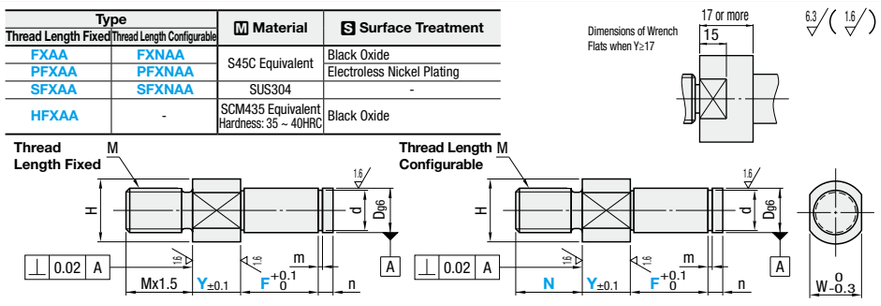
Cantilever Shafts

Threaded with Retaining Ring Groove

■Standard

RoHS

Type: Thread Length Fixed	Type: Thread Length Configurable	M Material	S Surface Treatment
FXAA	FXNAA	S45C Equivalent	Black Oxide
PFXAA	PFXNAA		Electroless Nickel Plating
SFXAA	SFXNAA	SUS304	-
HFXAA	-	SCM435 Equivalent Hardness: 35 ~ 40HRC	Black Oxide



(P) This type may have centering holes depending on dimensions.
(P) Refer to the table on **P.884** for thread undercut dimensions.

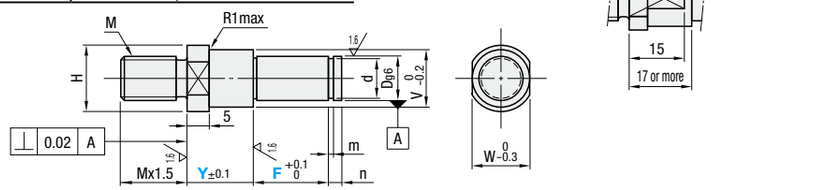
Part Number Type	No.	Dg6		1mm Increment Y	F	(P)N	H	W	M (Coarse)	d Ref. Dim.	d Tolerance	m	n	Unit Price: Thread Length Fixed FXAA	PFXAA	SFXAA	HFXAA	Thread Length Configurable FXNAA	PFXNAA	SFXNAA
Thread Length Fixed FXAA PFXAA SFXAA HFXAA (D≥6) Thread Length Configurable FXNAA PFXNAA SFXNAA	3	3	-0.002 -0.008	2~30	3~50	3~ 6	7	5	M 3	2	+0.060 0	0.5	2				-			
	3A						11	9									-			
	4	4	-0.004 -0.012			4~ 8	8	6	M 4	3		0.7					-			
	4A						12	10									-			
	5	5				5~10	9	7	M 5	4	+0.075 0						-			
	5A						13	11									-			
	6	6			5~100	6~12	10	8	M 6	5										
	6A						14	12												
	8	8	-0.005 -0.014	2~60		8~16	12	10	M 8	7	+0.090 0	0.9	3							
	8A						16	14												
	10	10				10~20	15	13	M10	9.6	0 -0.090	1.15	4							
	10A						20	17												
	12	12	-0.006 -0.017		10~150	12~24	17	14	M12	11.5	0 -0.110									
	13	13					18	15		12.4										
	15	15					20	17		14.3										
	16	16					21	18		15.2										
	17	17					22	19		16.2										
	18	18					23	20		17										
	20	20	-0.007 -0.020	4~60		20~40	26	24	M20	19	0 -0.210	1.35	5							
	20A								M16											
	22	22					28		M20	21										
	22A								M16											
	25	25					31	27	M20	23.9										
	25A								M16											
	30	30					36	32	M20	28.6		1.65								
	30A								M16											

(P) HFXAA is applicable to D6 or larger specifications. (P) N is available for Thread Length Configurable Type only.

■Stepped

RoHS

Type	M Material	S Surface Treatment
FXBA	S45C Equivalent	Black Oxide
PFXBA		Electroless Nickel Plating
SFXBA	SUS304	-
PHFXBA	SCM435 Equivalent Hardness: 35 ~ 40HRC	Electroless Nickel Plating



(P) This type may have centering holes depending on dimensions.
(P) Refer to the table on **P.884** for thread undercut dimensions.

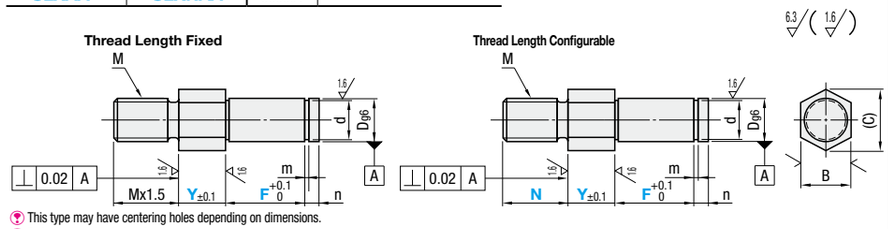
Part Number Type	No.	Dg6		1mm Increment Y	F	V	H	W	M (Coarse)	d Ref. Dim.	d Tolerance	m	n	Unit Price FXBA	PFXBA	SFXBA	PHFXBA
FXBA PFXBA SFXBA PHFXBA (D≥6)	3	3	-0.002 -0.008	7~30	3~ 50	5	7	5	M 3	2	+0.060 0	0.5	2				-
	3A					9	11	9									-
	4	4	-0.004 -0.012			6	8	6	M 4	3		0.7					-
	4A					10	12	10									-
	5	5				7	9	7	M 5	4	+0.075 0						-
	5A					11	13	11									-
	6	6			5~100	8	10	8	M 6	5							
	6A					12	14	12									
	8	8	-0.005 -0.014	7~60		10	12	10	M 8	7	+0.090 0	0.9	3				
	8A					14	16	14									
	10	10				13	15	13	M10	9.6	0 -0.090	1.15	4				
	10A					18	20	17									
	12	12	-0.006 -0.017		10~150	15	17	14	M12	11.5	0 -0.110						
	13	13				16	18	15		12.4							
	15	15				18	20	17		14.3							
	16	16				19	21	18		15.2							
	17	17				20	22	19		16.2							
	18	18				21	23	20		17							
	20	20	-0.007 -0.020	7~60		24	26	24	M20	19	0 -0.210	1.35	5				
	20A								M16								
	22	22				26	28		M20	21							
	22A								M16								
	25	25				29	31	27	M20	23.9							
	25A								M16								
	30	30				34	36	32	M20	28.6		1.65					
	30A								M16								

(P) When W<V, wrench flats W reaches O.D.V. (P) PHFXBA is applicable to D6 or larger specifications.

■Hex

RoHS

Type: Thread Length Fixed	Type: Thread Length Configurable	M Material	S Surface Treatment
LXAA	LXNAA	S45C Equivalent	Black Oxide
PLXAA	PLXNAA		Electroless Nickel Plating
SLXAA	SLXNAA	SUS304	-



(P) This type may have centering holes depending on dimensions.
(P) Refer to the table below for thread undercut dimensions.

Part Number Type	No.	Dg6		1mm Increment Y	F	(P)N	B	(C)	M (Coarse)	d Ref. Dim.	d Tolerance	m	n	Unit Price: Thread Length Fixed LXAA	PLXAA	SLXAA	Thread Length Configurable LXNAA	PLXNAA	SLXNAA
Thread Length Fixed LXAA PLXAA SLXAA Thread Length Configurable LXNAA PLXNAA SLXNAA	3	3	-0.002 -0.008	2~30	3~ 50	3~ 6	6	6.9	M 3	2	+0.060 0	0.5	2						
	4	4	-0.004 -0.012			4~ 8			M 4	3		0.7							
	5	5				5~10	7	8.1	M 5	4	+0.075 0								
	6	6			5~100	6~12	8	9.2	M 6	5									
	8	8	-0.005 -0.014	2~60		8~16	10	11.5	M 8	7	+0.090 0	0.9	3						
	10	10				10~20	13	15.0	M10	9.6	0 -0.090	1.15	4						
	12	12	-0.006 -0.017		10~150	12~24	14	16.2	M12	11.5	0 -0.110								
	13	13					17	19.6		12.4									
	15	15								14.3									
	16	16					19	21.9		15.2									
	17	17								16.2									
	18	18		4~60		20~40	24	27.7		17		1.35	5						
	20	20	-0.007 -0.020						M20	19	0 -0.210								
	20A								M16										
	22	22							M20	21									
	22A								M16										
	25	25					27	31.2	M20	23.9									
	25A								M16										
	30	30					32	36.9	M20	28.6		1.65							
	30A								M16										

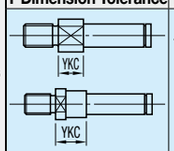
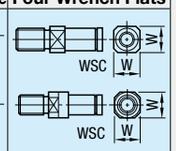
(P) N is available for Thread Length Configurable Type only.

Ordering Example

Part Number	-	Y	-	F	-	N
FXAA10	-	25	-	F18		
PLXNAA12	-	15	-	F25	-	N12

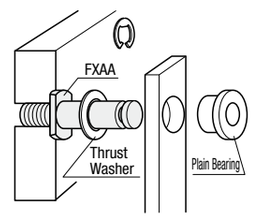
Alterations

Part Number	-	Y	-	F	-	N	-	(YKC, WSC, SET)
FXAA20	-	20	-	F20			-	YKC

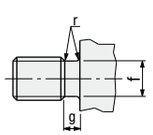
Alterations	Y Dimension Tolerance	Four Wrench Flats	Retaining Ring Set
			
Code	YKC	WSC	SET
Spec.	Changes Y dimension tolerance to ±0.05. (P) Applicable to all types. Ordering Code YKC	Changes from two wrench flats to four wrench flats. (P) Applicable to Standard and Stepped Types. Ordering Code WSC	Retaining Ring applicable to each shaft diameter is included. Ordering Code SET (P) Applicable to all types. Retaining Ring Shape No.=3 ~ 8A: E Type Retaining Ring No.=10 ~ 30A: C Type Retaining Ring Retaining Ring Material

Cantilever Shafts: Material	Cantilever Shafts: Surface Treatment	Retaining Ring: Material
S45C	Black Oxide	Spring Steel
	Electroless Nickel Plating	SUS304-CSP
SUS304	-	
SCM435	Black Oxide	Spring Steel
	Electroless Nickel Plating	SUS304-CSP

Example



(P) Thread Undercut Dimensions



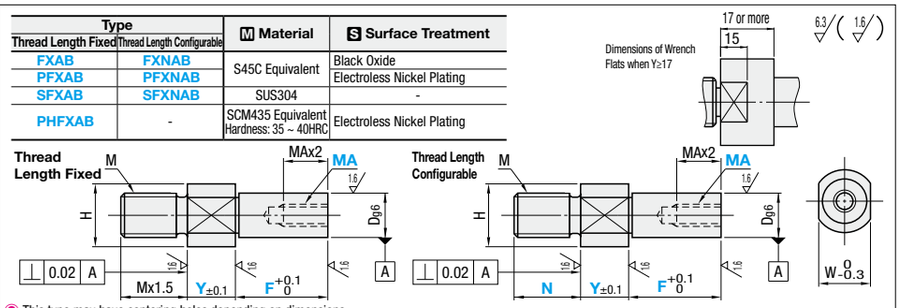
Coarse Thread: Thread Dia. (M)	g	r	f
3	1.2~1.5	0.2~0.3	2.1~2.4
4			2.9~3.2
5		0.2~0.6	3.9~4.1
6	1.5~2.5		4.3~4.9
8			6.3~6.6
10			8.1~8.3
12	1.5~3.0	0.2~1.0	9.8~10.1
16			13.6~13.8
20	1.5~4.0		17.0~17.2

Cantilever Shafts

Threaded with Tapped End

■Standard

Type		Material	Surface Treatment
Thread Length Fixed	Thread Length Configurable		
FXAB	FXNAB	S45C Equivalent	Black Oxide
PFXAB	PFXNAB		Electroless Nickel Plating
SFXAB	SFXNAB	SUS304	-
PHFXAB	-	SCM435 Equivalent Hardness: 35 ~ 40HRC	Electroless Nickel Plating



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.886** for thread undercut dimensions.

