

Compendium of JCK Series

4 Arm styles are available

4 Arm styles AM1, AM2, AM3 and AM4 each with 3 specifications R, C and L for uses in different situations.

4 sides are to be mounted

With dimensions subject to DIN standard.

Designed as a whole

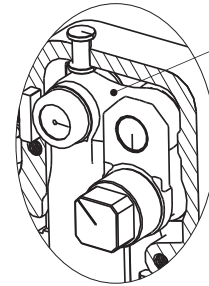
Mechanism and cylinder designed as a whole.

Oval-shaped cylinder which is space efficient

Rod-crank-slider structure

Rod-crank-slider structure made of high-strength, highly-wear-resisting material is adopted.

- a) Stable and reliable structure which can produce large clamping force at low working pressure.
- b) Self-lock mechanism is adopted at clamping position which can still provide clamping force even after compressed air is off.

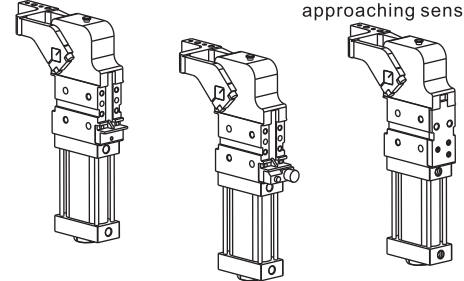


Rod-crank-slider structure

Electrical or Air inductive approaching sensor

No sensor

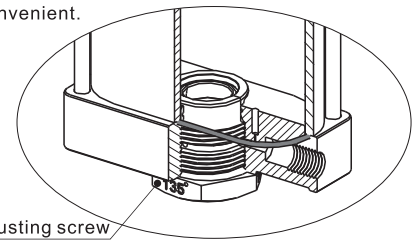
Air Inductive approaching sensor



Electrical Inductive approaching sensor (PNP/NPN type to be chosen)

Opening angle adjustment is easy and convenient

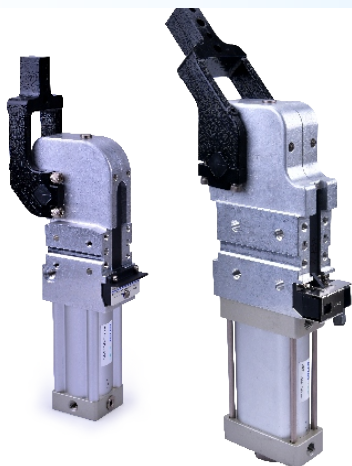
Opening angle adjustment by changing adjusting screw is easy and convenient.



Adjusting screw

Application





Specification

Model	JCK40	JCK50	JCK63	JCK80
Output torque (0.5MPa)	120N.m	160N.m	380N.m	800N.m
Acting type	Double acting			
Fluid	Air(to be filtered by 40 μ m filter element)			
Operating pressure	0.3~0.8MPa(43~116psi)			
Proof pressure	1.2MPa(175psi)			
Temperature	-10~60 °C			
Opening angle	15°/30°/45°/60°/75°/90°/105°/120°/135°			
Minimum opening and closure time	1 second clamping, 1 second opening			
Position sensing	Electrical or air Inductive approaching sensor			
Cushion type	Air buffer			
Weight (135°) [Note1]	2.2kg	4.0kg	5.5kg	13.0kg
Port size [Note2]	1/8"		1/4"	

[Note1] This weight includes 15mm offset clamping arm;

[Note2] PT thread, G thread are available.

Ordering code

JCK □ 63 x 135 AM1R K □

① ② ③ ④ ⑤ ⑥ ⑦

① Model	② Clamping arm position	③ Bore size	④ Opening angle	⑤ Clamping arm [Note2]	⑥ Sensor switch[Note3]	⑦ Thread type							
JCK: Power clamp cylinder (Double acting)	Blank: horizontal 	40(circular)	15 30 45 60 75 90 105 120 135 [Note1]	Blank: No clamping arm	<table border="1"> <tr> <td>R</td> <td>C</td> <td>L</td> </tr> <tr> <td colspan="3"></td> </tr> </table>	R	C	L				Blank: No sensor switch	Blank: PT G: G
	R			C		L							
AM1: Offset 15mm 	<table border="1"> <tr> <td>R</td> <td>C</td> <td>L</td> </tr> <tr> <td colspan="3"></td> </tr> </table>	R	C	L									
R		C	L										
V: Vertical 	50(oval) 63(oval) 80(oval)	15 30 45 60 75 90 105 120 135 [Note1]	Blank: No clamping arm	<table border="1"> <tr> <td>R</td> <td>C</td> <td>L</td> </tr> <tr> <td colspan="3"></td> </tr> </table>	R	C	L				K: With electrical sensor switch(PNP) KN: With electrical sensor switch(NPN) KA: With air sensor switch	Blank: PT G: G	
			R		C	L							
AM3: Offset 45mm 	<table border="1"> <tr> <td>R</td> <td>C</td> <td>L</td> </tr> <tr> <td colspan="3"></td> </tr> </table>	R	C	L									
R		C	L										
			AM2: Offset 15mm 	<table border="1"> <tr> <td>R</td> <td>C</td> <td>L</td> </tr> <tr> <td colspan="3"></td> </tr> </table>	R	C	L						
			R		C	L							
AM4: Offset 45mm 	<table border="1"> <tr> <td>R</td> <td>C</td> <td>L</td> </tr> <tr> <td colspan="3"></td> </tr> </table>	R	C	L									
R		C	L										

[Note1] Please refer to the right table for details of max. opening angle.

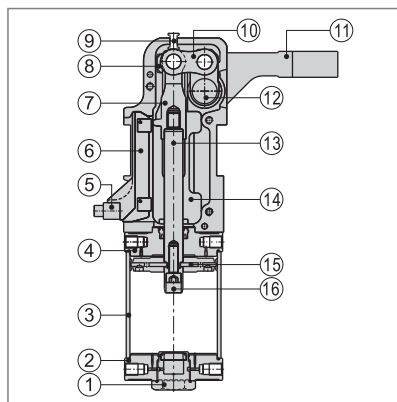
[Note2] Please refer to the drawing for detailed dimensions of clamping arm.

[Note3] K/KA type sensor switch can be ordered separately and please refer to relative contents.

KA type sensor switch can't be ordered separately and 80 size no KA type.

Bore size	Arm position	Arm type	Maximum opening angle
40	horizontal	AM1	135°
		AM3	105°
	Vertical(V)	AM1	120°
		AM3	105°
50 63 80	horizontal	AM1, AM3 AM2, AM4	135°
	Vertical(V)	AM1, AM3 AM2, AM4	105°

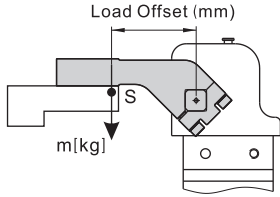
Inner structure and material of major parts



NO.	Item	Material
1	Adjusting screw	Free machining steel
2	Back cover	Aluminum alloy
3	Aluminum barrel	Aluminum alloy
4	Front cover	Aluminum alloy
5	Sensor switch	
6	Sensor switch fix	Plastic
7	Y knuckle	Alloy steel
8	Strengthen steel plate	Alloy steel
9	Retaining pin	Carbon steel
10	Connecting rod	Alloy steel
11	Clamping arm	Cast steel
12	Pivot	Alloy steel
13	Piston rod	Carbon steel
14	End cap	Aluminum alloy
15	Piston	NBR
16	Cushion body	Aluminum alloy

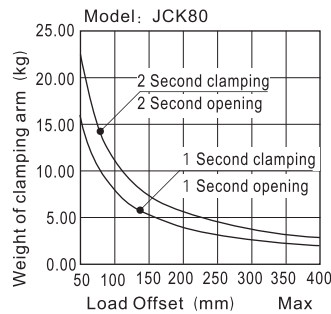
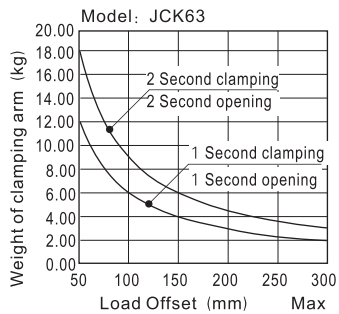
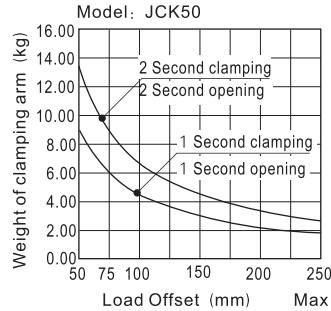
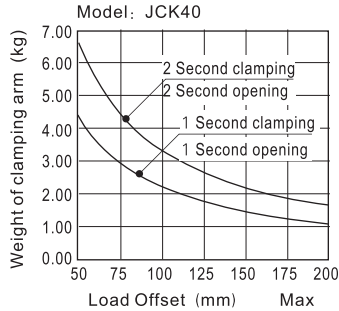
How to select product

1. Please design appropriate fixture according to "Allowable Arm Load-Load Offset curve" diagram.



Bore size	Maximum load torque	
	1 second period	2 second period
40	2.2Nm	3.3Nm
50	4.5Nm	6.7Nm
63	6.0Nm	9.0Nm
80	8.0Nm	11.2Nm

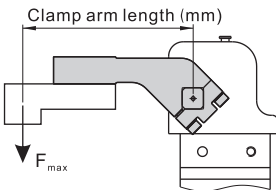
S: distance from pivot point to center of mass of clamping arm
m: weight of clamping arm



Attention: Please use with speed control valve.

