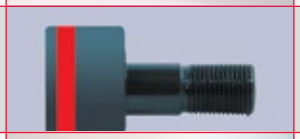
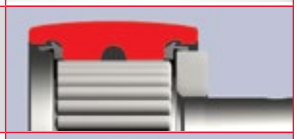
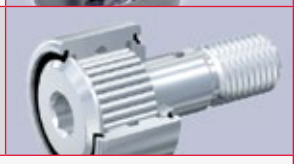
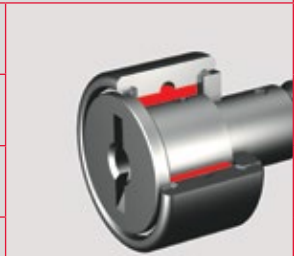
McGILL®

Cam Follower Bearings

A Regal Brand

REGAL

McGill Precision Bearings Reduce Operating Cost
CAMROL Cam Follower Selection Guide

Condition	How to identify		Potential Solutions	
General Purpose Applications	Using an unsealed bearing and desire longer life		LUBRI-DISC Seal CF-1-S Can extended bearing life 10 times longer than an unsealed bearing	
Ease of installation	feature a screwdriver slot to hold bearing during installation		Hex-Hole CF-1-S-B Provides superior holding power	
Blind Hole Applications	Stud type cam follower installed into drilled and tapped hole			
Misalignment/Corner Loading	Wear pattern on roller diameter offset from center		Crowned OD CCF-1-S Helps to center load	
Thrust	• Thrust loads present • Bearing supports rotating table • Bearing roller develops • excessive end play		Heavy Duty CFD-3 Incidental thrust loads	
			TRAKROL PCF-3 Higher thrust loads	
Corrosion	• Visible rust • Washdown environment • Bearing lock-up		CRES CAMROL ® CF-1-SB-CR Corrosion resistant 440C matrerial	
Contamination	• Dusty or contaminated environment • Bearing lock-up		Increased sealing protection:	
			LUBRI-DISC Seal CF-1-S	
			Heavy Duty CFD-3	
			Special Duty SD-CF-1	
			TRAKROL PCF-3	
Maintenance Free	• Bearing difficult to reach • Relubrication not desired		Maintenance free options:	
			Bushing Type BCF-1-S	
			Heavy Duty CFD-3	
			Special Duty SD-CF-1	
			TRAKROL PCF-3	

CAMROL® — The Industry Standard

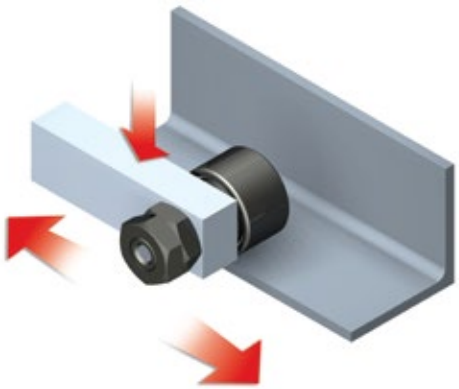
In 1937, McGill engineers invented the first needle bearing cam follower. Since that time, McGill has maintained its leading position through the continuous development of new features and improvements to the CAMROL bearing product line.

As today's leading manufacturer of quality cam follower bearings, McGill has developed many features to extend bearing life for a variety of operating conditions, lubrication requirements and application environments. McGill offers the broadest range of cam follower bearings on the market with over 1,400 standard designs to choose from.

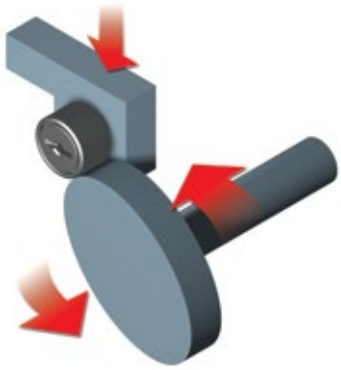
Overview

The typical functions of a cam follower are to provide anti-friction support of linear movement or to follow the surface of a cam. The CAMROL cam follower from McGill was designed to withstand the intermittent shock, loading and precision requirements associated with these applications.

