



Needle Rollers



The Osborn Load Runners® team has built a reputation on engineering the highest quality, customized solutions for the most extreme linear motion and architectural engineering applications. We have taken that dedication and expertise into the cam follower market, introducing a full complement of needle roller bearings to serve the needs of the industry. Including stud and yoke type rollers and a full range dimensional options, Osborn has what you need to Keep Rolling™.

Needle Roller Range Overview












**HIGH-LOAD
CAPACITY**



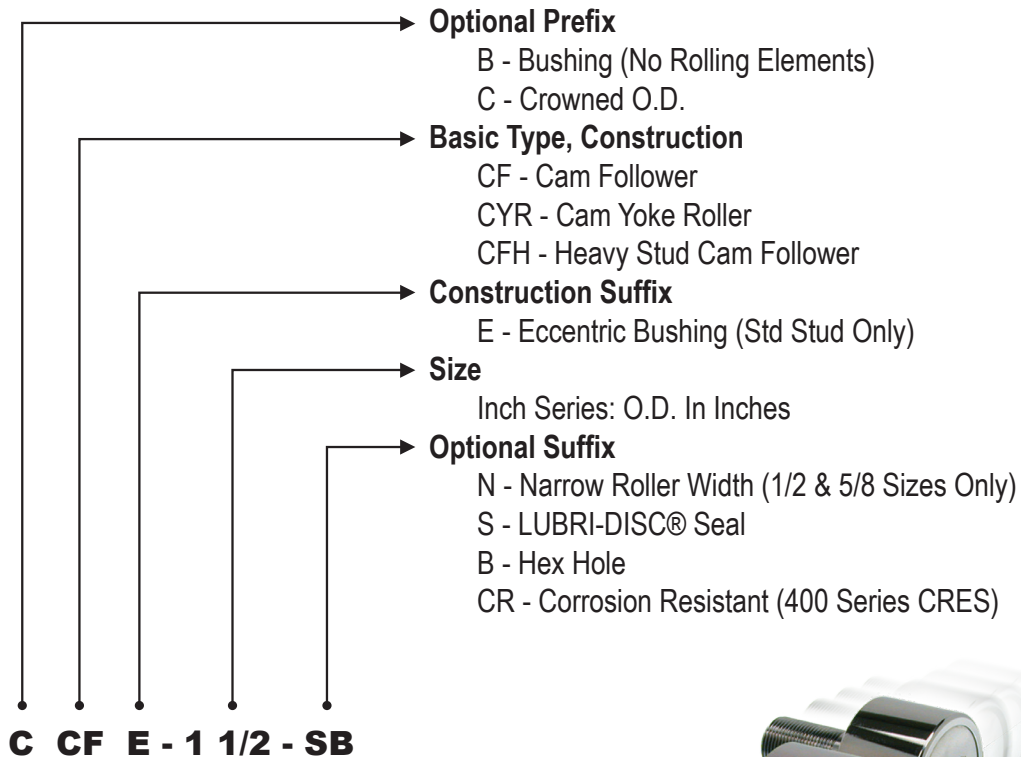
**CORROSION
RESISTANT**



**LONG
LASTING**

	Product Series	Description	Diameter Range	Catalog Pages
	CF	Concentric, stud type	0.5" - 4"	6-9
	CFH	Concentric, stud type, heavy duty	0.5" - 5"	10-13
	CCF	Concentric, stud type, crowned	0.5" - 4"	14-15
	CCFH	Concentric, stud type, crowned, heavy duty	0.5" - 4"	16-17
	CFE	Eccentric, stud type	0.5" - 3"	18-19
	CCFE	Eccentric, stud type, crowned	0.625" - 3"	18-19
	CYR	Yoke	0.75" - 6"	20-21
	CCYR	Yoke, crowned	0.75" - 4"	22-23
	CFD	Double row, cylindrical	1.5" - 3"	24-25

Cam Follower Nomenclature



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

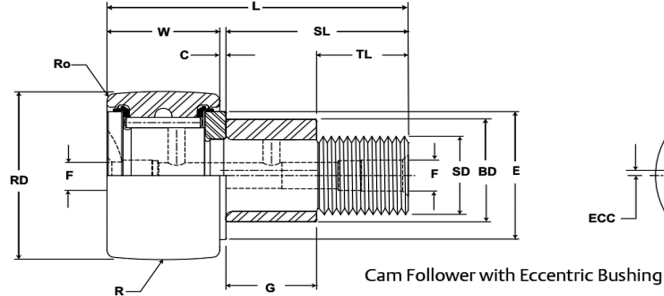
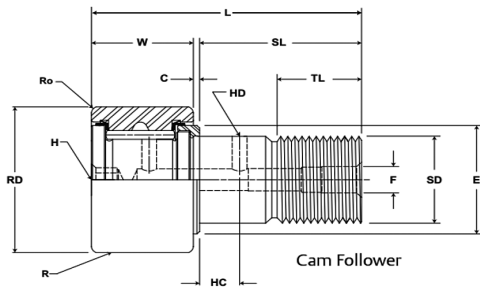


CF concentric, stud type

A needle roller CF concentric, stud type is a cam follower bearing for precise motion control in high radial and axial load applications. It has a stud with needle rollers mounted on it, which roll on the stud's outer diameter, reducing friction. Ideal for automation and robotics due to its ability to follow cam contours. Easy to install and durable.



Part Description	Sealed	RD			W			SD			SL	C	TL	L	Track Roller Dynamic Rating (Cr)	
		Roller Diameter			Roller Width			Stud Diameter			Stud Length	Endplate Extension	Minimum Thread Length	Length Overall		
		Inch			Inch			Inch			Inch	Inch	Inch	Inch	Units (lbs)	Units (KN)
		Nom.	Tol.		Nom.	Tol.		Nom.	Tol.		(Ref)	(Ref)	(Ref)	(Ref)		
	+	-		+	-		+	-								
CF 1/2 N-SB (Hex Drive rrow)	Yes	0.500	0	0.001	0.344	0	0.005	0.190	0.001	0	0.50	0.031	0.25	0.88	688	3.1
CF 1/2 S (Reg. Stud)	Yes	0.500	0	0.001	0.375	0	0.005	0.190	0.001	0	0.63	0.031	0.25	1.03	917	4.1
CF 1/2 SB (Hex Drive)	Yes	0.500	0	0.001	0.375	0	0.005	0.190	0.001	0	0.63	0.031	0.25	1.03	917	4.1
CF 5/8 NS (Reg. Stud/rrow)	Yes	0.625	0	0.001	0.406	0	0.005	0.250	0.001	0	0.63	0.031	0.31	1.06	1,111	4.9
CF 5/8 N-SB (Hex Drive / rrow)	Yes	0.625	0	0.001	0.406	0	0.005	0.250	0.001	0	0.63	0.031	0.31	1.06	1,111	4.9
CF 5/8 S (Reg. Stud)	Yes	0.625	0	0.001	0.438	0	0.005	0.250	0.001	0	0.75	0.031	0.31	1.22	1,401	6.2
CF 5/8 SB (Hex Drive)	Yes	0.625	0	0.001	0.438	0	0.005	0.250	0.001	0	0.75	0.031	0.31	1.22	1,401	6.2
CF 11/16 S (Reg. Stud)	Yes	0.688	0	0.001	0.438	0	0.005	0.250	0.001	0	0.75	0.031	0.31	1.22	1,401	6.2
CF 3/4 (Reg Stud)	No	0.750	0	0.001	0.500	0	0.005	0.375	0.001	0	0.88	0.031	0.38	1.41	1,574	7.0
CF 3/4 S (Reg. Stud)	Yes	0.750	0	0.001	0.500	0	0.005	0.375	0.001	0	0.88	0.031	0.38	1.41	1,574	7.0
CF 3/4 SB (Hex Drive)	Yes	0.750	0	0.001	0.500	0	0.005	0.375	0.001	0	0.88	0.031	0.38	1.41	1,660	7.4
CF 7/8 (Reg Stud)	No	0.875	0	0.001	0.500	0	0.005	0.375	0.001	0	0.88	0.031	0.38	1.41	1,574	7.0
CF 7/8 S (Reg. Stud)	Yes	0.875	0	0.001	0.500	0	0.005	0.375	0.001	0	0.88	0.031	0.38	1.41	1,574	7.0
CF 7/8 SB (Hex Drive)	Yes	0.875	0	0.001	0.500	0	0.005	0.375	0.001	0	0.88	0.031	0.38	1.41	1,574	7.0
CF 1 (Reg Stud)	No	1.000	0	0.001	0.625	0	0.005	0.438	0.001	0	1.00	0.031	0.50	1.66	2,093	9.3
CF 1 S (Reg. Stud)	Yes	1.000	0	0.001	0.625	0	0.005	0.438	0.001	0	1.00	0.031	0.50	1.66	2,093	9.3
CF 1 SB (Hex Drive)	Yes	1.000	0	0.001	0.625	0	0.005	0.438	0.001	0	1.00	0.031	0.50	1.66	2,225	9.9
CF 1-1/8 S (Reg. Stud)	Yes	1.125	0	0.001	0.625	0	0.005	0.438	0.001	0	1.00	0.031	0.50	1.66	2,473	11.0
CF 1-1/8 SB (Hex Drive)	Yes	1.125	0	0.001	0.625	0	0.005	0.438	0.001	0	1.00	0.031	0.50	1.66	2,473	11.0
CF 1-1/4 (Reg Stud)	No	1.250	0	0.001	0.750	0	0.005	0.500	0.001	0	1.25	0.031	0.63	2.03	3,485	15.5
CF 1-1/4 B (Hex Drive)	No	1.250	0	0.001	0.750	0	0.005	0.500	0.001	0	1.25	0.031	0.63	2.03	3,485	15.5
CF 1-1/4 S (Reg. Stud)	Yes	1.250	0	0.001	0.750	0	0.005	0.500	0.001	0	1.25	0.031	0.63	2.03	3,485	15.5
CF 1-1/4 SB (Hex Drive)	Yes	1.250	0	0.001	0.750	0	0.005	0.500	0.001	0	1.25	0.031	0.63	2.03	3,485	15.5
CF 1-3/8 (Reg Stud)	No	1.375	0	0.001	0.750	0	0.005	0.500	0.001	0	1.25	0.031	0.63	2.03	3,485	15.5
CF 1-3/8 S (Reg. Stud)	Yes	1.375	0	0.001	0.750	0	0.005	0.500	0.001	0	1.25	0.031	0.63	2.03	3,485	15.5
CF 1-3/8 SB (Hex Drive)	Yes	1.375	0	0.001	0.750	0	0.005	0.500	0.001	0	1.25	0.031	0.63	2.03	3,485	15.5
CF 1-1/2 S (Reg. Stud)	Yes	1.500	0	0.001	0.875	0	0.005	0.625	0.001	0	1.50	0.031	0.75	2.41	4,609	20.5
CF 1-1/2 SB (Hex Drive)	Yes	1.500	0	0.001	0.875	0	0.005	0.625	0.001	0	1.50	0.031	0.75	2.41	4,609	20.5
CF 1-5/8 S (Reg. Stud)	Yes	1.625	0	0.001	0.875	0	0.005	0.625	0.001	0	1.50	0.031	0.75	2.41	5,013	22.3
CF 1-5/8 SB (Hex Drive)	Yes	1.625	0	0.001	0.875	0	0.005	0.625	0.001	0	1.50	0.031	0.75	2.41	5,013	22.3