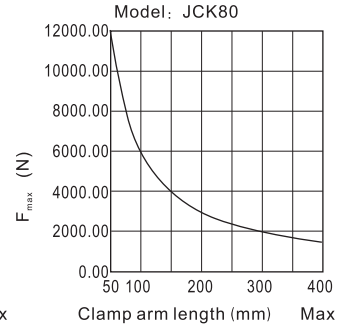
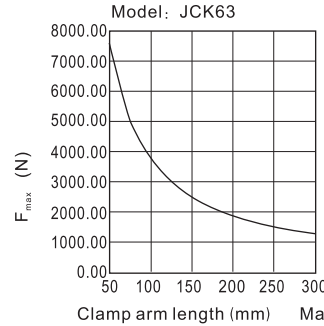
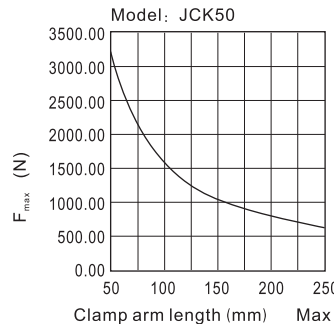
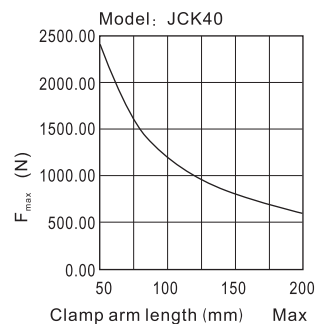
2. Please choose appropriate clamping position according to "Torque-Clamping Arm Length curve" diagram.

Note: For clamping force is produced by elbow mechanism, maximum torque is only reached at final clamping arm position.



Bore size	Maximum holder torque
40	380Nm
50	800Nm
63	1500Nm
80	2500Nm

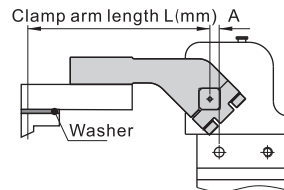
Bore size	Maximum clamp torque					
	0.3MPa	0.4MPa	0.5MPa	0.6MPa	0.7MPa	0.8MPa
40	72Nm	95Nm	120Nm	143Nm	167Nm	191Nm
50	99Nm	132Nm	165Nm	198Nm	230Nm	264Nm
63	230Nm	307Nm	384Nm	460Nm	537Nm	614Nm
80	482Nm	643Nm	803Nm	964Nm	1124Nm	1285Nm



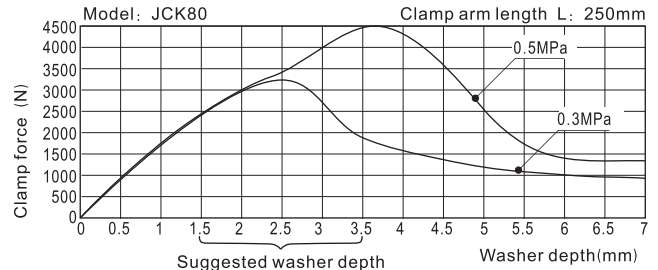
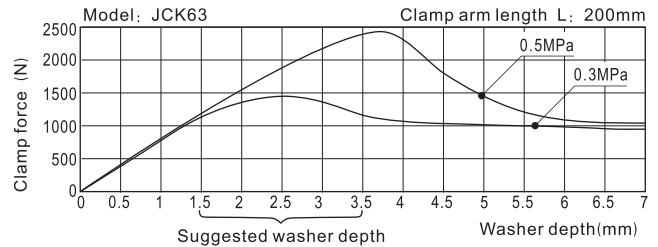
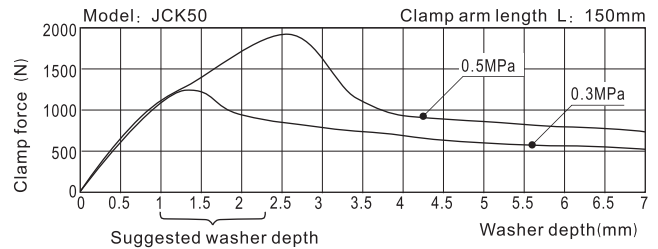
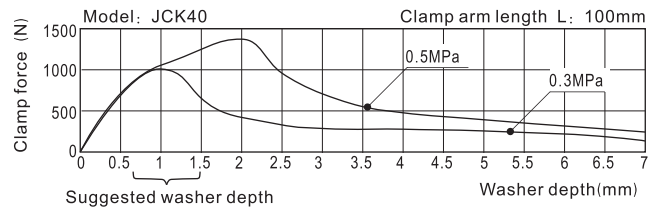
3. Please choose appropriate washer according to "Torque-Spacer thickness curve" diagram.

Note: Inserted washer exceeding maximum clamping torque position may lead to self-lock failure. Take safety issue into account when considering thickness of spacer inserted.

Besides, clamping arm length L represents distance from pivot point to clamping position. For distance from mounting base locating hole to pivot A, please refer to the following table.