RoHS

Part Number Type	No.	Dg6		1mm Increment Y	F	N	MA (Coarse) Selection	H	W	M (Coarse)	Unit Price: Thread Length Fixed FXAB	PFXAB	SFXAB	PHFXAB	Thread Length Configurable FXNAB	PFXNAB	SFXNAB
Thread Length Fixed FXAB PFXAB SFXAB PHFXAB	6	6	-0.004 -0.012	2~60	5~100	6~12	3	10	8	M 6							
	6A							14	12								
	8	8	-0.005 -0.014					12	10	M 8							
	8A							16	14								
	10	10				8~16	4	15	13	M10							
	10A					10~20	4 5 6	20	17								
	12	12	-0.006 -0.017		10~150	12~24	5 6 8	17	14	M12							
	13	13						18	15								
	15	15						20	17								
	16	16					6 8 10	21	18								
	17	17						22	19								
	18	18						23	20								
Thread Length Configurable FXNAB PFXNAB SFXNAB	20	20	-0.007 -0.020	4~75		20~40	6 8 10 12	26	24	M20							
	20A									M16							
	22	22						28		M20							
	22A									M16							
	25	25					8 10 12 16	31	27	M20							
	25A									M16							
	30	30					8 10 12 16 20	36	32	M20							
	30A									M16							

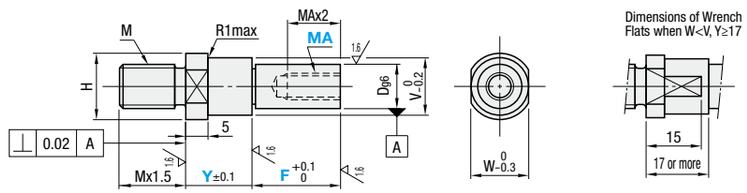
N is available for Thread Length Configurable Type only.

Table 1

MA	Y+F
M 3	Y+F≥11.5
M 4	Y+F≥14.0
M 5	Y+F≥16.2
M 6	Y+F≥18.5
M 8	Y+F≥23.5
M10	Y+F≥28.5
M12	Y+F≥35.5
M16	Y+F≥45.0
M20	Y+F≥55.0

■Stepped

Type	Material	Surface Treatment
FXBB	S45C Equivalent	Black Oxide
PFXBB		Electroless Nickel Plating
SFXBB	SUS304	-



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.886** for thread undercut dimensions.

RoHS

Part Number Type	No.	Dg6		1mm Increment Y	F	MA (Coarse) Selection	V	H	W	M (Coarse)	Unit Price FXBB	PFXBB	SFXBB
FXBB PFXBB SFXBB	6	6	-0.004 -0.012	7~60	5~75	3	8	10	8	M 6			
	6A						12	14	12				
	8	8	-0.005 -0.014			4	10	12	10	M 8			
	8A						14	16	14				
	10	10				4 5 6	13	15	13	M10			
	10A						18	20	17				
	12	12	-0.006 -0.017		10~75	5 6 8	15	17	14	M12			
	13	13					16	18	15				
	15	15					18	20	17				
	16	16				6 8 10	19	21	18				
	17	17					20	22	19				
	18	18					21	23	20				
	20	20	-0.007 -0.020			6 8 10 12	24	26	24	M20			
	20A									M16			
	22	22					26	28		M20			
	22A									M16			
	25	25				8 10 12 16	29	31	27	M20			
	25A									M16			
	30	30				8 10 12 16 20	34	36	32	M20			
	30A									M16			

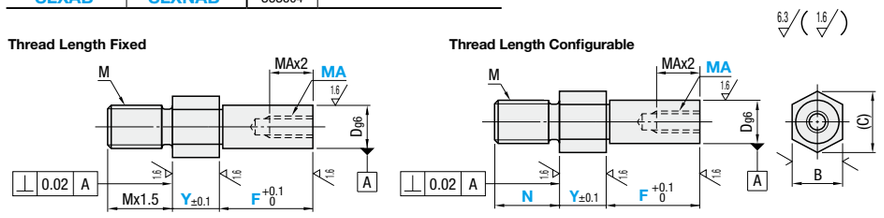
When W<V, wrench flats W reaches O.D.V.

Table 1

MA	Y+F
M 3	Y+F≥11.5
M 4	Y+F≥14.0
M 5	Y+F≥16.2
M 6	Y+F≥18.5
M 8	Y+F≥23.5
M10	Y+F≥28.5
M12	Y+F≥35.5
M16	Y+F≥45.0
M20	Y+F≥55.0

■Hex

Type		Material	Surface Treatment
Thread Length Fixed	Thread Length Configurable		
LXAB	LXNAB	S45C Equivalent	Black Oxide
PLXAB	PLXNAB		Electroless Nickel Plating
SLXAB	SLXNAB	SUS304	-



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.

RoHS

Part Number TYPE	No.	Dg6		1mm Increment Y	F	N	MA (Coarse) Selection	B	(C)	M (Coarse)	Unit Price: Thread Length Fixed LXAB	PLXAB	SLXAB	Thread Length Configurable LXNAB	PLXNAB	SLXNAB
Thread Length Fixed LXAB PLXAB SLXAB	6	6	-0.004 -0.012	2~60	5~100	6~12	3	8	9.2	M 6						
	8	8	-0.005 -0.014			8~16	4	10	11.5	M 8						
	10	10				10~20	4 5 6	13	15	M10						
	12	12	-0.006 -0.017		10~100	12~24	5 6 8	14	16.2	M12						
	13	13						17	19.6							
	15	15					6 8 10									
	16	16						19	21.9							
	17	17														
	18	18						24	27.7	M20						
Thread Length Configurable LXNAB PLXNAB SLXNAB	20	20	-0.007 -0.020	4~60		20~40	6 8 10 12			M16						
	20A									M20						
	22	22								M16						
	22A									M20						
	25	25					8 10 12 16	27	31.2	M16						
	25A									M20						
	30	30					8 10 12 16 20	32	36.9	M16						
	30A									M20						

N is available for Thread Length Configurable Type only.

Table 1

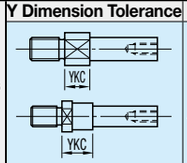
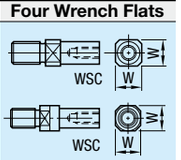
MA	Y+F
M 3	Y+F≥11.5
M 4	Y+F≥14.0
M 5	Y+F≥16.2
M 6	Y+F≥18.5
M 8	Y+F≥23.5
M10	Y+F≥28.5
M12	Y+F≥35.5
M16	Y+F≥45.0
M20	Y+F≥55.0

Ordering Example

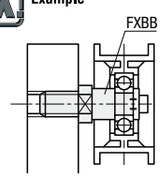
Part Number	Y	F	N	MA
FXAB10	25	F18		MA5
PLXNAB12	15	F25	N12	MA6

Alterations

Part Number	Y	F	N	MA	(YKC, WSC)
FXAB20	20	F20		MA10	YKC

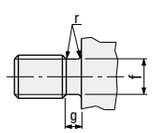
Alterations	Y Dimension Tolerance	Four Wrench Flats
		
Code	YKC	WSC
Spec.	Changes Y dimension tolerance to ±0.05. Applicable to all types. Ordering Code YKC	Changes from two wrench flats to four wrench flats. Applicable to Standard and Stepped Types. Ordering Code WSC

Example



Combination of these app. examples can be selected on our website.
Selection Procedure Details **P.87**
e-Catalog Search Keyword #MA272 Search
* Enter the search keyword in the search box on e-Catalog. The search result will be shown in "Modular Assembler" area.

Thread Undercut Dimensions



Coarse Thread Thread Dia. (M)	g	r	f
6	1.5~2.5	0.2~0.6	4.3~4.9
8			6.3~6.6
10			8.1~8.3
12	1.5~3.0	0.2~1.0	9.8~10.1
16			13.6~13.8
20	1.5~4.0		17.0~17.2

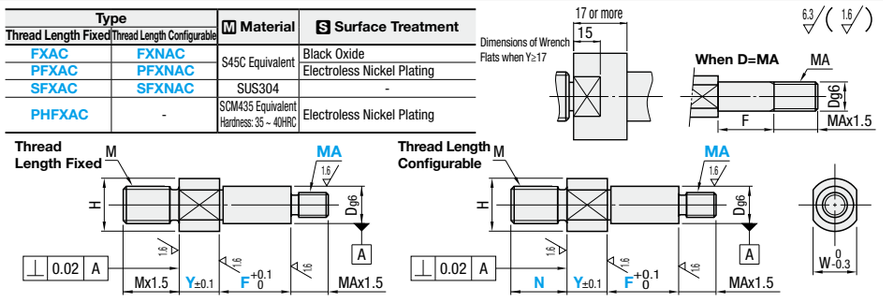
Cantilever Shafts

Threaded with Threaded Ends

■Standard

RoHS

Type: Thread Length Fixed	Type: Thread Length Configurable	M Material	S Surface Treatment
FXAC	FXNAC	S45C Equivalent	Black Oxide
PFXAC	PFXNAC		Electroless Nickel Plating
SFXAC	SFXNAC	SUS304	-
PHFXAC	-	SCM435 Equivalent Hardness: 35 ~ 40HRC	Electroless Nickel Plating



This type may have centering holes depending on dimensions.
Refer to the table on **P.888** for thread undercut dimensions.

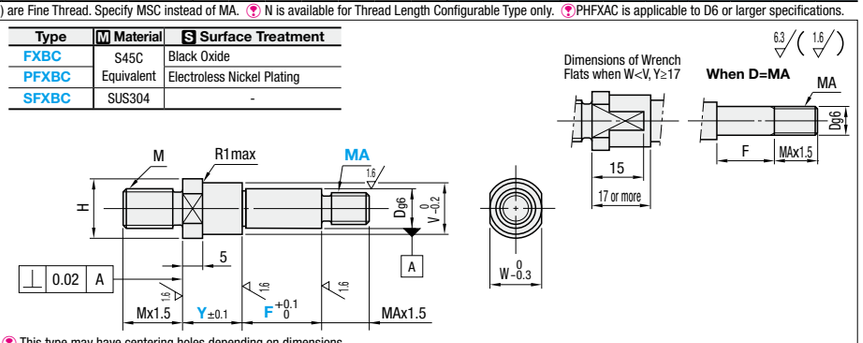
Part Number Type	No.	Dg6		1mm Increment Y	F	N	MA (Coarse) Selection	H	W	M (Coarse)	Unit Price: Thread Length Fixed FXAC	PFXAC	SFXAC	PHFXAC	Thread Length Configurable FXNAC	PFXNAC	SFXNAC
Thread Length Fixed FXAC PFXAC SFXAC PHFXAC (D≥6)	3	3	-0.002 -0.008	2~30	3~ 50	3~ 6	3	7	5	M 3				-			
	3A							11	9					-			
	4	4	-0.004 -0.012			4~ 8	3 4	8	6	M 4				-			
	4A							12	10					-			
	5	5				5~10	3 4 5	9	7	M 5				-			
	5A							13	11					-			
	6	6		2~60	5~100	6~12	4 5 6	10	8	M 6							
	6A							14	12								
	8	8	-0.005 -0.014			8~16	5 6 8	12	10	M 8							
	8A							16	14								
	10	10				10~20	6 8 10	15	13	M10							
	10A							20	17								
	12	12	-0.006 -0.017			12~24	6 8 10 12	17	14	M12							
	13	13						18	15								
	15	15					6 8 10 12 (15)	20	17								
Thread Length Configurable FXNAC SFXNAC PFXNAC	16	16						21	18								
	17	17					8 10 12 (15)	22	19								
	18	18						23	20								
	20	20	-0.007 -0.020	4~60	10~100	20~40	10 12 (15) 16 20	26	24	M20							
	20A									M16							
	22	22						28		M20							
	22A									M16							
	25	25					10 12 (15) 16 20 24 (25)	31	27	M20							
	25A									M16							
	30	30					12 (15) 16 20 24 (25) 30	36	32	M20							
	30A									M16							

MA dimensions with ( ) (M15 and M25) are Fine Thread. Specify MSC instead of MA. N is available for Thread Length Configurable Type only. PHFXAC is applicable to D6 or larger specifications.

