

# Air Cylinder

# Series CJ2

ø6, ø10, ø16



### Long life of over 1.5 times (In-house comparison)

The mounting accuracy of the cylinder and the wear resistance of the seals have been improved, thus dramatically increasing the cylinder's life to more than 1.5 times that of the CJ1 Series.

### Compact and lightweight:

The lateral width of the cover has been reduced approximately 10% from the CJ1 Series. In addition to a weight reduction of over 30%, a space-saving configuration has been achieved.



### Improved wear resistance:

The bearing portions of the rod cover and the clevis have been improved in wear resistance to ensure the longevity of the cylinder.

### High speed actuation possible:

Either the rubber bumper or the air cushion can be selected according to the drive speed conditions. Therefore, it can support high speed drives.

- Rubber bumper ..... 50 to 750mm/s (Standard equipment)
- Air cushion ..... 50 to 1000mm/s

### Easy installation:

The installation is simple because a tool can be placed directly over the cover for installation.

### Reduced piston rod deflection:

The clearance between the bushing and the piston rod has been decreased to achieve higher accuracy, thus decreasing the deflection of the piston rod.

### Variations

Series	Action	Rod	Basic	Standard variations				Bore size (mm)	Page
				Built-in magnet	Air cushion	Clean	Copper free		
<b>Standard: CJ2</b> 	Double acting	Single rod	●	●	●	●	6 10 16	1.3-2	
		Double rod	●	●	●	●		1.3-13	
	Single acting	Single rod, Spring return/extend	●	●	●	●		1.3-20	
<b>Non-rotating rod: CJ2K</b> 	Double acting	Single rod	●	●	●	●	10 16	1.3-30	
	Single acting	Single rod, Spring return/extend	●	●	●	●		1.3-35	
<b>Built-in speed controller: CJ2Z</b> 	Double acting	Single rod	●	●	●	●	10 16	1.3-42	
		Double rod	●	●	●	●		1.3-47	
<b>Low friction: CJ2Q</b> 	Double acting	Single rod	●	●	●	●	10 16	1.3-52	
<b>Direct mount: CJ2R</b> 	Double acting	Single rod	●	●	●	●	10 16	1.3-56	
	Single acting	Single rod, Spring return/extend	●	●	●	●		1.3-61	
<b>Non-rotating rod/ Direct mount: CJ2RK</b> 	Double acting	Single rod	●	●	●	●	10 16	1.3-65	
	Single acting	Single rod, Spring return/extend	●	●	●	●		1.3-69	

### Made to Order

Applicable auto switch	Band mounting	Rail mounting
<b>Reed switch</b>	D-C7/C8, D-C73C/C80C	D-A7/A8, D-A7□H/A80H, D-A73C/A80C, D-A79W
<b>Solid state switch</b>	D-H7□, D-H7C D-H7□W, D-H7BAL, D-H7□F	D-F7/J7, D-F7□V, D-J79C D-F7□W/J79W, D-F7□WV, D-F7BAL, D-F7□F, D-F7NTL

Refer to p.5.4-1 for made to order products of series CJ2.

- CJ1
- CJP
- CJ2**
- CM2
- C85
- CG1
- MB
- C95
- CA1
- CS1

# Standard: Double Acting Single Rod

# Series CJ2



ø6, ø10, ø16

## How to Order

Bore size	
6	6mm
10	10mm
16	16mm

Standard stroke (mm)	
ø 6	15, 30, 45, 60
ø10	15, 30, 45, 60, 75, 100, 125, 150
ø16	15, 30, 45, 60, 75, 100, 125, 150, 175, 200

Mounting	
B	Basic
L	Axial foot
F	Front flange
D	Double clevis (Except for ø6)

Cushion	
—	Rubber bumper
A	Air cushion (Except for ø6)

Standard

CJ2

L

16

60

A

R

With auto switch

CDJ2

L

16

60

A

R

C73

Band mounting

Rail mounting

**With auto switch (built-in magnet)**

**Port location on head cover**

	ø6	ø10/ø16
—	—	Perpendicular 90°
R	In-line	In-line

\* Refer to p.1.3-4 for the configuration.

**Number of switches**

—	2
S	1
n	n

**Auto switch**

\* Refer to the table below for selecting applicable auto switches.

\* If requiring a built-in magnet cylinder without an auto switch, refer to the model number example below.

### Applicable Auto Switches/Refer to p.5.3-2 for further information on auto switch.

Style	Special function	Electrical entry	Indicator	Wiring (Output)	Load voltage		Auto switch model**			Lead wire*				Applicable load		
					DC	AC	Band (ø6, ø10, ø16)	Rail (ø10, ø16)		0.5 (-)	3 (L)	5 (Z)	None (N)	IC	Relay PLC	
Reed switch	—	Grommet	Yes	3 wire (NPN)	—	5V	—	C76	—	A76H	●	●	—			—
						—	200V	—	A72	A72H	●	●	—	—	—	
						12V	100V	C73	A73	A73H	●	●	●	—	—	
						24V	5V, 12V	≤100V	C80	A80	A80H	●	●	—	—	—
							12V	—	C73C	A73C	—	●	●	●	●	—
							5V, 12V	≤24V	C80C	A80C	—	●	●	●	●	—
Diagnostic indication (2 color)	Grommet	Yes	—	—	—	A79W	—	●	●	—	—	—	—			
Solid state switch	—	Grommet	Yes	3 wire (NPN)	5V, 12V	—	H7A1	F7NV	F79	●	●	○	—	—	—	
				3 wire (PNP)		H7A2	F7PV	F7P	●	●	○	—	—			
				2 wire		H7B	F7BV	J79	●	●	○	—	—			
		Connector		12V		—	H7C	J79C	—	●	●	●	●	—		
				24V		5V, 12V	H7NW	F7NWV	F79W	●	●	○	—	—		
						—	H7PW	—	F7PW	●	●	○	—	—		
	—	H7BW	F9BWV		J79W	●	●	○	—	—						
	Diagnostic indication (2 color)	Grommet	Yes	2 wire	12V	—	H7BA	—	F7BA	—	●	○	—	—		
	Water resistant (2 color)			—	—	F7NT	—	●	○	—	—					
	With timer			5V, 12V	—	H7NF	—	F79F	●	●	○	—				
	With diagnostic output (2 color)	Grommet	Yes	3 wire (NPN)	—	—	—	F7NT	—	●	○	—	—			
	Latch with diagnostic output (2 color)			4 wire (NPN)		—	H7LF	—	F7LF	●	●	○	—			

\* Lead wire length      0.5m..... —      e.g.) C73C      5m.....Z      e.g.) C73CZ  
    3m.....L                      C73CL      None.....N                      C73CN

\* Solid state switches marked with "○" are manufactured upon receipt of order.

\*\* "D-A79W" cannot be mounted on bore size ø10 cylinder with air cushion.

### Part No. of Cylinder with Built-in Magnet

Symbol "-A" (rail mounting) or "-B" (band mounting) should be suffixed to the part No. of the cylinder with auto switch.

