Cantilever Shafts

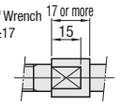
Piloted Thread with Retaining Ring Groove

■Standard

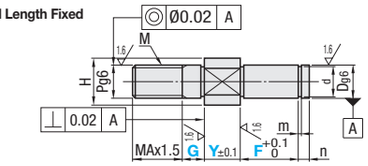
RoHS10

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

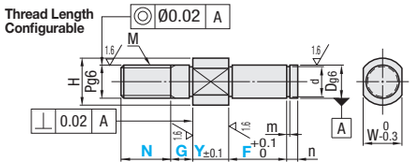
Dimensions of Wrench Flats when Y≥17



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					4~ 8	4	M 4	8	6	3		0.7					-			
	4A									12	10								-			
	5	5	-0.004 -0.012				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								
	10A									20	17											
	12	12	-0.006 -0.017		10~150	5~15	12~24	12	M12	17	14	11.5	0 -0.110		4							
	13	13								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													

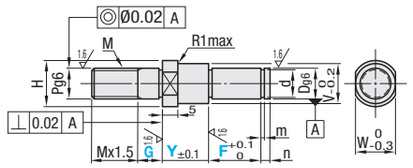
HFXCA is applicable to D6 or larger specifications.

N is available for Thread Length Configurable Type only.

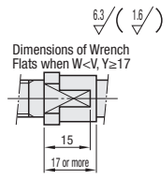
■Stepped

RoHS10

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



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



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				
	10A								18	20	17							
	12	12	-0.006 -0.017		10~100	5~15	12	M12	15	17	14	11.5	0 -0.110		4			
	13	13							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									

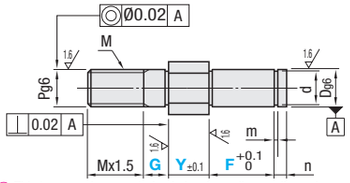
When W<V, wrench flats W reaches O.D.V.

■Hex

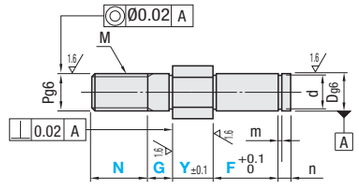
RoHS10

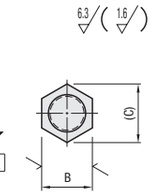
Type: Thread Length Fixed	Type: Thread Length Configurable	M Material	S Surface Treatment
LXCA	LXNCA	S45C Equivalent	Black Oxide
PLXCA	PLXNCA		Electroless Nickel Plating
SLXCA	SLXNCA	SUS304	-

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)	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		0.7							
	5	5					5~10	5	M 5	7	8.1	4	+0.075 0								
	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 -0.090	1.15							
	12	12	-0.006 -0.017		10~100	5~15	12~24	12	M12	14	16.2	11.5	0 -0.110		4						
	13	13								17	19.6	12.4									
	15	15										14.3									
	16	16								19	21.9	15.2									
	17	17										16.2									
Thread Length Configurable LXNCA PLXNCA SLXNCA	18	18								24	27.7	17	0 -0.210								
	20	20	-0.007 -0.020	4~60		5~20	20~40	20	M20			19		1.35	5						
	20A							16	M16												
	22	22						20	M20			21									
	22A							16	M16												
	25	25						20	M20	27	31.2	23.9									
	25A							16	M16												
	30	30						20	M20	32	36.9	28.6		1.65							
	30A							16	M16												

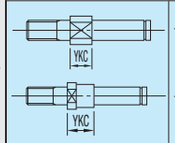
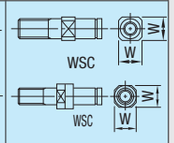
N is available for Thread Length Configurable Type only.

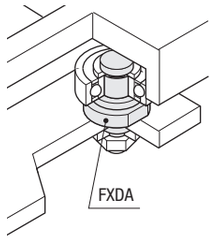
Ordering Example

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

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 Material	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