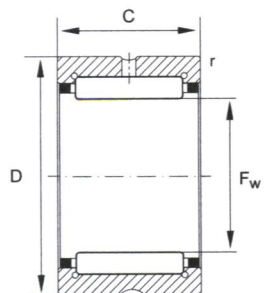
NK,NKS  
RNA 49  
RNA 69( $F_w \leq 35\text{mm}$ )



RNA 69( $F_w \geq 240\text{mm}$ )

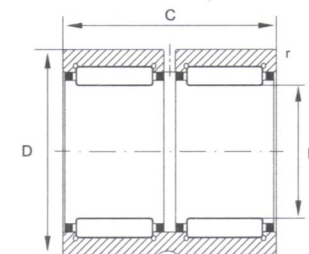
Shaft Diameter (mm)	Main designation (mm)				Designation				Weight $\approx$ g	Principal dimensions		Limiting Speed (oil) r/min
	Fw	D	C	r min	NK	RNA49	RNA69	NSK		Dynamic C (kN)	Static Co (kN)	
35	35	45	20	0.3	NK 35/20	-	-	-	73.8	24.3	41.5	12000
	35	45	30	0.3	NK 35/30	-	-	-	112	36.5	69	12000
	35	47	17	0.3	-	RNA 4906	-	-	69.4	25	35.5	13000
	35	47	30	0.3	-	-	RNA 6906	-	126	43.5	71	12000
	35	50	22	0.6	-	-	-	NSK 35	118	35	47	12000
37	37	47	20	0.3	NK 37/20	-	-	-	77	24.9	43.5	12000
	37	47	30	0.3	NK 37/30	-	-	-	113	37	73	12000
	37	52	22	0.6	-	-	-	NSK 37	123	36.5	50	11000
38	38	48	20	0.3	NK 38/20	-	-	-	79.4	25.5	45	11000
	38	48	30	0.3	NK 38/30	-	-	-	116	38	76	11000
40	40	50	20	0.3	NK 40/20	-	-	-	82.7	26	47	11000
	40	50	30	0.3	NK 40/30	-	-	-	125	39	79	11000
	40	52	20	0.3	-	RNA 49/32	-	-	89.1	30.5	47.5	12000
	40	52	36	0.3	-	-	RNA 69/32	-	162	47	82	11000
	40	55	22	0.6	-	-	-	NSK 40	129	38	54	10000
42	42	52	20	0.3	NK 42/20	-	-	-	85.8	36.5	49	10000
	42	52	30	0.3	NK 42/30	-	-	-	130	39.5	82	10000
	42	55	20	0.6	-	RNA 4907	-	-	107	31.5	50	11000
	42	55	36	0.6	-	-	RNA 6907	-	193	48	86	10000
43	43	53	20	0.3	NK 43/20	-	-	-	86	27	51	10000
	43	53	30	0.3	NK 43/30	-	-	-	133	40.5	85	10000
	43	58	22	0.6	-	-	-	NSK 43	139	39	57	9500
45	45	55	20	0.3	NK 45/20	-	-	-	91.5	27.5	53	10000
	45	55	30	0.3	NK 45/30	-	-	-	139	41	88	10000
	45	60	22	0.6	-	-	-	NSK 45	145	40.5	60	9500
47	47	57	20	0.3	NK 47/20	-	-	-	94.5	28.5	56	9500
	47	57	30	0.3	NK 47/30	-	-	-	142	43	94	9500
48	48	62	22	0.6	-	RNA 4908	-	-	140	43	67	9500
	48	62	40	0.6	-	-	RNA 6908	-	256	66	116	9000
50	50	62	25	0.6	NK 50/25	-	-	-	158	38	74	9000
	50	62	35	0.6	NK 50/35	-	-	-	221	50	106	9000
	50	65	22	1	-	-	-	NSK 50	157	42.5	67	8500
52	52	68	22	0.6	-	RNA 4909	-	-	182	45	73	8500
	52	68	40	0.6	-	-	RNA 6909	-	338	69	127	8000
55	55	68	25	0.6	NK 55/25	-	-	-	180	40	82	8000
	55	68	35	0.6	NK 55/35	-	-	-	250	53	118	8000
	55	72	22	1	-	-	-	NSK 55	221	45	74	7500
58	58	72	22	0.6	-	RNA 4910	-	-	163	47	80	8000
	58	72	40	0.6	-	-	RNA 6910	-	310	73	139	7500