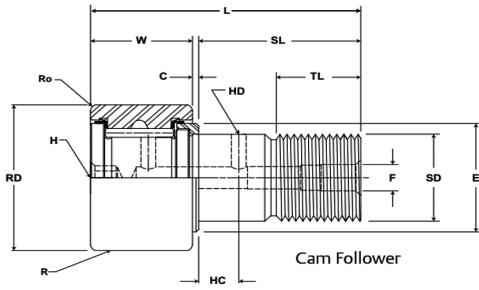
Track Roller Static Rating (Cor)		HC	HD	F	H	E	Ro	Thread Type	Limiting Speed	WT	Part Number
		Hole Center	Radial Hole Diameter	Axial Hole Dia or Fitting	Hex Hole	Min Boss Diameter	Outer Corner			Weight	
Units (lbs)	Units (KN)	Inch		Inch		Inch		RPM	lb		
		(Ref)	(Ref)	(Ref)	(Ref)	(Ref)	(Ref)				
699	3.1	-	-	-	0.125	0.39	0.01	10-32 UNF	7,000	0.029	0009208900
1,014	4.5	-	-	-	-	0.39	0.01	10-32 UNF	7,000	0.029	0009209000
1,014	4.5	-	-	-	0.125	0.39	0.01	10-32 UNF	7,000	0.029	0009209100
1,225	5.5	-	-	-	-	0.49	0.01	1/4-28 UNF	5,500	0.040	0009212400
1,225	5.5	-	-	-	0.125	0.49	0.01	1/4-28 UNF	5,500	0.040	0009212500
1,650	7.3	-	-	-	-	0.49	0.01	1/4-28 UNF	5,500	0.040	0009212600
1,650	7.3	-	-	-	0.125	0.49	0.01	1/4-28 UNF	5,500	0.040	0009212700
1,650	7.3	-	-	-	-	0.39	0.01	1/4-28 UNF	7,000	0.033	0009209200
2,084	9.3	0.250	0.094	0.188	-	0.57	0.01	3/8-24 UNF	5,500	0.070	0009211900
2,084	9.3	0.250	0.094	0.188	-	0.57	0.01	3/8-24 UNF	5,500	0.070	0009212000
2,065	2065.0	0.250	0.094	0.188	0.187	0.50	NA	3/8-24 UNF	5,500	0.076	0009212100
2,084	9.3	0.250	0.094	0.188	-	0.57	0.01	3/8-24 UNF	5,500	0.099	0009212800
2,084	9.3	0.250	0.094	0.188	-	0.57	0.01	3/8-24 UNF	5,500	0.099	0009212900
2,084	9.3	0.250	0.094	0.188	0.187	0.57	0.01	3/8-24 UNF	5,500	0.099	0009213000
3,260	14.5	0.250	0.094	0.188	-	0.78	0.03	7/16-20 UNF	2,800	0.161	0009208600
3,485	15.5	0.250	0.094	0.188	-	0.78	0.03	7/16-20 UNF	2,800	0.161	0009208700
3,060	13.6	0.250	0.094	0.188	0.250	0.64	NA	7/16-20 UNF	4,500	0.161	0009208800
3,619	16.1	0.250	0.094	0.188	-	0.78	0.03	7/16-20 UNF	2,800	0.209	0009209900
3,619	16.1	0.250	0.094	0.188	0.250	0.78	0.03	7/16-20 UNF	2,800	0.209	0009210000
4,631	20.6	0.313	0.094	0.188	-	0.97	0.03	1/2-20 UNF	2,700	0.299	0009209500
4,631	20.6	0.313	0.094	0.188	0.250	0.97	0.03	1/2-20 UNF	2,700	0.299	0009209600
4,631	20.6	0.313	0.094	0.188	-	0.97	0.03	1/2-20 UNF	2,700	0.299	0009209700
4,631	20.6	0.313	0.094	0.188	0.250	0.97	0.03	1/2-20 UNF	2,700	0.299	0009209800
4,631	20.6	0.313	0.094	0.188	-	0.97	0.03	1/2-20 UNF	2,700	0.350	0009210300
4,631	20.6	0.313	0.094	0.188	-	0.97	0.03	1/2-20 UNF	2,700	0.350	0009210400
4,631	20.6	0.313	0.094	0.188	0.250	0.97	0.03	1/2-20 UNF	2,700	0.350	0009210500
6,497	28.9	0.375	0.094	0.188	-	1.10	0.03	5/8-18 UNF	2,300	0.519	0009209300
6,497	28.9	0.375	0.094	0.188	0.313	1.10	0.03	5/8-18 UNF	2,300	0.519	0009209400
6,519	29.0	0.375	0.094	0.188	-	1.10	0.03	5/8-18 UNF	2,300	0.598	0009210600
6,519	29.0	0.375	0.094	0.188	0.313	1.10	0.03	5/8-18 UNF	2,300	0.598	0009210700

CF concentric, stud type *(continued)*

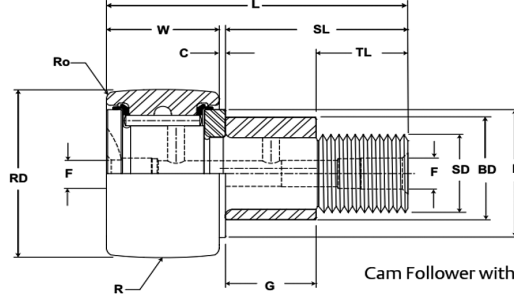
A needle roller CF concentric, stud type is a cam follower bearing for precise motion control in high radial and axial load applications. It has a stud with needle rollers mounted on it, which roll on the stud's outer diameter, reducing friction. Ideal for automation and robotics due to its ability to follow cam contours. Easy to install and durable.



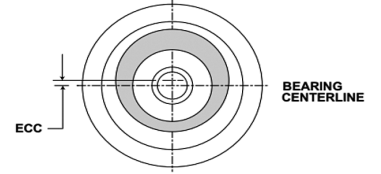
Part Description	Sealed	RD			W			SD			SL	C	TL	L	Track Roller Dynamic Rating (Cr)	
		Roller Diameter			Roller Width			Stud Diameter			Stud Length	Endplate Extension	Minimum Thread Length	Length Overall		
		Inch			Inch			Inch			Inch	Inch	Inch	Inch	Units (lbs)	Units (KN)
		Nom.	Tol.		Nom.	Tol.		Nom.	Tol.		(Ref)	(Ref)	(Ref)	(Ref)		
	+	-		+	-		+	-								
CF 1-3/4 S (Reg. Stud)	Yes	1.750	0	0.001	1.000	0	0.005	0.750	0.001	0	1.75	0.031	0.88	2.78	6,519	29.0
CF 1-3/4 SB (Hex Drive)	Yes	1.750	0	0.001	1.000	0	0.005	0.750	0.001	0	1.75	0.031	0.88	2.78	6,519	29.0
CF 1-7/8 (Reg Stud)	No	1.875	0	0.001	1.000	0	0.005	0.750	0.001	0	1.75	0.031	0.88	2.78	6,519	29.0
CF 1-7/8 S (Reg. Stud)	Yes	1.875	0	0.001	1.000	0	0.005	0.750	0.001	0	1.75	0.031	0.88	2.78	6,519	29.0
CF 1-7/8 SB (Hex Drive)	Yes	1.875	0	0.001	1.000	0	0.005	0.750	0.001	0	1.75	0.031	0.88	2.78	6,519	29.0
CF 2 (Reg Stud)	No	2.000	0	0.001	1.250	0	0.005	0.875	0.001	0	2.00	0.031	1.00	3.28	8,090	36.0
CF 2 S (Reg. Stud)	Yes	2.000	0	0.001	1.250	0	0.005	0.875	0.001	0	2.00	0.031	1.00	3.28	8,090	36.0
CF 2 SB (Hex Drive)	No	2.000	0	0.001	1.250	0	0.005	0.875	0.001	0	2.00	0.031	1.00	3.28	8,090	36.0
CF 2-1/4 SB (Hex Drive)	Yes	2.250	0	0.001	1.250	0	0.005	0.875	0.001	0	2.00	0.031	1.00	3.28	9,375	41.7
CF 2-1/2 (Reg Stud)	No	2.500	0	0.001	1.500	0	0.005	1.000	0.001	0	2.25	0.031	1.13	3.78	14,208	63.2
CF 2-1/2 SB (Hex Drive)	Yes	2.500	0	0.001	1.500	0	0.005	1.000	0.001	0	2.25	0.031	1.13	3.78	14,208	63.2
CF 2-3/4 SB (Hex Drive)	Yes	2.750	0	0.001	1.500	0	0.005	1.000	0.001	0	2.25	0.031	1.13	3.78	14,208	63.2
CF 3 SB (Hex Drive)	Yes	3.000	0	0.001	1.750	0	0.005	1.250	0.001	0	2.50	0.031	1.25	4.28	15,720	69.9
CF 3-1/2 SB (Hex Drive)	Yes	3.500	0	0.001	2.000	0	0.005	1.375	0.001	0	2.75	0.031	1.38	4.78	25,831	114.9
CF 4 SB (Hex Drive)	Yes	4.000	0	0.001	2.250	0	0.005	1.500	0.001	0	3.50	0.031	1.50	5.78	29,985	133.4