■Stepped

RoHS

Type	M Material	S Surface Treatment
FXBC	S45C Equivalent	Black Oxide
PFXBC		Electroless Nickel Plating
SFXBC	SUS304	-



This type may have centering holes depending on dimensions.
Refer to the table on **P.888** for thread undercut dimensions.

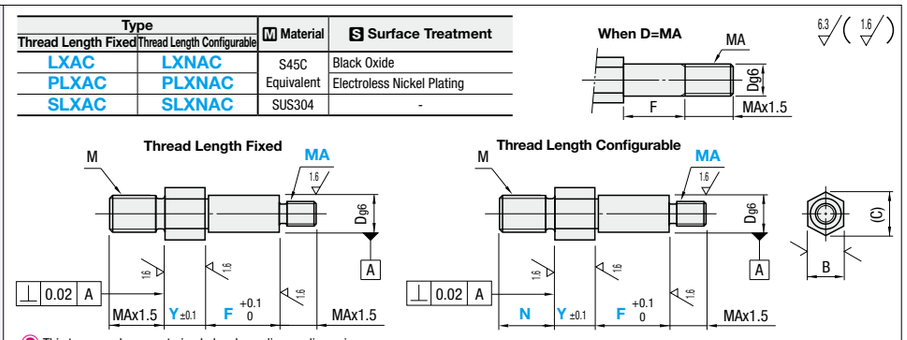
Part Number Type	No.	Dg6		1mm Increment Y	F	MA (Coarse) Selection	V	H	W	M (Coarse)	Unit Price FXBC	PFXBC	SFXBC
FXBC PFXBC SFXBC	3	3	-0.002 -0.008	7~30	3~ 50	3	5	7	5	M 3			
	3A						9	11	9				
	4	4	-0.004 -0.012			3 4	6	8	6	M 4			
	4A						10	12	10				
	5	5				3 4 5	7	9	7	M 5			
	5A						11	13	11				
	6	6		7~60	5~100	4 5 6	8	10	8	M 6			
	6A						12	14	12				
	8	8	-0.005 -0.014			5 6 8	10	12	10	M 8			
	8A						14	16	14				
	10	10				6 8 10	13	15	13	M10			
	10A						18	20	17				
	12	12	-0.006 -0.017			6 8 10 12	15	17	14	M12			
	13	13					16	18	15				
	15	15				8 10 12 (15)	18	20	17				
	16	16					19	21	18				
	17	17					20	22	19				
	18	18					21	23	20				
	20	20	-0.007 -0.020		10~100	10 12 (15) 16 20	24	26	24	M20			
	20A									M16			
	22	22					26	28		M20			
	22A									M16			
	25	25				10 12 (15) 16 20 24 (25)	29	31	27	M20			
	25A									M16			
	30	30				12 (15) 16 20 24 (25) 30	34	36	32	M20			
	30A									M16			

MA dimensions with ( ) (M15 and M25) are Fine Thread. Specify MSC instead of MA. When W<V, wrench flats W reaches O.D.V.

■Hex

RoHS

Type: Thread Length Fixed	Type: Thread Length Configurable	M Material	S Surface Treatment
LXAC	LXNAC	S45C Equivalent	Black Oxide
PLXAC	PLXNAC		Electroless Nickel Plating
SLXAC	SLXNAC	SUS304	-



This type may have centering holes depending on dimensions.
Refer to the table below for thread undercut dimensions.

Part Number Type	No.	Dg6		1mm Increment Y	F	N	MA (Coarse) Selection	B	(C)	M (Coarse)	Unit Price: Thread Length Fixed LXAC	PLXAC	SLXAC	Thread Length Configurable LXNAC	PLXNAC	SLXNAC
Thread Length Fixed LXAC PLXAC SLXAC	3	3	-0.002 -0.008	2~30	3~50	3~ 6	3	6	6.9	M 3						
	4	4	-0.004 -0.012			4~ 8	3 4			M 4						
	5	5				5~10	3 4 5	7	8.1	M 5						
	6	6		2~60	5~75	6~12	4 5 6	8	9.2	M 6						
	8	8	-0.005 -0.014			8~16	5 6 8	10	11.5	M 8						
	10	10				10~20	6 8 10	13	15	M10						
	12	12	-0.006 -0.017		10~75	12~24	6 8 10 12	14	16.2	M12						
	13	13						17	19.6							
	15	15					8 10 12 (15)	19	21.9							
Thread Length Configurable LXNAC PLXNAC SLXNAC	16	16														
	17	17														
	18	18														
	20	20	-0.007 -0.020	4~60		20~40	10 12 (15) 16 20	24	27.7	M20						
	20A									M16						
	22	22								M20						
	22A									M16						
	25	25					10 12 (15) 16 20 24 (25)	27	31.2	M20						
	25A									M16						
	30	30					12 (15) 16 20 24 (25) 30	32	36.9	M20						
	30A									M16						

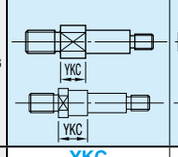
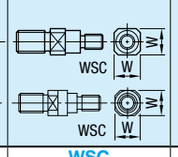
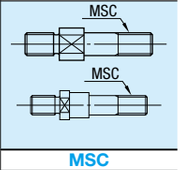
MA dimensions with ( ) (M15 and M25) are Fine Thread. Specify MSC instead of MA. N is available for Thread Length Configurable Type only.

Ordering Example

Part Number	-	Y	-	F	-	N	-	MA
FXAC12	-	25	-	F22			-	MA8
LXNAC10	-	30	-	F50	-	N10	-	MA6

Alterations

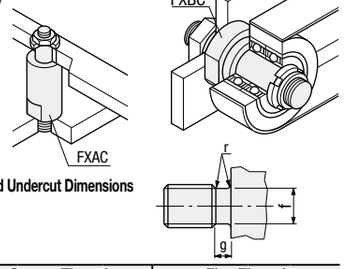
Part Number	-	Y	-	F	-	N	-	MA (MSC)	-	(YKC, WSC)
FXAC10	-	53	-	F30			-	MSC10	-	WSC

Alterations	Y Dimension Tolerance	Four Wrench Flats	Fine Thread
			
Code	YKC	WSC	MSC
Spec.	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 and Stepped Types. Ordering Code WSC	Changes Thread MA to Fine Thread in the table below. Applicable to all types. Specify MSC instead of MA. Ordering Code MSC8

MSC	Pitch
M 3	0.35
M 4	0.5
M 5	
M 6	0.75
M 8	1.0
M10	

MSC	Pitch
M12	1.0
M15	
M20	
M25	1.5
M30	

Example



Thread Undercut Dimensions

Coarse Thread: Thread Dia. (M, MA)	g	r	f	Fine Thread: Thread Dia. (MSC)	g	r	f
3	1.2~1.5	0.2~0.3	2.1~ 2.4	3	1.2~1.5	0.2~0.3	2.1~2.4
4			2.9~ 3.2	4			2.9~3.2
5			3.9~ 4.1	5			3.9~4.1
6	1.5~2.5	0.2~0.6	4.3~ 4.9	6	1.5~2.5	0.2~0.6	4.3~4.9
8			6.3~ 6.6	8			6.3~6.6
10			8.1~ 8.3	10			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			13.6~13.8	15			13.6~13.8
20	1.5~4.0		17.0~17.2	20	1.5~4.0		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			26.0~26.2	30			26.2~28.2

Cantilever Shafts

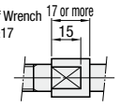
Piloted Thread with Retaining Ring Groove

■Standard

RoHS

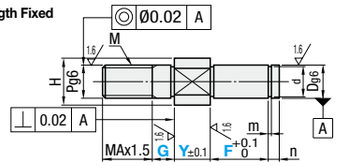
Type		Material	Surface Treatment
Thread Length Fixed	Thread Length Configurable		
FXCA	FXNCA	S45C Equivalent	Black Oxide
PFXCA	PFXNCA		Electroless Nickel Plating
SFXCA	SFXNCA	SUS304	-
HFXCA	-	SCM435 Equivalent Hardness: 35 ~ 40HRC	Black Oxide

Dimensions of Wrench Flats when Y≥17

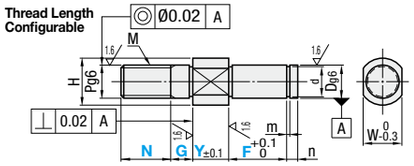


6.3 (1.6)

Thread Length Fixed



Thread Length Configurable



This type may have centering holes depending on dimensions.

Part Number Type	No.	Dg6		1mm Increment Y	F	G	N	Pg6	M (Coarse)	H	W	d Ref. Dim.	d Tolerance	m	n	Unit Price Thread Length Fixed FXCA	PFXCA	SFXCA	HFXCA	Thread Length Configurable FXNCA	PFXNCA	SFXNCA
Thread Length Fixed FXCA PFXCA SFXCA HFXCA (D≥6)	3	3	-0.002 -0.008	2~30	3~ 50	3~ 8	3~ 6	3	M 3	7	5	2	+0.060 0	0.5	2				-			
	3A									11	9								-			
	4	4	-0.004 -0.012				4~ 8	4	M 4	8	6	3		0.7					-			
	4A									12	10								-			
	5	5					5~10	5	M 5	9	7	4	+0.075 0						-			
	5A									13	11								-			
	6	6		2~60	5~100	5~10	6~12	6	M 6	10	8	5										
	6A									14	12											
	8	8	-0.005 -0.014				8~16	8	M 8	12	10	7	+0.090 0	0.9	3							
	8A									16	14											
	10	10					10~20	10	M10	15	13	9.6	0 -0.090	1.15	4							
	10A									20	17											
	12	12	-0.006 -0.017			5~15	12~24	12	M12	17	14	11.5	0 -0.110									
	13	13			10~150					18	15	12.4										
	15	15								20	17	14.3										
	16	16								21	18	15.2										
Thread Length Configurable FXNCA PFXNCA SFXNCA	17	17								23	20	16.2										
	18	18										17										
	20	20	-0.007 -0.020	4~75		5~20	20~40	20	M20	26	24	19	0 -0.210	1.35	5							
	20A							16	M16													
	22	22						20	M20	28	25	21										
	22A							16	M16													
	25	25						20	M20	31	27	23.9										
	25A							16	M16													
	30	30						20	M20	36	32	28.6		1.65								
	30A							16	M16													

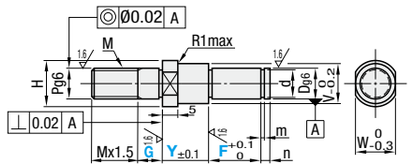
HFXCA is applicable to D6 or larger specifications.

N is available for Thread Length Configurable Type only.

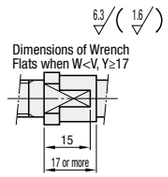
■Stepped

RoHS

Type	Material	Surface Treatment
FXDA	S45C Equivalent	Black Oxide
PFXDA		Electroless Nickel Plating
SFXDA	SUS304	-



Dimensions of Wrench Flats when W<V, Y≥17



6.3 (1.6)

This type may have centering holes depending on dimensions.