Ex.	Mounting	Part No.
	Rail mounting	CDJ2B10-45-A
	Band mounting	CDJ2B16-60-B

# Standard: Double Acting Single Rod *Series CJ2*



## Specifications

Action	Double acting/Single rod	
Fluid	Air	
Proof pressure	1.05MPa	
Max. operating pressure	0.7MPa	
Min. operating pressure	ø6	0.12MPa
	ø10, ø16	0.06MPa
Ambient and fluid temperature	Without auto switch: -10°C to 70°C, With auto switch: -10°C to 60°C*	
Cushion	Rubber bumper/Air cushion	
Lubrication	Non-lube	
Thread tolerance	JIS class 2	
Stroke tolerance	+1.0 0	
Piston speed	50 to 750mm/s	
Allowable kinetic energy	ø6	0.012J
	ø10	0.035J
	ø16	0.090J

\* No freezing

CJ1

CJP

**CJ2**

CM2

C85

CG1

MB

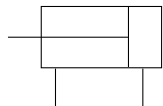
C95

CA1

CS1

## JIS symbol

Double acting/Single rod



## Standard Stroke

Bore size	Standard stroke (mm)
6	15, 30, 45, 60
10	15, 30, 45, 60, 75, 100, 125, 150
16	15, 30, 45, 60, 75, 100, 125, 150, 175, 200



**Made to Order**

Refer to p.5.4-1 for made to order products of series CJ2.

## ⚠ Precautions

Be sure to read before handling. Refer to p.0-39 to 0-46 for Safety Instructions and common precautions.

### ⚠ Caution

#### Mounting

- During installation, secure the rod cover and tighten by applying an appropriate tightening force to the retaining nut or to the rod cover body. If the head cover is secured or the head cover body is tightened, the cover could rotate, leading to a deviation.
- Tighten the retaining screws to an appropriate tightening torque within the range given below.  
ø6: 2.1 to 2.5Nm, ø10: 5.9 to 6.4Nm, ø16: 10.8 to 11.8Nm
- To remove and install the snap ring for the knuckle pin or the clevis pin, use an appropriate pair of pliers (tool for installing a C type snap ring). In particular, use a pair of ultra-mini pliers such as the Super Tool CSM-07A for removing and installing the snap rings on the ø10 cylinder.
- In the case of auto switch rail mounting style, do not remove the rail that is mounted. Because the retaining screws extend into the cylinder, this could lead to an air leak.

## Minimum Strokes for Auto Switch Mounting

Mounting	Auto switch model	Number of switches	Min. stroke (mm)
Band mounting (ø6, ø10, ø16)	D-C7 D-C8	2 (same surface)	50
		2 (different surfaces)	15
		1	10
	D-H7□ D-H7□W D-H7BAL D-H7NF	2 (same surface)	60
		2 (different surfaces)	15
		1	10
	D-C73C D-C80C D-H7C	2 (same surface)	65
		2 (different surfaces)	15
		1	10
	D-H7LF	2 (same surface)	65
2 (different surfaces)		25	
1		15	
1		10	
Rail mounting (ø10, ø16)	D-A7/A8 D-A7□H/A80H D-A73C/A80C	2	10
		1	5
		2	5
	D-F7 D-J79 D-F7□V D-J79C	1	5
		2	15
	D-A79W D-F7□W D-J79W D-F7BAL D-F7□WV D-F79F	1	10
		2	15
		1	15
		1	15

# Series CJ2

## Mounting Accessories/Refer to p.1.3-12 for details.

Mounting		Basic	Axial foot	Front flange	Double clevis*
Standard	Mounting nut	●	●	●	—
	Rod end nut	●	●	●	●
	Clevis pin	—	—	—	●
Option	Single knuckle joint	●	●	●	●
	Double knuckle joint*	●	●	●	●
	T bracket	—	—	—	●

\* Double clevis or double knuckle joint are packaged with pins and rings.

## Mounting Bracket Part No.

Mounting bracket	Bore size (mm)		
	6	10	16
Foot	CJ-L006B	CJ-L010B	CJ-L016B
Flange	CJ-F006B	CJ-F010B	CJ-F016B
T bracket*	—	CJ-T010B	CJ-T016B

\* T bracket is used with double clevis (D)

## Auto Switch Mounting Bracket Part No. (Band mounting)

Bore size (mm)	Bracket part No.	Note
6	BJ2-006	Common use to all of D-C7, C8 and D-H7
10	BJ2-010	
16	BJ2-016	

[A set of stainless steel mounting screws]

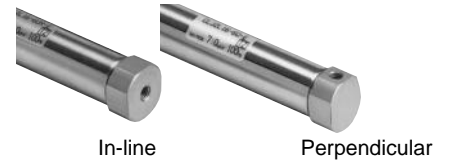
Note) A set of stainless steel mounting screws "BBA4" is attached. (A switch mounting band is not attached. Please order the band separately.) "BBA4" screws are used for D-C7/C8/H7. "D-H7BAL" switch is set on the cylinder with the screws above when shipped. Also, when a switch only is shipped, "BBA4" screws are attached.

## Theoretical Force

Refer to the "Double acting cylinder" in Theoretical Force Table 1 of Technical data 3 on p.5.6-7.

## Port Location on Head Cover

Either perpendicular to the cylinder axis or in-line with the cylinder axis is selectable for basic style. (ø6 is available only as in-line style.)



## Weight

(g)

Bore size (mm)		6	10	16
Basic weight*		15	24	55
Additional weight for each 15 of stroke		2	4	6.5
Mounting bracket weight	Axial foot	8	8	20
	Front flange	5	5	15
	Double clevis** (with pins)	—	4	10
Accessory	Single knuckle joint	—	16	22
	Double knuckle joint	—	24	19.5
	T bracket	—	32	50

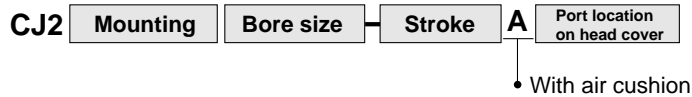
\* This basic weight includes weights of mounting nut and rod end nut.

\*\* The mounting nut is not attached to the double clevis style, so the mounting nut weight is already reduced.

Calculation example: CJ2L10-45

- Basic weight: 24 (ø10)
- Additional weight: 4/15 stroke
- Cylinder stroke: 45 stroke
- Mounting bracket weight: 8 (Axial foot)
- $24 + 4/15 \times 45 + 8 = 44g$

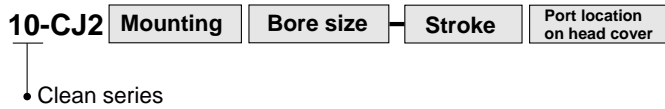
## With Air Cushion



With covers on both sides equipped with the cushion function, the cylinder absorbs the impact during high-speed operation.



## Clean Series



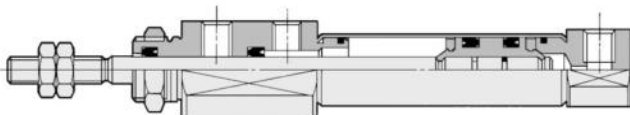
The rod section of actuator is reinforced with the double-seal structure. The air cylinder can be incorporated in the system which directly discharges the external leak from the clean room through the relief port.



