McGill Training

TRAKROL® BEARINGS

Emerson Power Transmission



CONTENTS





- Product Overview
- Construction
- Features and Benefits
- Special Features
- Nomenclature
- Competition
- Installation & Maintenance
- Applications
- Selection Assistance



McGILL, CAMROL, TRAKROL, LUBRI-DISC, MCFD, MCYRD, MCF, MCFR, MCYR, AND MCYRR ARE REGISTERED TRADEMARKS OF EMERSON POWER TRANSMISSION MANUFACTURING, L.P. AND/OR McGILL MANUFACTURING CO, INC.

Product Overview





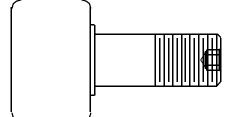
- Variation on standard inch cam follower
- Bearing insert allows thrust load
- Large lube reservoir, better seal
 - Dirty environments
 - Lube for life design
- 3 standard O.D. configurations

Product Overview



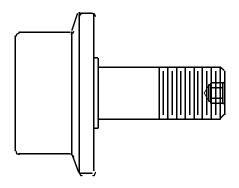


Standard O.D. Configurations



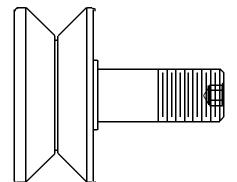
PCF - Plain Cylindrical O.D.

• Similar but not dimensionally interchangeable with standard cam followers



FCF - Flanged O.D.

- Popular in side guide applications
- Thrust load can be applied to flange



VCF - "V" Grooved O.D.

- Used with "V" bar tracks
- Configuration reduces track contamination buildup

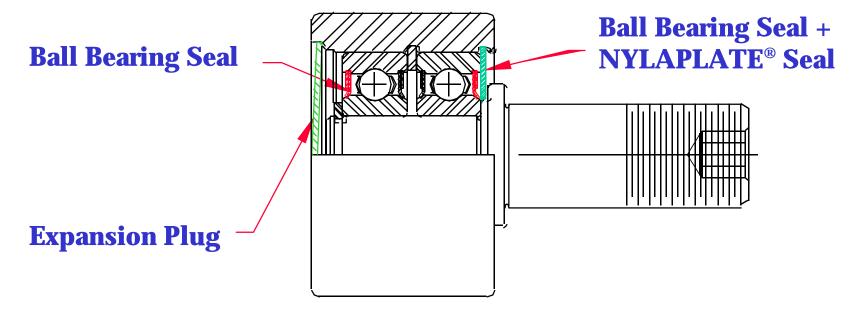
Construction



Construction and Sealing Less than 3" O.D.

(or point diameter)

- Precision ball bearing inserts allow for thrust loads
- Rubber lip seals help keep contamination out and lubricant in
- Extra NYLAPLATE[®] seal only offered by McGill



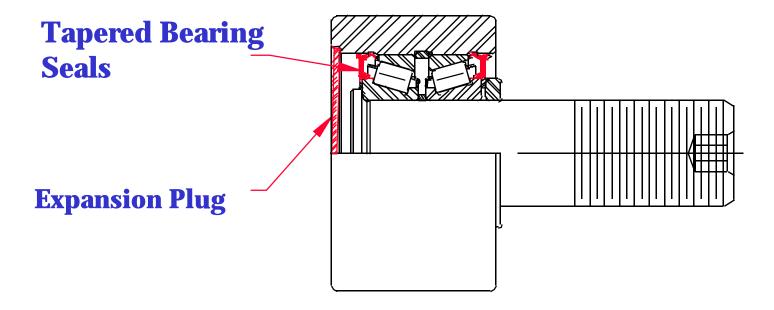
Construction





Construction and Sealing for 3" and Larger O.D. (or point diameter)

- Tapered roller bearing insert allows for thrust loads
- Double lip rubber seals help keep contamination out and lubricant in



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Features and Benefits



- Three O.D. configurations
- Sizes from 1 1/2" to 8" O.D.
- Black oxide on all exposed surfaces
- Tapered roller bearing inserts on larger sizes
- Precision ball bearing insert on smaller sizes
- Standard or eccentric stud available
- Extra NYLAPLATE® seal on smaller sizes
- Metal expansion plug for extra sealing on roller face
- Rubber lip seals
- Heavy walled outer housing



Features and Benefits



Eccentric Stud

- Compensates for improper positioning of mounting holes
- Allows for adjustment of bearing to track
- Can equalize loads over several bearings
- Total adjustment is double the amount of eccentricity
 - With 180° rotation of stud
- Pressed onto unthreaded stud diameter
- Nomenclature: add "E" prefix
 - Example: PCFE-1