Part Number Type	No.	Dg6		1mm Increment Y	F	G	Pg6	M (Coarse)	V	H	W	d Ref. Dim.	d Tolerance	m	n	Unit Price FXDA	PFXDA	SFXDA
FXDA PFXDA SFXDA	3	3	-0.002 -0.008	7~30	3~ 50	3~ 8	3	M 3	5	7	5	2	+0.060 0	0.5	2			
	3A								9	11	9							
	4	4	-0.004 -0.012				4	M 4	6	8	6	3		0.7				
	4A								10	12	10							
	5	5					5	M 5	7	9	7	4	+0.075 0					
	5A								11	13	11							
	6	6		7~60	5~100	5~10	6	M 6	8	10	8	5						
	6A								12	14	12							
	8	8	-0.005 -0.014				8	M 8	10	12	10	7	+0.090 0	0.9	3			
	8A								14	16	14							
	10	10					10	M10	13	15	13	9.6	0 -0.090	1.15	4			
	10A								18	20	17							
	12	12	-0.006 -0.017			5~15	12	M12	15	17	14	11.5	0 -0.110					
	13	13			10~100				16	18	15	12.4						
	15	15							18	20	17	14.3						
	16	16							19	21	18	15.2						
	17	17							20	23	20	16.2						
	18	18							21			17						
	20	20	-0.007 -0.020			5~20	20	M20	24	26	24	19	0 -0.210	1.35	5			
	20A						16	M16										
	22	22					20	M20	26	28	25	21						
	22A						16	M16										
	25	25					20	M20	29	31	27	23.9						
	25A						16	M16										
	30	30					20	M20	34	36	32	28.6		1.65				
	30A						16	M16										

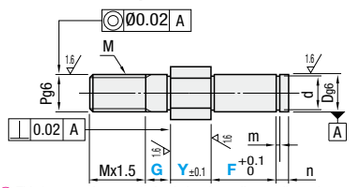
When W<V, wrench flats W reaches O.D.V.

■Hex

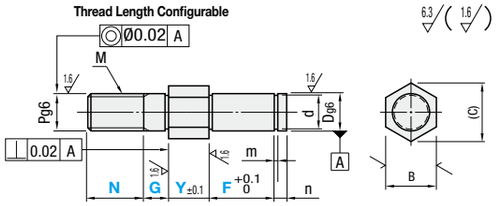
RoHS

Type		Material	Surface Treatment
Thread Length Fixed	Thread Length Configurable		
LXCA	LXNCA	S45C Equivalent	Black Oxide
PLXCA	PLXNCA		Electroless Nickel Plating
SLXCA	SLXNCA	SUS304	-

Thread Length Fixed



Thread Length Configurable



6.3 (1.6)

This type may have centering holes depending on dimensions.

Part Number Type	No.	Dg6		1mm Increment Y	F	G	N	Pg6	M (Coarse)	B	(C)	d Ref. Dim.	d Tolerance	m	n	Unit Price Thread Length Fixed LXCA	PLXCA	SLXCA	Thread Length Configurable LXNCA	PLXNCA	SLXNCA
Thread Length Fixed LXCA PLXCA SLXCA	3	3	-0.002 -0.008	2~30	3~ 50	3~ 8	3~ 6	3	M 3	6	6.9	2	+0.060 0	0.5	2						
	4	4	-0.004 -0.012				4~ 8	4	M 4			3									
	5	5					5~10	5	M 5	7	8.1	4	+0.075 0	0.7							
	6	6		2~60	5~100	5~10	6~12	6	M 6	8	9.2	5									
	8	8	-0.005 -0.014				8~16	8	M 8	10	11.5	7	+0.090 0	0.9	3						
	10	10					10~20	10	M10	13	15.0	9.6	-0.040 -0.130	1.15							
	12	12	-0.006 -0.017			5~15	12~24	12	M12	14	16.2	11.5			4						
	13	13			10~100					17	19.6	12.4	0 -0.110								
	15	15										14.3									
	16	16								19	21.9	15.2									
Thread Length Configurable LXNCA PLXNCA SLXNCA	17	17										16.2									
	18	18										17									
	20	20	-0.007 -0.020	4~60		5~20	20~40	20	M20	24	27.7	19	0 -0.210	1.35	5						
	20A							16	M16												
	22	22						20	M20	27	31.2	21									
	22A							16	M16												
	25	25						20	M20			23.9									
	25A							16	M16												
	30	30						20	M20	32	36.9	28.6		1.65							
	30A							16	M16												

N is available for Thread Length Configurable Type only.

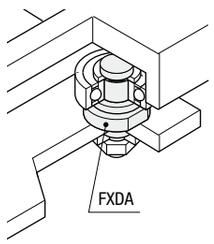
Ordering Example

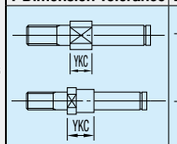
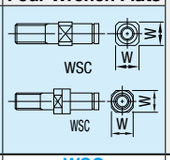
Part Number	-	Y	-	F	-	G	-	N
FXCA12	-	12	-	F15	-	G6		
LXNCA20	-	25	-	F30	-	G10	-	N40

Alterations

Part Number	-	Y	-	F	-	G	-	N	-	(YKC, WSC, SET)
FXCA25	-	30	-	F15	-	G8			-	YKC

Example



Alterations	Y Dimension Tolerance	Four Wrench Flats	Retaining Ring Set
			
Code	**YKC**	**WSC**	**SET**
Spec.	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 and Stepped Types. Ordering Code WSC	Retaining Ring applicable to each shaft diameter is included. Ordering Code SET Applicable to all types. Retaining Ring Shape No.=3 ~ 8: E Type Retaining Ring No.=10 ~ 30A: C Type Retaining Ring Retaining Ring Material

Cantilever Shafts		Retaining Ring
Material	Surface Treatment	Material
S45C	Black Oxide	Spring Steel
	Electroless Nickel Plating	SUS304-CSP
SUS304	-	
SCM435	Black Oxide	Spring Steel
	Electroless Nickel Plating	SUS304-CSP

Cantilever Shafts

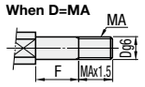
Piloted Thread with Threaded Ends

■Standard

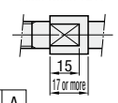
RoHS

Type		Material	Surface Treatment
Thread Length Fixed	Thread Length Configurable		
FXCC	FXNCC	S45C Equivalent	Black Oxide
PFXCC	PFXNCC		Electroless Nickel Plating
SFXCC	SFXNCC	SUS304	-

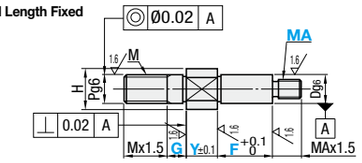
When D=MA



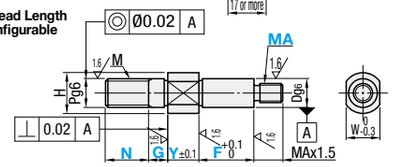
Dimensions of Wrench Flats when Y≥17



Thread Length Fixed



Thread Length Configurable



This type may have centering holes depending on dimensions.
Refer to the table on the next page for thread undercut dimensions.

Part Number Type	No.	Dg6		1mm Increment Y	F	G	N	MA (Coarse) Selection	Pg6	M (Coarse)	H	W	Unit Price Thread Length Fixed FXCC	PFXCC	SFXCC	Thread Length Configurable FXNCC	PFXNCC	SFXNCC
Thread Length Fixed FXCC PFXCC SFXCC / Thread Length Configurable FXNCC PFXNCC SFXNCC	3	3	-0.002 -0.008	2~30	3~ 50	3~ 8	3~ 6	3	3	M 3	7	5						
	3A										11	9			-			-
	4	4	-0.004 -0.012				4~ 8	3 4	4	M 4	8	6						
	4A										12	10			-			-
	5	5					5~10	3 4 5	5	M 5	9	7						
	5A										13	11			-			-
	6	6			5~100	5~10	6~12	4 5 6	6	M 6	10	8						
	6A										14	12			-			-
	8	8	-0.005 -0.014				8~16	5 6 8	8	M 8	12	10						
	8A										16	14			-			-
	10	10					10~20	6 8 10	10	M10	15	13						
	10A										20	17			-			-
	12	12	-0.006 -0.017	2~60	10~150	5~15	12~24	6 8 10 12	12	M12	17	14						
	13	13									18	15						
	15	15						8 10 12 (15)			20	17						
	16	16									21	18						
	17	17				5~20		10 12 (15) 16			23	20						
	18	18																
	20	20	-0.007 -0.020	4~60			20~40	10 12 (15) 16 20	20	M20	26	24						
	20A								16	M16								
	22	22							20	M20	28	25						
	22A								16	M16								
	25	25						10 12 (15) 16 20 24 (25)	20	M20	31	27						
	25A								16	M16								
	30	30						12 (15) 16 20 24 (25) 30	20	M20	36	32						
	30A								16	M16								

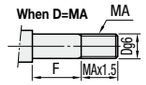
MA dimensions with ( ) (M15 and M25) are Fine Thread. Specify MSC instead of MA.
N is available for Thread Length Configurable Type only.

■Stepped

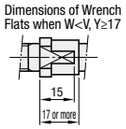
RoHS

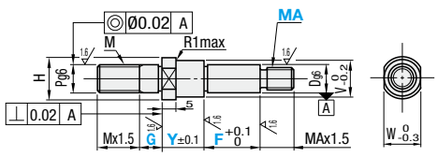
Type	Material	Surface Treatment
FXDC	S45C Equivalent	Black Oxide
PFXDC		Electroless Nickel Plating
SFXDC	SUS304	-

When D=MA



Dimensions of Wrench Flats when W<V, Y≥17





This type may have centering holes depending on dimensions.
Refer to the table on the next page for thread undercut dimensions.

Part Number Type	No.	Dg6		1mm Increment Y	F	G	MA (Coarse) Selection	Pg6	M (Coarse)	V	H	W	Unit Price FXDC	PFXDC	SFXDC
FXDC PFXDC SFXDC	3	3	-0.002 -0.008	7~30	3~50	3~ 8	3	3	M 3	5	7	5			
	3A									9	11	9			
	4	4	-0.004 -0.012				3 4	4	M 4	6	8	6			
	4A									10	12	10			
	5	5					3 4 5	5	M 5	7	9	7			
	5A									11	13	11			
	6	6			5~75	5~10	4 5 6	6	M 6	8	10	8			
	6A									12	14	12			
	8	8	-0.005 -0.014	7~60			5 6 8	8	M 8	10	12	10			
	8A									14	16	14			
	10	10					6 8 10	10	M10	13	15	13			
	10A									18	20	17			
	12	12	-0.006 -0.017		10~75	5~15	6 8 10 12	12	M12	15	17	14			
	13	13								16	18	15			
	15	15					8 10 12 (15)			18	20	17			
	16	16								19	21	18			
	17	17				5~20	10 12 (15) 16			20	23	20			
	18	18								21					
	20	20	-0.007 -0.020	7~60			10 12 (15) 16 20	20	M20	24	26	24			
	20A							16	M16						
	22	22						20	M20	26	28	25			
	22A							16	M16						
	25	25					10 12 (15) 16 20 24 (25)	20	M20	29	31	27			
	25A							16	M16						
	30	30					12 (15) 16 20 24 (25) 30	20	M20	34	36	32			
	30A							16	M16						

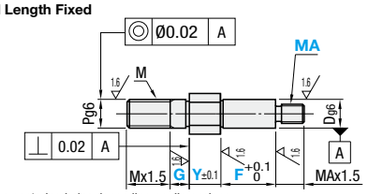
MA dimensions with ( ) (M15 and M25) are Fine Thread. Specify MSC instead of MA.
When W<V, wrench flats W reaches O.D.V.

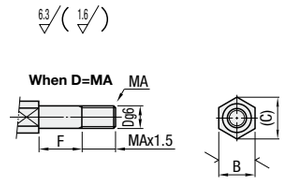
■Hex

RoHS

Type	Material	Surface Treatment
LXCC	S45C Equivalent	Black Oxide
PLXCC		Electroless Nickel Plating
SLXCC	SUS304	-

Thread Length Fixed





This type may have centering holes depending on dimensions.
Refer to the table below for thread undercut dimensions.