Shaft Diameter (mm)	Main designation (mm)				Designation				Weight $\approx$ g	Principal dimensions		Limiting Speed (oil) r/min
	Fw	D	C	r min	NK	RNA49	RNA69	NSK		Dynamic C (kN)	Static Co (kN)	
60	60	72	25	0.6	NK 60/25	-	-	-	185	42	90	7500
	60	72	35	0.6	NK 60/35	-	-	-	258	56	130	7500
	60	80	28	1.1	-	-	-	NKS 60	335	63	98	7000
	60	80	25	1	-	RNA 4911	-	-	255	58	100	7500
63	63	80	45	1	-	-	RNA 6911	-	470	90	176	7000
	63	80	25	0.6	NK 63/25	-	-	-	221	44	98	7000
65	65	78	35	0.6	NK 60/35	-	-	-	310	59	142	7000
	65	85	28	1.1	-	-	-	NKS 65	356	67	108	6500
	65	82	25	0.6	NK 68/25	-	-	-	241	43.5	89	6500
68	68	82	35	0.6	NK 68/35	-	-	-	338	62	139	6500
	68	85	25	1	-	RNA 4912	-	-	275	60	108	7000
	68	85	45	1	-	-	RNA 6912	-	488	94	191	6500
	68	85	25	0.6	NK 70/25	-	-	-	260	44.5	92	6500
70	70	85	35	0.6	NK 70/35	-	-	-	370	63	144	6500
	70	90	28	1.1	-	-	-	NKS 70	380	68	113	6000
	70	90	25	1	-	RNA 4913	-	-	312	61	112	6500
72	72	90	45	1	-	-	RNA 6913	-	580	95	198	6000
	72	90	25	1	NK 73/25	-	-	-	302	53	100	6000
73	73	90	35	1	NK 73/35	-	-	-	428	75	156	6000
	73	92	25	1	NK 75/25	-	-	-	315	54	104	6000
75	75	92	35	1	NK 75/35	-	-	-	445	77	162	6000
	75	95	28	1.1	-	-	-	NKS 75	402	71	123	6000
	75	95	25	1	NK 80/25	-	-	-	301	56	119	5500
80	80	95	35	1	NK 80/35	-	-	-	425	78	184	5500
	80	100	30	1	-	RNA 4914	-	-	460	84	156	6000
	80	100	54	1	-	-	RNA 6914	-	857	128	265	5500
	80	105	25	1	NK 85/25	-	-	-	425	69	123	5000
85	85	105	35	1	NK 85/35	-	-	-	600	98	193	5000
	85	105	30	1	-	RNA 4915	-	-	489	86	162	5500
	85	105	54	1	-	-	RNA 6915	-	935	130	275	5000
	85	110	25	1	NK 95/25	-	-	-	450	72	132	4900
90	90	110	35	1	NK 95/35	-	-	-	630	103	208	4900
	90	110	30	1	-	RNA 4916	-	-	516	89	174	5000
	90	110	54	1	-	-	RNA 6916	-	987	135	300	4900
	90	115	26	1	NK 95/26	-	-	-	490	73	137	4700
95	95	115	36	1	NK 95/36	-	-	-	680	107	223	4700



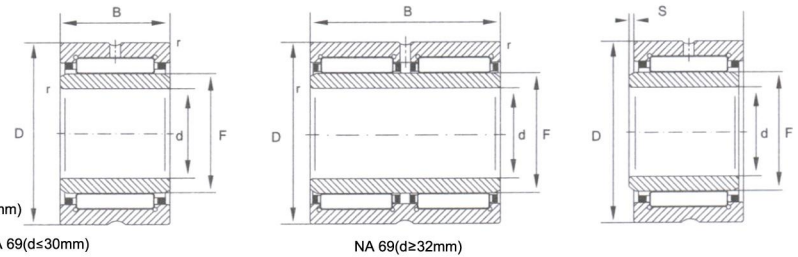
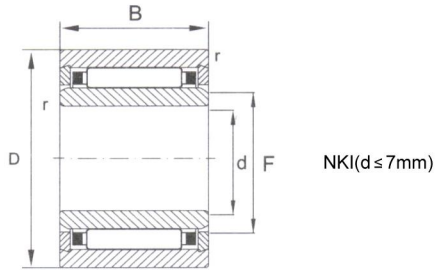
NK  
RNA 49, RNA 48

Shaft Diameter (mm)	Main designation (mm)				Designation				Principal dimensions		Limiting Speed (oil) r/min
	Fw	D	C	r min	NK	RNA49	RNA69	Weight ≈g	Dynamic C (kN)	Static Co (kN)	
100	100	120	26	1	<b>NK 100/26</b>	-	-	515	76	146	4500
	100	120	36	1	<b>NK 100/36</b>	-	-	715	111	237	4500
	100	120	35	1.1	-	<b>RNA 4917</b>	-	657	111	237	4800
	100	120	63	1.1	-	-	<b>RNA 6917</b>	1200	166	400	4500
105	105	125	26	1	<b>NK 105/26</b>	-	-	540	78	155	4300
	105	125	36	1	<b>NK 105/36</b>	-	-	713	114	250	4300
	105	125	35	1.1	-	<b>RNA 4918</b>	-	745	114	250	4600
	105	125	63	1.1	-	-	<b>RNA 6918</b>	1330	172	425	4300
110	110	130	30	1.1	<b>NK 110/30</b>	-	-	650	98	210	4100
	110	130	40	1.1	<b>NK 110/40</b>	-	-	830	127	290	4100
	110	130	35	1.1	-	<b>RNA 4919</b>	-	719	116	260	4400
	110	130	63	1.1	-	-	<b>RNA 6919</b>	1460	174	440	4100



