

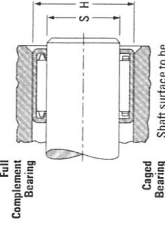
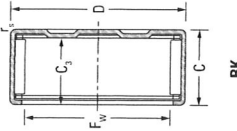
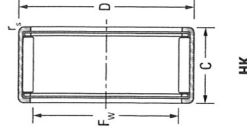


# NEEDLE ROLLER BEARINGS

## DRAWN CUP NEEDLE ROLLER BEARINGS

**CAGED,  
OPEN ENDS,  
CLOSED ONE END**

**METRIC SERIES  
HK, BK SERIES**



Shaft surface to be S8 HRc or equivalent

Shaft Dia. mm in	F <sub>w</sub> mm in	D mm in	C		r <sub>max</sub> mm in	Bearing Designation		Load Ratings		Speed Ratings		Mounting Dimensions		Mounting inner ring groove gpa B 2-28 B 2-29			
			+0 -0.042 -0.3 -0.012	mm in		mm in	mm in	mm in	Open Ends	Closed One End	Dynamic C	Static C <sub>0</sub>	Fatigue Load Limit C <sub>u</sub>		Grease	Oil	Approx. Wt.
3	0.1181	3	6.5	0.30	0.02	BK0006	—	1.20	0.130	3000	4600	0.001	3.000	2.665	6.493	6.494	Table B 2-28
3	0.1181	3	6.5	0.30	0.02	BK0006	—	1.20	0.130	3000	4600	0.001	3.000	2.665	6.493	6.494	Table B 2-29
4	0.1575	4	8	0.31	0.02	BK0008	—	1.20	0.130	3000	4600	0.001	3.000	2.665	6.493	6.494	Table B 2-28
4	0.1575	4	8	0.31	0.02	BK0008	—	1.20	0.130	3000	4600	0.001	3.000	2.665	6.493	6.494	Table B 2-29
5	0.1969	5	9	0.354	0.016	BK0009	—	2.52	0.20	2300	3600	0.002	5.000	4.955	8.953	8.954	Table B 2-28
5	0.1969	5	9	0.354	0.016	BK0009	—	2.52	0.20	2300	3600	0.002	5.000	4.955	8.953	8.954	Table B 2-29
6	0.2382	6	10	0.394	0.016	BK0010	—	2.52	0.20	2300	3600	0.002	5.000	4.955	8.953	8.954	Table B 2-28
6	0.2382	6	10	0.394	0.016	BK0010	—	2.52	0.20	2300	3600	0.002	5.000	4.955	8.953	8.954	Table B 2-29
7	0.2756	7	11	0.431	0.016	BK0011	—	2.34	0.20	2000	3000	0.002	6.000	5.955	9.953	9.954	Table B 2-28
7	0.2756	7	11	0.431	0.016	BK0011	—	2.34	0.20	2000	3000	0.002	6.000	5.955	9.953	9.954	Table B 2-29
8	0.3150	8	12	0.472	0.016	BK0012	—	3.14	0.25	1700	2500	0.003	7.000	6.954	10.951	10.950	Table B 2-28
8	0.3150	8	12	0.472	0.016	BK0012	—	3.14	0.25	1700	2500	0.003	7.000	6.954	10.951	10.950	Table B 2-29
9	0.3543	9	13	0.518	0.016	BK0013	—	2.34	0.25	1700	2500	0.003	7.000	6.954	10.951	10.950	Table B 2-28
9	0.3543	9	13	0.518	0.016	BK0013	—	2.34	0.25	1700	2500	0.003	7.000	6.954	10.951	10.950	Table B 2-29
10	0.3937	10	14	0.562	0.016	BK0014	—	2.34	0.25	1700	2500	0.003	7.000	6.954	10.951	10.950	Table B 2-28
10	0.3937	10	14	0.562	0.016	BK0014	—	2.34	0.25	1700	2500	0.003	7.000	6.954	10.951	10.950	Table B 2-29
12	0.4724	12	16	0.635	0.016	BK0016	—	2.34	0.25	1700	2500	0.003	7.000	6.954	10.951	10.950	Table B 2-28
12	0.4724	12	16	0.635	0.016	BK0016	—	2.34	0.25	1700	2500	0.003	7.000	6.954	10.951	10.950	Table B 2-29
15	0.5906	15	21	0.826	0.039	BK0021	—	2.34	0.25	1700	2500	0.003	7.000	6.954	10.951	10.950	Table B 2-28
15	0.5906	15	21	0.826	0.039	BK0021	—	2.34	0.25	1700	2500	0.003	7.000	6.954	10.951	10.950	Table B 2-29
16	0.6299	16	22	0.861	0.039	BK0022	—	2.34	0.25	1700	2500	0.003	7.000	6.954	10.951	10.950	Table B 2-28
16	0.6299	16	22	0.861	0.039	BK0022	—	2.34	0.25	1700	2500	0.003	7.000	6.954	10.951	10.950	Table B 2-29

(1) Drawn cup needle roller bearings with two needle roller and cage assemblies and one lubricating hole.