Part Number Type	No.	Dg6		1mm Increment Y	F	G	MA (Coarse) Selection	Pg6	M (Coarse)	B	(C)	Unit Price LXCC	PLXCC	SLXCC
LXCC PLXCC SLXCC	3	3	-0.002 -0.008	2~30	3~ 50	3~ 8	3	3	M 3	6	6.9			
	4	4	-0.004 -0.012				3 4	4	M 4					
	5	5					3 4 5	5	M 5	7	8.1			
	6	6		2~60	5~100	5~10	4 5 6	6	M 6	8	9.2			
	8	8	-0.005 -0.014				5 6 8	8	M 8	10	11.5			
	10	10					6 8 10	10	M10	13	15.0			
	12	12	-0.006 -0.017		10~150	5~15	6 8 10 12	12	M12	14	16.2			
	13	13								17	19.6			
	15	15					8 10 12 (15)							
	16	16								19	21.9			
	17	17				5~20	10 12 (15) 16							
	18	18												
	20	20	-0.007 -0.020	4~60			10 12 (15) 16 20	24	M20	27	27.7			
	20A							16	M16					
	22	22						20	M20					
	22A							16	M16					
	25	25					10 12 (15) 16 20 24 (25)	20	M20	32	31.2			
	25A							16	M16					
	30	30					12 (15) 16 20 24 (25) 30	20	M20	36	36.9			
	30A							16	M16					

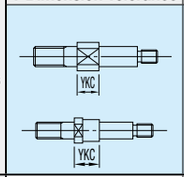
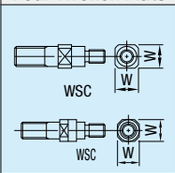
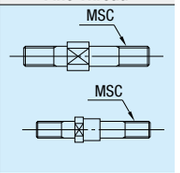
MA dimensions with ( ) (M15 and M25) are Fine Thread. Specify MSC instead of MA.

Ordering Example

Part Number	-	Y	-	F	-	G	-	N	-	MA
FXCC8	-	15	-	F25	-	G5			-	MA5
FXNCC10	-	27	-	F10	-	G5	-	N10	-	MA6

Alterations

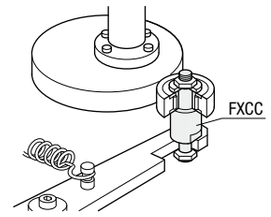
Part Number	-	Y	-	F	-	G	-	N	-	MA/MSC	-	(YKC, WSC)
FXCC15	-	10	-	F21	-	G7			-	MSC15	-	WSC

Alterations	Y Dimension Tolerance	Four Wrench Flats	Fine Thread
			
Code	YKC	WSC	MSC
Spec.	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 and Stepped Types. Ordering Code WSC	Changes Thread MA to Fine Thread in the table below. Applicable to all types. Specify MSC instead of MA. Ordering Code MSC12

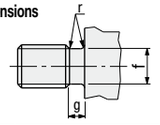
MSC	Pitch
M 3	0.35
M 4	0.5
M 5	
M 6	0.75
M 8	1.0
M10	

MSC	Pitch
M12	1.0
M15	
M20	
M25	1.5
M30	

Example



Thread Undercut Dimensions



Coarse Thread Thread Dia. (M, MA)	g	r	f	Fine Thread Thread Dia. (MSC)	g	r	f
3	1.2~1.5	0.2~0.3	2.1~ 2.4	3	1.2~1.5	0.2~0.3	2.1~2.4
4			2.9~ 3.2	4			2.9~3.2
5			3.9~ 4.1	5			3.9~4.1
6	1.5~2.5	0.2~0.6	4.3~ 4.9	6	1.5~2.5	0.2~0.6	4.3~4.9
8			6.3~ 6.6	8			6.3~6.6
10			8.1~ 8.3	10			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			13.6~13.8	15			13.6~13.8
20	1.5~4.0		17.0~17.2	20	1.5~4.0		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			26.0~26.2	30			26.2~28.2

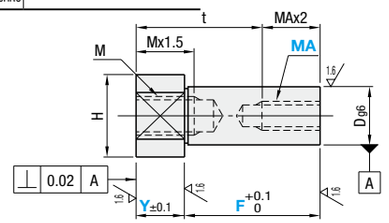
Cantilever Shafts

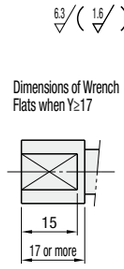
Screw Mount with Tapped End

■Standard

RoHS

Type	Material	Surface Treatment
FXHB	S45C Equivalent	Black Oxide
PFXHB		Electroless Nickel Plating
SFXHB	SUS304	-
PHFXHB	SCM435 Equivalent Hardness: 35 ~ 40HRC	Electroless Nickel Plating





Part Number Type	No.	Dg6		1mm Increment Y	F	MA (Coarse) Selection	M (Coarse)	H	W	Unit Price FXHB	PFXHB	SFXHB	PHFXHB
FXHB PFXHB SFXHB PHFXHB	6	6	-0.004 -0.012	2~60	5~100	3	M 3	10	8				
	6A							14	12				
	8	8	-0.005 -0.014			4	M 4	12	10				
	8A							16	14				
	10	10				4 5 6	M 6	15	13				
	10A							20	17				
	12	12	-0.006 -0.017		10~150	5 6 8	M 8	17	14				
	13	13						18	15				
	15	15				6 8 10	M10	20	17				
	16	16						21	18				
	17	17						23	20				
	18	18											
	20	20	-0.007 -0.020	4~75		6 8 10 12	M12	26	24				
	20A						M 8						-
	22	22					M16	28	26				
	22A						M12						-
	25	25				8 10 12 16	M16	31	27				
	25A						M12						
	30	30				8 10 12 16 20	M20	36	32				
	30A						M16						

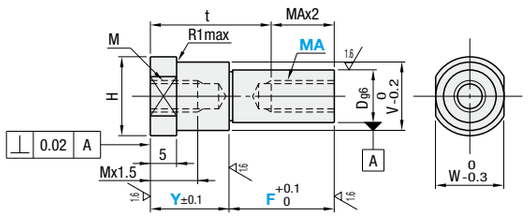
D	M	t
6	M 3	11
8	M 4	12.5
10	M 6	14
12, 13	M 8	17
15	M10	20
16		
17		
18		
20	M12	25
22		
25	M16	31
30	M20	37

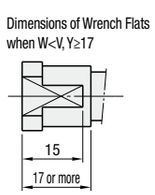
Specify dimensions Y and F not to make the dimension "t" less than the values in the table above.

■Stepped

RoHS

Type	Material	Surface Treatment
FXJB	S45C Equivalent	Black Oxide
PFXJB		Electroless Nickel Plating
SFXJB	SUS304	-





Part Number Type	No.	Dg6		1mm Increment Y	F	MA (Coarse) Selection	M (Coarse)	V	H	W	Unit Price FXJB	PFXJB	SFXJB
FXJB PFXJB SFXJB	6	6	-0.004 -0.012	7~60	5~100	3	M 3	8	10	8			
	6A							12	14	12			-
	8	8	-0.005 -0.014			4	M 4	10	12	10			
	8A							14	16	14			-
	10	10				4 5 6	M 6	13	15	13			
	10A							18	20	17			-
	12	12	-0.006 -0.017		10~100	5 6 8	M 8	15	17	14			
	13	13						16	18	15			
	15	15				6 8 10	M10	18	20	17			
	16	16						19	21	18			
	17	17						20	23	20			
	18	18						21					
	20	20	-0.007 -0.020	7~60		6 8 10 12	M12	24	26	24			
	20A						M 8						-
	22	22					M12	26	28	26			
	22A						M 8						-
	25	25				8 10 12 16	M16	29	31	27			
	25A						M12						
	30	30				8 10 12 16 20	M20	34	36	32			
	30A						M16						

D	M	t
6	M 3	11
8	M 4	12.5
10	M 6	14
12, 13	M 8	17
15	M10	20
16		
17		
18		
20	M12	25
22		
25	M16	31
30	M20	37

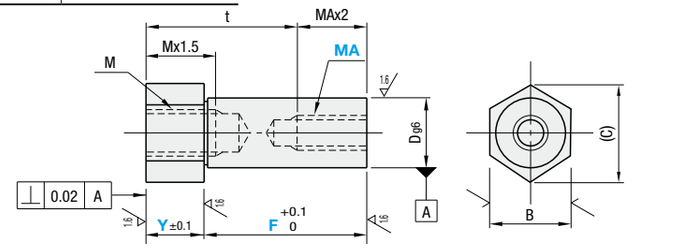
Specify dimensions Y and F not to make the dimension "t" less than the values in the table above.

When W<V, wrench flats W reaches O.D.V.

■Hex

RoHS

Type	Material	Surface Treatment
LXHB	S45C Equivalent	Black Oxide
PLXHB		Electroless Nickel Plating
SLXHB	SUS304	-



Part Number Type	No.	Dg6		1mm Increment Y	F	MA (Coarse) Selection	M (Coarse)	B	(C)	Unit Price LXHB	PLXHB	SLXHB
LXHB PLXHB SLXHB	6	6	-0.004 -0.012	2~60	5~100	3	M 3	8	9.2			
	8	8	-0.005 -0.014			4	M 4	10	11.5			
	10	10				4 5 6	M 6	13	15			
	12	12	-0.006 -0.017		10~150	5 6 8	M 8	14	16.2			
	13	13						17	19.6			
	15	15				6 8 10	M10	19	21.9			
	16	16						24	27.7			
	17	17										
	18	18										
	20	20	-0.007 -0.020	4~60		6 8 10 12	M12					
	22	22										
	25	25				8 10 12 16	M16	27	31.2			
	25A						M12					
	30	30				8 10 12 16 20	M20	32	36.9			
	30A						M16					

D	M	t
6	M 3	11
8	M 4	12.5
10	M 6	14
12, 13	M 8	17
15	M10	20
16		
17		
18		
20	M12	25
22		
25	M16	31
30	M20	37

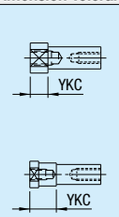
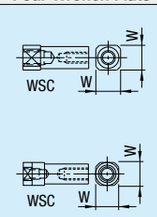
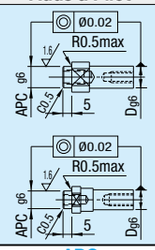
Specify dimensions Y and F not to make the dimension "t" less than the values in the table above.

Ordering Example

Part Number		Y		F		MA
FXHB20	-	17	-	F25	-	MA10
FXJB12	-	24	-	F18	-	MA6

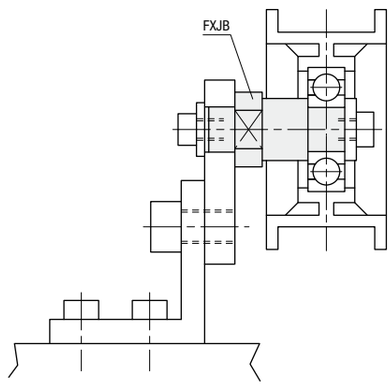
Alterations

Part Number		Y		F		MA		(YKC, WSC, APC)
FXHB25	-	50	-	F32	-	MA10	-	YKC- APC

	Y Dimension Tolerance	Four Wrench Flats	Adds a Pilot
Alterations			
Code	YKC	WSC	APC
Spec.	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 and Stepped Types. Ordering Code WSC	Adds a pilot to the shaft seat. Applicable to all types. Ordering Code APC

D	M	APCge
6	M 3	6
8	M 4	8
10	M 6	10
12	M 8	12
13		13
15	M10	15
16		16
17		17
18		18
20	M12	20
22		22
25	M16	25
25A	M12	
30	M20	30
30A	M18	

Example

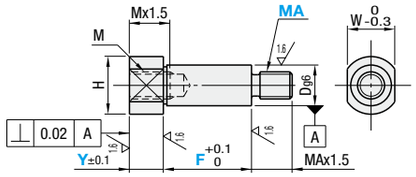


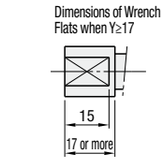
Cantilever Shafts

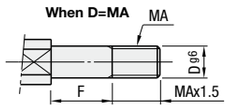
Screw Mount with Threaded End

■Standard

Type	Material	Surface Treatment
FXHC	S45C Equivalent	Black Oxide
PFXHC		Electroless Nickel Plating
SFXHC	SUS304	-







- 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 the next page for thread undercut dimensions.

