





Cam Followers

Unmounted bearing assembly consisting of hardened precision ground inner and outer raceways with either full complement or separated (cage) needle, ball, tapered or cylindrical rolling elements constructed with an integral stud or precision ground bore. Cam follower bearings provide an antifriction solution for translating rotation to linear motion or supporting either pure radial or combination thrust loads depending on the rolling elements types.

Bearing Configurations

Cylindrical, Crowned, V-Groove Or Flanged

Mounting Styles

Eccentric Or Concentric Stud Or Yoke

Outer Roller Diameter Range

1/2" To 10" And 13 mm To 90 mm

Materials

Bearing Quality Steel, Stainless

Cam Follower Selection Guide

				SIZE RANGE	
		Product Series	Material / Finish	Inch	Metric
CAMROL		CF	Black Oxide Finish Bearing Steel	1/2 - 10	
		CYR		3/4 - 10	
		CFH		1/2 - 7	
		BCF		1/2 - 4	
		BCYR		3/4 - 4	
		MCF			16 - 90
		MCFR			13 - 90
		MCYR			5 - 50
		MCYRR			5 - 50
Heavy-Duty		CFD	Black Oxide Finish Bearing Steel	1 1/4 - 6	
		CYRD		1 1/4 - 6	
		MCFD			35 - 80
		MCYRD			15 - 50

* For estimating purpose only, individually sizes may vary and are subject to change without notification

McGill CAMROL Cam Followers are available in 400 series stainless steel components for improved resistance to both external and internal corrosion.

CRES CAMROL bearings are dimensionally interchangeable with standard CAMROL[®] bearings and easily identifiable with "CR" designation.



Inch Cam Follower Bearings **McGILL**



DESIGN CHARACTERISTICS					FEATURES							Page No.
Radial Load	Thrust Load	Precision	High Speed	Relative Base Cost *	Crowned OD	Eccentric Stud	Lubrication Holes	Seal	Hex Hole	Slotted Face	Jam Nuts	
				\$	O	O	S	O	O	S	-	B-15
				\$	O	-	S	O	-	-	-	B-39
				\$\$	O	-	S	O	O	S	-	B-15
				\$	O	O	S	O	O	S	-	B-45
				\$	O	-	S	O	-	-	-	B-57
				\$	S	O	S	O	O	S	S	B-69
				\$	S	O	S	O	O	S	S	B-69
				\$	S	-	S	O	O	-	S	B-91
				\$	S	-	S	O	-	-	S	B-91
				\$\$	O	O	O	S	S	-	-	B-103
				\$\$	O	-	O	S	-	-	-	B-107
				\$\$	S	O	S	-	O	S	S	B-111
				\$\$	S	-	S	-	-	-	-	B-115

Circular Track / Misalignment

Load Sharing / Adjustment To Track

Relubrication To Help Promote Bearing Operating Life

Contamination Barrier

Blind Hole Mounting

Allows The Use Of A Lube Fitting When Lubrication From The Flange Side Of Bearing

Accessories Included

O = Optional

S = Standard

○ = Not Recommended



Poor ← → Best

Cam Follower Selection Guide

			SIZE RANGE		
		Product Series	Material / Finish	Inch	Metric
Special Duty		SDCF	Black Oxide Finish Bearing Steel	1 - 4	
		SDMCF			25 - 100
TRAKROL		PCF	Black Oxide Finish Bearing Steel	1 1/2 - 9	
		PCYR		3 - 6	
		FCF		1 1/2 - 9	
		FCYR		3 - 6	
		VCF		2 1/2 - 8 1/2	
		VCYR		3 1/2 - 7 1/2	

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				\$\$\$	O	O	-	S	S	-	S	B-123
				\$\$\$	O	O	-	S	S	-	S	B-125
				\$\$	O	O	-	S	-	-	O	B-131
				\$\$	O	-	-	S	S	-	-	B-133
				\$\$\$	-	O	-	S	S	-	O	B-135
				\$\$	-	-	-	S	-	-	-	B-137
				\$\$	-	O	-	S	S	-	O	B-139
				\$\$	-	-	-	S	-	-	-	B-141