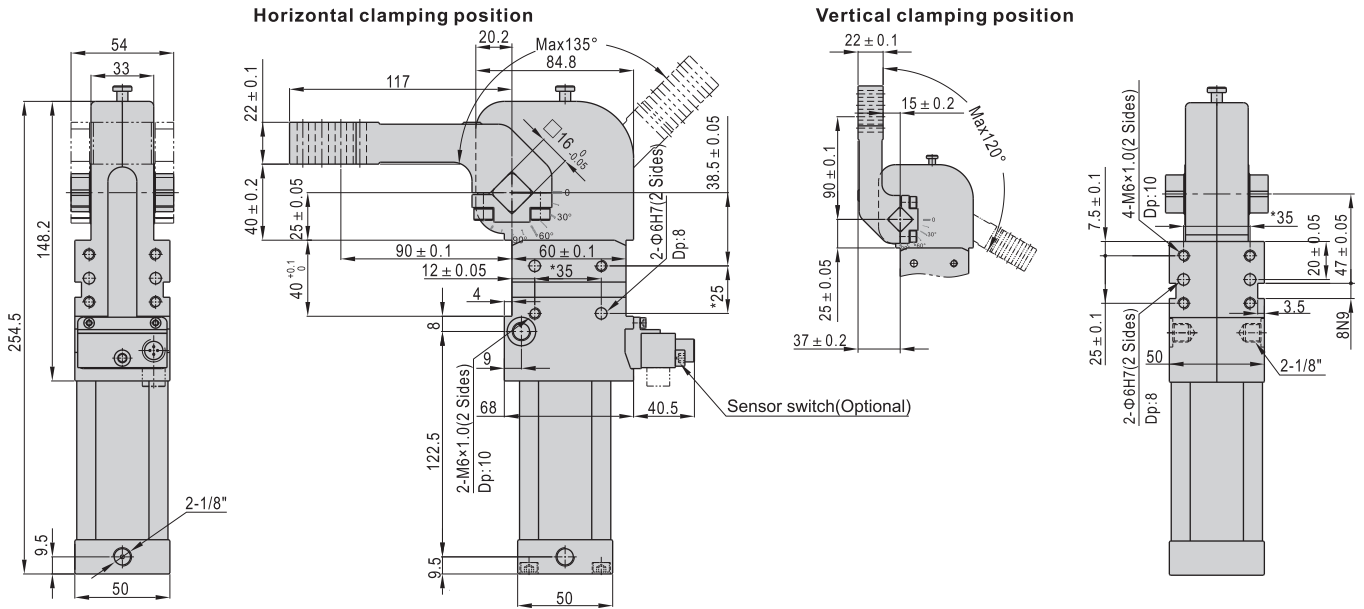


Bore size	A(mm)
40	12
50	10
63	10
80	15



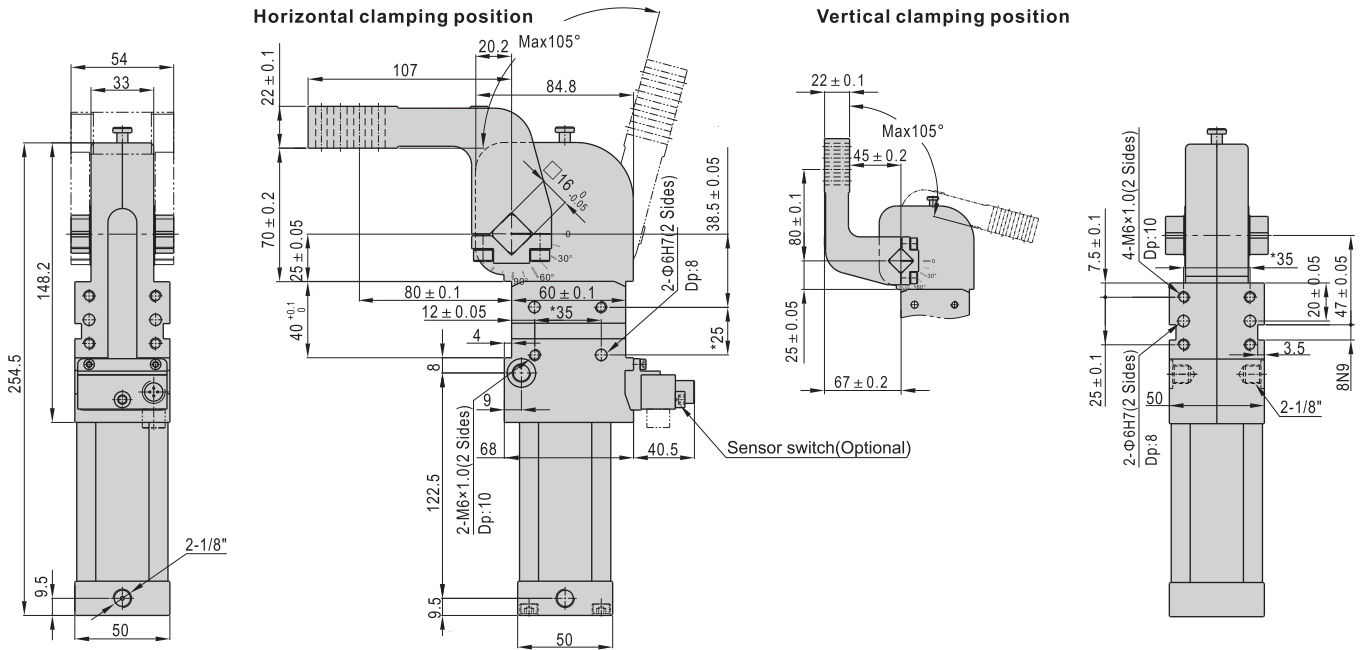
Dimensions

JCK40AM1



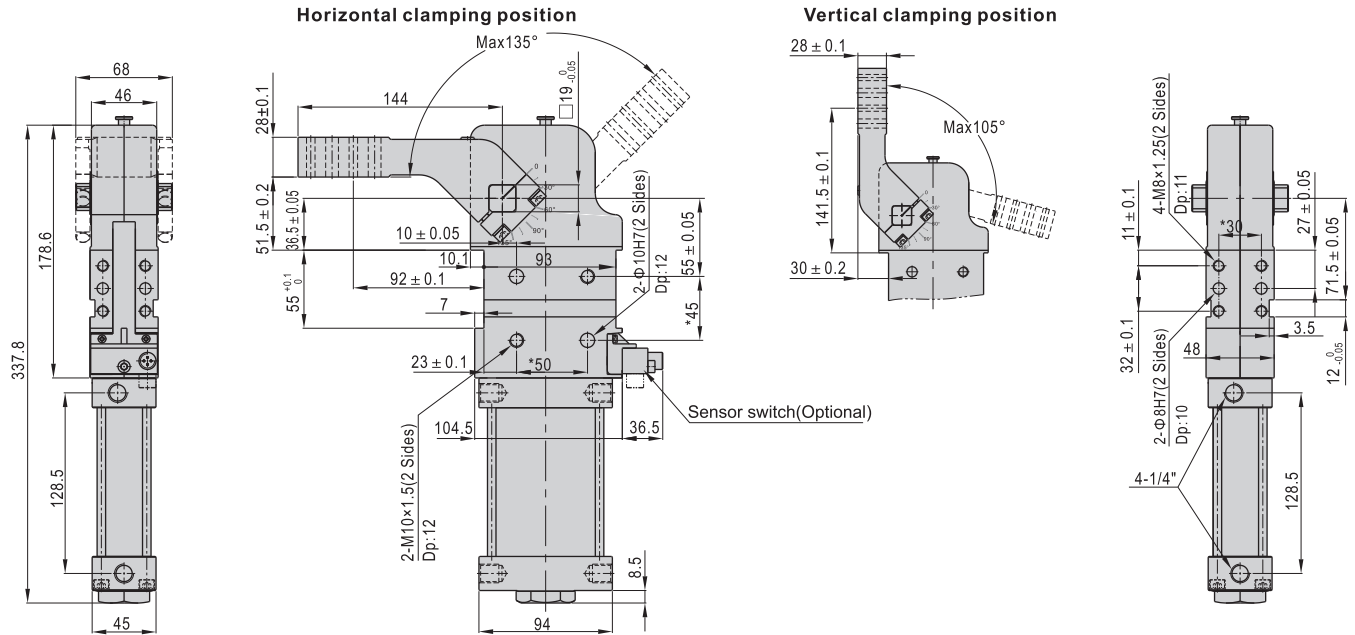
With * dimension: pin hole position tolerance: ±0.02. Thread hole position tolerance: ±0.1.

JCK40AM3



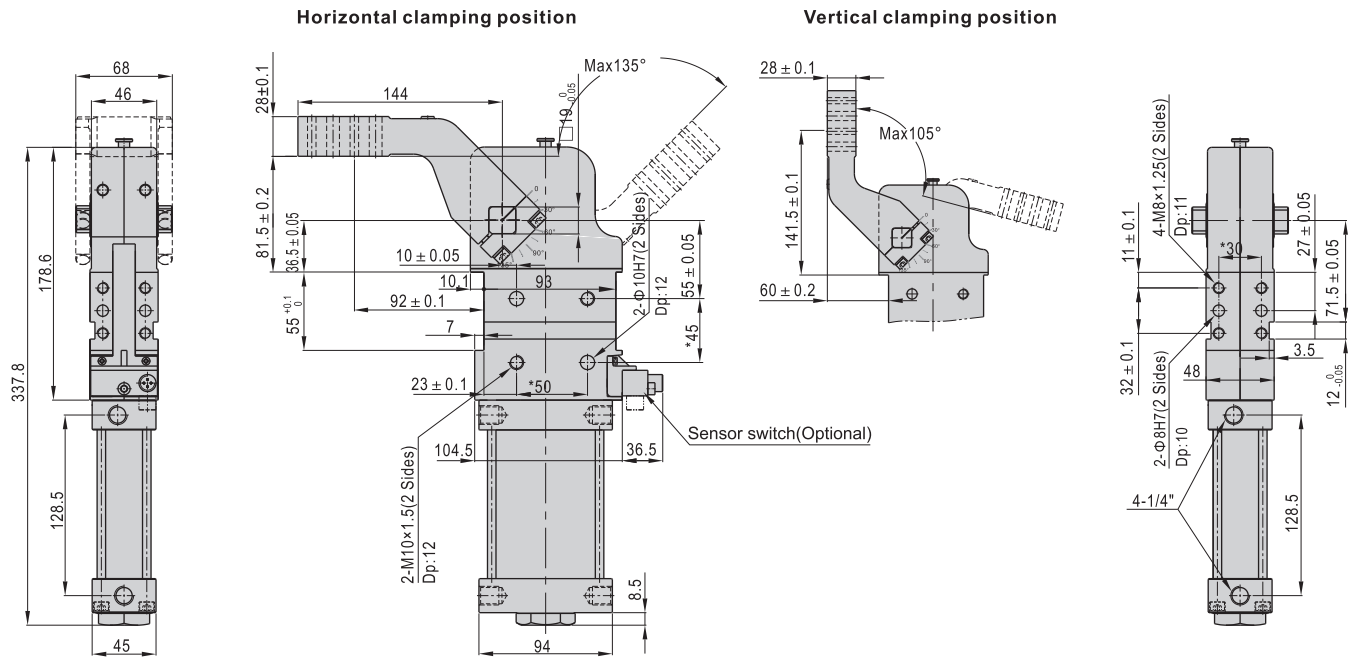
With * dimension: pin hole position tolerance: ±0.02. Thread hole position tolerance: ±0.1.

JCK50AM1(2)



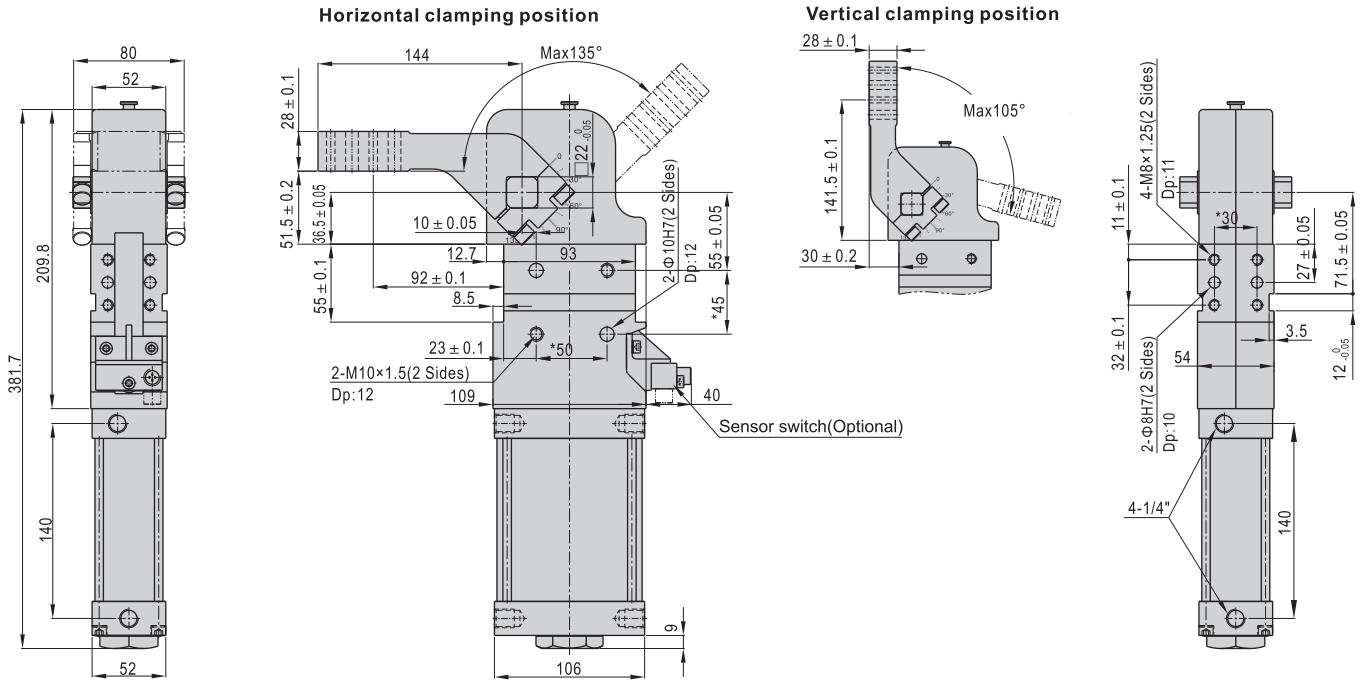
With * dimension: pin hole position tolerance: ± 0.02 . Thread hole position tolerance: ± 0.1 .

