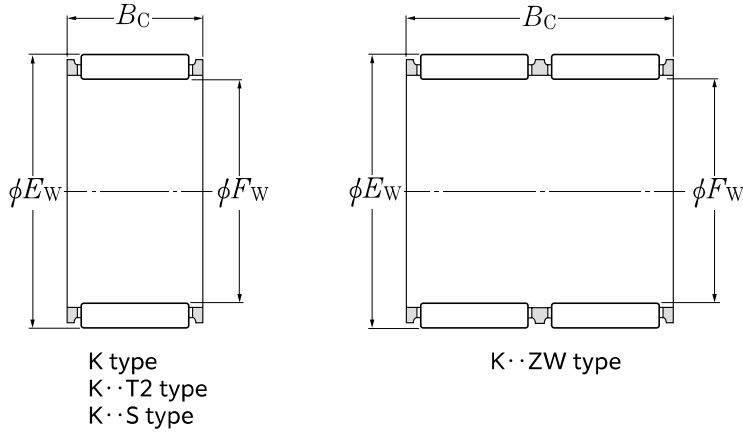


Needle roller and cage assemblies

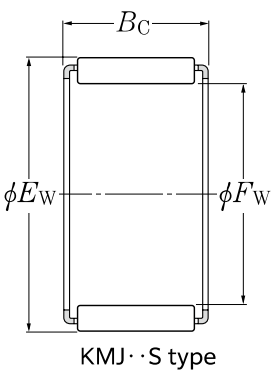
K type
K··T2 type
K··S type
K··ZW type
KMJ··S type



F_w 15 ~ 18mm

Boundary dimensions			Basic load rating		Fatigue load limit N C _u	Allowable speed		Number	Mass kg (approx.)
mm			dynamic N C _r	static C _{0r}		min ⁻¹			
F _w	E _w	B _c				Grease lubrication	Oil lubrication		
15	19	17	10 900	14 600	1 780	15 000	23 000	K15×19×17	0.0090
	19	24	14 100	20 400	2 490	15 000	23 000	K15×19×24ZW	0.013
	20	13	10 100	11 500	1 410	15 000	23 000	K15×20×13	0.0088
	20	16 − 0.2 − 0.55	12 600	15 200	1 850	15 000	23 000	KMJ15×20×15.8XS	0.0090
	21	15	11 900	12 500	1 530	15 000	23 000	K15×21×15	0.013
	21	17	14 900	16 800	2 050	15 000	23 000	KMJ15×21×16.8X1SK	0.012
	21	21	16 500	19 100	2 330	15 000	23 000	K15×21×21	0.017
16	20	10	7 500	9 250	1 130	15 000	23 000	K16×20×10T	0.0057
	20	11	8 300	10 500	1 280	15 000	23 000	K16×20×11T	0.0061
	20	13	9 050	11 800	1 430	15 000	23 000	K16×20×13	0.0071
	20	17	11 900	16 800	2 050	15 000	23 000	K16×20×17ST	0.0092
	22	12 − 0.2 − 0.55	11 700	12 500	1 530	15 000	23 000	K16×22×12	0.010
	22	13	12 600	13 900	1 690	15 000	23 000	KMJ16×22×13S	0.011
	22	16	13 600	15 200	1 850	15 000	23 000	K16×22×15.8X	0.014
	22	17	14 400	16 400	2 000	15 000	23 000	K16×22×17	0.015
	22	20	16 000	18 800	2 300	15 000	23 000	K16×22×20	0.017
17	21	10	7 450	9 300	1 140	15 000	22 000	K17×21×10S	0.0056
	21	13	9 400	12 600	1 530	15 000	22 000	K17×21×13S	0.0075
	21	15	10 400	14 400	1 750	15 000	22 000	K17×21×15	0.0089
	21	17 − 0.2 − 0.55	11 800	16 900	2 060	15 000	22 000	K17×21×17	0.0095
	22	20	14 700	19 200	2 340	15 000	22 000	K17×22×20	0.015
	23	17	14 400	16 500	2 020	15 000	22 000	K17×23×17	0.016
	23	23	16 800	20 200	2 470	15 000	22 000	K17×23×22.8X1T2	0.013
18	22	10	7 400	9 400	1 140	14 000	21 000	K18×22×10	0.0061
	22	13	8 900	11 900	1 450	14 000	21 000	K18×22×13	0.0077
	22	17 − 0.2 − 0.55	11 700	17 000	2 070	14 000	21 000	K18×22×17	0.011
	23	20 − 0.2 − 0.55	14 600	19 300	2 360	14 000	21 000	K18×23×20S	0.015
	24	12	12 300	13 800	1 690	14 000	21 000	K18×24×12	0.012
	24	13	11 600	12 800	1 560	14 000	21 000	K18×24×13	0.013

