

Pin Cylinders

CJP2/CJP Series

ø4, ø6, ø10, ø15, ø16

2 auto switches can even be mounted on a cylinder with ø4 bore size (5 mm stroke).



Double acting / **CJP2 Series**

One-touch fitting can be connected.

(Panel mount type)

ø2 One-touch fitting, miniature fitting, and speed controller can be connected.



Single acting / **CJP Series**



CJ1

CJP

CJ2

JCM

CM2

CM3

CG1

CG3

JMB

MB

MB1

CA2

CS1

CS2

D-□

-X□

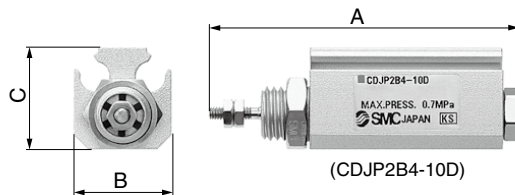
Technical
Data

Small and Light

Double acting / **CJP2 Series**

- Full length: Shortened by **6 to 9.5 mm**
- Weight: Reduced by **55 to 65%**

New aluminum body is light weight compared with the current CJP series.
(Compared with the basic model CJP cylinder without auto switch)



Dimensions

Unit: mm

Bore size	A	B	C
4	29 + stroke (34 + stroke)	14	14.5
6	33 + stroke (38 + stroke)	14	16.5
10	39.5 + stroke (44.5 + stroke)	15	19
16	43.5 + stroke (48.5 + stroke)	20	24.5

Weight

Unit: g

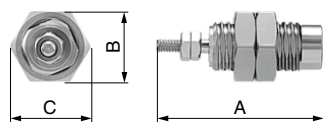
Stroke	Bore size (mm)			
	4	6	10	16
5	11	16	27	42
10	13	18	29	46
15	15	21	32	50
20	17	23	35	54
25	—	25	37	58
30	—	—	40	63
35	—	—	43	67
40	—	—	45	71

* (): Dimension for built-in magnet type

Single acting / **CJP Series**

Panel mount type (CJPB4-5)

Scale: 100%



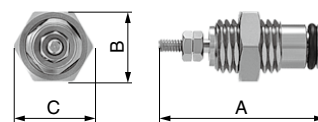
Dimensions

Unit: mm

Bore size	A			B	C
	5st	10st	15st		
4	23.5	31.5	39.5	10	11.5
6	27.5	34.5	41.5	12	13.9
10	32.5	39	46	19	22
15	37.5	43.5	50	27	31

Embedded type (CJPS4-5)

Scale: 100%



Weight

Unit: g

Stroke (mm)	Bore size (mm)			
	4	6	10	15
5	10	10.6	28	75
10	13	13.1	33	82
15	15	15.6	38	92

Variation

Series	Action	Bore size (mm)	Standard stroke (mm)	Mounting ^{Note 2)}
CJP2	Double acting, Single rod	4	5, 10, 15 (20) ^{Note 1)}	Basic Flange Foot Clevis Trunnion
		6	5, 10, 15, 20, 25	
		10	5, 10, 15, 20, 25, 30, 35, 40	
		16	5, 10, 15, 20, 25, 30, 35, 40	

Series	Action	Bore size (mm)	Standard stroke (mm)	Mounting
CJP	Single acting, Spring return	4	5, 10, 15	Panel mount type, Embedded type
		6	5, 10, 15	
		10	5, 10, 15	
		15	5, 10, 15	

Note 1) A stroke of 20 is available with a standard product only. Note 2) Bore size of $\phi 4$ is available with basic mounting only.

Related Products

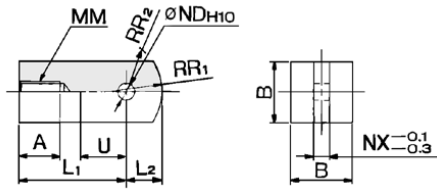
Refer to Best Pneumatics No. 7.



