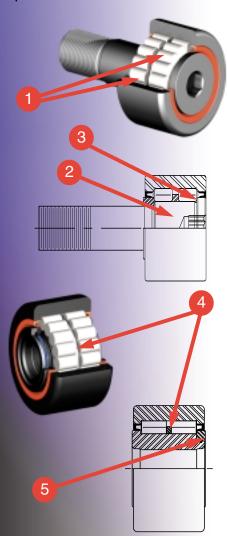


## The Industry Leader...

In 1937, McGILL engineers invented the first needle bearing cam follower. Since that time the McGILL® CAMROL® Bearing line has maintained its leadership position through development of innovative solutions to the problems faced by industry.

## The Problem Solver...Heavy-Duty

McGILL® Heavy-Duty CAMROL® bearings are designed to help solve some of the toughest problems in your cam follower applications. Utilizing Heavy-Duty CAMROL® Bearings in situations involving incidental thrust loads, higher speeds, contamination, or maintenance-free operation can provide significant operational life increases over standard cam followers.



### Improved Thrust Capability

Standard needle bearing cam followers are designed to handle heavy radial loads, however, thrust loads can cause early failure.

 Double Rows of Cylindrical Rollers are designed in the bearing to help it take incidental thrust sometimes associated with cam follower operation. The double row of cylindrical rollers also allows for high speeds and a high dynamic rating for extended fatigue life.

### Maintains McGILL Quality Features

The Heavy-Duty CAMROL® Bearing was designed with tough applications in mind, and maintains a quality, robust design unique to McGILL.

- **2. Zone Hardened** raceways provide high load ratings, and the ductile stem gives strength for absorbing shocks.
- **3. Integral Flange** in the stud type prevents disassembly in thrust load situations.
- **4. Center Thrust Ring** provides a smooth surface for thrust load carrying and roller guidance.
- **5. Endplate Retention Ring** in the yoke-type is an innovative method for securing endplates, eliminating the need for endplate backup in certain applications.







### Resists Contamination

Even a small amount of contamination can significantly reduce bearing life. Dust can wick oil out of the bearing, water can wash grease out, and particulate matter or contamination can dent raceways.

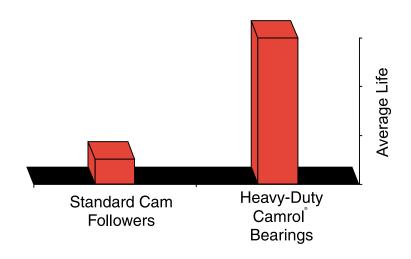
6. Rubber Lip Seals are standard in the Heavy-Duty CAMROL® Bearings. Although standard cam followers do well in most situations, at times, seals such as those in the Heavy-Duty CAMROL® Bearing are needed for increased protection against contamination. The rubber lip seals are pointed inward for improved grease retention.

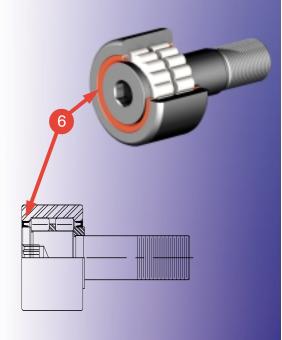
### Provides Lube-For-Life Operation

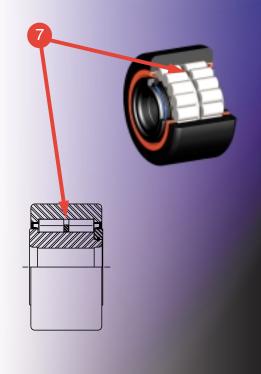
Heavy-Duty CAMROL® Bearings last up to 5 times longer than standard needle bearing cam followers in lube-for-life tests.

**7.** Large Lubricant Reservoirs and rubber lip seals help keep more grease in the bearing for maintenance-free operation.