JCK50AM3(4)



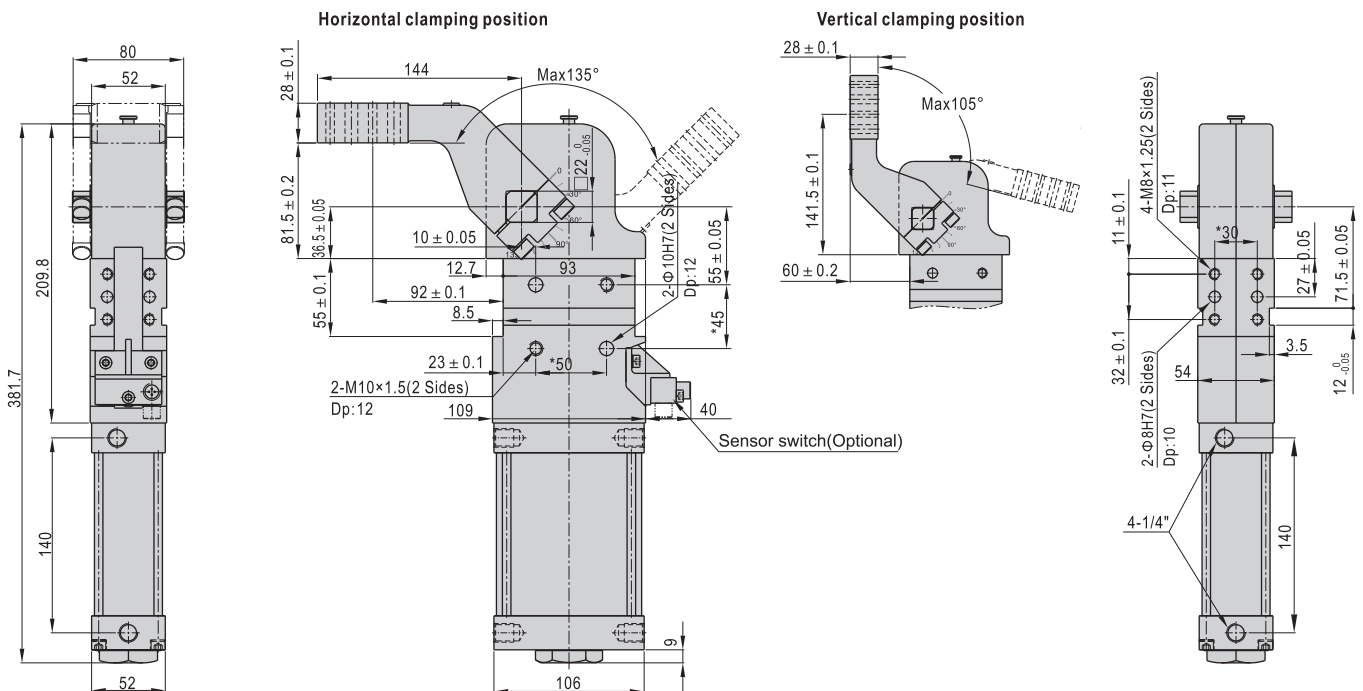
With * dimension: pin hole position tolerance: ± 0.02 . Thread hole position tolerance: ± 0.1 .

JCK63AM1(2)



With * dimension: pin hole position tolerance: ±0.02. Thread hole position tolerance: ±0.1.

JCK63AM3(4)



With * dimension: pin hole position tolerance: ±0.02. Thread hole position tolerance: ±0.1.



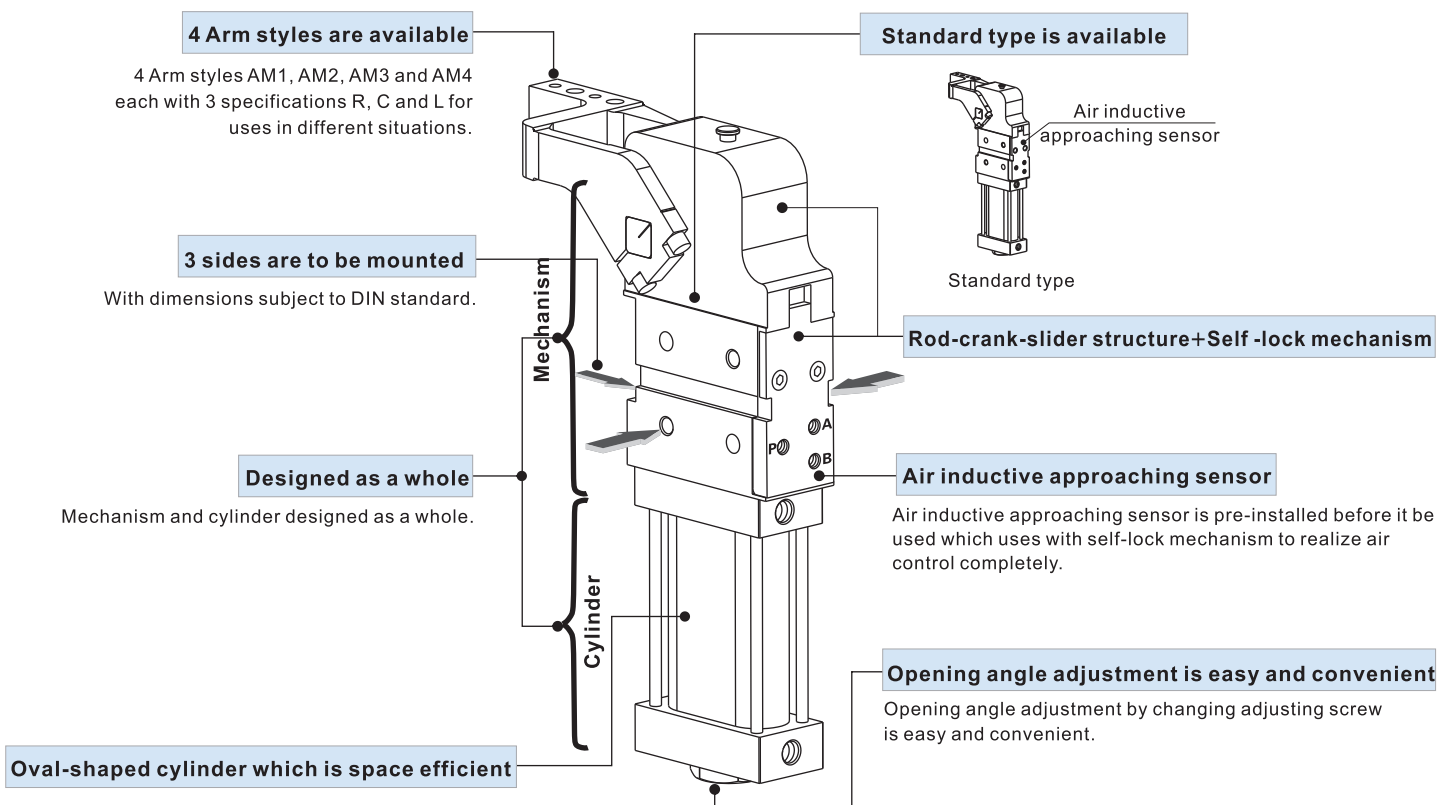
Specification

Model	JCK40□KA	JCK50□KA	JCK63□KA
Output torque (0.5MPa)	120N.m	160N.m	380N.m
Acting type	Double acting		
Fluid	Air(to be filtered by 40 μ m filter element)		
Operating pressure	0.3~0.8MPa(43~116psi)		
Proof pressure	1.2MPa(175psi)		
Temperature	-10~60 °C		
Opening angle	15°/30°/45°/60°/75°/90°/105°/120°/135°		
Minimum opening and closure time	1 second clamping, 1 second opening		
Position sensing	Air Inductive approaching sensor		
Cushion type	Air buffer		
Weight (135°) [Note1]	2.2kg	4.0kg	5.5kg
Port size [Note2]	1/8"		1/4"

[Note1] This weight includes 15mm offset clamping arm;

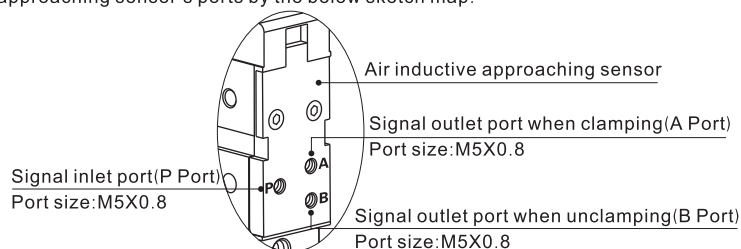
[Note2] PT thread, G thread are available.