RNA 69

Shaft Diameter (mm)	Main designation (mm)				Designation			Principal dimensions		Limiting Speed (oil) r/min
	Fw	D	C	r min	RNA49	RNA48	Weight=g	Dynamic C (kN)	Static Co (kN)	
115	115	140	40	1.1	<b>RNA 4920</b>	-	1150	128	270	4100
120	120	140	30	1	-	<b>RNA 4822</b>	670	94	216	3800
125	125	150	40	1.1	<b>RNA 4922</b>	-	1240	132	290	3800
130	130	150	30	1	-	<b>RNA 4824</b>	730	99	239	3500
135	135	165	45	1.1	<b>RNA 4924</b>	-	1860	181	390	3400
145	145	165	35	1.1	-	<b>RNA 4826</b>	990	118	310	3200
150	150	180	50	1.5	<b>RNA 4926</b>	-	2210	203	470	3200
155	155	175	35	1.1	-	<b>RNA 4828</b>	1050	120	325	3000
160	160	190	50	1.5	<b>RNA 4928</b>	-	2350	209	500	3000
165	165	190	40	1.1	-	<b>RNA 4830</b>	1600	152	400	2800
175	175	200	40	1.1	-	<b>RNA 4832</b>	1700	160	435	2600
185	185	215	45	1.1	-	<b>RNA 4834</b>	2540	185	510	2500
195	195	225	45	1.1	-	<b>RNA 4836</b>	2680	194	550	2300
210	210	240	50	1.5	-	<b>RNA 4838</b>	3210	227	690	2200
220	220	250	50	1.5	-	<b>RNA 4840</b>	3350	230	720	2100
240	240	270	50	1.5	-	<b>RNA 4844</b>	3620	243	790	1900
265	265	300	60	2	-	<b>RNA 4848</b>	5400	355	1080	1700
285	285	320	60	2	-	<b>RNA 4852</b>	5800	370	1160	1600
305	305	350	69	2	-	<b>RNA 4856</b>	9300	450	1300	1500
330	330	380	80	2.1	-	<b>RNA 4860</b>	12700	620	1770	1400
350	350	400	80	2.1	-	<b>RNA 4864</b>	13400	630	1850	1300
370	370	420	80	2.1	-	<b>RNA 4868</b>	14000	640	1940	1200
390	390	440	80	2.1	-	<b>RNA 4872</b>	14800	660	2020	1200
415	415	480	100	2.1	-	<b>RNA 4876</b>	26000	1000	2900	1100

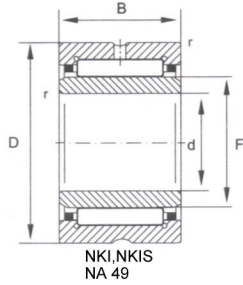


Shaft Diameter (mm)	Main designation (mm)						Designation				Weight ≈g	Principal dimensions		Limiting Speed (oil) r/min
	d	F	D	B	r <sub>min</sub>	S <sup>1)</sup>	NK	NA 49	NA 69	NKIS		Dynamic C (kN)	Static Co (kN)	
5	5	8	15	12	0.3	1.5	+NKI 5/12 TN	-	-	-	11.5	3.95	4.1	32000
	5	8	15	16	0.3	2	+NKI 5/16 TN	-	-	-	15.3	5.1	5.8	32000
6	6	9	16	12	0.3	1.5	+NKI 6/12 TN	-	-	-	13.5	4.5	5	30000
	6	9	16	16	0.3	2	+NKI 6/16 TN	-	-	-	17.4	5.9	7.1	30000
7	7	10	17	12	0.3	1.5	+NKI 7/12 TN	-	-	-	13.7	4.75	5.5	29000
	7	10	17	16	0.3	2	+NKI 7/16 TN	-	-	-	18.2	6.2	7.8	29000
9	9	12	19	12	0.3	1.5	NKI 9/12	-	-	-	16.6	6.4	7.1	27000
	9	12	19	16	0.3	2	NKI 9/16	-	-	-	21.9	9	11	27000
10	10	14	22	16	0.3	0.5	NKI 10/16	-	-	-	29.4	10.1	11.5	25000
	10	14	22	20	0.3	0.5	NKI 10/20	-	-	-	37.1	12.8	15.6	25000
12	12	16	24	16	0.3	0.5	NKI 12/16	-	-	-	33.3	11.3	13.9	24000
	12	16	24	20	0.3	0.5	NKI 12/20	-	-	-	41.9	14.4	18.8	24000
	12	16	24	13	0.3	0.5	-	RNA 4901	-	-	26	9.4	10.9	24000
	12	16	24	22	0.3	1	-	-	NA 6901	-	46	16	21.6	24000
15	15	19	27	16	0.3	0.5	NKI 15/16	-	-	-	38.8	13	17.4	22000
	15	19	27	20	0.3	0.5	NKI 15/20	-	-	-	48.7	16.5	23.6	22000
	15	20	28	13	0.3	0.5	-	RNA 4902	-	-	34	10.6	13.6	22000
	15	20	28	23	0.3	1	-	-	NA 6902	-	63.6	17.3	25.5	22000
17	17	22	35	20	0.6	0.5	-	-	-	92	24.5	28	20000	
	17	21	29	16	0.3	0.5	NKI 17/16	-	-	-	42.4	13.5	18.7	21000
	17	21	29	20	0.3	0.5	NKI 17/20	-	-	-	53.4	17.1	25.5	21000
	17	22	30	13	0.3	0.5	-	RNA 4903	-	-	37	11	14.6	21000
17	17	22	30	23	0.3	1	-	-	NA 6903	-	72	18.6	29	21000
	17	24	37	20	0.6	0.5	-	-	-	98	26	31	18000	