### Specifications

Action	Double acting/Single rod	
Bore size	ø6, ø10, ø16	
Max. operating pressure	0.7MPa	
Min. operating pressure	ø6	0.14MPa
	ø10, ø16	0.08MPa
Cushion	Rubber bumper (standard)	
Standard stroke	Same as the standard (Refer to p.1.3-3)	
Auto switch	Possible to be mounted	
Mounting	Basic, Axial foot, Front flange	

### Construction



### Specifications

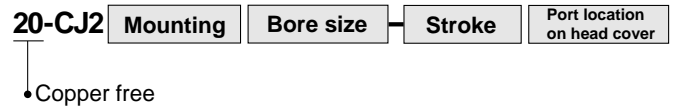
Action	Double acting/Single rod
Lubrication	Non-lube
Bore size	ø10, ø16
Max. operating pressure	0.7MPa
Min. operating pressure	0.1MPa
Piston speed	50 to 1000mm/s
Mounting	Basic, Axial foot, Front flange, Double clevis

### Cushion Mechanism

Bore size (mm)	Effective cushion length (mm)	Allowable kinetic energy (J)
10	9.4	0.07J
16	9.4	0.18J

\* Refer to p.1.3-6 for the construction.

## Copper Free



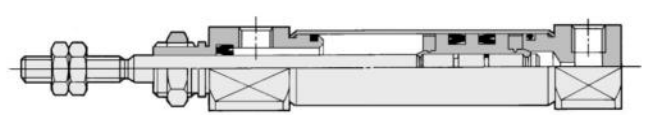
To eliminate influences of copper ions or halogen ions during CRT manufacturing processes, copper and fluorine materials are not used as component parts.



### Specifications

Action	Double acting/Single rod	
Bore size	ø6, ø10, ø16	
Max. operating pressure	0.7MPa	
Min. operating pressure	ø6	0.12MPa
	ø10, ø16	0.06MPa
Cushion	Rubber bumper (standard)	
Standard stroke	Same as the standard (Refer to p.1.3-3)	
Auto switch	Possible to be mounted	
Mounting	Basic, Axial foot, Front flange, Double clevis (Except for ø6)	

### Construction



CJ1

CJP

**CJ2**

CM2

C85

CG1

MB

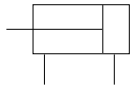
C95

CA1

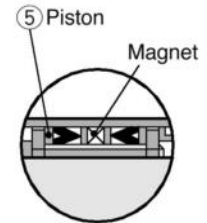
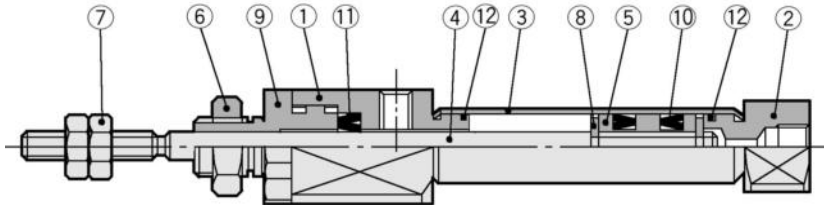
CS1

# Series CJ2

Construction (The cylinder cannot be disassembled.)

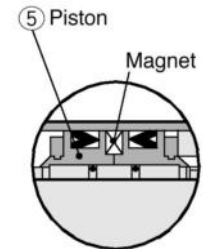
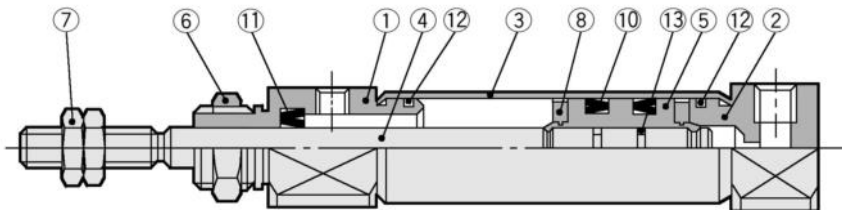


CJ2□6-R



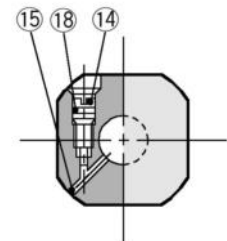
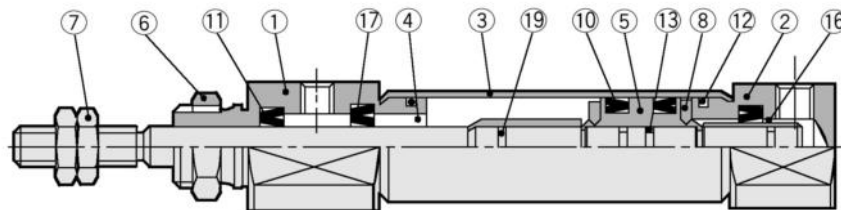
Piston construction in case of auto switches equipped

CJ2□10, CJ2□16



Piston construction in case of auto switches equipped

With air cushion



## Component Parts

No.	Description	Material	Note
①	Rod cover	Aluminum alloy	White anodized
②	Head cover	Aluminum alloy	White anodized
③	Cylinder tube	Stainless steel	
④	Piston rod	Stainless steel	
⑤	Piston	Brass	
⑥	Mounting nut	Brass	Nickel plated
⑦	Rod end nut	Rolled steel	Nickel plated
⑧	Bumper	Urethane	
⑨*	Packing retainer	Aluminum alloy	White anodized
⑩	Piston seal	NBR	
⑪	Rod packing	NBR	
⑫	Tube gasket	NBR	
⑬	Piston gasket	NBR	


\* Only for ø6 cylinder

## With Air Cushion

No.	Description	Material	Note
⑭	Cushion needle	Stainless steel	
⑮	Steel ball	Bearing steel	
⑯	Cushion ring	Brass	
⑰	Check seal	NBR	
⑱	Needle seal	NBR	
⑲	Cushion ring gasket	NBR	