### Up to Five Times Longer Life









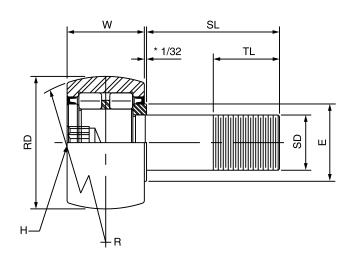




### **CFD Series**

# \* 1/32 TL

### **CCFD Series**



### CFD and CCFD STUD SERIES - Dimensions in Inches

Bearing Number		Diameter Widt RD W +.000 +.00	Roller Width	Stud Diameter SD +.001 000	Stud Length SL	Min. Thread Length TL	Fine Threads Class 2A	Hex Hole Size H	Endplate OD E	Crown Radius R (CCFD)	Rec'd Hsg. Bore +.0002 0003	Max. Rec'd Torque** InLbs.	ISO/ABMA Load Rating***		Track Roller Load Rating
			+.000 005										Dynamic Lbs.	Static Lbs.	Dynamic Lbs.
CFD-1 1/4	CCFD-1 1/4	1.250	.750	.500	1 1/4	5/8	1/2-20	1/4	45/64	14	.5003	350	4000	4260	3300
CFD-1 3/8	CCFD-1 3/8	1.375	.750	.500	1 1/4	5/8	1/2-20	1/4	45/64	14	.5003	350	4000	4260	3600
CFD-1 1/2	CCFD-1 1/2	1.500	.875	.625	1 1/2	3/4	5/8-18	5/16	55/64	20	.6253	650	6150	6910	5000
CFD-1 5/8	CCFD-1 5/8	1.625	.875	.625	1 1/2	3/4	5/8-18	5/16	55/64	20	.6253	650	6150	6910	5400
CFD-1 3/4	CCFD-1 3/4	1.750	1.000	.750	1 3/4	7/8	3/4-16	5/16	15/16	20	.7503	1250	7900	9190	6650
CFD-1 7/8	CCFD-1 7/8	1.875	1.000	.750	1 3/4	7/8	3/4-16	5/16	15/16	20	.7503	1250	7900	9190	7100
CFD-2	CCFD-2	2.000	1.250	.875	2	1	7/8-14	7/16	1 5/32	24	.8753	1500	12100	14600	9500
CFD-2 1/4	CCFD-2 1/4	2.250	1.250	.875	2	1	7/8-14	7/16	1 5/32	24	.8753	1500	12100	14600	10500
CFD-2 1/2	CCFD-2 1/2	2.500	1.500	1.000	2 1/4	1 1/8	1-14	1/2	1 5/16	30	1.0003	2250	16600	22600	14000
CFD-2 3/4	CCFD-2 3/4	2.750	1.500	1.000	2 1/4	1 1/8	1-14	1/2	1 5/16	30	1.0003	2250	16600	22600	15000
CFD-3	CCFD-3	3.000	1.750	1.250	2 1/2	1 1/4	1 1/4-12	3/4	1 27/32	30	1.2503	3450	25100	36500	18300
CFD-3 1/4	CCFD-3 1/4	3.250	1.750	1.250	2 1/2	1 1/4	1 1/4-12	3/4	1 27/32	30	1.2503	3450	25100	36500	20300
CFD-3 1/2	CCFD-3 1/2	3.500	2.000	1.375	2 3/4	1 3/8	1 3/8-12	3/4	2 3/16	30	1.3753	4200	34200	52500	23700
CFD-4	CCFD-4	4.000	2.250	1.500	3 1/2	1 1/2	1 1/2-12	3/4	2 27/64	30	1.5003	5000	44100	67900	32500
CFD-5	CCFD-5	5.000	2.750	2.000	5 1/16	2 9/16	2-12	7/8	2 61/64	48	2.0003	5000	67800	109500	50500
CFD-6	CCFD-6	6.000	3.250	2.500	6	3	2 1/2-12	1	3 11/16	56	2.5003	5000	101900	169900	71500

<sup>\*1/16</sup> for CFD/CCFD 5 and 6

<sup>\*\*\*</sup>Ratings for comparison purposes only.

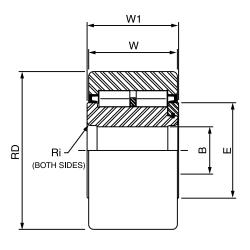




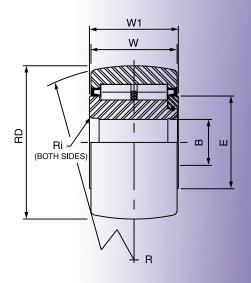


<sup>\*\*</sup>Clamping torque is based on dry threads. If threads are lubricated, use half of values shown.