TN is plastics cage and running temperature in +120°C  
 + is have closing ring, but have not lubrication bore and groove.  
 1) Axial direction move to inner ring relative to outer ring.

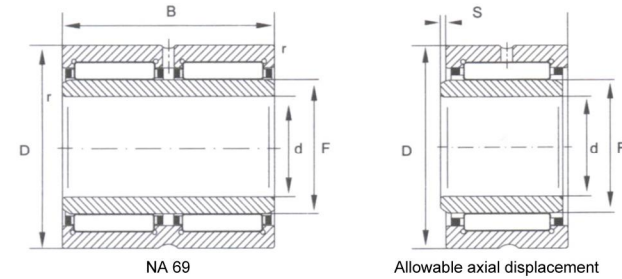
Shaft Diameter (mm)	Main designation (mm)						Designation				Weight ≈g	Principal dimensions		Limiting Speed (oil) r/min
	d	F	D	B	r <sub>min</sub>	S <sup>1)</sup>	NK	NA 49	NA 69	NKIS		Dynamic C (kN)	Static Co (kN)	
20	20	24	32	16	0.3	0.5	NKI 20/16	-	-	-	49	15	22.3	19000
	20	24	32	20	0.3	0.5	NKI 20/20	-	-	-	61	19	30.5	19000
	20	25	37	17	0.3	0.8	-	NA 4904	-	-	75.2	21	25.5	17000
	20	25	37	30	0.3	1	-	-	NA 6904	-	141	36	51	17000
22	20	28	42	20	0.6	0.5	-	-	-	NKIS 20	129	28.5	36.5	16000
	22	26	34	16	0.3	0.5	NKI 22/16	-	-	-	52	15.3	23.6	18000
	22	26	34	20	0.3	0.5	NKI 22/20	-	-	-	65.4	19.4	32	18000
	22	28	39	17	0.3	0.8	-	NA 49/22	-	-	80	22.8	29.5	16000
25	22	28	39	30	0.3	0.5	-	-	NA 69/22	-	150	37.5	55	16000
	25	29	38	20	0.3	1	NKI 25/20	-	-	-	79.4	21.9	34	16000
	25	29	38	30	0.3	1.5	NKI 25/30	-	-	-	124	32.5	57	16000
	25	30	42	17	0.3	0.8	-	NA 4905	-	-	88	23.6	31.5	15000
28	25	30	42	30	0.3	1	-	-	NA 6905	-	161	39	59	15000
	25	32	47	22	0.6	1	-	-	-	NKIS 25	162	33.5	43.5	14000
	28	32	42	20	0.3	1	NKI 28/20	-	-	-	96.5	23.1	37.5	14000
	28	32	42	30	0.3	1.5	NKI 28/30	-	-	-	146	34.5	63	14000
30	28	32	45	17	0.3	0.8	-	NA 49/28	-	-	97.7	24.4	33.5	13000
	28	32	45	30	0.3	1	-	-	NA 69/28	-	182	40.5	63	13000
	30	35	45	20	0.3	0.5	NKI 30/20	-	-	-	112	24.3	41.5	13000
	30	35	45	30	0.3	1	NKI 30/30	-	-	-	170	36.5	69	13000
32	30	35	47	17	0.3	0.8	-	NA 4906	-	-	101	25	35.5	13000
	30	35	47	30	0.3	1	-	-	NA 6906	-	192	43.5	71	13000
	30	37	52	22	0.6	1	-	-	-	NKIS 30	184	36.5	50	12000
	32	37	47	20	0.3	0.5	NKI 32/20	-	-	-	118	24.9	43.5	12000
35	32	37	47	30	0.3	1	NKI 32/30	-	-	-	180	37	73	12000
	32	40	52	20	0.6	0.8	-	NA 49/32	-	-	158	30.5	47.5	12000
	32	40	52	36	0.6	0.5	-	-	NA 69/32	-	288	47	82	12000
	35	40	50	20	0.3	0.5	NKI 35/20	-	-	-	127	26	47	12000
35	35	40	50	30	0.3	1	NKI 35/30	-	-	-	193	39	79	12000
	35	42	55	20	0.6	0.8	-	NA 4907	-	-	170	31.5	50	11000
	35	42	55	36	0.6	0.5	-	-	NA 6907	-	310	48	86	11000
	35	43	55	22	0.6	0.5	-	-	-	NKIS 35	220	39	57	11000

1) Axial direction move to inner ring relative to outer ring.



