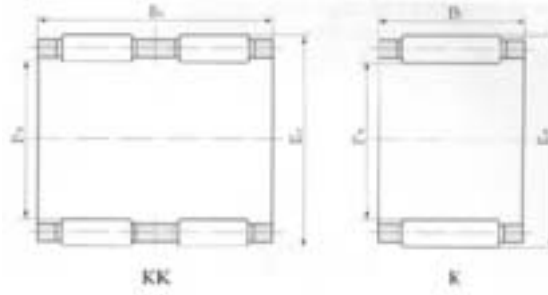
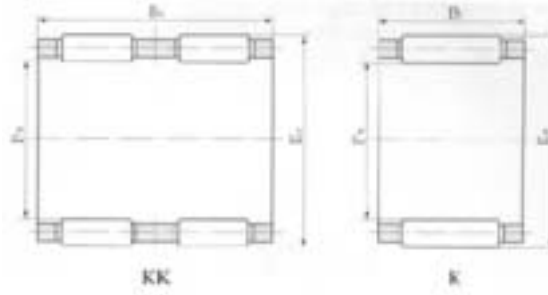


Radial Needle Roller and Cage Assemblies  
K, KK Series



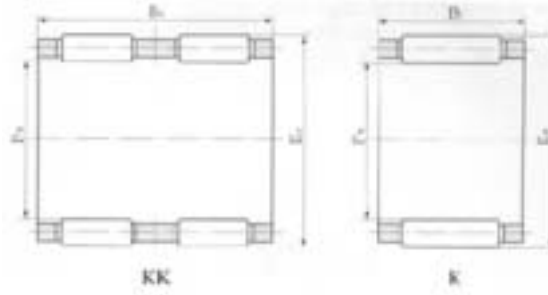
Shaft Diameter	Bearing Designation	Mass (g)	Boundary Dimensions			Basic Load Rating		Limiting Speed
						Dynamic	Static	
	K, KK	(g)	Fw	Ew	Bc	Cr(N)	Cor(N)	Oil
5	K5X8X8TN	0.7	5	8	8	2100	1800	33000
	K5X8X10TN	0.9	5	8	10	2700	2400	33000
6	K6X9X8TN	0.8	6	9	8	2500	2100	32000
	K6X9X10TN	1	6	9	10	3200	2800	32000
	K6X10X13TN	1.3	6	10	13	3500	2800	31000
7	K7X10X8TN	0.9	7	10	8	2600	2400	29000
	K7X10X10TN	1.1	7	10	10	3300	3300	29000
8	K8X11X10TN	1.3	8	11	10	3600	3700	27000
	K8X11X13TN	1.7	8	11	13	4600	5200	27000
	K8X12X10TN	1.8	8	12	10	4500	4500	27000
9	K9X12X10TN	1.5	9	12	10	4100	4500	26000
	K9X12X13TN	1.9	9	12	13	5300	6400	26000
10	K10X13X10TN	1.6	10	13	10	4500	4900	25000
	K10X13X13TN	2.1	10	13	13	5600	6900	25000
	K10X14X10TN	2.2	10	14	10	5500	5500	25000
	K10X14X13TN	2.9	10	14	13	6800	7500	25000
	K10X16X12TN	4.3	10	16	12	7300	6400	24000
12	K12X15X10TN	1.9	12	15	10	4500	5500	23000
	K12X15X13TN	2.4	12	15	13	5800	7700	23000
	K12X16X13TN	3.4	12	16	13	7200	8500	23000
	K12X17X13TN	4.4	12	17	13	8600	9400	22000
	K12X18X12TN	5	12	18	12	9000	8900	22000
14	K14X18X10	4.8	14	18	10	6400	7700	21000
	K14X18X13	6.3	14	18	13	7400	9100	21000
	K14X18X15	7.3	14	18	15	9400	12500	21000
	K14X18X17	8.1	14	18	17	9500	13000	21000
	K14X20X12	8.6	14	20	12	9400	9600	200000
15	K15X19X10	5.1	15	19	10	6800	8200	200000
	K15X19X13	7	15	19	13	7700	9800	200000
	K15X19X17	8.8	15	19	17	10200	14000	200000
	K15X20X13	8.9	15	20	13	8900	10300	200000
	K15X21X15	13	15	21	15	12900	14800	200000
	K15X21X21	18.2	15	21	21	17500	21900	200000
16	K16X20X10	5.8	16	20	10	7000	8900	200000
	K16X20X13	7.2	16	20	13	8000	10800	200000
	K16X20X17	9.2	16	20	17	10500	15100	200000

