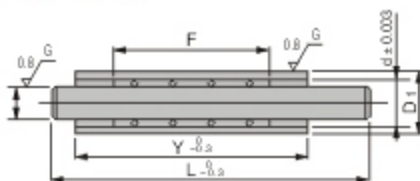


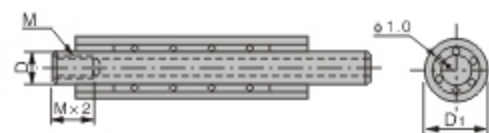
# Miniature Ball Cage Guide Sets



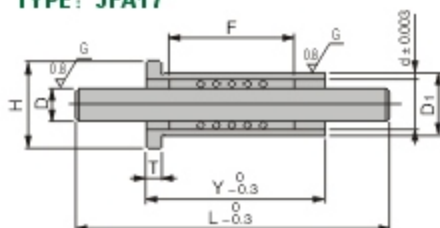
TYPE: JFA16



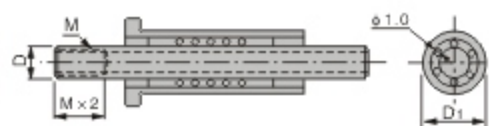
TYPE: JFA18



TYPE: JFA17



TYPE: JFA19



## Type: JFA16 ~ JFA19

Material: C3604, Brass

Steel Ball Material: SUJ2 - 1.3505 - High Carbon Chrome Bearing Steel (JIS-Grade 10)

### Combination Parts:

No.	Description	Quantity	Material
1	Shaft	1	SUJ2 - 1.3505
2	Bushing	1	SUJ2 - 1.3505
3	Ball Cage	1	Brass+Steel Ball

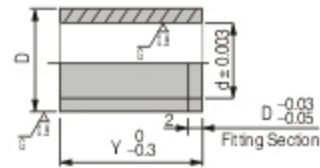
Type	D	Tolerance	L mm increments	Y Selection	F Selection	D1	Tolerance	T	H	d	M (Coarse thread)
JFA16 JFA17	3	0 -0.005	40~70	10	10 15 20	7	0 -0.006	2.5	9	5	-
				20							
				30							
JFA18 JFA19	4	0 -0.005	40~90	10	10 15 20	8	0 -0.011	3	10	6	-
				20							
				30							
	5		40~90	10	10 15 20	10		12	7	M3	
				20							
				30							
	6		40~150	10	15 20 30	11		13	8	M3	
				20							
				30							
	8		40~150	20	15 20 30	12		14	10	M4	
				30							
				40							
10	40~150	20	20 30 40	16	18	12	M5				
		30									
		40									
12	40~150	20	20 30 40	18	20	14	M6				
		30									
		40									

Order Example:  -  -  -  -   
 -  -  -  -

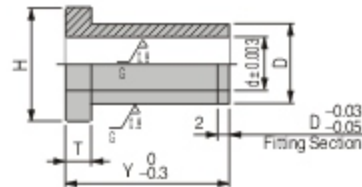
■ Customize are also available



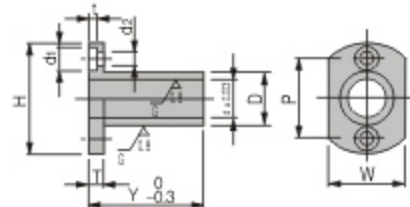
**TYPE: JFA20**  
**(Regular)**



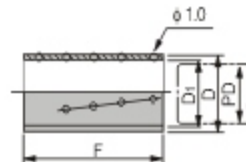
**TYPE: JFA21**  
**(With Head)**



**TYPE: JFA22**  
**(With Bolt Hole)**



**TYPE: JFA23**  
**(Brass Ball Cage)**



### Type: JFA20 ~ JFA23

Material: JFA20~JFA22: SUJ2 - 1.3505 - High Carbon Chrome Bearing Steel  
JFA23: C3604, Brass + JIS - Grade 10 Steel Ball

Hardness: JFA20~JFA22: HRC58+4 T through High Frequency Quenching

Type	No.	Y Selection	D	Tolerance	T	H	d
JFA20 JFA21	3	10 20 30	7	0 -0.006	2.5	9	5
	4	10 20 30	8				
	5	10 20 30	10				
	6	20 30 40	11	0 -0.011	3	13	8
	8	20 30 40	12				
	10	30 40 50	16				
	12	30 40 50	18				

Type	No.	Y Selection	D	Tolerance	H	W	P	T	d	d1	d2	t
JFA22	5	20 30	10	0 -0.006	25	16	17	4	7	6	3.5	2.2
	6	20 30 40	12	0 -0.011	28	18	20		8			
	8	20 30 40	14		29	20	21	10				
	10	30 40 50	16	34	22	25	5	12	7.5	4.5	3	
	12	30 40 50	19	40	25	29		14				

Type	PD	F Selection	D	D1
JFA23	3		4.8	3.2
	4	10 15 20	5.8	4.2
	5		6.8	5.2
	6	15 20 30	7.8	6.2
	8		9.8	8.2
	10	20 30 40	11.8	10.2
	12		13.8	12.2

JFA20 ~ JFA22 Order Example:  -  -   
JFA20 - 3 - 20

JFA23 Order Example:  -  -   
JFA23 - 3 - 15

■ Customize are also available