Compendium of JCK(Air inductive approaching sensor type) Series



Installation and application

1. Can be mounted from three sides.
2. Air inductive approaching sensor is obturated completely which avoid dust and splashed welding slag breaking cylinders.
3. Adapt to air control loop's equipment. Main signal export to self-lock mechanism to check clamp or unclamp's position by air pressure signal.
4. Please connect air inductive approaching sensor's ports by the below sketch map.





How to select clamp arm and adjusting screw

Accessories\Cylinder type		JCK40	JCK50	JCK63	JCK80	
Adjusting screw	F-JCK□□X15LM	F-JCK□□X30LM	●	●	●	●
	F-JCK□□X45LM	F-JCK□□X60LM	●	●	●	●
	F-JCK□□X75LM	F-JCK□□X90LM	●	●	●	●
	F-JCK□□X105LM	F-JCK□□X120LM	●	●	●	●
	F-JCK□□X135LM		●	●	●	●
Clamp arm	F-JCK□□AM1R	F-JCK□□AM3R	●	●	●	●
	F-JCK□□AM1C	F-JCK□□AM3C	●	●	●	●
	F-JCK□□AM1L	F-JCK□□AM3L	●	●	●	●
	F-JCK□□AM2R	F-JCK□□AM4R		●	●	●
	F-JCK□□AM2C	F-JCK□□AM4C		●	●	●
	F-JCK□□AM2L	F-JCK□□AM4L		●	●	●

Adjusting screw ordering code

F-JCK 63X135 LM

① ② ③ ④ ⑤

① Accessory code	② Cylinder type	③ Bore size	④ Adjusting angle	⑤ Adjusting screw code
	JCK: Power clamp cylinder (Double acting)	40: Φ 40mm 50: Φ 50mm 63: Φ 64mm 80: Φ 80mm	15: 15° 30: 30° 45: 45° 60: 60° 75: 75° 90: 90° 105: 105° 120: 120° 135: 135°	LM: Adjusting screw

Clamp arm ordering code

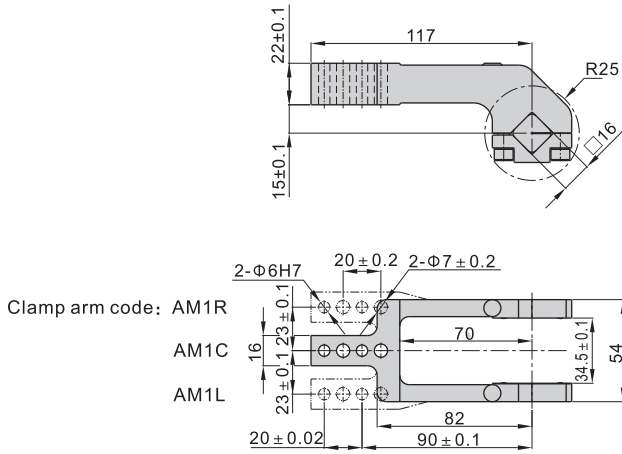
F-JCK 63 AM1C

① ② ③ ④

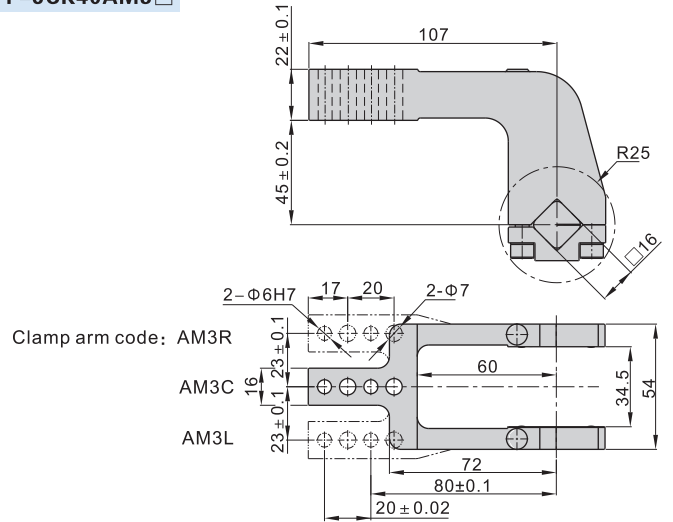
① Accessory code	② Cylinder type	③ Bore size	④ Clamping arm	
JCK: Power clamp cylinder (Double acting)		40: Φ 40mm	Blank: No clamping arm	
			AM1: Offset 15mm	R C L Φ 6 Φ 7
			AM3: Offset 45mm	R C L
			Blank: No clamping arm	R C L
		50: Φ 50mm 63: Φ 64mm 80: Φ 80mm	AM1: Offset 15mm	R C L Φ 6 Φ 9
			AM3: Offset 45mm	R C L
			AM2: Offset 15mm	R C L Φ 8 Φ 10.2
			AM4: Offset 45mm	R C L

Dimensions of clamp arm

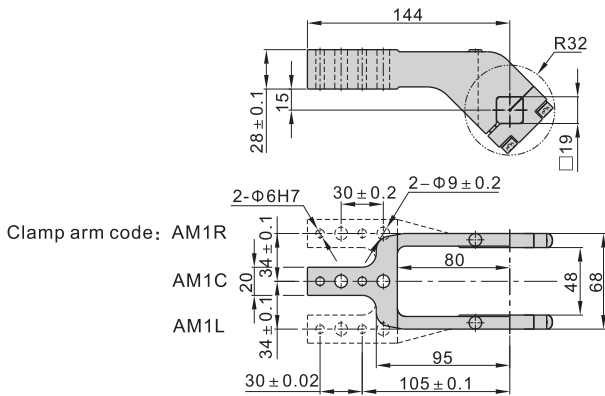
F-JCK40AM1



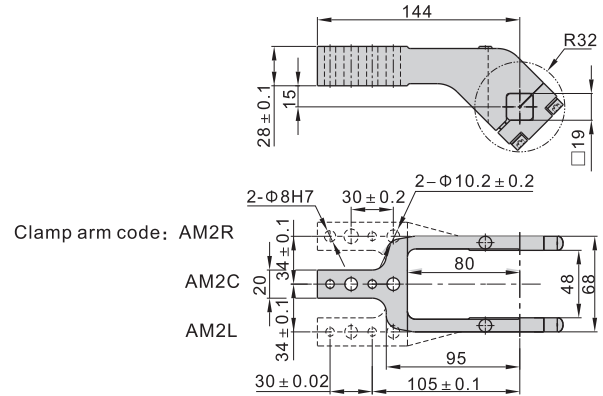
F-JCK40AM3



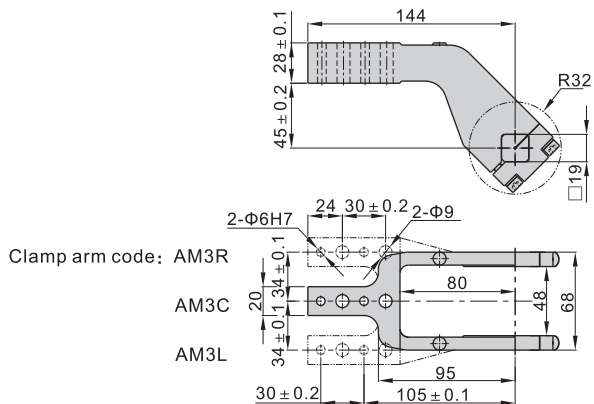
F-JCK50AM1



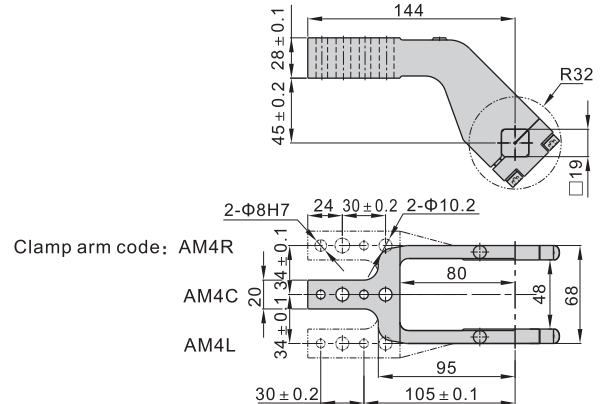
F-JCK50AM2

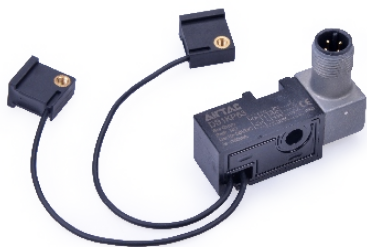


F-JCK50AM3



F-JCK50AM4





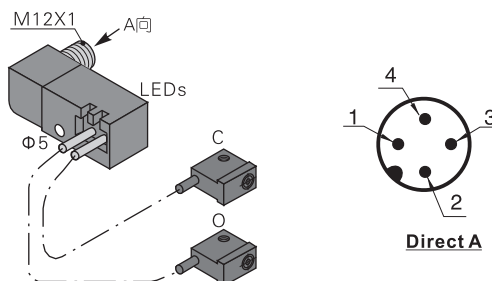
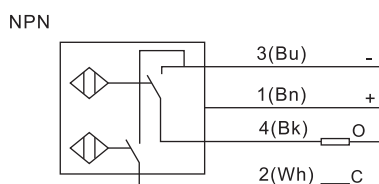
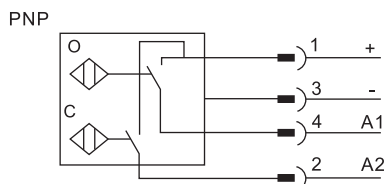
Specification