Radial Needle Roller and Cage Assemblies  
K, KK Series



Shaft Diameter	Bearing Designation	Mass (g)	Boundary Dimensions			Basic Load Rating		Limiting Speed
						Dynamic	Static	
	K, KK	(g)	Fw	Ew	Bc	Cr(N)	Cor(N)	Oil
16	K16X22X12	10.5	16	22	12	10400	11300	19500
	K16X22X13	12	16	22	13	11700	12500	19500
	K16X22X16	13.8	16	22	16	13400	15600	19500
	K16X22X20	16.8	16	22	20	16500	21000	19500
	K16X24X20	25	16	24	20	19300	21200	19000
17	K17X21X10	5.6	17	21	10	7300	9500	19500
	K17X21X13	7.5	17	21	13	9400	13000	19500
	K17X21X17	9.5	17	21	17	11000	16100	19500
18	K18X22X10	6.1	18	22	10	7700	10200	19000
	K18X22X13	7.7	18	22	13	8300	11400	19000
	K18X22X17	10.8	18	22	17	10900	16200	19000
	K18X24X12	11.8	18	24	12	10500	12500	19000
	K18X24X13	12.6	18	24	13	11800	13800	19000
	K18X24X20	19	18	24	20	19000	25000	19000
	K18X25X22	24.3	18	25	22	20800	26000	19000
19	K19X23X13	8.2	19	23	13	8600	12600	19000
	K19X23X17	11.2	19	23	17	11300	17300	19000
20	K20X24X10	6.5	20	24	10	8100	11400	18000
	K20X24X13	8.9	20	24	13	8800	12900	18000
	K20X24X17	11.2	20	24	17	11600	18400	18000
	K20X26X12	13.2	20	26	12	12100	14600	18000
	K20X26X13	14.3	20	26	13	13000	16100	18000
	K20X26X17	18.2	20	26	17	17500	23400	18000
	K20X26X20	22	20	26	20	19000	26000	18000
	K20X28X20	26.8	20	28	20	21500	25700	17000
	K20X28X25	36.3	20	28	25	27500	35000	17000
	K20X30X30	56	20	30	30	32000	37600	17000
21	K21X25X13	9	21	25	13	9100	13600	18500
	K21X25X17	12	21	25	17	12000	19400	18500
22	K22X26X10	8	22	26	10	8200	12500	18000
	K22X26X13	10	22	26	13	9300	14300	18000
	K22X26X17	12	22	26	17	12000	20500	18000
	K22X28X17	20	22	28	17	17500	25000	18000
	K22X29X16	22	22	29	16	18000	23000	17000
	K22X30X15TN	14.4	22	30	15	18500	21100	17000
24	K24X28X10	8.1	24	28	10	31000	13300	17000

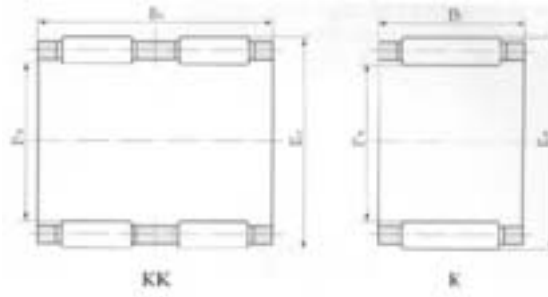
Radial Needle Roller and Cage Assemblies  
K, KK Series



Shaft Diameter	Bearing Designation	Mass (g)	Boundary Dimensions			Basic Load Rating		Limiting Speed
						Dynamic	Static	
	K, KK	(g)	Fw	Ew	Bc	Cr(N)	Cor(N)	Oil
24	K24X28X13	10.1	24	28	13	9900	15000	17000
	K24X28X17	13.2	24	28	17	13100	21200	17000
25	K25X29X10	8.3	25	29	10	8900	13100	15500
	K25X29X13	10.4	25	29	13	10200	15700	15500
	K25X29X17	13.7	25	29	17	13400	22100	15500
	K25X30X20	20.5	25	30	20	19500	34000	15500
	K25X31X17	21.8	25	31	17	17500	24000	15500
	K25X31X21	26.2	25	31	21	22200	35000	15500
	K25X32X16	24.5	25	32	16	19000	24000	14500
	K25X33X20	32	25	33	20	25700	35000	14500
	K25X33X24	38.7	25	33	24	31000	40000	15500
26	K25X35X30	65.5	25	35	30	43000	53000	14000
	K26X30X10	9	26	30	10	9100	13700	15500
	K26X30X13	11.4	26	30	13	10500	16300	15500
28	K26X30X17	15	26	30	17	13700	13800	15500
	K28X33X13	15.2	28	33	13	13500	20600	14000
	K28X33X17	19.5	28	33	17	17700	28500	14000
	K28X33X27TN	19	28	33	27	21000	35000	14000
	K28X34X17	24.2	28	34	17	19600	28500	14000
	K28X35X16	29	28	35	16	19400	25100	14000
30	K28X35X18	31	28	35	18	20400	29000	14000
	K30X34X13	14.6	30	34	13	10500	18500	13000
	K30X35X13	16.3	30	35	13	14000	21700	13000
	K30X35X17	21.3	30	35	17	16700	29000	13000
	K30X35X27	33.3	30	35	27	25900	50000	13000
	K30X37X16	26.4	30	37	16	19600	28500	13000
	K30X37X18	34	30	37	18	22100	32700	13000
32	K30X40X30	78	30	40	30	41700	59000	13000
	K32X37X13	18.3	32	37	13	13200	21700	12000
	K32X37X17	22.4	32	37	17	17000	30200	12000
	K32X37X27	36.7	32	37	27	25500	51000	12000
	K32X38X20	31	32	38	20	25500	38300	12000
	K32X39X16	36.7	32	39	16	20200	30200	12000
	K32X40X25	54	32	40	25	31900	49300	12000
	KK32X40X36	73	32	40	36	51000	89000	12000
KK32X40X42TN	77.1	32	40	42	45000	78000	12000	