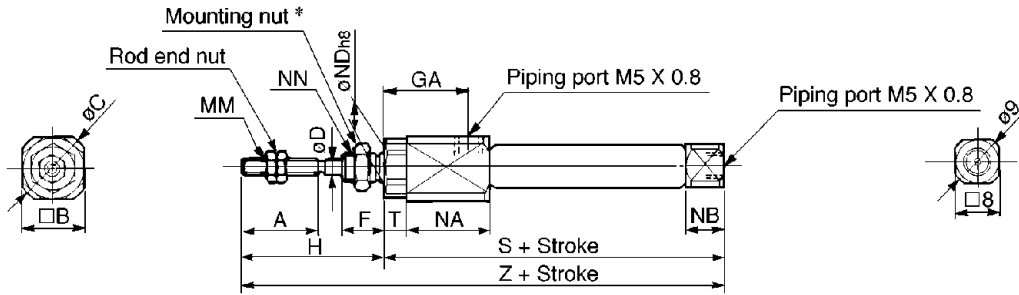


# Standard: Double Acting Single Rod *Series CJ2*

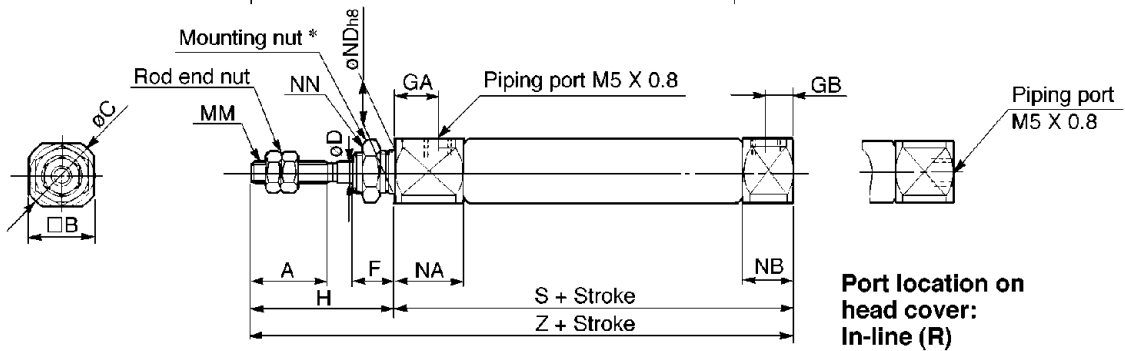
Basic (B) 

CJ2B Bore size Stroke Port location on head cover

CJ2B6

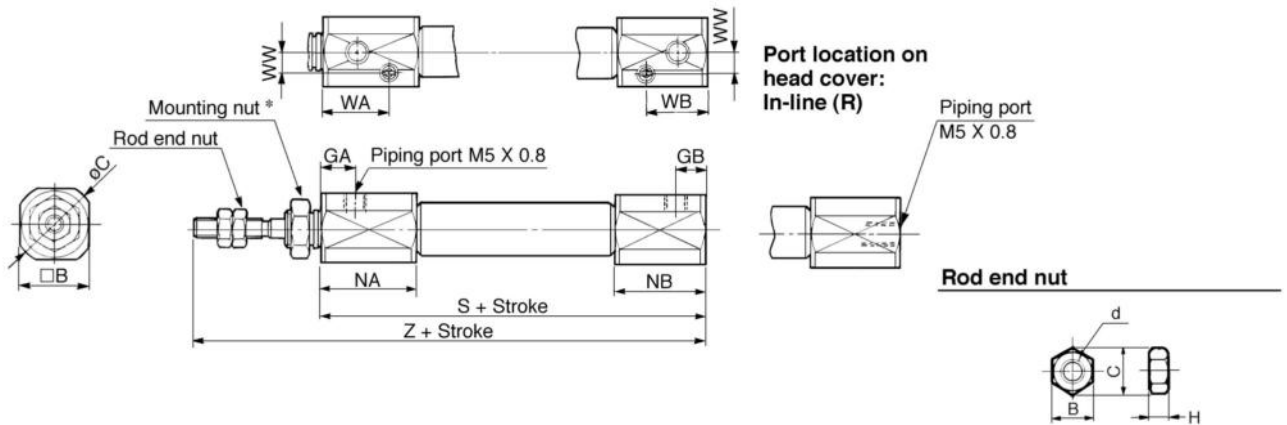


CJ2B10, 16



- CJ1
- CJP
- CJ2**
- CM2
- C85
- CG1
- MB
- C95
- CA1
- CS1

With air cushion: CJ2B Bore size Stroke A Port location on head cover



Material: Iron

Part No.	Bore	B	C	d	H
NTJ-006A	6	5.5	6.4	M3 X 0.5	2.4
NTJ-010A	10	7	8.1	M4 X 0.7	3.2
NTJ-015A	16	8	9.2	M5 X 0.8	4

\* Refer to p.1.3-12 for details of the mounting nut.

Bore	A	B	C	D	F	GA	GB	H	MM	NA	NB	NDh8	NN	S	T	Z
6	15	12	14	3	8	14.5	—	28	M3 X 0.5	16	7	6 <sup>0</sup> <sub>-0.018</sub>	M6 X 1.0	49	3	77
10	15	12	14	4	8	8	5	28	M4 X 0.7	12.5	9.5	8 <sup>0</sup> <sub>-0.022</sub>	M8 X 1.0	46	—	74
16	15	18	20	5	8	8	5	28	M5 X 0.8	12.5	9.5	10 <sup>0</sup> <sub>-0.022</sub>	M10 X 1.0	47	—	75

With air cushion/Dimensions not mentioned in the below table are the same as the above table. (mm)

Bore	B	C	GA	GB	NA	NB	WA	WB	WW	S	Z
10	15	17	7.5	6.5	21	20	14.5	13.5	4.5	65	93
16	18	20	7.5	6.5	21	20	14.5	13.5	5.5	66	94



Basic With air cushion  
 CJ2B6.....SCJ26, #1  
 CJ2B10.....SCJ210, #1 SCJ210, #2  
 CJ2B16.....SCJ216, #1 SCJ216, #2

\* The data shows auto switch styles.  
 Please delete the unnecessary parts.

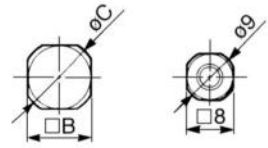
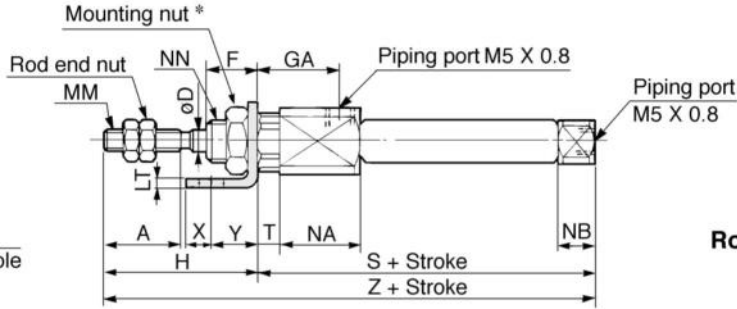
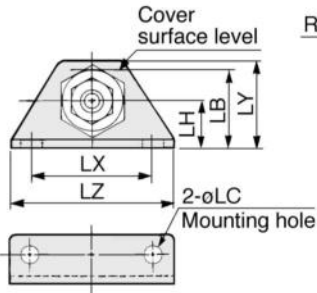
# Series CJ2

Axial Foot (L)



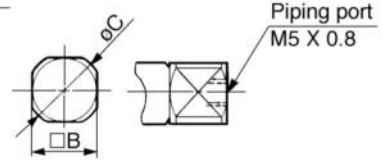
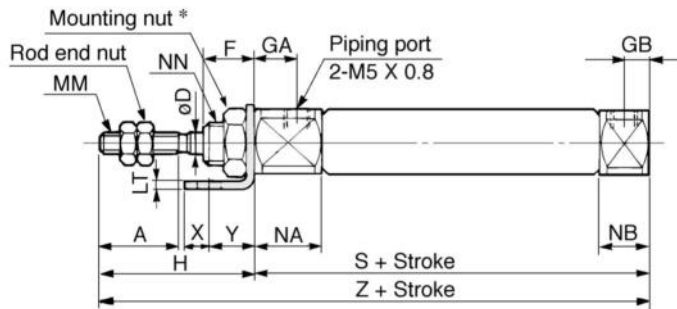
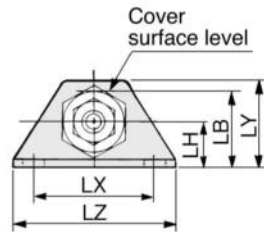
CJ2L Bore size Stroke Port location on head cover

