

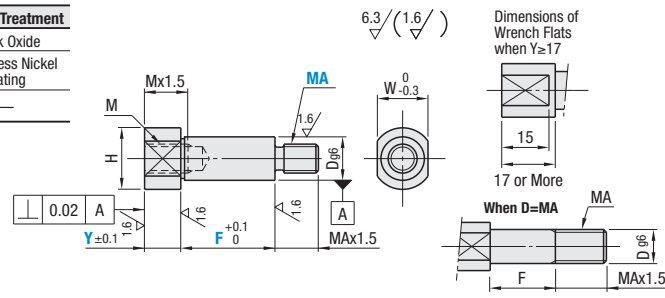
# Cantilever Shafts (Bolt Mount with Threaded End)

Standard / Stepped

Cantilever Shafts – Bolt Mount with Threaded End Standard

Type	Material	Surface Treatment
FXHC	1045 Carbon Steel or Equivalent	Black Oxide
PFXHC	1045 Carbon Steel or Equivalent	Electroless Nickel Plating
SFXHC	304 Stainless Steel	—

- This type may have centering holes depending on dimensions.
- Please refer to Table 1 to specify dimensions Y and F.
- Refer to the table on P.915 for thread undercut dimensions.



Part Number	Type	No.	Dg <sub>6</sub>	1 mm Increment		MA (Coarse)	M (Coarse)	H	W	Available Types		
				Y	F					F—HC	PF—HC	SF—HC
6	F—HC	6	-0.004	5-100	5-100	4 5 6	M3	10	8	•	•	•
6A		-0.012	5 6 8			M4	12	10	•	•	•	
8		8	-0.005			6 8 10	M6	15	13	•	•	•
8A	PF—HC	8	-0.014	2-60	2-60	6 8 10	M8	17	14	•	•	•
10		10	-0.006			8 10 12 (15)	M10	18	15	•	•	•
10A		10	-0.017			10 12 (15) 16	M12	20	17	•	•	•
12	SF—HC	12	-0.006	10-150	10-150	8 10 12 (15)	M16	21	18	•	•	•
13		13	-0.017			10 12 (15) 16	M8	23	20	•	•	•
15		15	-0.007			10 12 (15) 16 20	M12	26	24	•	•	•
16	PF—HC	16	-0.020	4-75	4-75	10 12 (15) 16 20	M8	28	26	•	•	•
17		17	-0.007			10 12 (15) 16 20 24 (25)	M16	31	27	•	•	•
18		18	-0.020			12 (15) 16 20 24 (25) 30	M12	36	32	•	•	•
20	SF—HC	20	-0.007	10-150	10-150	10 12 (15) 16 20	M16	36	32	•	•	•
20A		20	-0.020			10 12 (15) 16 20 24 (25)	M12	36	32	•	•	•
22		22	-0.007			12 (15) 16 20 24 (25) 30	M16	36	32	•	•	•

Table 1

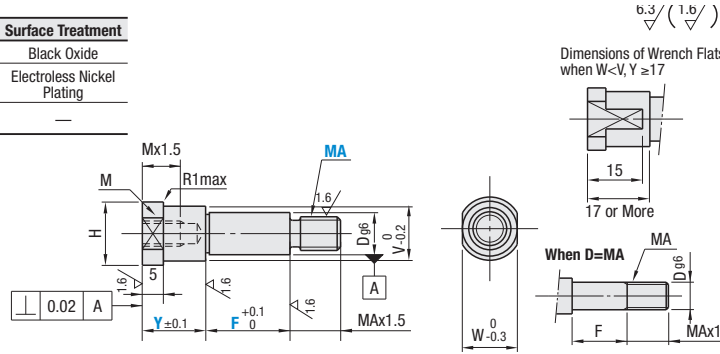
M	Y+F
M3	Y+F≥10
M4	Y+F≥12
M6	Y+F≥15.5
M8	Y+F≥19.5
M10	Y+F≥23.5
M12	Y+F≥29.5
M16	Y+F≥37
M20	Y+F≥45

MA dimensions with ( ) (M15 and M25) are Fine Thread. Specify MSC instead of MA.

Cantilever Shafts – Bolt Mount with Threaded End Stepped

Type	Material	Surface Treatment
FXJC	1045 Carbon Steel or Equivalent	Black Oxide
PFXJC	1045 Carbon Steel or Equivalent	Electroless Nickel Plating
SFXJC	304 Stainless Steel	—

- This type may have centering holes depending on dimensions.
- Please refer to Table 1 to specify dimensions Y and F.
- Refer to the table on P.915 for thread undercut dimensions.



