

**Hex Hole CAMROL Bearings**



Metric stud type CAMROL Bearings are available with a hexagonal hole in the face of the stud in place of the screwdriver slot. This feature is advantageous for mounting bearings in blind holes or with self-locking nuts requiring greater-than-average thread torque. In this modification, relubrication through the flange end of the stud is not possible.

**Hexagonal Wrench Sizes**

BASIC BEARING NUMBER	HEX WRENCH SIZE, MM	BASIC BEARING NUMBER	HEX WRENCH SIZE, MM
13	3	47	10
16	4	47A	10
19	4	52	10
22	4	52A	10
22A	5	62	14
26	4	62A	14
26A	5	72	14
30	6	72A	14
32	6	80	14
35	8	85	14
40	8	90	14
40A	8		

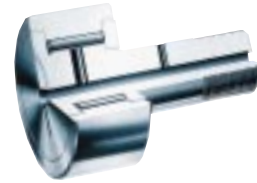
**Eccentric Collar CAMROL Bearings**



The eccentric collar feature provides an easy means of radial adjustment for precise positioning of cam followers, track, guide and support rollers. In-line combinations of eccentric collar CAMROL Bearings can be perfectly aligned without the need for extremely close tolerances of mounting holes and members. Problems involving control of clearances, pre-loading and compensation for wear can be avoided or solved by the easy adjustment of new bearings.

In most applications, a lock nut is sufficient to hold the bearing at the desired position. In applications where a more positive means of holding a given position is required, this can be accomplished by drilling and doweling through the housing into the bushing and the stud.

**Coding for metric CAMROL Bearings**



**Stud Type**

SERIES	CONSTRUCTION FEATURES
MCF	Full complement of needle rollers
<b>MCFE</b>	<b>With eccentric collar</b>
MCF-X	With cylindrical outside diameter
MCF-B, MCF-BX	With hexagonal hole
MCF-S, MCF-SBX	With seals
MCFR	Caged needle rollers
MCFRE	With eccentric collar
MCFR-X	With cylindrical outside diameter
MCFR-B, MCFR-BX	With hexagonal hole
MCFR-S, MCFR-SBX	With seals
MCFD	Full complement cylindrical rollers
MCFDE	With eccentric collar
MCFD-X	With cylindrical outside diameter



**Yoke Type**

SERIES	CONSTRUCTION FEATURES
MCYR	Full complement of needle rollers
MCYR-S	With seals
MCYR-X	With cylindrical outside diameter
MCYR-SX	With cylindrical outside diameter
MCYRR	Caged needle rollers
MCYRR-S	With seals
MCYRR-SX	With cylindrical outside diameter
MCYRD	Full complement cylindrical rollers
MCYRD-X	With cylindrical outside diameter

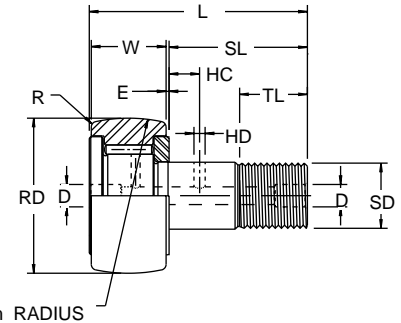
**MCF SERIES**

**STUD TYPE**

- Series MCF — Unsealed, full complement
- Series MCF-S — Sealed, full complement
- Series MCFR — Unsealed, cage type
- Series MCFR-S — Sealed, cage type



