

Cam Followers

Hex Socket on Head

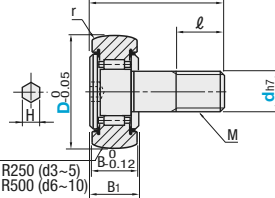
■Crowned



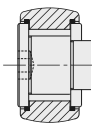
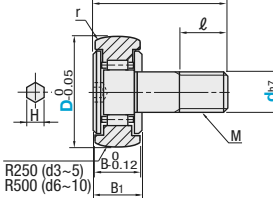
RoHS

Application	Type		Material	Accessory
	With Seal	No Seal		
General	CFUA	CUA	EN 1.3505 Equiv.	1 Hex Nut (EN 1.1191 Equiv. Carbon Steel, Black Oxide)
Low Dust Generation	CFUAS	CUAS	EN 1.4125 Equiv.	Hex Nut 1 pc. (EN 1.4301 Equiv.)
Heavy Load	CFUAC	-	EN 1.3505 Equiv.	1 Hex Nut (EN 1.1191 Equiv. Carbon Steel, Black Oxide)

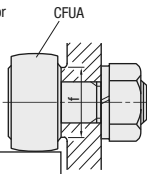
■With Seal



■No Seal



Full Roller for Heavy Load.



No grease hole is provided.
Operating Temp.: 80°C or lower

Part Number		D (Selectable)	MxPitch	B	B ₁	L	l	r	f (Min.)	H	Unit Price					
Type	dh7 Tolerance										CFUA	CFUAS	CFUAC	CUA	CUAS	
(With Seal)																
CFUA	3	0 -0.010	10	3x0.5	7	8	17	5	0.3	6.8	2 (1.5)					
CFUAS	4	0	12	4x0.7	8	9	20	6	0.5	8.6	2.5 (2)					
CFUAC	5	0 -0.012	13	5x0.8	9	10	23	7.5		9.7	3 (2.5)					
CFUAG	6		16	6x1.0	11	12	28	9		11	3					
(No Seal)																
CUA	8	0	19	8x1.25	12	13	32	11	1	13	4					
CUAS	10	0 -0.015	22	10x1.25	12	13	36	13		15	5					
			26													

The standards of d12 to 20 have been modified to those with the hex socket on the head and thread. For the new part number, see P.1044.

Dimensions in () are for Stainless Steel Type.

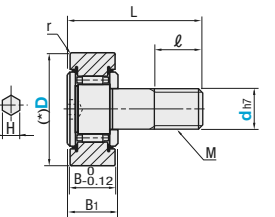
■Flat



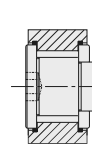
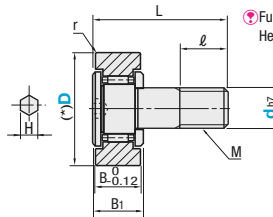
RoHS

Application	Type		Material	Accessory
	With Seal	No Seal		
General	CFFA	CFA	EN 1.3505 Equiv.	1 Hex Nut (EN 1.1191 Equiv. Carbon Steel, Black Oxide)
Low Dust Generation	CFFAS	CFAAS	EN 1.4125 Equiv.	Hex Nut 1 pc. (EN 1.4301 Equiv.)
Heavy Load	CFFAC	-	EN 1.3505 Equiv.	1 Hex Nut (EN 1.1191 Equiv. Carbon Steel, Black Oxide)

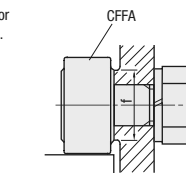
■With Seal



■No Seal



Full Roller for Heavy Load.



No grease hole is provided.
Operating Temp.: 80°C or lower

Part Number		D (Selectable)	MxPitch	B	B ₁	L	l	r	f (Min.)	H	Unit Price					
Type	dh7 Tolerance										CFFA	CFFAS	CFFAC	CFFAG	CFA	CFAS
(With Seal)																
CFFA	3	0 -0.01	10	3x0.5	7	8	17	5	0.3	6.8	2 (1.5)					
CFFAS	4	0	12	4x0.7	8	9	20	6	0.5	8.6	2.5 (2)					
CFFAC	5	0 -0.012	13	5x0.8	9	10	23	7.5		9.7	3 (2.5)					
CFFAG	6		16	6x1.0	11	12	28	9		11	3					
(No Seal)																
CFA	8	0	19	8x1.25	12	13	32	11	1	13	4					
CFAS	10	0 -0.015	22	10x1.25	12	13	36	13		15	5					
			26													

The standards of d12 to 20 have been modified to those with the hex socket on the head and thread. For the new part number, see P.1044.

Dimensions in () are for Stainless Steel Type.

Table1: Reference Data of Cam Followers

d-D	General						Heavy Load								
	Basic Dynamic Load Rating C (kN)	Basic Static Load Rating Cor (kN)	Max. Allowable Load (kN)	Track Load Capacity (kN)		Max. Rotational Speed (rpm)		Mass (g)	Basic Dynamic Load Rating C (kN)	Basic Static Load Rating Cor (kN)	Max. Allowable Load (kN)	Track Load Capacity (kN)		Rotational Speed Limit (with Seal) (rpm)	Mass (g)
				Crowned	Flat	With Seal	No Seal					Crowned	Flat		
3-10	1.47	1.18	0.36	0.37	1.37	32900	47000	4.5	-	-	-	-	-	-	-
4-12	2.06	2.05	0.78	0.47	1.76	25900	37000	7.5	-	-	-	-	-	-	-
5-13	3.14	2.77	1.42	0.53	2.25	20300	29000	10.5	-	-	-	-	-	-	-
6-16	3.59	3.58	2.11	1.08	3.43	17500	25000	18.5	6.94	8.50	2.11	1.08	3.43	4400	19
8-19	4.17	4.65	4.73	1.37	4.02	14000	20000	28.5	8.13	11.20	4.73	1.37	4.02	3480	29
10-22	5.33	6.78	5.81	1.67	4.70	11900	17000	45	9.42	14.30	5.81	1.67	4.70	2880	46
10-26				2.06	5.49			60	9.42	14.30	5.81	2.06	5.49		
12-30	7.87	9.79	9.37	2.45	7.06	9800	14000	95(105)	13.40	19.80	9.37	2.45	7.06	2320	107
12-32				2.74	7.45			105(115)	13.40	19.80	9.37	2.74	7.45		
16-35	12.0	18.30	17.30	3.14	11.2	7000	10000	170(205)	20.60	37.60	17.30	3.14	11.20	1800	207
18-40	14.7	25.2	26.1	3.72	14.4	5950	8500	250(295)	-	-	-	-	-	-	-
20-52	20.7	34.8	32.1	8.23	23.2	4900	7000	460(525)	-	-	-	-	-	-	-

() is the weight of Hex Socket on Head and Thread.

kgf=Nx0.101972

Ordering Example
Part Number - D
CFUAS10 - 22

Cam Followers

Hex Socket on Head / Thread (w / Grease Fitting)

Features: Hex socket and grease fitting are mounted on both the head and thread part. You can secure it from either head or thread side using a hex wrench. Greasing is possible from both directions.

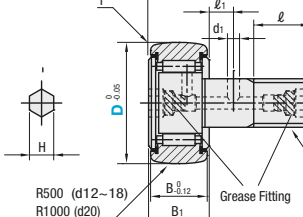
■Crowned



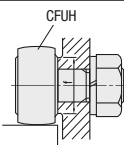
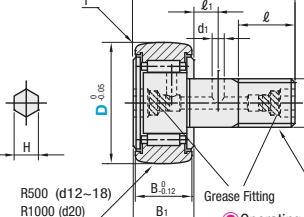
RoHS

Application	Type		Material	Accessory
	With Seal	No Seal		
General	CFUH	CUH	EN 1.3505 Equiv.	1 Hex Nut (EN 1.1191 Equiv. Carbon Steel, Black Oxide)
Low Dust Generation	CFUSH	CUSH	EN 1.4125 Equiv.	Hex Nut 1 pc. (EN 1.4301 Equiv.)
Heavy Load	CFUCH	-	EN 1.3505 Equiv.	1 Hex Nut (EN 1.1191 Equiv. Carbon Steel, Black Oxide)

■With Seal



■No Seal



Operating Temp.: 80°C or lower

Part Number		D (Selectable)	MxPitch	B	B ₁	L	d ₁	l	l ₁	r	f (Min.)	H	Unit Price					
Type	dh7 Tolerance												CFUH	CFUSH	CFUCH	CFUGH	CUH	CUSH
(With Seal)																		
CFUH	12	0 -0.018	30	12x1.5	14	15	40	3	14	6	20	6						
CFUSH	16		32	16x1.5	18	19.5	52		18	8	24	6						
CFUCH	18		35	18x1.5	20	21.5	58		20		26	6						
CFUGH	20	0 -0.021	52	20x1.5	24	25.5	66	4	22	9	36	8						

For the performance of Cam Followers, see Table 1 on P.1043.

