

NEEDLE ROLLER BEARINGS

STAINLESS STEEL



Strong Point of Stainless Needle Roller Bearing

JNS manufactures stainless steel needle bearings and inner rings with excellent corrosion resistance. These products are used in applications where a high resistance to corrosion is required such as medical devices, food machinery, packaging machinery, textile machinery and chemical machinery. The outer ring, inner ring and rollers are made from martensite stainless steel, and after being subjected to heat treatment, receive a high accuracy grinding finish. These products are not appropriate for use in environments with high humidity or where they could be directly exposed to water. The mounting dimensions of JNS stainless bearings are the same as the conventional bearings. They are also compatible with the needle bearings of other manufacturers.

PHARMACEUTICALS



MEDICAL DEVICES



SEMICONDUCTORS



BOTTLING

FOODS

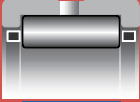


Stainless type Machined type needle roller bearings/inner ring

Type and Part Code

Type	Applicable axis diameter	Feature	Part Code
 RNA..M	φ 7 ~ φ 30	Stainless type Machined type needle roller bearings With collar outer ring Without inner ring Without seal	Type RNA ↓ Type of bearing Dimensions 49 01 M ↓ ↓ ↓ Dimension series Bore diameter number Suffix code P6 ↓ Classification symbol (Class 6) (Standard class 0 No symbol)
 NK..M	φ 5 ~ φ 19	Stainless type Machined type needle roller bearings Light load type With collar outer ring Without inner ring Without seal (There are no oil holes or oil grooves if the roller set bore diameter (Fw) is 10 mm or less)	Type NK ↓ Type of bearing Dimensions 18 / 20 M ↓ ↓ ↓ Inscribed circle diameter Outer ring width Suffix code P6 ↓ Classification symbol (Class 6) (Standard class 0 No symbol)
 NA..M	φ 5 ~ φ 25	Stainless type Machined type needle roller bearings With collar outer ring With inner ring Without seal *Double rows: NA69 (shaft dia. ≥ φ 32)	Type NA ↓ Type of bearing Dimensions 49 01 M ↓ ↓ ↓ Dimension series Bore diameter number Suffix code C3 P6 ↓ ↓ Classification symbol (Class 6) (Standard class 0 No symbol) Clearance symbol (C3 clearance) (Standard: No symbol, CN clearance)
 NKI..M	φ 5 ~ φ 15	Stainless type Machined type needle roller bearings Light load type With collar outer ring With inner ring Without seal (There are no oil holes or oil grooves if the bore diameter is 8 mm or less)	Type NKI ↓ Type of bearing Dimensions 10 / 20 M ↓ ↓ ↓ Bore diameter Outer ring width Suffix code C3 P6 ↓ ↓ Classification symbol (Class 6) (Standard class 0 No symbol) Clearance symbol (C3 clearance) (Standard: No symbol, CN clearance)
 IR..M	φ 5 ~ φ 50	Stainless type Inner ring	Type IR ↓ Type of bearing Dimensions 25 30 17 M ↓ ↓ ↓ ↓ Bore diameter Width Outer diameter Suffix code ↓ Stainless steel

MACHINED RING
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STAINLESS STEEL
WITHOUT INNER RING

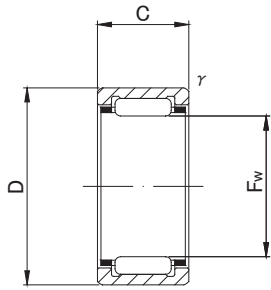


SUS/INOX

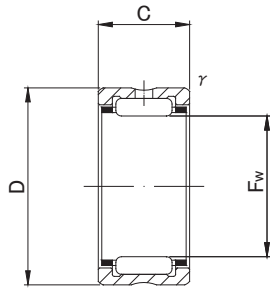


RNA49..M , NK..M

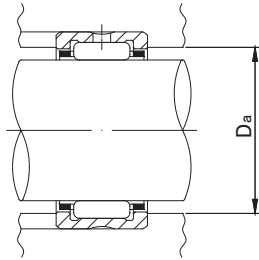
STAINLESS STEEL



NK..M(Fw ≤ 10)



RNA49..M,NK..M

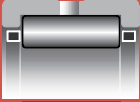


RNA49..M NK..M TYPE

Shaft Diameter (mm) 	Designation 		Dimensions (mm)   				Standard mounting dimensions (mm) 	Basic dynamic load rating 	Basic static load rating 	Limiting speed * 	Mass 	Usable bearing designation  	
	RNA49..M	NK..M	Fw	D	C	ℓ's min	Da MAX	Cr N	Cor N	rpm	g (approx)	INNER RING	WITH INNER RING
5	—	NK5/10M	5 +0.018	10	10	0.15	6.5	2 200	1 700	40 000	3.4	—	—
	—	NK5/12M	5 +0.010	10	12	0.15	6.5	2 800	2 400	40 000	4.2	—	—
6	—	NK6/10M	6 +0.018	12	10	0.15	7.5	2 400	2 100	37 000	5.3	—	—
	—	NK6/12M	6 +0.010	12	12	0.15	7.5	3 100	2 900	37 000	6.4	—	—
7	RNA495M	—	7	13	10	0.15	8.5	2 700	2 400	34 000	5.9	—	—
	—	NK7/10M	7 +0.022	14	10	0.3	8.5	3 300	2 700	34 000	6.9	—	—
	—	NK7/12M	7 +0.013	14	12	0.3	8.5	4 200	3 700	34 000	8.3	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—
8	RNA496M	—	8	15	10	0.15	13.8	3 500	3 100	32 000	7.3	IR6810M	NA496M
	—	NK8/12M	8 +0.022	15	12	0.3	13	4 600	4 300	32 000	9	IR5812M	NKI 5/12M
	—	NK8/16M	8 +0.013	15	16	0.3	13	6 500	6 700	32 000	13	IR5816M	NKI 5/16M
	—	—	—	—	—	—	—	—	—	—	—	—	—
9	—	NK9/12M	9	16	12	0.3	14	5 000	4 800	30 000	10	IR6912M	NKI 6/12M
	—	NK9/16M	9 +0.022	16	16	0.3	14	6 900	7 500	30 000	13.2	IR6916M	NKI 6/16M
	RNA497M	—	9 +0.013	17	10	0.15	15.8	4 100	3 300	30 000	9.3	IR7910M	NA497M
	—	—	—	—	—	—	—	—	—	—	—	—	—
10	—	NK10/12M	10	17	12	0.3	15	5 400	5 500	28 000	10.7	IR71012M	NKI 7/12M
	—	NK10/16M	10 +0.022	17	16	0.3	15	7 500	8 400	28 000	14.3	IR71016M	NKI 7/16M
	RNA498M	—	10 +0.013	19	11	0.2	17.4	5 700	4 600	28 000	12.6	IR81011M	NA498M
	—	—	—	—	—	—	—	—	—	—	—	—	—
12	—	NK12/12M	12	19	12	0.3	17	6 000	6 700	26 000	12.2	IR91212M	NKI 9/12M
	—	NK12/16M	12 +0.027	19	16	0.3	17	8 400	10 300	26 000	16.3	IR91216M	NKI 9/16M
	RNA499M	—	12 +0.016	20	11	0.3	18	6 000	5 700	26 000	13.6	IR91211M	NA499M
	—	—	—	—	—	—	—	—	—	—	—	—	—
14	RNA4900M	—	14	22	13	0.3	20	8 400	9 200	24 000	16.5	IR101413M	NA4900M
	—	NK14/16M	14 +0.027	22	16	0.3	20	10 800	12 600	24 000	21	IR101416M	NKI 10/16M
	—	NK14/20M	14 +0.016	22	20	0.3	20	13 600	17 000	24 000	26.5	IR101420M	NKI 10/20M
	—	—	—	—	—	—	—	—	—	—	—	—	—
15	—	NK15/16M	15 +0.027	23	16	0.3	21	11 400	13 700	23 000	22.5	—	—
	—	NK15/20M	15 +0.016	23	20	0.3	21	14 300	18 500	23 000	28	—	—

* Suitable for oil lubrication. In case of grease lubrication, down to 60% of this value.

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WITHOUT INNER RING

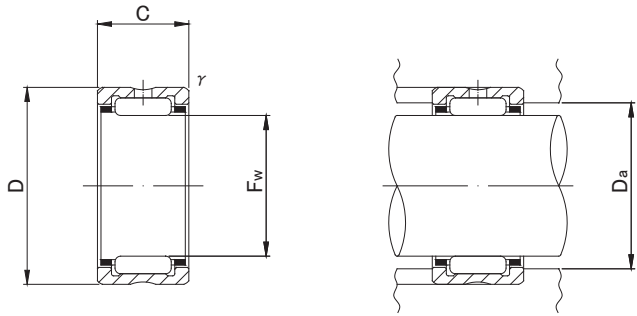


SUS/INOX

STAINLESS STEEL



RNA49..M , NK..M



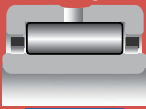
RNA49..M,NK..M

RNA49..M NK..M TYPE

Shaft Diameter (mm) 	Designation 		Dimensions (mm)   				Standard mounting dimensions (mm) 	Basic dynamic load rating 	Basic static load rating 	Limiting speed * 	Mass 	Usable bearing designation  	
	RNA49..M	NK..M	Fw	D	C	ℓ's min	Da MAX	Cr N	Cor N	rpm	g (approx)	INNER RING	WITH INNER RING
16	RNA4901M	—	16	24	13	0.3	22	8 900	10 200	23 000	18.1	IR121613M	NA4901M
	—	NK16/16M	16 +0.027	24	16	0.3	22	11 300	13 800	23 000	23	IR121616M	NKI 12/16M
	—	NK16/20M	16 +0.016	24	20	0.3	22	14 300	18 700	23 000	29	IR121620M	NKI 12/20M
17	—	NK17/16M	17 +0.027	25	16	0.3	23	11 700	14 900	22 000	24.5	—	—
	—	NK17/20M	17 +0.016	25	20	0.3	23	14 900	20 300	22 000	30.5	—	—
18	—	NK18/16M	18 +0.027	26	16	0.3	24	12 300	16 100	21 000	25.5	—	—
	—	NK18/20M	18 +0.016	26	20	0.3	24	15 600	21 700	21 000	32	—	—
19	—	NK19/16M	19 +0.033	27	16	0.3	25	12 800	17 200	21 000	27	IR151916M	NKI 15/16M
	—	NK19/20M	19 +0.020	27	20	0.3	25	16 200	23 200	21 000	34	IR151920M	NKI 15/20M
20	RNA4902M	—	20 +0.033 +0.020	28	13	0.3	26	10 000	12 600	20 000	21.5	IR152013M	NA4902M
22	RNA4903M	—	22 +0.033 +0.020	30	13	0.3	28	10 800	14 300	18 000	23.5	IR172213M	NA4903M
25	RNA4904M	—	25 +0.033 +0.020	37	17	0.3	35	19 300	23 000	16 000	55.5	IR202517M	NA4904M
30	RNA4905M	—	30 +0.033 +0.020	42	17	0.3	40	21 800	28 200	13 000	64	IR253017M	NA4905M

* Suitable for oil lubrication. In case of grease lubrication, down to 60% of this value.

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WITH INNER RING

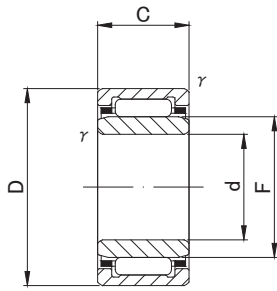


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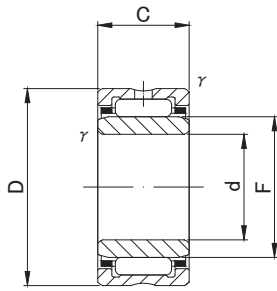


NA49..M ,NKI..M

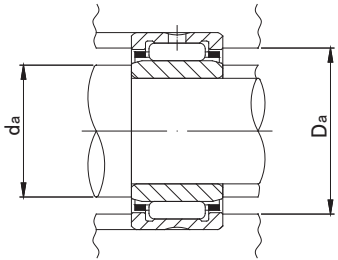
STAINLESS STEEL



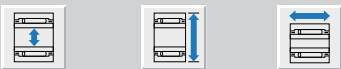
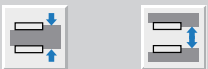
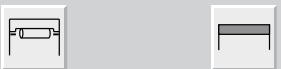
NKI.M(d ≤ 8)



NA49..M,NKI..M



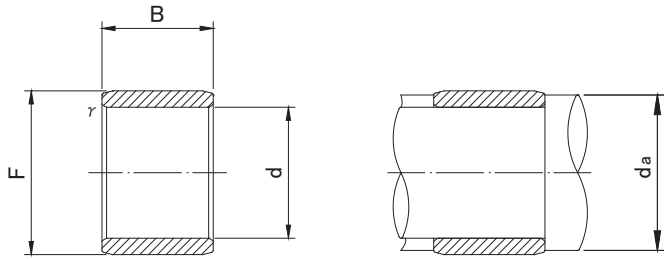
■NA49..M ,NKI..M TYPE

Shaft Diameter (mm) 	Designation 		Dimensions (mm) 					Standard mounting dimensions (mm) 			Basic dynamic load rating 	Basic static load rating 	Limiting speed * 	Mass 	Usable bearing designation 	
	NA49..M	NKI..M	d	D	C	f's min	F	da		Da MAX	Cr N	Cor N	rpm	g (approx)	OUTER RING	INNER RING
								MIN	MAX							
5	NA495M	—	5	13	10	0.15	7	6.2	6.7	11.8	2 700	2 400	34 000	7.3	RNA495M	IR5710M
	—	NKI 5/12M	5 ⁰ _{-0.008}	15	12	0.3	8	7	7.7	13	4 600	4 300	32 000	11.9	NK8/12M	IR5812M
	—	NKI 5/16M		15	16	0.3	8	7	7.7	13	6 500	6 700	32 000	16.7	NK8/16M	IR5816M
6	NA496M	—	6	15	10	0.15	8	7.2	7.7	13.8	3 500	3 100	32 000	9.1	RNA496M	IR6810M
	—	NKI 6/12M	6 ⁰ _{-0.008}	16	12	0.3	9	8	8.7	14	5 000	4 800	30 000	13	NK9/12M	IR6912M
	—	NKI 6/16M		16	16	0.3	9	8	8.7	14	6 900	7 500	30 000	17.5	NK9/16M	IR6916M
7	NA497M	—	7	17	10	0.15	9	8.2	8.7	15.8	4 100	3 300	30 000	11.2	RNA497M	IR7910M
	—	NKI 7/12M	7 ⁰ _{-0.008}	17	12	0.3	10	9	9.7	15	5 400	5 500	28 000	14.3	NK10/12M	IR71012M
	—	NKI 7/16M		17	16	0.3	10	9	9.7	15	7 500	8 400	28 000	19.2	NK10/16M	IR71016M
8	NA498M	—	8 ⁰ _{-0.008}	19	11	0.2	10	9.2	9.7	17.4	5 700	4 600	28 000	15	RNA498M	IR81011M
9	—	NKI 9/12M	9 ⁰ _{-0.008}	19	12	0.3	12	11	11.5	17	6 000	6 700	26 000	16.7	NK12/12M	IR91212M
	—	NKI 9/16M		19	16	0.3	12	11	11.5	17	8 400	10 300	26 000	22.5	NK12/16M	IR91216M
	NA499M	—		20	11	0.3	12	11	11.5	18	6 000	5 700	26 000	16.7	RNA499M	IR91211M
10	NA4900M	—	10 ⁰ _{-0.008}	22	13	0.3	14	12	13	20	8 400	9 200	24 000	24	RNA4900M	IR101413M
	—	NKI 10/16M		22	16	0.3	14	12	13	20	10 800	12 600	24 000	30	NK14/16M	IR101416M
	—	NKI 10/20M		22	20	0.3	14	12	13	20	13 600	17 000	24 000	38	NK14/20M	IR101420M
12	NA4901M	—	12 ⁰ _{-0.008}	24	13	0.3	16	14	15	22	8 900	10 200	23 000	26.5	RNA4901M	IR121613M
	—	NKI 12/16M		24	16	0.3	16	14	15	22	11 300	13 800	23 000	33.5	NK16/16M	IR121616M
	—	NKI 12/20M		24	20	0.3	16	14	15	22	14 300	18 700	23 000	42.5	NK16/20M	IR121620M
15	—	NKI 15/16M	15 ⁰ _{-0.008}	27	16	0.3	19	17	18	25	12 800	17 200	21 000	39.5	NK19/16M	IR151916M
	—	NKI 15/20M		27	20	0.3	19	17	18	25	16 200	23 200	21 000	50	NK19/20M	IR151920M
	NA4902M	—		28	13	0.3	20	17	19	26	10 000	12 600	20 000	35	RNA4902M	IR152013M
17	NA4903M	—	17 ⁰ _{-0.008}	30	13	0.3	22	19	21	28	10 800	14 300	18 000	39	RNA4903M	IR172213M
20	NA4904M	—	20 ⁰ _{-0.010}	37	17	0.3	25	22	24	35	19 300	23 000	16 000	78.5	RNA4904M	IR202517M
25	NA4905M	—	25 ⁰ _{-0.010}	42	17	0.3	30	27	29	40	21 800	28 200	13 000	92.5	RNA4905M	IR253017M

* Suitable for oil lubrication. In case of grease lubrication, down to 60% of this value.