Part Number	Type	No.	Dg <sub>6</sub>	1 mm Increment		MA (Coarse)	M (Coarse)	V	H	W	Available Types		
				Y	F						FXJC	PFXJC	SFXJC
6	F—HC	6	-0.004	5-75	5-75	4 5 6	M3	8	10	8	•	•	•
6A		-0.012	5 6 8			M4	12	10	•	•	•		
8		8	-0.005			6 8 10	M6	14	14	•	•	•	
8A	PF—HC	8	-0.014	7-60	7-60	6 8 10	M8	13	15	13	•	•	•
10		10	-0.006			8 10 12 (15)	M10	18	20	17	•	•	•
10A		10	-0.017			10 12 (15) 16	M12	15	17	14	•	•	•
12	SF—HC	12	-0.006	10-75	10-75	8 10 12 (15)	M8	16	18	15	•	•	•
13		13	-0.017			10 12 (15) 16	M10	18	20	17	•	•	•
15		15	-0.007			10 12 (15) 16 20	M12	20	21	18	•	•	•
16	PF—HC	16	-0.020	10-75	10-75	10 12 (15) 16 20	M16	24	26	24	•	•	•
17		17	-0.007			10 12 (15) 16 20 24 (25)	M8	26	28	26	•	•	•
18		18	-0.020			10 12 (15) 16 20 24 (25)	M12	29	31	27	•	•	•
20	SF—HC	20	-0.007	10-75	10-75	10 12 (15) 16 20 24 (25)	M16	29	31	27	•	•	•
20A		20	-0.020			10 12 (15) 16 20 24 (25) 30	M12	34	36	32	•	•	•
22		22	-0.007			12 (15) 16 20 24 (25) 30	M16	34	36	32	•	•	•

Table 1

M	Y+F
M3	Y+F≥10
M4	Y+F≥12
M6	Y+F≥15.5
M8	Y+F≥19.5
M10	Y+F≥23.5
M12	Y+F≥29.5
M16	Y+F≥37
M20	Y+F≥45

MA dimensions with ( ) (M15 and M25) are Fine Thread. Specify MSC instead of MA. When W<V, width across flats W reaches outer diameter V.

# Cantilever Shafts (Bolt Mount with Threaded End)

Hex

Cantilever Shafts – Bolt Mount with Threaded End Hex

Type	Material	Surface Treatment
LXHC	1045 Carbon Steel or Equivalent	Black Oxide
PLXHC	1045 Carbon Steel or Equivalent	Electroless Nickel Plating
SLXHC	304 Stainless Steel	—

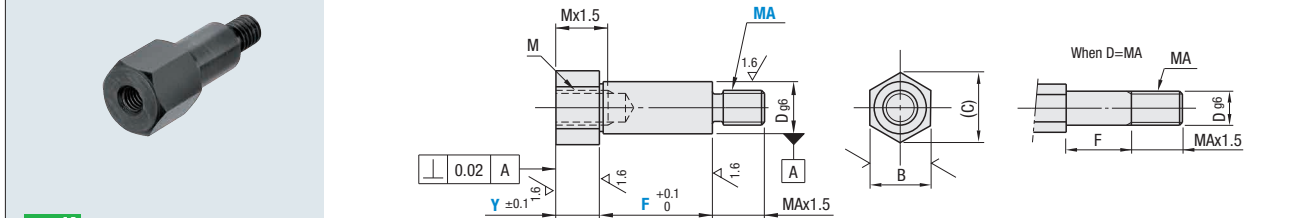


Table 1

Part Number	Type	No.	Dg <sub>6</sub>	1 mm Increment		MA (Coarse) Selection	M (Coarse Thread)	B	C
		Y	F						
6	LXHC	6	-0.004	5-100	5-100	4 5 6	M3	8	9.2
8		8	-0.012			5 6 8	M4	10	11.5
10		10	-0.005			6 8 10	M6	13	15.0
12	PLXHC	12	-0.014	2-60	2-60	6 8 10 12	M8	14	16.2
13		13	-0.006			8 10 12 (15)	M10	17	19.6
15		15	-0.017			10 12 (15) 16		19	21.9
16	SLXHC	16	-0.006	10-100	10-100	10 12 (15) 16	M12	24	27.7
17		17	-0.007			10 12 (15) 16 20		27	31.2
18		18	-0.020			10 12 (15) 16 20 24 (25)	M16	27	31.2
20		20	-0.007	4-60	4-60	10 12 (15) 16 20 24 (25) 30	M12	32	36.9
22		22	-0.007			12 (15) 16 20 24 (25) 30	M20	32	36.9
25		25	-0.020				M16	32	36.9

- Please refer to Table 1 to specify dimensions Y and F.
- Refer to the table below for thread undercut dimensions. This type may have centering holes depending on dimensions.

MA dimensions with ( ) (M15 and M25) are Fine Thread. Specify MSC instead of MA.