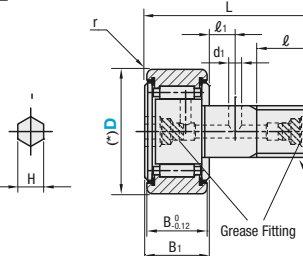
■Flat



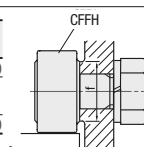
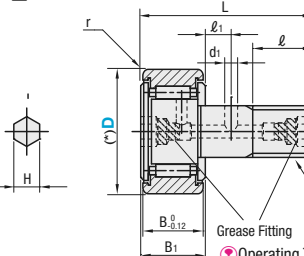
RoHS

Application	Type		Material	Accessory
	With Seal	No Seal		
General	CFFH	CFAH	EN 1.3505 Equiv.	1 Hex Nut (EN 1.1191 Equiv. Carbon Steel, Black Oxide)
Low Dust Generation	CFFSH	CFAH	EN 1.4125 Equiv.	Hex Nut 1 pc. (EN 1.4301 Equiv.)
Heavy Load	CFFCH	-	EN 1.3505 Equiv.	1 Hex Nut (EN 1.1191 Equiv. Carbon Steel, Black Oxide)

■With Seal



■No Seal



D	Tolerance
30	0 -0.009
32-40	0 -0.011
52	0 -0.013

Operating Temp.: 80°C or lower

Part Number		D (Selectable)	MxPitch	B	B ₁	L	d ₁	l	l ₁	r	f (Min.)	H	Unit Price					
Type	dh7 Tolerance												CFFH	CFFSH	CFFCH	CFFGH	CFAH	CFASH
(With Seal)																		
CFFH	12	0 -0.018	30	12x1.5	14	15	40	3	14	6	20	6						
CFFSH	16		32	16x1.5	18	19.5	52		18	8	24	6						
CFFCH	18		35	18x1.5	20	21.5	58		20		26	6						
CFFGH	20	0 -0.021	52	20x1.5	24	25.5	66	4	22	9	36	8						

For the performance of Cam Followers, see Table 1 on P.1043.

Part Number Substitution Table for Cam Follower Standard Changes (d12 and above only)

Type	Old Part Number (d12 or more)			New Part Number
	Old Standard	Old Hex Socket Type	Old Hex Socket on Thread	
Cam Followers	CFUR	CFUA	CFUB	CFUH
	CFURS	CFUAS	-	CFUSH
	CFURC	CFUAC	-	CFUCH
	-	CFUAG	-	CFUGH
	CFU	CUA	-	CUH
	CFUS	CUAS	-	CUSH
	CFFR	CFFA	CFFB	CFFH
	CFFRS	CFFAS	-	CFFSH
	CFFRC	CFFAC	-	CFFCH
	-	CFFAG	-	CFFGH
	CFR	CFA	-	CFAH
	CFRS	CFAS	-	CFASH

Cam Followers

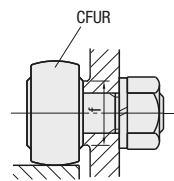
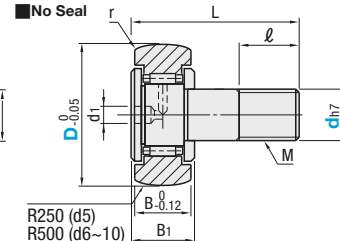
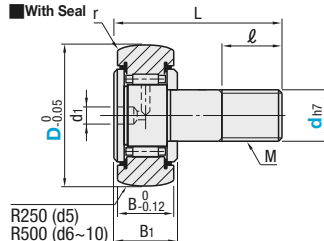
Straight Slot

■Crowned



RoHS

Application	Type		Material	Accessory
	With Seal	No Seal		
General	CFUR	CFU	EN 1.3505 Equiv.	1 Hex Nut (EN 1.1191 Equiv. Carbon Steel, Black Oxide)
Low Dust Generation	CFURS	CFUS	EN 1.4125 Equiv.	Hex Nut 1 pc. (EN 1.4301 Equiv.)



☞ Grease hole is provided on the head only.
☞ Operating Temp.: 80°C or lower

Part Number		D (Selectable)	MxPitch	B	B1	L	d1	l	r	f (Min.)	Unit Price			
Type	dh7 Tolerance										CFUR	CFURS	CFURC	CFUS
(With Seal)														
5	0	13	5x0.8	9	10	23	3.1	7.5		9.7				
6	-0.012	16	6x1.0			28		9	0.5	11				
8		19	8x1.25	11	12	32		11		13				
(No Seal)														
10	-0.015	22	10x1.25	12	13	36		13	1	15				
		26												

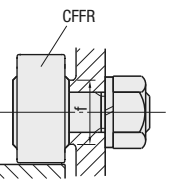
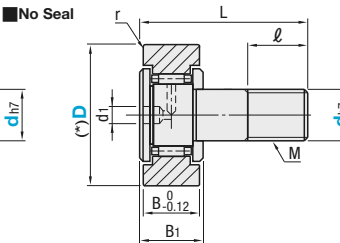
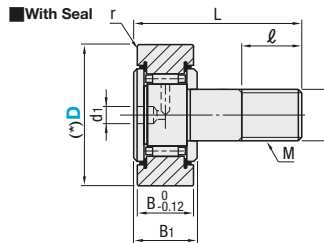
☞ The standards of d12 to 20 have been modified to those with the hex socket on the head and thread. For the new part number, see P.1044. ☞ For the performance of Cam Followers, see Table 1 on P.1043.

■Flat



RoHS

Application	Type		Material	Accessory
	With Seal	No Seal		
General	CFFR	CFR	EN 1.3505 Equiv.	1 Hex Nut (EN 1.1191 Equiv. Carbon Steel, Black Oxide)
Low Dust Generation	CFFRS	CFRS	EN 1.4125 Equiv.	Hex Nut 1 pc. (EN 1.4301 Equiv.)



☞ Grease hole is provided on the head only.
☞ Operating Temp.: 80°C or lower

Part Number		D (Selectable)	MxPitch	B	B1	L	d1	l	r	f (Min.)	Unit Price			
Type	dh7 Tolerance										CFFR	CFFRS	CFFRC	CFR
(With Seal)														
5	0	13	5x0.8	9	10	23	3.1	7.5		9.7				
6	-0.012	16	6x1.0			28		9	0.5	11				
8		19	8x1.25	11	12	32		11		13				
(No Seal)														
10	-0.015	22	10x1.25	12	13	36		13	1	15				
		26												

☞ The standards of d12 to 20 have been modified to those with the hex socket on the head and thread. For the new part number, see P.1044. ☞ For the performance of Cam Followers, see Table 1 on P.1043.

Ordering Example
Part Number - D
CFUR10 - 22

Cam Followers

With Tapped Hole for Grease Fitting

■Features: Tapped holes for grease fittings are provided. Easy to attach grease fittings, which makes it suitable for use when you need to constantly feed oil.

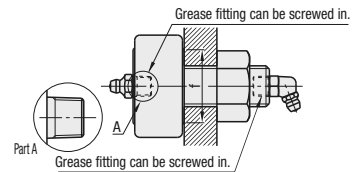
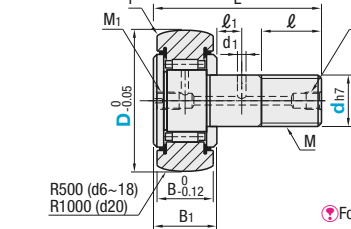
■Crowned



RoHS

Application	Type		Material	Accessory
	With Seal	No Seal		
General	CFURT		EN 1.3505 Equiv.	1 Hex Nut (EN 1.1191 Equiv. Carbon Steel, Black Oxide)

■With Seal



☞ For d10 or less, tapped holes for grease fittings are machined only on the head part.
☞ Operating Temp.: 80°C or lower

Part Number		D (Selectable)	MxPitch	B	B1	L	d1	l	l1	r	f (Min.)	M1 (for Grease Fitting)	Unit Price
Type	dh7 Tolerance												
CFURT	6	0	16	6x1.0	11	12	28		9	0.5	11		
	8	0	19	8x1.25			32		11		13		
	10	-0.015	22	10x1.25	12	13	36		13	1	15	M6x0.75	
			26										
	12	0	30	12x1.5	14	15	40		14	6	20		
			32										
	16	-0.018	35	16x1.5	18	19.5	52	3	18	1.5	24	PT1/8	
	18		40	18x1.5	20	21.5	58		20		26		
	20	0	52	20x1.5	24	25.5	66	4	22		36		
		-0.021							9				

☞ For the performance of Cam Followers, see Table 1 on P.1043.