RoHS

Part Number Type	No.	Dg6		1mm Increment Y	F	MA (Coarse) Selection	M (Coarse)	H	W	Unit Price FXHC	PFXHC	SFXHC
FXHC PFXHC SFXHC	6	6	-0.004 -0.012	2~60	5~100	4 5 6	M 3	10	8			
	6A							14	12		-	
	8	8	-0.005 -0.014			5 6 8	M 4	12	10			
	8A							16	14		-	
	10	10				6 8 10	M 6	15	13			
	10A							20	17		-	
	12	12	-0.006 -0.017		10~150	6 8 10 12	M 8	17	14			
	13	13						18	15			
	15	15				8 10 12 (15)	M10	20	17			
	16	16						21	18			
	17	17				10 12 (15) 16		23	20			
	18	18										
	20	20	-0.007 -0.020			10 12 (15) 16 20	M12	26	24			
	20A						M 8				-	
	22	22					M16	28	26			
	22A						M12				-	
	25	25		4~75		10 12 (15) 16 20 24 (25)	M16	31	27			
	25A						M12					
	30	30				12 (15) 16 20 24 (25) 30	M20	36	32			
	30A						M16					

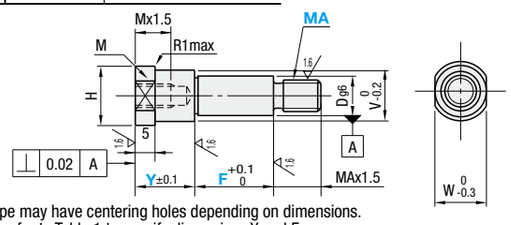
Table 1

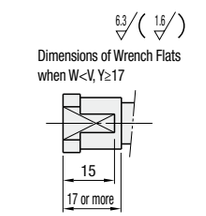
M	Y+F
M3	Y+F≥10
M4	Y+F≥12
M6	Y+F≥15.5
M8	Y+F≥19.5
M10	Y+F≥23.5
M12	Y+F≥29.5
M16	Y+F≥37
M20	Y+F≥45

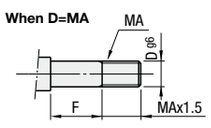
MA dimensions with ( ) (M15 and M25) are Fine Thread. Specify MSC instead of MA.

■Stepped

Type	Material	Surface Treatment
FXJC	S45C Equivalent	Black Oxide
PFXJC		Electroless Nickel Plating
SFXJC	SUS304	-







- 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 the next page for thread undercut dimensions.

RoHS

Part Number Type	No.	Dg6		1mm Increment Y	F	MA (Coarse) Selection	M (Coarse)	V	H	W	Unit Price FXJC	PFXJC	SFXJC
FXJC PFXJC SFXJC	6	6	-0.004 -0.012	7~60	5~75	4 5 6	M 3	8	10	8			
	6A							12	14	12		-	-
	8	8	-0.005 -0.014			5 6 8	M 4	10	12	10			
	8A							14	16	14		-	-
	10	10				6 8 10	M 6	13	15	13			
	10A							18	20	17		-	-
	12	12	-0.006 -0.017		10~75	6 8 10 12	M 8	15	17	14			
	13	13						16	18	15			
	15	15				8 10 12 (15)	M10	18	20	17			
	16	16						19	21	18			
	17	17				10 12 (15) 16		20	23	20			
	18	18						21					
	20	20	-0.007 -0.020			10 12 (15) 16 20	M12	24	26	24			
	20A						M 8					-	-
	22	22					M12	26	28	26			
	22A						M 8					-	-
	25	25				10 12 (15) 16 20 24 (25)	M16	29	31	27			
	25A						M12						
	30	30				12 (15) 16 20 24 (25) 30	M20	34	36	32			
	30A						M16						

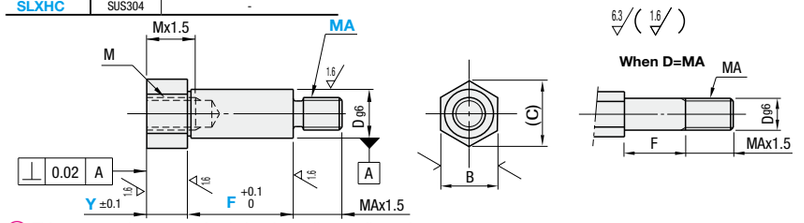
Table 1

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, wrench flats W reaches O.D.V.

■Hex

Type	Material	Surface Treatment
LXHC	S45C Equivalent	Black Oxide
PLXHC		Electroless Nickel Plating
SLXHC	SUS304	-



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

RoHS

Part Number Type	No.	Dg6		1mm Increment Y	F	MA (Coarse) Selection	M (Coarse)	B	(C)	Unit Price LXHC	PLXHC	SLXHC
LXHC PLXHC SLXHC	6	6	-0.004 -0.012	2~60	5~100	4 5 6	M 3	8	9.2			
	8	8	-0.005 -0.014			5 6 8	M 4	10	11.5			
	10	10				6 8 10	M 6	13	15			
	12	12	-0.006 -0.017		10~100	6 8 10 12	M 8	14	16.2			
	13	13						17	19.6			
	15	15				8 10 12 (15)	M10					
	16	16						19	21.9			
	17	17				10 12 (15) 16						
	18	18						24	27.7			
	20	20	-0.007 -0.020			10 12 (15) 16 20	M12					
	22	22										
	25	25		4~60		10 12 (15) 16 20 24 (25)	M16	27	31.2			
	25A						M12					
	30	30				12 (15) 16 20 24 (25) 30	M20	32	36.9			
	30A						M16					

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

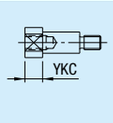
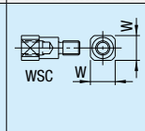
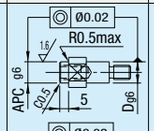
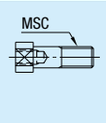
MA dimensions with ( ) (M15 and M25) are Fine Thread. Specify MSC instead of MA.

Ordering Example

Part Number	-	Y	-	F	-	MA
FXHC12	-	5	-	F15	-	MA8
LXHC10	-	20	-	F35	-	MA6

Alterations

Part Number	-	Y	-	F	-	MA(MSC)	-	(YKC, WSC, APC)
FXHC15	-	20	-	F22	-	MSC15	-	APC

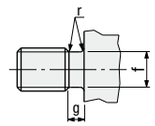
Alterations	Y Dimension Tolerance	Four Wrench Flats	Adds a Pilot	Fine Thread
				
Code	YKC	WSC	APC	MSC
Spec.	Changes Y dimension tolerance to ±0.05. Applicable to all types. Ordering Code YKC	Changes from two wrench flats to four wrench flats. Applicable to Standard and Stepped Types. Ordering Code WSC	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

D	M	APC Ø6
6	M3	6
8	M4	8
10	M6	10
12	M8	12
13		13
15		15
16	M10	16
17		17
18		18
20	M12	20
22		22
25	M16	25
25A	M12	
30	M20	30
30A	M16	

MSC	Pitch
M4	0.5
M5	
M6	0.75
M8	1.0
M10	

MSC	Pitch
M12	1.0
M15	
M20	
M25	1.5
M30	

Thread Undercut Dimensions

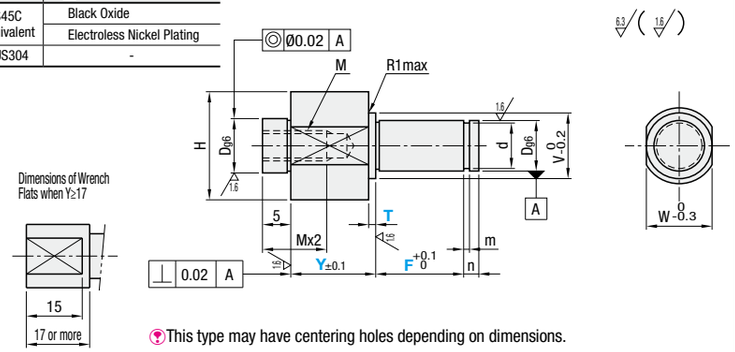


Coarse Thread Thread Dia. (MA)	g	r	f	Fine Thread Thread Dia. (MSC)	g	r	f
4	1.2~1.5	0.2~0.3	2.9~3.2	4	1.2~1.5	0.2~0.3	2.9~3.2
5			3.9~4.1	5			3.9~4.1
6	1.5~2.5	0.2~0.6	4.3~4.9	6	1.5~2.5	0.2~0.6	4.3~4.9
8			6.3~6.6	8			6.3~6.6
10			8.1~8.3	10			8.3~8.6
12	1.5~3.0	0.2~1.0	9.8~10.1	12	1.5~3.0	0.2~1.0	9.8~10.7
16			13.6~13.8	15			13.6~13.8
20	1.5~4.0		17.0~17.2	20	1.5~4.0		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			26.0~26.2	30			26.2~28.2

Cantilever Shafts
Heavy Load

Features: This is the highly stable type with a tapped hole mounting on a large base.

Type	Material	Surface Treatment
FXMA	S45C Equivalent	Black Oxide
PFXMA		Electroless Nickel Plating
SFXMA	SUS304	-



This type may have centering holes depending on dimensions.

Part Number Type	No.	Dg6		1mm Increment Y	F	Selection T	M Coarse	V	H	W	d Ref. Dim.	d Tolerance	m	n	Unit Price FXMA	PFXMA	SFXMA
FXMA PFXMA SFXMA	6	6	-0.004 -0.012	4~60	5~75	1 3 5	M3	8	14	12	5	+0.075 0	0.7	2			
	8	8	-0.005 -0.014				M4	10	17	14	7	+0.090 0	0.9	3			
	10	10				2 5 8	M6	13	21	18	9.6	0 -0.090	1.15				
	12	12	-0.006 -0.017		10~100		M8	15	24	21	11.5	0 -0.110		4			
	15	15						18	28	25	14.3						
	17	17						20	32	28	16.2						
	20	20	-0.007 -0.020	4~75				24	36	32	19	0 -0.120	1.35	5			
	25	25						29	43	38	23.9						
	30	30						34	50	44	28.6		1.65				

When the pilot hole depth is ≥Y+F+5, the pilot for M goes through. Also, when Mx2≥Y+F+5, M goes through.

Ordering Example

Part Number	-	Y	-	F	-	T
FXMA20	-	20	-	F70	-	T5
SFXMA12	-	10	-	F100	-	T2

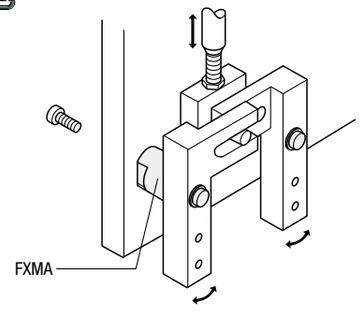
Alterations

Part Number	-	Y	-	F	-	T	-	(SET · SC)
PFXMA15	-	20	-	F60	-	T8	-	SET -SC

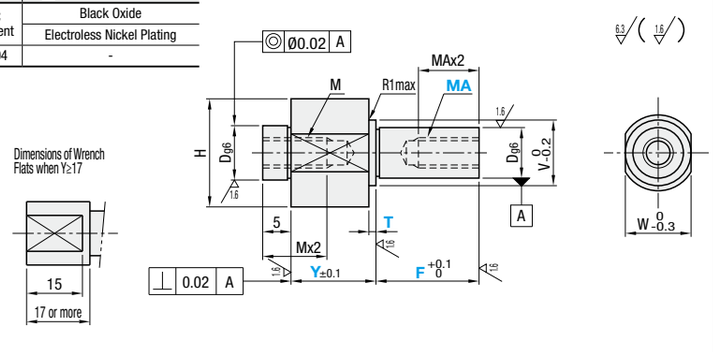
Alterations	Retaining Ring Set	Wrench Flats
Code	SET	SC
Spec.	Retaining Ring applicable to each shaft diameter is included. Ordering Code SET Retaining Ring Shape No.=6, 8: E Type Retaining Ring No.10 ~ 30: C Type Retaining Ring Retaining Ring Material	An alteration of wrench flats can be made for a slot hole guide. Ordering Code SC For D (Wrench Flats), the tolerance is always positive. Y-T≥6

Cantilever Shafts		Retaining Ring
Material	Surface Treatment	Material
S45C	Black Oxide	Spring Steel
	Electroless Nickel Plating	SUS304-CSP
SUS304	-	

Example



Type	Material	Surface Treatment
FXMB	S45C Equivalent	Black Oxide
PFXMB		Electroless Nickel Plating
SFXMB	SUS304	-



Part Number Type	No.	Dg6		1mm Increment Y	F	Selection T	MA (Coarse)	M Coarse	V	H	W	Unit Price FXMB	PFXMB	SFXMB
FXMB PFXMB SFXMB	6	6	-0.004 -0.012	4~60	5~75	1 3 5	3	M3	8	14	12			
	8	8	-0.005 -0.014				4	M4	10	17	14			
	10	10				2 5 8	4 5 6	M6	13	21	18			
	12	12	-0.006 -0.017		10~100		5 6 8	M8	15	24	21			
	15	15							18	28	25			
	17	17					6 8 10		20	32	28			
	20	20	-0.007 -0.020						24	36	32			
	25	25					8 10 12		29	43	38			
	30	30					8 10 12 16		34	50	44			

Tap Size	Effective Length	Pilot Hole Depth
M3	6	11
M4	8	14
M5	10	17
M6	12	20
M8	12	25
M10	20	29
M12	24	34
M16	32	44

Please select Y, F and T so that M and MA don't interfere with each other.