Track or Load



External Cam



Industries

- Auto plants
- Food and beverage
- Forest products
- Oil drilling
- Printing
- Steel mills
- Textiles

Applications

- Automation equipment
- Machine tools
- Packaging equipment
- Unit material handling

Yoke TRAKROL Bearings

Yoke TRAKROL bearings are designed for yoke (straddle) mounting on a shaft and utilize tapered roller bearings.

Available in three configurations.

VCYR Series

FCYR Series

PCYR Series

For part nomenclature, see page 19.

Cam Follower Nomenclature Chart

Series	Type	Internal Construction	Size Specification	Seal	Mounting Method	O.D. Configuration
Camrol Bearings						
CF	Standard Stud	Full Complement Needle Rollers	Roller Diameter in Inches	Unsealed	Screwdriver Slot	Cylindrical
CF-S				Lubri-Disc		
CCF-S						Crowned
CF-B				Unsealed	Hex Hole	Cylindrical
CF-SB				Lubri-Disc		
CCF-SB						Crowned
CFE-B	Eccentric Stud			Unsealed		Cylindrical
CFE-SB				Lubri-Disc		
CCFE-SB						Crowned
CFH	Heavy Stud			Unsealed	Screwdriver Slot	Cylindrical
CFH-S				Lubri-Disc		
CCFH-S						Crowned
CFH-B				Unsealed	Hex Hole	Cylindrical
CFH-SB				Lubri-Disc		
CCFH-SB						Crowned
CYR	Yoke			Unsealed	Yoke	Cylindrical
CYR-S				Lubri-Disc		
CCYR-S						Crowned
Bushing Camrol Bearings						
BCF-S	Standard Stud	Bushing	Roller Diameter in Inches	Lubri-Disc	Screwdriver Slot	Cylindrical
BCF-SB					Hex Hole	
BCCF-SB						Crowned
BCYR-S	Yoke				Yoke	Cylindrical
CRES Camrol Bearings						
CF-SB CR	Standard Stud	Full Complement Needle Rollers	Roller Diameter in Inches	Lubri-Disc or Lubri-Disc +	Hex Hole	Cylindrical
CFE-SB CR	Eccentric Stud					
CYR-S CR	Yoke				Yoke	
Heavy-Duty Camrol Bearings						
CFD	Standard Stud	Double Row Cylindrical Rollers	Roller Diameter in Inches	Rubber Lip	Hex Hole	Cylindrical
CCFD						Crowned
CYRD	Yoke				Yoke	Cylindrical
CCYRD						Crowned
Special-Duty Camrol Bearings						
SDCF	Standard Stud	Caged Needle Rollers	Roller Diameter in Inches	End Plug and Lubri-Disc +	Hex Hole	Cylindrical
Metric Camrol Bearings						
MCF	Standard Stud	Full Complement Needle Rollers	Roller Diameter in Millimeters	Unsealed	Screwdriver Slot	Crowned
MCF-S				Lubri-Disc		
MCF-SX						Cylindrical
MCFR		Caged Needle Rollers		Unsealed		Crowned
MCFR-S				Lubri-Disc		Cylindrical
MCFR-SX						Crowned
MCF-SB		Full Complement Needle Rollers			Hex Hole	Cylindrical
MCF-SBX						Crowned
MCFR-SB		Caged Needle Rollers				Cylindrical
MCFR-SBX						Crowned
MCFE-SB	Eccentric Stud	Full Complement Needle Rollers				
MCFRE-SB		Caged Needle Rollers				
MCYR	Yoke	Full Complement Needle Rollers	Bore Diameter in Millimeters	Unsealed	Yoke	Crowned
MCYR-S				Lubri-Disc		
MCYR-SX						Cylindrical
MCYRR		Caged Needle Rollers		Unsealed		Crowned
MCYRR-S				Lubri-Disc		
MCYRR-SX						Cylindrical
Metric Heavy-Duty Camrol Bearings						
MCFD	Standard Stud	Double Row Cylindrical Rollers	Roller Diameter in Millimeters	Metal Shield	Screwdriver Slot	Crowned
MCFD-X						Cylindrical
MCYRD	Yoke		Bore Diameter in Millimeters		Yoke	Crowned
MCYRD-X						Cylindrical
Metric Special-Duty Camrol Bearings						
SDMCF	Standard Stud	Caged Needle Rollers	Roller Diameter in Millimeters	End Plug and Lubri-Disc +	Hex Hole	Cylindrical
Trakrol Bearings						
PCF	Standard Stud	Ball or Tapered Roller Bearings	Roller Diameter in Inches	Rubber Lip and End Plug	Hex Hole	Cylindrical
PCFE	Eccentric Stud					
FCF	Standard Stud					Flanged
FCFE	Eccentric Stud					
VCF	Standard Stud		Point Diameter in Inches			V-Grove
VCFE	Eccentric Stud					
PCYR	Yoke	Tapered Roller Bearings	Roller Diameter in Inches	Rubber Lip	Yoke	Cylindrical
FCYR						Flanged
VCYR			Point Diameter in Inches			V-Grove

