



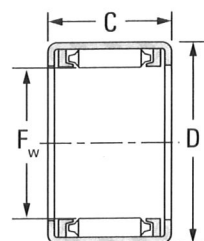
NEEDLE ROLLER BEARINGS

DRAWN CUP ROLLER CLUTCHES METRIC SERIES

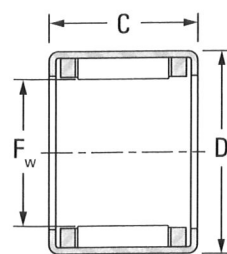
- For proper application, separate bearings are suggested (adjacent to clutch) to carry radial loads and assure concentricity between shaft and housing.
- The clutch engages when housing is rotated relative to the shaft in direction of arrow marking (← LOCK), as labeled on cup.
- Proper inspection requires use of ring gage and bore plug gage(s). See the inspection section on page B-3-9.
- Full details on installation are given on page B-3-8.
- Shaft raceway and housing bore diameters that are necessary for proper mounting and operation are listed on the opposite page.
- Types FC, FCS, FC-K and FCL-K clutches have stainless steel springs inserted in molded cage to position rollers for lockup.



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.

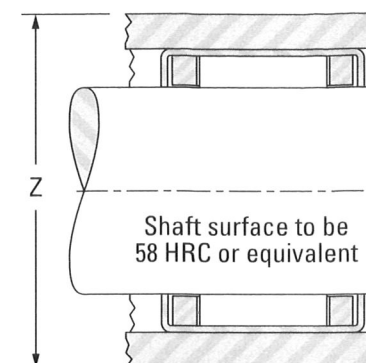


FC



FCS, FCL-K and FC-K

Shaft Diameter	F _w	D	C	Clutch Designation	Torque Rating	Minimum O.D. of Steel Housing for Rated Torque	Overrun Limiting Speed Rating for Rotating Shaft ⁽¹⁾	Suitable Drawn Cup Bearing ⁽²⁾
						Z		
mm in	mm in	mm in	mm in		N-m lbf-in	mm in	min ⁻¹	
4 0.1575	4 0.1575	8 0.3150	6 0.236	FC-4-K	0.349 3.09	11 0.433	26000	HK0408
6 0.2362	6 0.2362	10 0.3937	12 0.472	FCS-6	2.15 19.0	14 0.551	22000	HK0608
	6 0.2362	10 0.3937	12 0.472	FC-6	2.63 23.3	14 0.551	22000	HK0608
8 0.3150	8 0.3150	12 0.4724	12 0.472	FCL-8-K	3.39 30.0	17 0.669	21000	HK0808
	8 0.3150	14 0.5512	12 0.472	FC-8	4.42 39.1	20 0.787	21000	—
10 0.3937	10 0.3937	14 0.5512	12 0.472	FCL-10-K	4.60 40.7	20 0.787	19000	HK1010
	10 0.3937	16 0.6299	12 0.472	FC-10	5.82 51.5	25 0.984	19000	—
12 0.4724	12 0.4724	18 0.7087	16 0.630	FC-12	14.0 124	27 1.063	19000	HK1212
16 0.6299	16 0.6299	22 0.8661	16 0.630	FC-16	21.7 192	31 1.22	14000	HK1612
20 0.7874	20 0.7874	26 1.0236	16 0.630	FC-20	32.6 289	38 1.496	11000	HK2012
25 0.9843	25 0.9843	32 1.2598	20 0.787	FC-25	71.0 628	46 1.811	8700	HK2512



Gaging		
Ring Gage	Clutch Locking Plug	Clutch Overrun Plug
mm in	mm in	mm in
7.984 0.3143	3.980 0.1567	4.004 0.1576
9.984 0.3931	5.980 0.2354	6.004 0.2364
9.984 0.3931	5.980 0.2354	6.004 0.2364
11.980 0.4717	7.976 0.3140	8.005 0.3152
13.980 0.5504	7.976 0.3140	8.005 0.3152
13.980 0.5504	9.976 0.3928	10.005 0.3939
15.980 0.6291	9.976 0.3928	10.005 0.3939
17.980 0.7079	11.974 0.4714	12.006 0.4727
21.976 0.8652	15.972 0.6288	16.006 0.6302
25.976 1.0227	19.970 0.7862	20.007 0.7877
31.972 1.2587	24.967 0.9830	25.007 0.9845