Ordering Example

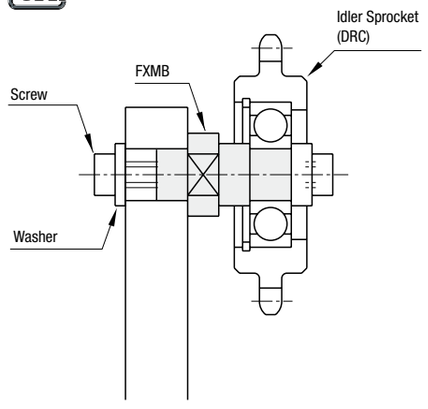
Part Number	-	Y	-	F	-	T	-	MA
FXMB20	-	20	-	F70	-	T5	-	MA6
SFXMB12	-	10	-	F100	-	T2	-	MA6

Alterations

Part Number	-	Y	-	F	-	T	-	MA	-	(SC)
PFXMB15	-	20	-	F60	-	T8	-	MA10	-	SC

Alterations	Wrench Flats
Code	SC
Spec.	An alteration of wrench flats can be made for a slot hole guide. Ordering Code SC For D (Wrench Flats), the tolerance is always positive. Y-T≥6

Example

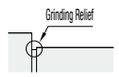


Cantilever Shafts
Shouldered

■Retaining Ring

RoHS

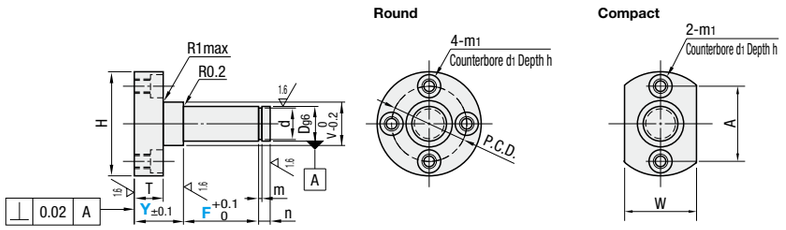
Type		M Material	S Surface Treatment
Round	Compact		
FXFA	FXEA	S45C Equivalent	Black Oxide
PFXFA	PFXEA		Electroless Nickel Plating
SFXFA	SFXEA	SUS304	-



6.3 (1.6)

All types except FXFA and FXEA have an undercut groove at R0.2 step.

D Tolerance (g6)	
6	-0.004 -0.012
8·10	-0.005 -0.014
12~18	-0.006 -0.017
20~30	-0.007 -0.020
35~50	-0.009 -0.025



This type may have centering holes depending on dimensions.

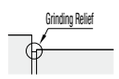
Part Number Type	No.	D	1mm Increment Y	1mm Increment F	V	H	T	m1	d1	h	P.C.D.	d Tolerance	m	n	W	A	Unit Price Round FXFA	Round PFXFA	Round SFXFA	Compact FXEA	Compact PFXEA	Compact SFXEA
Round FXFA PFXFA SFXFA Compact FXEA PFXEA SFXEA	6	6	12~60	5~100	8	26	10	M 4	6.5	3.5	17	5 +0.075 0	0.7	2	14	17						
	6A					32					23				-	-				-	-	-
	8	8			10	28					19	7 +0.090 0	0.9	3	15	19						
	8A					36		M 5	8	4.4	26				-	-				-	-	-
	10	10			13	32		M 4	6.5	3.5	23	9.6 0			16	23						
	10A					40					30	-0.090			-	-				-	-	-
	12	12		10~150	15	36		M 5	8	4.4	26	11.5 0	1.15	4	20	26						
	13	13			16	38					27	12.4 -0.110			22	27						
	15	15			18	40					30	14.3			24	30						
	16	16			19	42					31	15.2			25	31						
	17	17			20	44					32	16.2			28	32						
	18	18			21	46					34	17			31	34						
	20	20			24	48	15	M 6	9.5	5.4	36	19 0	1.35	5	32	36						
	22	22			26	50					39	21 -0.210			34	39						
	25	25	17~75		29	54					42	23.9			38	42						
	30	30			34	62		M 8	11	6.5	49	28.6	1.65		42	49						
	35	35			39	70					55	33 0			50	55			-			
	40	40	20~75		44	80		M10	14	9	63	38 -0.250	1.9		56	63			-			
	50	50			54	90					73	47	2.2		70	73			-			

Mounting holes are tapped and counterbored to allow mounting from either the front or the back side.

■Screw Mount

RoHS

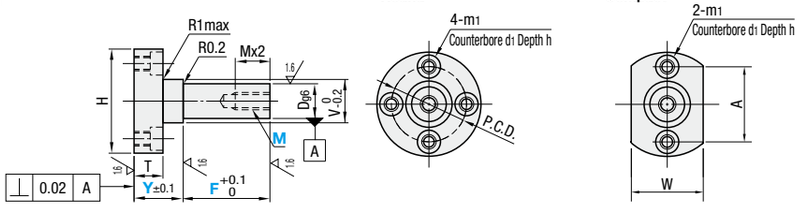
Type		M Material	S Surface Treatment
Round	Compact		
FXFB	FXEB	S45C Equivalent	Black Oxide
PFXFB	PFXEB		Electroless Nickel Plating
SFXFB	SFXEB	SUS304	-



6.3 (1.6)

All types except FXFB and FXEB have an undercut groove at R0.2 step.

D Tolerance (g6)	
6	-0.004 -0.012
8, 10	-0.005 -0.014
12~18	-0.006 -0.017
20~30	-0.007 -0.020
35~50	-0.009 -0.025



This type may have centering holes depending on dimensions.

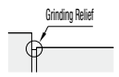
Part Number Type	No.	D	1mm Increment Y	1mm Increment F	M (Coarse) Selection	V	H	T	m1	d1	h	P.C.D.	W	A	Unit Price Round FXFB	Round PFXFB	Round SFXFB	Compact FXEB	Compact PFXEB	Compact SFXEB
Round FXFB PFXFB SFXFB Compact FXEB PFXEB SFXEB	6	6	12~60	5~100	3	8	26	10	M 4	6.5	3.5	17	14	17						
	6A						32					23	-	-				-	-	-
	8	8			4	10	28					19	15	19						
	8A						36		M 5	8	4.4	26	-	-				-	-	-
	10	10			4 5 6	13	32		M 4	6.5	3.5	23	16	23						
	10A						40					30	-	-				-	-	-
	12	12		10~150	5 6 8	15	36		M 5	8	4.4	26	20	26						
	13	13				16	38					27	22	27						
	15	15				18	40					30	24	30						
	16	16			6 8 10	19	42					31	25	31						
	17	17				20	44					32	28	32						
	18	18				21	46					34	31	34						
	20	20			6 8 1012	24	48	15	M 6	9.5	5.4	36	32	36						
	22	22				26	50					39	34	39						
	25	25	17~75		8 1012 16	29	54					42	38	42						
	30	30			8 1012 16 20	34	62		M 8	11	6.5	49	42	49						
	35	35				39	70					55	50	55			-			
	40	40	20~75		12 16 20	44	80		M10	14	9	63	56	63			-			
	50	50			16 20	54	90					73	70	73			-			

Mounting holes are tapped and counterbored to allow mounting from either the front or the back side.

■Lock Nut

RoHS

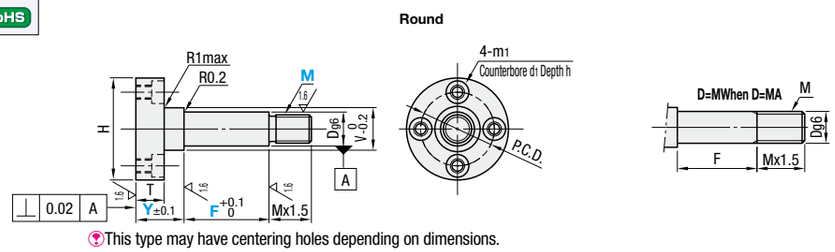
Type Round	M Material	S Surface Treatment
FXFC	S45C Equivalent	Black Oxide
PFXFC		Electroless Nickel Plating
SFXFC	SUS304	-



6.3 (1.6)

PFXFC has an undercut groove at R0.2 step.
Refer to the table below for thread undercut dimensions.

D Tolerance (g6)	
6	-0.004 -0.012
8, 10	-0.005 -0.014
12~18	-0.006 -0.017
20~30	-0.007 -0.020
35~50	-0.009 -0.025



This type may have centering holes depending on dimensions.

Part Number Type	No.	D	1mm Increment Y	1mm Increment F	M (Coarse) Selection	V	H	T	m1	d1	h	P.C.D.	Unit Price Round FXFC	Round PFXFC	Round SFXFC
Round FXFC PFXFC SFXFC	6	6	12~60	5~100	4 5 6	8	26	10	M 4	6.5	3.5	17			
	6A						32					23			
	8	8			5 6 8	10	28					19			
	8A						36		M 5	8	4.4	26			
	10	10			6 8 10	13	32		M 4	6.5	3.5	23			
	10A						40					30			
	12	12		10~150	6 8 10 12	15	36		M 5	8	4.4	26			
	13	13				16	38					27			
	15	15			8 10 12 (15)	18	40					30			
	16	16				19	42					31			
	17	17			10 12 (15) 16	20	44					32			
	18	18				21	46					34			
	20	20			10 12 (15) 16 20	24	48	15	M 6	9.5	5.4	36			
	22	22				26	50					39			
	25	25	17~75		10 12 (15) 16 20 24 (25)	29	54					42			
	30	30				34	62		M 8	11	6.5	49			
	35	35			12 (15) 16 20 24 (25) 30	39	70					55			-
	40	40	20~75			44	80		M10	14	9	63			-
	50	50				54	90					73			-

M dimensions with ( ) (M15 and M25) are Fine Thread. Specify MSC instead of M. Mounting holes are tapped and counterbored to allow mounting from either the front or the back side.