Circular Track / Misalignment

Load Sharing / Adjustment To Track

Relubrication And Promote Bearing Life

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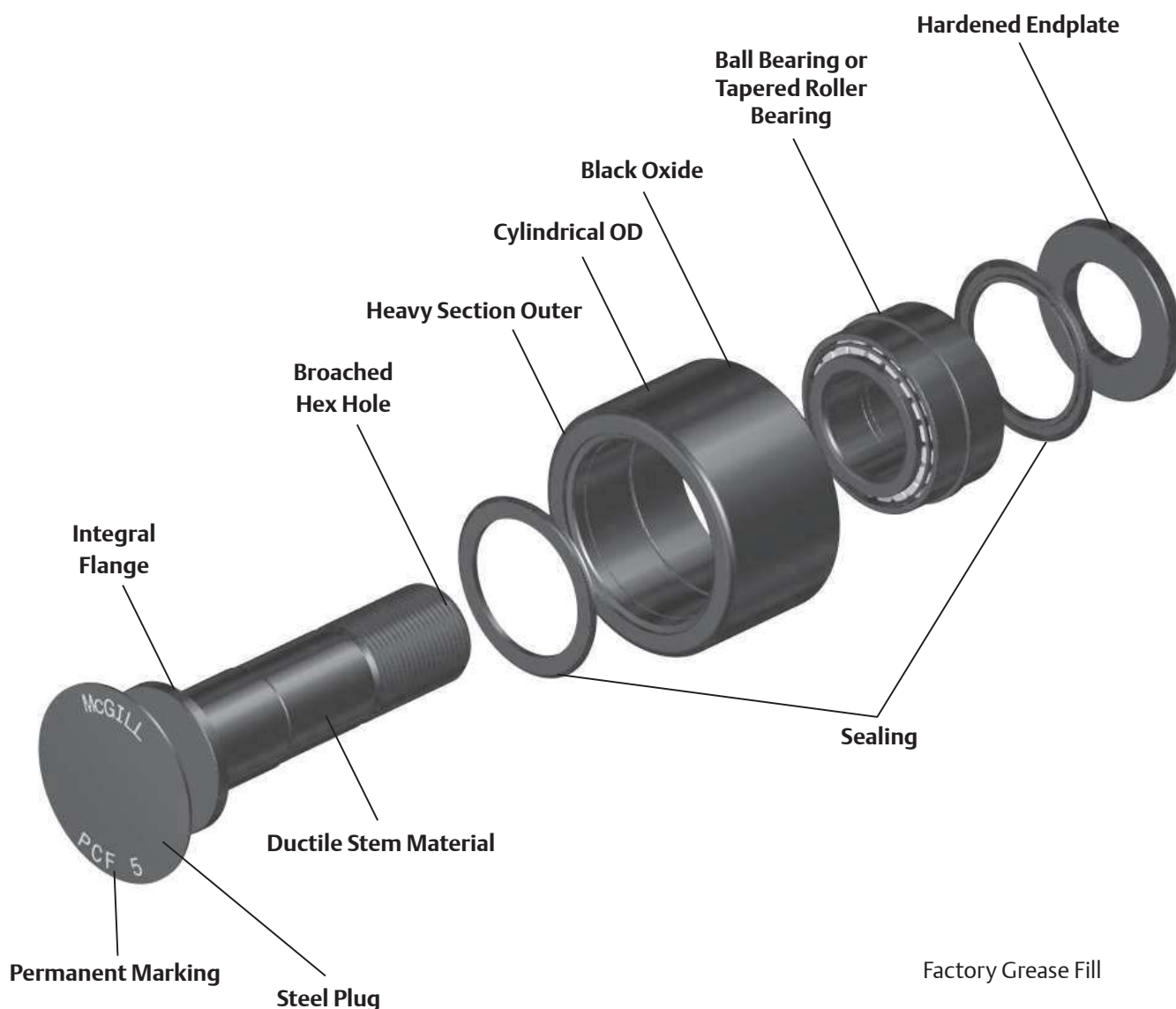
Poor ← → **Best**

* For estimating purpose only, individual costs may vary and are subject to change without notification