IR..M



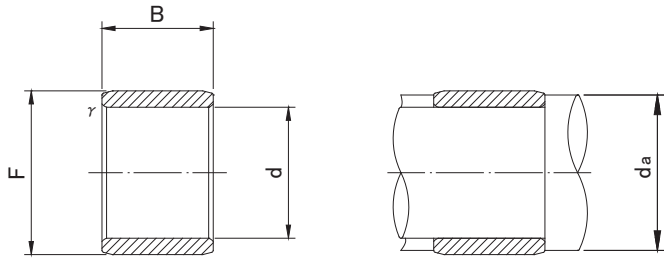
IR..M

IR..M TYPE

Shaft Diameter (mm)	Designation	Dimensions (mm)				Standard mounting dimensions (mm)		Mass	Usable bearing designation	
					<i>f</i> 's min					
	IR..M	d	F	B		da		g (approx)		RNA49..M
						MIN	MAX			
5	IR 5710M	5	7	10	0.15	6.2	6.7	1.4	RNA495M	—
	IR 5812M	5 ⁰ _{-0.008}	8	12	0.3	7	7.7	3	—	NK8/12M
	IR 5816M	5	8	16	0.3	7	7.7	4	—	NK8/16M
6	IR 6810M	6	8	10	0.15	7.2	7.7	1.7	RNA496M	—
	IR 6912M	6 ⁰ _{-0.008}	9	12	0.3	8	8.7	3.2	—	NK9/12M
	IR 6916M	6	9	16	0.3	8	8.7	4.3	—	NK9/16M
	IR 61010M	6	10	10	0.3	8	9.7	4	—	—
7	IR 7910M	7	9	10	0.15	8.2	8.7	1.9	RNA497M	—
	IR 71012M	7 ⁰ _{-0.008}	10	12	0.3	9	9.7	3.6	—	NK10/12M
	IR 71016M	7	10	16	0.3	9	9.7	5	—	NK10/16M
8	IR 81011M	8	10	11	0.15	9.2	9.7	2.4	RNA498M	—
	IR 81210M	8 ⁰ _{-0.008}	12	10	0.3	10	11	4.8	—	—
9	IR 91211M	9	12	11	0.3	11	11.5	3.1	RNA499M	—
	IR 91212M	9 ⁰ _{-0.008}	12	12	0.3	11	11.5	4.5	—	NK12/12M
	IR 91216M	9	12	16	0.3	11	11.5	6	—	NK12/16M
10	IR 101412M	10	14	12	0.3	12	13	7	—	—
	IR 101413M	10 ⁰ _{-0.008}	14	13	0.3	12	13	7.5	RNA4900M	—
	IR 101416M	10	14	16	0.3	12	13	9	—	NK14/16M
	IR 101420M	10	14	20	0.3	12	13	11.5	—	NK14/20M
12	IR 121612M	12	16	12	0.3	14	15	8	—	—
	IR 121613M	12 ⁰ _{-0.008}	16	13	0.3	14	15	8.5	RNA4901M	—
	IR 121616M	12	16	16	0.3	14	15	10.5	—	NK16/16M
	IR 121620M	12	16	20	0.3	14	15	13.5	—	NK16/20M
15	IR 151916M	15	19	16	0.3	17	18	12.5	—	NK19/16M
	IR 151920M	15 ⁰ _{-0.008}	19	20	0.3	17	18	16	—	NK19/20M
	IR 152012M	15	20	12	0.3	17	19	12	—	—
	IR 152013M	15	20	13	0.3	17	19	13.5	RNA4902M	—
17	IR 172213M	17	22	13	0.3	19	21	15.5	RNA4903M	—
	IR 172216M	17 ⁰ _{-0.008}	22	16	0.3	19	21	19	—	—



IR..M



IR..M

IR..M TYPE

Shaft Diameter (mm) 	Designation	Dimensions (mm)				Standard mounting dimensions (mm)		Mass	Usable bearing designation	
										
	IR..M	d	F	B	<i>f</i> 's min	da		g (approx)	RNA49..M	NK..M
						MIN	MAX			
20	IR 202516M IR 202517M	20 ⁰ _{-0.010}	25 25	16 17	0.3 0.3	22 22	24 24	22 23	— RNA4904M	— —
25	IR 253016M IR253017M	25 ⁰ _{-0.010}	30 30	16 17	0.3 0.3	27 27	29 29	28 28.5	— RNA4905M	— —
30	IR 303820M	30 ⁰ _{-0.010}	38	20	0.6	34	37	65	—	—
35	IR 354220M	35 ⁰ _{-0.012}	42	20	0.6	39	41	65	—	—
50	IR 506020M	50 ⁰ _{-0.012}	60	20	1	55	59	135	—	—

CAM FOLLOWERS

STAINLESS STEEL



Type and Part Code

Type	Applicable axis diameter	Feature	Part Code
 CFS..MA compact outer ring	φ 2.5 ~ φ 6	Built-in very thin needle roller. Enables compact design due to very small outer ring diameter in comparison to stud diameter.	V: Full complement None: With cage CFS 6 V M A ↑ ↑ ↑ ↑ ↑ Type Stud diameter Stainless steel A: With hexagon socket on the stud head
 CF..MA Hexagon hole	φ 3 ~ φ 30	Hexagon sockets on the stud head. Easy mounting with hex-wrench. Available with hexagon sockets at the thread side mode (CF-B). (Applicable for shaft diameter 12 or more)	V: Full complement None: With cage UU: With seal None: With shield Option (Dedicated grease nipple : Brass) CF 16 V M UU R A N ↑ ↑ ↑ ↑ ↑ ↑ ↑ Type Stud diameter Stainless steel R: Crowned outer ring None: Cylindrical outer ring A: With hexagon socket on the stud head B: With hexagon socket on the thread side. (Applicable for shaft diameter 12 or more)
 CF..MAB	φ 10 ~ φ 30	Both of stud head and thread ends have hexagon holes and integrated concave grease nipples. Available for mounting with either hexagon sockets and lubrication from both sides.	V: Full complement None: With cage UU: With seal None: With shield CF 16 V M UU R AB ↑ ↑ ↑ ↑ ↑ ↑ ↑ Type Stud diameter Stainless steel R: Crowned outer ring None: Cylindrical outer ring AB: With hexagon socket on both sides. (With integrated concave nipple : Stainless steel)
 CF..M	φ 5 ~ φ 30	General purpose cam follower with screwdriver groove on the stud head.	V: Full complement None: With cage UU: With seal None: With shield CF 16 V M UU R N ↑ ↑ ↑ ↑ ↑ ↑ ↑ Type Stud diameter Stainless steel R: Crowned outer ring None: Cylindrical outer ring Option (Dedicated grease nipple : Brass)

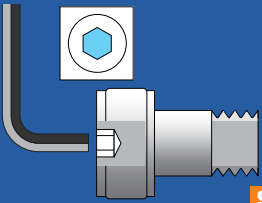
Type	Applicable axis diameter	Feature	Part Code
 CFH..MA Hexagon socket, Eccentric	$\phi 5 \sim \phi 30$	Available for the same mounting hole as general type. Compact and high accuracy eccentric cam followers with integrated structure enables easy fine positioning adjustment simply by rotating stud due to eccentric stud head shifting 0.2 to 1mm from stud mounting axis.	V: Full complement None: With cage UU: With seal None: With shield CFH 16 V M UU R A ↑ ↑ ↑ ↑ ↑ ↑ ↑ Type Stud diameter Stainless steel R: Crowned outer ring None: Cylindrical outer ring A: With hexagon socket on the stud head B: With hexagon socket on the thread side. (Applicable for shaft diameter 12 or more)
 CFH..MAB	$\phi 12 \sim \phi 30$	Eccentric cam follower with integrated concave grease nipple on both sides. Available for mounting and lubrication with hexagon holes on both sides.	V: Full complement None: With cage UU: With seal None: With shield CFH 16 V M UU R AB ↑ ↑ ↑ ↑ ↑ ↑ ↑ Type Stud diameter Stainless steel R: Crowned outer ring None: Cylindrical outer ring AB: With hexagon socket on both sides. (With integrated concave nipple : Stainless steel)
 CFT..M Lubrication tap hole	$\phi 6 \sim \phi 30$	Cam follower with tap for piping at stud head and thread of general type. Optimal for location that requires concentrated lubrication piping.	V: Full complement None: With cage UU: With seal None: With shield CFT 16 V M UU R A ↑ ↑ ↑ ↑ ↑ ↑ ↑ CFT: Standard type Stud diameter Stainless steel R: Crowned outer ring CFHT: Eccentric type None: Cylindrical outer ring A: With hexagon socket on the stud head (Applicable shaft diameter $\phi 12 \sim \phi 30$) B: With hexagon socket on the thread side. (Applicable shaft diameter $\phi 12 \sim \phi 30$) None: Standard type

CAM FOLLOWERS

STAINLESS STEEL

MINIATURE TYPE

HEXAGON SOCKET ON STUD HEAD



SUS/INOX

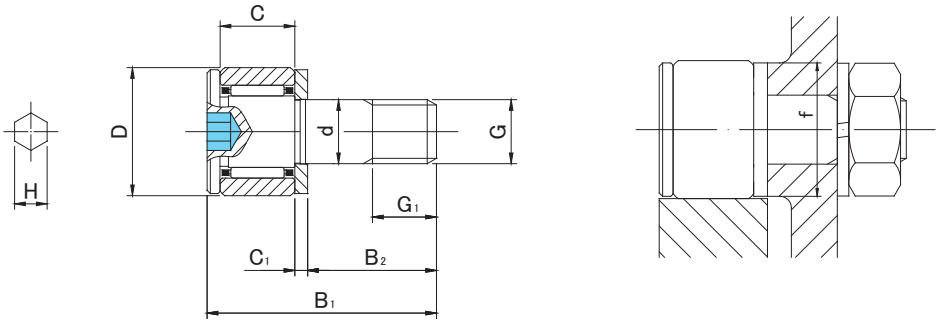
STAINLESS STEEL



CFS..MA



CFS..VMA



CFS..MA TYPE

Prepacked Grease

Stud diameter (mm)	h6 tolerance	Designation		Dimensions (mm)										Basic dynamic load rating	Basic static load rating	Largest permissible load	Max tightening torque	Mass
		With cage	Full roller	D	C	d	G	G1	B1	B2	C1	H	f min	Cr N	Cor N	N	N·m	g (approx)
2.5	0 -0.006	CFS 2.5MA	—	5	3	2.5	M2.5×0.45	2.5	9.5	5	0.7	0.9	4.8	370	300	260	0.2	1
		—	CFS 2.5VMA											920	990	260		
3	0 -0.006	CFS 3MA	—	6	4	3	M3×0.5	3	11.5	6	0.7	1.5	5.8	570	560	360	0.3	2
		—	CFS 3VMA											1 260	1 620	360		
4	0 -0.008	CFS 4MA	—	8	5	4	M4×0.7	4	15	8	1	2	7.7	990	990	780	0.6	4
		—	CFS 4VMA											2 160	2 790	780		
5	0 -0.008	CFS 5MA	—	10	6	5	M5×0.8	5	18	10	1	2.5	9.6	1 440	1 710	1 420	1.3	7
		—	CFS 5VMA											2 880	4 330	1 420		
6	0 -0.008	CFS 6MA	—	12	7	6	M6×1	6	21.5	12	1.2	3	11.6	1 890	1 980	2 110	2.3	13
		—	CFS 6VMA											4 240	5 760	2 110		

OUTER RINGS TOLERANCE (μm)	
TYPE	Cylindrical outer ring
CFS2.5M,CFS3M,CFS4M,CFS5M,CFS6M	0/-8

ACCESSORIES	
TYPE	NUT
All types	Attached

CAM FOLLOWERS
STAINLESS STEEL
HEXAGON SOCKET ON STUD HEAD

SUS/INOX

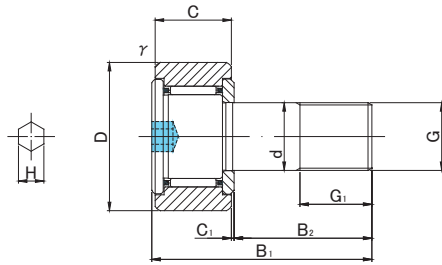
STAINLESS STEEL



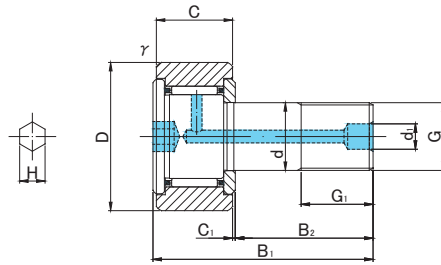
CF..MA



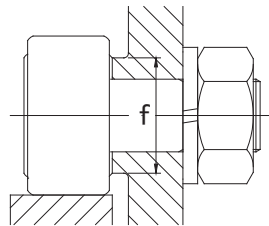
CF..VMA



CF3(V)MA~CF10-1(V)MA



CF10(V)MAK~CF10-1(V)MAK



CF..MA TYPE

Prepacked Grease

Stud diameter (mm)	Designation					Dimensions (mm)															Basic dynamic load rating	Basic static load rating	Largest permissible load	Limiting speed *	Track load capacity		Max tightening torque	Mass																																																																																																																																																																																																																																																																																																																																											
	Cylindrical outer ring		Crowned outer ring R250(CF3 ~ CF5) R500(CF6 ~ CF10-1)																						Cylindrical outer ring N	Crowned outer ring N																																																																																																																																																																																																																																																																																																																																													
																																																																																																																																																																																																																																																																																																																																																																							

* Without seals, suitable for grease lubrication. In case of oil lubrication, up to 130% of this value shall be permissible, and 70% of this value shall apply for types with seals.

OUTER RINGS TOLERANCE (μm)

TYPE	Cylindrical outer ring	Crowned outer ring
CF3M,CF4M,CF5M,CF6M	0/-8	0/-50
CF8M,CF10M,CF10-1M,CF12M	0/-9	0/-50
CF12-1M,CF16M,CF18M,CF20-1M	0/-11	0/-50
CF20M,CF24M,CF24-1M,CF30M	0/-13	0/-50
CF30-1M,CF30-2M	0/-15	0/-50

ACCESSORIES

TYPE			
CF3M/CF4M/CF5M/CF6M/CF8M/CF10M/CF10-1M	—	—	Attached
CF10MK/CF10-1MK	φ 4 Attached	φ 4 Attached	Attached
CF12M/CF12-1M/CF16M/CF18M	φ 6 Attached	φ 6 Attached	Attached
CF20M/CF20-1M/CF24M/CF24-1M/CF30M/CF30-1M/CF30-2M	φ 8 Attached	φ 8 Attached	Attached

CAM FOLLOWERS

STAINLESS STEEL

HEXAGON SOCKET ON STUD HEAD

SUS/INOX

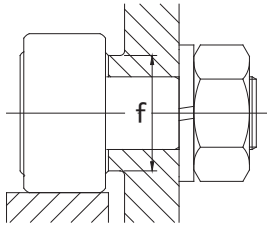
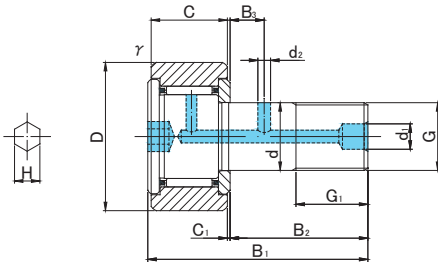
STAINLESS STEEL



CF..MA



CF..VMA



CF..MA TYPE

Prepacked Grease

Stud diameter (mm)		Designation				Dimensions (mm)																Basic dynamic load rating	Basic static load rating	Largest permissible load	Limiting speed *	Track load capacity		Max tightening torque	Mass
																													
h7 tolerance	Without seals	With seals	Without seals	With seals	D	C	d	G	G1	B1	B2	B3	C1	d1	d2	H	rs min	f min	Cr N	Cor N	N	rpm	Cylindrical outer ring N	Crowned outer ring N	N-m	g (approx)			
12	0 -0.018	CF12MA	CF12MUUA	CF12MRA	CF12MUURA	30	14	12	M12×1.5	13	40	25	6	0.6	6	3	6	0.6	20	7 300	9 010	9 800	14 000	7 060	2 450	22	95		
		CF12VMA	CF12VMUUA	CF12VMRA	CF12VMUURA															12 350	18 120	11 270	6 000						
12	0 -0.018	CF12-1MA	CF12-1MUUA	CF12-1MRA	CF12-1MUURA	32	14	12	M12×1.5	13	40	25	6	0.6	6	3	6	0.6	20	7 300	9 010	9 800	14 000	7 450	2 740	22	105		
		CF12-1VMA	CF12-1VMUUA	CF12-1VMRA	CF12-1VMUURA															12 350	18 120	11 270	6 000						
16	0 -0.018	CF16MA	CF16MUUA	CF16MRA	CF16MUURA	35	18	16	M16×1.5	17	52	32.5	8	0.8	6	3	6	0.6	24	11 080	16 860	18 330	10 000	11 200	3 140	58	170		
		CF16VMA	CF16VMUUA	CF16VMRA	CF16VMUURA															19 020	34 610	19 800	4 500						
18	0 -0.018	CF18MA	CF18MUUA	CF18MRA	CF18MUURA	40	20	18	M18×1.5	19	58	36.5	8	0.8	6	3	6	1	26	13 520	23 180	25 200	8 500	14 400	3 720	87	250		
		CF18VMA	CF18VMUUA	CF18VMRA	CF18VMUURA															23 250	47 240	26 560	3 500						
20	0 -0.021	CF20MA	CF20MUUA	CF20MRA	CF20MUURA	52	24	20	M20×1.5	21	66	40.5	9	0.8	8	4	8	1	36	19 020	31 830	32 140	7 000	23 200	8 230	120	460		
		CF20VMA	CF20VMUUA	CF20VMRA	CF20VMUURA															30 470	59 320	32 140	3 500						
20	0 -0.021	CF20-1MA	CF20-1MUUA	CF20-1MRA	CF20-1MUURA	47	24	20	M20×1.5	21	66	40.5	9	0.8	8	4	8	1	36	19 020	31 830	32 140	7 000	21 000	7 150	120	385		
		CF20-1VMA	CF20-1VMUUA	CF20-1VMRA	CF20-1VMUURA															30 470	59 320	32 140	3 500						
24	0 -0.021	CF24MA	CF24MUUA	CF24MRA	CF24MUURA	62	29	24	M24×1.5	25	80	49.5	11	0.8	8	4	8	1	40	28 040	48 410	49 500	6 500	34 200	10 500	220	815		
		CF24VMA	CF24VMUUA	CF24VMRA	CF24VMUURA															42 820	84 650	49 500	3 000						
24	0 -0.021	CF24-1MA	CF24-1MUUA	CF24-1MRA	CF24-1MUURA	72	29	24	M24×1.5	25	80	49.5	11	0.8	8	4	8	1	40	28 040	48 410	49 500	6 500	39 800	12 900	220	1 140		
		CF24-1VMA	CF24-1VMUUA	CF24-1VMRA	CF24-1VMUURA															42 820	84 650	49 500	3 000						
30	0 -0.021	CF30MA	CF30MUUA	CF30MRA	CF30MUURA	80	35	30	M30×1.5	32	100	63	15	1	8	4	8	1	46	41 740	78 250	73 700	5 000	52 600	14 900	450	1 870		
		CF30VMA	CF30VMUUA	CF30VMRA	CF30VMUURA															62 210	132 530	73 700	2 200						
30	0 -0.021	CF30-1MA	CF30-1MUUA	CF30-1MRA	CF30-1MUURA	85	35	30	M30×1.5	32	100	63	15	1	8	4	8	1	46	41 740	78 250	73 700	5 000	56 000	16 100	450	2 030		
		CF30-1VMA	CF30-1VMUUA	CF30-1VMRA	CF30-1VMUURA															62 210	132 530	73 700	2 200						
30	0 -0.021	CF30-2MA	CF30-2MUUA	CF30-2MRA	CF30-2MUURA	90	35	30	M30×1.5	32	100	63	15	1	8	4	8	1	46	41 740	78 250	73 700	5 000	59 300	17 300	450	2 220		
		CF30-2VMA	CF30-2VMUUA	CF30-2VMRA	CF30-2VMUURA															62 210	132 530	73 700	2 200						

* Without seals, suitable for grease lubrication. In case of oil lubrication, up to 130% of this value shall be permissible, and 70% of this value shall apply for types with seals.