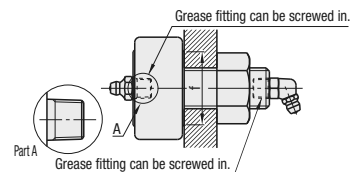
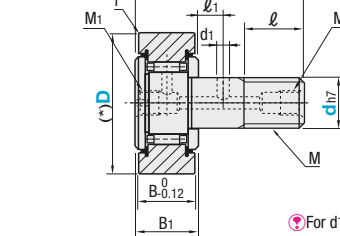
■Flat



RoHS

Application	Type		Material	Accessory
	With Seal	No Seal		
General	CFFRT		EN 1.3505 Equiv.	1 Hex Nut (EN 1.1191 Equiv. Carbon Steel, Black Oxide)

■With Seal



☞ For d10 or less, tapped holes for grease fittings are machined only on the head part.
☞ Operating Temp.: 80°C or lower

Part Number		D (Selectable)	MxPitch	B	B1	L	d1	l	l1	r	f (Min.)	M1 (for Grease Fitting)	Unit Price
Type	dh7 Tolerance												
CFFRT	6	0	16	6x1.0	11	12	28		9	0.5	11		
	8	0	19	8x1.25			32		11		13		
	10	-0.015	22	10x1.25	12	13	36		13	1	15	M6x0.75	
			26										
	12	0	30	12x1.5	14	15	40		14	6	20		
			32										
	16	-0.018	35	16x1.5	18	19.5	52	3	18	1.5	24	PT1/8	
	18		40	18x1.5	20	21.5	58		20		26		
	20	0	52	20x1.5	24	25.5	66	4	22		36		
		-0.021							9				

☞ For the performance of Cam Followers, see Table 1 on P.1043.

Alterations	Grease Fitting		
Code	GA (1 pc.), GA2 (2 pcs.)	GB (1 pc.), GB2 (2 pcs.)	GC (1 pc.), GC2 (2 pcs.)
Spec.	Applicable grease fitting is included. Ordering Code GA M1(d) H L B M6x0.75 13.5 5 7 PT1/8 20 9 10 * Drawing 1 shows the shape of thread part for PT1/8.	Applicable grease fitting is included. Ordering Code GB M1(d) H L B M6x0.75 16.5 5 8 PT1/8 21.5 8 10	Applicable grease fitting is included. Ordering Code GC M1(d) H L B M6x0.75 17.5 5 8 PT1/8 21.5 8 10
Material: Free-Cutting Brass (EN CW614N Equiv.) Surface Treatment: Nickel Plating			

Ordering Example
Part Number - D
CFURT12 - 30

Alterations
Part Number - D - (GA, GB, GC)
CFURT12 - 30 - GA

Guide Followers / Solid Eccentric Cam Followers

■ **Features:** Ball bearing-combined products used for transfers and guiding.

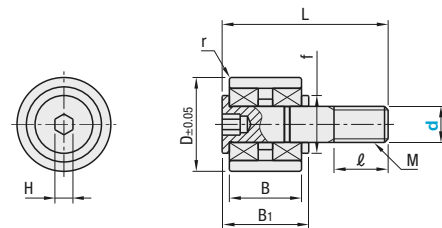
■ Guide Followers



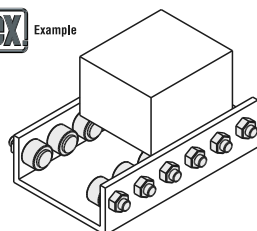
RoHS

Application	Type	Material		Accessory
		External Parts	Internal Parts (Bearing)	
General	GFR	EN 1.4029 Equiv.	EN 1.3505 Equiv.	Hex Nut 1 pc. (EN 1.4301 Equiv.)

Operating Temp.: 80°C or lower



Example



Part Number		D	MxPitch	B	B ₁	L	ℓ	r	f (Min.)	H	Basic Load Rating		Allowable Rotational Speed (rpm)	Mass (g)	Unit Price	
Type	d Tolerance										C (Dynamic) kN	Cor (Static) kN				
GFR	3	-0.007 -0.015	10	3x0.5	8.5	9.5	17	5	0.2	6.8	1.5	0.840	0.268	52000	5	
	4		12	4x0.7	9	11	20	6	0.4	7.8	2	1.065	0.405	38000	8	
	5		13	5x0.8	10	12	23	7.5		10.8	2.5	1.072	0.414	36000	11	
	6		16	6x1.0		14	28	9	0.2	13.8	3	1.620	0.660	30000	18	
	8		19	8x1.25		16	32	11			4	2.415	1.065	24000	28	

kgf=Nx0.101972

Ordering Example
Part Number
GFR6

■ Solid Eccentric Cam Followers With Hex Socket



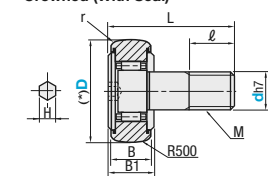
RoHS

As the stud (dh7) is eccentric to the center of the cam follower, it is possible to finely adjust the position by turning the stud when mounting.

Shape	Type				Material	Accessory
	Hex Socket on Head (d6 ~ 10)	Hex Socket on Head and Thread (d12 ~ 16)	No Seal	With Seal		
Crowned	CUAP	CFUAP	CUAPH	CFUAPH	EN 1.3505 Equiv.	Hex Nut 1 pc. (EN 1.1191 Equiv., Black Oxide)
Flat	CFAP	CFFAP	CFAPH	CFFAPH		

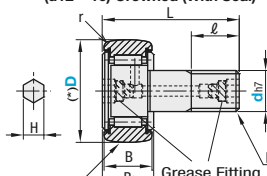
D	Tolerance
16	0 -0.008
19~30	-0.009
32, 35	-0.011

■ Hex Socket on Head (d6 ~ 10) Crowned (With Seal)



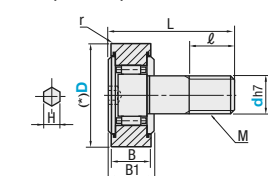
(No Seal)

■ Hex Socket on Head and Thread (d12 ~ 16) Crowned (With Seal)

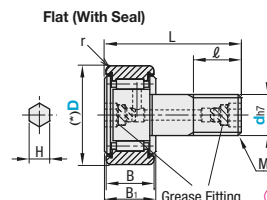


(No Seal)

Flat (With Seal)



(No Seal)



(No Seal)

For d10 and smaller sizes, no grease replenishing hole is provided.
Operating Temp.: 80°C or lower

Part Number		D Selectable	MxPitch	l	B	B ₁	L	r	f (Min.)	H	e (Eccentricity)	Unit Price							
Type	dh7 Tolerance											CFUAP	CFFAP	CUAP	CFAP	CFUAPH	CFFAPH	CUAPH	CFAPH
(With Seal) CFUAP CFFAP	6	0 -0.012	16	6x1.0	9	11	12	28	0.5	11	3	0.25							
	8	0 -0.015	19	8x1.25	11			32		13	4								
	10	0 -0.015	22	10x1.25	13	12	13	36	1	15	5	0.3							
(With Seal) CFUAPH CFFAPH	12	0 -0.018	30	12x1.5	14	14	15	40		20		0.4							
	14		32							20	6								
	16		35	16x1.5	18	18	19.5	52		24		0.5							

The standards of d12, 16 have been modified to those with the hex socket on the head and thread. For the performance of Cam Followers, Table 1 on P.1043.