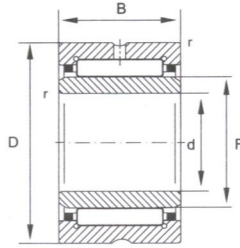
Shaft Diameter (mm)	Main designation (mm)						Designation				Weight $\approx$ g	Principal dimensions		Limiting Speed (oil) r/min
	d	F	D	B	r <sub>min</sub>	S <sup>1)</sup>	NK	NA 49	NA 69	NKIS		Dynamic C (kN)	Static Co (kN)	
38	38	43	53	20	0.3	0.5	NKI 38/20	-	-	-	136	27	51	11000
	38	43	53	30	0.3	1.0	NKI 38/30	-	-	-	207	10.5	85	11000
40	40	45	55	20	0.3	0.5	NKI 40/20	-	-	-	142	27.5	53	10000
	40	45	55	30	0.3	1.0	NKI 40/30	-	-	-	216	41	88	10000
	40	48	62	22	0.6	1.0	-	NA 4908	-	-	230	43	67	9500
	40	48	62	40	0.6	0.5	-	-	NA 6908	-	430	66	116	9500
42	42	47	57	20	0.3	0.5	NKI 42/20	-	-	-	148	28.5	56	10000
	42	47	57	30	0.3	1.0	NKI 42/30	-	-	-	222	43	94	10000
	42	50	62	25	0.6	1.5	NKI 45/25	-	-	-	229	38	74	9000
45	45	50	62	35	0.6	2.0	NKI 45/35	-	-	-	322	50	106	9000
	45	52	68	22	0.6	1.0	-	NA 4909	-	-	271	45	73	8500
	45	52	68	40	0.6	0.5	-	-	NA 6909	-	495	69	127	8500
	45	55	72	22	1.0	0.5	-	-	-	NKIS 45	336	45	74	8500
50	50	55	68	25	0.6	1.5	NKI 50/25	-	-	-	270	40	82	8500
	50	55	68	35	0.6	2.0	NKI 50/35	-	-	-	379	53	118	8500
	50	58	72	22	0.6	1.0	-	NA 4910	-	-	274	47	80	8000
	50	60	80	28	1.1	2.0	-	-	-	NKIS 50	518	63	98	7500
55	55	60	72	25	0.6	1.5	NKI 55/25	-	-	-	272	42	90	7500
	55	60	72	35	0.6	2.0	NKI 55/35	-	-	-	379	56	130	7500
	55	63	80	25	1.0	1.5	-	NA 4911	-	-	393	58	100	7500
	55	63	80	45	1.0	1.5	-	-	NA 6911	-	780	90	176	7500
60	55	65	85	28	1.1	2.0	-	-	-	NKIS 55	558	67	108	7000
	60	68	82	25	0.6	1.0	NKI 60/25	-	-	-	394	43.5	89	7000
	60	68	82	35	0.6	1.0	NKI 60/35	-	-	-	553	62	139	7000
	60	68	85	25	1.0	1.5	-	NA 4912	-	-	426	60	108	7000
65	60	68	85	45	1.0	1.5	-	-	NA 6912	-	808	94	191	7000
	60	70	90	28	1.1	2.0	-	-	-	NKIS 60	560	68	113	6500
	65	73	90	25	1.0	1.0	NKI 65/25	-	-	-	467	53	100	6500
	65	73	90	35	1.0	1.0	NKI 65/35	-	-	-	659	75	156	6500
65	65	72	90	25	1.0	1.5	-	NA 4913	-	-	456	61	112	6500
	65	72	90	45	1.0	1.5	-	-	NA 6913	-	833	95	198	6500
	65	75	95	28	1.1	2.0	-	-	-	NKIS 65	641	71	123	6500