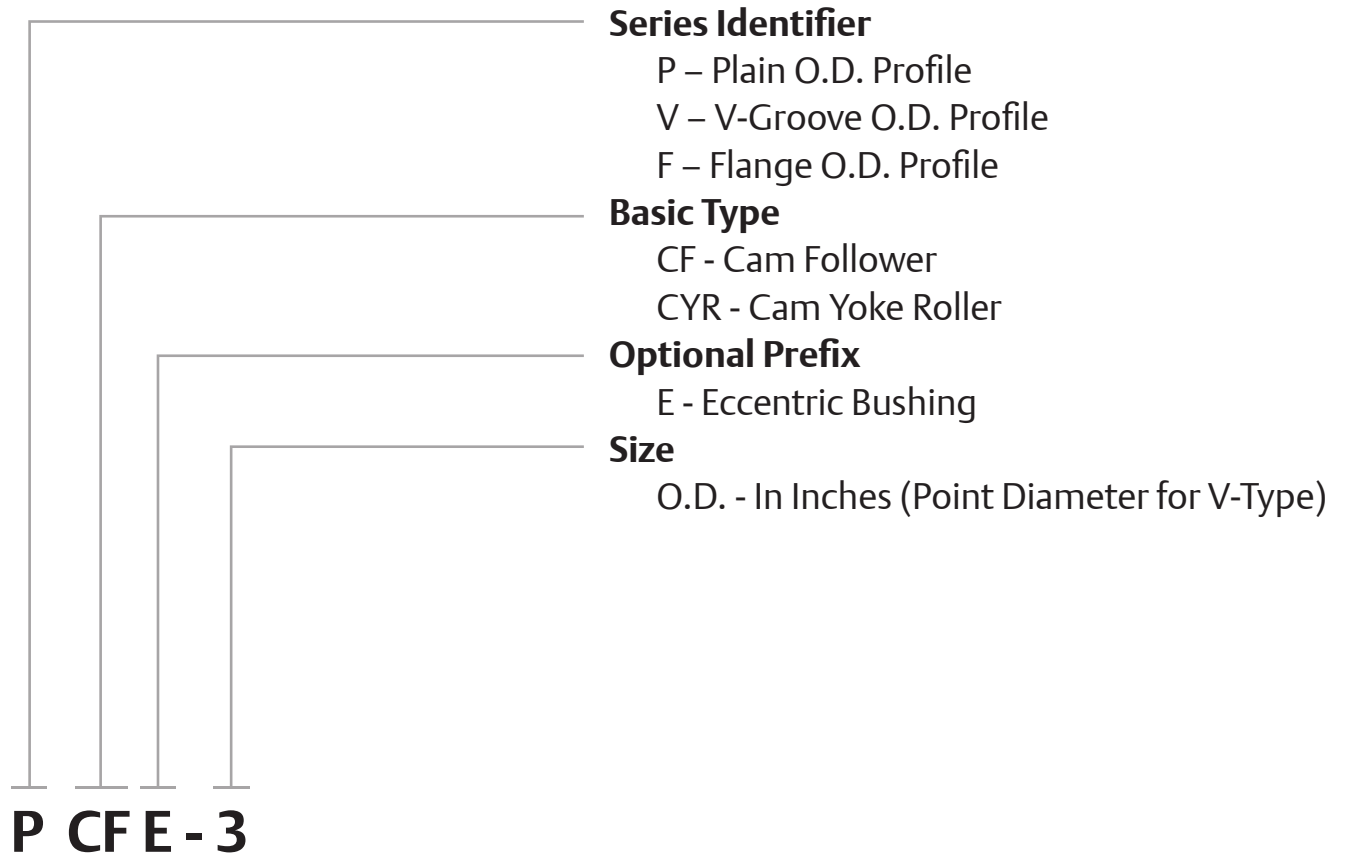
McGILL® TRAKROL Cam Follower Bearings

McGill TRAKROL Followers

TRAKROL bearings feature black oxide treated bearing steel and utilize either a precision ball or tapered roller bearing insert for longer operating life under combination radial and thrust loads. The capacity for combination loads allow the TRAKROL bearing to be available in plain (cylindrical), V-groove, and flanged O.D. in both stud and yoke styles. Small sizes (<3" OD or point diameter) use sealed ball bearing inserts along with a NYLAPLATE seal for additional protection. Stud type configurations utilize a metal end plug seal on the roller face providing a long lasting seal. Both bearing types provide a large internal grease reservoir along with special sealing makes TRAKROL bearings an excellent choice where reduced maintenance is required.



TRAKROL Nomenclature



McGILL® TRAKROL Cam Follower Bearings

Features and Benefits

Configurations

TRAKROL® bearings feature precision ball bearings or tapered roller bearings to help provide longer life when subjected to a combination of radial and thrust loads.



Plain Series

Plain OD bearings are generally used to support radial loads. Can also act as a “float” bearing when used in conjunction with a flange or V-Groove type.



Flanged Series

Flanged OD bearings are popular in guide rail applications since integral flange help direct the load axially.



