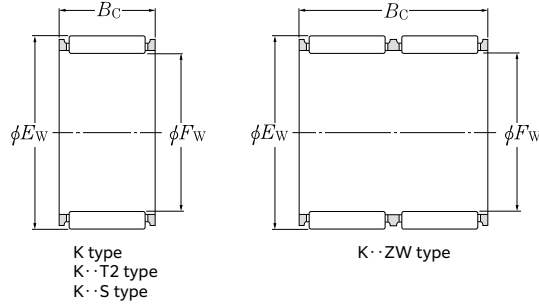


Needle Roller Bearings

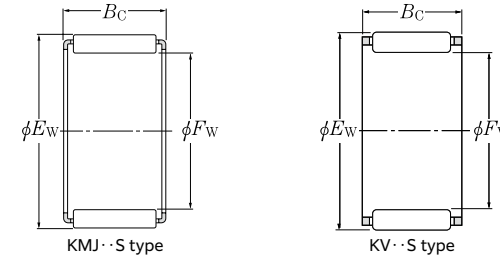


Needle roller and cage assemblies

- K type
- K·T2 type
- K·S type
- K·ZW type
- KMJ·S type
- KV·S type



Needle Roller Bearings



F_w 3 ~ 10mm

Boundary dimensions	Basic load rating		Fatigue load limit N C_u	Allowable speed		Number	Mass kg (approx.)									
	mm			min ⁻¹												
	F_w	E_w		Grease lubrication	Oil lubrication											
3	6	7	1 460	970	118	33 000	50 000	K3×6×7T2T	0.0004							
4	6	8	1 560	1 330	162	30 000	45 000	K4×6×7.8XT2	0.0003							
	7	7								1 770	1 270	155	30 000	45 000	K4×7×7T2	0.0005
5	8	8	2 640	2 190	267	27 000	40 000	K5×8×8T2	0.0007							
	8	10								2 720	2 250	275	27 000	40 000	K5×8×10T2	0.0009
6	9	8	2 660	2 280	278	25 000	37 000	K6×9×8T2T	0.0009							
	9	10								3 400	3 150	380	25 000	37 000	K6×9×10T2T	0.0011
	10	13								4 400	3 700	455	25 000	37 000	K6×10×13T2	0.0019
7	10	8	2 670	2 350	286	23 000	34 000	K7×10×8T2	0.0009							
	10	10								3 400	3 200	390	23 000	34 000	K7×10×10T2	0.0011
	10	13								5 050	5 400	655	23 000	34 000	KV7×10×12.8X3S	0.0023
8	11	8	3 150	3 000	365	21 000	32 000	K8×11×8T2T	0.0011							
	11	9								3 150	3 000	365	21 000	32 000	8E-KV8×11×8.8X2S	0.0019
	11	10								4 000	4 100	500	21 000	32 000	K8×11×10T2	0.0013
	11	12								4 450	4 650	570	21 000	32 000	8E-KV8×11×11.8X2S	0.0025
	11	13								4 850	5 200	635	21 000	32 000	K8×11×13	0.0026
	12	10								4 650	4 150	510	21 000	32 000	K8×12×10T2	0.0020
	12	12								5 600	5 300	650	21 000	32 000	8E-KV8×12×11.8X1S	0.0040
	12	13								5 050	4 650	565	21 000	32 000	K8×12×13	0.0036
9	12	10	4 550	5 000	615	20 000	30 000	K9×12×10T2	0.0015							
	12	13								5 500	6 400	780	20 000	30 000	K9×12×13T2	0.0021
10	13	10	4 550	5 100	620	19 000	28 000	K10×13×10T2T	0.0016							
	13	13								5 450	6 450	790	19 000	28 000	8E-KV10×13×12.8XS	0.0032
	14	8								4 300	3 950	485	19 000	28 000	K10×14×8	0.0027
	14	10								5 500	5 450	660	19 000	28 000	K10×14×10T	0.0034
	14	11								5 500	5 450	660	19 000	28 000	8E-KV10×14×10.8XS	0.0039
	14	11.5								6 800	7 200	875	19 000	28 000	KMJ10×14×11.3XS	0.0040
10	14	13	6 600	6 900	840	19 000	28 000	K10×14×13	0.0044							
	14	14								7 150	7 650	930	19 000	28 000	8E-KV10×14×13.8X4S	0.0050

Note: Bearings may be delivered with a different cage type even if they are ordered by the bearing numbers in the table.

F_w 10 ~ 15mm

Boundary dimensions	Basic load rating		Fatigue load limit N C_u	Allowable speed		Number	Mass kg (approx.)		
	mm			min ⁻¹					
	F_w	E_w		Grease lubrication	Oil lubrication				
10	14	17	8 050	8 850	1 080	19 000	28 000	8E-K10×14×16.8X1	0.0064
	16	12							
11	14	10	5 050	6 000	735	18 000	27 000	K11×14×10	0.0028
12	15	9	4 450	5 250	640	17 000	26 000	K12×15×9	0.0027
	15	10	5 000	6 100	740	17 000	26 000	8Q-K12×15×10	0.0030
	15	13	6 000	7 700	940	17 000	26 000	K12×15×13	0.0038
	15	20	8 550	12 200	1 480	17 000	26 000	K12×15×20ZW	0.0059
	16	8	4 850	4 900	600	17 000	26 000	K12×16×8	0.0034
	16	11.5	6 750	7 400	900	17 000	26 000	KMJ12×16×11.3XS	0.0047
	16	13	7 500	8 500	1 040	17 000	26 000	8Q-K12×16×13	0.0060
	16	18	9 800	11 900	1 460	17 000	26 000	8E-K12×16×17.8X1	0.0070
	16	20	10 300	12 800	1 560	17 000	26 000	K12×16×19.8X4	0.010
	17	10	7 350	7 200	880	17 000	26 000	KMJ12×17×9.8XS	0.0050
14	17	13	9 000	9 400	1 150	17 000	26 000	K12×17×13	0.0075
	17	18	12 600	14 400	1 760	17 000	26 000	KV12×17×17.8XS	0.0080
	18	12	8 650	8 000	975	17 000	26 000	8Q-K12×18×12	0.0089
	17	10	5 400	7 050	860	16 000	24 000	KV14×17×10ST	0.0040
	18	10	6 900	8 000	975	16 000	24 000	K14×18×10	0.0046
	18	11	7 600	9 050	1 100	16 000	24 000	K14×18×11	0.0053
	18	13	8 300	10 100	1 240	16 000	24 000	K14×18×13	0.0063
	18	15	9 650	12 300	1 500	16 000	24 000	K14×18×15S	0.0076
15	18	17	10 900	14 400	1 760	16 000	24 000	K14×18×17V5	0.0079
	18	39	18 800	28 900	3 500	16 000	24 000	K14×18×39ZW	0.018
	19	13	8 950	9 650	1 180	16 000	24 000	K14×19×13	0.0080
	20	12	9 350	9 150	1 110	16 000	24 000	K14×20×12	0.0095
	20	17	13 500	14 600	1 780	16 000	24 000	K14×20×17	0.014
	18	14	7 850	11 600	1 420	15 000	23 000	K15×18×14	0.0060
15	19	8	5 350	5 850	715	15 000	23 000	KV15×19×7.8XS	0.0033
	19	10	6 850	8 050	980	15 000	23 000	K15×19×10T	0.0055
	19	13	8 250	10 200	1 250	15 000	23 000	K15×19×13	0.0067

Note: Bearings may be delivered with a different cage type even if they are ordered by the bearing numbers in the table.