





# *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<sup>®</sup> 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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# Inch Cam Follower Bearings **McGILL**

Cam Follower Bearings



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Radial Load	Thrust Load	Precision	High Speed	Relative Base Cost *	Crowned OD	Eccentric Stud	Lubrication Hole	Seal	Hex Hole	Slotted Face	Jam Nuts	
				\$\$\$	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

Contamination Barrier

Blind Hole Mounting

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

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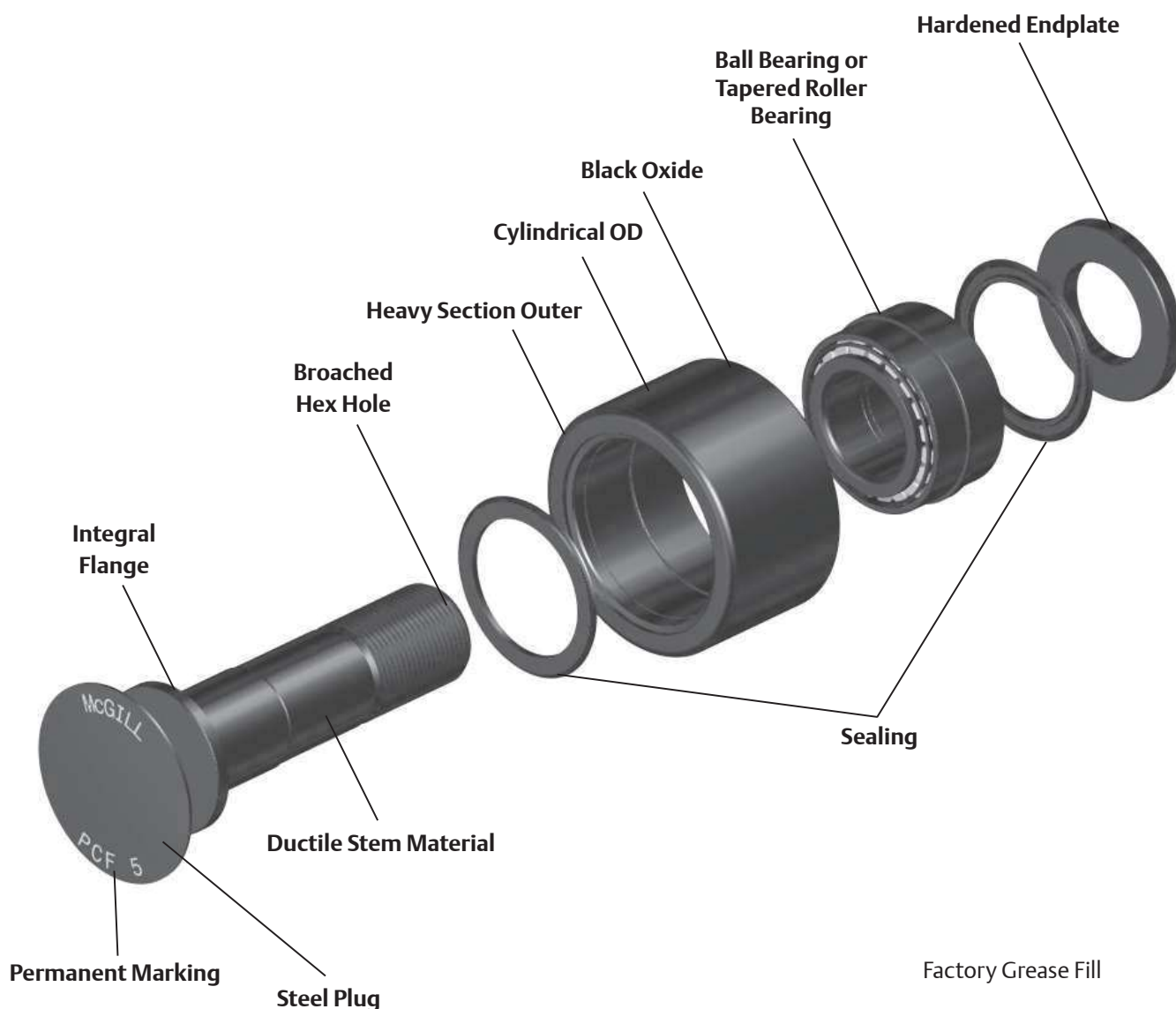
**Poor** ← → **Best**