Ordering Example
Part Number
CUAP8 - 19

Part Number Substitution Table for Cam Follower Standard Changes (d12, 16)

Seal	Material	Crowned / Flat	Old Part Number (Hex Socket on Head)	New Part Number (Hex Socket on Head and Thread)
With Seal	EN 1.3505 Equiv.	Crowned	CFUAP	CFUAPH
		Flat	CFFAP	CFFAPH
No Seal		Crowned	CUAP	CUAPH
		Flat	CFAP	CFAPH

Miniature Cam Followers

■ Miniature Cam Followers

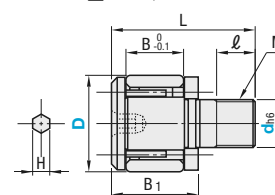


RoHS

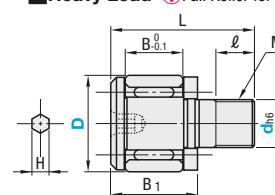
Application	Type	Material		Accessory
		External Parts	Internal Parts (Bearing)	
General	CFFAN	EN 1.3505 Equiv. (Stud: EN 1.7242 Equiv.)		1 Hex Nut (EN 1.1191 Equiv. Carbon Steel, Black Oxide)
Low Dust Generation	CFFAM	EN 1.4125 Equiv.		Hex Nut 1 pc. (EN 1.4301 Equiv.)
Heavy Load	CFFANG	EN 1.3505 Equiv. (Stud: EN 1.7242 Equiv.)		1 Hex Nut (EN 1.1191 Equiv. Carbon Steel, Black Oxide)
	CFFAMG	EN 1.4125 Equiv.		Hex Nut 1 pc. (EN 1.4301 Equiv.)

Operating Temp.: 80°C or lower

■ General, Low Particle Generation



■ Heavy Load Full Roller for Heavy Load



Note: Thread diameter of Miniature Cam Follower is small. To prevent damage, use torque wrench and secure within the maximum tightening torque. (Please note that the maximum tightening torque for a miniature cam follower is about one-fourth of that of the conventional equivalents.)

■ General, Low Particle Generation

Part Number		D Selectable	MxPitch	ℓ	B	B ₁	L	H		Basic Load Rating				Max. Allowable Load (N)	Track Load Capacity (N)	Max. Rotational Speed (rpm)	Mass (g)	Max. Tightening Torque (N · cm)	Unit Price			
Type	dh6 Tolerance									Cr (Dynamic) N		Cor (Static) N							CFFAN	CFFAM	CFFAMC	
								Steel	Stainless Steel	Steel	Stainless Steel	Steel	Stainless Steel									
CFFAN (General, Steel) CFFAM (General) CFFAMC (Low Dust Generation)	2.5	0 -0.006	5	2.5x0.45	2.5	3	4.5	9.5	0.9	0.9	410	350	335	285	285	285	3360	1	16			
	3		6	3x0.5	3	4	5.5	11.5	1.5	1.3	630	565	610	525	525	470	2800	2	28			
	4	0 -0.008	8	4x0.7	4	5	7	15	2	1.5	1080	915	1080	915	915	795	2100	4	64			
	5		10	5x0.8	5	6	8	18	2.5	2	1570	1340	1860	1400	1400	1210	1680	7	125			
	6		12	6x1.0	6	7	9.5	21.5	3	2.5	2060	1880	2160	2040	2040	1700	1400	13	226			

kgf=Nx0.101972

■ Heavy Load (Full Rollers)

Part Number			D Selectable	MxPitch	ℓ	B	B ₁	L	H		Basic Dynamic Load Rating				Max. Allowable Load		Track Load Capacity		Max. Rotational Speed (rpm)	Mass (g)	Max. Tightening Torque (N · cm)	Unit Price	
Type	dh6 Tolerance	Cr (Dynamic) N									Cor (Static) N		Max. Allowable Load (N)		Track Load Capacity (N)		CFFANG	CFFAMG					
		Steel							Stainless Steel	Steel	Stainless Steel	Steel	Stainless Steel	Steel	Stainless Steel								
CFFANG CFFAMG (Heavy Load)	2.5	0 -0.006	5	2.5x0.45	2.5	3	4.5	9.5	0.9	0.9	1000	665	1080	410	260	410	300	285	2000	1	16		
	3		6	3x0.5	3	4	5.5	11.5	1.5	1.3	1370	1020	1770	590	360	590	480	470	1680	2	28		
	4	0 -0.008	8	4x0.7	4	5	7	15	2	1.5	2350	1680	3040	1050	780	1050	770	795	1260	4	64		
	5		10	5x0.8	5	6	8	18	2.5	2	3140	2520	4710	1640	1420	1640	1180	1210	1000	7	125		
	6		12	6x1.0	6	7	9.5	21.5	3	2.5	4610	3400	6270	2360	2110	2360	1540	1700	840	13	226		

kgf=Nx0.101972

Ordering Example
Part Number - D
CFFAM2.5 - 5

Plastic Cam Followers

Press Fit

■ **Features:** Plastic is pressed onto the outer ring of the cam follower.

■ **R**



RoHS

Type		Seal	Material		Accessory
(d5 ~ 10) Hex Socket on Head	(d12, 16) Hex Socket on Head and Thread		Plastic	Cam Followers	
CFFRUDS	CFRUH	Provided	MC Nylon	EN 1.3505 Equiv.	Hex Nut (EN 1.1191 Equiv. Carbon Steel, Black Oxide)
CFFRUDSS	CFRUSH			EN 1.4125 Equiv.	Hex Nut 1 pc. (EN 1.4301 Equiv.)

■ (d5 ~ 10) Hex Socket on Head

■ (d12, 16) Hex Socket on Head and Thread

⚠ Operating Temperature 50°C or less (Reference)

Part Number		D Selectable	MxPitch	B	B ₁	L	d	ℓ	ℓ ₁	H	Allowable Load (N)	Allowable Rotational Speed (rpm)	Mass (g)	Unit Price			
Type	ch7 Tolerance													CFFRUDS	CFFRUDSS	CFRUH	CFRUSH
(Hex Socket on Head)	5	0	13	5x0.8	9	10	23	7.5	-	3	88	2520	13			-	-
	6	-0.012	16	6x1.0	11	12	28				112	2210	22			-	-
	8	0	19	8x1.25	12	13	32				122	1960	33			-	-
	10	-0.015	22	10x1.25	12	13	36				120	1760	50			-	-
(Hex Socket on Head and Thread)	12	0	30	12x1.5	14	15	40	3	14	6	156	1390	95	-	-		
	12	-0.018	32	12x1.5	14	15	40				150	1320	113	-	-		
	16	0	35	16x1.5	18	19.5	52				192	1230	181	-	-		
	16	-0.018	35	16x1.5	18	19.5	52				192	1230	181	-	-		

⚠ Values of allowable load are values when speed =10km/h.
⚠ For Standard Type, resin expands and may come off easily in high temperature. Avoid storing in high temperature.
⚠ For Hex Socket on Head, no grease replenishing hole is provided.
⚠ The standards of d12, 16 has been modified to those with the hex socket on the head and thread.

■ **Flat**



RoHS

Type		Seal	Material		Accessory
(d5 ~ 10) Straight Slot	(d5 ~ 10) Hex Socket on Head		Plastic	Cam Followers	
CFFRUC	CFFRUCS	Provided	MC Nylon	EN 1.3505 Equiv.	Hex Nut (EN 1.1191 Equiv. Carbon Steel, Black Oxide)
-	CFFRUCSS			EN 1.4125 Equiv.	Hex Nut 1 pc. (EN 1.4301 Equiv.)

■ (d5 ~ 10) Straight Slot

■ (d5 ~ 10) Hex Socket on Head

■ (d12, 16) Hex Socket on Head and Thread

⚠ Operating Temperature 50°C or less (Reference)

Part Number		D Selectable	MxPitch	B	B ₁	L	d ₁	d ₂	ℓ	ℓ ₁	H	Allowable Load (N)	Allowable Rotational Speed (rpm)	Mass (g)	Unit Price				
Type	ch7 Tolerance														CFFRUC	CFFRUCS	CFFRUCSS	CFRUH	CFRUSH
(Straight Slot)	5	0	13	5x0.8	9	10	23	3.1	7.5	-	3	88	2520	13				-	-
	6	-0.012	16	6x1.0	11	12	28	4				112	2210	22				-	-
	8	0	19	8x1.25	12	13	32	11				122	1960	33				-	-
	10	-0.015	22	10x1.25	12	13	36	13				120	1760	50				-	-
(Hex Socket on Head)	12	0	30	12x1.5	14	15	40	3	14	6	156	1390	95	-	-	-			
	12	-0.018	32	12x1.5	14	15	40				150	1320	113	-	-	-			
	16	0	35	16x1.5	18	19.5	52				192	1230	181	-	-	-			
	16	-0.018	35	16x1.5	18	19.5	52				192	1230	181	-	-	-			

⚠ Values of allowable load are values when speed =10km/h.
⚠ For Standard Type, resin expands and may come off easily in high temperature. Avoid storing in high temperature.
⚠ For Straight Slot, grease hole is provided on the head only. For Hex Socket on Head, no grease replenishing hole is provided.
⚠ The standards of d12, 16 has been modified to those with the hex socket on the head and thread.