Operating range	2mm
Voltage range	10~30V DC
Output type	N.O., PNP, NPN
Rated DC	150mA(max)
Switch frequency	30Hz
Shell material	PBT
Switch status indication	Clamping: Red Opening: Yellow
Voltage indication	Green

Ordering code

DS1 KP 63			
	①	②	③
① Model	② Output type	③ Bore size	
DS1:	KP: PNP	63(Bore size: 40、50、63)	
Sensor witch	KN: NPN	80(Bore size: 80)	

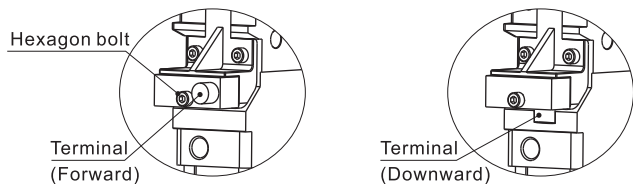
Hookup



Installation and application of sensor switch

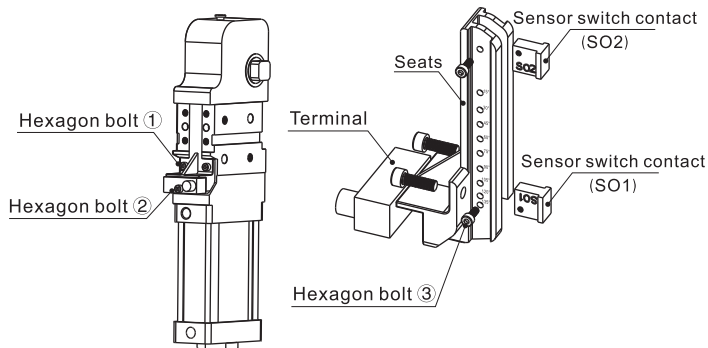
1. Sensor switch is well assembled before leaving factory which is free of adjusting. If you need to change terminals' wiring direction, change new sensor or rearrange angle, please do as follows:

1.1) Steps of changing terminals' wiring direction:



(See figure above.) Unscrew the hexagon bolt→dismount sensor's Terminal→ change terminals' wiring direction as you need→ remounting→screw up the hexagon bolt.

1.2) Steps of change new sensor switch:



(See figure above.) unscrew two hexagon bolts ①→dismount sensor seats as a whole→unscrew two hexagon bolts ③→dismount two sensor switch contacts(SO1\SO2)→unscrew hexagon bolt ②→remove the sensor switch→choose new sensor switch →replace new sensor switch contact and screw up hexagon bolt ②→replace new wiring box and screw up hexagon bolt ①→finished.

Ecmmended lock torque of hexagon bolt is listed in the following table:

Eccmmended lock torque of hexagon bolt ①		Eccmmended lock torque of hexagon bolt ②		Eccmmended lock torque of hexagon bolt ③		
Bore size	Hexagon bolt type	Lock torque(N.m)	Hexagon bolt type	Lock torque(N.m)	Hexagon bolt type	Lock torque(N.m)
40、50	M3×0.5	1.2~1.5	M5×0.8	4.0~5.0	M3×0.5	1.2~1.5
63、80	M5×0.8	4.0~5.0				

1.3) Steps of readjusting angle: For more details, see latter contents.

1.4) Sensor switch's connection:

Sensor switch's connection need to use relevant male connector, which have separate male connector, and with wire male connector to be choused.

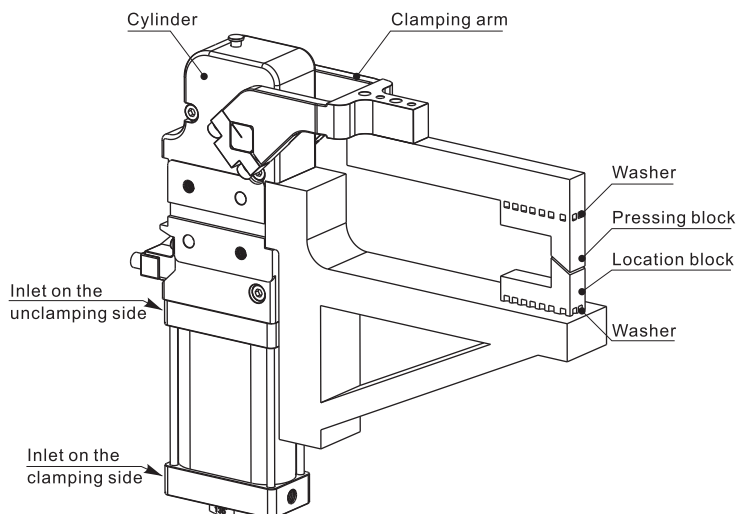
The ordering code as below:

Name: On end cable(3 meters length)	Name: L shape cable(3 meters length)	Name: On end connector(rotundity)	Name: L shape connector (rotundity)
Ordering code: X-F-PPVCS	Ordering code: X-F-PPVCL	Ordering code: X-F-PPVCV	Ordering code: X-F-PPVCH



Installation and application

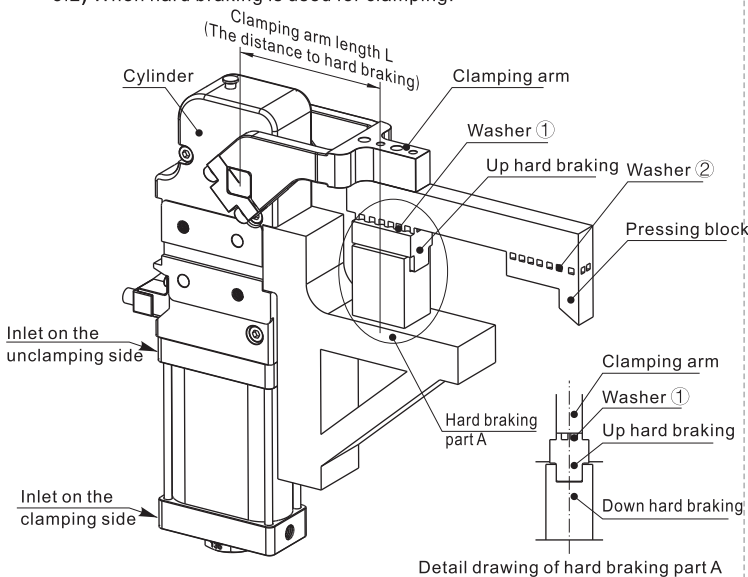
1. Mount the cylinder at desired place with bolts and locating pin after choosing a mounting surface. Connect the cylinder and control valve with joint and rubber hose. To adjust the opening and closure speed, our pneumatic power welding clamp is equipped with return stroke air buffering. Buffering cannot function well if the clamping arm is over-weighted so that clamping arm' weight must be within the allowable limit;
2. Using clamping arm beyond the listed in this catalog is forbidden.
3. Workpiece mounting method:
 - 3.1) When only clamping torque is used for clamping:



Please follow the steps to mount the workpiece onto the clamping arm:

- A) Clamping the arm:** supply compressed air through the inlet on the clamping side to keep the arm and pressing block at the closure position simultaneously. Make sure the arm is locked up.
- B) Adjusting the clamping gap:** adjust the spacer under the mentioned state to make the pressing block in line with the workpiece's thickness. (At this moment no clamping torque is produced theoretically.)
- C) Applying clamping torque:** Insert the spacer furthermore under the mentioned state until the gap is smaller than the workpiece's thickness and desired clamping torque is produced. (Make sure the mechanism passes the dead position to produce self-locking i.e. the retaining pin is pushed out.)