OUTER RINGS TOLERANCE (μm)

TYPE	Cylindrical outer ring	Crowned outer ring
CF3M,CF4M,CF5M,CF6M	0/-8	0/-50
CF8M,CF10M,CF10-1M,CF12M	0/-9	0/-50
CF12-1M,CF16M,CF18M,CF20-1M	0/-11	0/-50
CF20M,CF24M,CF24-1M,CF30M	0/-13	0/-50
CF30-1M,CF30-2M	0/-15	0/-50

ACCESSORIES

TYPE			
CF3M/CF4M/CF5M/CF6M/CF8M/CF10M/CF10-1M	—	—	Attached
CF10MK/CF10-1MK	φ 4 Attached	φ 4 Attached	Attached
CF12M/CF12-1M/CF16M/CF18M	φ 6 Attached	φ 6 Attached	Attached
CF20M/CF20-1M/CF24M/CF24-1M/CF30M/CF30-1M/CF30-2M	φ 8 Attached	φ 8 Attached	Attached



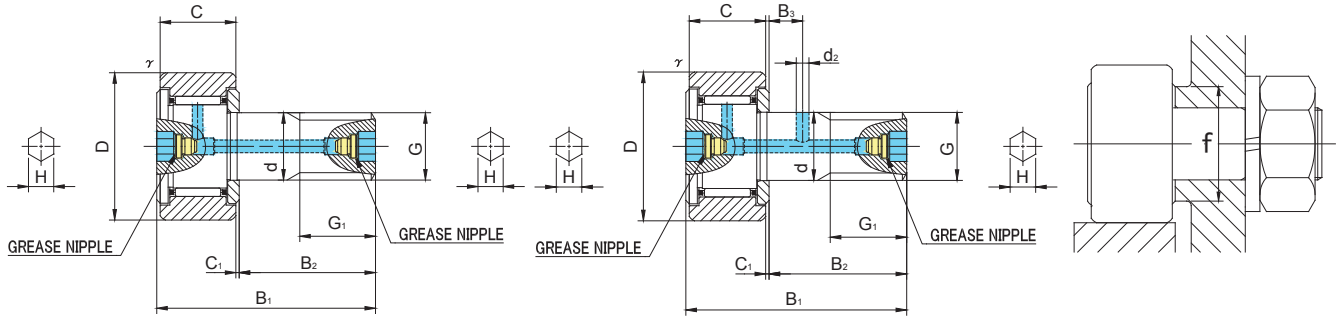
STAINLESS STEEL



CF..MAB



CF..VMAB



CF10(V)MABK~CF10-1(V)MABK

CF12(V)MAB~CF18(V)MAB

CF..MAB TYPE

Prepacked Grease

Stud diameter (mm)		Designation				Dimensions (mm)															Basic dynamic load rating	Basic static load rating	Largest permissible load	Limiting speed * 	Track load capacity		Max tightening torque 	Mass 
		Cylindrical outer ring 		Crowned outer ring R500(CF10 ~ CF18) 				d		G1	B1	B2						C1	d2	H					<i>r</i> _s min	f min		
		Without seals	With seals	Without seals	With seals	D	C	d	G	G1	B1	B2	B3	C1	d2	H	<i>r</i> _s min	f min	Cr N	Cor N					N	rpm		
10	0 -0.015	CF10MABK	CF10MUUABK	CF10MRABK	CF10MUURABK	22	12	10	M10×1	12	36	23		—	0.6	—	5	0.3	15	4 950	6 310	6 860	17 000	4 700	1 670	15	45	
		CF10VMABK	CF10VMUUABK	CF10VMRABK	CF10VMUURABK															8 740	13 340	7 450	7 500					
10	0 -0.015	CF10-1MABK	CF10-1MUUABK	CF10-1MRABK	CF10-1MUURABK	26	12	10	M10×1	12	36	23		—	0.6	—	5	0.3	15	4 950	6 310	6 860	17 000	5 490	2 060	15	60	
		CF10-1VMABK	CF10-1VMUUABK	CF10-1VMRABK	CF10-1VMUURABK															8 740	13 340	7 450	7 500					
12	0 -0.018	CF12MAB	CF12MUUAB	CF12MRAB	CF12MUURAB	30	14	12	M12×1.5	13	40	25		6	0.6	3	6	0.6	20	7 300	9 010	9 800	14 000	7 060	2 450	22	95	
		CF12VMAB	CF12VMUUAB	CF12VMRAB	CF12VMUURAB															12 350	18 120	11 270	6 000					
12	0 -0.018	CF12-1MAB	CF12-1MUUAB	CF12-1MRAB	CF12-1MUURAB	32	14	12	M12×1.5	13	40	25		6	0.6	3	6	0.6	20	7 300	9 010	9 800	14 000	7 450	2 740	22	105	
		CF12-1VMAB	CF12-1VMUUAB	CF12-1VMRAB	CF12-1VMUURAB															12 350	18 120	11 270	6 000					
16	0 -0.018	CF16MAB	CF16MUUAB	CF16MRAB	CF16MUURAB	35	18	16	M16×1.5	17	52	32.5		8	0.8	3	6	0.6	24	11 080	16 860	18 330	10 000	11 200	3 140	58	170	
		CF16VMAB	CF16VMUUAB	CF16VMRAB	CF16VMUURAB															19 020	34 610	19 800	4 500					
18	0 -0.018	CF18MAB	CF18MUUAB	CF18MRAB	CF18MUURAB	40	20	18	M18×1.5	19	58	36.5		8	0.8	3	6	1	26	13 520	23 180	25 200	8 500	14 400	3 720	87	250	
		CF18VMAB	CF18VMUUAB	CF18VMRAB	CF18VMUURAB															23 250	47 240	26 560	3 500					

CF..MAB TYPE has oil holes (grease nipple) which are prepared in the stud head and thread side, also an oil hole is prepared outer surface of stud.

* Without seals, suitable for grease lubrication. In case of oil lubrication, up to 130% of this value shall be permissible, and 70% of this value shall apply for types with seals.

OUTER RINGS TOLERANCE (μm)

TYPE	Cylindrical outer ring	Crowned outer ring
CF10,CF10-1,CF12	0/-9	0/-50
CF12-1,CF16,CF18,CF20-1	0/-11	0/-50
CF20,CF24,CF24-1,CF30	0/-13	0/-50
CF30-1,CF30-2	0/-15	0/-50

ACCESSORIES

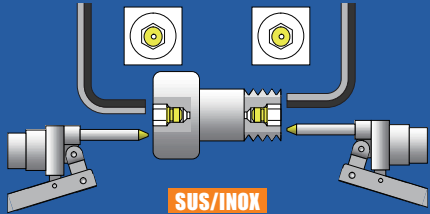
TYPE		
All types	Installed	Attached

CAM FOLLOWERS

STAINLESS STEEL

HEXAGON SOCKET ON BOTH SIDES

GREASE NIPPLE INSTALLED



SUS/INOX

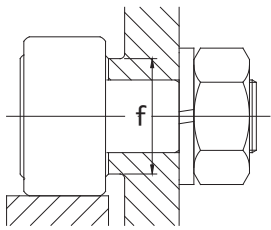
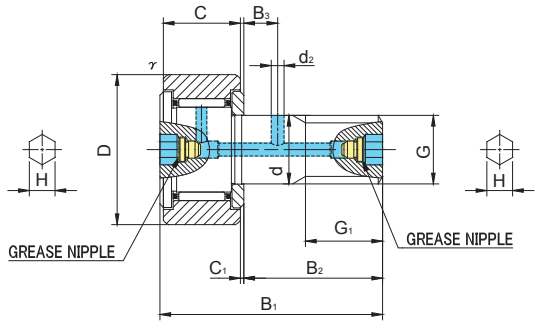
STAINLESS STEEL



CF..MAB



CF..VMAB



CF..MAB TYPE

Prepacked Grease

Stud diameter (mm)		Designation				Dimensions (mm)															Basic dynamic load rating	Basic static load rating	Largest permissible load	Limiting speed *	Track load capacity		Max tightening torque	Mass
		Cylindrical outer ring		Crowned outer ring R1000(CF20 ≤)																								
																												
	h7 tolerance	Without seals	With seals	Without seals	With seals	D	C	d	G	G1	B1	B2	B3	C1	d2	H	rs min	f min	Cr N	Cor N	N	rpm	Cylindrical outer ring N	Crowned outer ring N	N·m	g (approx)		
20	0 -0.021	CF20MAB	CF20MUUAB	CF20MRAB	CF20MUURAB	52	24	20	M20×1.5	21	66	40.5	9	0.8	4	8	1	36	19 020	31 830	32 140	7 000	23 200	8 230	120	460		
		CF20VMAB	CF20VMUUAB	CF20VMRAB	CF20VMUURAB														30 470	59 320	32 140	3 500						
20	0 -0.021	CF20-1MAB	CF20-1MUUAB	CF20-1MRAB	CF20-1MUURAB	47	24	20	M20×1.5	21	66	40.5	9	0.8	4	8	1	36	19 020	31 830	32 140	7 000	21 000	7 150	120	385		
		CF20-1VMAB	CF20-1VMUUAB	CF20-1VMRAB	CF20-1VMUURAB														30 470	59 320	32 140	3 500						
24	0 -0.021	CF24MAB	CF24MUUAB	CF24MRAB	CF24MUURAB	62	29	24	M24×1.5	25	80	49.5	11	0.8	4	8	1	40	28 040	48 410	49 500	6 500	34 200	10 500	220	815		
		CF24VMAB	CF24VMUUAB	CF24VMRAB	CF24VMUURAB														42 820	84 650	49 500	3 000						
24	0 -0.021	CF24-1MAB	CF24-1MUUAB	CF24-1MRAB	CF24-1MUURAB	72	29	24	M24×1.5	25	80	49.5	11	0.8	4	8	1	40	28 040	48 410	49 500	6 500	39 800	12 900	220	1 140		
		CF24-1VMAB	CF24-1VMUUAB	CF24-1VMRAB	CF24-1VMUURAB														42 820	84 650	49 500	3 000						
30	0 -0.021	CF30MAB	CF30MUUAB	CF30MRAB	CF30MUURAB	80	35	30	M30×1.5	32	100	63	15	1	4	8	1	46	41 740	78 250	73 700	5 000	52 600	14 900	450	1 870		
		CF30VMAB	CF30VMUUAB	CF30VMRAB	CF30VMUURAB														62 210	132 530	73 700	2 200						
30	0 -0.021	CF30-1MAB	CF30-1MUUAB	CF30-1MRAB	CF30-1MUURAB	85	35	30	M30×1.5	32	100	63	15	1	4	8	1	46	41 740	78 250	73 700	5 000	56 000	16 100	450	2 030		
		CF30-1VMAB	CF30-1VMUUAB	CF30-1VMRAB	CF30-1VMUURAB														62 210	132 530	73 700	2 200						
30	0 -0.021	CF30-2MAB	CF30-2MUUAB	CF30-2MRAB	CF30-2MUURAB	90	35	30	M30×1.5	32	100	63	15	1	4	8	1	46	41 740	78 250	73 700	5 000	59 300	17 300	450	2 220		
		CF30-2VMAB	CF30-2VMUUAB	CF30-2VMRAB	CF30-2VMUURAB														62 210	132 530	73 700	2 200						

CF..MAB TYPE has oil holes (grease nipple) which are prepared in the stud head and thread side, also an oil hole is prepared outer surface of stud.

* Without seals, suitable for grease lubrication. In case of oil lubrication, up to 130% of this value shall be permissible, and 70% of this value shall apply for types with seals.

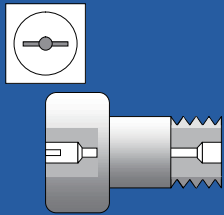
OUTER RINGS TOLERANCE (μm)

TYPE	Cylindrical outer ring	Crowned outer ring
CF10,CF10-1,CF12	0/-9	0/-50
CF12-1,CF16,CF18,CF20-1	0/-11	0/-50
CF20,CF24,CF24-1,CF30	0/-13	0/-50
CF30-1,CF30-2	0/-15	0/-50

ACCESSORIES

TYPE		
All types	Installed	Attached

CAM FOLLOWERS
STAINLESS STEEL
SCREWDRIVER SLOT HEAD



SUS/INOX

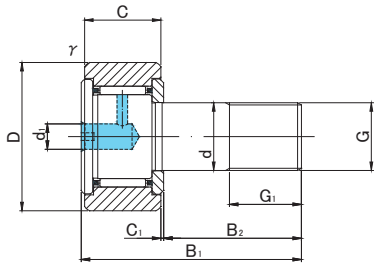
STAINLESS STEEL



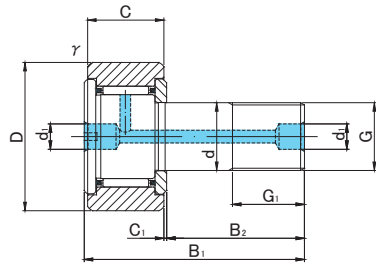
CF..M



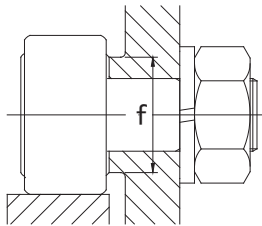
CF..VM



CF5(V)M~CF10-1(V)M



CF10(V)MK~CF10-1(V)MK



CF..M TYPE

Prepacked Grease

Stud diameter (mm)		Designation				Dimensions (mm)															Basic dynamic load rating	Basic static load rating	Largest permissible load	Limiting speed *	Track load capacity		Max tightening torque	Mass
		Cylindrical outer ring		Crowned outer ring R250(CF5) R500(CF6 ~ CF10-1)																								
																												
h7 tolerance	Without seals	With seals	Without seals	With seals	D	C	d	G	G1	B1	B2	B3	C1	d1	d2	rs min	f min	Cr N	Cor N	N	rpm	Cylindrical outer ring N	Crowned outer ring N	N·m	g (approx)			
5	0 -0.012	CF 5M	CF 5MUU	CF 5MR	CF 5MUUR	13	9	5	M5×0.8	7.5	23	13	—	0.5	3.1	—	0.3	9.7	2 880	2 540	1 420	29 000	2 250	530	2	10.5		
		CF 5VM	CF 5VMUU	CF 5VMR	CF 5VMUUR														4 690	5 060	1 420	11 600						
6	0 -0.012	CF 6M	CF 6MUU	CF 6MR	CF 6MUUR	16	11	6	M6×1	8	28	16	—	0.6	4	—	0.3	11	3 330	3 330	2 110	25 000	3 430	1 080	3	18.5		
		CF 6VM	CF 6VMUU	CF 6VMR	CF 6VMUUR														6 400	7 840	2 110	12 000						
8	0 -0.015	CF 8M	CF 8MUU	CF 8MR	CF 8MUUR	19	11	8	M8×1.25	10	32	20	—	0.6	4	—	0.3	13	3 960	4 330	4 710	20 000	4 020	1 370	8	28.5		
		CF 8VM	CF 8VMUU	CF 8VMR	CF 8VMUUR														7 470	10 270	4 710	9 000						
10	0 -0.015	CF10M	CF10MUU	CF10MR	CF10MUUR	22	12	10	M10×1.25	12	36	23	—	0.6	4	—	0.3	15	4 950	6 310	6 860	17 000	4 700	1 670	15	45		
		CF10VM	CF10VMUU	CF10VMR	CF10VMUUR														8 740	13 340	7 450	7 500						
10	0 -0.015	CF10-1M	CF10-1MUU	CF10-1MR	CF10-1MUUR	26	12	10	M10×1.25	12	36	23	—	0.6	4	—	0.3	15	4 950	6 310	6 860	17 000	5 490	2 060	15	60		
		CF10-1VM	CF10-1VMUU	CF10-1VMR	CF10-1VMUUR														8 740	13 340	7 450	7 500						
10	0 -0.015	CF10MK	CF10MUUK	CF10MRK	CF10MUURK	22	12	10	M10×1	12	36	23	—	0.6	4	—	0.3	15	4 950	6 310	6 860	17 000	4 700	1 670	15	45		
		CF10VMK	CF10VMUUK	CF10VMRK	CF10VMUURK														8 740	13 340	7 450	7 500						
10	0 -0.015	CF10-1MK	CF10-1MUUK	CF10-1MRK	CF10-1MUURK	26	12	10	M10×1	12	36	23	—	0.6	4	—	0.3	15	4 950	6 310	6 860	17 000	5 490	2 060	15	60		
		CF10-1VMK	CF10-1VMUUK	CF10-1VMRK	CF10-1VMUURK														8 740	13 340	7 450	7 500						

* Without seals, suitable for grease lubrication. In case of oil lubrication, up to 130% of this value shall be permissible, and 70% of this value shall apply for types with seals.