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



F_w 18 ~ 22mm

Boundary dimensions				Basic load rating		Fatigue load limit N C _u	Allowable speed		Number	Mass kg (approx.)
mm			dynamic C _r	static C _{0r}	min ⁻¹					
F _w	E _w	B _c			Grease lubrication		Oil lubrication			
18	24	17	−0.2 −0.55	16 000	19 300	2 350	14 000	21 000	KMJ18×24×17SV1	0.014
	24	20		17 000	20 900	2 550	14 000	21 000	K18×24×20	0.019
	25	17		18 000	20 400	2 490	14 000	21 000	K18×25×17	0.019
	25	22		22 100	26 600	3 250	14 000	21 000	K18×25×22	0.024
19	23	13	−0.2 −0.55	9 650	13 500	1 640	14 000	21 000	K19×23×13	0.0082
	23	17		12 700	19 200	2 340	14 000	21 000	K19×23×17	0.011
20	24	10	−0.2 −0.55	8 300	11 200	1 370	13 000	20 000	K20×24×10S	0.0065
	24	11		9 500	13 400	1 640	13 000	20 000	K20×24×11	0.0072
	24	13		10 000	14 300	1 740	13 000	20 000	K20×24×13SV4	0.0086
	24	17		13 200	20 400	2 480	13 000	20 000	K20×24×17S	0.011
	24	45		16 400	27 100	3 300	13 000	20 000	K20×24×45ZW	0.028
	25	40		29 000	48 000	5 880	13 000	20 000	K20×25×40ZWT	0.033
	26	12		12 900	15 100	1 840	13 000	20 000	K20×26×12	0.013
	26	13		14 000	16 700	2 040	13 000	20 000	KMJ20×26×13ST	0.012
	26	14		15 800	19 600	2 390	13 000	13 000	KMJ20×26×13.8X1S	0.013
	26	17		17 800	22 800	2 780	13 000	20 000	KMJ20×26×17S	0.016
	26	20		20 600	27 600	3 350	13 000	20 000	KMJ20×26×20S	0.019
	28	17		21 700	24 600	3 000	13 000	20 000	KMJ20×28×16.8XS	0.022
	28	20		24 600	28 900	3 500	13 000	20 000	KMJ20×28×19.8X4S	0.026
	28	25		27 100	32 500	3 950	13 000	20 000	8Q-K20×28×25	0.039
21	25	13	−0.2 −0.55	10 700	15 900	1 940	13 000	19 000	KMJ21×25×12.8X1S	0.0081
	25	17		13 600	21 500	2 630	13 000	19 000	K21×25×17	0.012
22	26	10	−0.2 −0.55	8 500	11 900	1 450	12 000	18 000	K22×26×10S	0.0071
	26	11		10 100	14 900	1 820	12 000	18 000	8Q-K22×26×11	0.0090
	26	13		10 200	15 200	1 850	12 000	18 000	K22×26×13	0.0094
	26	17		13 500	21 600	2 640	12 000	18 000	K22×26×17S	0.012
	27	20		17 500	25 900	3 150	12 000	18 000	K22×27×20	0.020
	27	28.5		24 200	39 500	4 800	12 000	18 000	K22×27×28.3X	0.028
	27	40		29 900	51 500	6 300	12 000	18 000	K22×27×40ZW	0.039
	28	17		17 700	23 300	2 850	12 000	18 000	K22×28×17V1	0.020

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