CJP2 Series

Accessory Bracket Dimensions

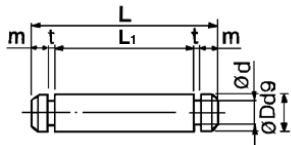
Single knuckle joint



Material: Rolled steel

Part no.	Applicable bore size (mm)	A	B	L ₁	L ₂	MM	ND _{H10}	NX	R ₁	R ₂	U
I-P006A	6	5	6	12	3.5	M3 x 0.5	3 ^{+0.040} ₀	3	5	4	5
I-P010A	10	6.5	10	16	5.5	M4 x 0.7	5 ^{+0.048} ₀	5	8	6.3	7
I-P016A	16	7	12	19	7	M5 x 0.8	6 ^{+0.048} ₀	6	10	7.8	9

Knuckle pin

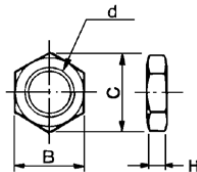


Material: Stainless steel

Part no.	Applicable bore size (mm)	D d ₉	L	d	L ₁	m	t	Retaining* ring
IY-P006	6	3 ^{-0.020} _{-0.045}	9	2.85	6.2	0.75	0.65	Clip C-type 3
IY-P010	10	5 ^{-0.030} _{-0.060}	13.6	4.8	10.2	1	0.7	C-type 5
IY-P015	16	6 ^{-0.030} _{-0.060}	15.8	5.7	12.2	1	0.8	C-type 6

* Included

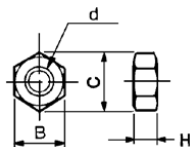
Mounting nut



Material: Brass

Part no.	Applicable bore size (mm)	d	H	B	C
SNPS-004	4	M8 x 1.0	3	10	11.5
SNP-006	6	M10 x 1.0	3	14	16.2
SNP-010	10	M12 x 1.0	3	17	19.6
SNP-015	16	M14 x 1.0	4	19	21.9

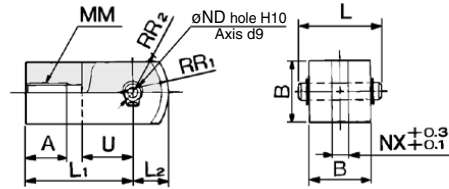
Rod end nut



Material: Iron

Part no.	Applicable bore size (mm)	d	H	B	C
NTJ-004	4	M2 x 0.4	1.6	4	4.6
NTP-006	6	M3 x 0.5	1.8	5.5	6.4
NTP-010	10	M4 x 0.7	2.4	7	8.1
NTP-015	16	M5 x 0.8	3.2	8	9.2

Double knuckle joint

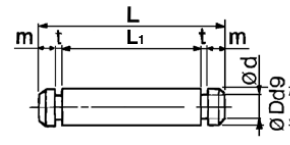


* Knuckle pin and retaining ring are included.

Material: Rolled steel

Part no.	Applicable bore size (mm)	A	B	L	L ₁	L ₂	MM	ND _{d9}	ND _{H10}	NX	R ₁	R ₂	U
Y-P006A	6	5	6	9	12	3.5	M3 x 0.5	3 ^{-0.020} _{-0.045}	3 ^{+0.040} ₀	3	5	4	5
Y-P010A	10	6.5	10	13.6	16	5.5	M4 x 0.7	5 ^{-0.030} _{-0.060}	5 ^{+0.048} ₀	5	8	6.3	7
Y-P016A	16	7	12	15.8	19	7	M5 x 0.8	6 ^{-0.030} _{-0.060}	6 ^{+0.048} ₀	6	10	7.8	9

Trunnion pin



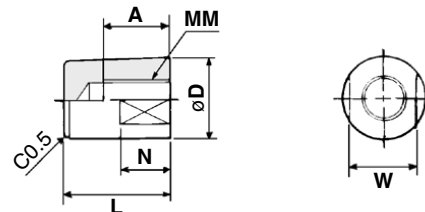
Material: Stainless steel

Part no.	Applicable bore size (mm)	D d ₉	L	d	L ₁	m	t	Retaining* ring
CT-P006	6	3 ^{-0.020} _{-0.045}	20.4	2.85	17.6	0.75	0.65	Clip C-type 3
CT-P010	10	5 ^{-0.030} _{-0.060}	23.9	4.8	20.5	1	0.7	C-type 5
CT-P015	16	6 ^{-0.030} _{-0.060}	31.7	5.7	28.1	1	0.8	C-type 6