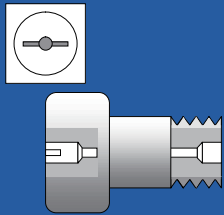
OUTER RINGS TOLERANCE (μm)

TYPE	Cylindrical outer ring	Crowned outer ring
CF5M,CF6M	0/-8	0/-50
CF8M,CF10M,CF10-1M,CF12M	0/-9	0/-50
CF12-1M,CF16M,CF18M,CF20-1M	0/-11	0/-50
CF20M,CF24M,CF24-1M,CF30M	0/-13	0/-50
CF30-1M,CF30-2M	0/-15	0/-50

ACCESSORIES

TYPE	 STOP PLUG	 RESIN PLUG	 NUT
CF5M	—	—	Attached
CF6M/CF8M/CF10M/CF10-1M	—	φ 4 Attached	Attached
CF10MK/CF10-1MK	φ 4 Attached	φ 4 Attached	Attached
CF12M/CF12-1M/CF16M/CF18M	φ 6 Attached	φ 6 Attached	Attached
CF20M/CF20-1M/CF24M/CF24-1M/CF30M/CF30-1M/CF30-2M	φ 8 Attached	φ 8 Attached	Attached

CAM FOLLOWERS
STAINLESS STEEL
SCREWDRIVER SLOT HEAD



SUS/INOX

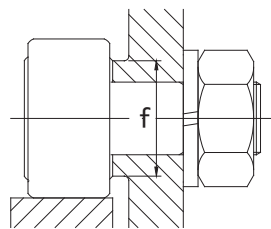
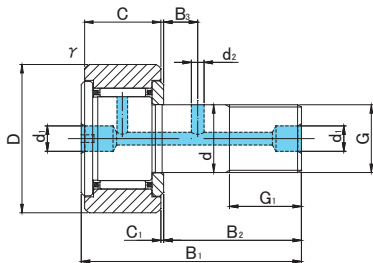
STAINLESS STEEL



CF..M



CF..VM



CF..M TYPE

Prepacked Grease

Stud diameter (mm)	Designation					Dimensions (mm)															Basic dynamic load rating	Basic static load rating	Largest permissible load	Limiting speed *	Track load capacity		Max tightening torque	Mass
	Cylindrical outer ring		Crowned outer ring R500(CF12 ~ CF18) R1000(CF20 ≤)																									
																												
h7 tolerance	Without seals	With seals	Without seals	With seals	D	C	d	G	G1	B1	B2	B3	C1	d1	d2	rs min	f min	Cr N	Cor N	N	rpm	Cylindrical outer ring N	Crowned outer ring N	N·m	g (approx)			
12	0 -0.018	CF12M	CF12MUU	CF12MR	CF12MUUR	30	14	12	M12×1.5	13	40	25	6	0.6	6	3	0.6	20	7 300	9 010	9 800	14 000	7 060	2 450	22	95		
		CF12VM	CF12VMUU	CF12VMR	CF12VMUUR														12 350	18 120	11 270	6 000						
12	0 -0.018	CF12-1M	CF12-1MUU	CF12-1MR	CF12-1MUUR	32	14	12	M12×1.5	13	40	25	6	0.6	6	3	0.6	20	7 300	9 010	9 800	14 000	7 450	2 740	22	105		
		CF12-1VM	CF12-1VMUU	CF12-1VMR	CF12-1VMUUR														12 350	18 120	11 270	6 000						
16	0 -0.018	CF16M	CF16MUU	CF16MR	CF16MUUR	35	18	16	M16×1.5	17	52	32.5	8	0.8	6	3	0.6	24	11 080	16 860	18 330	10 000	11 200	3 140	58	170		
		CF16VM	CF16VMUU	CF16VMR	CF16VMUUR														19 020	34 610	19 800	4 500						
18	0 -0.018	CF18M	CF18MUU	CF18MR	CF18MUUR	40	20	18	M18×1.5	19	58	36.5	8	0.8	6	3	1	26	13 520	23 180	25 200	8 500	14 400	3 720	87	250		
		CF18VM	CF18VMUU	CF18VMR	CF18VMUUR														23 250	47 240	26 560	3 500						
20	0 -0.021	CF20M	CF20MUU	CF20MR	CF20MUUR	52	24	20	M20×1.5	21	66	40.5	9	0.8	8	4	1	36	19 020	31 830	32 140	7 000	23 200	8 230	120	460		
		CF20VM	CF20VMUU	CF20VMR	CF20VMUUR														30 470	59 320	32 140	3 500						
20	0 -0.021	CF20-1M	CF20-1MUU	CF20-1MR	CF20-1MUUR	47	24	20	M20×1.5	21	66	40.5	9	0.8	8	4	1	36	19 020	31 830	32 140	7 000	21 000	7 150	120	385		
		CF20-1VM	CF20-1VMUU	CF20-1VMR	CF20-1VMUUR														30 470	59 320	32 140	3 500						
24	0 -0.021	CF24M	CF24MUU	CF24MR	CF24MUUR	62	29	24	M24×1.5	25	80	49.5	11	0.8	8	4	1	40	28 040	48 410	49 500	6 500	34 200	10 500	220	815		
		CF24VM	CF24VMUU	CF24VMR	CF24VMUUR														42 820	84 650	49 500	3 000						
24	0 -0.021	CF24-1M	CF24-1MUU	CF24-1MR	CF24-1MUUR	72	29	24	M24×1.5	25	80	49.5	11	0.8	8	4	1	40	28 040	48 410	49 500	6 500	39 800	12 900	220	1 140		
		CF24-1VM	CF24-1VMUU	CF24-1VMR	CF24-1VMUUR														42 820	84 650	49 500	3 000						
30	0 -0.021	CF30M	CF30MUU	CF30MR	CF30MUUR	80	35	30	M30×1.5	32	100	63	15	1	8	4	1	46	41 740	78 250	73 700	5 000	52 600	14 900	450	1 870		
		CF30VM	CF30VMUU	CF30VMR	CF30VMUUR														62 210	132 530	73 700	2 200						
30	0 -0.021	CF30-1M	CF30-1MUU	CF30-1MR	CF30-1MUUR	85	35	30	M30×1.5	32	100	63	15	1	8	4	1	46	41 740	78 250	73 700	5 000	56 000	16 100	450	2 030		
		CF30-1VM	CF30-1VMUU	CF30-1VMR	CF30-1VMUUR														62 210	132 530	73 700	2 200						
30	0 -0.021	CF30-2M	CF30-2MUU	CF30-2MR	CF30-2MUUR	90	35	30	M30×1.5	32	100	63	15	1	8	4	1	46	41 740	78 250	73 700	5 000	59 300	17 300	450	2 220		
		CF30-2VM	CF30-2VMUU	CF30-2VMR	CF30-2VMUUR														62 210	132 530	73 700	2 200						

* Without seals, suitable for grease lubrication. In case of oil lubrication, up to 130% of this value shall be permissible, and 70% of this value shall apply for types with seals.

OUTER RINGS TOLERANCE (μm)

TYPE	Cylindrical outer ring	Crowned outer ring
CF5M,CF6M	0/-8	0/-50
CF8M,CF10M,CF10-1M,CF12M	0/-9	0/-50
CF12-1M,CF16M,CF18M,CF20-1M	0/-11	0/-50
CF20M,CF24M,CF24-1M,CF30M	0/-13	0/-50
CF30-1M,CF30-2M	0/-15	0/-50

ACCESSORIES

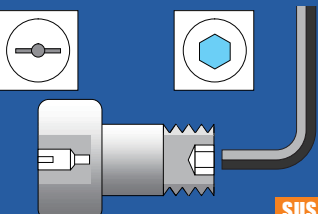
TYPE	STOP PLUG	RESIN PLUG	NUT
CF5M	—	—	Attached
CF6M/CF8M/CF10M/CF10-1M	—	φ 4 Attached	Attached
CF10MK/CF10-1MK	φ 4 Attached	φ 4 Attached	Attached
CF12M/CF12-1M/CF16M/CF18M	φ 6 Attached	φ 6 Attached	Attached
CF20M/CF20-1M/CF24M/CF24-1M/CF30M/CF30-1M/CF30-2M	φ 8 Attached	φ 8 Attached	Attached

CAM FOLLOWERS

STAINLESS STEEL

HEXAGON SOCKET ON THREAD SIDE

SCREWDRIVER SLOT HEAD



SUS/INOX

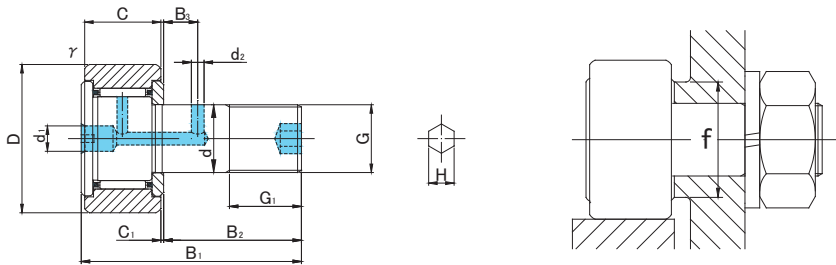
STAINLESS STEEL



CF..MB



CF..VMB



CF..MB TYPE

Prepacked Grease

Stud diameter (mm)		Designation				Dimensions (mm)														Basic dynamic load rating	Basic static load rating	Largest permissible load	Limiting speed [*]	Track load capacity		Max tightening torque	Mass
		Cylindrical outer ring		Crowned outer ring R500 (CF12 ~ CF18) R1000 (CF20 ≤)																							
																											
d	h7 tolerance	Without seals	With seals	Without seals	With seals	D	C	G	G1	B1	B2	B3	C1	d1	d2	H	r _s min	f min	Cr N	Cor N	N	rpm	Cylindrical outer ring N	Crowned outer ring N	N·m	g (approx)	
12	0 -0.018	CF12MB	CF12MUUB	CF12MRB	CF12MUURB	30	14	M12×1.5	13	40	25	6	0.6	6	3	6	0.6	20	7 300	9 010	9 800	14 000	7 060	2 450	22	95	
		CF12VMB	CF12VMUUB	CF12VMRB	CF12VMUURB														12 350	18 120	11 270	6 000					
12	0 -0.018	CF12-1MB	CF12-1MUUB	CF12-1MRB	CF12-1MUURB	32	14	M12×1.5	13	40	25	6	0.6	6	3	6	0.6	20	7 300	9 010	9 800	14 000	7 450	2 740	22	105	
		CF12-1VMB	CF12-1VMUUB	CF12-1VMRB	CF12-1VMUURB														12 350	18 120	11 270	6 000					
16	0 -0.018	CF16MB	CF16MUUB	CF16MRB	CF16MUURB	35	18	M16×1.5	17	52	32.5	8	0.8	6	3	6	0.6	24	11 080	16 860	18 330	10 000	11 200	3 140	58	170	
		CF16VMB	CF16VMUUB	CF16VMRB	CF16VMUURB														19 020	34 610	19 800	4 500					
18	0 -0.018	CF18MB	CF18MUUB	CF18MRB	CF18MUURB	40	20	M18×1.5	19	58	36.5	8	0.8	6	3	6	1	26	13 520	23 180	25 200	8 500	14 400	3 720	87	250	
		CF18VMB	CF18VMUUB	CF18VMRB	CF18VMUURB														23 250	47 240	26 560	3 500					
20	0 -0.021	CF20MB	CF20MUUB	CF20MRB	CF20MUURB	52	24	M20×1.5	21	66	40.5	9	0.8	8	4	8	1	36	19 020	31 830	32 140	7 000	23 200	8 230	120	460	
		CF20VMB	CF20VMUUB	CF20VMRB	CF20VMUURB														30 470	59 320	32 140	3 500					
20	0 -0.021	CF20-1MB	CF20-1MUUB	CF20-1MRB	CF20-1MUURB	47	24	M20×1.5	21	66	40.5	9	0.8	8	4	8	1	36	19 020	31 830	32 140	7 000	21 000	7 150	120	385	
		CF20-1VMB	CF20-1VMUUB	CF20-1VMRB	CF20-1VMUURB														30 470	59 320	32 140	3 500					
24	0 -0.021	CF24MB	CF24MUUB	CF24MRB	CF24MUURB	62	29	M24×1.5	25	80	49.5	11	0.8	8	4	8	1	40	28 040	48 410	49 500	6 500	34 200	10 500	220	815	
		CF24VMB	CF24VMUUB	CF24VMRB	CF24VMUURB														42 820	84 650	49 500	3 000					
24	0 -0.021	CF24-1MB	CF24-1MUUB	CF24-1MRB	CF24-1MUURB	72	29	M24×1.5	25	80	49.5	11	0.8	8	4	8	1	40	28 040	48 410	49 500	6 500	39 800	12 900	220	1 140	
		CF24-1VMB	CF24-1VMUUB	CF24-1VMRB	CF24-1VMUURB														42 820	84 650	49 500	3 000					
30	0 -0.021	CF30MB	CF30MUUB	CF30MRB	CF30MUURB	80	35	M30×1.5	32	100	63	15	1	8	4	8	1	46	41 740	78 250	73 700	5 000	52 600	14 900	450	1 870	
		CF30VMB	CF30VMUUB	CF30VMRB	CF30VMUURB														62 210	132 530	73 700	2 200					
30	0 -0.021	CF30-1MB	CF30-1MUUB	CF30-1MRB	CF30-1MUURB	85	35	M30×1.5	32	100	63	15	1	8	4	8	1	46	41 740	78 250	73 700	5 000	56 000	16 100	450	2 030	
		CF30-1VMB	CF30-1VMUUB	CF30-1VMRB	CF30-1VMUURB														62 210	132 530	73 700	2 200					
30	0 -0.021	CF30-2MB	CF30-2MUUB	CF30-2MRB	CF30-2MUURB	90	35	M30×1.5	32	100	63	15	1	8	4	8	1	46	41 740	78 250	73 700	5 000	59 300	17 300	450	2 220	
		CF30-2VMB	CF30-2VMUUB	CF30-2VMRB	CF30-2VMUURB														62 210	132 530	73 700	2 200					

* Without seals, suitable for grease lubrication. In case of oil lubrication, up to 130% of this value shall be permissible, and 70% of this value shall apply for types with seals.

OUTER RINGS TOLERANCE (μm)

TYPE	Cylindrical outer ring	Crowned outer ring
CF12M	0/-9	0/-50
CF12-1M,CF16M,CF18M,CF20-1M	0/-11	0/-50
CF20M,CF24M,CF24-1M,CF30M	0/-13	0/-50
CF30-1M,CF30-2M	0/-15	0/-50

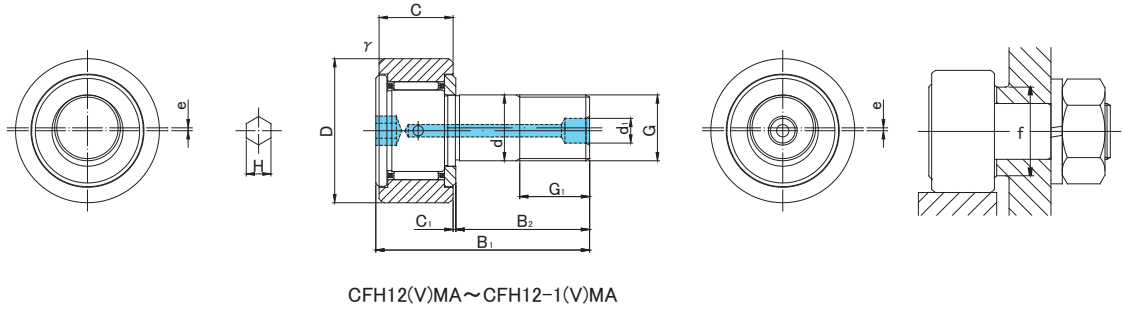
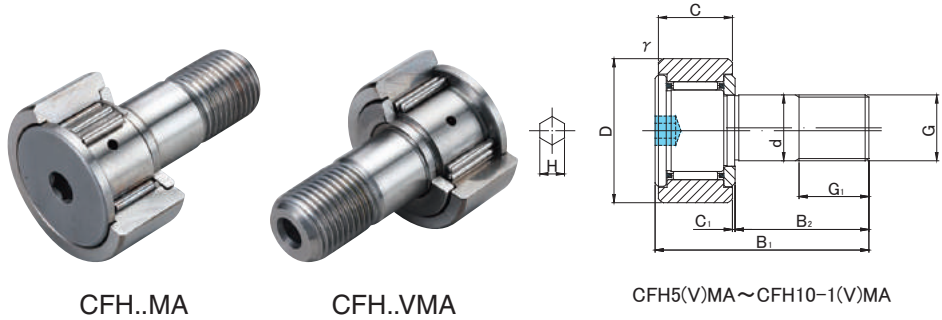
ACCESSORIES

TYPE	 STOP PLUG	 RESIN PLUG	 NUT
CF12M/CF12-1M/CF16M/CF18M	φ 6 Attached	φ 6 Attached	Attached
CF20M/CF20-1M/CF24M/CF24-1M/CF30M/CF30-1M/CF30-2M	φ 8 Attached	φ 8 Attached	Attached