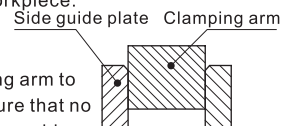
- 3.2) When hard braking is used for clamping:



Please follow the steps to mount the workpiece onto the clamping arm:

- A) clamping the arm:** supply compressed air through the inlet on the closure side to keep the arm and the braking block at the clamping position simultaneously. Make sure the arm is locked up:

- B) Adjusting the clamping gap:** Adjust washer ① under the mentioned state until the gap between the upside braking block and downside one. (At this moment no clamping torque is produced theoretically.)
- C) Applying clamping torque:** insert the washer ① furthermore under the mentioned state to produce desired clamping torque. (Make sure the mechanism passes the dead position to produce self-locking i.e. the retaining pin is pushed out.)
- D) Adjust washer ② under the state mentioned in C to make the pressing block in contact with the workpiece.**



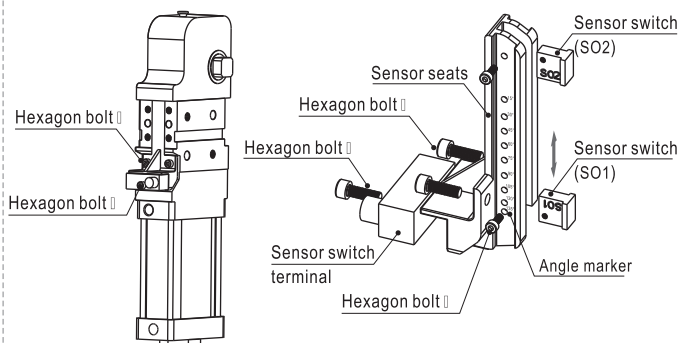
- 3.3) When side guide plate is mounted:

Side guide plate is mounted on the clamping arm to prevent transverse movement and make sure that no transverse load is applied and that the arm would not be stuck.

4. Angle adjusting method:

Standard adjusting angle range of the pneumatic clamp is 15°~135°. Opening angle can be changed via changing cylinder's stroke distance or the sensor's position;

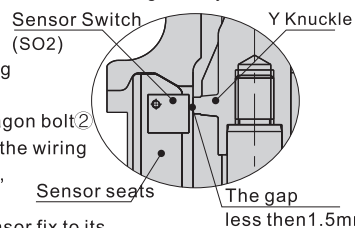
- 4.1) Step 1 of adjusting angle--change of sensor's position:



- A) Unscrew hexagon bolt ① with inner hexagon wrench to take out the sensor seats;**
- B) Unscrew hexagon bolt ③ with inner hexagon wrench to take out sensor SO1 and align it to your desired angle indication position and re-screw up hexagon bolt ③. (Note: when mounting sensor SO1, the number "SO1" should point downward except 15°.)**
- C) After the sensor's position is adjusted, replace the sensor seats by screwing up hexagon bolt ① with inner hexagon wrench (lock-up torque by related contents).**

Note: 1) sensor SO2 controls the cylinder's end stroke position and its mounting position is well set when leaving factory and is not changeable.

- 2) the sensor wiring box is provided with two outgoing orientations: forward and downward. Unscrew hexagon bolt ② and then you can change the wiring box orientation. After that, screw up hexagon bolt ②.
- 3) When remounting the sensor fix to its original position, the gap between the sensor and Y-knuckle should be less than 1.5mm. Otherwise, the sensor may not function well.



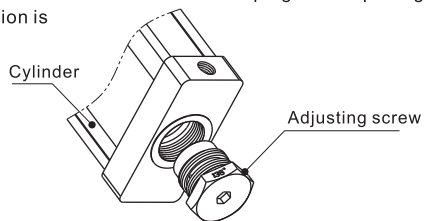
- 4.2) Step 2 of adjusting angle--change of the cylinder's stroke distance:

The relation between the opening angle of clamping arm and cylinder's stroke distance is listed as follows:

Opening angle\Type	JCK40	JCK50	JCK63	JCK80
15°	20.2	21.6	23.1	36.1
30°	28.1	30.2	33.4	50.5
45°	34.8	37.5	41.6	62.7
60°	41.4	44.6	49.7	74.5
75°	48.0	51.8	57.5	86.3
90°	54.8	59.2	65.7	98.1
105°	61.5	66.4	73.8	109.6
120°	67.4	72.7	81.0	119.5
135°	71.6	77.3	86.2	126.4

During actual operation, the cylinder's stroke can be changed by changing the adjusting screw at the bottom to control the clamping arm's opening angle. Detailed description is

as follows:



- A) Unscrew original adjusting screw with inner hexagon wrench
- B) Choose suitable adjusting screw according to actual need (the bottom is marked with corresponding opening angle).
- C) Screw up new adjusting screw into the cylinder's end cap.

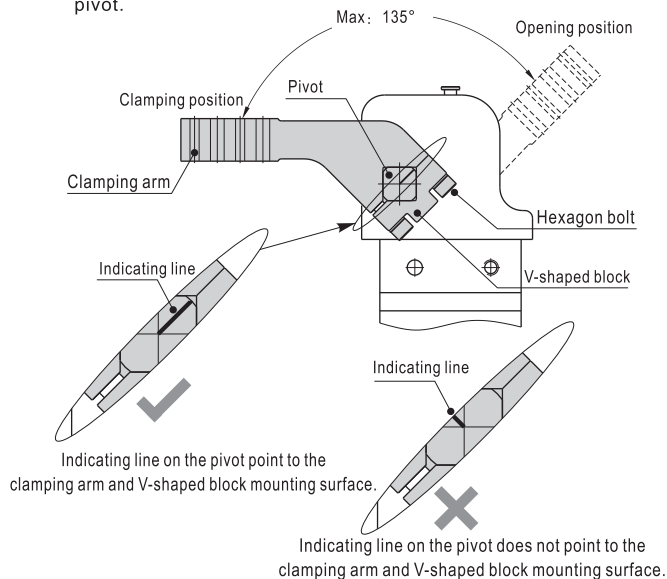
5. Mounting clamping arm:

The clamping arm is already mounted when leaving factory which can be remounted by yourself horizontally or vertically according to your actual need.

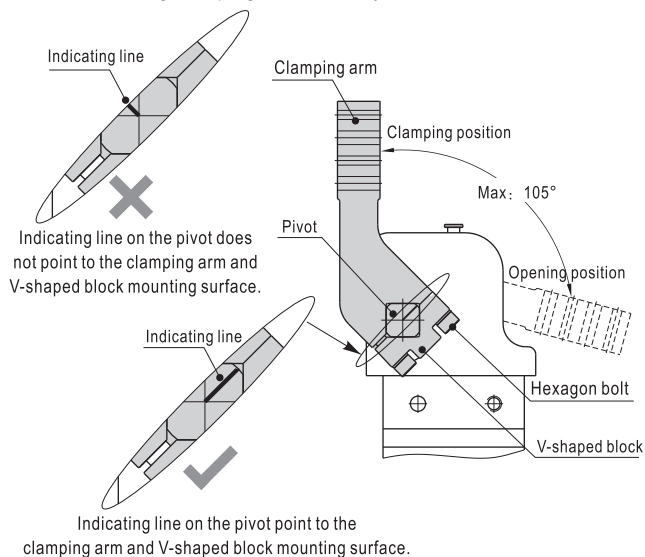
5.1) Mounting clamping arm horizontally:

Unscrew 4 hexagon bolts on both sides of the clamping arm to remove V-shaped block and then the clamping arm for substituting your desired one.

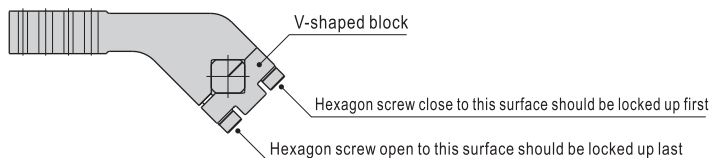
When mounting, please note the direction of the indicating line on the pivot.



5.2) Mounting clamping arm vertically:



5.3) V-shaped block mounting:



5.4) Holding torque of clamping arm (recommended):

When holding clamping arm, please choose recommended value in the following list:

Bore size	Bolt type	Holding torque (N.m)
40	M6 × 1.0	13.8
50	M6 × 1.0	13.8
63	M8 × 1.25	33.0
80	M10 × 1.5	66.0

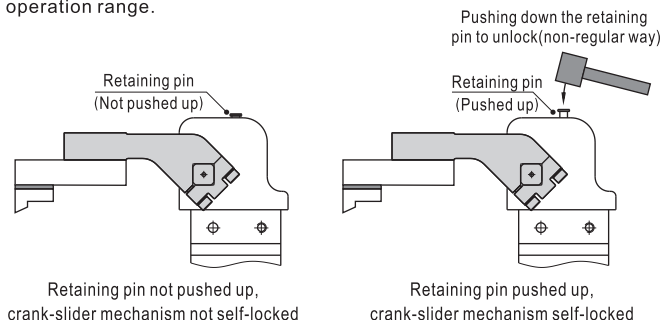
6. Self-lock function:

At the end of stroke, the crank-slider mechanism passes the dead point and gets self-locked up. The retaining pin gets pushed up at this moment. Even when compressed air is off, the cylinder can remain at closure state for safety. To open self-locking of the crank-slider mechanism, push down the retaining pin when compressed air is off.

Warning:

Pushing down the retaining pin may cause clamping arm to spring off at closure state.

So when using the pin, please get yourself away from the clamping arm's operation range.