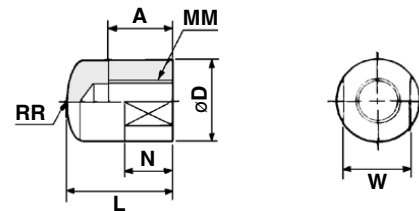
* Included

Rod end cap

Flat type: CJ-CF□□□



Round type: CJ-CR□□□



Material: Polyacetal

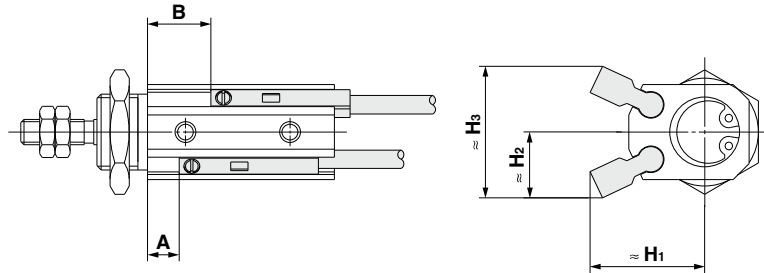
Part no.		Applicable bore size (mm)	A	D	L	MM	N	RR	W
Flat type	Round type								
CJ-CF004	CJ-CR004	4	5	6	9	M2 x 0.4	3	6	5
CJ-CF006	CJ-CR006	6	6	8	11	M3 x 0.5	5	8	6
CJ-CF010	CJ-CR010	10	8	10	13	M4 x 0.7	6	10	8
CJ-CF016	CJ-CR016	16	10	12	15	M5 x 0.8	7	12	10

CJP2 Series

Auto Switch Mounting 1

Auto Switch Proper Mounting Position (Detection at Stroke End) and Its Mounting Height

D-A9□(V), D-M9□(V), D-M9□W(V), D-M9□A(V)



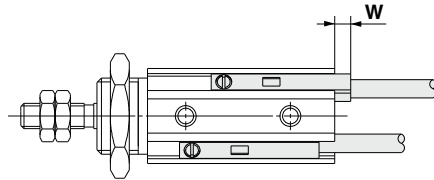
Applicable Auto Switches: D-A9□, D-A9□V

Bore size	A (When detecting at extended stroke end position)	B (When detecting at retracted stroke end position)								H ₁	H ₂	H ₃
		5 st	10 st	15 st	20 st	25 st	30 st	35 st	40 st			
ø4	—	—	—	—	—	—	—	—	—	—	—	—
ø6	1	6	11	16	21	26	—	—	—	13	10	20
ø10	1	6	11	16	21	26	31	36	41	16	9.5	19
ø16	1	6	11	16	21	26	31	36	41	18	12	24

Applicable Auto Switches: D-M9□, D-M9□V, D-M9□W, D-M9□WV, D-M9□A, D-M9□AV

Bore size	A (When detecting at extended stroke end position)	B (When detecting at retracted stroke end position)								H ₁	H ₂	H ₃
		5 st	10 st	15 st	20 st	25 st	30 st	35 st	40 st			
ø4	4	9	14	19	—	—	—	—	—	14.5	11.5	23
ø6	5	10	15	20	25	30	—	—	—	15	11.5	23
ø10	5	10	15	20	25	30	35	40	45	18	10.5	21
ø16	5	10	15	20	25	30	35	40	45	20	13	26

Note) Only adjust the setting position after confirming the auto switch is properly activated.



Mounting: Basic, Flange, Foot

Auto switch model	W (mm)					
	D-M9□ D-M9□W	D-M9□V D-M9□WV	D-M9□A	D-M9□AV	D-A96 D-A9□V	D-A90 D-A93
Bore size	W					
ø4	6	4	8	6	—	—
ø6	6	4	8	6	2	4.5
ø10	2.5	0.5	4.5	2.5	0	1
ø16	2.5	0.5	4.5	2.5	0	1

Mounting: Clevis, Trunnion

Auto switch model	W (mm)			
	D-M9□ D-M9□W	D-M9□V D-M9□WV D-A9□ D-A9□V	D-M9□A	D-M9□AV
Bore size	W			
ø4	—	—	—	—
ø6	1	0	3	2
ø10	0	0	2	2
ø16	0	0	2	2

* 0 (zero) denotes the auto switch does not protrude from the end surface.