CAM FOLLOWERS
STAINLESS STEEL
SOLID ECCENTRIC TYPE
HEXAGON SOCKET ON STUD HEAD

SUS/INOX

STAINLESS STEEL



CFH..MA TYPE

Prepacked Grease

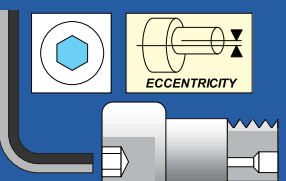
Stud diameter (mm)	Designation					Dimensions (mm)															Basic dynamic load rating	Basic static load rating	Largest permissible load	Limiting speed *	Track load capacity		Max tightening torque	Mass	
	Cylindrical outer ring		Crowned outer ring R500(CF5 ~ CF12)																						Cylindrical outer ring N				Crowned outer ring N
																													
h7 tolerance	Without seals	With seals	Without seals	With seals	D	C	d	G	G1	B1	B2	C1	d1	H	rs min	e	f min	Cr N	Cor N	N	rpm	Cylindrical outer ring N	Crowned outer ring N	N-m	g (approx)				
5	0 -0.012	CFH 5MA	CFH 5MUUA	CFH 5MRA	CFH 5MUURA	13	9	5	M5×0.8	7.5	23	13	0.5	—	2.5	0.3	0.2	9.7	2 880	2 540	1 420	29 000	2 250	530	2	10.5			
		CFH 5VMA	CFH 5VMUUA	CFH 5VMRA	CFH 5VMUURA														4 690	5 060	1 420	11 600							
6	0 -0.012	CFH 6MA	CFH 6MUUA	CFH 6MRA	CFH 6MUURA	16	11	6	M6×1	8	28	16	0.6	—	3	0.3	0.25	11	3 330	3 330	2 110	25 000	3 430	1 080	3	18.5			
		CFH 6VMA	CFH 6VMUUA	CFH 6VMRA	CFH 6VMUURA														6 400	7 840	2 110	12 000							
8	0 -0.015	CFH 8MA	CFH 8MUUA	CFH 8MRA	CFH 8MUURA	19	11	8	M8×1.25	10	32	20	0.6	—	4	0.3	0.25	13	3 960	4 330	4 710	20 000	4 020	1 370	8	28.5			
		CFH 8VMA	CFH 8VMUUA	CFH 8VMRA	CFH 8VMUURA														7 470	10 270	4 710	9 000							
10	0 -0.015	CFH10MA	CFH10MUUA	CFH10MRA	CFH10MUURA	22	12	10	M10×1.25	12	36	23	0.6	—	5	0.3	0.3	15	4 950	6 310	6 860	17 000	4 700	1 670	15	45			
		CFH10VMA	CFH10VMUUA	CFH10VMRA	CFH10VMUURA														8 740	13 340	7 450	7 500							
10	0 -0.015	CFH10-1MA	CFH10-1MUUA	CFH10-1MRA	CFH10-1MUURA	26	12	10	M10×1.25	12	36	23	0.6	—	5	0.3	0.3	15	4 950	6 310	6 860	17 000	5 490	2 060	15	60			
		CFH10-1VMA	CFH10-1VMUUA	CFH10-1VMRA	CFH10-1VMUURA														8 740	13 340	7 450	7 500							
12	0 -0.018	CFH12MA	CFH12MUUA	CFH12MRA	CFH12MUURA	30	14	12	M12×1.5	13	40	25	0.6	6	6	0.6	0.4	20	7 300	9 010	9 800	14 000	7 060	2 450	22	95			
		CFH12VMA	CFH12VMUUA	CFH12VMRA	CFH12VMUURA														12 350	18 120	11 270	6 000							
12	0 -0.018	CFH12-1MA	CFH12-1MUUA	CFH12-1MRA	CFH12-1MUURA	32	14	12	M12×1.5	13	40	25	0.6	6	6	0.6	0.4	20	7 300	9 010	9 800	14 000	7 450	2 740	22	105			
		CFH12-1VMA	CFH12-1VMUUA	CFH12-1VMRA	CFH12-1VMUURA														12 350	18 120	11 270	6 000							

* Without seals, suitable for grease lubrication. In case of oil lubrication, up to 130% of this value shall be permissible, and 70% of this value shall apply for types with seals.

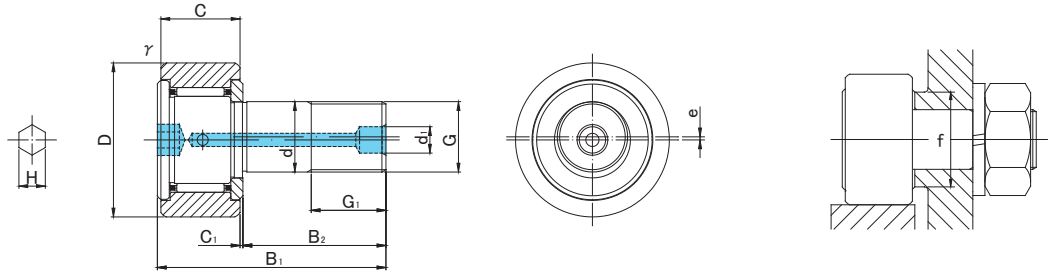
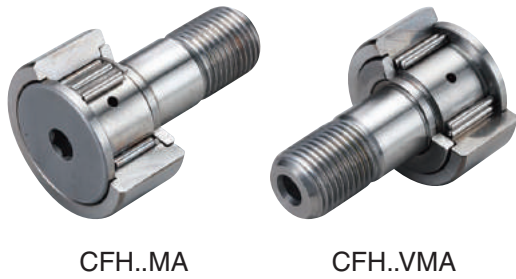
TYPE	Cylindrical outer ring	Crowned outer ring
CF5M,CF6M	0/-8	0/-50
CF8M,CF10M,CF10-1M,CF12M	0/-9	0/-50
CF12-1M,CF16M,CF18M,CF20-1M	0/-11	0/-50
CF20M,CF24M,CF24-1M,CF30M	0/-13	0/-50
CF30-1M,CF30-2M	0/-15	0/-50

TYPE	STOP PLUG	RESIN PLUG	NUT
CF3M/CF4M/CF5M	—	—	Attached
CF6M/CF8M/CF10M/CF10-1M	—	—	Attached
CF12M/CF12-1M/CF16M/CF18M	φ 6 Attached	φ 6 Attached	Attached
CF20M/CF20-1M/CF24M/CF24-1M/CF30M/CF30-1M/CF30-2M	φ 8 Attached	φ 8 Attached	Attached

CAM FOLLOWERS
STAINLESS STEEL
SOLID ECCENTRIC TYPE
HEXAGON SOCKET ON STUD HEAD



SUS/INOX



CFH..MA TYPE

Prepacked Grease

Stud diameter (mm)	Designation					Dimensions (mm)													Basic dynamic load rating	Basic static load rating	Largest permissible load	Limiting speed *	Track load capacity		Max tightening torque	Mass
	Cylindrical outer ring		Crowned outer ring R500(CF16 ~ CF18) R1000(CF20 ≤)																				Cylindrical outer ring N	Crowned outer ring N	N·m	g (approx)
	Without seals	With seals	Without seals	With seals		D	C	d	G	G1	B1	B2	C1	d1	H	r_s min	e	f min	Cr N	Cor N	N	rpm				
16	0 -0.018	CFH16MA	CFH16MUUA	CFH16MRA	CFH16MUURA	35	18	16	M16×1.5	17	52	32.5	0.8	6	6	0.6	0.5	24	11 080	16 860	18 330	10 000	11 200	3 140	58	170
		CFH16VMA	CFH16VMUUA	CFH16VMRA	CFH16VMUURA														19 020	34 610	19 800	4 500				
18	0 -0.018	CFH18MA	CFH18MUUA	CFH18MRA	CFH18MUURA	40	20	18	M18×1.5	19	58	36.5	0.8	6	6	1	0.6	26	13 520	23 180	25 200	8 500	14 400	3 720	87	250
		CFH18VMA	CFH18VMUUA	CFH18VMRA	CFH18VMUURA														23 250	47 240	26 560	3 500				
20	0 -0.021	CFH20MA	CFH20MUUA	CFH20MRA	CFH20MUURA	52	24	20	M20×1.5	21	66	40.5	0.8	8	8	1	0.7	36	19 020	31 830	32 140	7 000	23 200	8 230	120	460
		CFH20VMA	CFH20VMUUA	CFH20VMRA	CFH20VMUURA														30 470	59 320	32 140	3 500				
20	0 -0.021	CFH20-1MA	CFH20-1MUUA	CFH20-1MRA	CFH20-1MUURA	47	24	20	M20×1.5	21	66	40.5	0.8	8	8	1	0.7	36	19 020	31 830	32 140	7 000	21 000	7 150	120	385
		CFH20-1VMA	CFH20-1VMUUA	CFH20-1VMRA	CFH20-1VMUURA														30 470	59 320	32 140	3 500				
24	0 -0.021	CFH24MA	CFH24MUUA	CFH24MRA	CFH24MUURA	62	29	24	M24×1.5	25	80	49.5	0.8	8	8	1	0.8	40	28 040	48 410	49 500	6 500	34 200	10 500	220	815
		CFH24VMA	CFH24VMUUA	CFH24VMRA	CFH24VMUURA														42 820	84 650	49 500	3 000				
24	0 -0.021	CFH24-1MA	CFH24-1MUUA	CFH24-1MRA	CFH24-1MUURA	72	29	24	M24×1.5	25	80	49.5	0.8	8	8	1	0.8	40	28 040	48 410	49 500	6 500	39 800	12 900	220	1 140
		CFH24-1VMA	CFH24-1VMUUA	CFH24-1VMRA	CFH24-1VMUURA														42 820	84 650	49 500	3 000				
30	0 -0.021	CFH30MA	CFH30MUUA	CFH30MRA	CFH30MUURA	80	35	30	M30×1.5	32	100	63	1	8	8	1	1	46	41 740	78 250	73 700	5 000	52 600	14 900	450	1 870
		CFH30VMA	CFH30VMUUA	CFH30VMRA	CFH30VMUURA														62 210	132 530	73 700	2 200				
30	0 -0.021	CFH30-1MA	CFH30-1MUUA	CFH30-1MRA	CFH30-1MUURA	85	35	30	M30×1.5	32	100	63	1	8	8	1	1	46	41 740	78 250	73 700	5 000	56 000	16 100	450	2 030
		CFH30-1VMA	CFH30-1VMUUA	CFH30-1VMRA	CFH30-1VMUURA														62 210	132 530	73 700	2 200				
30	0 -0.021	CFH30-2MA	CFH30-2MUUA	CFH30-2MRA	CFH30-2MUURA	90	35	30	M30×1.5	32	100	63	1	8	8	1	1	46	41 740	78 250	73 700	5 000	59 300	17 300	450	2 220
		CFH30-2VMA	CFH30-2VMUUA	CFH30-2VMRA	CFH30-2VMUURA														62 210	132 530	73 700	2 200				

* Without seals, suitable for grease lubrication. In case of oil lubrication, up to 130% of this value shall be permissible, and 70% of this value shall apply for types with seals.

OUTER RINGS TOLERANCE (μm)

TYPE	Cylindrical outer ring	Crowned outer ring
CF5M,CF6M	0/-8	0/-50
CF8M,CF10M,CF10-1M,CF12M	0/-9	0/-50
CF12-1M,CF16M,CF18M,CF20-1M	0/-11	0/-50
CF20M,CF24M,CF24-1M,CF30M	0/-13	0/-50
CF30-1M,CF30-2M	0/-15	0/-50

ACCESSORIES

TYPE	 STOP PLUG	 RESIN PLUG	 NUT
CF3M/CF4M/CF5M	—	—	Attached
CF6M/CF8M/CF10M/CF10-1M	—	—	Attached
CF12M/CF12-1M/CF16M/CF18M	φ 6 Attached	φ 6 Attached	Attached
CF20M/CF20-1M/CF24M/CF24-1M/CF30M/CF30-1M/CF30-2M	φ 8 Attached	φ 8 Attached	Attached

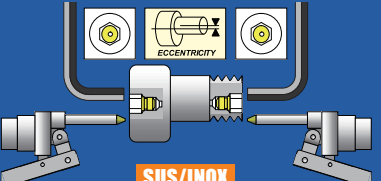
CAM FOLLOWERS

STAINLESS STEEL

SOLID ECCENTRIC TYPE

HEXAGON SOCKET ON BOTH SIDES

GREASE NIPPLE INSTALLED



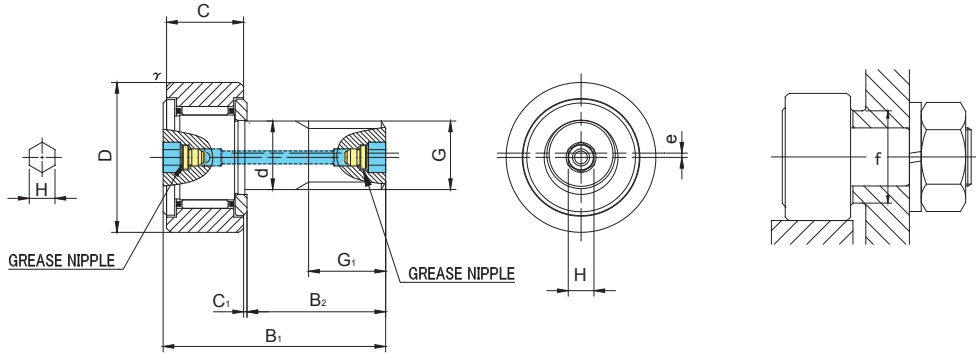
SUS/INOX



CFH..MAB



CFH..VMAB



CFH..MAB TYPE

Prepacked Grease

Stud diameter (mm)	Designation					Dimensions (mm)															Basic dynamic load rating	Basic static load rating	Largest permissible load	Limiting speed *	Track load capacity		Max tightening torque	Mass	
	Cylindrical outer ring		Crowned outer ring R500(CF12 ~ CF18) R1000(CF20 ≤)																						Cylindrical outer ring N				Crowned outer ring N
																													
h7 tolerance	Without seals	With seals	Without seals	With seals	D	C	d	G	G1	B1	B2	C1	H	rs min	e	f min	Cr N	Cor N	N	rpm	Cylindrical outer ring N	Crowned outer ring N	N·m	g (approx)					
12	0 -0.018	CFH12MAB	CFH12MUUAB	CFH12MRAB	CFH12MUURAB	30	14	12	M12×1.5	13	40	25	0.6	6	0.6	0.4	20	7 300	9 010	9 800	14 000	7 060	2 450	22	95				
		CFH12VMAB	CFH12VMUAB	CFH12VMRAB	CFH12VMUURAB													12 350	18 120	11 270	6 000								
12	0 -0.018	CFH12-1MAB	CFH12-1MUUAB	CFH12-1MRAB	CFH12-1MUURAB	32	14	12	M12×1.5	13	40	25	0.6	6	0.6	0.4	20	7 300	9 010	9 800	14 000	7 450	2 740	22	105				
		CFH12-1VMAB	CFH12-1VMUAB	CFH12-1VMRAB	CFH12-1VMUURAB													12 350	18 120	11 270	6 000								
16	0 -0.018	CFH16MAB	CFH16MUUAB	CFH16MRAB	CFH16MUURAB	35	18	16	M16×1.5	17	52	32.5	0.8	6	0.6	0.5	24	11 080	16 860	18 330	10 000	11 200	3 140	58	170				
		CFH16VMAB	CFH16VMUAB	CFH16VMRAB	CFH16VMUURAB													19 020	34 610	19 800	4 500								
18	0 -0.018	CFH18MAB	CFH18MUUAB	CFH18MRAB	CFH18MUURAB	40	20	18	M18×1.5	19	58	36.5	0.8	6	1	0.6	26	13 520	23 180	25 200	8 500	14 400	3 720	87	250				
		CFH18VMAB	CFH18VMUAB	CFH18VMRAB	CFH18VMUURAB													23 250	47 240	26 560	3 500								
20	0 -0.021	CFH20MAB	CFH20MUUAB	CFH20MRAB	CFH20MUURAB	52	24	20	M20×1.5	21	66	40.5	0.8	8	1	0.7	36	19 020	31 830	32 140	7 000	23 200	8 230	120	460				
		CFH20VMAB	CFH20VMUAB	CFH20VMRAB	CFH20VMUURAB													30 470	59 320	32 140	3 500								
20	0 -0.021	CFH20-1MAB	CFH20-1MUUAB	CFH20-1MRAB	CFH20-1MUURAB	47	24	20	M20×1.5	21	66	40.5	0.8	8	1	0.7	36	19 020	31 830	32 140	7 000	21 000	7 150	120	385				
		CFH20-1VMAB	CFH20-1VMUAB	CFH20-1VMRAB	CFH20-1VMUURAB													30 470	59 320	32 140	3 500								

CFH..MAB TYPE has oil holes (grease nipple) which are prepared in the stud head and thread side, also an oil hole is prepared outer surface of stud.

* Without seals, suitable for grease lubrication. In case of oil lubrication, up to 130% of this value shall be permissible, and 70% of this value shall apply for types with seals.