<sup>1)</sup> Axial displacement of inner ring allowed



Shaft Diameter (mm)	Main designation (mm)						Designation				Weight $\approx$ g	Principal dimensions		Limiting Speed (oil) r/min
	d	F	D	B	r <sub>min</sub>	S <sup>1)</sup>	NK	NA 49	NA 69	Dynamic C (kN)		Static Co (kN)		
70	70	80	95	25	1.0	0.8	NKI 70/25	-	-	521	56	119	6000	
	70	80	95	35	1.0	0.8	NKI 70/35	-	-	737	78	184	6000	
	70	80	100	30	1.0	1.5	-	NA 4914	-	728	84	156	6000	
	70	80	100	54	1.0	1.0	-	-	NA 6914	1340	128	265	6000	
75	75	85	105	25	1.0	1.0	NKI 75/25	-	-	641	69	123	5500	
	75	85	105	35	1.0	1.0	NKI 75/35	-	-	908	98	193	5500	
	75	85	105	30	1.0	1.5	-	NA 4915	-	775	86	162	5500	
80	75	85	105	54	1.0	1.0	-	-	NA 6915	1450	130	275	5500	
	80	90	110	25	1.0	1.0	NKI 80/25	-	-	677	72	132	5000	
	80	90	110	35	1.0	1.0	NKI 80/35	-	-	959	103	208	5000	
	80	90	110	30	1.0	1.5	-	NA 4916	-	878	89	174	5000	
85	80	90	110	54	1.0	1.0	-	-	NA 6916	1522	135	300	5000	
	85	95	115	26	1.0	1.5	NKI 85/26	-	-	743	73	137	4900	
	85	95	115	36	1.0	1.5	NKI 85/36	-	-	1040	107	223	4900	
	85	100	120	35	1.1	1.0	-	NA 4917	-	1250	111	237	4900	
90	85	100	120	63	1.1	1.0	-	-	NA 6917	2200	166	400	4900	
	95	100	120	26	1.0	1.5	NKI 90/26	-	-	778	76	146	4700	
	95	100	120	36	1.0	1.5	NKI 90/36	-	-	1090	111	237	4700	
	95	105	125	35	1.1	1.0	-	NA 4918	-	1312	114	250	4600	
95	95	105	125	63	1.1	1.0	-	-	NA 6918	2310	172	425	4600	
	95	105	125	26	1.0	1.5	NKI 95/26	-	-	816	78	155	4500	
	95	105	125	36	1.0	1.5	NKI 95/36	-	-	1145	114	250	4500	
	95	110	130	35	1.1	1.0	-	NA 4919	-	1371	116	260	4400	
95	110	130	63	1.1	1.0	-	-	NA 6919	2500	174	440	4400		

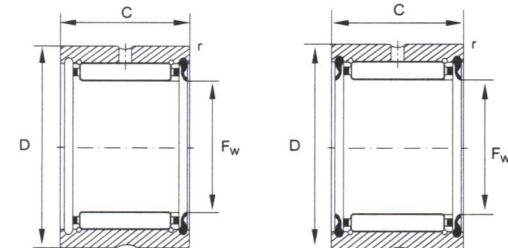
<sup>1)</sup> Axial direction move to inner ring relative to outer ring.



NKI  
NA 49,NA 48

Shaft Diameter (mm)	Main designation (mm)						Designation			Weight ≈g	Principal dimensions		Limiting Speed (oil) r/min
	d	F	D	B	r <sub>min</sub>	S <sup>1)</sup>	NK	NA 49	NA 48		Dynamic C (kN)	Static Co (kN)	
100	100	110	130	30	1.1	1.5	<b>NKI 100/30</b>	-	-	990	98	210	4300
	100	110	130	40	1.1	2.0	<b>NKI 100/40</b>	-	-	1330	127	290	4300
	100	115	140	40	1.1	2.0	-	<b>NA 4920</b>	-	1900	128	270	4100
110	110	125	150	40	1.1	2.0	-	<b>NA 4922</b>	-	2070	132	290	3800
	110	120	140	30	1.0	0.8	-	-	<b>NA 4822</b>	1080	94	216	3900
120	120	135	165	45	1.1	2.0	-	<b>NA 4924</b>	-	2860	181	390	3400
	120	130	150	30	1.0	0.8	-	-	<b>NA 4824</b>	1170	99	239	3600
130	130	150	190	50	1.5	1.5	-	<b>NA 4926</b>	-	3900	203	470	3200
	130	145	175	35	1.1	1.0	-	-	<b>NA 4826</b>	1810	118	310	3300
140	140	160	190	50	1.5	1.5	-	<b>NA 4928</b>	-	4150	209	500	3000
	140	155	175	35	1.1	1.0	-	-	<b>NA 4828</b>	1920	120	325	3100
150	150	165	190	40	1.1	1.5	-	-	<b>NA 4830</b>	2720	152	400	2900
160	160	175	200	40	1.1	1.5	-	-	<b>NA 4832</b>	2890	160	435	2700
170	170	185	215	45	1.1	1.5	-	-	<b>NA 4834</b>	3960	185	510	2500
180	180	195	225	45	1.1	1.5	-	-	<b>NA 4836</b>	4200	194	550	2400
190	190	210	240	50	1.5	1.5	-	-	<b>NA 4838</b>	5610	227	690	2300

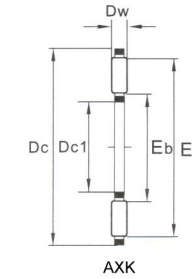
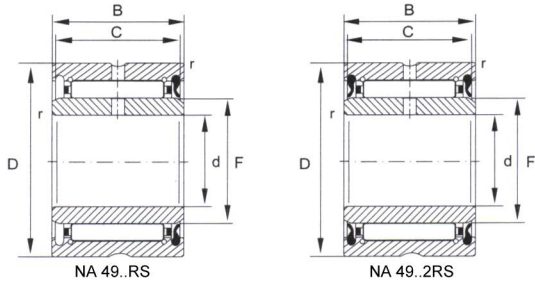
<sup>1)</sup> Axial direction move to inner ring relative to outer ring.