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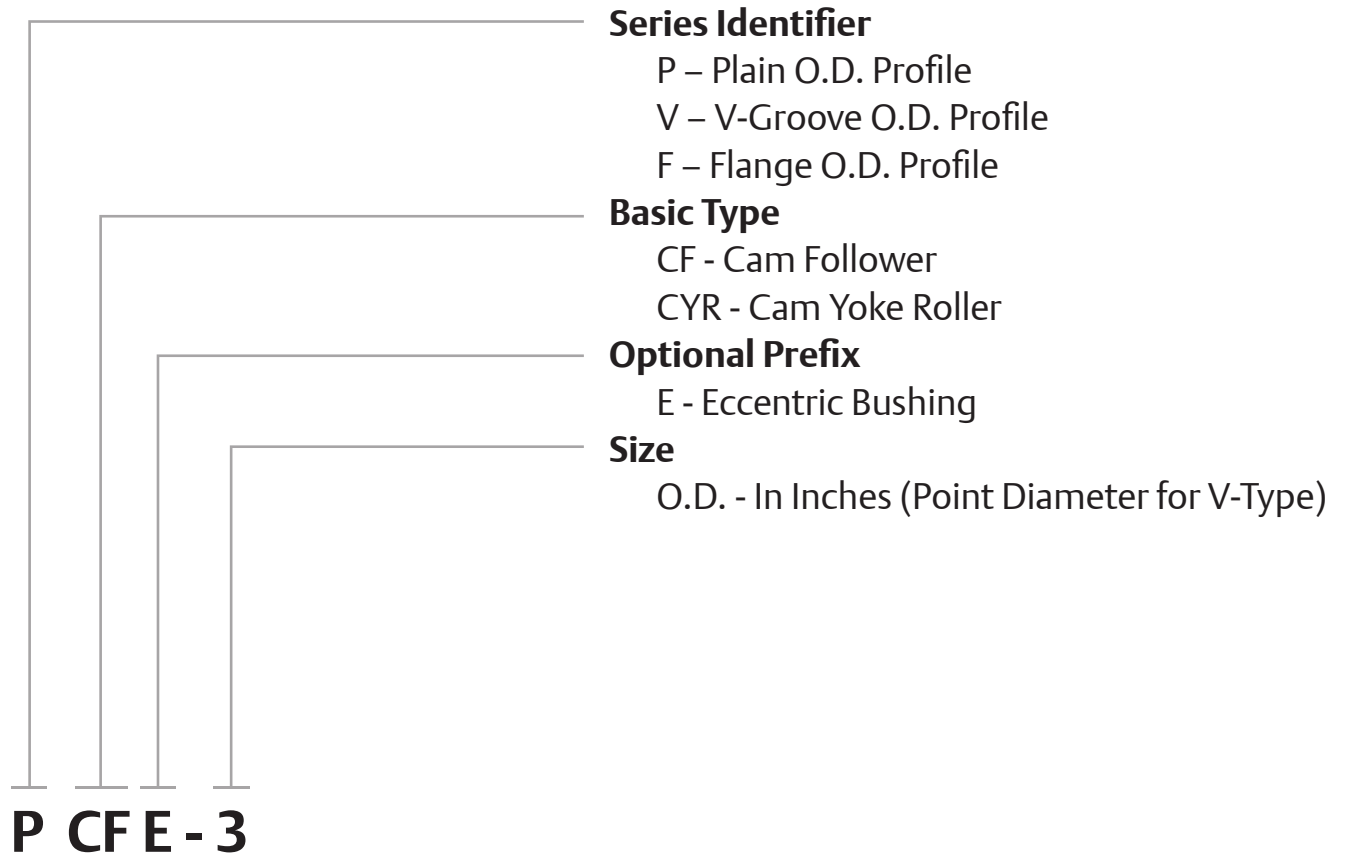
# McGILL® TRAKROL Cam Follower Bearings