Note) Adjust the auto switch after confirming the operating conditions in the actual setting.

CJ1

CJP

CJ2

JCM

CM2

CM3

CG1

CG3

JMB

MB

MB1

CA2

CS1

CS2

D-□

-X□

Technical Data

CJP2 Series

Auto Switch Mounting 2

Operating Range

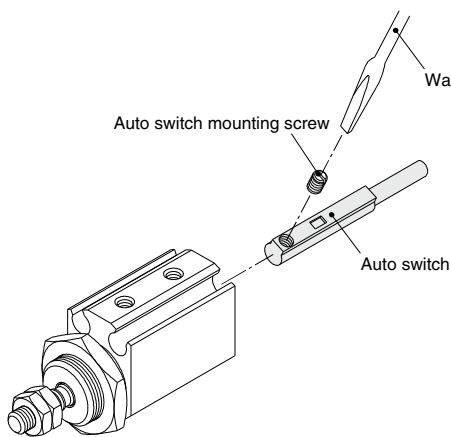
Auto switch model	Bore size (mm)			
	4	6	10	16
D-A9□(V)	—	5	6	7
D-M9□(V)	2.5	2.5	3	3.5
D-M9□W(V)				
D-M9□A(V)				

* Since the operating range is provided as a guideline including hysteresis, it cannot be guaranteed (assuming approximately ±30% dispersion). It may vary substantially depending on an ambient environment.

Minimum Stroke for Auto Switch Mounting

No. of auto switches mounted	Applicable auto switch model (mm)	
	D-M9□, D-M9□V	D-M9□W, D-M9□WV D-M9□A, D-M9□A(V) D-A9□, D-A9□V
1	5	5
2	5	10

Mounting and Moving Auto Switches



- ① Fit an auto switch into the auto switch mounting groove to set it roughly to the mounting position for an auto switch.
- ② After reconfirming the detecting position, tighten the auto switch mounting screw* to secure the auto switch.
- ③ Modification of the detecting position should be made in the condition of ①.

* When tightening an auto switch mounting screw, use a watchmaker's screwdriver with a handle of approximately 5 to 6 mm in diameter.
(Use a tightening torque of approximately 0.10 to 0.20 N·m.)

Tightening torque for auto switch mounting screw

Auto switch model	Tightening torque (N·m)
D-M9□(V)	0.05 to 0.15
D-M9□W(V)	
D-A93	
D-M9□A(V)	0.05 to 0.10
D-A9□(V)(Excludes the D-A93)	0.10 to 0.20

⚠ Specific Product Precautions

Before handling auto switches, refer to pages 8 to 12 for Auto Switches Precautions.

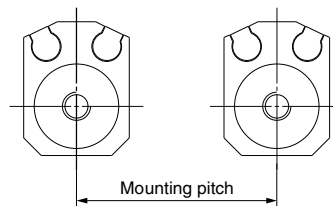
⚠ Caution

1. If auto switch cylinders are used in parallel, keep the distance between cylinders in accordance with the below chart.

Mounting Pitch

Auto switch model	Bore size (mm)			
	4	6	10	16
D-A9□(V)	—	20	25	30
D-M9□(V)	25	25	30	35
D-M9□W(V)				
D-M9□A(V)				

Use caution not to use them, getting closer than the specified pitch. Otherwise, it may cause auto switch to malfunction.



CJP2 Series

Made to Order: Individual Specifications

Please contact SMC for detailed dimensions, specifications and lead times.