Cam Follower



Cam Follower with Eccentric Bushing



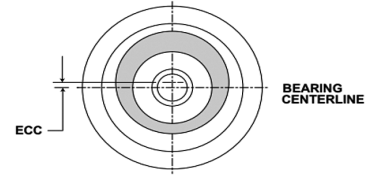
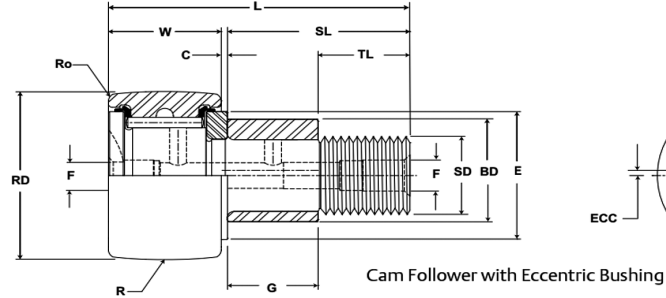
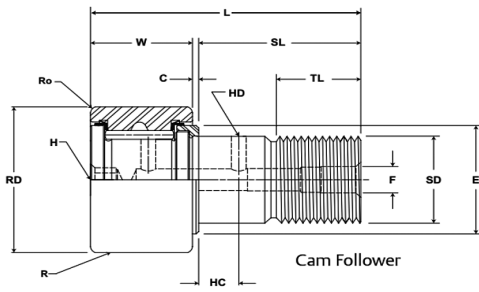
Track Roller Static Rating (Cor)		HC	HD	F	H	E	Ro	Thread Type	Limiting Speed	WT	Part Number
		Hole Center	Radial Hole Diameter	Axial Hole Dia or Fitting	Hex Hole	Min Boss Diameter	Outer Corner			Weight	
Units (lbs)	Units (KN)	Inch		Inch		Inch		RPM	lb		
		(Ref)	(Ref)	(Ref)	(Ref)	(Ref)	(Ref)				
10,229	45.5	0.438	0.094	0.188	-	1.25	0.04	3/4-16 UNF	1,900	0.827	0009210100
10,454	46.5	0.438	0.094	0.188	0.313	1.25	0.04	3/4-16 UNF	1,900	0.827	0009210200
10,229	45.5	0.438	0.094	0.188	-	1.25	0.04	3/4-16 UNF	1,900	0.920	0009210800
10,229	45.5	0.438	0.094	0.188	-	1.25	0.04	3/4-16 UNF	1,900	0.920	0009210900
10,229	45.5	0.438	0.094	0.188	0.313	1.25	0.04	3/4-16 UNF	1,900	0.920	0009211000
10,570	47.0	0.500	0.126	0.188	-	1.20	NA	7/8-14 UNF	2,200	1.320	0009211100
10,570	47.0	0.500	0.126	0.188	-	1.54	0.05	7/8-14 UNF	2,200	1.320	0009211200
10,570	47.0	0.500	0.126	0.188	0.437	1.20	NA	7/8-14 UNF	2,200	1.320	0009211300
13,871	61.7	0.500	0.125	0.188	0.437	1.54	0.05	7/8-14 UNF	1,700	1.639	0009211600
26,055	115.9	0.563	0.125	0.188	-	1.89	0.09	1-14 UNF	1,400	2.497	0009211400
26,055	115.9	0.563	0.125	0.188	0.500	1.89	0.09	1-14 UNF	1,400	2.497	0009211500
26,055	115.9	0.563	0.125	0.188	0.500	1.89	0.09	1-14 UNF	1,400	2.926	0009211700
24,910	110.8	0.625	0.126	0.254	0.437	2.00	NA	1 1/4-12 UNF	1,600	4.040	0009211800
45,389	201.9	0.688	0.125	0.250	0.750	2.48	0.09	1 3/8-12 UNF	950	6.413	0009212200
44,770	199.1	0.754	0.126	0.254	0.750	2.62	NA	1 1/2-12 UNF	1,300	7.440	0009212300

CFH concentric, stud type, heavy duty

The needle roller CFH concentric, stud type is a heavy-duty cam follower bearing for demanding applications. It has a stud with a needle roller assembly that minimizes friction and provides precise motion control. Suitable for heavy loads, it's easy to install and durable.



Part Description	Sealed	RD			W			SD			SL	C	TL	L	Track Roller Dynamic Rating (Cr)	
		Roller Diameter			Roller Width			Stud Diameter			Stud Length	Endplate Extension	Minimum Thread Length	Length Overall		
		Inch			Inch			Inch			Inch	Inch	Inch	Inch	Units (lbs)	Units (KN)
		Nom.	Tol.		Nom.	Tol.		Nom.	Tol.		(Ref)	(Ref)	(Ref)	(Ref)		
CFH 1/2	No	0.500	0	0.001	0.375	0	0.005	0.250	0.001	0	0.63	0.031	0.25	1.03	825	3.7
CFH 1/2 B (Hex)	No	0.500	0	0.001	0.375	0	0.005	0.250	0.001	0	0.63	0.031	0.25	1.03	825	3.7
CFH 1/2 SB (Hex)	Yes	0.500	0	0.001	0.375	0	0.005	0.250	0.001	0	0.63	0.031	0.25	1.03	825	3.7
CFH 9/16 SB (Hex)	Yes	0.563	0	0.001	0.375	0	0.005	0.250	0.001	0	0.63	0.031	0.25	1.03	825	3.7
CFH 5/8 S	Yes	0.625	0	0.001	0.438	0	0.005	0.313	0.001	0	0.75	0.031	0.31	1.22	1,209	5.4
CFH 5/8 SB (Hex)	Yes	0.625	0	0.001	0.438	0	0.005	0.313	0.001	0	0.75	0.031	0.31	1.22	1,209	5.4
CFH 11/16 SB (Hex)	Yes	0.688	0	0.001	0.438	0	0.005	0.313	0.001	0	0.75	0.031	0.31	1.22	1,209	5.4
CFH 3/4	No	0.750	0	0.001	0.500	0	0.005	0.438	0.001	0	0.88	0.031	0.38	1.41	1,380	6.1
CFH 3/4 S	Yes	0.750	0	0.001	0.500	0	0.005	0.438	0.001	0	0.88	0.031	0.38	1.41	1,380	6.1
CFH 3/4 SB (Hex)	Yes	0.750	0	0.001	0.500	0	0.005	0.438	0.001	0	0.88	0.031	0.38	1.41	1,660	7.4
CFH 7/8 S	Yes	0.875	0	0.001	0.500	0	0.005	0.438	0.001	0	0.88	0.031	0.38	1.41	1,380	6.1
CFH 7/8 SB (Hex)	Yes	0.875	0	0.001	0.500	0	0.005	0.438	0.001	0	0.88	0.031	0.38	1.41	1,380	6.1
CFH 1	No	1.000	0	0.001	0.625	0	0.005	0.625	0.001	0	1.00	0.031	0.50	1.66	2,225	9.9
CFH 1 S	Yes	1.000	0	0.001	0.625	0	0.005	0.625	0.001	0	1.00	0.031	0.50	1.66	2,050	9.1
CFH 1 SB (Hex)	Yes	1.000	0	0.001	0.625	0	0.005	0.625	0.001	0	1.00	0.031	0.50	1.66	2,225	9.9
CFH 1-1/8 S	Yes	1.125	0	0.001	0.625	0	0.005	0.625	0.001	0	1.00	0.031	0.50	1.66	2,232	9.9
CFH 1-1/8 SB (Hex)	Yes	1.125	0	0.001	0.625	0	0.005	0.625	0.001	0	1.00	0.031	0.50	1.66	2,232	9.9
CFH 1-1/4	No	1.250	0	0.001	0.750	0	0.005	0.750	0.001	0	1.25	0.031	0.63	2.03	3,192	14.2
CFH 1-1/4 S	Yes	1.250	0	0.001	0.750	0	0.005	0.750	0.001	0	1.25	0.031	0.63	2.03	3,192	14.2
CFH 1-1/4 SB (Hex)	Yes	1.250	0	0.001	0.750	0	0.005	0.750	0.001	0	1.25	0.031	0.63	2.03	3,192	14.2
CFH 1-3/8 S	Yes	1.375	0	0.001	0.750	0	0.005	0.750	0.001	0	1.25	0.031	0.63	2.03	3,192	14.2
CFH 1-3/8 SB (Hex)	Yes	1.375	0	0.001	0.750	0	0.005	0.750	0.001	0	1.25	0.031	0.63	2.03	3,192	14.2
CFH 1-1/2 B (Hex)	No	1.500	0	0.001	0.875	0	0.005	0.875	0.001	0	1.50	0.031	0.75	2.41	4,609	20.5
CFH 1-1/2 S	Yes	1.500	0	0.001	0.875	0	0.005	0.875	0.001	0	1.50	0.031	0.75	2.41	4,609	20.5
CFH 1-1/2 SB (Hex)	Yes	1.500	0	0.001	0.875	0	0.005	0.875	0.001	0	1.50	0.031	0.75	2.41	4,609	20.5
CFH 1-5/8 SB (Hex)	Yes	1.625	0	0.001	0.875	0	0.005	0.875	0.001	0	1.50	0.031	0.75	2.41	5,013	22.3