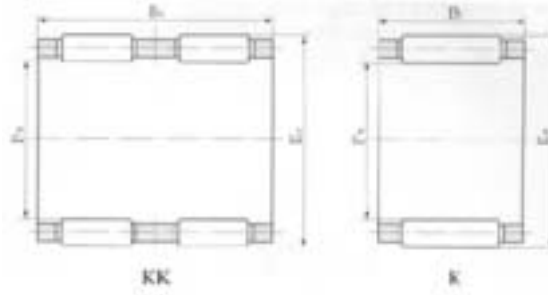
Roller and Cage Assemblies

K, KK Series



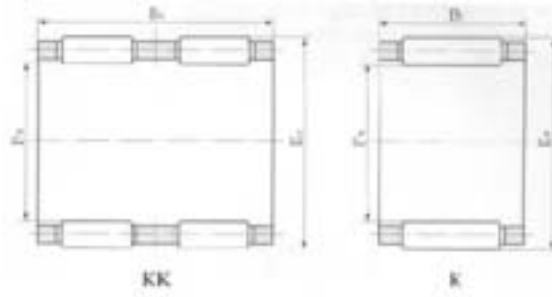
Shaft Diameter	Bearing Designation	Mass (g)	Boundary Dimensions			Basic Load Rating		Limiting Speed
						Dynamic	Static	
	K, KK	(g)	Fw	Ew	Bc	Cr(N)	Cor(N)	Oil
35	K35X40X13	18.8	35	40	13	13800	25100	12000
	K35X40X17	25.3	35	40	17	18700	33000	12000
	K35X40X27TN	23.4	35	40	27	22500	44000	11100
	K35X42X16	34	35	42	16	21500	35000	11100
	K35X42X18	39.2	35	42	18	24000	38000	11100
	K35X42X30	62.4	35	42	30	35000	62000	11100
37	K37X42X17	25.8	37	42	17	20100	39000	10800
38	K38X43X17	26.1	38	43	17	19000	34000	10800
	K38X46X20	46	38	46	20	32000	53000	10800
	K38X46X32	72.7	38	46	32	49000	89000	10800
40	K40X45X17	27.4	40	45	17	19000	38000	10800
	K40X45X27	46	40	45	27	30000	67000	10800
	K40X46X17	30	40	46	17	22000	41000	9900
	K40X47X18	45.2	40	47	18	25000	45000	9900
	K40X48X20	57.7	40	48	20	32000	55000	9900
	KK40X45X30	41	40	45	30	31000	62000	9900
42	K42X47X13	22.5	42	47	13	16000	30100	9900
	K42X47X17	31.2	42	47	17	19500	39000	9900
	K42X47X27	46.6	42	47	27	31000	68000	9900
	K42X50X20	54	42	50	20	32000	50000	9900
43	K43X48X17	29.3	43	48	17	20000	39000	9900
	K43X48X27	45.7	43	48	27	31000	68000	9900
	K43X50X18	48.5	43	50	18	28000	49000	9900
45	45X50X17	25.5	45	50	17	21000	42000	9000
	K45X50X27	50	45	50	27	31000	72000	9000
	K45X52X18	51	45	52	18	30000	51000	9000
	K45X53X20	62.2	45	53	20	35000	60000	9000
	K45X53X28	78	45	53	28	48000	88000	9000
47	K47X52X17	32	47	52	17	21000	45000	9000
	K47X52X27	50.7	47	52	27	34000	75000	9000
50	K50X55X20	39.4	50	55	20	24000	54000	8600
	K50X55X30	59.4	50	55	30	35000	88000	8600
	K50X57X18	53.4	50	57	18	31500	56000	8100
	K50X58X20	65	50	58	20	32000	55000	8100
	K50X58X25	81	50	58	25	38000	73000	8100
52	K52X57X12	24	52	57	12	16000	34000	8100