OUTER RINGS TOLERANCE (μm)

TYPE	Cylindrical outer ring	Crowned outer ring
CF12	0/-9	0/-50
CF12-1,CF16,CF18,CF20-1	0/-11	0/-50
CF20,CF24,CF24-1,CF30	0/-13	0/-50
CF30-1,CF30-2	0/-15	0/-50

ACCESSORIES

TYPE		
All types	Installed	Attached

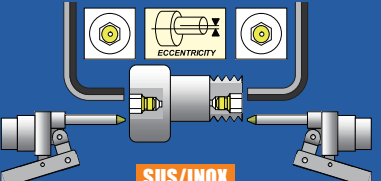
CAM FOLLOWERS

STAINLESS STEEL

SOLID ECCENTRIC TYPE

HEXAGON SOCKET ON BOTH SIDES

GREASE NIPPLE INSTALLED



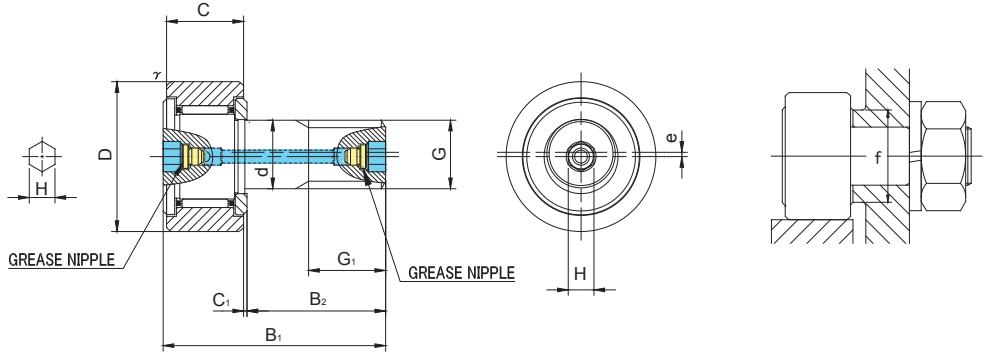
SUS/INOX



CFH..MAB



CFH..VMAB



CFH..MAB TYPE

Prepacked Grease

Stud diameter (mm)		Designation				Dimensions (mm)															Basic dynamic load rating	Basic static load rating	Largest permissible load	Limiting speed *	Track load capacity		Max tightening torque	Mass
		Cylindrical outer ring		Crowned outer ring R1000(CF24 ≤)																								
																												
h7 tolerance	Without seals	With seals	Without seals	With seals	D	C	d	G	G1	B1	B2	C1	H	rs min	e	f min	Cr N	Cor N	N	rpm	Cylindrical outer ring N	Crowned outer ring N	N·m	g (approx)				
24	0 -0.021	CFH24MAB	CFH24MUUAB	CFH24MRAB	CFH24MUURAB	62	29	24	M24×1.5	25	80	49.5	0.8	8	1	0.8	40	28 040	48 410	49 500	6 500	34 200	10 500	220	815			
		CFH24VMAB	CFH24VMUUAB	CFH24VMRAB	CFH24VMUURAB													42 820	84 650	49 500	3 000							
24	0 -0.021	CFH24-1MAB	CFH24-1MUUAB	CFH24-1MRAB	CFH24-1MUURAB	72	29	24	M24×1.5	25	80	49.5	0.8	8	1	0.8	40	28 040	48 410	49 500	6 500	39 800	12 900	220	1 140			
		CFH24-1VMAB	CFH24-1VMUUAB	CFH24-1VMRAB	CFH24-1VMUURAB													42 820	84 650	49 500	3 000							
30	0 -0.021	CFH30MAB	CFH30MUUAB	CFH30MRAB	CFH30MUURAB	80	35	30	M30×1.5	32	100	63	1	8	1	1	46	41 740	78 250	73 700	5 000	52 600	14 900	450	1 870			
		CFH30VMAB	CFH30VMUUAB	CFH30VMRAB	CFH30VMUURAB													62 210	132 530	73 700	2 200							
30	0 -0.021	CFH30-1MAB	CFH30-1MUUAB	CFH30-1MRAB	CFH30-1MUURAB	85	35	30	M30×1.5	32	100	63	1	8	1	1	46	41 740	78 250	73 700	5 000	56 000	16 100	450	2 030			
		CFH30-1VMAB	CFH30-1VMUUAB	CFH30-1VMRAB	CFH30-1VMUURAB													62 210	132 530	73 700	2 200							
30	0 -0.021	CFH30-2MAB	CFH30-2MUUAB	CFH30-2MRAB	CFH30-2MUURAB	90	35	30	M30×1.5	32	100	63	1	8	1	1	46	41 740	78 250	73 700	5 000	59 300	17 300	450	2 220			
		CFH30-2VMAB	CFH30-2VMUUAB	CFH30-2VMRAB	CFH30-2VMUURAB													62 210	132 530	73 700	2 200							

CFH..MAB TYPE has oil holes (grease nipple) which are prepared in the stud head and thread side, also an oil hole is prepared outer surface of stud.

* Without seals, suitable for grease lubrication. In case of oil lubrication, up to 130% of this value shall be permissible, and 70% of this value shall apply for types with seals.

OUTER RINGS TOLERANCE (μm)

TYPE	Cylindrical outer ring	Crowned outer ring
CF12	0/-9	0/-50
CF12-1,CF16,CF18,CF20-1	0/-11	0/-50
CF20,CF24,CF24-1,CF30	0/-13	0/-50
CF30-1,CF30-2	0/-15	0/-50

ACCESSORIES

TYPE		
All types	Installed	Attached

CAM FOLLOWERS

STAINLESS STEEL

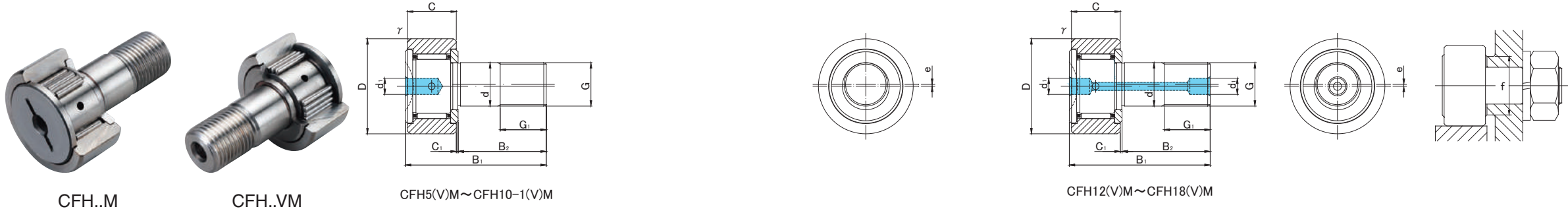
SOLID ECCENTRIC TYPE

SCREWDRIER SLOT HEAD

ECCENTRICITY

SUS/INOX

STAINLESS STEEL



CFH..M TYPE

Prepacked Grease

Stud diameter (mm)	Designation					Dimensions (mm)														Basic dynamic load rating	Basic static load rating	Largest permissible load	Limiting speed *	Track load capacity		Max tightening torque	Mass				
	Cylindrical outer ring		Crowned outer ring R250(CF5) R500(CF6 ~ CF18)																												
	h7 tolerance	Without seals	With seals	Without seals	With seals	D	C	d	G	G1	B1	B2		C1	d1	rs min	e	f min	Cr N	Cor N	N	rpm	Cylindrical outer ring N	Crowned outer ring N	N·m	g (approx)					
5	0 -0.012	CFH 5M	CFH 5MUU	CFH 5MR	CFH 5MUUR	13	9	5	M5×0.8	7.5	23	13		0.5	3.1	0.3	0.2	9.7	2 880	2 540	1 420	29 000	2 250	530	2	10.5					
		CFH 5VM	CFH 5VMUU	CFH 5VMR	CFH 5VMUUR														4 690	5 060	1 420	11 600									
6	0 -0.012	CFH 6M	CFH 6MUU	CFH 6MR	CFH 6MUUR	16	11	6	M6×1	8	28	16		0.6	4	0.3	0.25	11	3 330	3 330	2 110	25 000	3 430	1 080	3	18.5					
		CFH 6VM	CFH 6VMUU	CFH 6VMR	CFH 6VMUUR														6 400	7 840	2 110	12 000									
8	0 -0.015	CFH 8M	CFH 8MUU	CFH 8MR	CFH 8MUUR	19	11	8	M8×1.25	10	32	20		0.6	4	0.3	0.25	13	3 960	4 330	4 710	20 000	4 020	1 370	8	28.5					
		CFH 8VM	CFH 8VMUU	CFH 8VMR	CFH 8VMUUR														7 470	10 270	4 710	9 000									
10	0 -0.015	CFH10M	CFH10MUU	CFH10MR	CFH10MUUR	22	12	10	M10×1.25	12	36	23		0.6	4	0.3	0.3	15	4 950	6 310	6 860	17 000	4 700	1 670	15	45					
		CFH10VM	CFH10VMUU	CFH10VMR	CFH10VMUUR														8 740	13 340	7 450	7 500									
10	0 -0.015	CFH10-1M	CFH10-1MUU	CFH10-1MR	CFH10-1MUUR	26	12	10	M10×1.25	12	36	23		0.6	4	0.3	0.3	15	4 950	6 310	6 860	17 000	5 490	2 060	15	60					
		CFH10-1VM	CFH10-1VMUU	CFH10-1VMR	CFH10-1VMUUR														8 740	13 340	7 450	7 500									
12	0 -0.018	CFH12M	CFH12MUU	CFH12MR	CFH12MUUR	30	14	12	M12×1.5	13	40	25		0.6	6	0.6	0.4	20	7 300	9 010	9 800	14 000	7 060	2 450	22	95					
		CFH12VM	CFH12VMUU	CFH12VMR	CFH12VMUUR														12 350	18 120	11 270	6 000									
12	0 -0.018	CFH12-1M	CFH12-1MUU	CFH12-1MR	CFH12-1MUUR	32	14	12	M12×1.5	13	40	25		0.6	6	0.6	0.4	20	7 300	9 010	9 800	14 000	7 450	2 740	22	105					
		CFH12-1VM	CFH12-1VMUU	CFH12-1VMR	CFH12-1VMUUR														12 350	18 120	11 270	6 000									
16	0 -0.018	CFH16M	CFH16MUU	CFH16MR	CFH16MUUR	35	18	16	M16×1.5	17	52	32.5		0.8	6	0.6	0.5	24	11 080	16 860	18 330	10 000	11 200	3 140	58	170					
		CFH16VM	CFH16VMUU	CFH16VMR	CFH16VMUUR														19 020	34 610	19 800	4 500									
18	0 -0.018	CFH18M	CFH18MUU	CFH18MR	CFH18MUUR	40	20	18	M18×1.5	19	58	36.5		0.8	6	1	0.6	26	13 520	23 180	25 200	8 500	14 400	3 720	87	250					
		CFH18VM	CFH18VMUU	CFH18VMR	CFH18VMUUR														23 250	47 240	26 560	3 500									

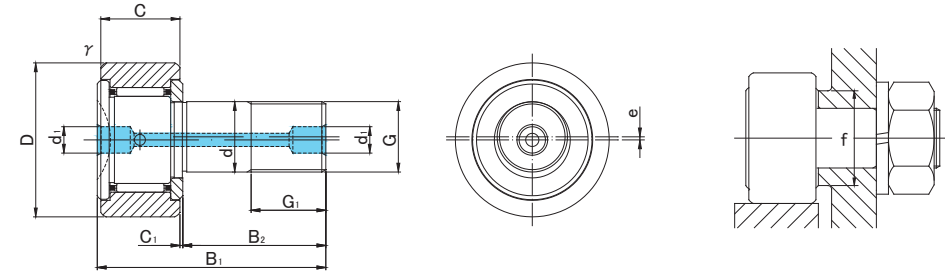
* Without seals, suitable for grease lubrication. In case of oil lubrication, up to 130% of this value shall be permissible, and 70% of this value shall apply for types with seals.

TYPE	OUTER RINGS TOLERANCE (μm)	
	Cylindrical outer ring	Crowned outer ring
CF5M,CF6M	0/-8	0/-50
CF8M,CF10M,CF10-1M,CF12M	0/-9	0/-50
CF12-1M,CF16M,CF18M,CF20-1M	0/-11	0/-50
CF20M,CF24M,CF24-1M,CF30M	0/-13	0/-50
CF30-1M,CF30-2M	0/-15	0/-50

TYPE	ACCESSORIES		
	STOP PLUG	RESIN PLUG	NUT
CF5M	—	—	Attached
CF6M/CF8M/CF10M/CF10-1M	—	φ 4 Attached	Attached
CF12M/CF12-1M/CF16M/CF18M	φ 6 Attached	φ 6 Attached	Attached
CF20M/CF20-1M/CF24M/CF24-1M/CF30M/CF30-1M/CF30-2M	φ 8 Attached	φ 8 Attached	Attached



CFH..VM



Prepacked Grease

Stud diameter (mm)		Designation				Dimensions (mm)												Basic dynamic load rating	Basic static load rating	Largest permissible load	Limiting speed [*]	Track load capacity		Max tightening torque	Mass											
		Cylindrical outer ring		Crowned outer ring R1000(CF20 ≤)																		Cylindrical outer ring N	Crowned outer ring N													
																																				
	h7 tolerance	Without seals	With seals	Without seals	With seals	D	C	d	G	G1	B1	B2	C1	d1	r _s min	e	f min	Cr N	Cor N	N	rpm	Cylindrical outer ring N	Crowned outer ring N	N·m	g (approx)											
20	0 -0.021	CFH20M	CFH20MUU	CFH20MR	CFH20MUUR	52	24	20	M20×1.5	21	66	40.5	0.8	8	1	0.7	36	19 020	31 830	32 140	7 000	23 200	8 230	120	460											
		CFH20VM	CFH20VMUU	CFH20VMR	CFH20VMUUR													30 470	59 320	32 140	3 500															
20	0 -0.021	CFH20-1M	CFH20-1MUU	CFH20-1MR	CFH20-1MUUR	47	24	20	M20×1.5	21	66	40.5	0.8	8	1	0.7	36	19 020	31 830	32 140	7 000	21 000	7 150	120	385											
		CFH20-1VM	CFH20-1VMUU	CFH20-1VMR	CFH20-1VMUUR													30 470	59 320	32 140	3 500															
24	0 -0.021	CFH24M	CFH24MUU	CFH24MR	CFH24MUUR	62	29	24	M24×1.5	25	80	49.5	0.8	8	1	0.8	40	28 040	48 410	49 500	6 500	34 200	10 500	220	815											
		CFH24VM	CFH24VMUU	CFH24VMR	CFH24VMUUR													42 820	84 650	49 500	3 000															
24	0 -0.021	CFH24-1M	CFH24-1MUU	CFH24-1MR	CFH24-1MUUR	72	29	24	M24×1.5	25	80	49.5	0.8	8	1	0.8	40	28 040	48 410	49 500	6 500	39 800	12 900	220	1 140											
		CFH24-1VM	CFH24-1VMUU	CFH24-1VMR	CFH24-1VMUUR													42 820	84 650	49 500	3 000															
30	0 -0.021	CFH30M	CFH30MUU	CFH30MR	CFH30MUUR	80	35	30	M30×1.5	32	100	63	1	8	1	1	46	41 740	78 250	73 700	5 000	52 600	14 900	450	1 870											
		CFH30VM	CFH30VMUU	CFH30VMR	CFH30VMUUR													62 210	132 530	73 700	2 200															
30	0 -0.021	CFH30-1M	CFH30-1MUU	CFH30-1MR	CFH30-1MUUR	85	35	30	M30×1.5	32	100	63	1	8	1	1	46	41 740	78 250	73 700	5 000	56 000	16 100	450	2 030											
		CFH30-1VM	CFH30-1VMUU	CFH30-1VMR	CFH30-1VMUUR													62 210	132 530	73 700	2 200															
30	0 -0.021	CFH30-2M	CFH30-2MUU	CFH30-2MR	CFH30-2MUUR	90	35	30	M30×1.5	32	100	63	1	8	1	1	46	41 740	78 250	73 700	5 000	59 300	17 300	450	2 220											
		CFH30-2VM	CFH30-2VMUU	CFH30-2VMR	CFH30-2VMUUR													62 210	132 530	73 700	2 200															

OUTER RINGS TOLERANCE (μm)

TYPE	Cylindrical outer ring	Crowned outer ring
CF5M,CF6M	0/-8	0/-50
CF8M,CF10M,CF10-1M,CF12M	0/-9	0/-50
CF12-1M,CF16M,CF18M,CF20-1M	0/-11	0/-50
CF20M,CF24M,CF24-1M,CF30M	0/-13	0/-50
CF30-1M,CF30-2M	0/-15	0/-50

ACCESSORIES

TYPE			
	STOP PLUG	RESIN PLUG	NUT
CF5M	—	—	Attached
CF6M/CF8M/CF10M/CF10-1M	—	φ 4 Attached	Attached
CF12M/CF12-1M/CF16M/CF18M	φ 6 Attached	φ 6 Attached	Attached
CF20M/CF20-1M/CF24M/CF24-1M/CF30M/CF30-1M/CF30-2M	φ 8 Attached	φ 8 Attached	Attached

CAM FOLLOWERS

STAINLESS STEEL

SOLID ECCENTRIC TYPE

HEXAGON SOCKET ON THREAD SIDE

SCREWDRIVER SLOT HEAD

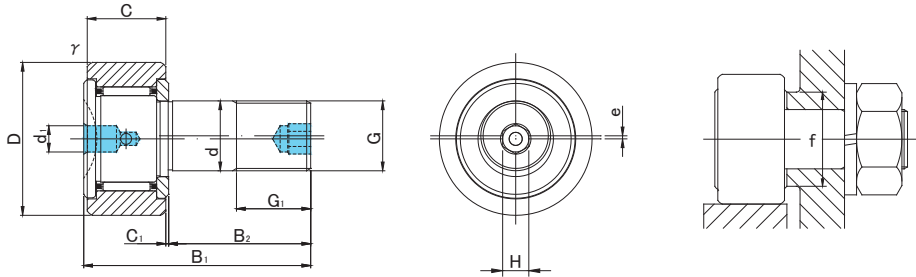
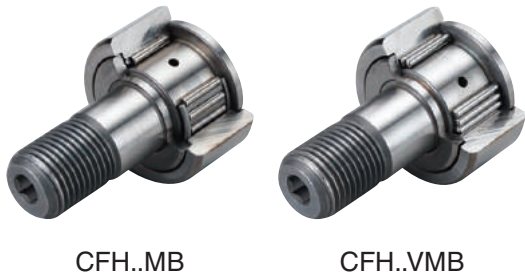
ECCENTRICITY

HEXAGON SOCKET ON THREAD SIDE

SCREWDRIVER SLOT HEAD

SUS/INOX

STAINLESS STEEL



CFH..MB TYPE

Prepacked Grease

Stud diameter (mm)		Designation				Dimensions (mm)															Basic dynamic load rating	Basic static load rating	Largest permissible load	Limiting speed *	Track load capacity		Max tightening torque	Mass																																																																																																																																																																																																																																																																																																																																													
		Cylindrical outer ring		Crowned outer ring R500(CF12 ~ CF18) R1000(CF20 ≤)																																																																																																																																																																																																																																																																																																																																																																					
																																																																																																																																																																																																																																																																																																																																																																									

* Without seals, suitable for grease lubrication. In case of oil lubrication, up to 130% of this value shall be permissible, and 70% of this value shall apply for types with seals.