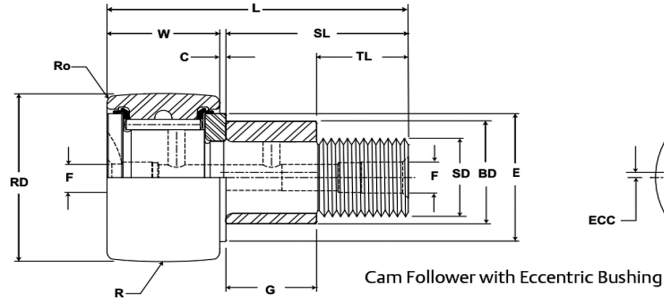
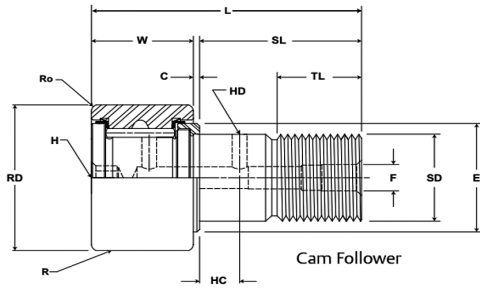
Track Roller Static Rating (Cor)		HC	HD	F	H	E	Ro	Thread Type	Limiting Speed	WT	Part Number
		Hole Center	Radial Hole Diameter	Axial Hole Dia or Fitting	Hex Hole	Min Boss Diameter	Outer Corner			Weight	
Units (lbs)	Units (KN)	Inch		Inch		Inch		RPM	lb		
		(Ref)	(Ref)	(Ref)	(Ref)	(Ref)	(Ref)				
883	3.9	-	-	-	-	0.39	0.01	1/4-28 UNF	7,000	0.044	0009215500
883	3.9	-	-	-	0.125	0.39	0.01	1/4-28 UNF	7,000	0.044	0009215600
883	3.9	-	-	-	0.125	0.39	0.01	1/4-28 UNF	7,000	0.044	0009215800
883	3.9	-	-	-	0.125	0.39	0.01	1/4-28 UNF	7,000	0.040	0009219800
1,367	6.1	-	-	-	-	0.49	0.01	5/16-24 UNF	5,500	0.059	0009219300
1,367	6.1	-	-	-	0.125	0.49	0.01	5/16-24 UNF	5,500	0.059	0009219400
1,367	6.1	-	-	-	0.125	0.49	0.01	5/16-24 UNF	5,500	0.051	0009215900
1,760	7.8	0.250	0.094	0.188	-	0.57	0.01	7/16-20 UNF	5,500	0.090	0009218400
1,760	7.8	0.250	0.094	0.188	-	0.57	0.01	7/16-20 UNF	5,500	0.090	0009218500
4,130	4,130.0	0.250	0.094	0.188	0.187	0.60	-	7/16-20 UNF	5,500	0.083	0009218600
1,760	7.8	0.250	0.094	0.188	-	0.57	0.01	7/16-20 UNF	5,500	0.110	0009219500
1,760	7.8	0.250	0.094	0.188	0.187	0.57	0.01	7/16-20 UNF	5,500	0.110	0009219600
3,060	13.6	0.250	0.094	0.188	-	0.78	-	5/8-18 UNF	4,500	0.209	0009215200
3,170	14.1	0.250	0.094	0.188	-	0.78	0.03	5/8-18 UNF	2,800	0.209	0009215300
6,120	27.2	0.250	0.094	0.188	0.250	0.78	-	5/8-18 UNF	4,500	0.209	0009215400
3,192	14.2	0.250	0.094	0.188	-	0.78	0.03	5/8-18 UNF	2,800	0.251	0009216700
3,192	14.2	0.250	0.094	0.188	0.250	0.78	0.03	5/8-18 UNF	2,800	0.251	0009216800
4,136	18.4	0.313	0.094	0.188	-	0.97	0.03	3/4-16 UNF	2,700	0.389	0009216400
4,136	18.4	0.313	0.094	0.188	-	0.97	0.03	3/4-16 UNF	2,700	0.389	0009216500
4,136	18.4	0.313	0.094	0.188	0.250	0.97	0.03	3/4-16 UNF	2,700	0.389	0009216600
4,136	18.4	0.313	0.094	0.188	-	0.97	0.03	3/4-16 UNF	2,700	0.440	0009217100
4,136	18.4	0.313	0.094	0.188	0.250	0.97	0.03	3/4-16 UNF	2,700	0.440	0009217200
6,497	28.9	0.375	0.094	0.188	0.313	1.10	0.03	7/8-14 UNF	2,300	0.660	0009216000
6,497	28.9	0.375	0.094	0.188	-	1.10	0.03	7/8-14 UNF	2,300	0.660	0009216100
6,497	28.9	0.375	0.094	0.188	0.313	1.10	0.03	7/8-14 UNF	2,300	0.660	0009216300
6,519	29.0	0.375	0.094	0.188	0.313	1.10	0.03	7/8-14 UNF	2,300	0.728	0009217300

CFH concentric, stud type, heavy duty *(continued)*

The needle roller CFH concentric, stud type is a heavy-duty cam follower bearing for demanding applications. It has a stud with a needle roller assembly that minimizes friction and provides precise motion control. Suitable for heavy loads, it's easy to install and durable.



Part Description	Sealed	RD			W			SD			SL	C	TL	L	Track Roller Dynamic Rating (Cr)	
		Roller Diameter			Roller Width			Stud Diameter			Stud Length	Endplate Extension	Minimum Thread Length	Length Overall		
		Inch			Inch			Inch			Inch	Inch	Inch	Inch	Units (lbs)	Units (KN)
		Nom.	Tol.		Nom.	Tol.		Nom.	Tol.		(Ref)	(Ref)	(Ref)	(Ref)		
	+	-		+	-		+	-								
CFH 1-3/4 S	Yes	1.750	0	0.001	1.000	0	0.005	1.000	0.001	0	1.75	0.031	0.88	2.78	5,733	25.5
CFH 1-3/4 SB	Yes	1.750	0	0.001	1.000	0	0.005	1.000	0.001	0	1.75	0.031	0.88	2.78	5,733	25.5
CFH 1-7/8 SB (Hex)	Yes	1.875	0	0.001	1.000	0	0.005	1.000	0.001	0	1.75	0.031	0.88	2.78	5,733	25.5
CFH 2 S	Yes	2.000	0	0.001	1.250	0	0.005	1.125	0.001	0	2.00	0.031	1.00	3.28	9,375	41.7
CFH 2 SB (Hex)	Yes	2.000	0	0.001	1.250	0	0.005	1.125	0.001	0	2.00	0.031	1.00	3.28	8,090	36.0
CFH 2-1/4 SB (Hex)	Yes	2.250	0	0.001	1.250	0	0.005	1.125	0.001	0	2.00	0.031	1.00	3.28	9,375	41.7
CFH 2-1/2 B (Hex)	No	2.500	0	0.001	1.500	0	0.005	1.250	0.001	0	2.25	0.031	1.13	3.78	13,264	59.0
CFH 2-1/2 S	Yes	2.500	0	0.001	1.500	0	0.005	1.250	0.001	0	2.25	0.031	1.13	3.78	13,264	59.0
CFH 2-1/2 SB (Hex)	Yes	2.500	0	0.001	1.500	0	0.005	1.250	0.001	0	2.25	0.031	1.13	3.78	13,264	59.0
CFH 2-3/4 SB (Hex)	Yes	2.750	0	0.001	1.500	0	0.005	1.250	0.001	0	2.25	0.031	1.13	3.78	13,264	59.0
CFH 3 S	Yes	3.000	0	0.001	1.749	0	0.005	1.500	0.001	0	2.50	0.031	1.25	4.28	15,720	69.9
CFH 3 SB (Hex)	Yes	3.000	0	0.001	1.749	0	0.005	1.500	0.001	0	2.50	0.031	1.25	4.28	15,720	69.9
CFH 3-1/4 S	Yes	3.250	0	0.001	1.750	0	0.005	1.500	0.001	0	2.50	0.031	1.25	4.28	19,468	86.6
CFH 3-1/4 SB (Hex)	Yes	3.250	0	0.001	1.750	0	0.005	1.500	0.001	0	2.50	0.031	1.25	4.28	19,468	86.6
CFH 3-1/2 SB (Hex)	Yes	3.500	0	0.001	2.000	0	0.005	1.750	0.001	0	2.75	0.031	1.38	4.78	25,831	114.9
CFH 4 S	Yes	4.000	0	0.001	2.250	0	0.005	2.000	0.001	0	3.50	0.031	1.50	5.78	29,985	133.4
CFH 4 SB (Hex)	Yes	4.000	0	0.001	2.250	0	0.005	2.000	0.001	0	3.50	0.031	1.50	5.78	29,985	133.4
CFH 5 S	Yes	5.000	0	0.001	2.750	0	0.005	2.500	0.001	0	5.06	0.031	2.56	7.84	44,737	199.0



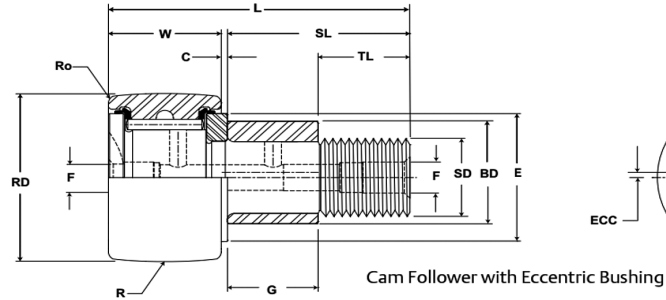
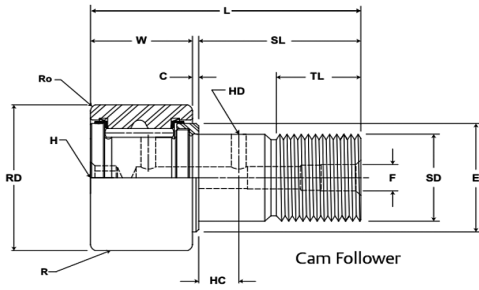
Track Roller Static Rating (Cor)		HC	HD	F	H	E	Ro	Thread Type	Limiting Speed	WT	Part Number
		Hole Center	Radial Hole Diameter	Axial Hole Dia or Fitting	Hex Hole	Min Boss Diameter	Outer Corner			Weight	
Units (lbs)	Units (KN)	Inch		Inch		Inch		RPM	lb		
		(Ref)	(Ref)	(Ref)	(Ref)	(Ref)	(Ref)				
9,914	44.1	0.438	0.094	0.188	-	1.25	0.04	1-14 UNF	1,900	1.019	0009216900
9,914	44.1	0.438	0.094	0.188	0.313	1.25	0.04	1-14 UNF	1,900	1.019	0009217000
9,914	44.1	0.438	0.094	0.188	0.313	1.25	0.04	1-14 UNF	1,900	1.118	0009217400
13,871	61.7	0.500	0.125	0.188	-	1.54	0.05	1 1/8-12 UNF	1,700	1.588	0009217500
21,140	94.0	0.500	0.126	0.188	0.437	1.40	-	1 1/8-12 UNF	2,200	1.550	0009217600
13,871	61.7	0.500	0.125	0.188	0.437	1.54	0.05	1 1/8-12 UNF	1,700	1.888	0009218000
23,852	106.1	0.563	0.125	0.188	0.500	1.89	0.09	1 1/4-12 UNF	1,400	2.750	0009217700
23,852	106.1	0.563	0.125	0.188	-	1.89	0.09	1 1/4-12 UNF	1,400	2.750	0009217800
23,852	106.1	0.563	0.125	0.188	0.500	1.89	0.09	1 1/4-12 UNF	1,400	2.750	0009217900
23,852	106.1	0.563	0.125	0.188	0.500	1.89	0.09	1 1/4-12 UNF	1,400	3.186	0009218100
49,820	221.6	0.625	0.126	0.254	-	2.00	-	1 1/2-12 UNF	1,600	4.420	0009218200
49,820	221.6	0.625	0.126	0.254	0.750	2.00	-	1 1/2-12 UNF	1,600	4.420	0009218300
35,093	156.1	0.625	0.125	0.250	-	2.28	0.09	1 1/2-12 UNF	990	5.183	0009218800
35,093	156.1	0.625	0.125	0.250	0.750	2.00	-	1 1/2-12 UNF	1,600	5.150	0009218900
45,389	201.9	0.688	0.125	0.250	0.750	2.48	0.09	1 3/4-12 UNF	950	7.000	0009218700
89,540	398.3	0.754	0.126	0.254	NA	2.75	-	2-12 UNF	1,300	10.300	0009219000
89,540	398.3	0.754	0.126	0.254	0.750	2.75	-	2-12 UNF	1,300	10.300	0009219100
478	478.0	0.875	0.188	1/4 NPT	-	3.74	0.09	2 1/2-12 UNF	700	22.073	0009219200

CCF concentric, stud type, crowned

The needle roller CCF concentric, stud type, crowned is a cam follower bearing designed to handle high loads and compensate for misalignment. Its crowned design helps distribute loads evenly, and the needle rollers enable precise motion control. Ideal for applications with slight misalignments or surface profile variations, it's easy to install and durable.