**MCF**



UNSEALED BRG. NO. (1)	SEALED BRG. NO. (1)	ROLLER DIA. RD NOM. (2)	ROLLER WIDTH W +0.00 -0.12	STUD DIA. SD NOM. (3)	STUD L'GTH. SL NOM.	OVERALL LENGTH L NOM.	ENDPLATE EXTENSION E NOM.	THREAD	THREAD LENGTH TL NOM.	OIL HOLE	
										(HC) NOM.	(HD) NOM.
mm											
MCFR-13	MCFR-13-S	13	9	5	13	23	0.6	M5x0.8	7.5	-	-
MCFR-16	MCFR-16-S	16	11	6	16	28	0.6	M6x1	9	-	-
MCFR-19	MCFR-19-S	19	11	8	20	32	0.6	M8x1.25	11	-	-
MCFR-22	MCFR-22-S	22	12	10	23	36	0.6	M10x1	12	-	-
MCFR-22A	MCFR-22A-S	22	12	10	23	36	0.6	M10x1.25	13	-	-
MCFR-26	MCFR-26-S	26	12	10	23	36	0.6	M10x1	12	-	-
MCFR-26A	MCFR-26A-S	26	12	10	23	36	0.6	M10x1.25	13	-	-
MCFR-30	MCFR-30-S	30	14	12	25	40	0.6	M12x1.5	14	6	3
MCFR-32	MCFR-32-S	32	14	12	25	40	0.6	M12x1.5	14	6	3
MCFR-35	MCFR-35-S	35	18	16	32.5	52	0.8	M16x1.5	18	8	3
MCFR-40	MCFR-40-S	40	20	18	36.5	58	0.8	M18x1.5	19	8	3
MCFR-40A	MCFR-40A-S	40	20	18	36.5	58	0.8	M18x1.5	20	10	3
MCFR-47	MCFR-47-S	47	24	20	40.5	66	0.8	M20x1.5	21	9	4
MCFR-47A	MCFR-47A-S	47	24	20	40.5	66	0.8	M20x1.5	22	12	4
MCFR-52	MCFR-52-S	52	24	20	40.5	66	0.8	M20x1.5	21	9	4
MCFR-52A	MCFR-52A-S	52	24	20	40.5	66	0.8	M20x1.5	22	12	4
MCFR-62	MCFR-62-S	62	29	24	49.5	80	0.8	M24x1.5	25	11	4
MCFR-62A	MCFR-62A-S	62	29	24	49.5	80	0.8	M24x1.5	25	12	4
MCFR-72	MCFR-72-S	72	29	24	49.5	80	0.8	M24x1.5	25	11	4
MCFR-72A	MCFR-72A-S	72	29	24	49.5	80	0.8	M24x1.5	25	12	4
MCFR-80	MCFR-80-S	80	35	30	63	100	1	M30x1.5	32	15	4
MCFR-85	MCFR-85-S	85	35	30	63	100	1	M30x1.5	32	15	4
MCFR-90	MCFR-90-S	90	35	30	63	100	1	M30x1.5	32	15	4

(1) Standard bearing has a crowned roller outside diameter. For straight cylindrical outside roller diameter, add suffix "X". Example - MCFR-35-X or MCF-35-SX  
 (2) Tolerance limits for Roller Diameter are shown below.

**Cylindrical Roller Dia. "RD"**

RD (NOM.)		TOLERANCE	
OVER	INCL.	MAX.	MIN.
mm	mm	mm	mm
6	18	0	-0.008
18	30	0	-0.009
30	50	0	-0.011
50	80	0	-0.013
80	120	0	-0.015

**Crowned Roller Dia. "RD"**

RD (NOM.)		TOLERANCE	
OVER	INCL.	MAX.	MIN.
mm	mm	mm	mm
6	120	0	-0.050

**INTERCHANGEABILITY CHARTS**

**STUD TYPE METRIC CAM FOLLOWERS:  
Needle Roller Cage and Full Complement Types**

McGILL		INA	SKF	NTN	IKO	THK	
CAGE	FULL COMPLEMENT	CAGE	FULL COMPLEMENT	CAGE	FULL COMPLEMENT	CAGE	FULL COMPLEMENT
MCFR-13	-	-	-	-	CF5	-	
MCFR-16	MCF-16	KR-16	KRV-16	CF6R	CF6VR		
MCFR-19	MCF-19	KR-19	KRV-19	CF8R	CF8VR		
MCFR-22	MCF-22	KR-22	KRV-22	-	-		
MCFR-22A	MCF-22A	-	-	CF10R	CF10VR		
MCFR-26	MCF-26	KR-26	KRV-26	-	-		
MCFR-26A	MCF-26A	-	-	CF10-1R	CF10-1VR		
MCFR-30	MCF-30	KR-30	KRV-30	CF12R	CF12VR		
MCFR-32	MCF-32	KR-32	KRV-32	CF12-1R	CF12-1VR		
MCFR-35	MCF-35	KR-35	KRV-35	CF16R	CF16VR		
MCFR-40	MCF-40	KR-40	KRV-40	-	-		
MCFR-40A	MCF-40A	-	-	CF18R	CF18VR		
MCFR-47	MCF-47	KR-47	KRV-47	-	-		
MCFR-47A	MCF-47A	-	-	CF20-1R	CF20-1VR		
MCFR-52	MCF-52	KR-52	KRV-52	-	-		
MCFR-52A	MCF-52A	-	-	CF20R	CF20VR		
MCFR-62	MCF-62	KR-62	KRV-62	-	-		
MCFR-62A	MCF-62A	-	-	CF24R	CF24VR		
MCFR-72	MCF-72	KR-72	KRV-72	-	-		
MCFR-72A	MCF-72A	-	-	CF24-1R	CF24-1VR		
MCFR-80	MCF-80	KR-80	KRV-80	CF30R	CF30VR		
MCFR-85	MCF-85	KR-85	-	CF30-1R	CF30-1VR		
MCFR-90	MCF-90	KR-90	KRV-90	CF30-2R	CF30-2VR		