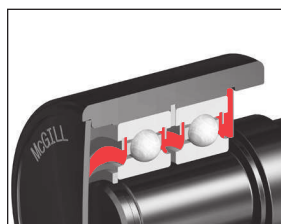
V-Groove Series

Typically used with “V” shaped tracks for both guidance and radial support. The configuration of the track reduces the amount of sediment build-up on the track.



Heavy Section Outer

The heavy section outer helps support radial loading and provide proper rolling element support.



Sealing

All TRAKROL bearing utilize rubber lip seals to help improve sealing and grease retention. TRAKROL bearings under 3” feature a ball bearing insert along with a NYLAPLATE wiping seal for addition protection. The NYLAPLATE seal is exclusive to McGill TRAKROL bearings and complements the rubber lip seal provided with the bearing insert.



Features and Benefits continued



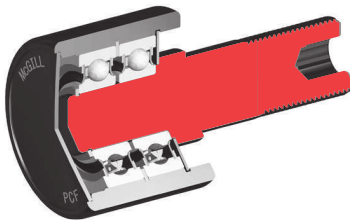
Steel Plug

Metallic Plug seal helps keep contamination out the bearing and is resistant to weld spatter, abrasive contaminants and washout.



Cylindrical Outside Diameter (OD)

The cylindrical OD can improve performance in certain applications such as improved track capacity by maximizing the contact area with the track.



Ductile Material

Ductile stem helps resist shock loads.

Factory Grease Fill

The bearings are factory lubricated with medium temperature grease. Contact Application Engineering when application conditions require special lubricants.



Black Oxide Finish

Bearings have a black oxide finish on all external surfaces.



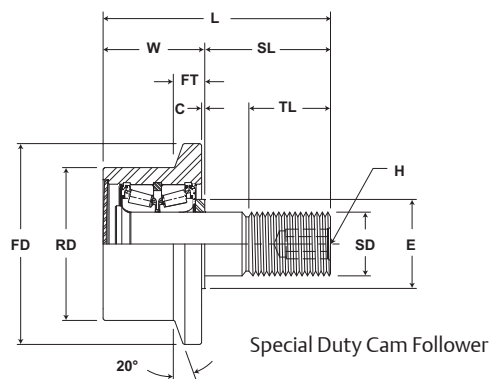
Permanent Marking

Part number permanently marked on bearing face, helps bearing identification after years of service.

McGILL® TRAKROL Cam Follower Bearings



- Basic Construction Type:** Stud Type Flanged Outside Diameter
- Rolling Elements:** Ball or Tapered Roller Bearing Insert
- Bearing Material:** Bearing Quality Steel
- Seal Type:** Metal Extension Plug and Rubber Lip Seal Ball Bearing with Additional NYLAPLATE Seal
- Lubrication:** Polyurea Thickened Grease NLGI #2
- Stem Configuration:** Concentric / Eccentric / Heavy Stud
- Mounting Feature:** Hex Hole on Thread Face