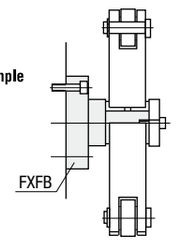
Ordering Example

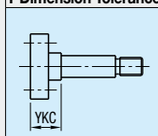
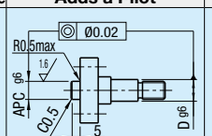
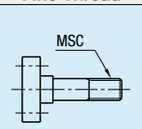
Part Number	-	Y	-	F	-	M
FXFA12	-	27	-	F35		
FXFB10	-	30	-	F40	-	M4

Alterations

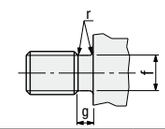
Part Number	-	Y	-	F	-	M(MSC)	-	(YKC, APC···etc.)
PFXFC10	-	20	-	F40	-	MSC10	-	APC

Example



Alterations	Retaining Ring Set	Y Dimension Tolerance	Adds a Pilot	Fine Thread
				
Code	SET	YKC	APC	MSC
Spec.	Retaining Ring applicable to each shaft diameter is included. Ordering Code SET Applicable for Retaining Ring Type (No.30 or less) Retaining Ring Shape No.=6 ~ 8A: E Type Retaining Ring No.10 ~ 30: C Type Retaining Ring Retaining Ring Material Cantilever Shafts: Material S45C, SUS304; Surface Treatment Black Oxide, Electroless Nickel Plating Retaining Ring: Material Spring Steel, SUS304-CSP	Changes Y dimension tolerance to ±0.05. Applicable to all types. Ordering Code YKC	Adds a pilot to the Shoulder seat. Applicable to all types. Ordering Code APC D: 6 → APC g6 8; 8~30 → 10; 35~50 → 12	Changes the Lock Nut Type Thread M to Fine Thread in the table below. Applicable to Lock Nut Type only. Specify MSC instead of M. Ordering Code MSC8 MSC: M6 → Pitch 0.75; M8~20 → 1.0; M25, 30 → 1.5

Thread Undercut Dimensions



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

Fine Thread Thread Dia. (MSC)	g	r	f
4	1.2~1.5	0.2~0.3	2.9~ 3.2
5			3.9~ 4.1
6	1.5~2.5	0.2~0.6	4.3~ 4.9
8			6.3~ 6.6
10			8.3~ 8.6
12	1.5~3.0	0.2~1.0	9.8~10.7
15			13.6~13.8
20	1.5~4.0		17.2~18.8
25	2.5~5.0	0.2~1.5	20.2~23.2
30			26.2~28.2

Cantilever Shafts
For Tension

For Idlers, see **P.1201**~.

■Retaining Ring

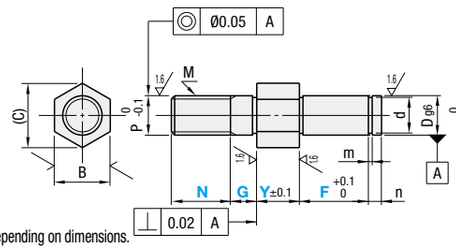
RoHS

D Tolerance (g6)	
6	-0.004 -0.012
8, 10	-0.005 -0.014
12~18	-0.006 -0.017
20~30	-0.007 -0.020

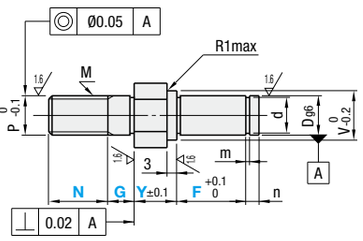
Standard		Stepped		Material	Surface Treatment
Thread Length Fixed	Thread Length Configurable	Thread Length Fixed	Thread Length Configurable		
FXKA	FXNKA	FXLA	FXNLA	S45C	Black Oxide
PFXKA	PFXNKA	PFXLA	PFXNLA	Equivalent	Electroless Nickel Plating
SFXKA	SFXNKA	SFXLA	SFXNLA	SUS304	-

6.3 (1.6)

Standard



Stepped



This type may have centering holes depending on dimensions.

Part Number Type	No.	D	1mm Increment Y	F	G	N Thread Length Fixed	N Thread Length Configurable	P	M (Coarse)	V (Stepped only)	B	(C)	d Ref. Dim.	d Tolerance	m	n
Standard	6	6	5~60	5~100	5~10	9	6~12	6	M 6	8	10	11.5	5	+0.075 0	0.7	2
Fixed Configurable	8	8				12	8~16	8	M 8	10	12	13.9	7	+0.090 0	0.9	
FXKA FXNKA	10	10				15	10~20	10	M10	13	14	16.2	9.6	-0.090	1.15	3
PFXKA PFXNKA	12	12		5~15	5~10	18	12~24	12	M12	15	17	19.6	11.5	0 -0.110		4
SFXKA SFXNKA	13	13								16			12.4			
	15	15								18	19	21.9	14.3			
	16	16								19			15.2			
	17	17	5~75	10~150	5~20					20	22	27.5	16.2			
	18	18								21	24	27.7	17		1.35	
Stepped	20	20				30	20~40	20	M20	24	27	31.2	19	0 -0.210		5
Fixed Configurable	20A							16	M16							
FXLA FXNLA	22	22						20	M20	26			21			
PFXLA PFXNLA	22A							16	M16							
SFXLA SFXNLA	25	25						20	M20	29	30	34.6	23.9			
	25A							16	M16							
	30	30						20	M20	34	36	41.6	28.6		1.65	
	30A							16	M16							

Ordering Example

Part Number	-	Y	-	F	-	G	-	N
FXKA20A	-	20	-	F12	-	G8		
PFXNLA12	-	15	-	F21	-	G5	-	N14

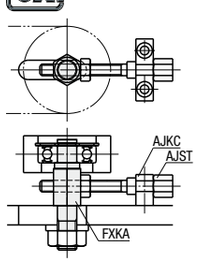
■Retaining Ring

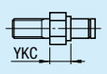
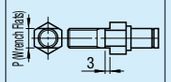
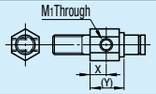
No.	Unit Price Standard Thread Length Fixed FXKA	PFXKA	SFXKA	Standard Thread Length Configurable FXNKA	PFXNKA	SFXNKA	Stepped Thread Length Fixed FXLA	PFXLA	SFXLA	Stepped Thread Length Configurable FXNLA	PFXNLA	SFXNLA
6												
8												
10												
12												
13												
15												
16												
17												
18												
20												
20A												
22												
22A												
25												
25A												
30												
30A												

Alterations Part Number - Y - F - G - N - (YKC, SC, MTC, SET)

FXNLA12 - 27 - F15 - G7 - N12 - MTC

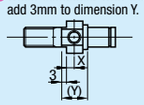
Example



Alterations	Retaining Ring Set	Y Dimension Tolerance	Wrench Flats	Tapped Hole
				
Code	SET	YKC	SC	MTC
Spec.	Retaining Ring applicable to each shaft diameter is included. Ordering Code SET. Applicable to Retaining Ring Type. Retaining Ring Shape: No.=6 ~ 8: E Type Retaining Ring; No.=10 ~ 30A: C Type Retaining Ring. Retaining Ring Material: Cantilever Shafts — Material S45C, Surface Treatment Black Oxide / Electroless Nickel Plating, SUS304 -; Retaining Ring — Material Spring Steel, SUS304-CSP	Changes Y dimension tolerance to ±0.05. Applicable to all types. Ordering Code YKC	An alteration of wrench flats can be made for a slot hole guide. Applicable to all types. Ordering Code SC	An alteration of a tapped hole made for shaft push/pull. Allows combined use of AJST (**P.1463**) or AJKC (**P.1465**). (Configurable dimension Y is limited. Refer to the table below.) Ordering Code MTC

D	X	M1	Ymin. Standard	Ymin. Stepped
6	10	M 4	15	18
8		M 5		
10		M 6	16	19
12~18		M 8	18	21
20~25A	15	M10	25	28
30, 30A		M12	27	30

When combined with SC, add 3mm to dimension Y.



■Screw Mount

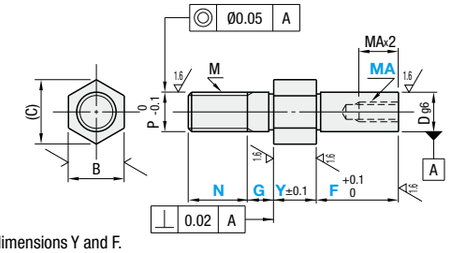
RoHS

D Tolerance (g6)	
6	-0.004 -0.012
8, 10	-0.005 -0.014
12~18	-0.006 -0.017
20~30	-0.007 -0.020

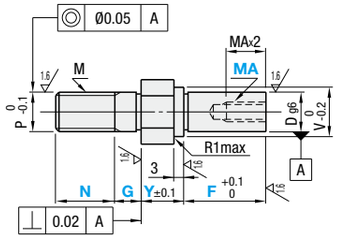
Standard		Stepped		Material	Surface Treatment
Thread Length Fixed	Thread Length Configurable	Thread Length Fixed	Thread Length Configurable		
FXKB	FXNKB	FXLB	FXNLB	S45C	Black Oxide
PFXKB	PFXNKB	PFXLB	PFXNLB	Equivalent	Electroless Nickel Plating
SFXKB	SFXNKB	SFXLB	SFXNLB	SUS304	-

6.3 (1.6)

Standard



Stepped



Please refer to Table 1 to specify dimensions Y and F.

Part Number Type	No.	D	1mm Increment Y	F	G	N Thread Length Fixed	N Thread Length Configurable	MA (Coarse) Selection	P	M (Coarse)	V (Stepped only)	B	(C)
Standard	6	6	5~60	5~100	5~10	9	6~12	3	6	M 6	8	10	11.5
Fixed Configurable	8	8				12	8~16	4	8	M 8	10	12	13.9
FXKB FXNKB	10	10				15	10~20	4 5 6	10	M10	13	14	16.2
PFXKB PFXNKB	12	12		5~15	5~10	18	12~24	5 6 8	12	M12	15	17	19.6
SFXKB SFXNKB	13	13									16		
	15	15									18	19	21.9
	16	16						6 8 10			19		
	17	17	5~75	10~120	5~20						20	22	27.5
	18	18									21	24	27.7
Stepped	20	20				30	20~40	6 8 10 12	20	M20	24	27	31.2
Fixed Configurable	20A								16	M16			
FXLB FXNLB	22	22							20	M20	26	27	31.2
PFXLB PFXNLB	22A								16	M16			
SFXLB SFXNLB	25	25						8 10 12 16	20	M20	29	30	34.6
	25A								16	M16			
	30	30						8 10 12 16 20	20	M20	34	36	41.6
	30A								16	M16			

Table 1

MA	Y+F
M 3	Y+F≥11.5
M 4	Y+F≥14.0
M 5	Y+F≥16.2
M 6	Y+F≥18.5
M 8	Y+F≥23.5
M10	Y+F≥28.5
M12	Y+F≥35.5
M16	Y+F≥45.0
M20	Y+F≥55.0

Ordering Example

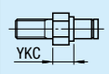
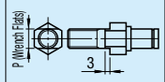
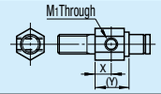
Part Number	-	Y	-	F	-	G	-	N	-	MA
FXKB20A	-	20	-	F12	-	G8			-	MA10
FXNKB12	-	15	-	F21	-	G5	-	N14	-	MA6

■Screw Mount

No.	Unit Price Standard Thread Length Fixed FXKB	PFXKB	SFXKB	Standard Thread Length Configurable FXNKB	PFXNKB	SFXNKB	Stepped Thread Length Fixed FXLB	PFXLB	SFXLB	Stepped Thread Length Configurable FXNLB	PFXNLB	SFXNLB
6												
8												
10												
12												
13												
15												
16												
17												
18												
20												
20A												
22												
22A												
25												
25A												
30												
30A												

Alterations Part Number - Y - F - G - N - MA - (YKC, SC, MTC, SET)

FXLB12 - 27 - F15 - G7 - MA6 - MTC

Alterations	Retaining Ring Set	Y Dimension Tolerance	Wrench Flats	Tapped Hole
				
Code	SET	YKC	SC	MTC
Spec.	Retaining Ring applicable to each shaft diameter is included. Ordering Code SET. Applicable to Retaining Ring Type. Retaining Ring Shape: No.=6 ~ 8: E Type Retaining Ring; No.=10 ~ 30A: C Type Retaining Ring. Retaining Ring Material: Cantilever Shafts — Material S45C, Surface Treatment Black Oxide / Electroless Nickel Plating, SUS304 -; Retaining Ring — Material Spring Steel, SUS304-CSP	Changes Y dimension tolerance to ±0.05. Applicable to all types. Ordering Code YKC	An alteration of wrench flats can be made for a slot hole guide. Applicable to all types. Ordering Code SC	An alteration of a tapped hole made for shaft push/pull. Allows combined use of AJST (**P.1463**) or AJKC (**P.1465**). (Configurable dimension Y is limited. Refer to the table below.) Ordering Code MTC

D	X	M1	Ymin. Standard	Ymin. Stepped
6	10	M 4	15	18
8		M 5		
10		M 6	16	19
12~18		M 8	18	21
20~25A	15	M10	25	28
30, 30A		M12	27	30

When combined with SC, add 3mm to dimension Y.