### **CYRD Series**



### **CCYRD Series**



### CYRD and CCYRD YOKE SERIES - Dimensions in Inches

Bearing Number		Roller Diameter RD	Roller Width W	Bore Diameter B	Overall Width W1	Endplate OD	Crown Radius	Bore Corner	Recommended Shaft Diameter			ISO/ABMA Load Rating*		Track Roller Load Rating
		+.000	+.000 +.0002 0050004	+.005 010	E	R (CCYRD)	Ri** Min	Push Fit +/0002	Drive Fit +/0002	Press Fit +/0002	Dynamic Lbs.	Static Lbs.	Dynamic Lbs.	
CYRD-1 1/4	CCYRD-1 1/4	1.250	.750	.3750	.8125	45/64	14	.030	.3745	.3751	.3753	4000	4260	3300
CYRD-1 3/8	CCYRD-1 3/8	1.375	.750	.3750	.8125	45/64	14	.030	.3745	.3751	.3753	4000	4260	3600
CYRD-1 1/2	CCYRD-1 1/2	1.500	.875	.4375	.9375	55/64	20	.040	.4370	.4376	.4378	6150	6910	5000
CYRD-1 5/8	CCYRD-1 5/8	1.625	.875	.4375	.9375	55/64	20	.040	.4370	.4376	.4378	6150	6910	5400
CYRD-1 3/4	CCYRD-1 3/4	1.750	1.000	.5000	1.0625	15/16	20	.050	.4995	.5001	.5005	7900	9190	6650
CYRD-1 7/8	CCYRD-1 7/8	1.875	1.000	.5000	1.0625	15/16	20	.050	.4995	.5001	.5005	7900	9190	7100
CYRD-2	CCYRD-2	2.000	1.250	.6250	1.3125	1 5/32	24	.060	.6245	.6251	.6255	12100	14600	9500
CYRD-2 1/4	CCYRD-2 1/4	2.250	1.250	.6250	1.3125	1 5/32	24	.060	.6245	.6251	.6255	12100	14600	10500
CYRD-2 1/2	CCYRD-2 1/2	2.500	1.500	.7500	1.5625	1 5/16	30	.070	.7495	.7501	.7505	16600	22600	14000
CYRD-2 3/4	CCYRD-2 3/4	2.750	1.500	.7500	1.5625	1 5/16	30	.070	.7495	.7501	.7505	16600	22600	15000
CYRD-3	CCYRD-3	3.000	1.750	1.0000	1.8125	1 27/32	30	.080	.9994	1.0002	1.0006	25100	36500	18300
CYRD-3 1/4	CCYRD-3 1/4	3.250	1.750	1.0000	1.8125	1 27/32	30	.080	.9994	1.0002	1.0006	25100	36500	20300
CYRD-3 1/2	CCYRD-3 1/2	3.500	2.000	1.1250	2.0625	2 3/16	30	.09	1.1244	1.1252	1.1256	34200	52500	23700
CYRD-4	CCYRD-4	4.000	2.250	1.2500	2.3125	2 27/64	30	.100	1.2494	1.2502	1.2506	44100	67900	32500
CYRD-5	CCYRD-5	5.000	2.750	1.7500	2.8750	2 61/64	48	.110	1.7494	1.7502	1.7506	67800	109500	50500
CYRD-6	CCYRD-6	6.000	3.250	2.2500	3.3750	3 11/16	56	.120	2.2494	2.2502	2.2506	101900	169900	71500

<sup>\*</sup>Ratings for comparison purposes only.







<sup>\*\*</sup>Max. fillet for shaft

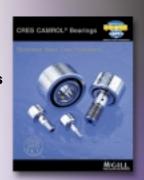
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### Choose From a Broad Range of Cam Follower Solutions:



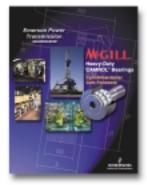
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**CRES CAMROL® Bearings** 





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#### **APPLICATION CONSIDERATIONS**

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