## CJ2L6



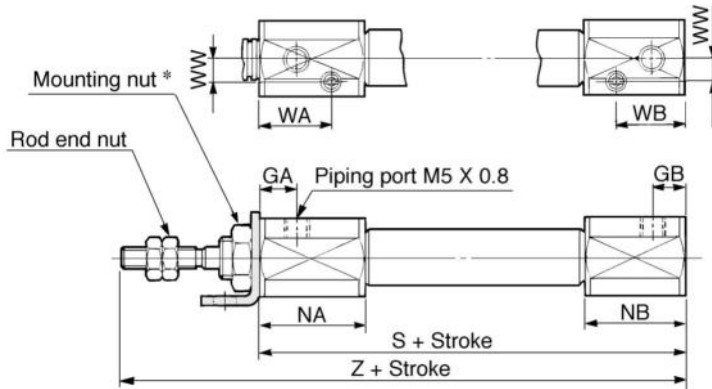
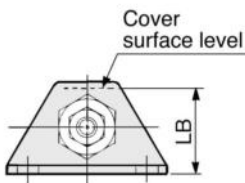
Rod cover side Head cover side

## CJ2L10, 16

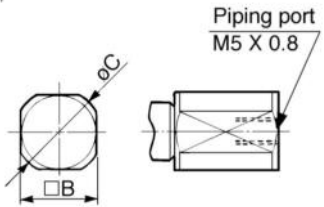


Port location on head cover: In-line (R)

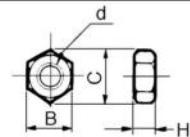
With air cushion: CJ2L Bore size Stroke A Port location on head cover



Port location on head cover: In-line (R)



Rod end nut



Material: Iron

Part No.	Bore	B	C	d	H
NTJ-006A	6	5.5	6.4	M3 X 0.5	2.4
NTJ-010A	10	7	8.1	M4 X 0.7	3.2
NTJ-015A	16	8	9.2	M5 X 0.8	4

\* Refer to p.1.3-12 for details of the mounting nut.

Bore	A	B	C	D	F	GA	GB	H	LB	LC	LH	LT	LX	LY	LZ	MM	NA	NB	NN	S	T	X	Y	Z
6	15	12	14	3	8	14.5	—	28	15	4.5	9	1.6	24	16.5	32	M3 X 0.5	16	7	M6 X 1.0	49	3	5	7	77
10	15	12	14	4	8	8	5	28	15	4.5	9	1.6	24	16.5	32	M4 X 0.7	12.5	9.5	M8 X 1.0	46	—	5	7	74
16	15	18	20	5	8	8	5	28	23	5.5	14	2.3	33	25	42	M5 X 0.8	12.5	9.5	M10 X 1.0	47	—	6	9	75

With air cushion/Dimensions not mentioned in the below table are the same as the above table. (mm)

Bore	B	C	GA	GB	LB	NA	NB	WA	WB	WW	S	Z
10	15	17	7.5	6.5	16.5	21	20	14.5	13.5	4.5	65	93
16	18	20	7.5	6.5	23	21	20	14.5	13.5	5.5	66	94



Basic	With foot	With air cushion
CJ2L6.....SCJ26, #1	SCJ26, #1, #3	—
CJ2L10.....SCJ210, #1	SCJ210, #1, #3	SCJ210, #2, #3
CJ2L16.....SCJ216, #1	SCJ216, #1, #3	SCJ216, #2, #3

\* The data shows auto switch styles.

Please delete the unnecessary parts.



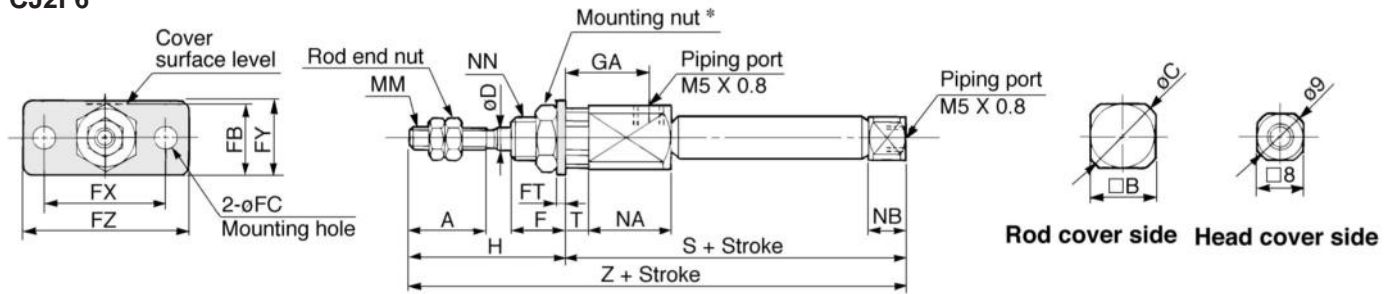
# Standard: Double Acting Single Rod *Series CJ2*

Front Flange (F)