Ordering Example Part Number - D CFFRUC12 - 32

Plastic Cam Followers

Retaining Ring

■ **Features:** After plastic is press-fit into the outer ring of cam follower, the sleeve is retained by retaining ring.

■ **Flat**



RoHS

Type		Seal	Material		Accessory
(d8, 10) Hex Socket on Head	(d12, 16) Hex Socket on Head and Thread		Plastic	Cam Followers	
CFFRUCT	CFFUHW	Provided	MC Nylon	EN 1.3505 Equiv.	Hex Nut (EN 1.1191 Equiv. Carbon Steel, Black Oxide)
CFFRUCTS	CFFUSHW			EN 1.4125 Equiv.	Hex Nut 1 pc. (EN 1.4301 Equiv.)

■ (d8, 10) Hex Socket on Head

■ (d12, 16) Hex Socket on Head and Thread

(Reference) Plastic Sleeve

⚠ Operating Temperature 80°C or less

Part Number		D Selectable	MxPitch	ℓ	B	B ₁	B ₂	B ₃	B ₄	D ₁	D ₂	L	L ₁	d ₁	d ₂	ℓ ₁	H	Allowable Load (N)	Allowable Rotational Speed (rpm)	Mass (g)	Unit Price					
Type	ch7 Tolerance																				CFFRUCT	CFFRUCTS	CFFUHW	CFFUSHW		
(Hex Socket on Head) CFFRUCT CFFRUCTS	8	0 -0.015	19	8x1.25	11	17	12	11	3.5	1.1	20	+0.15 0	16	32	35	4	-	4	518	1960	35			-	-	
	10		22	10x1.25	13	18	13	12	3.5		23	+0.2 0	18	36	39				5	594	1760	53			-	-
	10		26	10x1.25	13	18	13	12	3.5		27.2		18	36	39				5	637	1560	71			-	-
(Hex Socket on Head and Thread) CFFUHW CFFUSHW	12	0 -0.018	30	12x1.5	14	21	15	14	4.5	1.3	31.4	+0.25 0	23.5	40	44	-	3	6	499	1390	100	-	-			
	12		32	12x1.5	14	21	15	14	4.5		33.7		23.5	40	44				6	513	1320	119	-	-		
	16		35	16x1.5	18	26	19.5	18	5.5		1.6		+0.10 0	37	28.5				52	56.75	8	686	1230	187	-	-

⚠ Values of allowable load are values when speed =10km/h.
⚠ For Hex Socket on Head, no grease replenishing hole is provided.
⚠ The standards of d12, 16 has been modified to those with the hex socket on the head and thread.

Ordering Example Part Number - D CFFRUCT10 - 26

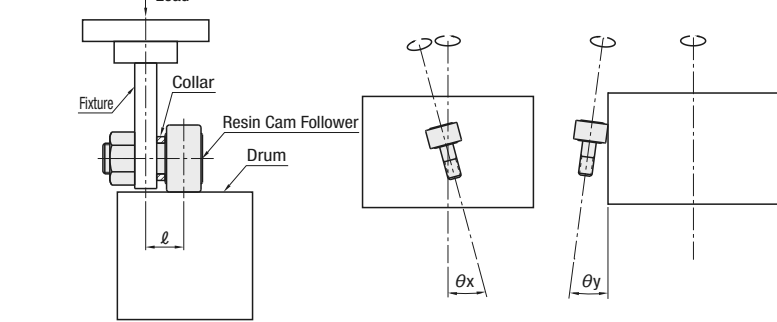
Part Number Substitution Table for Cam Follower Standard Changes (d12, 16)			
Type	Old Part Number (d12, 16)		New Part Number (d12, 16)
	Old Standard	Old Hex Socket	Hex Socket on Head and Thread
Plastic	CFFRUC	CFFRUCS	CFFUHW
	-	CFFRUCS	CFFUHW
	-	CFFRUCS	CFRUH
	-	CFFRUCSS	CFFUSH
	-	CFFRUCSS	CFFUSH
	-	CFFRUCSS	CFFUSH
	-	CFFRUCSS	CFFUSH
	-	CFFRUCSS	CFFUSH

■ **Plastic Cam Followers - Plastic Sleeve Retention Test**
Test data when a load is applied from the upper part of the cam follower at a constant speed.
Loads when the plastic sleeves came off more than 0.5mm are shown. Travel distance is (speed≤4.5km/h) = 1km, (speed>4.5km/h) = 2km.

⚠ Load beyond limit, rotary speed and unbalanced load may cause a plastic sleeve to come off.
* Data below are for reference, not guaranteed.

Press Fitting Load				Room Temperature 21°C $\theta_x=0^\circ, \theta_y=0^\circ$						Unit: (N)	
Type	d	D Selectable	ℓ	Speed km/h							
				1.8	3.6	4.5	5	6	10		
CFFRUC CFFRUCS CFFRUCSS CFFRUCSS CFFRUCSS CFFRUCSS	5	13	9	250	250	225	190	125	125		
	6	16	11.5	300	300	250	220	180	160		
	8	19	11.7	330	310	275	240	180	175		
	10	22	14	350	325	300	265	195	185		
		26		400	380	350	300	210	193		
	12	30	17.8	450	420	350	320	260	240		
		32		470	450	400	350	280	250		
	16	35	20.5	625	600	550	480	350	320		

• Testing Method Overview Load Inclination of Plastic Cam Followers should be 0.



[Material Properties]		
Item	Urethane	MC Nylon
Allowable Load	△	○
Abrasion Resistance	○	△
Mechanical Strength	○	△
Heat Resistance	×	○
Chemical Resistance	×	○

⚠ For Urethane Cam Followers, P:1051.

Urethane Cam Followers

Straight Slot

■Features: Urethane is baked on the outer rings of the cam followers.

■R



RoHS

Type		Material		Accessory	
With Seal	No Seal	Urethane	Cam Followers		
CFFRRZ	CFFRR	Shore A90	EN 1.3505 Equiv.	1 Hex Nut (EN 1.1191 Equiv. Carbon Steel, Black Oxide)	
CFFRRZS	CFFRRS		EN 1.4125 Equiv.	Hex Nut 1 pc. (EN 1.4301 Equiv.)	

(With Seal)

(No Seal)

Operating Temp.: 80°C or lower

Grease hole is provided on the head only.

Part Number		D Selectable	MxPitch	B	B ₁	L	d ₁	ℓ	Max. Allowable Load (N)	Allowable Rotational Speed (rpm)	Mass (g)	Unit Price			
Type	dh7 Tolerance											CFFRRZ	CFFRRZS	CFFRR	CFFRRS
(With Seal)	5	0	13	5x0.8	9	10	23	3.1	7.5	68	1500	13			
CFFRRZ	6	-0.012	16	6x1.0		28		9	90	1300	22				
CFFRRZS	8		19	8x1.25	11	12	32	4	11	96	1180	33			
(No Seal)		0	22	10x1.25	12	13	36		110	1060	50			-	-
CFFRR	10	-0.015	26					13	118	930	66				-
CFFRRS															

⚠The standards of d12, 16 have been modified to those with the hex socket on the head and thread. For the new part number, ☞P1052.

■Flat



RoHS

Type		Material		Accessory	
With Seal	No Seal	Urethane	Cam Followers		
CFFRUZ	CFFRU	Shore A90	EN 1.3505 Equiv.	1 Hex Nut (EN 1.1191 Equiv. Carbon Steel, Black Oxide)	
CFFRUZS	-		EN 1.4125 Equiv.	Hex Nut 1 pc. (EN 1.4301 Equiv.)	

(With Seal)

(No Seal)

Operating Temp.: 80°C or lower

Grease hole is provided on the head only.

Part Number			D Selectable	MxPitch	B	B ₁	L	d ₁	ℓ	Max. Allowable Load (N)	Allowable Rotational Speed (rpm)	Mass (g)	Unit Price		
Type	dh7 Tolerance												CFFRUZ	CFFRUZS	CFFRU
(With Seal) CFFRUZ	5	0 -0.012	13	5x0.8	9	10	23	3.1	7.5	68	1500	13			
	6		16	6x1.0	11	12	28	4	9	90	1300	22		-	
CFFRUZS	8	19	8x1.25	32					11	96	1180	33			
(No Seal) CFFRU	10	0 -0.015	22	10x1.25	12	13	36		13	110	1060	50			
			26								118	930	66		

⚠The standards of d12, 16 have been modified to those with the hex socket on the head and thread. For the new part number, ☞P1052.