OUTER RINGS TOLERANCE (μm)		
TYPE	Cylindrical outer ring	Crowned outer ring
CF12M	0/-9	0/-50
CF12-1M,CF16M,CF18M,CF20-1M	0/-11	0/-50
CF20M,CF24M,CF24-1M,CF30M	0/-13	0/-50
CF30-1M,CF30-2M	0/-15	0/-50

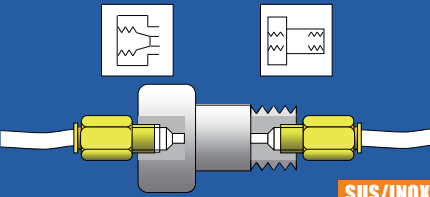
ACCESSORIES			
TYPE			
CF12M/CF12-1M/CF16M/CF18M	φ 6 Attached	φ 6 Attached	Attached
CF20M/CF20-1M/CF24M/CF24-1M/CF30M/CF30-1M/CF30-2M	φ 8 Attached	φ 8 Attached	Attached

CAM FOLLOWERS

STAINLESS STEEL

TAP HOLE FOR PIPING

SCREWDRIVER SLOT HEAD



SUS/INOX

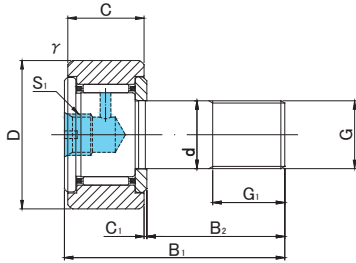
STAINLESS STEEL



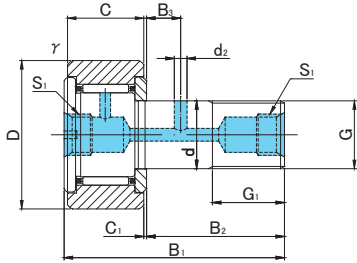
CFT..M



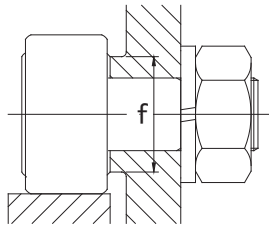
CFT..VM



CFT6(V)M~CFT10-1(V)M



CFT12(V)M~CFT18(V)M



CFT..M TYPE

Prepacked Grease

Stud diameter (mm)	Designation					Dimensions (mm)															Basic dynamic load rating	Basic static load rating	Largest permissible load	Limiting speed *	Track load capacity		Max tightening torque	Mass
	Cylindrical outer ring		Crowned outer ring R500(CF6 ~ CF18)																									
																												
h7 tolerance	Without seals	With seals	Without seals	With seals	D	C	d	G	G1	B1	B2	B3	C1	S1	d2	rs min	f min	Cr N	Cor N	N	rpm	Cylindrical outer ring N	Crowned outer ring N	N·m	g (approx)			
6	0 -0.012	CFT 6M	CFT 6MUU	CFT 6MR	CFT 6MUUR	16	11	6	M6×1	8	28	16	—	0.6	M6×0.75	—	0.3	11	3 330	3 330	2 110	25 000	3 430	1 080	3	18.5		
		CFT 6VM	CFT 6VMUU	CFT 6VMR	CFT 6VMUUR														6 400	7 840	2 110	12 000						
8	0 -0.015	CFT 8M	CFT 8MUU	CFT 8MR	CFT 8MUUR	19	11	8	M8×1.25	10	32	20	—	0.6	M6×0.75	—	0.3	13	3 960	4 330	4 710	20 000	4 020	1 370	8	28.5		
		CFT 8VM	CFT 8VMUU	CFT 8VMR	CFT 8VMUUR														7 470	10 270	4 710	9 000						
10	0 -0.015	CFT10M	CFT10MUU	CFT10MR	CFT10MUUR	22	12	10	M10×1.25	12	36	23	—	0.6	M6×0.75	—	0.3	15	4 950	6 310	6 860	17 000	4 700	1 670	15	45		
		CFT10VM	CFT10VMUU	CFT10VMR	CFT10VMUUR														8 740	13 340	7 450	7 500						
10	0 -0.015	CFT10-1M	CFT10-1MUU	CFT10-1MR	CFT10-1MUUR	26	12	10	M10×1.25	12	36	23	—	0.6	M6×0.75	—	0.3	15	4 950	6 310	6 860	17 000	5 490	2 060	15	60		
		CFT10-1VM	CFT10-1VMUU	CFT10-1VMR	CFT10-1VMUUR														8 740	13 340	7 450	7 500						
12	0 -0.018	CFT12M	CFT12MUU	CFT12MR	CFT12MUUR	30	14	12	M12×1.5	13	40	25	6	0.6	M6×0.75	3	0.6	20	7 300	9 010	7 840	14 000	7 060	2 450	22	95		
		CFT12VM	CFT12VMUU	CFT12VMR	CFT12VMUUR														12 350	18 120	9 010	6 000						
12	0 -0.018	CFT12-1M	CFT12-1MUU	CFT12-1MR	CFT12-1MUUR	32	14	12	M12×1.5	13	40	25	6	0.6	M6×0.75	3	0.6	20	7 300	9 010	7 840	14 000	7 450	2 740	22	105		
		CFT12-1VM	CFT12-1VMUU	CFT12-1VMR	CFT12-1VMUUR														12 350	18 120	9 010	6 000						
16	0 -0.018	CFT16M	CFT16MUU	CFT16MR	CFT16MUUR	35	18	16	M16×1.5	17	52	32.5	8	0.8	Rc1/8	3	0.6	24	11 080	16 860	14 660	10 000	11 200	3 140	58	170		
		CFT16VM	CFT16VMUU	CFT16VMR	CFT16VMUUR														19 020	34 610	15 840	4 500						
18	0 -0.018	CFT18M	CFT18MUU	CFT18MR	CFT18MUUR	40	20	18	M18×1.5	19	58	36.5	8	0.8	Rc1/8	3	1	26	13 520	23 180	20 160	8 500	14 400	3 720	87	250		
		CFT18VM	CFT18VMUU	CFT18VMR	CFT18VMUUR														23 250	47 240	21 240	3 500						

* Without seals, suitable for grease lubrication. In case of oil lubrication, up to 130% of this value shall be permissible, and 70% of this value shall apply for types with seals.

OUTER RINGS TOLERANCE (μm)

TYPE	Cylindrical outer ring	Crowned outer ring
CF6M	0/-8	0/-50
CF8M,CF10M,CF10-1M,CF12M	0/-9	0/-50
CF12-1M,CF16M,CF18M,CF20-1M	0/-11	0/-50
CF20M,CF24M,CF24-1M,CF30M	0/-13	0/-50
CF30-1M,CF30-2M	0/-15	0/-50

ACCESSORIES

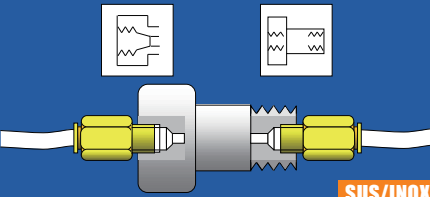
TYPE	
All types	NUT Attached

CAM FOLLOWERS

STAINLESS STEEL

TAP HOLE FOR PIPING

SCREWDRIER SLOT HEAD



SUS/INOX

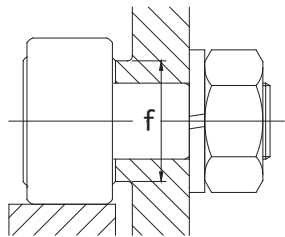
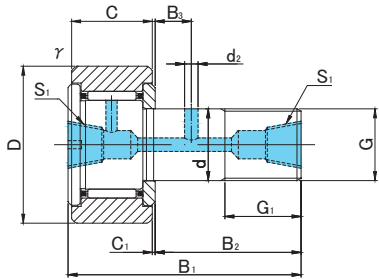
STAINLESS STEEL



CFT..M



CFT..VM



CFT..M TYPE

Prepacked Grease

Stud diameter (mm)		Designation				Dimensions (mm)															Basic dynamic load rating	Basic static load rating	Largest permissible load	Limiting speed *	Track load capacity		Max tightening torque	Mass
		Cylindrical outer ring		Crowned outer ring R1000(CF20 ≤)																								
																												
h7 tolerance	Without seals	With seals	Without seals	With seals	D	C	d	G	G1	B1	B2	B3	C1	S1	d2	rs min	f min	Cr N	Cor N	N	rpm	Cylindrical outer ring N	Crowned outer ring N	N·m	g (approx)			
20	0 -0.021	CFT20M	CFT20MUU	CFT20MR	CFT20MUUR	52	24	20	M20×1.5	21	66	40.5	9	0.8	Rc1/8	4	1	36	19 020	31 830	25 710	7 000	23 200	8 230	120	460		
		CFT20VM	CFT20VMUU	CFT20VMR	CFT20VMUUR														30 470	59 320	25 710	3 500						
20	0 -0.021	CFT20-1M	CFT20-1MUU	CFT20-1MR	CFT20-1MUUR	47	24	20	M20×1.5	21	66	40.5	9	0.8	Rc1/8	4	1	36	19 020	31 830	25 710	7 000	21 000	7 150	120	385		
		CFT20-1VM	CFT20-1VMUU	CFT20-1VMR	CFT20-1VMUUR														30 470	59 320	25 710	3 500						
24	0 -0.021	CFT24M	CFT24MUU	CFT24MR	CFT24MUUR	62	29	24	M24×1.5	25	80	49.5	11	0.8	Rc1/8	4	1	40	28 040	48 410	39 600	6 500	34 200	10 500	220	815		
		CFT24VM	CFT24VMUU	CFT24VMR	CFT24VMUUR														42 820	84 650	39 600	3 000						
24	0 -0.021	CFT24-1M	CFT24-1MUU	CFT24-1MR	CFT24-1MUUR	72	29	24	M24×1.5	25	80	49.5	11	0.8	Rc1/8	4	1	40	28 040	48 410	39 600	6 500	39 800	12 900	220	1 140		
		CFT24-1VM	CFT24-1VMUU	CFT24-1VMR	CFT24-1VMUUR														42 820	84 650	39 600	3 000						
30	0 -0.021	CFT30M	CFT30MUU	CFT30MR	CFT30MUUR	80	35	30	M30×1.5	32	100	63	15	1	Rc1/8	4	1	46	41 740	78 250	58 960	5 000	52 600	14 900	450	1 870		
		CFT30VM	CFT30VMUU	CFT30VMR	CFT30VMUUR														62 210	132 530	58 960	2 200						
30	0 -0.021	CFT30-1M	CFT30-1MUU	CFT30-1MR	CFT30-1MUUR	85	35	30	M30×1.5	32	100	63	15	1	Rc1/8	4	1	46	41 740	78 250	58 960	5 000	56 000	16 100	450	2 030		
		CFT30-1VM	CFT30-1VMUU	CFT30-1VMR	CFT30-1VMUUR														62 210	132 530	58 960	2 200						
30	0 -0.021	CFT30-2M	CFT30-2MUU	CFT30-2MR	CFT30-2MUUR	90	35	30	M30×1.5	32	100	63	15	1	Rc1/8	4	1	46	41 740	78 250	58 960	5 000	59 300	17 300	450	2 220		
		CFT30-2VM	CFT30-2VMUU	CFT30-2VMR	CFT30-2VMUUR														62 210	132 530	58 960	2 200						

* Without seals, suitable for grease lubrication. In case of oil lubrication, up to 130% of this value shall be permissible, and 70% of this value shall apply for types with seals.

TYPE	OUTER RINGS TOLERANCE (μm)	
	Cylindrical outer ring	Crowned outer ring
CF6M	0/-8	0/-50
CF8M,CF10M,CF10-1M,CF12M	0/-9	0/-50
CF12-1M,CF16M,CF18M,CF20-1M	0/-11	0/-50
CF20M,CF24M,CF24-1M,CF30M	0/-13	0/-50
CF30-1M,CF30-2M	0/-15	0/-50

ACCESSORIES	
TYPE	
All types	NUT Attached

CAM FOLLOWERS
STAINLESS STEEL
TAP HOLE FOR PIPING
HEXAGON SOCKET ON STUD HEAD

SUS/INOX

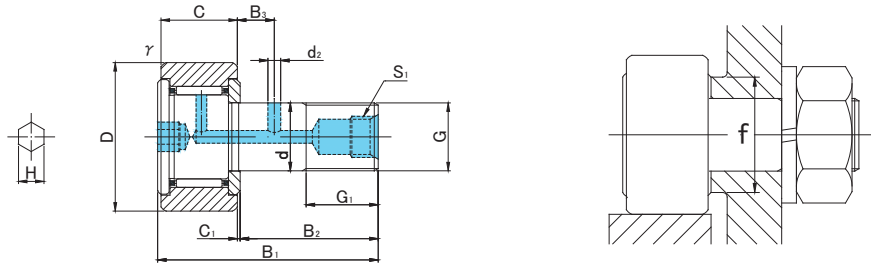
STAINLESS STEEL



CFT..MA

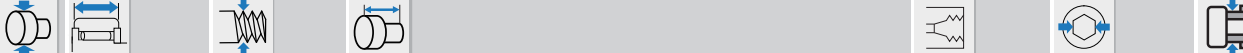


CFT..VMA



CFT..MA TYPE

Prepacked Grease

Stud diameter (mm)	Designation					Dimensions (mm)																Basic dynamic load rating	Basic static load rating	Largest permissible load	Limiting speed * 	Track load capacity		Max tightening torque 	Mass 																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	Cylindrical outer ring		Crowned outer ring R500(CF12 ~ CF18) R1000(CF20 ≤)																							Cr N	Cor N			N	rpm	Cylindrical outer ring N	Crowned outer ring N	N·m	g (approx)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
						D	C	d	G	G1	B1	B2	B3	C1	S1	d2	H	rs min	f min																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
	h7 tolerance	Without seals	With seals	Without seals	With seals																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											

* Without seals, suitable for grease lubrication. In case of oil lubrication, up to 130% of this value shall be permissible, and 70% of this value shall apply for types with seals.

OUTER RINGS TOLERANCE (μm)

TYPE	Cylindrical outer ring	Crowned outer ring
CF12M	0/-9	0/-50
CF12-1M,CF16M,CF18M,CF20-1M	0/-11	0/-50
CF20M,CF24M,CF24-1M,CF30M	0/-13	0/-50
CF30-1M,CF30-2M	0/-15	0/-50

ACCESSORIES

TYPE	
All types	Attached

ROLLER FOLLOWERS

STAINLESS STEEL



Type and Part Code

Type	Applicable axis diameter	Feature	Part Code
 RNAS..M (Separable type)	φ 7 ~ φ 60	NAST type without inner ring.	<u>RNAS</u> ↑ Type <u>15</u> ↑ Bore diameter code <u>M</u> ↑ Stainless steel <u>R</u> ↑ R: Crowned outer ring None: Cylindrical outer rings
 NAST..M (Separable type)	φ 6 ~ φ 50	Thick wall outer ring, inner ring. Separable bearing with combined needle roller with precision cage.	<u>NAST</u> ↑ Type <u>15</u> ↑ Bore diameter code <u>M</u> ↑ Stainless steel <u>R</u> ↑ R: Crowned outer ring None: Cylindrical outer rings
 NAST..MZZ (Separable type)	φ 6 ~ φ 50	Separable bearing in which labyrinth seal is formed with combined side plate at both sides of inner ring of NAST type. (NAST-ZZUU type comes with seal)	<u>NAST</u> ↑ Type <u>15</u> ↑ Bore diameter code <u>M</u> ↑ Stainless steel <u>ZZ</u> ↑ ZZ: With shield <u>UU</u> ↑ UU: With seal None : With shield <u>R</u> ↑ R: Crowned outer ring X: Cylindrical outer ring
 NART..MR (Non-separable type)	φ 5 ~ φ 50	Non-separable bearing with fixed side plate at inner ring. Mitigate eccentric load with spherical shape at outer diameter of outer ring (code R). (NART-UUR type comes with seal)	<u>NART</u> ↑ Type <u>15</u> ↑ Bore diameter code <u>M</u> ↑ Stainless steel <u>UU</u> ↑ UU: With seal None : With shield <u>V</u> ↑ V: Full complement None : With cage <u>R</u> ↑ R: Crowned outer ring X: Cylindrical outer ring

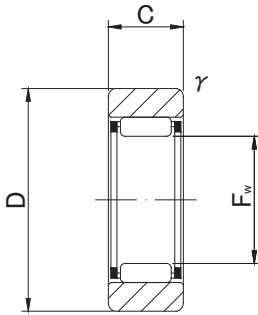
ROLLER FOLLOWERS
STAINLESS STEEL
SEPARABLE
WITHOUT INNER RING



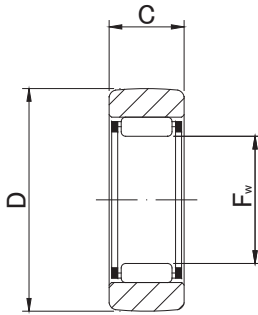
SUS/INOX



RNAS...M



RNAS...M



RNAS...MR

STAINLESS STEEL

RNAS...M TYPE

Prepacked Grease

Shaft Diameter (mm)	Designation		Dimensions (mm)				Basic dynamic load rating	Basic static load rating	Track load capacity		Limiting speed *	Mass
	Cylindrical outer ring	Crowned outer ring (R500)										
			Fw	D	C	rs min	Cr N	Cor N	Cylindrical outer ring N	Crowned outer ring N	rpm	g (approx)
7	RNAS 5M	RNAS 5MR	7 +0.022 +0.013	16	7.8	0.3	2 520	2 190	2 350	1 080	30 000	8.9
10	RNAS 6M	RNAS 6MR	10 +0.027 +0.016	19	9.8	0.3	3 790	4 180	3 530	1 370	20 000	13.9
12	RNAS 8M	RNAS 8MR	12 +0.027 +0.016	24	9.8	0.6	5 220	5 410	4 020	1 860	17 000	23.5
14	RNAS10M	RNAS10MR	14 +0.027 +0.016	30	11.8	1	8 920	8 890	5 590	2 450	15 000	42.5
16	RNAS12M	RNAS12MR	16 +0.027 +0.016	32	11.8	1	9 560	10 020	5 980	2 740	13 000	49.5
20	RNAS15M	RNAS15MR	20 +0.033 +0.020	35	11.8	1	11 310	13 150	6 570	3 140	10 000	50
22	RNAS17M	RNAS17MR	22 +0.033 +0.020	40	15.8	1	16 000	19 220	10 900	3 720	9 500	90
25	RNAS20M	RNAS20MR	25 +0.033 +0.020	47	15.8	1	17 660	22 540	12 700	4 610	8 500	135
30	RNAS25M	RNAS25MR	30 +0.033 +0.020	52	15.8	1	19 040	26 120	14 100	5 290	7 000	152
38	RNAS30M	RNAS30MR	38 +0.041 +0.025	62	19.8	1	27 870	41 760	22 100	6 660	5 500	255
42	RNAS35M	RNAS35MR	42 +0.041 +0.025	72	19.8	1	29 620	46 550	25 700	8 130	5 000	375
50	RNAS40M	RNAS40MR	50 +0.041 +0.025	80	19.8	1.5	32 840	56 210	26 900	9 310	4 000	420
55	RNAS45M	RNAS45MR	55 +0.049 +0.030	85	19.8	1.5	34 130	61 080	28 500	10 100	4 000	460
60	RNAS50M	RNAS50MR	60 +0.049 +0.030	90	19.8	1.5	35 600	66 050	30 200	11 000	3 500	500

* Suitable for grease lubrication. In case of oil lubrication, up to 130% of this value shall be permissible.

