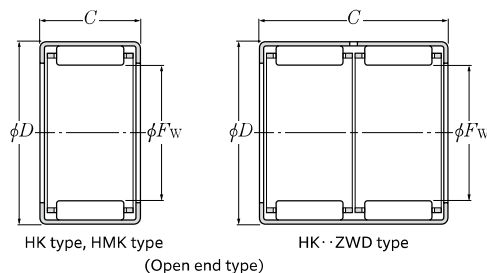


Needle Roller Bearings

NTN

Drawn cup needle roller bearings

HK type, HK··ZWD type
HMK type
BK type, BK··ZWD type



F_w 3 ~ 10mm

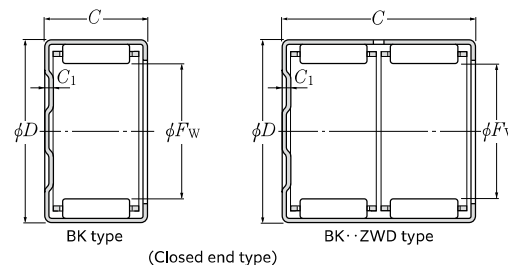
	Boundary dimensions mm			Basic load rating		Fatigue load limit N C_u	Allowable speed		Number		Mass kg (approx.)	Applied inner ring ¹⁾ (approx.)
	F_w	D	C_1	dynamic C_r	static C_{0r}		min ⁻¹ Grease lubrication	Oil lubrication	Open end type	Closed end type		
3	6.5	6	—	925	565	69	33 000	50 000	HK0306FT2	—	0.0006	—
	6.5	6	0.8	925	565	69	33 000	50 000	—	BK0306T2	0.0007	—
4	8	8	—	1 770	1 270	155	30 000	45 000	HK0408FT2	—	0.0016	—
	8	8	1.6	1 770	1 270	155	30 000	45 000	—	BK0408T2	0.0018	—
5	9	9	—	2 450	1 990	243	27 000	40 000	HK0509FM	—	0.0019	—
	9	9	1.6	2 450	1 990	243	27 000	40 000	—	BK0509	0.0021	—
6	10	9	—	2 920	2 590	315	25 000	37 000	HK0609FM	—	0.0022	—
	10	9	1.6	2 660	2 280	278	25 000	37 000	—	BK0609T2	0.0024	—
7	11	9	—	3 150	2 930	355	23 000	34 000	HK0709FM	—	0.0025	—
	11	9	1.6	3 150	2 930	355	23 000	34 000	—	BK0709CT	0.0027	—
8	12	10	—	3 850	3 950	480	20 000	30 000	HK0810FM	—	0.0032	IR 5×8×12
	12	10	1.6	3 850	3 950	480	20 000	30 000	—	BK0810CT	0.0034	IR 5×8×12
	15	10	—	4 200	3 300	400	20 000	30 000	HMK0810CT	—	0.0067	IR 5×8×12
	15	15	—	7 300	6 650	770	20 000	30 000	HMK0815CT	—	0.010	IR 5×8×16
	15	20	—	9 050	8 750	1 070	20 000	30 000	HMK0820T2	—	0.013	—
9	13	10	—	4 300	4 650	570	18 000	27 000	HK0910FM	—	0.0035	IR 6×9×12
	13	10	1.6	4 300	4 650	570	18 000	27 000	—	BK0910CT	0.0039	IR 6×9×12
	13	12	—	5 400	6 250	765	18 000	27 000	HK0912F	—	0.0042	IR 6×9×12
	13	12	1.6	5 400	6 250	765	18 000	27 000	—	BK0912CT	0.0045	IR 6×9×12
	16	12	—	5 300	4 450	545	18 000	27 000	HMK0912	—	0.0087	IR 6×9×16
	16	16	—	7 400	6 850	840	18 000	27 000	HMK0916	—	0.012	—
10	14	10	—	4 500	5 100	620	16 000	24 000	HK1010FM	—	0.0038	IR 7×10×10.5
	14	10	1.6	4 500	5 100	620	16 000	24 000	—	BK1010	0.0042	IR 7×10×10.5
	14	12	—	5 650	6 800	830	16 000	24 000	HK1012F	—	0.0045	IR 7×10×16
	14	12	1.6	5 900	7 250	880	16 000	24 000	—	BK1012	0.0050	IR 7×10×16
	14	15	—	7 250	9 400	1 140	16 000	24 000	HK1015F	—	0.0056	IR 7×10×16
	14	15	1.6	7 250	9 400	1 140	16 000	24 000	—	BK1015CT	0.0062	IR 7×10×16
	17	10	—	4 250	3 450	420	16 000	24 000	HMK1010	—	0.0079	IR 7×10×10.5
	17	12	—	5 600	4 850	590	16 000	24 000	HMK1012	—	0.0094	IR 7×10×16