Ordering Example
Part Number - D
CFFRUZ10 - 22

[Material Properties]		
Item	Urethane	MC Nylon
Allowable Load	△	○
Abrasion Resistance	○	△
Mechanical Strength	○	△
Heat Resistance	×	△
Chemical Resistance	×	○

⚠For MC Nylon, ☞P1049.

Urethane Cam Followers

With Hex Socket

■Features: Urethane is baked on the outer rings of the cam followers.

■R



RoHS

Type				Material		Accessory	
Hex Socket on Head (d5 ~ 10)		Hex Socket on Head and Thread (d12 ~ 16)		Urethane	Cam Followers		
With Seal	No Seal	With Seal	No Seal				
CFFRAA	CFFRAU	CFFRAH	CFFRTH	Shore A90	EN 1.3505 Equiv.	1 Hex Nut (EN 1.1191 Equiv. Carbon Steel, Black Oxide)	
CFFRRAS	-	CFFRSH	CFFRTSH		EN 1.4125 Equiv.	Hex Nut 1 pc. (EN 1.4301 Equiv.)	
-	-	-	-	Shore A50	EN 1.3505 Equiv.	Hex Nut (EN 1.1191 Equiv. Carbon Steel, Black Oxide)	

■Hex Socket on Head (d5 ~ 10) (With Seal)

(No Seal)

■Hex Socket on Head and Thread (d12 ~ 16) (With Seal)

(No Seal)

Operating Temp.: 80°C or lower

For d10 and smaller sizes, no grease replenishing hole is provided.

Part Number		D Selectable	MxPitch	B	B ₁	L	d ₁	ℓ	ℓ ₁	H	Allowable Load (N)	Allowable Rotational Speed (rpm)	Mass (g)	Unit Price					
Type	dh7 Tolerance													CFFRAA	CFFRRAS	CFFRAU	CFFRSH	CFFRTH	CFFRTSH
(With Seal)	5	0	13	5x0.8	9	10	23	7.5		3	68	1500	250	13			-	-	-
CFFRAA	6	-0.012	16	6x1.0		28		9		4	90	1300	220	22			-	-	-
CFFRRAS	8		19	8x1.25	11	12	32	-	11	-	96	1180	190	33			-	-	-
(No Seal)		0	22	10x1.25	12	13	36		13		110	1060	170	50			-	-	-
CFFRAU	10	-0.015	26							5	118	930	150	66			-	-	-
(With Seal)		0	30	12x1.5	14	15	40	3	14	6	147	830	140	103	-	-	-	-	-
CFFRAH	12	-0.018	32							6	151	800	130	113	-	-	-	-	-
CFFRSH	16		35	16x1.5	18	19.5	52	18	8		202	740	120	181	-	-	-	-	-
CFFRTH																			
CFFRTSH																			

⚠The standards of d12, 16 have been modified to those with the hex socket on the head and thread.

■Flat



RoHS

Type				Material		Accessory	
Hex Socket on Head (d5 ~ 10)		Hex Socket on Head and Thread (d12 ~ 16)		Urethane	Cam Followers		
With Seal	No Seal	With Seal	No Seal				
CFFRUUA	CFFRUU	CFFTAH	CFFTH	Shore A90	EN 1.3505 Equiv.	1 Hex Nut (EN 1.1191 Equiv. Carbon Steel, Black Oxide)	
CFFRUUAS	-	CFTSH	-		EN 1.4125 Equiv.	Hex Nut 1 pc. (EN 1.4301 Equiv.)	
CFFRUUAG	-	CFTGH	-	Shore A50	EN 1.3505 Equiv.	Hex Nut (EN 1.1191 Equiv. Carbon Steel, Black Oxide)	

■Hex Socket on Head (d5 ~ 10) (With Seal)

(No Seal)

■Hex Socket on Head and Thread (d12 ~ 16) (With Seal)

(No Seal)

Operating Temp.: 80°C or lower

For d10 and smaller sizes, no grease replenishing hole is provided.

Part Number		D Selectable	MxPitch	B	B ₁	L	d ₁	d ₂	ℓ	ℓ ₁	H	Allowable Load (N)	Allowable Rotational Speed (rpm)		Mass (g)	Unit Price							
Type	dh7 Tolerance												Shore A90	Shore A50		CFFRUUA	CFFRUAS	CFFRUAG	CFFRUU	CFFTAH	CFTSH	CFTGH	CFFTH
(With Seal)	5	0	13	5x0.8	9	10	23		7.5		3	68	1500	250	13				-	-	-	-	
CFFRUUA	6	-0.012	16	6x1.0		28			9		4	90	1300	220	22				-	-	-	-	
CFFRUAS	8		19	8x1.25	11	12	32	-	11	-		96	1180	190	33				-	-	-	-	
CFFRUAG		0	22	10x1.25	12	13	36		13		5	110	1060	170	50				-	-	-	-	
(No Seal)	10	-0.015	26									118	930	150	66				-	-	-	-	
CFFRUU																							
(With Seal)		0	30	12x1.5	14	15	40	6	14	6		147	830	140	103	-	-	-	-	-	-	-	
CFFTAH	12	-0.018	32					3		6		151	800	130	113	-	-	-	-	-	-	-	
CFTSH																							
CFTGH	16		35	16x1.5	18	19.5	52		18	8		202	740	120	181	-	-	-	-	-	-	-	
(No Seal)																							
CFFTH																							

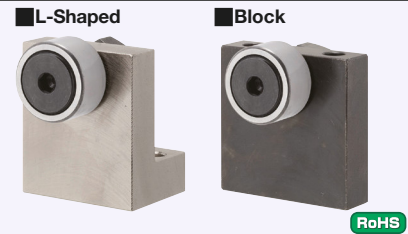
⚠The standards of d12, 16 have been modified to those with the hex socket on the head and thread.

Part Number Substitution Table for Cam Follower Standard Changes (d12, 16)			
Type	Old Part Number (d12, 16)		New Part Number (d12, 16)
	Old Standard	Old Hex Socket	Hex Socket on Head and Thread
Urethane	CFFRRZ	CFFRAA	CFFRAH
	CFFRRZS	CFFRRAS	CFFRSH
	CFFRR	CFFRUU	CFFRTH
	CFFRRS	-	CFFRTSH
	CFFRUZ	CFFRUUA	CFFTAH
	CFFRUZS	CFFRUUAS	CFTSH
	-	CFFRUUAG	CFTGH
	CFFRU	CFFRUU	CFFTH
Ordering Example Part Number - D CFFRAH12 - 30			

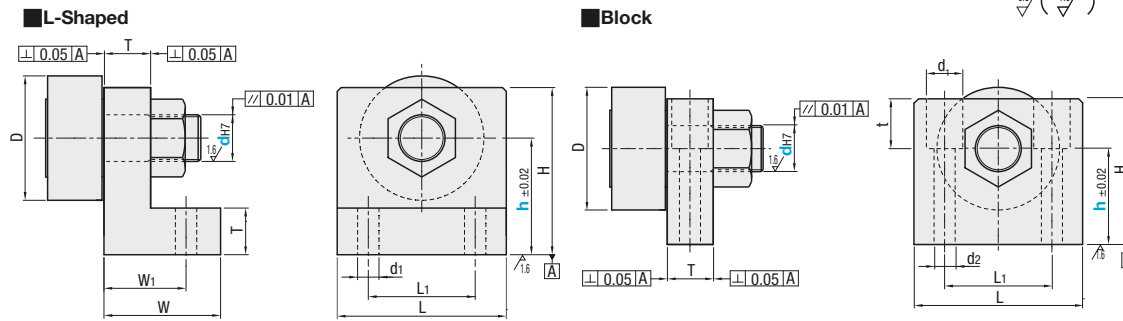
Cam Followers with Brackets

L-Shaped, Block

■ **Features:** Low-priced all-in-one unit. Cumbersome ordering steps are eliminated and prices are economical.