Part Description	RD			W			SD			SL	C	TL	L	R	Track Roller Dynamic Rating (Cr)	
	Roller Diameter			Roller Width			Stud Diameter			Stud Length	Endplate Extension	Minimum Thread Length	Length Overall	Crown		
	Inch			Inch			Inch			Inch	Inch	Inch	Inch	Inch		
	Nom.	Tol.		Nom.	Tol.		Nom.	Tol.		(Ref)	(Ref)	(Ref)	(Ref)	Radius	Units (lbs)	Units (KN)
	+	-		+	-		+	-								
CCF 1/2 NSB (Hex/row)	0.500	0	0.001	0.344	0	0.005	0.190	0.005	0	0.50	0.031	0.25	0.88	6	688	3.1
CCF 1/2 SB (Hex)	0.500	0	0.001	0.375	0	0.005	0.190	0.005	0	0.63	0.031	0.25	1.03	7	917	4.1
CCF 5/8 SB (Hex)	0.625	0	0.001	0.438	0	0.005	0.250	0.005	0	0.75	0.031	0.31	1.22	8	1,401	6.2
CCF 3/4 S (Reg)	0.750	0	0.001	0.500	0	0.005	0.375	0.005	0	0.88	0.031	0.38	1.41	10	1,574	7.0
CCF 3/4 SB (Hex)	0.750	0	0.001	0.500	0	0.005	0.375	0.005	0	0.88	0.031	0.38	1.41	10	1,574	7.0
CCF 7/8 SB (Hex)	0.875	0	0.001	0.500	0	0.005	0.375	0.005	0	0.88	0.031	0.38	1.41	10	1,574	7.0
CCF 1 SB (Hex)	1.000	0	0.001	0.625	0	0.005	0.438	0.005	0	1.00	0.031	0.50	1.66	12	2,093	9.3
CCF 1-1/8 SB (Hex)	1.125	0	0.001	0.625	0	0.005	0.438	0.005	0	1.00	0.031	0.50	1.66	12	2,473	11.0
CCF 1-1/4 S (Reg)	1.250	0	0.001	0.750	0	0.005	0.500	0.005	0	1.25	0.031	0.63	2.03	14	3,485	15.5
CCF 1-1/4 SB (Hex)	1.250	0	0.001	0.750	0	0.005	0.500	0.005	0	1.25	0.031	0.63	2.03	14	3,485	15.5
CCF 1-3/8 SB (Hex)	1.375	0	0.001	0.750	0	0.005	0.500	0.005	0	1.25	0.031	0.63	2.03	14	3,485	15.5
CCF 1-1/2 S (Reg)	1.500	0	0.001	0.875	0	0.005	0.625	0.005	0	1.50	0.031	0.75	2.41	20	4,609	20.5
CCF 1-1/2 SB (Hex)	1.500	0	0.001	0.875	0	0.005	0.625	0.005	0	1.50	0.031	0.75	2.39	20	4,609	20.5
CCF 1-5/8 SB (Hex)	1.625	0	0.001	0.875	0	0.005	0.625	0.005	0	1.50	0.031	0.75	2.41	20	5,013	22.3
CCF 1-3/4 SB (Hex)	1.750	0	0.001	1.000	0	0.005	0.750	0.005	0	1.75	0.031	0.88	2.78	20	6,519	29.0
CCF 1-7/8 SB (Hex)	1.875	0	0.001	1.000	0	0.005	0.750	0.005	0	1.75	0.031	0.88	2.78	20	6,519	29.0
CCF 2 SB (Hex)	2.000	0	0.001	1.250	0	0.005	0.875	0.005	0	2.00	0.031	1.00	3.28	24	8,090	36.0
CCF 2-1/2 SB (Hex)	2.500	0	0.001	1.500	0	0.005	1.000	0.005	0	2.25	0.031	1.13	3.78	30	14,208	63.2
CCF 2-3/4 SB (Hex)	2.750	0	0.001	1.500	0	0.005	1.000	0.005	0	2.25	0.031	1.13	3.78	30	14,208	63.2
CCF 3 SB (Hex)	3.000	0	0.001	1.751	0	0.005	1.250	0.005	0	2.50	0.031	1.25	4.28	30	15,720	69.9
CCF 3-1/4 S (Reg Stud)	3.250	0	0.001	1.750	0	0.005	1.250	0.005	0	2.50	0.031	1.25	4.28	30	19,468	86.6
CCF 3-1/4 SB (Hex)	3.250	0	0.001	1.750	0	0.005	1.250	0.005	0	2.50	0.031	1.25	4.28	30	19,468	86.6
CCF 3-1/2 SB (Hex)	3.500	0	0.001	2.000	0	0.005	1.375	0.005	0	2.75	0.031	1.38	4.78	30	25,831	114.9
CCF 4 SB (Hex)	4.000	0	0.001	2.263	0	0.005	1.500	0.005	0	3.51	0.031	1.50	5.79	30	29,985	133.4



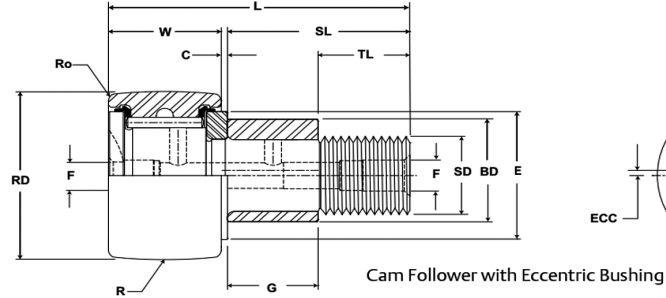
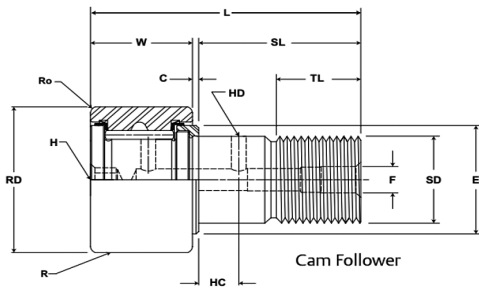
Track Roller Static Rating (Cor)		HC	HD	F	H	E	Ro	Thread Type	Limiting Speed	WT	Part Number
Units (lbs)	Units (KN)	Hole Center	Radial Hole Diameter	Axial Hole Dia or Fitting	Hex Hole	Min Boss Diameter	Outer Corner			Weight	
		(Ref)	(Ref)	(Ref)	(Ref)	(Ref)	(Ref)			RPM	
699	3.1	-	-	-	0.125	0.39	0.01	10-32 UNF	7,000	0.029	0009200600
1,014	4.5	-	-	-	0.125	0.39	0.01	10-32 UNF	7,000	0.029	0009200700
1,650	7.3	-	-	-	0.125	0.49	0.01	1/4-28 UNF	5,500	0.040	0009203300
2,084	9.3	0.250	0.094	0.188	-	0.57	0.01	3/8-24 UNF	3,800	0.070	0009202600
2,084	9.3	0.250	0.094	0.188	0.188	0.57	0.01	3/8-24 UNF	3,800	0.070	0009202700
2,084	9.3	0.250	0.094	0.188	0.188	0.57	0.01	3/8-24 UNF	3,800	0.099	0009203400
3,260	14.5	0.250	0.094	0.188	0.250	0.78	0.03	7/16-20 UNF	2,800	0.161	0009200500
3,619	16.1	0.250	0.094	0.188	0.250	0.78	0.03	7/16-20 UNF	2,800	0.209	0009201300
4,631	20.6	0.313	0.094	0.188	-	0.97	0.03	1/2-20 UNF	2,700	0.299	0009201000
4,631	20.6	0.313	0.094	0.188	0.250	0.97	0.03	1/2-20 UNF	2,700	0.299	0009201100
4,631	20.6	0.313	0.094	0.188	0.250	0.97	0.03	1/2-20 UNF	2,700	0.350	0009201600
6,497	28.9	0.375	0.094	0.188	-	1.10	0.03	5/8-18 UNF	2,300	0.519	0009200800
6,497	28.9	0.375	0.094	0.188	0.313	1.10	0.03	5/8-18 UNF	2,300	0.519	0009200900
6,519	29.0	0.375	0.094	0.188	0.313	1.10	0.03	5/8-18 UNF	2,300	0.598	0009201700
10,229	45.5	0.438	0.094	0.188	0.313	1.25	0.04	3/4-16 UNF	1,900	0.827	0009201500
10,229	45.5	0.438	0.094	0.188	0.313	1.25	0.04	3/4-16 UNF	1,900	0.920	0009201800
10,570	47.0	0.500	0.126	0.188	0.437	1.20	NA	7/8-14 UNF	2,200	1.320	0009201900
26,055	115.9	0.563	0.125	0.188	0.500	1.89	0.09	1-14 UNF	1,400	2.497	0009202100
26,055	115.9	0.563	0.125	0.188	0.500	1.89	0.09	1-14 UNF	1,400	2.926	0009202400
24,910	110.8	0.625	0.126	0.215	0.437	2.00	NA	1 1/4-12 UNF	1,600	4.040	0009202500
35,115	156.2	0.625	0.125	0.250	-	2.28	0.09	1 1/4-12 UNF	990	4.803	0009202900
35,115	156.2	0.625	0.125	0.250	0.750	2.28	0.09	1 1/4-12 UNF	990	4.803	0009203000
45,389	201.9	0.688	0.125	0.250	0.750	2.48	0.09	1 3/8-12 UNF	950	6.413	0009202800
44,770	199.1	0.754	0.126	0.254	0.750	2.62	NA	1 1/2-12 UNF	1,300	7.440	0009203200

CCFH concentric, stud type, crowned, heavy duty

The needle roller CCFH concentric, stud type, crowned, heavy duty is a cam follower bearing designed for heavy loads, misalignment compensation, and precise motion control. The crowned design helps distribute loads evenly, and the needle rollers enable smooth and accurate rolling. It's durable and easy to install, ideal for heavy-duty applications.