1) If the bearing has an inner ring, the value indicates HK + IR.
Example: HK1012F + IR7 × 10 × 16

E-26

Needle Roller Bearings

NTN



F_w 10 ~ 15mm

	Boundary dimensions mm			Basic load rating		Fatigue load limit N C_u	Allowable speed		Number		Mass kg (approx.)	Applied inner ring ¹⁾ (approx.)
	F_w	D	C_1	dynamic C_r	static C_{0r}		min ⁻¹ Grease lubrication	Oil lubrication	Open end type	Closed end type		
10	17	15	—	7 400	6 950	850	16 000	24 000	HMK1015	—	0.012	IR 7×10×16
	17	20	—	9 900	10 100	1 240	16 000	24 000	7E-HMK1020CT	—	0.016	—
12	16	10	—	5 050	6 250	760	13 000	20 000	HK1210FM	—	0.0046	IR 8×12×10.5
	16	10	1.6	5 050	6 250	760	13 000	20 000	—	BK1210	0.0052	IR 8×12×10.5
	18	12	—	6 600	7 300	890	13 000	20 000	HK1212FM	—	0.0091	IR 8×12×12.5
	18	12	2.7	6 600	7 300	890	13 000	20 000	—	BK1212	0.010	IR 8×12×12.5
13	19	12	—	7 100	6 900	845	13 000	20 000	HMK1212	—	0.011	IR 8×12×12.5
	19	15	—	9 400	9 900	1 210	13 000	20 000	7E-HMK1215C	—	0.014	IR 9×12×16
	19	20	—	12 900	14 900	1 820	13 000	20 000	HMK1220CT	—	0.018	—
	19	25	—	15 300	18 600	2 260	13 000	20 000	HMK1225	—	0.023	—
14	19	12	—	6 950	7 900	965	12 000	18 000	HK1312FM	—	0.010	IR10×13×12.5
	19	12	2.7	6 950	7 900	965	12 000	18 000	—	BK1312	0.011	IR10×13×12.5
15	20	12	—	7 200	8 500	1 040	11 000	17 000	HK1412FM	—	0.011	IR10×14×13
	20	12	2.7	7 200	8 500	1 040	11 000	17 000	—	BK1412	0.012	IR10×14×13
	20	16	—	10 300	13 400	1 640	11 000	17 000	HK1416F	—	0.015	—
	20	16	2.7	10 300	13 400	1 640	11 000	17 000	—	BK1416CT	0.016	—
	22	16	—	11 500	12 000	1 460	11 000	17 000	HMK1416C	—	0.019	IR10×14×20
	22	20	—	14 600	16 200	1 980	11 000	17 000	HMK1420C	—	0.024	—
16	21	12	—	7 500	9 100	1 110	11 000	16 000	HK1512FM	—	0.011	IR12×15×12.5
	21	12	2.7	7 500	9 100	1 110	11 000	16 000	—	BK1512	0.013	IR12×15×12.5
	21	16	—	10 700	14 400	1 750	11 000	16 000	HK1516F	—	0.015	IR12×15×16.5
	21	16	2.7	10 700	14 400	1 750	11 000	16 000	—	BK1516	0.017	IR12×15×16.5
	21	22	—	12 900	18 200	2 220	11 000	16 000	HK1522ZWF	—	0.020	IR12×15×22.5
	21	22	2.7	12 900	18 200	2 220	11 000	16 000	—	BK1522ZWD	0.022	IR12×15×22.5
	22	10	—	6 100	6 000	730	11 000	16 000	HMK1510	—	0.011	IR10×15×12.5
	22	12	—	7 950	8 450	1 030	11 000	16 000	HMK1512	—	0.013	IR12×15×12.5
	22	15	—	10 500	12 100	1 480	11 000	16 000	HMK1515C	—	0.016	IR12×15×16
	22	20	—	15 300	19 700	2 400	11 000	16 000	HMK1520CV6	—	0.022	IR12×15×22.5
	22	25	—	18 500	25 000	3 050	11 000	16 000	HMK1525	—	0.027	—

1) If the bearing has an inner ring, the value indicates HK + IR.
Example: HK1312FM + IR10 × 13 × 12.5

E-27