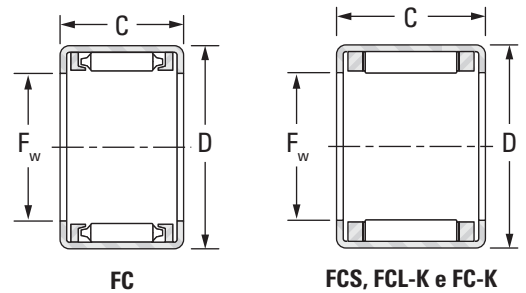


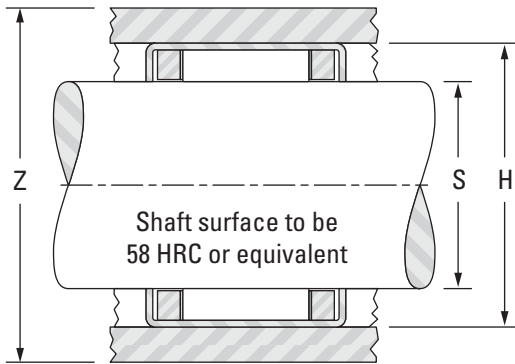
# Drawn cup roller clutches

Shaft raceway and housing bore diameters that are necessary for proper mounting and operation are listed on the opposite page. Types **FC**, **FC-K**, **FCS** and **FCL-K** clutches have stainless steel springs inserted in molded cage to position rollers for lockup.



Shaft ∅ mm	Designation	F <sub>w</sub> mm	D mm	C mm	Torque Nm	Overrun limiting speed rating for rotating shaft min <sup>-1</sup>	Suitable needle bush
4	FC-4-K	4	8	6	0.349	26000	HK0408
6	FCS-6	6	10	12	2.15	22000	HK0608
	FC-6	6	10	12	2.63	22000	HK0608
8	FCL-8-K	8	12	12	3.39	21000	HK0808
	FC-8	8	14	12	4.42	21000	DL810
10	FCL-10-K	10	14	12	4.60	19000	HK1010
	FC-10	10	16	12	5.82	19000	DL1012
12	FC-12	12	18	16	14.0	19000	HK1212
16	FC-16	16	22	16	21.7	14000	HK1612
20	FC-20	20	26	16	32.6	11000	HK2012
	FC-20-K	20	26	16	30.0	11000	HK2012
25	FC-25-K	25	32	20	66.4	8700	HK2512
	FC-25	25	32	20	71.0	8700	HK2512
30	FC-30	30	37	20	99.1	7300	HK3012
35	FCS-35	35	42	20	107.0	6100	HK3512

# Drawn cup roller clutches



Proper inspection requires installation of the clutch in a ring gauge and then checking the bore with the appropriate plug gauges. Please read the section on "INSPECTION" on page 85.

When applying these clutches, it is important that separate bearings be used adjacent to the clutches to carry radial loads and assure concentricity between the shaft and housing. For full details on "INSTALLATION" see page 83.



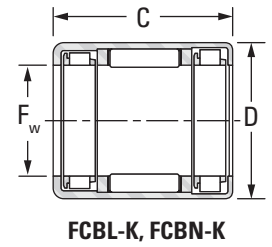
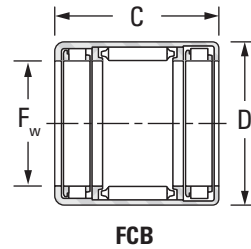
The mounted clutch engages when the housing is rotated relative to the shaft in the direction of the arrow marking (← LOCK) stamped on the cup.

Shaft Ø mm	Gaging			Z Minimum outer diameter of steel housing for Torque mm	S - Shaft raceway diameter		H - Housing bore		Weight kg
	Ring gage mm	Clutch locking plug mm	Clutch overrun plug mm		Mounting				
					Max. mm	Min. mm	Max. mm	Min. mm	
4	7.984	3.980	4.004	11	4.000	3.995	7.993	7.984	0.001
6	9.984	5.980	6.004	14	6.000	5.995	9.993	9.984	0.003
	9.984	5.980	6.004	14	6.000	5.995	9.993	9.984	0.004
8	11.980	7.976	8.005	17	8.000	7.994	11.991	11.980	0.003
	13.980	7.976	8.005	20	8.000	7.994	13.991	13.980	0.007
10	13.980	9.976	10.005	20	10.000	9.994	13.991	13.980	0.004
	15.980	9.976	10.005	25	10.000	9.994	15.991	15.980	0.009
12	17.980	11.974	12.006	27	12.000	11.992	17.991	17.980	0.012
16	21.976	15.972	16.006	31	16.000	15.992	21.989	21.976	0.018
20	25.976	19.970	20.007	38	20.000	19.991	25.989	25.976	0.021
	25.976	19.970	20.007	38	20.000	19.991	25.989	25.976	0.016
25	31.972	24.967	25.007	46	25.000	24.991	31.988	31.972	0.026
	31.972	24.967	25.007	46	25.000	24.991	31.988	31.972	0.034
30	36.972	29.967	30.007	51	30.000	29.991	36.988	36.972	0.042
35	41.972	34.964	35.009	56	35.000	34.989	41.988	41.972	0.048

# Drawn cup roller clutches

Shaft raceway and housing bore diameters that are necessary for proper mounting and operation are listed on the opposite page.

Types **FCB** and **FCBL** clutch and bearing assemblies have stainless steel springs inserted in the molded cage to position rollers for instantaneous lockup.



Shaft ∅ mm	Designation	F <sub>w</sub> mm	D mm	C mm	Torque Nm	Load ratings 1)		Overrun limiting speed rating for rotating shaft min <sup>-1</sup>
						Dynamic C kN	Static C <sub>0</sub> kN	
4	FCBN-4-K	4	10	9	0.19	1.86	0.99	26000
6	FCBN-6-K	6	12	10	0.56	2.48	1.48	22000
8	FCBL-8-K	8	12	22	3.39	3.62	3.28	21000
	FCB-8	8	14	20	4.42	4.22	3.04	21000
10	FCB-10	10	16	20	5.82	4.84	3.80	19000
12	FCB-12	12	18	26	14.0	6.30	5.84	19000
16	FCB-16	16	22	26	21.7	6.64	7.12	14000
20	FCB-20	20	26	26	32.6	8.16	9.46	11000
25	FCB-25	25	32	30	71.0	11.3	13.1	8700
30	FCB-30	30	37	30	99.1	11.5	14.9	7300

1) Load ratings are based on a minimum raceway hardness of 58 HRC or equivalent.