Part Description	RD			W			SD			SL	C	TL	L	R	Track Roller Dynamic Rating (Cr)	
	Roller Diameter			Roller Width			Stud Diameter			Stud Length	Endplate Extension	Minimum Thread Length	Length Overall	Crown		
	Inch			Inch			Inch			Inch	Inch	Inch	Inch	Inch		
	Nom.	Tol.		Nom.	Tol.		Nom.	Tol.		(Ref)	(Ref)	(Ref)	(Ref)	Radius	Units (lbs)	Units (KN)
CCFH 1/2 SB (Hex)	0.500	0	0.001	0.375	0	0.005	0.250	0.001	0	0.63	0.031	0.25	1.03	7	825	3.7
CCFH 9/16 SB (Hex)	0.563	0	0.001	0.375	0	0.005	0.250	0.001	0	0.63	0.031	0.25	1.03	7	825	3.7
CCFH 5/8 S	0.625	0	0.001	0.438	0	0.005	0.313	0.001	0	0.75	0.031	0.31	1.22	8	1,209	5.4
CCFH 5/8 SB (Hex)	0.625	0	0.001	0.438	0	0.005	0.313	0.001	0	0.75	0.031	0.31	1.22	8	1,209	5.4
CCFH 3/4 S	0.750	0	0.001	0.500	0	0.005	0.438	0.001	0	0.88	0.031	0.38	1.41	10	1,380	6.1
CCFH 3/4 SB (Hex)	0.750	0	0.001	0.500	0	0.005	0.438	0.001	0	0.88	0.031	0.38	1.41	10	1,380	6.1
CCFH 7/8 SB (Hex)	0.875	0	0.001	0.500	0	0.005	0.438	0.001	0	0.88	0.031	0.38	1.41	10	1,380	6.1
CCFH 1 SB (Hex)	1.000	0	0.001	0.625	0	0.005	0.625	0.001	0	1.00	0.031	0.50	1.66	12	2,225	9.9
CCFH 1-1/4 SB (Hex)	1.250	0	0.001	0.750	0	0.005	0.750	0.001	0	1.25	0.031	0.63	2.03	14	3,192	14.2
CCFH 1-1/2 SB (Hex)	1.500	0	0.001	0.875	0	0.005	0.875	0.001	0	1.50	0.031	0.75	2.41	20	4,609	20.5
CCFH 1-3/4 SB (Hex)	1.750	0	0.001	1.000	0	0.005	1.000	0.001	0	1.75	0.031	0.88	2.78	20	5,733	25.5
CCFH 2 S (Crowned)	2.000	0	0.001	1.250	0	0.005	1.125	0.001	0	2.00	0.031	1.00	3.28	24	9,375	41.7
CCFH 2 SB (Hex)	2.000	0	0.001	1.250	0	0.005	1.125	0.001	0	2.00	0.031	1.00	3.28	24	8,090	36.0
CCFH 2-1/2 SB (Hex)	2.500	0	0.001	1.500	0	0.005	1.250	0.001	0	2.25	0.031	1.13	3.78	30	13,264	59.0
CCFH 3 SB (Hex)	3.000	0	0.001	1.749	0	0.005	1.500	0.001	0	2.50	0.031	1.25	4.28	30	15,720	69.9
CCFH 4 SB (Hex)	4.000	0	0.001	2.250	0	0.005	2.000	0.001	0	3.50	0.031	1.50	5.78	30	29,985	133.4



Track Roller Static Rating (Cor)		HC	HD	F	H	E	Ro	Thread Type	Limiting Speed	WT	Part Number
		Hole Center	Radial Hole Diameter	Axial Hole Dia or Fitting	Hex Hole	Min Boss Diameter	Outer Corner			Weight	
Units (lbs)	Units (KN)	Inch		Inch		Inch		RPM	lb		
		(Ref)	(Ref)	(Ref)	(Ref)	(Ref)	(Ref)				
883	3.9	-	-	-	0.125	0.39	0.01	1/4-28 UNF	7,000	0.044	0009205000
883	3.9	-	-	-	0.125	0.39	0.01	1/4-28 UNF	7,000	0.040	0009206800
1,367	6.1	-	-	-	-	0.49	0.01	5/16-24 UNF	5,500	0.059	0009206500
1,367	6.1	-	-	-	0.125	0.49	0.01	5/16-24 UNF	5,500	0.059	0009206600
1,760	7.8	0.250	0.094	0.188	-	0.57	0.01	7/16-24 UNF	3,800	0.090	0009206100
1,760	7.8	0.250	0.094	0.188	0.188	0.57	0.01	7/16-20 UNF	3,800	0.090	0009206200
1,760	7.8	0.250	0.094	0.188	0.188	0.57	0.01	7/16-20 UNF	3,800	0.110	0009206700
1,375,830	27.2	0.250	0.094	0.187	0.250	0.78	NA	5/8-18 UNF	4,500	0.200	0009204900
4,136	18.4	0.313	0.094	0.188	0.250	0.97	0.03	3/4-16 UNF	2,700	0.389	0009205200
6,497	28.9	0.375	0.094	0.188	0.313	1.10	0.03	7/8-14 UNF	2,300	0.660	0009205100
9,914	44.1	0.438	0.094	0.188	0.313	1.25	0.04	1-14 UNF	1,900	1.019	0009205300
13,871	61.7	0.500	0.125	0.188	-	1.54	0.05	1 1/8-12 UNF	1,700	1.588	0009205600
21,140	94.0	0.500	0.126	0.188	0.437	1.40	NA	1 1/8-12 UNF	2,200	1.550	0009205700
23,852	106.1	0.563	0.125	0.188	0.500	1.89	0.09	1 1/4-12 UNF	1,400	2.750	0009205800
49,820	221.6	0.625	0.126	0.254	0.750	2.00	NA	1 1/2-12 UNF	1,600	4.420	0009206000
89,540	398.3	0.754	0.126	0.254	0.750	2.75	NA	2-12 UN	1,300	10.300	0009206400

CFE eccentric, stud type

The Osborn Load Runner Needle Roller CFE eccentric, stud type is a specialized cam follower bearing that offers precise motion control, handles high loads, and can adjust its position relative to the mating surface. Ideal for automation and robotics applications, it's a high-quality bearing that delivers reliable performance in challenging environments.

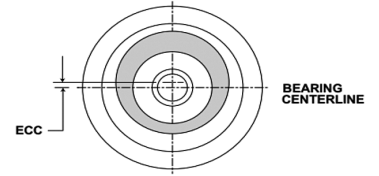
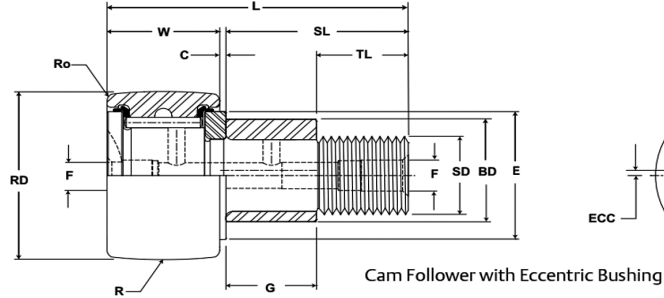
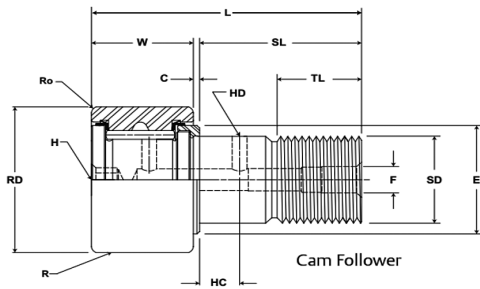


Part Description	Sealed	RD			W			SD			SL	C	TL	L	Track Roller Dynamic Rating (Cr)		Track Roller Static Rating (Cor)	
		Roller Diameter			Roller Width			Stud Diameter			Stud Length	Endplate Extension	Minimum Thread Length	Length Overall				
		Inch			Inch			Inch			Inch	Inch	Inch	Inch				
		Nom.	Tol.		Nom.	Tol.		Nom.	Tol.		(Ref)	(Ref)	(Ref)	(Ref)	Units (lbs)	Units (KN)	Units (lbs)	Units (KN)
CFE 1/2 SB (Hex)	Yes	0.500	0	0.001	0.375	0	0.005	0.190	0.001	0	0.63	0.031	0.25	1.03	917	4.1	1,014	4.5
CFE 3/4 SB (Hex)	Yes	0.750	0	0.001	0.500	0	0.005	0.375	0.001	0	0.88	0.031	0.38	1.41	1,574	7.0	2,084	9.3
CFE 1 S	No	1.000	0	0.001	0.625	0	0.005	0.438	0.001	0	1.00	0.031	0.50	1.66	2,093	9.3	3,260	14.5
CFE 1 SB (Hex)	Yes	1.000	0	0.001	0.625	0	0.005	0.438	0.001	0	1.00	0.031	0.50	1.66	2,093	9.3	3,260	14.5
CFE 1-1/4 SB (Hex)	Yes	1.250	0	0.001	0.750	0	0.005	0.500	0.001	0	1.25	0.031	0.63	2.03	3,485	15.5	4,631	20.6
CFE 1-1/2 SB (Hex)	Yes	1.500	0	0.001	0.875	0	0.005	0.625	0.001	0	1.50	0.031	0.75	2.41	4,609	20.5	6,497	28.9
CFE 2-3/4 SB (Hex)	Yes	2.736	0	0.001	1.500	0	0.005	1.000	0.001	0	2.26	0.031	1.13	3.78	14,208	63.2	26,055	115.9
CFE 3 SB (Hex)	Yes	3.000	0	0.001	1.750	0	0.005	-	-	-	2.50	0.031	1.25	4.28	15,720	69.9	24,910	110.8

CCFE eccentric, stud type, crowned

The Osborn Load Runner needle roller CCFE eccentric, stud type, crowned is a specialized cam follower bearing with an eccentric stud and crowned design that offers precise motion control and can handle high loads while compensating for misalignment. Ideal for automation and robotics applications, it's a high-quality bearing that delivers reliable performance even in challenging environments.