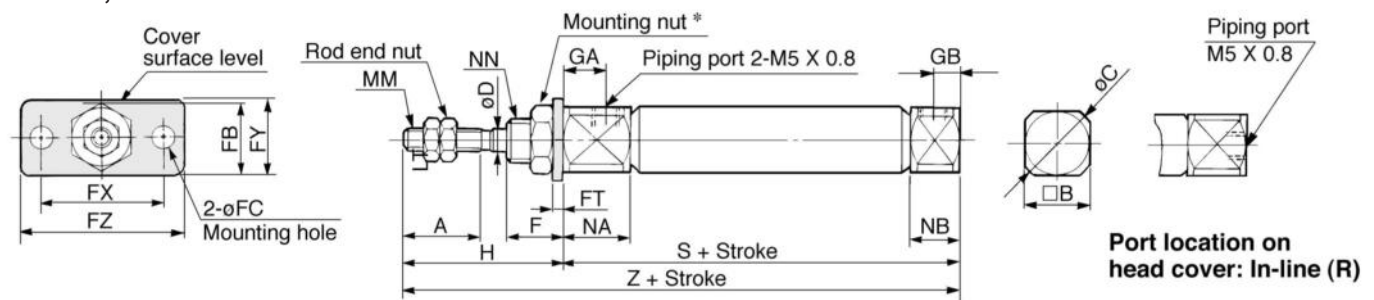


CJ2F Bore size Stroke Port location on head cover

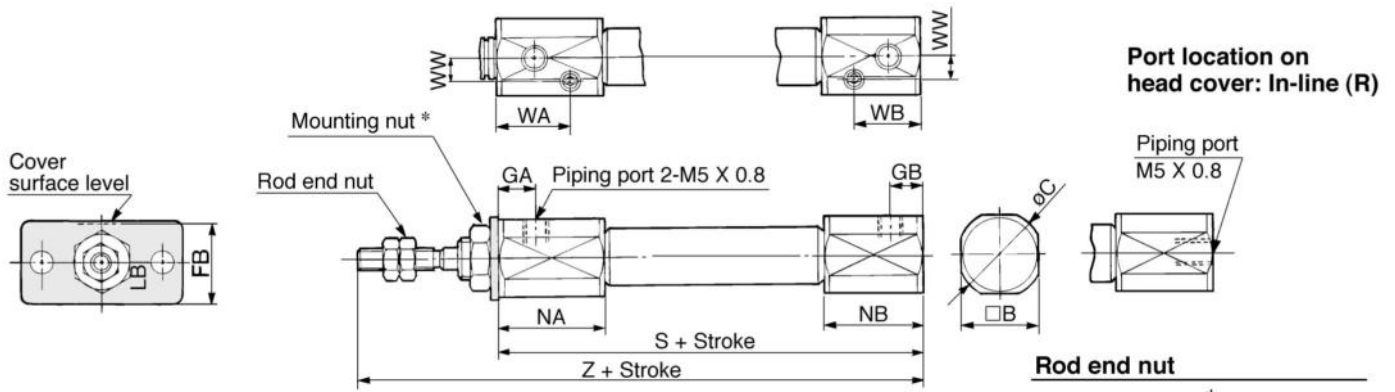
## CJ2F6



## CJ2F10, 16



With air cushion: CJ2F Bore size Stroke A Port location on head cover



Material: Iron

Part No.	Bore	B	C	d	H
NTJ-006A	6	5.5	6.4	M3 X 0.5	2.4
NTJ-010A	10	7	8.1	M4 X 0.7	3.2
NTJ-015A	16	8	9.2	M5 X 0.8	4

\* Refer to p.1.3-12 for details of the mounting nut.

Bore	A	B	C	D	F	FB	FC	FT	FX	FY	FZ	GA	GB	H	MM	NA	NB	NN	S	T	Z
6	15	12	14	3	8	13	4.5	1.6	24	14	32	14.5	—	28	M3 X 0.5	16	7	M6 X 1.0	49	3	77
10	15	12	14	4	8	13	4.5	1.6	24	14	32	8	5	28	M4 X 0.7	12.5	9.5	M8 X 1.0	46	—	74
16	15	18	20	5	8	19	5.5	2.3	33	20	42	8	5	28	M5 X 0.8	12.5	9.5	M10 X 1.0	47	—	75

With air cushion/Dimensions not mentioned in the below table are the same as the above table. (mm)

Bore	B	C	FB	GA	GB	NA	NB	WA	WB	WW	S	Z
10	15	17	14.5	7.5	6.5	21	20	14.5	13.5	4.5	65	93
16	18	20	19	7.5	6.5	21	20	14.5	13.5	5.5	66	94



Basic Font flange With air cushion  
 CJ2F6.....SCJ26, #1 SCJ26, #1, #4 —  
 CJ2F10.....SCJ210, #1 SCJ210, #1, #4 SCJ210, #2, #4  
 CJ2F16.....SCJ216, #1 SCJ216, #1, #4 SCJ216, #2, #4

\* The data shows auto switch styles.

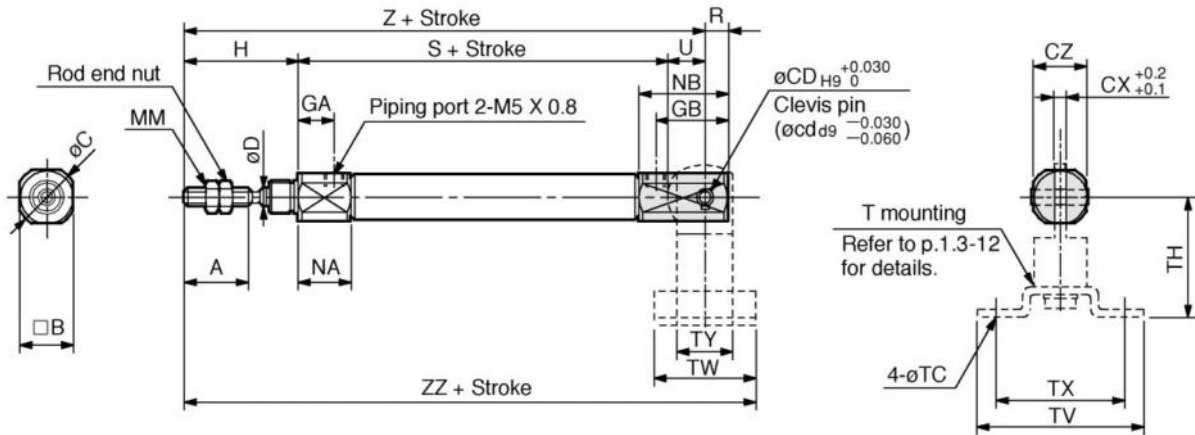
Please delete the unnecessary parts.

# Series CJ2

## Double Clevis (D)

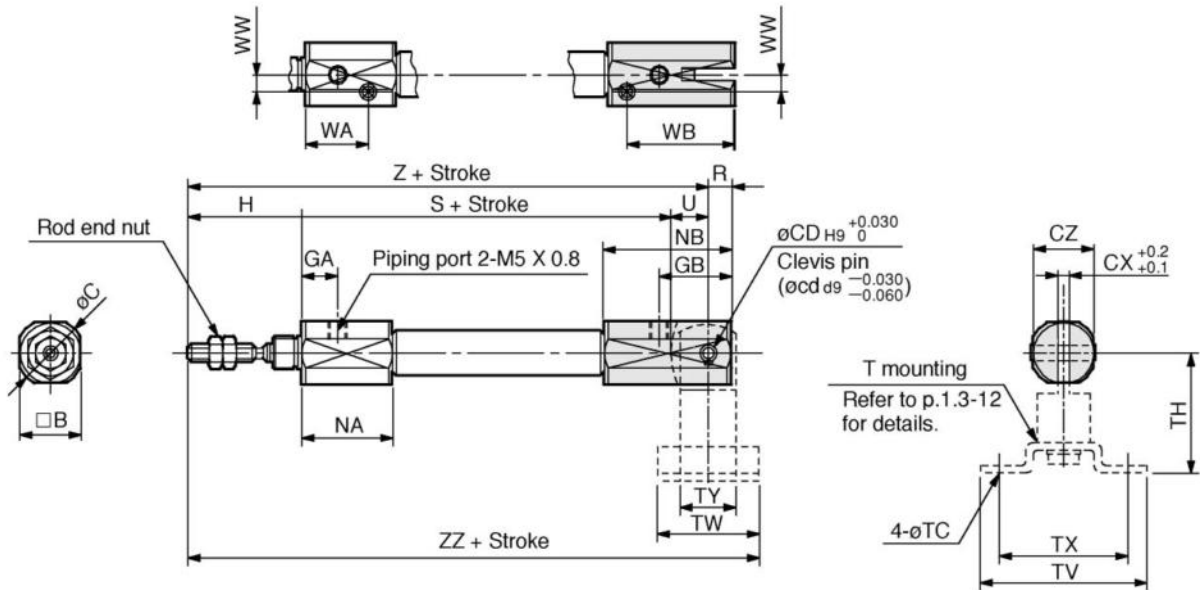


CJ2D Bore size Stroke



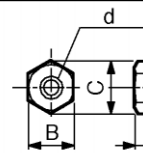
\* Clevis pins and set rings are attached.