RNA 49..RS

RNA 49..2RS

Shaft Diameter (mm)	Main designation (mm)					Designation			Principal dimensions		Limiting Speed (oil) r/min
	Fw	D	C	r <sub>min</sub>	RNA 49..RS Single seal	RNA 49..RS Double seals	Weight≈g	Dynamic C (kN)	Static Co (kN)		
14	14	22	13	0.3	<b>RNA 4900 RS</b>	<b>RNA 4900 2RS</b>	16	6.8	6.9	13000	
16	16	24	13	0.3	<b>RNA 4901 RS</b>	<b>RNA 4901 2RS</b>	18	7.6	8.3	12000	
20	20	28	13	0.3	<b>RNA 4902 RS</b>	<b>RNA 4902 2RS</b>	21.5	8.6	10.6	10000	
22	22	30	13	0.3	<b>RNA 4903 RS</b>	<b>RNA 4903 2RS</b>	23	8.8	11	9000	
25	25	37	17	0.3	<b>RNA 4904 RS</b>	<b>RNA 4904 2RS</b>	56	17.3	19.9	7500	
30	30	42	17	0.3	<b>RNA 4905 RS</b>	<b>RNA 4905 2RS</b>	60	19.3	24.2	6500	
35	35	47	17	0.3	<b>RNA 4906 RS</b>	<b>RNA 4906 2RS</b>	69	21.1	28.5	5500	
42	42	55	20	0.6	<b>RNA 4907 RS</b>	<b>RNA 4907 2RS</b>	107	26.5	39.5	4800	
48	48	62	22	0.6	<b>RNA 4908 RS</b>	<b>RNA 4908 2RS</b>	154	36	53	4200	
52	52	68	22	0.6	<b>RNA 4909 RS</b>	<b>RNA 4909 2RS</b>	157	38	59	3900	
58	58	72	22	0.6	<b>RNA 4910 RS</b>	<b>RNA 4910 2RS</b>	160	40	64	3500	



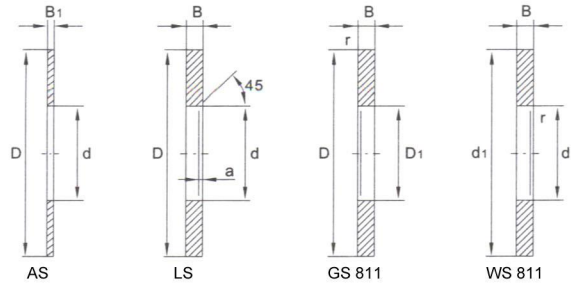
Shaft Diameter (mm)	Main designation (mm)						Designation			Principal dimensions			Limiting Speed (oil) r/min
	d	F	D	C	B	r min	RNA 49..RS Single seal	RNA 49..RS Double seals	Weight≈g	Dynamic C (kN)	Static Co (kN)		
10	10	14	22	13	14	0.3	NA 4900 RS	NA 4900 2RS	24.5	6.8	6.9	13000	
12	12	16	24	13	14	0.3	NA 4901 RS	NA 4901 2RS	27.5	7.6	8.3	12000	
15	15	20	28	13	14	0.3	NA 4902 RS	NA 4902 2RS	37	8.6	10.6	10000	
17	17	22	30	13	14	0.3	NA 4903 RS	NA 4903 2RS	40	8.8	11	9000	
20	20	25	37	17	18	0.3	NA 4904 RS	NA 4904 2RS	80	17.3	19.9	7500	
25	25	30	42	17	18	0.3	NA 4905 RS	NA 4905 2RS	89.5	19.3	24.2	6500	
30	30	35	47	17	18	0.3	NA 4906 RS	NA 4906 2RS	104	21.1	28.5	5500	
35	35	42	55	20	21	0.6	NA 4907 RS	NA 4907 2RS	175	26.5	39.5	4800	
40	40	48	62	22	23	0.6	NA 4908 RS	NA 4908 2RS	252	36	53	4200	
45	45	52	68	22	23	0.6	NA 4909 RS	NA 4909 2RS	290	38	59	3900	
50	50	58	72	22	23	0.6	NA 4910 RS	NA 4910 2RS	295	40	64	3500	

) limiting speed of grease lubrication.