FCF

Part No.	Insert Type	RD	W	FD	FT	SD		SL	C	TL	L	Track Roller Dynamic Rating	Thrust Capacity	Track Roller Static Rating
With LUBRI-DISC Seals	Ball or Tapered Roller Bearing	Roller Diameter	Roller Width	Flange		Stud Diameter		Stud Length	Endplate Extension	Minimum Thread Length	Length Overall			
		Diameter	Width											
		inch mm	inch mm	inch mm	inch mm	(Ref)	(Ref)	(Ref)	(Ref)	(Ref)	(Ref)			
(Ref)	(Ref)	(Ref)	(Ref)	Nom	Tol	(Ref)	(Ref)	(Ref)	(Ref)	lb/N	lb/N	lb/N		
FCF 1 1/2 FCFE 1 1/2	BB	1.50 38.1	1.188 30.16	2.19 55.6	.34 8.7	.625 15.9	+0 / -0.001 +0 / - 0.03	1.50 38.1	.06 1.6	.75 19.1	2.69 68.3	2,520 11,209	1,320 5,871	1,370 6,094
FCF 1 3/4 FCFE 1 3/4	BB	1.75 44.5	1.188 30.16	2.44 61.9	.34 8.7	.750 19.1	+0 / -0.001 +0 / - 0.03	1.75 44.5	.06 1.6	.88 22.2	2.94 74.6	2,520 11,209	1,320 5,871	1,370 6,094
FCF 2 1/2 FCFE 2 1/2	BB	2.50 63.5	1.688 42.86	3.19 81.0	.59 15.1	1.00 25.4	+0 / -0.001 +0 / - 0.03	2.25 57.2	.06 1.6	1.50 38.1	3.94 100.0	5,120 22,774	2,680 11,921	3,120 13,878
FCF 2 3/4 FCFE 2 3/4	BB	2.75 69.9	1.688 42.86	3.44 87.3	.59 15.1	1.00 25.4	+0 / -0.001 +0 / - 0.03	2.25 57.2	.06 1.6	1.50 38.1	3.94 100.0	5,120 22,774	2,680 11,921	3,120 13,878
FCF 3 FCFE 3	TRB	3.00 76.2	2.000 50.80	3.94 100.0	.59 15.1	1.25 31.8	+0 / -0.001 +0 / - 0.03	2.50 63.5	.06 1.6	1.75 44.5	4.50 114.3	14,300 63,606	5,790 25,754	16,000 71,168
FCF 3 1/4 FCFE 3 1/4	TRB	3.25 82.6	2.000 50.80	4.19 106.4	.59 15.1	1.25 31.8	+0 / -0.001 +0 / - 0.03	2.50 63.5	.06 1.6	1.75 44.5	4.50 114.3	14,300 63,606	5,790 25,754	16,000 71,168
FCF 3 1/2 FCFE 3 1/2	TRB	3.50 88.9	2.000 50.80	4.44 112.7	.59 15.1	1.25 31.8	+0 / -0.001 +0 / - 0.03	2.75 69.9	.06 1.6	1.75 44.5	4.75 120.7	14,300 63,606	5,790 25,754	16,000 71,168
FCF 4 FCFE 4	TRB	4.00 101.6	2.000 50.80	4.94 125.4	.59 15.1	1.25 31.8	+0 / -0.001 +0 / - 0.03	2.75 69.9	.06 1.6	1.75 44.5	4.75 120.7	14,300 63,606	5,790 25,754	16,000 71,168
FCF 4 1/2	TRB	4.50 114.3	2.000 50.80	5.44 138.1	.59 15.1	1.25 31.8	+0 / -0.001 +0 / - 0.03	2.75 69.9	.06 1.6	1.75 44.5	4.75 120.7	14,300 63,606	5,790 25,754	16,000 71,168
FCF 5	TRB	5.00 127.0	3.000 76.20	5.94 150.8	.72 18.3	1.25 31.8	+0 / -0.001 +0 / - 0.03	4.50 114.3	.06 1.6	2.50 63.5	7.50 190.5	35,800 159,238	13,300 59,158	40,000 177,920
FCF 6	TRB	6.00 152.4	3.000 76.20	6.94 176.2	.72 18.3	2.50 63.5	+0 / -0.001 +0 / - 0.03	5.50 139.7	.06 1.6	3.25 82.6	8.50 215.9	35,800 159,238	14,200 63,162	62,000 275,776
FCF 7	TRB	7.00 177.8	3.000 76.20	7.94 201.6	.72 18.3	2.50 63.5	+0 / -0.001 +0 / - 0.03	5.50 139.7	.06 1.6	3.25 82.6	8.50 215.9	35,800 159,238	14,200 63,162	62,000 275,776
FCF 8	TRB	8.00 203.2	3.000 76.20	8.94 227.0	.72 18.3	2.50 63.5	+0 / -0.001 +0 / - 0.03	5.50 139.7	.06 1.6	3.25 82.6	8.50 215.9	35,800 159,238	14,200 63,162	62,000 275,776

*Dynamic thrust load rating based on application of a centric, axial load. Fatigue life calculations for combined radial and thrust loading require special considerations and Application Engineering should be contacted.

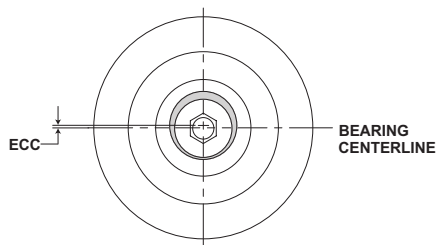
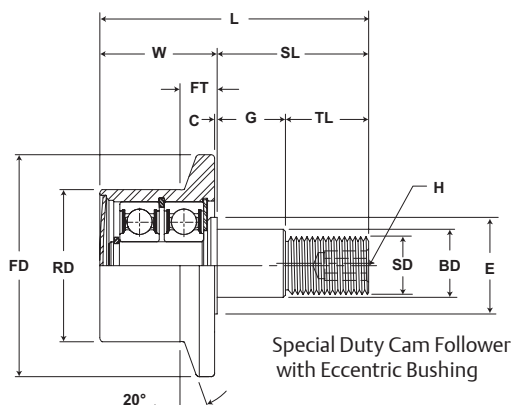
Metric dimensions for reference only.