Type		Bracket		Cam Follower Shape		Included Cam Follower	
L-Shaped	Block	Material	Surface Treatment	Shape	Material	d5-10	d12
CMFLBF	CMFBF	EN 1.1191 Equiv.	Black Oxide	Flat	EN 1.3505 Equiv.	CFFA	CFFH
CMFLF	CMFF	EN 1.1191 Equiv.	Electroless Nickel Plating		EN 1.3505 Equiv.	CFFA	CFFH
CMFLSF	CMFSF	EN 1.4301 Equiv.	-	Crowned	EN 1.4125 Equiv.	CFFAS	CFFSH
CMFLBU	CMFBU	EN 1.1191 Equiv.	Black Oxide		EN 1.3505 Equiv.	CFUA	CFUH
CMFLU	CMFU	EN 1.1191 Equiv.	Electroless Nickel Plating		EN 1.3505 Equiv.	CFUA	CFUH
CMFLSU	CMFSU	EN 1.4301 Equiv.	-		EN 1.4125 Equiv.	CFUAS	CFUSH

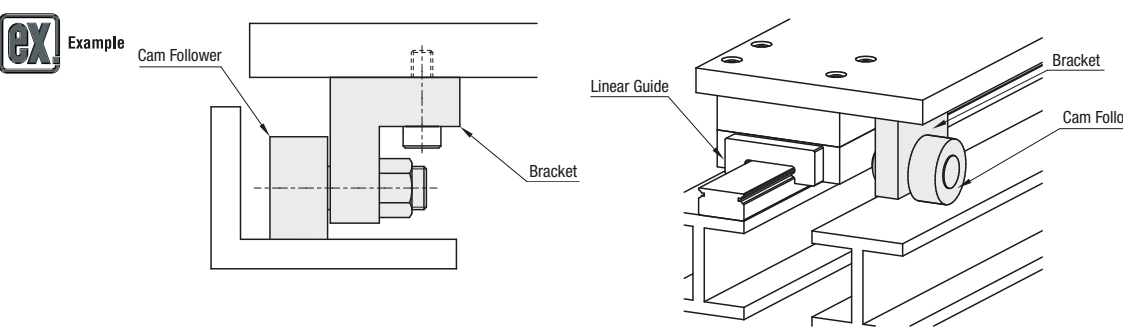


For Brackets and Cam Followers alone, see P1054 and P1043 respectively.

Part Number		Height h 1mm Increment	D	H	T	L1	L	W	W1	d1	Unit Price					
Type	d										CMFLBF	CMFLF	CMFLSF	CMFLBU	CMFLU	CMFLSU
CMFLBF	5	17~28	13	h+4.5	8	16	26	20	13	5.5						
CMFLF	6	17~32	16	h+6		19	29	22	15							
CMFLSF	8	20~38	19	h+7		22	32	24	17							
CMFLBU	10	25~52	26	h+10	12	29	42	28	20	6.5						
CMFLU	12	28~64	32	h+11		31	47	28	20							

Part Number		Height h 1mm Increment	D	H	T	L1	L	d1	d2	t	Unit Price					
Type	d										CMFBF	CMFF	CMFSF	CMFBU	CMFU	CMFSU
CMFBF	6	12~25	16	h+6	10	24	38	7.5	4.5	5						
CMFF	8	15~30	19	h+7												
CMFSF	10	20~35	26	h+10												
CMFBU	12	20~40	32	h+11	12	26	42	11	6.5	10						
CMFU																
CMFSU																

Ordering Example	Part Number	-	h
	CMFLF10	-	40
	CMFLU10	-	50

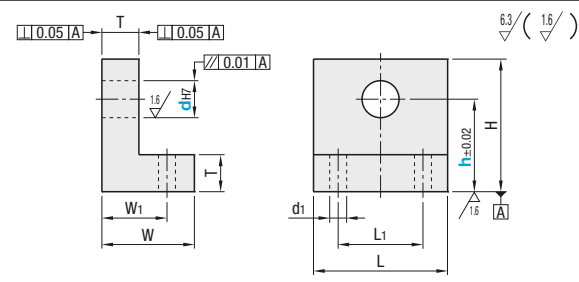


Brackets for Cam Followers

■ **Features:** Available for Cam Followers with plastic or urethane. d7 is made to fit with Cam Follower's shaft diameter.



Type	Material	Surface Treatment
CMFLB	EN 1.1191 Equiv.	Black Oxide
CMFL	EN 1.1191 Equiv.	Electroless Nickel Plating
CMFLS	EN 1.4301 Equiv.	-

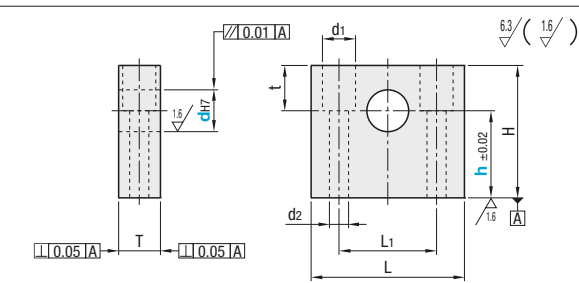


Part Number		h 1mm Increment	H	T	L1	L	W	W1	d1	Unit Price		
Type	d									CMFLB	CMFL	CMFLS
CMFLB	5	17~28	h+4.5	8	16	26	20	13	5.5			
CMFL	6	17~32	h+6		19	29	22	15				
CMFLS	8	20~38	h+7		22	32	24	17				
	10	25~52	h+10	12	29	42	28	20	6.5			
	12	28~64	h+11		31	47	28	20				

Ordering Example	Part Number	-	h
	CMFLB8	-	30

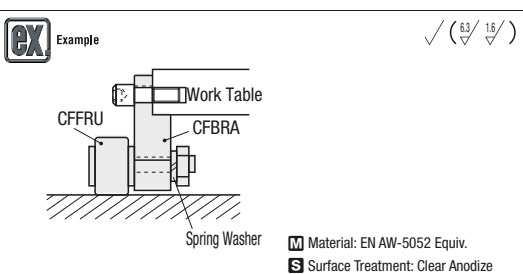
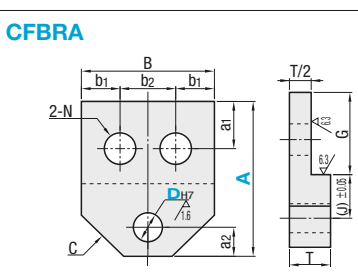


Type	Material	Surface Treatment
CMFB	EN 1.1191 Equiv.	Black Oxide
CMF	EN 1.1191 Equiv.	Electroless Nickel Plating
CMFS	EN 1.4301 Equiv.	-



Part Number		h 1mm Increment	H	T	L1	L	d1	d2	t	Unit Price		
Type	d									CMFB	CMF	CMFS
CMFB	6	12~25	h+6	10	24	38	7.5	4.5	5			
CMF	8	15~30	h+7									
CMFS	10	20~35	h+10									
	12	20~40	h+11	12	26	42	11	6.5	10			

Ordering Example	Part Number	-	h
	CMFB8	-	25

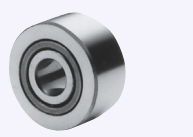


Part Number		A 1mm Increment	a1	a2	B	b1	b2	G	N	T	Mounting Screw Size	C	(J)	Unit Price
Type	DH7													
CFBRA	5	+0.012	27~50	8	4.5	24	6	12	15	6	7	M5	8	
	6	0	31~60	9	6	27	6.5	14	16	7	8	M6	8.5	
	8	+0.015	40~80	11.5	7.5	34	8.5	17	21	9.5	10	M8	12	
	10	0	49~100	14	8	44	11	22	26	11.5	12	M10	16	
	12	+0.018	58~120	17	12	48	12	24	32	13.5	12	M12	17	
	16	0	79~160	21	14.5	66	17	32	41	17.5	15	M16	25	

Ordering Example	Part Number	-	A
	CFBRA5	-	37

Roller Followers

Separate, Solid

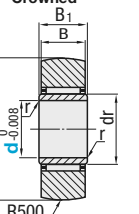


Separate

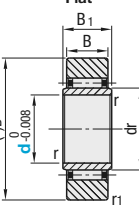
Grease	No Seal		With Seal		Material
	Crowned	Flat	Crowned	Flat	
General	NASTR	NASTF	NASTZ	NASTFZ	EN 1.3505 Equiv.
Low Dust Generation	-	NASTFS	NASTZS	NASTFZS	EN 1.4125 Equiv.