Radial Needle Roller and Cage Assemblies  
K, KK Series



Shaft Diameter	Bearing Designation	Mass (g)	Boundary Dimensions			Basic Load Rating		Limiting Speed
						Dynamic	Static	
	K, KK	(g)	Fw	Ew	Bc	Cr(N)	Cor(N)	Oil
55	K55X60X20	43.4	55	60	20	25000	59000	7700
	K55X60X30	68.6	55	60	30	38000	97000	7700
	K55X62X18	58.5	55	62	18	32000	63000	7700
	KK55X60X40	96.5	55	60	40	45000	11000	7700
58	KK58X65X36	106	58	65	36	45000	98000	7300
60	K60X65X20	50.5	60	65	20	25000	68000	7300
	K60X65X30	71.2	60	65	30	40000	110000	7300
	K60X68X20	79	60	68	20	41000	82000	7000
	K60X68X23	94	60	68	23	45000	98000	7000
	K60X68X25	97	60	68	25	50000	10000	7000
65	K65X70X20	49	65	70	20	26000	62000	6700
	K65X70X30	83	65	70	30	35000	110000	6700
	K65X73X23	100	65	73	23	36000	87000	6300
	K65X73X30	126	65	73	30	47000	110000	6300
68	K68X74X20	65	68	74	20	32000	78000	6300
	K68X74X30	97	68	74	30	42000	10000	6300
70	K70X76X20	70	70	76	20	32000	82000	5800
	K70X76X30	100	70	76	30	48000	120000	5800
	K70X78X25	115	70	78	25	48000	100000	5800
	K70X78X30	136	70	78	30	53000	120000	5800
72	K72X80X20	94	72	80	20	38000	70000	5800
73	K73X79X20	69	73	79	20	34000	78000	5800
75	K75X81X20	72	75	81	20	32000	81000	5800
	K75X81X30	106	75	81	30	32000	85000	5800
	K75X83X23	113	75	83	23	45000	102000	5500
	K75X83X30	147	75	83	30	55000	125000	5500
80	K80X86X20	76	80	86	20	35000	91000	5500
	K80X86X30	114	80	86	30	52000	130000	5500
	K80X88X30	141	80	88	30	67000	150000	5500
85	K85X92X20	96	85	92	20	38000	98000	4800
90	K90X97X20	103	90	97	20	39000	10100	4500
	K90X98X27	150	90	98	27	50000	120000	4500
	K90X98X30	172	90	98	30	55000	150000	4500
95	K95X103X30	177	95	103	30	56000	155000	4400
100	K100X107X21	120	100	107	21	41000	110000	4100
	K100X108X27	176	100	108	27	49000	120000	4100

Radial Needle Roller and Cage Assemblies  
K, KK Series



Shaft Diameter	Bearing Designation	Mass (g)	Boundary Dimensions			Basic Load Rating		Limiting Speed
						Dynamic	Static	
	K, KK	(g)	Fw	Ew	Bc	Cr(N)	Cor(N)	Oil
100	K100×108×30	190	100	108	30	58000	160000	4200
105	K105×112×21	123	105	112	21	43000	110000	4000
	K105×113×30	198	105	113	30	60000	170000	4000
110	K110×117×24	146	110	117	24	50000	125000	3900
	K110×118×30	217	110	118	30	62000	180000	3900
115	K115×123×27	200	115	123	27	52000	150000	3700
120	K120×127×24	166	120	127	24	48000	150000	3600
125	K125×133×35	275	125	133	35	70000	230000	3500
130	K130×137×24	170	130	137	24	50000	150000	3400
135	K135×143×35	300	135	143	35	77000	250000	3200
145	K145×153×26	250	145	153	26	65000	210000	3000
	K145×153×36	300	145	153	36	80000	300000	3000
150	K150×160×46	570	150	160	46	125000	420000	2900
155	K155×163×26	265	155	163	26	64000	210000	2800
	K155×163×36	356	155	163	36	85000	310000	2800
160	K160×170×46	550	160	170	46	130000	480000	2700
165	K165×173×26	284	165	173	26	65000	230000	2600
170	K170×180×46	620	170	180	46	135000	520000	2550
175	K175×183×32	360	175	183	32	85000	320000	2500
185	K185×195×37	607	185	195	37	110000	380000	2300
195	K195×205×37	620	195	205	37	115000	385000	2200
210	K210×220×42	740	210	220	42	125000	500000	2000
220	K220×230×42	790	220	230	42	130000	550000	1900
240	K240×250×42	850	240	250	42	140000	580000	1800
265	K265×280×50	1810	265	280	50	200000	750000	1700

Remarks: 1) TN=The allowable working temperature for plastic cage: 120 (continuously); 150 (temporarily); 180 (for a short time).

2) Allowable rotational speed applies to oil lubrication. For grease lubrication, a maximum of 60% of this value is allowable.