Part Description	RD			W			SD			SL	C	TL	L	R	Track Roller Dynamic Rating (Cr)		Track Roller Static Rating (Cor)
	Roller Diameter			Roller Width			Stud Diameter			Stud Length	Endplate Extension	Minimum Thread Length	Length Overall	Crown			
	Inch			Inch			Inch			Inch	Inch	Inch	Inch	Inch			
	Nom.	Tol.		Nom.	Tol.		Nom.	Tol.		(Ref)	(Ref)	(Ref)	(Ref)	Radius	Units (lbs)	Units (KN)	Units (lbs)
CCFE 1-1/2 SB (Hex)	1.500	0	0.001	0.875	0	0.005	0.625	0.001	0	1.50	0.031	0.75	2.41	20	4,609	21	6,497
CCFE 5/8 SB (Hex)	0.625	0	0.001	0.438	0	0.005	0.250	0.001	0	0.75	0.031	0.31	1.22	8	1,401	6	1,650
CCFE 3/4 SB (Hex)	0.750	0	0.001	0.500	0	0.005	0.375	0.001	0	0.88	0.031	0.38	1.41	10	1,574	7	2,084
CCFE 1-1/4 SB (Hex)	1.250	0	0.001	0.750	0	0.005	0.500	0.001	0	1.25	0.031	0.63	2.03	14	3,485	16	4,631
CCFE 1-3/8 SB (Hex)	1.375	0	0.001	0.750	0	0.005	0.500	0.001	0	1.25	0.031	0.63	2.03	14	3,485	16	4,631
CCFE 2 SB (Hex)	2.000	0	0.001	1.250	0	0.005	-	-	-	2.00	0.031	1.00	3.28	24	8,090	36	10,570
CCFE 2-1/2 SB (Hex)	2.500	0	0.001	1.500	0	0.005	1.000	0.001	0	2.25	0.031	1.13	3.78	30	14,208	63	26,055
CCFE 3 SB (Hex)	3.000	0	0.001	1.750	0	0.005	1.250	0.001	0	2.50	0.031	1.25	3.03	30	19,468	87	35,115



ECC	G			BD			F	H	E	Ro	Thread Type	Limiting Speed	WT	Part Number
Eccentric										RPM		Weight		
Base Modifier CFE-XX												lb		
Inch						Inch		Inch						
(Ref)	Nom.	Tol.		Nom.	Tol.		(Ref)	(Ref)	(Ref)	(Ref)				
		+	-		+	-								
0.010	0.344	0	0.005	0.250	0.001	0.001	-	0.13	0.39	0.01	10-32 UNF	7,000	0.029	0009213700
0.015	0.500	0	0.005	0.500	0.001	0.001	0.188	0.19	0.57	0.01	3/8-24 UNF	5,500	0.079	0009215000
0.030	0.500	0	0.005	0.625	0.001	0.001	0.188	-	0.78	0.03	7/16-20 UNF	2,800	0.178	0009213500
0.030	0.500	0	0.005	0.625	0.001	0.001	0.188	0.25	0.78	0.03	7/16-20 UNF	2,800	0.178	0009213600
0.030	0.625	0	0.005	0.687	0.001	0.001	0.188	0.25	0.97	0.03	1/2-20 UNF	2,700	0.312	0009214200
0.030	0.750	0	0.005	0.875	0.001	0.001	0.188	0.31	1.10	0.03	5/8-18 UNF	2,300	0.519	0009213900
0.030	1.125	0	0.005	1.375	0.001	0.001	0.188	0.50	1.89	0.09	1-14 UNF	1,400	3.025	0009214600
0.060	1.252	0	0.000	1.750	0.001	0.001	0.254	0.44	-	-	1/4-12 UNF	1,600	4.460	0009214800

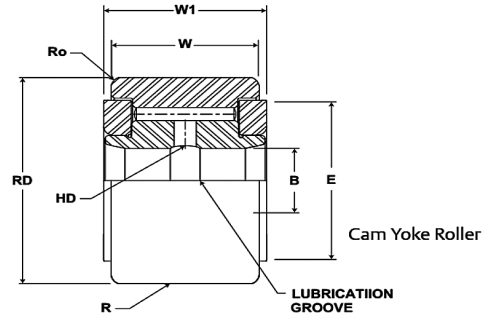
ECC	G			BD			F	H	E	Ro	Thread Type	Limiting Speed	WT	Part Number
Eccentric										RPM		Weight		
Base Modifier CFE-XX												lb		
Inch						Inch		Inch						
(Ref)	Tol.		Nom.	Tol.		(Ref)	(Ref)	(Ref)	(Ref)					
	+	-		+	-									
0.030	0.750	0	0.005	0.875	0.001	0.188	0.313	0	0	0	5/8-18 UNF	2,300	0.000	0009203600
0.015	0.438	0	0.005	0.375	0.001	-	0.125	0	0	0	1/4-28 UNF	5,500	0.000	0009204700
0.015	0.500	0	0.005	0.500	0.001	0.188	0.188	0	0	0	3/8-24 INF	5,500	0.000	0009204500
0.030	0.625	0	0.005	0.687	0.001	0.188	0.250	0	0	0	1/2-20 UNF	2,700	0.000	0009203700
0.030	0.625	0	0.005	0.687	0.001	0.188	0.250	0	0	0	1/2-20 UNF	2,700	0.000	0009204000
0.060	1.000	0	0.005	1.187	0.001	0.188	0.437	0	0	0	7/8-14 UNF	2,200	1.460	0009204100
0.030	1.125	0	0.005	1.375	0.001	0.188	0.500	0	0	0	1-14 UNF	1,400	0.000	0009204200
0.060	1.250	0	0.005	1.750	0.001	0.250	0.750	0	0	0	1 1/4-12 UNF	990	0.000	0009204400

CYR yoke

Needle Rollers CYR yoke is a specialized bearing designed for high radial and axial load capacity, with a yoke-style design that allows for easy mounting and adjustment. The needle roller assembly is equipped with precision-ground rollers that enable smooth and accurate motion control, making it ideal for automation and robotics applications. The Osborn Load Runner brand ensures reliable performance even in challenging environments.



Part Description	Sealed	RD			W			B			W1		
		Roller Diameter			Roller Width			Bore Diameter			Overall Width		
		Inch			Inch			Inch			Inch		
		Nom.	Tol.		Nom.	Tol.		Nom.	Tol.		Nom.	Tol.	
+	-		+	-		+	-		+	-			
CYR 3/4	No	0.750	0	0.001	0.500	0	0.005	0.250	0.00001	0.0004	0.563	0.005	0.010
CYR 3/4 S	Yes	0.750	0	0.001	0.500	0	0.005	0.250	0.00001	0.0004	0.563	0.005	0.010
CYR 7/8 S	Yes	0.875	0	0.001	0.500	0	0.005	0.251	0.00001	0.0004	0.563	0.005	0.010
CYR 1	No	1.000	0	0.001	0.625	0	0.005	0.312	0.00000	0.0004	0.688	0.005	0.010
CYR 1 S	Yes	1.000	0	0.001	0.625	0	0.005	0.312	0.00000	0.0004	0.688	0.005	0.010
CYR 1 S-CR	Yes	1.000	0	0.001	0.625	0	0.005	0.312	0.00000	0.0004	0.688	0.005	0.010
CYR 1-1/8	No	1.125	0	0.001	0.625	0	0.005	0.312	0.00001	0.0004	0.688	0.005	0.010
CYR 1-1/8 S	Yes	1.125	0	0.001	0.625	0	0.005	0.313	0.00001	0.0004	0.688	0.005	0.010
CYR 1-1/4	No	1.250	0	0.001	0.750	0	0.005	0.375	0.00001	0.0004	0.813	0.005	0.010
CYR 1-1/4 S	Yes	1.250	0	0.001	0.750	0	0.005	0.375	0.00001	0.0004	0.813	0.005	0.010
CYR 1-3/8	No	1.375	0	0.001	0.750	0	0.005	0.375	0.00001	0.0004	0.813	0.005	0.010
CYR 1-3/8 S	Yes	1.375	0	0.001	0.750	0	0.005	0.375	0.00001	0.0004	0.813	0.005	0.010
CYR 1-1/2	No	1.500	0	0.001	0.875	0	0.005	0.438	0.00001	0.0004	0.938	0.005	0.010
CYR 1-1/2 S	Yes	1.500	0	0.001	0.875	0	0.005	0.438	0.00001	0.0004	0.938	0.005	0.010
CYR 1-5/8 S	Yes	1.625	0	0.001	0.875	0	0.005	0.438	0.00001	0.0004	0.938	0.005	0.010
CYR 1-3/4 S	Yes	1.750	0	0.001	1.000	0	0.005	0.500	0.00001	0.0004	1.063	0.005	0.010
CYR 1-7/8 S	Yes	1.875	0	0.001	1.000	0	0.005	0.500	0.00001	0.0004	1.063	0.005	0.010
CYR 2 S	Yes	2.000	0	0.001	1.250	0	0.005	0.625	0.00001	0.0004	1.313	0.005	0.010
CYR 2 1/4	No	2.250	0	0.001	1.250	0	0.005	0.625	0.00001	0.0004	1.313	0.005	0.010
CYR 2-1/4 S	Yes	2.250	0	0.001	1.250	0	0.005	0.625	0.00001	0.0004	1.313	0.005	0.010
CYR 2-1/2	No	2.500	0	0.001	1.500	0	0.005	0.750	0.00001	0.0004	1.563	0.005	0.010
CYR 2-1/2 S	Yes	2.500	0	0.001	1.500	0	0.005	0.750	0.00001	0.0004	1.563	0.005	0.010
CYR 2-3/4 S	Yes	2.750	0	0.001	1.500	0	0.005	0.750	0.00001	0.0004	1.563	0.005	0.010
CYR 3 S	Yes	3.000	0	0.001	1.751	0	0.005	1.000	0.00000	0.0005	1.813	0.005	0.010
CYR 3	No	3.000	0	0.001	1.751	0	0.005	1.000	0.00000	0.0005	1.813	0.005	0.010
CYR 3-1/4 S	Yes	3.248	0	0.001	1.752	0	0.005	1.000	0.00001	0.0004	1.813	0.005	0.010
CYR 3-1/2 S	Yes	3.500	0	0.001	2.000	0	0.005	1.125	0.00001	0.0004	2.063	0.005	0.010
CYR 4	No	4.000	0	0.001	2.250	0	0.005	1.250	0.00000	0.0005	2.313	0.005	0.010
CYR 4 S	Yes	4.000	0	0.001	2.250	0	0.005	1.250	0.00000	0.0005	2.313	0.005	0.010
CYR 5 S	Yes	5.000	0	0.001	2.750	0	0.005	1.750	0.00001	0.0004	2.875	0.005	0.010
CYR 6 S	Yes	6.000	0	0.001	3.250	0	0.005	2.250	0.00001	0.0004	3.375	0.005	0.010