1 Clevis / Trunnion Type Mounting Interchangeable

Symbol
-X1666

CJP2 series standard model no. — **X1666**

• Clevis / Trunnion type mounting interchangeable (Former CJP)

Specifications

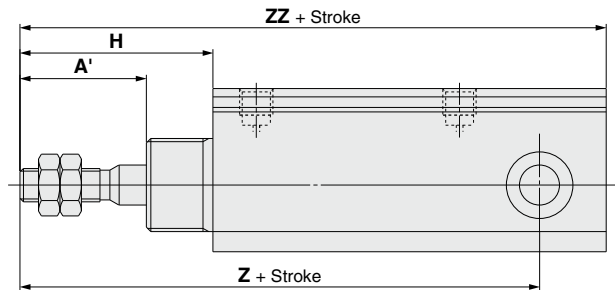
Applicable series	CJP2
Bore size	ø6, ø10, ø16

Other specifications	Same as standard type.
----------------------	------------------------

* ø6 is available for both standard and built-in magnet types.

* ø10 and ø16 are available for the standard type (The built-in magnet type is interchangeable.)

Dimensions



Bore size(mm)	A'	H	Z	ZZ
6	18.5 (13.5)	26.5 (21.5)	43.5	47.5
10	17	25	49	55.5
16	19	29	53	63

* Dimensions other than above are same as basic type.

(): For the built-in magnet type

CJ1

CJP

CJ2

JCM

CM2

CM3

CG1

CG3

JMB

MB

MB1

CA2

CS1

CS2

D-□

-X□

Technical
Data



CJP2 Series Specific Product Precautions

Be sure to read this before handling the products. Please consult with SMC for the use other than the specifications.

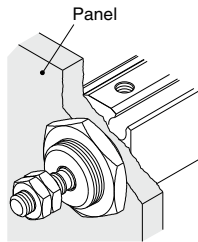
Mounting

⚠ Caution

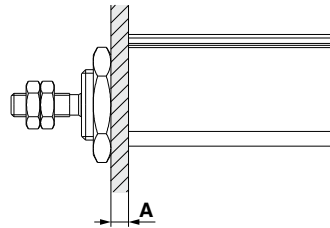
Mounting nut maximum tightening torque and panel width

- ① Do not apply more torque than the maximum torque range when mounting the cylinder or bracket. Also, do not attach a panel with a thickness beyond the specified range.

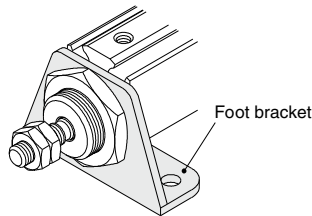
Cylinder bore size	Thread	Maximum tightening torque (N·m)	A dimension maximum value (mm)
ø4	M8 x 1	6.2	3
ø6	M10 x 1	12.5	4
ø10	M12 x 1	21.0	4
ø16	M14 x 1	34.0	5



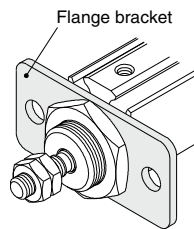
Panel mounting



Panel maximum thickness



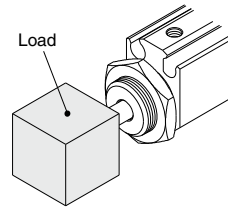
Foot mounting



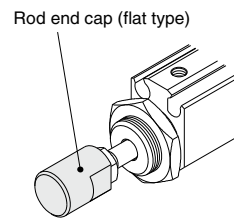
Flange mounting

- ② Do not apply more tightening torque than the below specified range when attaching a load on the rod end, rod end cap, single or double knuckle joint.

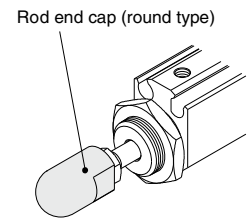
Applicable bore size	Thread size	Maximum tightening torque (N·m)
ø4	M2 x 0.4	0.1
ø6	M3 x 0.5	0.3
ø10	M4 x 0.7	0.8
ø16	M5 x 0.8	1.6



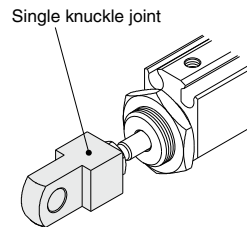
Rod end load mounting



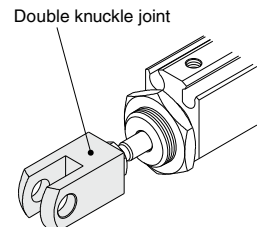
Rod end cap (flat type) mounting



Rod end cap (round type) mounting



Single knuckle joint mounting



Double knuckle joint mounting

Piping

⚠ Caution

The piping port size of CJ2□6 and CJP2□10 is M3 x 0.5. If using piping tube O.D. ø6, piping is possible on M3 One-touch fittings (applicable tube O.D. ø4) when used with a reducer (KQ2R06-04A).