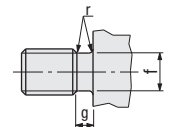
Part Number Example: FXHC12 - 5 - F15 - MA8, LXHC10 - 20 - F35 - MA6

Part Number Alterations: FXHC15 - 20 - F22 - MSC15 - APC

Table 1

M	Y+F
M3	Y+F≥10
M4	Y+F≥12
M6	Y+F≥15.5
M8	Y+F≥19.5
M10	Y+F≥23.5
M12	Y+F≥29.5
M20	Y+F≥45

Thread Undercut Dimensions



Alterations	Y Dimension Tolerance	Four Wrench Flats	Additional Pilot	Fine Thread																																																																			
	 Changes Y dimension tolerance to ±0.05. Applicable to all types. Ordering Code: YKC	 Changes from two wrench flats to four wrench flats. Applicable to Standard / Stepped Types. Ordering Code: WSC	 Adds a pilot to the shaft seat. Applicable to all types. Ordering Code: APC	 Changes Thread MA to Fine Thread in the table below. Applicable to all types. Specify MSC instead of MA. Ordering Code: MSC12																																																																			
Code	YKC	WSC	APC	MSC																																																																			
Spec.			<table border="1"> <thead> <tr> <th>D</th> <th>M</th> <th>APCg6</th> </tr> </thead> <tbody> <tr><td>6</td><td>M3</td><td>6</td></tr> <tr><td>8</td><td>M4</td><td>8</td></tr> <tr><td>10</td><td>M6</td><td>10</td></tr> <tr><td>12</td><td>M8</td><td>12</td></tr> <tr><td>13</td><td>M8</td><td>13</td></tr> <tr><td>15</td><td>M10</td><td>15</td></tr> <tr><td>16</td><td>M10</td><td>16</td></tr> <tr><td>17</td><td>M10</td><td>17</td></tr> <tr><td>18</td><td>M10</td><td>18</td></tr> <tr><td>20</td><td>M12</td><td>20</td></tr> <tr><td>22</td><td>M12</td><td>22</td></tr> <tr><td>25</td><td>M16</td><td>25</td></tr> <tr><td>30</td><td>M20</td><td>30</td></tr> <tr><td>30A</td><td>M16</td><td>30</td></tr> </tbody> </table>	D	M	APCg6	6	M3	6	8	M4	8	10	M6	10	12	M8	12	13	M8	13	15	M10	15	16	M10	16	17	M10	17	18	M10	18	20	M12	20	22	M12	22	25	M16	25	30	M20	30	30A	M16	30	<table border="1"> <thead> <tr> <th>MSC</th> <th>Pitch</th> </tr> </thead> <tbody> <tr><td>M4</td><td>0.5</td></tr> <tr><td>M5</td><td>0.5</td></tr> <tr><td>M6</td><td>0.75</td></tr> <tr><td>M8</td><td>1.0</td></tr> <tr><td>M10</td><td>1.0</td></tr> <tr><td>M12</td><td>1.0</td></tr> <tr><td>M15</td><td>1.0</td></tr> <tr><td>M20</td><td>1.5</td></tr> <tr><td>M25</td><td>1.5</td></tr> <tr><td>M30</td><td>1.5</td></tr> </tbody> </table>	MSC	Pitch	M4	0.5	M5	0.5	M6	0.75	M8	1.0	M10	1.0	M12	1.0	M15	1.0	M20	1.5	M25	1.5	M30	1.5
D	M	APCg6																																																																					
6	M3	6																																																																					
8	M4	8																																																																					
10	M6	10																																																																					
12	M8	12																																																																					
13	M8	13																																																																					
15	M10	15																																																																					
16	M10	16																																																																					
17	M10	17																																																																					
18	M10	18																																																																					
20	M12	20																																																																					
22	M12	22																																																																					
25	M16	25																																																																					
30	M20	30																																																																					
30A	M16	30																																																																					
MSC	Pitch																																																																						
M4	0.5																																																																						
M5	0.5																																																																						
M6	0.75																																																																						
M8	1.0																																																																						
M10	1.0																																																																						
M12	1.0																																																																						
M15	1.0																																																																						
M20	1.5																																																																						
M25	1.5																																																																						
M30	1.5																																																																						

Thread Dia. (MA)	Coarse Thread			Fine Thread			
	g	r	f	Thread Dia. (MSC)	g	r	f
4	1.2-1.5	0.2-0.3	2.9-3.2	4	1.2-1.5	0.2-0.3	2.9-3.2
5	1.2-1.5	0.2-0.3	3.9-4.1	5	1.2-1.5	0.2-0.3	3.9-4.1
6	1.2-1.5	0.2-0.3	4.3-4.9	6	1.2-1.5	0.2-0.3	4.3-4.9
8	1.5-2.5	0.2-0.6	6.3-6.6	8	1.5-2.5	0.2-0.6	6.3-6.6
10	1.5-2.5	0.2-0.6	8.1-8.3	10	1.5-2.5	0.2-0.6	8.3-8.6
12	1.5-3.0	0.2-1.0	9.8-10.1	12	1.5-3.0	0.2-1.0	9.8-10.7
16	1.5-4.0	0.2-1.0	13.6-13.8	16	1.5-4.0	0.2-1.0	13.6-13.8
20	1.5-4.0	0.2-1.0	17.0-17.2	20	1.5-4.0	0.2-1.0	17.2-18.8
24	2.5-5.0	0.2-1.5	20.2-20.7	25	2.5-5.0	0.2-1.5	20.2-23.2
30	2.5-5.0	0.2-1.5	26.0-26.2	30	2.5-5.0	0.2-1.5	26.2-28.2