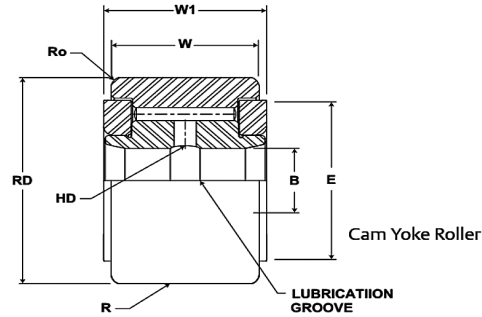
Track Roller Dynamic Rating (Cr)		Track Roller Static Rating (Cor)		HD	E	Ro	Limiting Speed	WT	Part Number
Units (lbs)	Units (KN)	Units (lbs)	Units (KN)	Hole Diameter	Min. Clamping Diameter	Outer Corner		Weight	
				Inch			RPM	lb	
				(Ref)	(Ref)	(Ref)			
1,956	8.7	2,727	12.1	0.125	0.57	0.01	3,800	0.059	0009222100
1,660	7.4	4,130	4,130.0	-	0.60	-	3,930	0.051	0009222200
1,958	8.7	2,727	12.1	0.094	0.57	0.01	3,800	0.075	0009222900
2,225	9.9	6,120	27.2	-	0.78	-	3,140	0.150	0009219900
2,225	9.9	6,120	27.2	-	0.78	-	3,140	0.150	0009220000
2,225	9.9	6,120	27.2	-	0.78	-	3,140	0.115	0009220100
2,473	11.0	3,619	16.1	0.094	0.78	0.03	2,800	0.163	0009220600
2,473	11.0	3,619	16.1	0.094	0.78	0.03	2,800	0.163	0009220700
3,485	15.5	4,631	20.6	0.094	0.98	0.03	2,700	0.240	0009220400
3,709	16.5	4,856	21.6	0.094	0.98	0.03	2,700	0.240	0009220500
3,485	15.5	4,631	20.6	0.094	0.98	0.03	2,700	0.299	0009220900
3,485	15.5	4,631	20.6	0.094	0.98	0.03	2,700	0.299	0009221000
4,609	20.5	6,497	28.9	0.094	1.10	0.03	2,300	0.409	0009220200
4,833	21.5	6,722	29.9	0.094	1.10	0.03	2,300	0.409	0009220300
5,013	22.3	6,519	29.0	0.094	1.10	0.03	2,300	0.499	0009221100
6,519	29.0	10,454	46.5	0.094	1.24	0.04	1,900	0.640	0009220800
6,519	29.0	10,229	45.5	0.094	1.24	0.04	1,900	0.799	0009221200
8,090	36.0	21,140	94.0	-	1.41	-	1,700	0.920	0009221300
9,712	43.2	14,500	64.5	0.094	1.54	0.09	1,700	1.318	0009221600
9,712	43.2	14,500	64.5	0.094	1.54	0.09	1,700	1.318	0009221700
14,860	66.1	25,134	111.8	0.094	1.89	0.09	1,400	1.797	0009221400
14,860	66.1	25,134	111.8	0.094	1.89	0.09	1,400	1.797	0009221500
14,860	66.1	25,134	111.8	0.125	1.89	0.09	1,400	2.248	0009221800
15,720	69.9	49,820	221.6	-	2.13	-	1,060	2.880	0009221900
15,720	69.9	49,820	221.6	-	2.13	-	1,060	2.880	0009222000
19,468	86.6	35,093	156.1	0.125	2.28	0.09	990	3.608	0009222400
25,831	114.9	45,389	201.9	0.125	2.48	0.09	950	4.943	0009222300
29,985	133.4	89,540	398.3	-	2.80	-	940	6.760	0009222500
29,985	133.4	89,540	398.3	-	2.80	-	940	6.760	0009222600
44,737	199.0	107,526	478.3	0.188	3.71	0.16	700	13.185	0009222700
64,453	286.7	145,901	649.0	0.188	4.41	0.16	580	21.872	0009222800

CCYR yoke, crowned

The Osborn Load Runners Needle Rollers CCYR yoke, crowned is a specialized bearing designed for high radial and axial load capacity, with a crowned design that distributes load evenly and compensates for misalignment. Its yoke-style design allows for easy mounting and adjustment. The needle roller assembly features precision-ground rollers for smooth and accurate motion control, making it ideal for automation and robotics applications.



Part Description	RD			W			B			W1		
	Roller Diameter			Roller Width			Bore Diameter			Overall Width		
	Inch			Inch			Inch			Inch		
	Nom.	Tol.		Nom.	Tol.		Nom.	Tol.		Nom.	Tol.	
		+	-		+	-		+	-		+	-
CCYR 3/4 S	0.750	0	0.001	0.500	0	0.005	0.250	0.00020	0.0004	0.563	0.005	0.010
CCYR 7/8 S	0.875	0	0.001	0.500	0	0.005	0.250	0.00020	0.0004	0.563	0.005	0.010
CCYR 1 S	1.000	0	0.001	0.625	0	0.005	0.312	0.00008	0.0004	0.688	0.005	0.010
CCYR 1-1/4 S	1.250	0	0.001	0.750	0	0.005	0.375	0.00020	0.0004	0.813	0.005	0.010
CCYR 1-3/8 S	1.375	0	0.001	0.750	0	0.005	0.375	0.00020	0.0004	0.813	0.005	0.010
CCYR 1-1/2 S	1.500	0	0.001	0.875	0	0.005	0.438	0.00020	0.0004	0.938	0.005	0.010
CCYR 1-3/4 S	1.750	0	0.001	1.000	0	0.005	0.500	0.00020	0.0004	1.063	0.005	0.010
CCYR 1-7/8 S	1.875	0	0.001	1.000	0	0.005	0.500	0.00020	0.0004	1.063	0.005	0.010
CCYR 2 S	2.000	0	0.001	1.250	0	0.005	0.625	0.00020	0.0004	1.313	0.005	0.010
CCYR 2 -1/2 S	2.500	0	0.001	1.500	0	0.005	0.750	0.00020	0.0004	1.563	0.005	0.010
CCYR 2 -3/4 S	2.750	0	0.001	1.500	0	0.005	0.750	0.00020	0.0004	1.563	0.005	0.010
CCYR 4	4.000	0	0.001	2.250	0	0.005	1.250	0.00008	0.0005	2.313	0.005	0.010



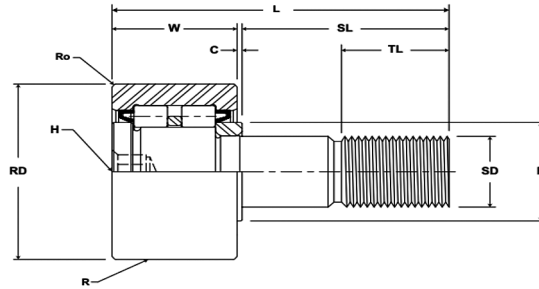
Track Roller Dynamic Rating (Cr)		Track Roller Static Rating (Cor)		HD	E	Ro	Limiting Speed	WT	Part Number
Units (lbs)	Units (KN)	Units (lbs)	Units (KN)	Hole Diameter	Min. Clamping Diameter	Outer Corner		Weight	
				Inch			RPM	lb	
				(Ref)	(Ref)	(Ref)			
1,956	8.70	2,727	12.13	0.094	0.57	0.01	3,800	0.059	0009208200
1,958	8.71	2,727	12.13	0.094	0.57	0.01	3,800	0.075	0009208500
2,225	9.90	6,120	27.22	0.094	0.78	0.03	2,800	0.150	0009206900
3,485	15.50	4,631	20.60	0.094	0.98	0.03	2,700	0.240	0009207100
3,485	15.50	4,631	20.60	0.094	1.24	0.03	2,700	0.299	0009207500
4,609	20.50	6,497	28.90	0.094	1.10	0.03	2,300	0.409	0009207000
6,519	29.00	10,229	45.50	0.094	1.24	0.04	1,900	0.640	0009207400
6,519	29.00	10,229	45.50	0.094	1.24	0.09	1,900	0.799	0009207700
8,090	35.99	21,140	94.04	0.094	1.41	0.05	1,700	1.047	0009208000
14,860	66.10	25,134	111.80	0.125	1.89	0.09	1,400	1.797	0009207800
14,860	66.10	25,358	112.80	0.125	1.93	0.09	1,400	2.248	0009207900
29,985	133.38	89,540	398.29	0.125	2.80	0.09	780	7.040	0009208300

CFD double row, cylindrical

Osborn's Needle Rollers CFD double row cylindrical is a specialized bearing designed for high radial and axial load capacity, with a double row cylindrical design that offers increased load capacity and stiffness. The needle roller assembly features precision-ground rollers for smooth and accurate motion control, making it ideal for automation and robotics applications.



Part Description	RD		W		SD		SL	C	TL	L	Track Roller Dynamic Rating (Cr)	
	Roller Diameter		Roller Width		Stud Diameter		Stud Length	Endplate Extension	Minimum Thread Length	Length Overall	Units (lbs)	Units (KN)
	Inch		Inch		Inch		Inch	Inch	Inch	Inch		
	Nom.	Tol.	Nom.	Tol.	Nom.	Tol.	(Ref)	(Ref)	(Ref)	(Ref)		
CFD 1-1/2	1.500	0.001	0.875	0.005	0.625	0.001	1.50	0.031	0.75	2.41	5,463	24.30
CFD 1-3/4	1.750	0.001	1.000	0.005	0.750	0.001	1.75	0.031	0.88	2.78	8,543	38.00
CFD 2	2.000	0.001	1.250	0.005	0.875	0.001	2.00	0.031	1.00	3.28	10,768	47.90
CFD 3	3.000	0.001	1.750	0.005	1.250	0.001	2.50	0.031	1.25	4.28	21,604	96.10



Track Roller Static Rating (Cor)		H	E	Ro	Thread Type	WT	Box			Part Number
		Hex Hole	Min Boss Diameter	Outer Corner		Weight	Box dims			
Units (lbs)	Units (KN)	Inch				lb	Outside dimension			
		(Ref)	(Ref)	(Ref)			L	W	H	
5,710	25.40	0.313	0.750	0.03	5/8-18 UNF	0.506	1.772	1.772	2.559	0009213100
10,903	48.50	0.313	1.000	0.04	3/4-16 UNF	-	1.969	1.969	2.953	0009213200
13,758	61.20	0.437	1.125	0.05	7/8-14 UNF	1.32	2.165	2.165	3.543	0009213300
30,147	134.10	0.625	1.500	0.09	1 1/4-12 UNF	-	3.346	3.346	4.528	0009213400



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