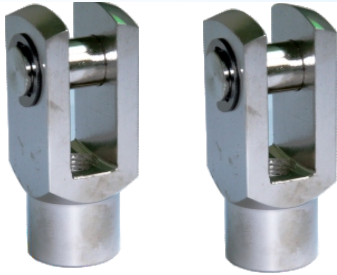


Table for Y knuckle and cylinder

Cylinder Accessory	SE							SAI								
	32	40	50	63	80	100	125	32	40	50	63	80	100	125	160	200
F-M10X125Y	●							●								
F-M12X125Y		●							●							
F-M16X150Y			●	●						●	●					
F-M20X150Y					●	●						●	●			
F-M27X200Y							●							●		
F-M36X200Y															●	●

Cylinder Accessory	SGC				SC/SAU					SC				JSI								
	125	160	200	250	32	40	50	63	80	100	125	160	200	250	32	40	50	63	80	100	125	
F-M10X125Y															●							
F-M12X125Y						●																
F-M14X150Y																		●				
F-M16X150Y								●	●													
F-M18X150Y																			●	●		
F-M20X150Y										●	●											
F-M22X150Y																					●	●
F-M26X150Y																						●
F-M27X200Y	●																					●
F-M36X200Y		●	●																			●
F-M42X200Y				●																		●

Cylinder Accessory	MI						MPG						
	8	10	12	16	20	25	32	40	6	8	10	12	16
F-M3X050Y										●			
F-M4X070Y	●	●									●	●	
F-M5X080Y												●	●
F-M6X100Y			●	●									
F-M8X125Y					●								
F-M10X125Y						●	●						
F-M12X125Y								●					

Ordering code

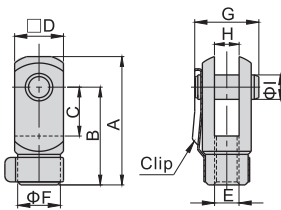
F-M16X150 Y

① ② ③ ④

① Accessories code	② Screw thread	③ Thread pitch	④ Code
	M3: M3	050: 0.5mm	Y:Y Knuckle
	M4: M4	070: 0.7mm	
	M5: M5	080: 0.8mm	
	M6: M6	100: 1.0mm	
	M8: M8		
	M10: M10	125: 1.25mm	
	M12: M12		
	M14: M14		
	M16: M16		
	M18: M18	150: 1.5mm	
	M20: M20		
	M22: M22		
	M26: M26		
	M27: M27		
	M36: M36	200: 2.0mm	
	M42: M42		

Dimensions

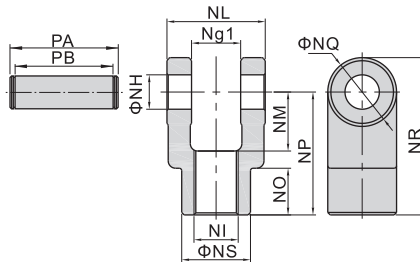
M10 and below



Type\Item	A	B	C	D	F
F-M3X050Y	15.5	12	5	6	6
F-M4X070Y	22	16	8	8	7
F-M5X080Y	28	21	10.2	12	10
F-M6X100Y	32	24	12	12	10
F-M8X125Y	42	32	16	16	14
F-M10X125Y	52	40	20	19	18

Type\Item	E	G	H	I
F-M3X050Y	M3×0.5	9	3	3
F-M4X070Y	M4×0.7	11.5	4	4
F-M5X080Y	M5×0.8	15.5	6.5	5
F-M6X100Y	M6×1.0	16	6	6
F-M8X125Y	M8×1.25	21	8	8
F-M10X125Y	M10×1.25	25	10	10

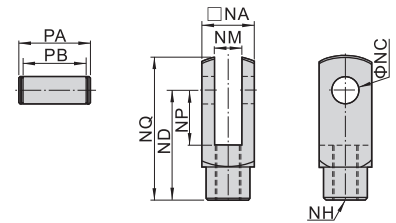
M14\M18\M22\M26



Type\Item	NG1	NH	NI	NL	NM
F-M14X150Y	14.2	10	M14×1.5	27.8	19
F-M18X150Y	20.2	14	M18×1.5	39.8	24
F-M22X150Y	30.2	22	M22×1.5	59.8	34
F-M26X150Y	30.2	22	M26×1.5	59.8	34

Type\Item	NO	NP	NQ	NR	NS	PA	PB
F-M14X150Y	17	40	22	51	22	34.6	28.8
F-M18X150Y	19	50	28	64	28	47	40.8
F-M22X150Y	20	65	40	85	40	69.2	60.8
F-M26X150Y	20	65	40	85	40	69.2	60.8

Others



Type\Item	NA	NC	ND	NP	NQ
F-M12X125Y	25.4	12	48	24	62
F-M16X150Y	32	16	64	32	80
F-M20X150Y	44.4	20	80	40	101
F-M27X200Y	54	30	110	55	139
F-M36X200Y	70	35	144	73	179
F-M42X200Y	85	40	168	86	211

Type\Item	NM	NH	PA	PB
F-M12X125Y	12	M12×1.25	32.4	26.2
F-M16X150Y	16	M16×1.5	39	32.8
F-M20X150Y	20	M20×1.5	53.4	45.2
F-M27X200Y	30	M27×2.0	64.2	54.8
F-M36X200Y	35	M36×2.0	80.2	70.8
F-M42X200Y	40.3	M42×2.0	115	93



Table for universal joint and cylinder

Cylinder Accessory	SE						SAI					SAI/SC				
	32	40	50	63	80	100	125	32	40	50	63	80	100	125	160	200
F-M10X125U	●							●								
F-M12X125U		●							●							
F-M16X150U			●	●						●	●					
F-M20X150U					●	●						●	●			
F-M27X200U							●							●		
F-M36X200U															●	●

Cylinder Accessory	SGC				SC/SAU					JSI							
	125	160	200	250	32	40	50	63	80	100	32	40	50	63	80	100	125
F-M10X125U					●							●					
F-M12X125U						●											
F-M14X150U													●				
F-M16X150U							●	●									
F-M18X150U														●	●		
F-M20X150U									●	●							
F-M26X150U																●	
F-M27X200U	●																●
F-M36X200U		●	●														

Cylinder Accessory	ACQ										
	12	16	20	25	32	40	50	63	80	100	
F-M5X080U	●										
F-M6X100U		●									
F-M8X125U			●								
F-M10X125U				●							
F-M12X125U					●	●					
F-M14X150U						●	●				
F-M16X150U								●	●		
F-M18X150U							●	●			
F-M20X150U										●	
F-M26X150U											●

Cylinder Accessory	MA				MF				MBL									
	16	20	25	32	40	50	63	80	20	25	32	40	20	25	32	40	50	63
F-M6X100U	●																	
F-M8X125U		●						●					●					
F-M10X125U			●	●					●	●				●	●			
F-M12X125U					●											●		
F-M14X150U						●	●				●						●	●

Cylinder Accessory	PB				MI								
	4	6	10	12	16	8	10	12	16	20	25	32	40
F-M4X070U			●			●	●						
F-M5X080U				●	●								
F-M6X100U								●	●				
F-M8X125U										●			
F-M10X125U											●	●	
F-M12X125U													●

Ordering code

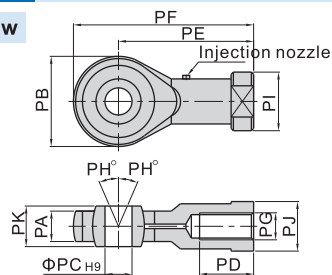
F-M10X125 U

① ② ③ ④

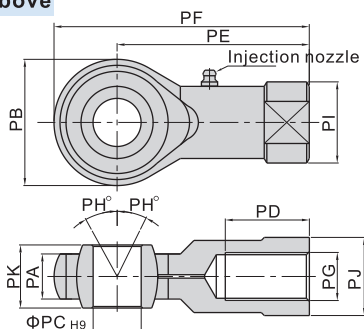
① Accessories code	② Screw thread	③ Thread pitch	④ Code
	M4: M4	070: 0.7mm	U: Universal joint
	M5: M5	080: 0.8mm	
	M6: M6	100: 1.0mm	
	M8: M8	125: 1.25mm	
	M10: M10		
	M12: M12		
	M14: M14		
	M16: M16	150: 1.5mm	
	M18: M18		
	M20: M20		
	M26: M26		
	M27: M27	200: 2.0mm	
	M36: M36		

Dimensions

M8 and below



M10 and above



Type\Item	PA	PB	PC	PD	PE	PF	PG	PH	PI	PJ	PK
F-M4X070U	6	18	5	10	27	36	M4×0.7	13	12.5	10	8
F-M5X080U	6	18	5	10	27	36	M5×0.8	13	12.5	10	8
F-M6X100U	6.8	20	6	12	30	40	M6×1.0	13	13	11	9
F-M8X125U	9	24	8	16	36	48	M8×1.25	13	16	14	12
F-M10X125U	11	26	10	20	43	56	M10×1.25	13	19	17	14
F-M12X125U	12	32	12	22	50	66	M12×1.25	13	22	19	16
F-M14X150U	14	36	14	28	57	75	M14×1.5	13	25	22	19
F-M16X150U	15	40	16	28	64	84	M16×1.5	15	27	22	21
F-M18X150U	16.5	46	18	30	71	94	M18×1.5	15	31	27	23
F-M20X150U	18	46	20	33	77	100	M20×1.5	15	34	30	25
F-M26X150U	22	60	25	48	94	124	M26×1.5	15	42	36	31
F-M27X200U	25	70	30	51	110	145	M27×2.0	15	50	41	37
F-M36X200U	27.5	80	35	56	125	165	M36×2.0	15	57.5	50	43