With air cushion: CJ2D Bore size Stroke A



\* Clevis pins and set rings are attached.

### Rod end nut



Material: Iron

Part No.	Bore	B	C	d	H
NTJ-010A	10	7	8.1	M4 X 0.7	3.2
NTJ-015A	16	8	9.2	M5 X 0.8	4

Bore	A	B	C	CD (cd)	CX	CZ	D	GA	GB	H	MM	NA	NB	R	S	U	Z	ZZ
10	15	12	14	3.3	3.2	12	4	8	18	28	M4 X 0.7	12.5	22.5	5	46	8	82	93
16	15	18	20	5	6.5	18	5	8	23	28	M5 X 0.8	12.5	27.5	8	47	10	85	99

### T mounting dimensions

(mm)

Bore	TC	TH	TV	TW	TX	TY
10	4.5	29	40	22	32	12
16	5.5	35	48	28	38	16

With air cushion/Dimensions not mentioned in the below table are the same as the above table. (mm)

Bore	B	C	CZ	GA	GB	NA	NB	S	WA	WB	WW	Z	ZZ
10	15	17	15	7.5	19.5	21	33	65	14.5	26.5	4.5	101	112
16	18	20	18	7.5	24.5	21	38	66	14.5	31.5	5.5	104	118



Double clevis

CJ2D10 ..... SCJ210, #5

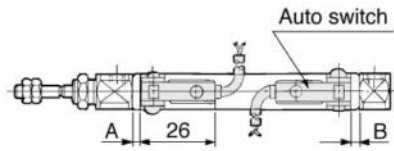
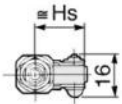
CJ2D16 ..... SCJ216, #5

\* The data shows auto switch styles.

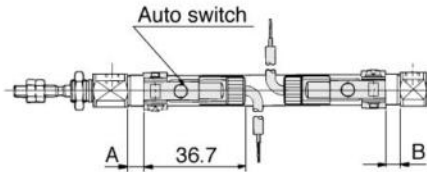
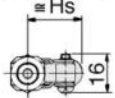
Please delete the unnecessary parts.

## Auto Switch Mounting Position

### Reed Switch <Band mounting> D-C7/C8

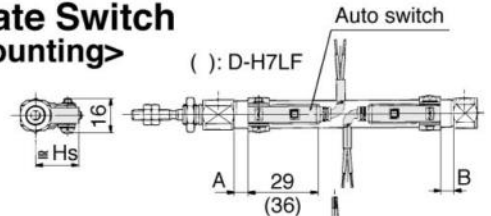


### D-C73C/C80C

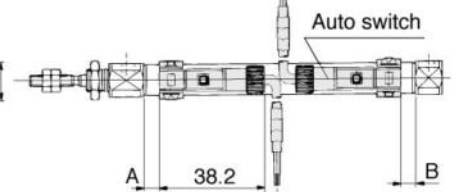
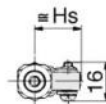


### Solid State Switch <Band mounting>

( ): D-H7LF  
D-H7□  
D-H7□W  
D-H7BAL  
D-H7□F

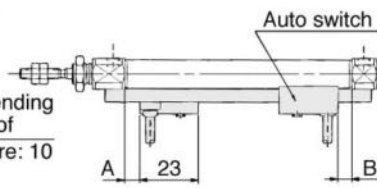
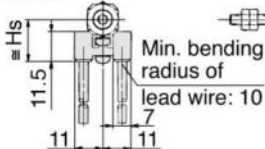


### D-H7C

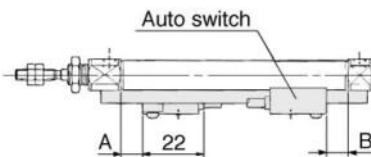
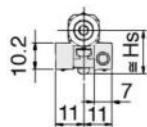


### <Rail mounting>

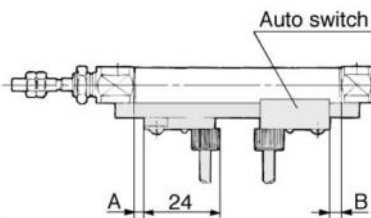
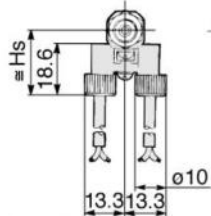
#### D-A7/A8



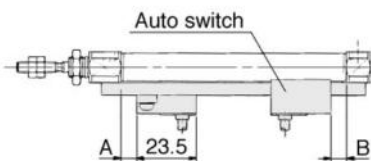
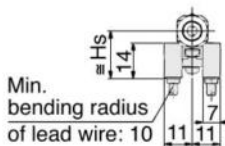
#### D-A7□H/A80H



#### D-A73C/A80C

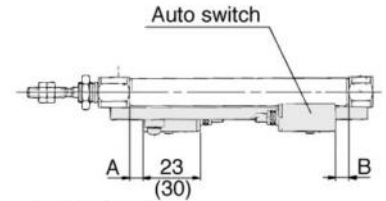
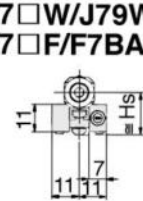


#### D-A79W

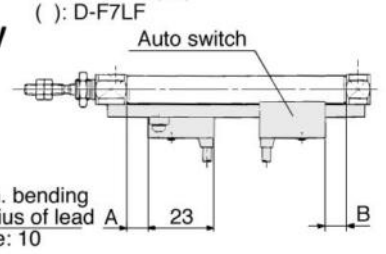
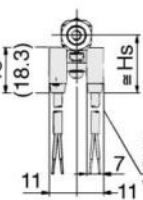


### <Rail mounting>

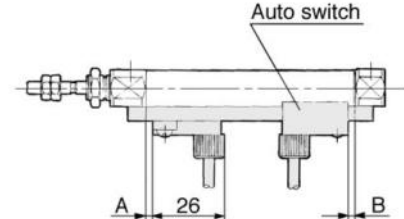
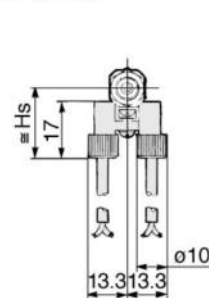
#### D-F7/J7 D-F7□W/J79W D-F7□F/F7BAL



#### D-F7□V/F7□WV



#### D-J79C



## Auto Switch Mounting Position

Auto switch model	D-C7 D-C8 D-C73C D-C80C		D-H7□ D-H7C		D-H7□W D-H7BAL D-H7□F		D-A7/A8		D-A7□H/A80H D-A73C/A80C D-F7/J7 D-F7□V D-J79C		D-F7BAL D-F7□W D-F7□F D-J79W D-F7□WV		D-A79W	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B
Bore 6	2 (8.5)	2 (0.5)	1 (7.5)	1 (0)	—	—	—	—	—	—	—	—	—	—
Bore 10	2.5	2.5	1.5	1.5	0	0	3	3	3.5	3.5	7.5	7.5	0.5	0.5
Bore 16	3	3	2	2	0.5	0.5	3.5	3.5	4	4	8	8	1	1

## Auto Switch Mounting Height

\* ( ) in the table: In case of double rod style, series CJ2W.