McGill Needle Bearings

McGill machined race needle bearings are manufactured from bearing quality steel and available with multiple seal configurations. McGill needle bearings have a lubrication groove with radial holes on both the inner and outer rings for relubrication through the housing or shaft. Custom designs, lubricants and diametrical matching (-DS Suffix) are available.

MR 32 Shown

CAGEROL®

Bearings are available in two series.
Standard width MR 5/8" to 9 ¼" bore sizes
Narrow width MR-N 5/8" to 6 ½" bore sizes

- Steel cage construction allowing for higher-speed operation, while providing roller guidance and a lubricant reservoir.
- Crowned rollers, available on most sizes, reduce end stresses.
- Available with optional inner ring (MI) which provides a hardened raceway for the rollers when used with an unhardened shaft.

GUIDEROL®

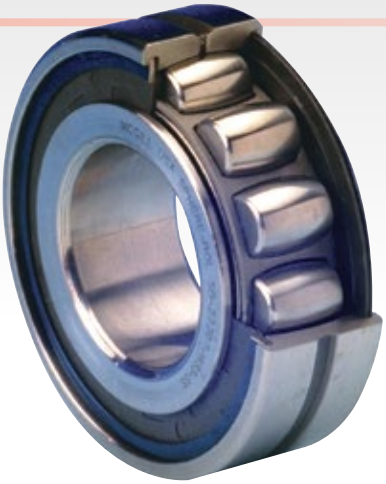
Bearings are available in two series.
Standard width GR sizes 5/8" to 9 ¼" bore sizes
Narrow width GR-N sizes 5/8" to 6 ½" bore sizes

- Full complement needle bearing allowing for higher static load rating, rigidity, and shock resistance.
- Available with optional inner ring (MI) which provides a hardened raceway for the rollers when used with an unhardened shaft.

GR 32 SS with Inner Ring Shown

McGill Spherical Roller Bearings

McGill Spherical Bearings single row of spherical rollers provides a wide variety of advantages. The bearing design allows for higher capacities, higher-limiting speeds, longer life under more misalignment and protection from contaminant within the same envelope of ordinary two-row designs.



SB-22207-W33-SS Shown

SPHERE-ROL®

Bearings are available in two series (tapered bore optional):
22200 series - 20mm to 150mm bore sizes
22300 series - 40mm to 100mm bore sizes

- Sealed SPHERE-ROL bearing dimensions meet ABMA/ISO specifications. Choose from three seal types:
  - NYLAPLATE® seal
  - NYLAPLATE® high temperature seal
  - LAMBDA® seal
- Dimensionally interchangeable with conventional double row spherical roller bearings.
- Spherical rollers increase dynamic load capacity and misalignment
- of conventional double row spherical roller bearings.