## B-2-14 NEEDLE ROLLER BEARINGS

## Drawn Cup Needle Roller Bearings

Shaft Dia. mm in	F <sub>w</sub> mm in	D mm in	C mm in	C <sub>max</sub> mm in	C <sub>min</sub> mm in	r <sub>max</sub> mm in	Bearing Designation		Load Ratings		Speed Ratings		Mounting Dimensions		Mounting inner ring groove gpa B 2-28 B 2-29		
							Open Ends	Closed One End	Dynamic C	Static C <sub>0</sub>	Fatigue Load Limit C <sub>u</sub>	Grease	Oil	Approx. Wt.		Shaft (NS)	Housing (NH)
9	0.3543	9	13	0.518	0.394	0.40	HK0910	—	4.57	5.07	1900	3000	0.004	9.000	8.994	12.990	Table B 2-28
9	0.3543	9	13	0.518	0.408	0.40	HK0912	—	4.57	5.07	1900	3000	0.004	9.000	8.994	12.990	Table B 2-29
10	0.3937	10	14	0.562	0.331	0.40	HK1010	—	4.78	5.51	1900	3000	0.004	10.000	9.994	13.990	Table B 2-28
10	0.3937	10	14	0.562	0.331	0.40	HK1012	—	4.78	5.51	1900	3000	0.004	10.000	9.994	13.990	Table B 2-29
10	0.3937	10	14	0.562	0.331	0.40	HK1015	—	4.78	5.51	1900	3000	0.004	10.000	9.994	13.990	Table B 2-28
10	0.3937	10	14	0.562	0.331	0.40	HK1015	—	4.78	5.51	1900	3000	0.004	10.000	9.994	13.990	Table B 2-29
12	0.4724	12	16	0.635	0.331	0.40	HK1210	—	5.24	6.55	1800	2800	0.006	12.000	11.992	15.991	Table B 2-28
12	0.4724	12	16	0.635	0.331	0.40	HK1210	—	5.24	6.55	1800	2800	0.006	12.000	11.992	15.991	Table B 2-29
12	0.4724	12	16	0.635	0.331	0.40	HK1215	—	5.24	6.55	1800	2800	0.006	12.000	11.992	15.991	Table B 2-28
12	0.4724	12	16	0.635	0.331	0.40	HK1215	—	5.24	6.55	1800	2800	0.006	12.000	11.992	15.991	Table B 2-29
13	0.5118	13	19	0.748	0.472	0.40	HK1312	—	6.51	7.29	1400	2200	0.012	12.000	11.992	17.991	Table B 2-28
13	0.5118	13	19	0.748	0.472	0.40	HK1312	—	6.51	7.29	1400	2200	0.012	12.000	11.992	17.991	Table B 2-29
14	0.5512	14	20	0.787	0.472	0.40	HK1412	—	6.51	7.29	1400	2200	0.012	12.000	11.992	17.991	Table B 2-28
14	0.5512	14	20	0.787	0.472	0.40	HK1412	—	6.51	7.29	1400	2200	0.012	12.000	11.992	17.991	Table B 2-29
15	0.5906	15	21	0.826	0.472	0.40	HK1512	—	6.51	7.29	1400	2200	0.012	12.000	11.992	17.991	Table B 2-28
15	0.5906	15	21	0.826	0.472	0.40	HK1512	—	6.51	7.29	1400	2200	0.012	12.000	11.992	17.991	Table B 2-29
15	0.5906	15	21	0.826	0.472	0.40	HK1516	—	6.51	7.29	1400	2200	0.012	12.000	11.992	17.991	Table B 2-28
15	0.5906	15	21	0.826	0.472	0.40	HK1516	—	6.51	7.29	1400	2200	0.012	12.000	11.992	17.991	Table B 2-29
16	0.6299	16	22	0.861	0.472	0.40	HK1612	—	6.51	7.29	1400	2200	0.012	12.000	11.992	17.991	Table B 2-28
16	0.6299	16	22	0.861	0.472	0.40	HK1612	—	6.51	7.29	1400	2200	0.012	12.000	11.992	17.991	Table B 2-29

Continued on next page.

## NEEDLE ROLLER BEARINGS B-2-15