* For details of One-touch fittings, refer to Best Pneumatics No. 7.

Disassembly and Maintenance

⚠ Caution

Snap ring installation / removal

- To replace seals or grease the cylinder during maintenance, use an appropriate pair of pliers (tool for installing a C-type retaining ring for hole). After re-installing the cylinder, make sure that the retaining ring is placed securely in the groove before supplying air.
- To remove and install the retaining ring for the knuckle pin or the trunnion pin, use an appropriate pair of pliers (tool for installing a C-type retaining ring for hole). In particular, use a pair of ultra-mini pliers, for removing and installing the retaining rings on the ø6 cylinder. Do not disassemble the CJP4 cylinder. Do not loosen or remove the head cover.

Pin Cylinder: Single Acting, Spring Return

CJP Series

ø4, ø6, ø10, ø15

A short stroke miniature cylinder with a shorter overall length.

The installation space can be significantly reduced because this cylinder can be recessed directly into a machine body or installed on a panel. Thus, the machine can be made more compact.

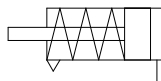


Embedded type

Panel mount type

Symbol

Single acting, Spring return



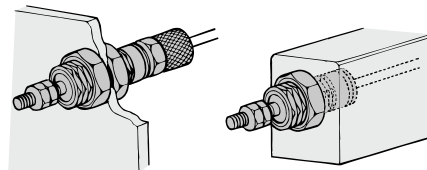
Made to Order (ø6 to ø15)

[Click here for details](#)

Symbol	Specifications
XC17	Pin cylinder with rod quenched
XC22	Fluororubber seals

Mounting

Panel mount type Embedded type



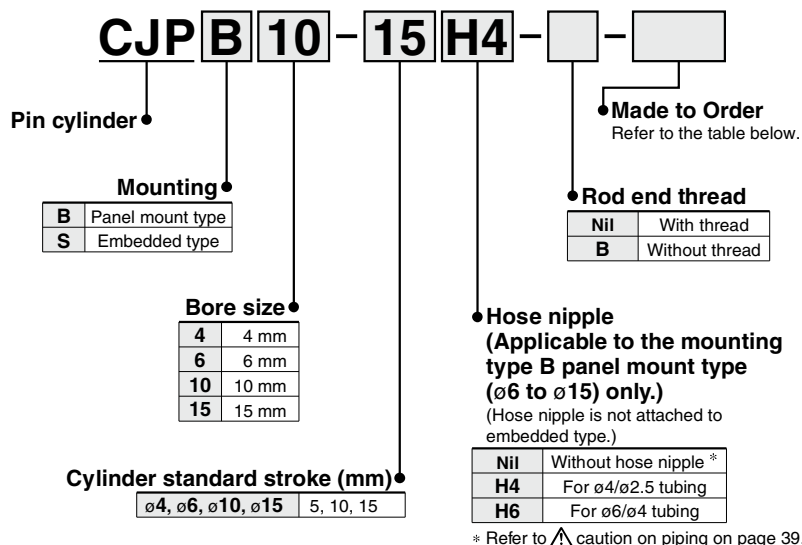
Moisture Control Tube IDK Series

When operating an actuator with a small diameter and a short stroke at a high frequency, the dew condensation (water droplet) may occur inside the piping depending on the conditions.

Simply connecting the moisture control tube to the actuator will prevent dew condensation from occurring. For details, refer to [the IDK series in the Best Pneumatics No. 6](#).



