

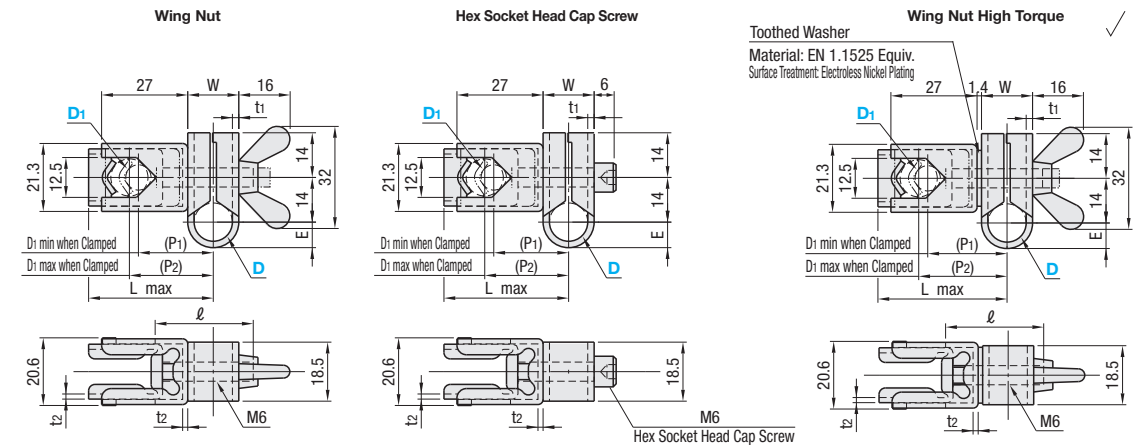
Flexible Clamps / Holder Pipes

Features: A circular post and a hex post can be clamped together.

Flexible Clamps



Type			Material	Surface Treatment
Wing Nut	Hex Socket Head Cap Screw	Wing Nut High Torque		
FLEC	FLEB	FLHC	EN 1.0320 Equiv. (hot coiled)	Electroless Nickel Plating
FLES	FLEBS	-	EN 1.4301 Equiv.	-



Part Number		D1		D		W		E		P1(min)		P2(max)		Lmax		t1		t2		Unit Price				
Type																								
Wing Nut	Hex Socket Head Cap Screw	12	8	08~12		16	8	(23.5)	(26.3)	39.1	30					2	1.6	1.5		FLEC	FLES	FLEB	FLEBS	FLHC
FLEC	FLEB	15				19	9.5	(25.0)	(27.8)	40.6	35													
FLES	FLEBS	12	8	08~12		16	8	(24.9)	(27.7)	40.5	30													
Wing Nut High Torque		15				19	9.5	(26.4)	(29.2)	42	35													
FLHC																								

- Do not tighten the wing nut and the hex socket head cap screw unless the shaft is set in D part. Excessive tightening can cause deformation.
- Recommended Diameter Tolerances of Mating Posts: ± 0.05 for Wing Nuts; $+0.05/-0.1$ for Hex Socket Head Cap Screws.

Ordering Example

Part Number	-	D1
FLEC12	-	8

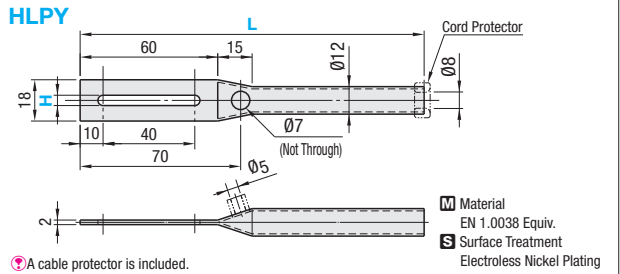
- Features:
- Two axes can be clamped by tightening one wing nut.
 - Flexible clamping is possible as shown in the right figure.