Not all parts are available from stock. Please contact customer service for availability (800) 626-2120.

For more information on bearing capabilities outside of our standard offering, please contact Application Engineering (800) 626-2093.

TRAKROL Cam Follower Bearings **McGILL**

Cam Follower Bearings



FCF

Part No.	ECC	G	BD	H	E	Housing Bore Diameter		Thread Type	Clamping Torque	WT
With LUBRI-DISC Seals	Eccentric			Hex Hole	Min. Clamping Diameter					Bearing Weight
	Base Modifier FCFE-XX					lb kg				
	inch mm			inch mm	(Ref)		in-lb Nm			
	(Ref)	+0/-.010	±.001	(Ref)		(Ref)		Nom.	Tol.	
FCF 1 1/2	-	-	-	.25 6.4	.75 19.1	.6260 15.900	±.0002 ±.005	5/8-18	650 74	.63 1.4
FCFE 1 1/2	.03 .8	.730 18.54	.875 22.23			.878 22.30	+0.001 +.025			
FCF 1 3/4	-	-	-	.25 6.4	1.00 25.4	.7510 19.075	±.0002 ±.005	3/4-16	1,250 142	1.00 .45
FCFE 1 3/4	.03 .8	0.855 21.72	1.000 25.40			1.003 25.47	+0.001 +.025			
FCF 2 1/2	-	-	-	.44 11.1	1.25 31.8	1.0010 25.425	±.0002 ±.005	1-14	2,240 254	2.75 1.25
FCFE 2 1/2	.03 .8	1.105 28.07	1.375 34.93			1.378 35.00	+0.001 +.025			
FCF 2 3/4	-	-	-	.44 11.1	1.25 31.8	1.0010 25.425	±.0002 ±.005	1-14	2,240 254	3.25 1.47
FCFE 2 3/4	.03 .8	1.105 28.07	1.375 34.93			1.378 35.00	+0.001 +.025			
FCF 3	-	-	-	.44 11.1	1.75 44.5	1.2510 31.775	±.0002 ±.005	1 1/4-12	3,440 388	4.69 2.13
FCFE 3	.06 1.5	1.230 31.24	1.750 44.45			1.753 44.52	+0.001 +.025			
FCF 3 1/4	-	-	-	.44 11.1	1.75 44.5	1.2510 31.775	±.0002 ±.005	1 1/4-12	3,440 388	5.42 2.46
FCFE 3 1/4	.06 1.5	1.230 31.24	1.750 44.45			1.753 44.52	+0.001 +.025			
FCF 3 1/2	-	-	-	.44 11.1	1.75 44.5	1.2510 31.775	±.0002 ±.005	1 1/4-12	3,440 388	6.25 2.83
FCFE 3 1/2	.06 1.5	1.355 34.42	1.812 46.02			1.815 46.10	+0.001 +.025			
FCF 4	-	-	-	.44 11.1	1.75 44.5	1.2510 31.775	±.0002 ±.005	1 1/4-12	3,440 388	7.94 3.60
FCFE 4	.06 1.5	1.355 34.42	1.812 46.02			1.815 46.10	+0.001 +.025			
FCF 4 1/2	-	-	-	.44 11.1	1.75 44.5	1.2510 31.775	±.0002 ±.005	1 1/4-12	3,440 388	9.88 4.48
FCF 5	-	-	-	.88 22.2	3.25 82.6	2.0010 50.825	±.0002 ±.005	2-12	5,000 566	18.50 8.39
FCF 6	-	-	-	.88 22.2	3.25 82.6	2.5010 63.525	±.0002 ±.005	2 1/2-12	5,000 566	30.00 13.61
FCF 7	-	-	-	.88 22.2	3.25 82.6	2.5010 63.525	±.0002 ±.005	2 1/2-12	5,000 566	38.00 17.24
FCF 8	-	-	-	.88 22.2	3.25 82.6	2.5010 63.525	±.0002 ±.005	2 1/2-12	5,000 566	49.00 22.23

Clamping torque is based on dry threads. If threads are lubricated, use half of value shown.