**HEAVY-DUTY  
Cylindrical Roller Type**

McGILL	INA FAG NTN
MCFD-35	NUKR-35
MCFD-40	NUKR-40
MCFD-47	NUKR-47
MCFD-52	NUKR-52
MCFD-62	NUKR-62
MCFD-72	NUKR-72
MCFD-80	NUKR-80
MCFD-90	NUKR-90

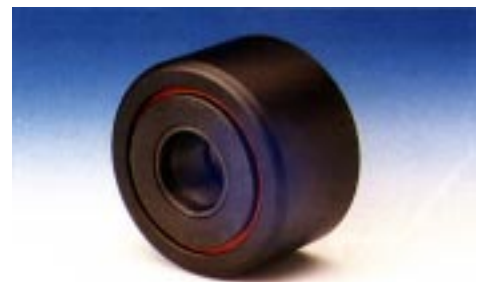


**YOKE TYPE METRIC CAM FOLLOWERS:  
Needle Roller Cage and Full Complement Types**

McGILL		INA	SKF	NTN	IKO	THK	
CAGE	FULL COMPLEMENT	CAGE	FULL COMPLEMENT	CAGE	FULL COMPLEMENT	CAGE	FULL COMPLEMENT
MCYRR-5	MCYR-5	NATR-5	NATV-5	NART-5R	NART-5VR		
MCYRR-6	MCYR-6	NATR-6	NATV-6	NART-6R	NART-6VR		
MCYRR-8	MCYR-8	NATR-8	NATV-8	NART-8R	NART-8VR		
MCYRR-10	MCYR-10	NATR-10	NATV-10	NART-10R	NART-10VR		
MCYRR-12	MCYR-12	NATR-12	NATV-12	NART-12R	NART-12VR		
MCYRR-15	MCYR-15	NATR-15	NATV-15	NART-15R	NART-15VR		
MCYRR-17	MCYR-17	NATR-17	NATV-17	NART-17R	NART-17VR		
MCYRR-20	MCYR-20	NATR-20	NATV-20	NART-20R	NART-20VR		
MCYRR-25	MCYR-25	NATR-25	NATV-25	NART-25R	NART-25VR		
MCYRR-30	MCYR-30	NATR-30	NATV-30	NART-30R	NART-30VR		
MCYRR-35	MCYR-35	NATR-35	NATV-35	NART-35R	NART-35VR		
MCYRR-40	MCYR-40	NATR-40	NATV-40	NART-40R	NART-40VR		
MCYRR-45	MCYR-45	NATR-45	-	NART-45R	NART-45VR		
MCYRR-50	MCYR-50	NATR-50	NATV-50	NART-50R	NART-50VR		

**HEAVY-DUTY  
Cylindrical Roller Type**

McGILL	INA FAG	NTN
MCYRD-15	NUTR-15	NUTR-202
MCYRD-17	NUTR-17	NUTR-203
MCYRD-20	NUTR-20	NUTR-204
MCYRD-25	NUTR-25	NUTR-205
MCYRD-30	NUTR-30	NUTR-206
MCYRD-35	NUTR-35	NUTR-207
MCYRD-40	NUTR-40	NUTR-208
MCYRD-45	NUTR-45	NUTR-209
MCYRD-50	NUTR-50	NUTR-210



**Coding for Other Cam Follower and Yoke Roller Types**

OPTIONAL FEATURES	McGILL	INA	SKF	IKO	NTN	THK
Seals**	Add Suffix "S"	Add Suffix "PP"	Add Suffix "UU"	Add Suffix "LL"	Add Suffix "UU"	Add Suffix "UU"
Cylindrical OD	Add Suffix "X"	Add Suffix "X"	Remove Suffix "R"	Add Suffix "X"	Remove Suffix "R"	Remove Suffix "R"
Hexagonal Hole*	Add Suffix "B"	Add Suffix "SK"	Add Suffix "B"	Add Suffix "H"	Add Suffix "A"	Add Suffix "A"
Eccentric Collar*	Add Prefix "E"	Add Prefix "E"	Add Prefix "E"	-	-	-

\*Not applicable for yoke roller types

\*\*Not applicable for heavy-duty cylindrical roller type.