		Standard				High Torque	
Sample		EN 1.0320 Equiv. (hot coiled)		Stainless Steel		EN 1.0320 Equiv. (hot coiled)	
Data	Tightening Conditions	FLEC12-8 FLEB	FLEC15-8 FLEB	FLES12-8 FLEBS	FLES15-8 FLEBS	FLHC12-8	FLHC15-8
A (Ncm)	1	102.9	235.2	132.3	161.7	232.3	313.1
	2	220.5	470.4	249.9	294.0	429.2	502.7
B (Ncm)	1	205.8	1176 or More	176.4	1176 or More	285.2	1176 or More
	2	294.0		367.5		352.8	

- The above data is an example of actual measurements and not guaranteed.
- A and B correspond with A and B in the above figure.
- The data show the results of tightening with Hex Nuts instead of Wing Nuts. The posts are EN 1.1191 Equiv. polished material.
- Tightening Condition 1: Tightening Torque 100Ncm
- Tightening Condition 2: Tightening Torque 200Ncm

Features: Can be used as holders for opto-electric sensors and proximity sensors.

Holder Pipes



Part Number		L		Unit Price	
Type	H			L150	L250
HLPY	4.5	150	250		
	5.5				

Ordering Example

Part Number	-	L
HLPY4.5	-	150

Flexible Clamps

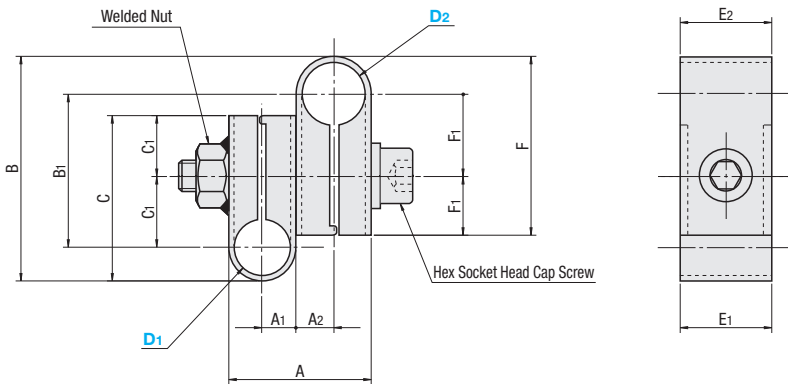
Compact

Features: Easy mounting with one screw. Suitable for mounting light loads.

Flexible Clamps



Type	Material	Surface Treatment
FLYC	EN 1.0320 Equiv. (hot coiled)	Black Oxide
FLYM	EN 1.0320 Equiv. (hot coiled)	Electroless Nickel Plating
FLYS	EN 1.4301 Equiv.	-



Part Number		D2 Selection	A	A1	A2	B	B1	C	C1	E1	E2	F	F1	Welded Nut	Hex Socket Head Cap Screw
Type	D1														
FLYC FLYM FLYS	8	8	22.4	5.6	5.6	40.6	29.4	35	14.7	13	13	35	14.7	M6	M6×30
		10	24.4	5.6	6.6	41.1	28.9	35	14.7	13	15	35	14.2		M6×35
	10	10	26.4	6.6	6.6	41.6	28.4	35	14.2	15	15	35	14.2		M6×40
		12	29.2	6.6	8	42.8	28.2	35	14.2	15	18	36	14		M6×40
	12	12	32	8	8	44	28	36	14	18	18	36	14		M6×40
		15	35	8	9.5	45.3	27.7	36	14	18	18	37	13.7		M6×45
	15	15	38	9.5	9.5	46.6	27.4	37	13.7	18	18	37	13.7		M6×45
		20	43.6	9.5	12.3	57	35	37	13.7	18	23	55	21.3		M6×55
	20	20	49.2	12.3	12.3	67.4	42.6	55	21.3	23	23	55	21.3		M8×65
		25	54.2	12.3	14.8	72.6	45.4	55	21.3	23	25	63	24.1		M8×70
	25	25	59.2	14.8	14.8	77.8	48.2	63	24.1	25	25	63	24.1		M8×75

Recommended Diameter Tolerance of Mating Post: +0.1 ~ -0.3.

Ordering Example

Part Number	-	D2
FLYC10	-	12

D1	D2	Unit Price		
		FLYC	FLYM	FLYS
8	8			
	10			
10	10			
	12			
12	12			
	15			
15	15			
	20			
20	20			
	25			
25	25			