Auto switch model	D-C7/C8 D-H7□/H7□W D-H7□F D-H7BAL	D-C73C D-C80C	D-H7C	D-A7 D-A8	D-A7□H/A80H D-F7/J7 D-F7□W/J79W D-F7BAL/F7□F	D-A73C D-A80C	D-F7□V D-F7□WV	D-J79C	D-A79W
Bore	Hs	Hs	Hs	Hs	Hs	Hs	Hs	Hs	Hs
6	15	17.5	18	—	—	—	—	—	—
10	17	19.5	20	16.5	17.5	23.5	20	23	19
16	20.5	23	23.5	19.5	20.5	26.5	23	26	22

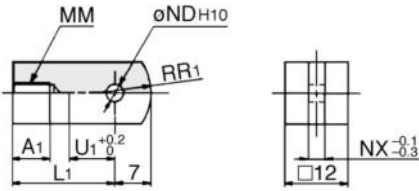
# Series CJ2



## Accessory Dimensions

(mm)

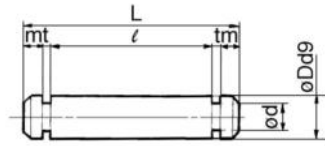
### Single knuckle joint



Material: Rolled steel

Part No.	Bore	A1	L1	MM	ND <sup>H10</sup>	NX	R1	U1
I-J010B	10	8	21	M4 X 0.7	33 <sup>+0.048</sup> <sub>0</sub>	3.1	8	9
I-J016B	16	8	25	M5 X 0.8	5 <sup>+0.048</sup> <sub>0</sub>	6.4	12	14

### Clevis pin

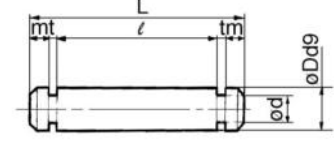


Material: Stainless steel

Part No.	Bore	Dd9	d	L	ℓ	m	t	Set ring
CD-J010	10	33 <sup>-0.030</sup> <sub>-0.060</sub>	3	15.2	12.2	1.2	0.3	C 3.2
CD-Z015	16	5 <sup>-0.030</sup> <sub>-0.060</sub>	4.8	22.7	18.3	1.5	0.7	C 5
CD-JA010*	10	33 <sup>-0.030</sup> <sub>-0.060</sub>	3	18.2	15.2	1.2	0.3	C 3.2

\* For ø10 double clevis style, with air cushion and built-in speed controller

### Knuckle pin

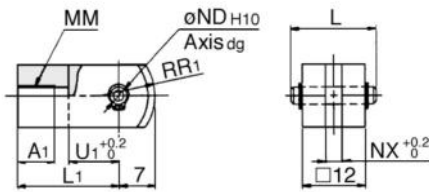


Material: Stainless steel

Part No.	Bore	Dd9	d	L	ℓ	m	t	Set ring
IY-J010	10	33 <sup>-0.030</sup> <sub>-0.060</sub>	3	16.2	12.2	1.7	0.3	C 3.2
IY-J015	16	5 <sup>-0.030</sup> <sub>-0.060</sub>	4.8	16.6	12.2	1.5	0.7	C 5

### Double knuckle joint

\* Knuckle pins and set rings are attached.



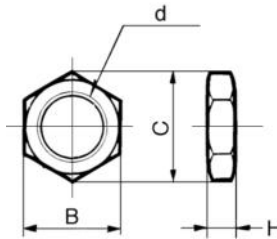
Material: Rolled steel

Part No.	Bore	A1	L	L1	MM
Y-J010B	10	8	16.2	21	M4 X 0.7
Y-J016B	16	11	16.6	21	M5 X 0.8

Part No.	ND <sub>d9</sub>	ND <sup>H10</sup>	NX	R1	U1
Y-J010B	33 <sup>-0.030</sup> <sub>-0.060</sub>	33 <sup>+0.048</sup> <sub>0</sub>	3.2	8	10
Y-J016B	5 <sup>-0.030</sup> <sub>-0.060</sub>	5 <sup>+0.048</sup> <sub>0</sub>	6.5	12	10

### Mounting nut

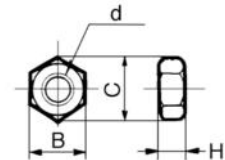


Material: Brass

Part No.	Bore	B	C	d	H
SNJ-006B	6	8	9.2	M6 X 1.0	4
SNJ-010B	10	11	12.7	M8 X 1.0	4
SNJ-016B	16	14	16.2	M10 X 1.0	4
SNKJ-016B*	16	17	19.6	M12 X 1.0	4

\* For ø16 non-rotating style.  
(Use SNJ-016B for ø10 non-rotating style.)

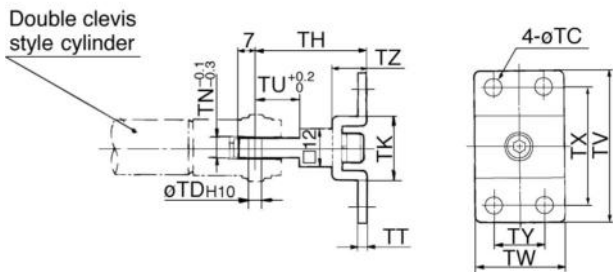
### Rod end nut



Material: Iron

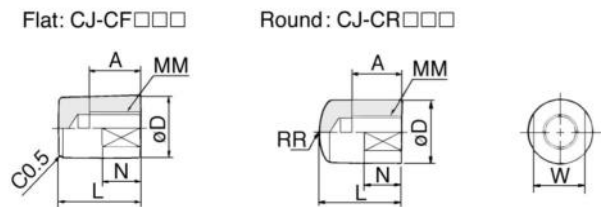
Part No.	Bore	B	C	d	H
NTJ-006A	6	5.5	6.4	M3 X 0.5	2.4
NTJ-010A	10	7	8.1	M4 X 0.7	3.2
NTJ-015A	16	8	9.2	M5 X 0.8	4

### T bracket



Part No.	Bore	TC	TD <sup>H10</sup>	TH	TK	TN	TT	TU	TV	TW	TX	TY	TZ
CJ-T010B	10	4.5	3.3 <sup>+0.048</sup> <sub>0</sub>	29	18	3.1	2	9	40	22	32	12	8
CJ-T016B	16	5.5	5 <sup>+0.048</sup> <sub>0</sub>	35	20	6.4	2.3	14	48	28	38	16	10

### Rod end cap



Material: Iron

Part No.		Bore	A	D	L	MM	N	R	W
Flat	Round								
CJ-CF006	CJ-CR006	6	6	8	11	M3 X 0.5	5	8	6
CJ-CF010	CJ-CR010	10	8	10	13	M4 X 0.7	6	10	8
CJ-CF016	CJ-CR016	16	10	12	15	M5 X 0.8	7	12	10



Accessory: SCJ2 [Bore size] #11