No Seal

Crowned

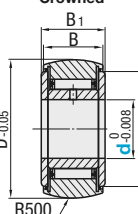


Flat

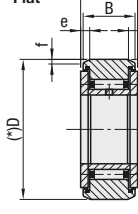


With Seal

Crowned



Flat



Operating Temp.: 80°C or lower

Outer ring, inner ring, and retainer will separate. See the figure on the overview page **P1042**.

No Seal																								
Part Number		D		dr	B	B ₁	r	r ₁	Basic Dynamic Load Rating		Basic Static Load Rating		Track Load Capacity (kN)		Max. Rotational Speed		Mass	Unit Price						
Type	d								C(kN)	Co(kN)	NASTR	NASTF			(rpm)	(g)	NASTR	NASTF	NASTFS					
(Crowned) NASTR	6	19	10	9.8	10	0.5	0.5	4.12	4.55	1.37	3.53	20000	17.8											
	8	24	12				1.0	5.68	5.89	1.86	4.02	17000	28											
	10	30	14				1.5	9.70	9.67	2.45	5.59	15000	50											
	12	32	16				1.5	10.4	10.9	2.74	5.98	13000	58											
	15	35	20	11.8	12		12.3	14.3	3.14	10000	62	-	-											
	17	40	22				17.4	20.9	3.72	9500	110	-	-											
	20	47	25				19.2	24.5	4.61	8500	155	-	-											
(Flat) NASTF NASTFS																								

 Apply ample grease before use.

kgf=Nx0.101972

With Seal

Part Number

Type

d

D

a

B

B₁

e

f

Basic Dynamic Load Rating

C(kN)

Basic Static Load Rating

Co(kN)

Track Load Capacity (kN)

NASTZ

NASTFZ

Max. Rotational Speed

(rpm)

Mass

(g)

Unit Price

NASTZ

NASTZS

NASTFZ

NASTFZS

NASTFZC

(Crowned)

NASTZ

NASTZS

(Flat)

NASTFZ

NASTFZS

NASTFZC

	6	19	14	13.8	14	2.5	0.8	4.12	4.55	1.37	3.53	8000	24.5													
	8	24	17.5					5.68	5.89	1.86	4.51	6800	39													
	10	30	23.5					9.70	9.67	2.45	6.86	6000	65													
	12	32	25.5	15.8	16			10.4	10.9	2.74	7.35	5200	75													
	15	35	29.0					12.3	14.3	-	8.04	4000	83	-	-			-	-							
	17	40	32.5	19.8	20	3	1	17.4	20.9	-	11.8	3800	135	-	-			-	-							
	20	47	38.0					19.2	24.5	-	13.8	3400	195	-	-			-	-							

kgf=Nx0.101972

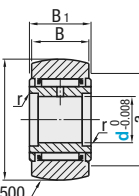


Solid

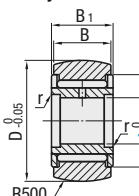
Grease	No Seal		With Seal		Material
	Crowned	Heavy Load Crowned	Crowned	Heavy Load Crowned	
General	NARTR	NARTRV	NARTUS	NARTVS	EN 1.3505 Equiv.
Low Dust Generation	-	-	NARTUC	-	EN 1.4125 Equiv.

No Seal

Crowned

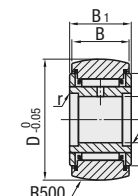


Heavy Load Crowned

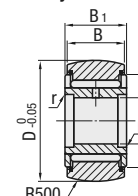


With Seal

Crowned



Heavy Load Crowned



No Seal																								
Part Number		D		a	B	B ₁	r	Basic Dynamic Load Rating C (kN)		Basic Static Load Rating Co (kN)		Track Load	Max. Rotational Speed (rpm)		Mass	Unit Price								
Type	d							NARTR	NARTRV	NARTR	NARTRV	Capacity (kN)	NARTR	NARTRV	(g)	NARTR	NARTRV	NARTR	NARTRV	NARTUS				
(Crowned) NARTR NARTUS	5	16	12		11	12	0.5	2.84	6.46	2.65	7.81	1.08	25000	10500	15									
	6	19	14					3.33	7.58	3.35	10.2	1.37	20000	8700	21									
	8	24	17.5					5.68	11.7	5.89	15.6	1.86	17000	7000	42									
	10	30	23.5	14	15			7.94	15.8	7.59	18.5	2.45	15000	5700	66									
	12	32	25.5					8.53	17.0	8.44	21.0	2.74	13000	5200	73									

With Seal																				kgf=Nx0.101972			
Part Number		D		a	B	B ₁	r	Basic Dynamic Load Rating C (kN)		Basic Static Load Rating Co (kN)		Track Load Capacity (kN)	Max. Rotational Speed (rpm)		Mass (g)		Unit Price						
Type	d							NARTU	NARTV	NARTU	NARTV		NARTU	NARTV	NARTU	NARTV	NARTU	NARTV	NARTUC	NARTVS			
(Crowned) NARTU NARTV NARTUC	5	16	12		11	12	0.5	2.84	6.46	2.65	7.81	1.08	10000	4200	14.5	15.1							
	6	19	14					3.33	7.58	3.35	10.2	1.37	8000	3480	20.5	21.5							
	8	24	17.5					5.68	11.7	5.89	15.6	1.86	6800	2800	41.5	42.5							
	10	30	23.5	14	15			7.94	15.8	7.59	18.5	2.45	6000	2280	64.5	66.5							
	12	32	25.5					8.53	17.0	8.44	21.0	2.74	5200	2080	71	73							
	15	35	29.0	18.0	19			13.7	25.3	16.4	36.9	3.14	4000	1720	102	106	-	-	-	-			
	17	40	32.5	20.0	21		17.4	32.0	19.3	46.6	3.72	3800	1560	149	155	-	-	-	-				
	20	47	38.0	24.0	25		22.9	41.7	30.6	67.7	7.15	3200	1360	250	255	-	-	-	-				

Ordering Example

Part Number **NASTR8**

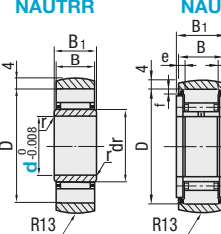
Urethane Roller Followers / Roller Follower Pins



Urethane Roller Followers

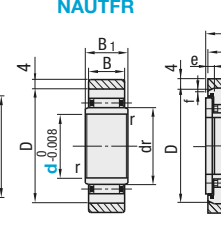
Separate, R

(No Seal) NAUTRR (With Seal) NAUTR



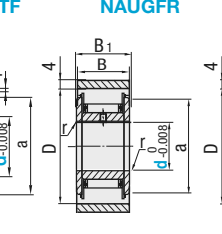
Separate, Flat

(No Seal) NAUTFR (With Seal) NAUTF



Solid, Flat

(No Seal) NAUGFR (With Seal) NAUGF



Part Number		D		dr		B		B ₁		r		Allowable Load (N)		Max. Rotational Speed (rpm)		Mass (g)		Unit Price		
Type	d	D	dr	B	B ₁	r	C(kN)	Co(kN)	NASTR	NASTF	NASTFS	(rpm)	(g)	NASTR	NASTF	NASTFS				
(Crowned) NAUTRR	6	19	10	9.8	10	0.5	96	4900	22.3											
	8	24	12				115	4150	33.5											
	10	30	14				147	3475	58											
	12	32	16	11.8	12		151	3300	66											
	15	35	20																	
	17	40	22																	
(Flat) NAUTFR	20	47	25	15.8	16															

Part Number		D	a	B	B ₁	r	Allowable Load (N)	Max. Rotational Speed (rpm)	Mass (g)	Unit Price	
Type	d									NAUGFR	NAUGF
NAUGFR NAUGF	5	16	12			0.5	100	6525	19.5		
	6	19	14	11	12		125	5220	26.5		
	8	24	17.5				150	5910	50		
	10	30	23.5	14	15		190	4785	74		
	12	32	25.5				196	5055	81		

 Ordering Example

Part Number
NAUTF6

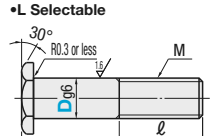
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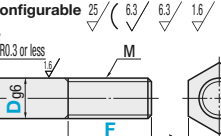
Roller Follower Pins Threaded

Type	Material	Surface Treatment
L Selectable	FRFN	Black Oxide
L, F Configurable	FRFN	Black Oxide

L Selectable



L, F Configurable



D	M	Course	ℓ	T	B	(C)
5	M 5	14	2	8	9.2	
6	M 6	16	3	10	11.5	
8	M 8	18	3	13	15.0	
10	M 10	19	3	17	19.6	
12	M 12	22	4	19	21.9	