## 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.



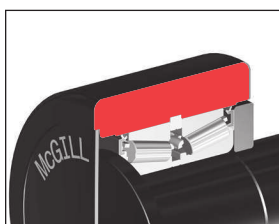
#### Flanged Series

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



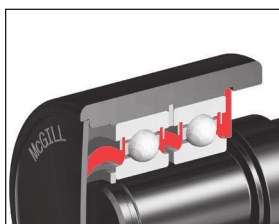
#### V-Groove Series

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



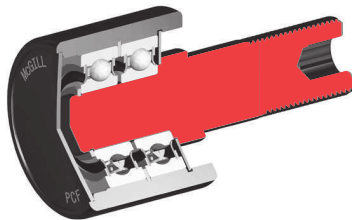
### Steel Plug

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



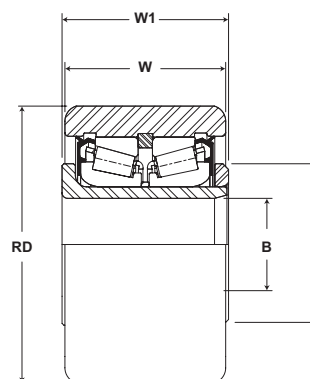
**Basic Construction Type:** Yoke Type Cylindrical Outside Diameter

**Rolling Elements:** Ball or Tapered Roller Bearing Insert

**Bearing Material:** Bearing Quality Steel

**Seal Type:** Rubber Lip

**Lubrication:** Polyurea Thickened Grease NLGI #2



## PCYR

Part No.	Insert Type	RD	W	B		W1	E	Track Roller Dynamic Rating	Thrust Capacity	Track Roller Static Rating	WT
With LUBRI-DISC Seals	Ball or Tapered Roller Bearing	Roller Diameter	Roller Width	Bore Diameter		Endplate Extension	Min. Clamping Diameter				Bearing Weight
		inch mm		inch mm		inch mm					lb/N
		(Ref)	(Ref)	Nom.	Tol.	(Ref)	(Ref)				
PCYR 3	TRB	3.00 76.2	1.75 44.5	1.000 25.40	+0.0007 /-0 +0.02 / - 0	1.81 46.0	1.75 44.5	14,300 63,606	5,790 25,754	20,000 88,960	2.57 1.17
PCYR 3 1/2	TRB	3.50 88.9	2.00 50.8	1.125 28.58	+0.0007 /-0 +0.02 / - 0	2.06 52.4	2.00 50.8	14,300 63,606	5,790 25,754	27,200 120,986	4.41 2.00
PCYR 4	TRB	4.00 101.6	2.25 57.2	1.250 31.75	+0.0007 /-0 +0.02 / - 0	2.31 58.7	2.25 57.2	14,300 63,606	5,790 25,754	27,200 120,986	6.57 2.98
PCYR 4 1/2	TRB	4.50 114.3	1.75 44.5	1.000 25.40	+0.0007 /-0 +0.02 / - 0	1.81 46.0	1.75 44.5	14,300 63,606	5,790 25,754	20,000 88,960	9.09 4.12
PCYR 5	TRB	5.00 127.0	3.75 95.3	1.750 44.45	+0.0007 /-0 +0.02 / - 0	2.85 72.3	3.00 76.2	35,800 159,238	13,300 59,158	58,400 259,763	11.61 5.27
PCYR 6	TRB	6.00 152.4	3.25 82.6	2.250 57.15	+0.0007 /-0 +0.02 / - 0	3.38 85.7	3.25 82.6	35,800 159,238	14,200 63,162	58,400 259,763	20.47 9.29

\*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.

**Cam Follower Engineering see page B-147.**