Shaft Diameter (mm)	Needle roller thrust bearing and cage parts		thrust bearing washer					
	Designation	Weight ≈g	Bearing washer designation	Weight ≈g	Shaft ring designation	pedestal ring designation	Thrust bearing washer designation	Weight ≈g
4	AKX 0414 TN	0.7	AS 0414	1	-	-	-	-
5	AKX 0515 TN	0.8	AS 0515	1	-	-	-	-
6	AKX 0619 TN	1	AS 0619	2	LS 0619	-	-	4
8	AKX 0821 TN	2	AS 0821	2	LS 0821	-	-	4
10	AKX 1024	3	AS 1024	3	LS 1024	-	-	7
12	AKX 1226	3	AS 1226	3	LS 1226	-	-	8
15	AKX 1528	4	AS 1528	3	LS 1528	GS 81102	WS 81102	9
17	AKX 1730	4	AS 1730	4	LS 1730	GS 81103	WS 81103	9
20	AKX 2035	5	AS 2035	5	LS 2035	GS 81104	WS 81104	13
25	AKX 2542	7	AS 2542	7	LS 2542	GS 81105	WS 81105	19
30	AKX 3047	8	AS 3047	8	LS 3047	GS 81106	WS 81106	22
35	AKX 3552	10	AS 3552	9	LS 3552	GS 81107	WS 81107	29
40	AKX 4060	16	AS 4060	12	LS 4060	GS 81108	WS 81108	40
45	AKX 4565	18	AS 4565	13	LS 4565	GS 81109	WS 81109	50
50	AKX 5070	20	AS 5070	14	LS 5070	GS 81110	WS 81110	55
55	AKX 5578	28	AS 5578	18	LS 5578	GS 81111	WS 81111	88
60	AKX 6085	33	AS 6085	22	LS 6085	GS 81112	WS 81112	97
65	AKX 6590	35	AS 6590	24	LS 6590	GS 81113	WS 81113	115
70	AKX 7095	60	AS 7095	25	LS 7095	GS 81114	WS 81114	123
75	AKX 75100	61	AS 75100	27	LS 75100	GS 81115	WS 81115	142
80	AKX 80105	63	AS 80105	28	LS 80105	GS 81116	WS 81116	151
85	AKX 85110	67	AS 85110	29	LS 85110	GS 81117	WS 81117	159
90	AKX 90120	86	AS 90120	39	LS 90120	GS 81118	WS 81118	234
100	AKX 100135	104	AS 100135	50	LS 100135	GS 81120	WS 81120	350
110	AKX 110145	122	AS 110145	55	LS 110145	GS 81122	WS 81122	385
120	AKX 120155	131	AS 120155	59	LS 120155	GS 81124	WS 81124	415
130	AKX 130170	205	AS 130170	65	LS 130170	GS 81126	WS 81126	663
140	AKX 140180	219	AS 140180	79	LS 140180	GS 81128	WS 81128	749
150	AKX 150190	323	AS 150190	84	LS 150190	GS 81130	WS 81130	796
160	AKX 160200	246	AS 160200	89	LS 160200	GS 81132	WS 81132	842

TN is plastics cage and running temperature in +120°C

) limiting speed of grease lubrication.



Main designation (mm)								designation		Principal dimensions		Limiting Speed (oil) r/min
Dc1 d	D1	Dc D	d1	Dw	B1	B	a r min	Eb	Ea	Dynamic C (KN)	Static Co (KN)	
4	-	14	-	2	1	-	-	5	13	4.4	8	21000
5	-	15	-	2	1	-	-	6	14	4.75	9.2	21000
6	-	19	-	2	1	2.75	0.3	7	18	6.8	15.5	19000
8	-	21	-	2	1	2.75	0.3	9	20	7.8	19.4	18000
10	-	24	-	2	1	2.75	0.3	12	23	9.2	25.5	17000
12	-	26	-	2	1	2.75	0.3	14	25	9.9	29	15000
15	16	28	28	2	1	2.75	0.3	17	27	11.3	36	13000
17	18	30	30	2	1	2.75	0.3	19	29	11.9	39.5	12000
20	21	35	35	2	1	2.75	0.3	22	34	13.1	46.5	10000
25	26	42	42	2	1	3	0.6	29	41	14.7	58	8500
30	32	47	47	2	1	3	0.6	34	46	16.3	70	7500
35	37	52	52	2	1	3.5	0.6	39	51	17.8	81	6500
40	42	60	60	3	1	3.5	0.6	45	58	28	114	6000
45	47	65	65	3	1	4	0.6	50	63	30	128	5000
50	52	70	70	3	1	4	0.6	55	68	32	143	4800
55	57	78	78	3	1	5	0.6	60	76	38	186	4300
60	62	85	85	3	1	4.75	1	65	83	44.5	234	4000
65	67	90	90	3	1	5.25	1	70	88	46.5	255	3700
70	72	95	95	4	1	5.25	1	74	93	54	255	3500
75	77	100	100	4	1	5.75	1	79	98	55	265	3300
80	82	105	105	4	1	5.75	1	84	103	56	280	3100
85	87	110	110	4	1	5.75	1	89	108	58	290	3000
90	92	120	120	4	1	6.5	1	94	118	73	405	2700
100	102	135	135	4	1	7	1	105	133	91	560	2500
110	112	145	145	4	1	7	1	115	143	97	620	2300
120	122	155	155	4	1	7	1	125	153	102	680	2100
130	132	170	170	5	1	9	1	136	167	133	840	1900
140	142	180	178	5	1	9.5	1	146	177	138	900	1800
150	152	190	188	5	1	9.5	1	156	187	143	960	1700
160	162	200	198	5	1	9.5	1	166	197	148	1020	1600