OUTER RINGS TOLERANCE

TYPE	Cylindrical outer ring	Crowned outer ring
RNAS5M	0/-8	0/-50
RNAS6M,RNAS8M,RNAS10M	0/-9	0/-50
RNAS12M,RNAS15M,RNAS17M,RNAS20M	0/-11	0/-50
RNAS25M,RNAS30M,RNAS35M,RNAS40M	0/-13	0/-50
RNAS45M,RNAS50M	0/-15	0/-50

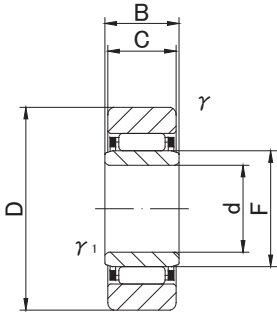
ROLLER FOLLOWERS
STAINLESS STEEL
SEPARABLE WITH INNER RING

SUS/INOX

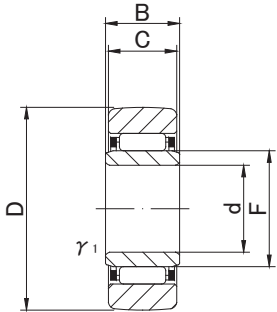
STAINLESS STEEL



NAST..M



NAST..M



NAST..MR

NAST..M TYPE

Prepacked Grease

Shaft Diameter (mm)	Designation		Dimensions (mm)							Basic dynamic load rating	Basic static load rating	Track load capacity		Limiting speed *	Mass
	Cylindrical outer ring	Crowned outer ring (R500)													
			d	D	B	C	r's min	r'1s min	F	Cr N	Cor N	Cylindrical outer ring N	Crowned outer ring N	rpm	g (approx)
6	NAST 6M	NAST 6MR	6 ⁰ _{-0.008}	19	10	9.8	0.3	0.3	10	3 790	4 180	3 530	1 370	20 000	17.8
8	NAST 8M	NAST 8MR	8 ⁰ _{-0.008}	24	10	9.8	0.6	0.3	12	5 220	5 410	4 020	1 860	17 000	28
10	NAST10M	NAST10MR	10 ⁰ _{-0.008}	30	12	11.8	1	0.3	14	8 920	8 890	5 590	2 450	15 000	50
12	NAST12M	NAST12MR	12 ⁰ _{-0.008}	32	12	11.8	1	0.3	16	9 560	10 020	5 980	2 740	13 000	58
15	NAST15M	NAST15MR	15 ⁰ _{-0.008}	35	12	11.8	1	0.3	20	11 310	13 150	6 570	3 140	10 000	62
17	NAST17M	NAST17MR	17 ⁰ _{-0.010}	40	16	15.8	1	0.3	22	16 000	19 220	10 900	3 720	9 500	110
20	NAST20M	NAST20MR	20 ⁰ _{-0.010}	47	16	15.8	1	0.3	25	17 660	22 540	12 700	4 610	8 500	155
25	NAST25M	NAST25MR	25 ⁰ _{-0.010}	52	16	15.8	1	0.3	30	19 040	26 120	14 100	5 290	7 000	180
30	NAST30M	NAST30MR	30 ⁰ _{-0.010}	62	20	19.8	1	0.6	38	27 870	41 760	22 100	6 660	5 500	320
35	NAST35M	NAST35MR	35 ⁰ _{-0.012}	72	20	19.8	1	0.6	42	29 620	46 550	25 700	8 130	5 000	440
40	NAST40M	NAST40MR	40 ⁰ _{-0.012}	80	20	19.8	1.5	1	50	32 840	56 210	26 900	9 310	4 000	530
45	NAST45M	NAST45MR	45 ⁰ _{-0.012}	85	20	19.8	1.5	1	55	34 130	61 080	28 500	10 100	4 000	580
50	NAST50M	NAST50MR	50 ⁰ _{-0.012}	90	20	19.8	1.5	1	60	35 600	66 050	30 200	11 000	3 500	635

* Suitable for grease lubrication. In case of oil lubrication, up to 130% of this value shall be permissible.

TYPE	Cylindrical outer ring	Crowned outer ring
NAST6M,NAST8M,NAST10M	0/-9	0/-50
NAST12M,NAST15M,NAST17M,NAST20M	0/-11	0/-50
NAST25M,NAST30M,NAST35M,NAST40M	0/-13	0/-50
NAST45M,NAST50M	0/-15	0/-50

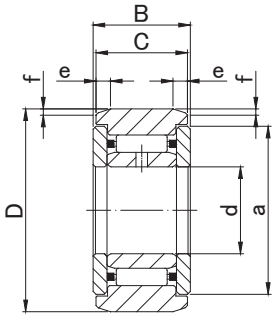
ROLLER FOLLOWERS
STAINLESS STEEL
SEPARABLE WITH INNER RING WITH SHIELD



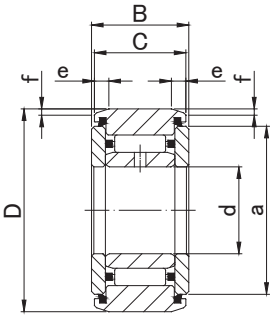
SUS/INOXSUS/INOX



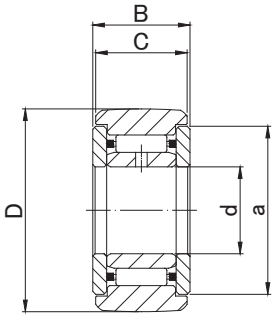
NAST..MZZ



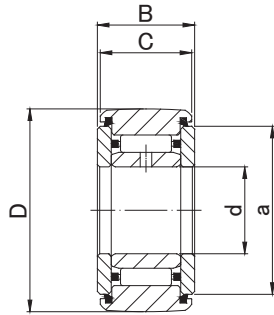
NAST..MZZ



NAST..MZZUU



NAST..MZZR



NAST..MZZUUR

STAINLESS STEEL

NAST..MZZ TYPE

Prepacked Grease

Shaft Diameter (mm)	Designation				Dimensions (mm)							Basic dynamic load rating	Basic static load rating	Track load capacity		Limiting speed*	Mass
	Cylindrical outer ring		Crowned outer ring (R500)		   												
	Without seals	With seals	Without seals	With seals	d	D	B	C	a	e	f	Cr N	Cor N	Cylindrical outer ring N	Crowned outer ring N	rpm	g (approx)
6	NAST 6MZZ	NAST 6MZZUU	NAST 6MZZR	NAST 6MZZUUR	6 ⁰ _{-0.008}	19	14	13.8	14	2.5	0.8	3 790	4 180	3 530	1 370	20 000	24.5
8	NAST 8MZZ	NAST 8MZZUU	NAST 8MZZR	NAST 8MZZUUR	8 ⁰ _{-0.008}	24	14	13.8	17.5	2.5	0.8	5 220	5 410	4 510	1 860	17 000	39
10	NAST10MZZ	NAST10MZZUU	NAST10MZZR	NAST10MZZUUR	10 ⁰ _{-0.008}	30	16	15.8	23.5	2.5	0.8	8 920	8 890	6 860	2 450	15 000	65
12	NAST12MZZ	NAST12MZZUU	NAST12MZZR	NAST12MZZUUR	12 ⁰ _{-0.008}	32	16	15.8	25.5	2.5	0.8	9 560	10 020	7 350	2 740	13 000	75
15	NAST15MZZ	NAST15MZZUU	NAST15MZZR	NAST15MZZUUR	15 ⁰ _{-0.008}	35	16	15.8	29	2.5	0.8	11 310	13 150	8 040	3 140	10 000	83
17	NAST17MZZ	NAST17MZZUU	NAST17MZZR	NAST17MZZUUR	17 ⁰ _{-0.010}	40	20	19.8	32.5	3	1	16 000	19 220	11 800	3 720	9 500	135
20	NAST20MZZ	NAST20MZZUU	NAST20MZZR	NAST20MZZUUR	20 ⁰ _{-0.010}	47	20	19.8	38	3	1	17 660	22 540	13 800	4 610	8 500	195
25	NAST25MZZ	NAST25MZZUU	NAST25MZZR	NAST25MZZUUR	25 ⁰ _{-0.010}	52	20	19.8	43	3	1	19 040	26 120	15 300	5 290	7 000	225
30	NAST30MZZ	NAST30MZZUU	NAST30MZZR	NAST30MZZUUR	30 ⁰ _{-0.010}	62	25	24.8	50.5	4	1.2	27 870	41 760	22 100	6 660	5 500	400
35	NAST35MZZ	NAST35MZZUU	NAST35MZZR	NAST35MZZUUR	35 ⁰ _{-0.012}	72	25	24.8	53.5	4	1.2	29 620	46 550	25 700	8 130	5 000	550
40	NAST40MZZ	NAST40MZZUU	NAST40MZZR	NAST40MZZUUR	40 ⁰ _{-0.012}	80	26	25.8	61.5	4	1.2	32 840	56 210	30 300	9 310	4 000	710
45	NAST45MZZ	NAST45MZZUU	NAST45MZZR	NAST45MZZUUR	45 ⁰ _{-0.012}	85	26	25.8	66.5	4	1.2	34 130	61 080	31 100	10 100	4 000	760
50	NAST50MZZ	NAST50MZZUU	NAST50MZZR	NAST50MZZUUR	50 ⁰ _{-0.012}	90	26	25.8	76	4	1.2	35 600	66 050	34 000	11 000	3 500	830

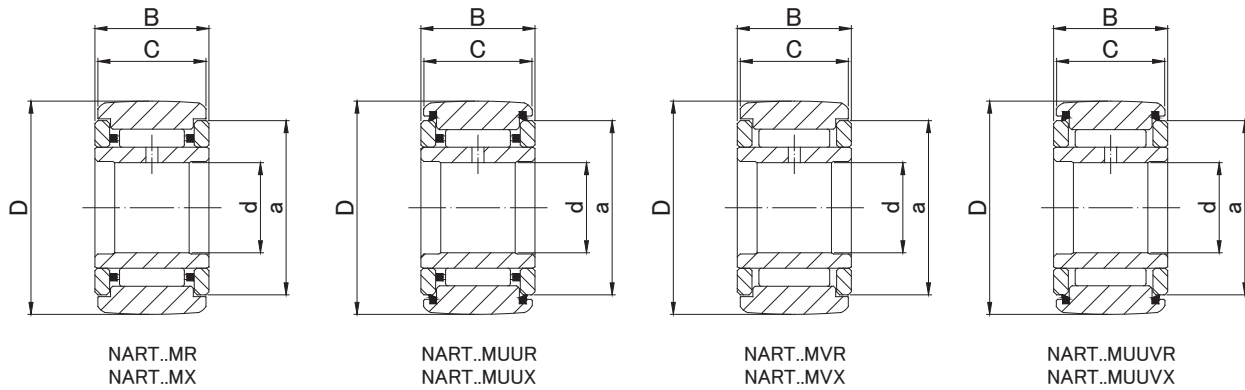
* Without seals, suitable for grease lubrication. In case of oil lubrication, up to 130% of this value shall be permissible, and 70% of this value shall apply for types with seals.

TYPE	OUTER RINGS TOLERANCE (Outside diameter) (μm)	
	Cylindrical outer ring	Crowned outer ring
NAST6M,NAST8M,NAST10M	0/-9	0/-50
NAST12M,NAST15M,NAST17M,NAST20M	0/-11	0/-50
NAST25M,NAST30M,NAST35M,NAST40M	0/-13	0/-50
NAST45M,NAST50M	0/-15	0/-50

ROLLER FOLLOWERS
STAINLESS STEEL
NON SEPARABLE WITH INNER RING



SUS/INOXSUS/INOX



NART.. M TYPE

Prepacked Grease

Shaft Diameter (mm)	Designation				Dimensions (mm)					Basic dynamic load rating	Basic static load rating	Track load capacity		Limiting speed *	Mass
	Crowned outer ring R500(≤ NART17R) R1000(NART20R ≤)		Cylindrical outer ring												
															
	Without seals	With seals	Without seals	With seals	d	D	B	C	a	Cr N	Cor N	Crowned outer ring N	Cylindrical outer ring N	rpm	g (approx)
5	NART 5MR NART 5MVR	NART 5MUUR NART 5MUUVR	NART 5MX NART 5MVX	NART 5MUUX NART 5MUUVX	5 ⁰ _{-0.008}	16	12	11	12	3 330 6 210	3 420 7 670	1 080 1 080	3 430 3 430	25 000 8 500	14.5 15.1
6	NART 6MR NART 6MVR	NART 6MUUR NART 6MUUVR	NART 6MX NART 6MVX	NART 6MUUX NART 6MUUVX	6 ⁰ _{-0.008}	19	12	11	14	3 860 7 020	4 320 9 470	1 370 1 370	4 020 4 020	20 000 7 000	20.5 21.5
8	NART 8MR NART 8MVR	NART 8MUUR NART 8MUUVR	NART 8MX NART 8MVX	NART 8MUUX NART 8MUUVX	8 ⁰ _{-0.008}	24	15	14	17.5	6 070 10 850	6 710 14 350	1 860 1 860	5 950 5 950	17 000 5 500	41.5 42.5
10	NART10MR NART10MVR	NART10MUUR NART10MUUVR	NART10MX NART10MVX	NART10MUUX NART10MUUVX	10 ⁰ _{-0.008}	30	15	14	23.5	7 910 14 350	7 630 16 650	2 450 2 450	7 060 7 060	15 000 5 000	64.5 66.5
12	NART12MR NART12MVR	NART12MUUR NART12MUUVR	NART12MX NART12MVX	NART12MUUX NART12MUUVX	12 ⁰ _{-0.008}	32	15	14	25.5	8 370 15 450	8 460 18 860	2 740 2 740	7 450 7 450	13 000 4 500	71 73
15	NART15MR NART15MVR	NART15MUUR NART15MUUVR	NART15MX NART15MVX	NART15MUUX NART15MUUVX	15 ⁰ _{-0.008}	35	19	18	29	13 240 23 090	16 190 33 480	3 140 3 140	11 200 11 200	10 000 3 500	102 106
17	NART17MR NART17MVR	NART17MUUR NART17MUUVR	NART17MX NART17MVX	NART17MUUX NART17MUUVX	17 ⁰ _{-0.008}	40	21	20	32.5	17 110 29 440	20 700 42 500	3 720 3 720	14 400 14 400	9 500 3 000	149 155
20	NART20MR NART20MVR	NART20MUUR NART20MUUVR	NART20MX NART20MVX	NART20MUUX NART20MUUVX	20 ⁰ _{-0.010}	47	25	24	38	22 170 38 360	30 080 61 910	7 150 7 150	21 000 21 000	8 000 2 500	250 255
25	NART25MR NART25MVR	NART25MUUR NART25MUUVR	NART25MX NART25MVX	NART25MUUX NART25MUUVX	25 ⁰ _{-0.010}	52	25	24	43	23 730 41 860	34 500 72 680	8 230 8 230	23 200 23 200	7 000 2 500	285 295
30	NART30MR NART30MVR	NART30MUUR NART30MUUVR	NART30MX NART30MVX	NART30MUUX NART30MUUVX	30 ⁰ _{-0.010}	62	29	28	50.5	33 300 55 010	52 340 101 560	10 500 10 500	33 000 33 000	5 500 1 800	470 485
35	NART35MR NART35MVR	NART35MUUR NART35MUUVR	NART35MX NART35MVX	NART35MUUX NART35MUUVX	35 ⁰ _{-0.012}	72	29	28	53.5	35 140 57 960	57 770 111 780	12 900 12 900	38 000 38 000	5 000 1 700	640 655
40	NART40MR NART40MVR	NART40MUUR NART40MUUVR	NART40MX NART40MVX	NART40MUUX NART40MUUVX	40 ⁰ _{-0.012}	80	32	30	61.5	42 500 70 100	77 920 151 060	14 900 14 900	44 400 44 000	4 000 1 400	845 865
45	NART45MR NART45MVR	NART45MUUR NART45MUUVR	NART45MX NART45MVX	NART45MUUX NART45MUUVX	45 ⁰ _{-0.012}	85	32	30	66.5	45 350 73 780	87 580 166 610	16 100 16 100	47 000 47 000	4 000 1 300	915 935
50	NART50MR NART50MVR	NART50MUUR NART50MUUVR	NART50MX NART50MVX	NART50MUUX NART50MUUVX	50 ⁰ _{-0.012}	90	32	30	76	47 010 77 370	94 110 182 160	17 300 17 300	50 000 50 000	3 500 1 200	980 1 010

* Without seals, suitable for grease lubrication. In case of oil lubrication, up to 130% of this value shall be permissible, and 70% of this value shall apply for types with seals.

TYPE	OUTER RINGS TOLERANCE (Outside diameter) (μm)	
	Crowned outer ring	Cylindrical outer ring
NART5M	0/-50	0/-8
NART6M,NART8M,NART10M	0/-50	0/-9
NART12M,NART15M,NART17M,NART20M	0/-50	0/-11
NART25M,NART30M,NART35M,NART40M	0/-50	0/-13
NART45M,NART50M	0/-50	0/-15