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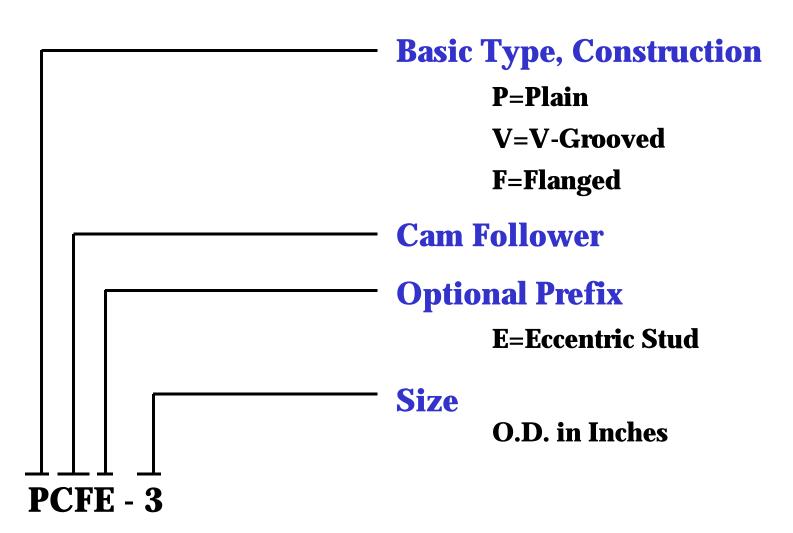
Special Features

- High temperature (about 400°F, 205°C) version with Teflon or metallic seal and special grease
- Yoke style
- Call factory for price and delivery

Nomenclature







Competition





Main Competitor

- Osborn
- "Load Runners"

Interchange Guide

McGILL	*OSBORN	
PCF**	PLR	
VCF	VLR	
FCF	FLR	

^{*}OSBORN is a registered trademark of Jason Inc.

^{**}Each manufacturer uses the same numbering convention i.e. a PCF-1 1/2 interchanges with a PLR-1 1/2.

Installation & Maintenance MGILL





Operating Temperature

Operating temperature range:

-30° to 225°F (-35°C - 110°C)

- Maximum operating temperature is limited by seal material and lubricant
- High temperature versions with Teflon, metallic shields (BB size), and high temperature grease are available as specials (to about 400°F, 205°C)

Installation & Maintenance





Lubrication

- Factory packed with grease
 - **–Ball bearings packed by manufacturer with a multi-purpose** bearing grease
- Tapered bearings packed by McGill
 - -#2 EP grease
- Large grease capacity for long prelubricated life
- Standard bearings cannot be relubricated



CAMROL® vs. TRAKROL® Bearings

Application Considerations	CAMROL Bearing	TRAKROL Bearing
Radial Loading	Better 🗸	Good
Contamination	Good	Better 🗸
Running Accuracy	Better 🗸	Good
Lube for Life	Good	Better 🗸
Thrust Loading	Not Recommended	Good
OD Size	1/2" -10"	1 1/2" - 8"





- Track roller applications involving:
 - Thrust loads
 - Lower precision demands
 - Contaminated environments
 - Lube-for-life maintenance





Foundries

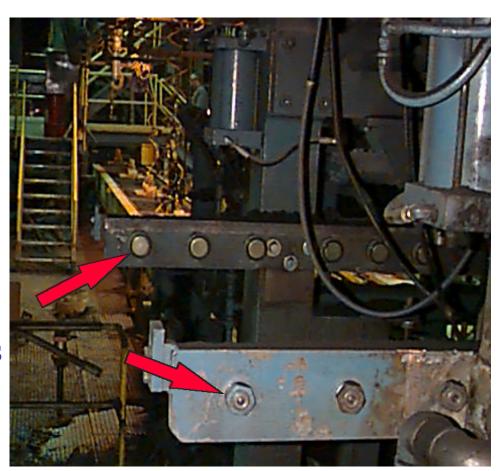
- Molding and core-making applications
 - Bearings are often stationary, with platform riding on roller
- Utilize VCF bearings on angle iron
 - Helps prevent excessive accumulation of sand





Foundry Application

Supports linear movement of molds







• Automotive Industry:

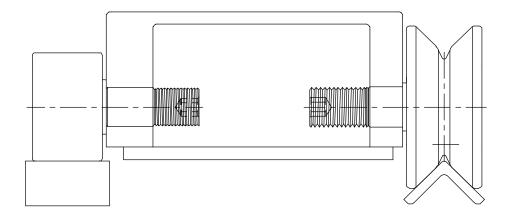
- Conveyors and overhead tracking systems
 - Transport automotive frames and components
- Automated welding equipment
 - Endplugs and NYLAPLATE® seals help protect against weld splatter





Steel Mills:

- Used with conveyors or rails to transport product
- VCF bearings can be used with angle iron track to keep dirt from accumulating on track
 - For long tracks, use a VCF in conjunction with a PCF (float bearing)







- Steel Mills (continued):
 - FCF bearings can be used on tracks or rails
 - Employed like train wheels
 - PCF bearings are often used on conveyor systems





Material Handling:

- Food and beverage industry
- Paper industries
- Agricultural equipment
- Airport jetways
- Mining





Available Resources

Internet: <u>www.emerson-ept.com</u>

- Price, Availability, Order Entry
- Product Selections
- Smart Interchanges
- CAD Drawings
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