How to Order



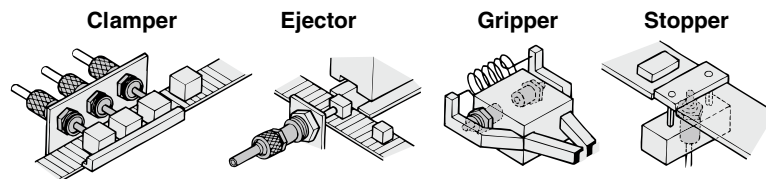
Specifications

Action	Single acting, Spring return	
Maximum operating pressure	0.7 MPa	
Minimum operating pressure	ø4	0.3 MPa
	ø6	0.2 MPa
	ø10, ø15	0.15 MPa
Proof pressure	1 MPa	
Ambient and fluid temperature	-10 to 70°C (No freezing)	
Lubrication	Not required (Non-lube)	
Piston speed	50 to 500 mm/s	
Cushion	None	
Stroke length tolerance	+1.0 0	
Rod end type	With thread/Without thread	
Mounting	Panel mount type	Embedded type
Accessory (Standard equipment)	Standard equipment	Mounting nut (2) Rod end nut (2) *
	Option	Hose nipple (Except ø4)
		Mounting nut (1) Gasket (1) Rod end nut (2) *

* When rod end is threaded.

* For details about the hose nipple (accessory), refer to page 39.

Application Examples



CJ1

CJP

CJ2

JCM

CM2

CM3

CG1

CG3

JMB

MB

MB1

CA2

CS1

CS2

D-□

-X□

Technical Data

CJP2 Series

Standard Stroke

Bore size (mm)	Stroke (mm)
4	5, 10, 15
6	5, 10, 15
10	5, 10, 15
15	5, 10, 15

Weight

Model	Stroke (mm)		
	5	10	15
CJP□4	10	13	15
CJP□6	10.6	13.1	15.6
CJP□10	28	33	38
CJP□15	72	82	92

* Weight of hose nipple (4 g) for panel mounting is excluded.

Theoretical Output

Bore size (mm)	Operating direction	Operating pressure (MPa)		
		0.3	0.5	0.7
4	OUT	0.97	3.48	6.00
	IN	1.0		
6	OUT	4.56	10.2	15.9
	IN	1.42		
10	OUT	17.6	33.3	49.0
	IN	2.45		
15	OUT	42.2	77.5	113
	IN	4.41		

Spring Reaction Force

Bore size (mm)	Stroke (mm)	Retracted side	Extended side
4	5, 10, 15	2.80	1.00
6	5, 10, 15	3.92	1.42
10	5, 10, 15	5.98	2.45
15	5, 10, 15	10.80	4.41

* Same spring force for each stroke.

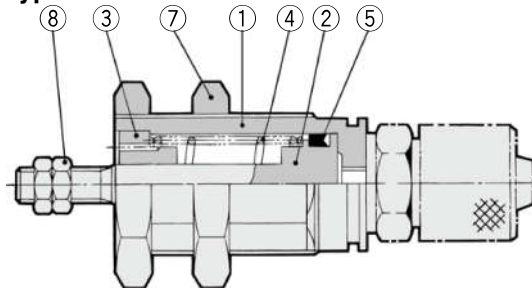
Hose Nipple Dedicated for Panel Mount Type

(With fixed orifice)

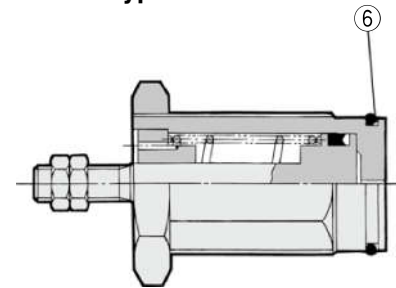
Applicable tubing	Part no.
For ø4/ø2.5 tubing	CJ-5H-4
For ø6/ø4 tubing	CJ-5H-6

Construction (Not able to disassemble.)

Panel mount type



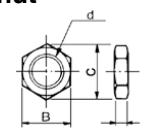
Embedded type



Component Parts

No.	Description	Material	Note
1	Cover	Brass	Electroless nickel plated
2	Piston	Stainless steel	
3	Collar	Oil-impregnated sintered alloy	ø4 Brass + Electroless nickel plated
			ø6, ø10 Bronze
4	Return spring	Steel wire	Zinc chromated
5	Piston seal	NBR	
6	Gasket	NBR	Special product (O-ring) embedded type only
7	Mounting nut	Brass	Electroless nickel plated
8	Rod end nut	Steel	Zinc chromated

Mounting nut



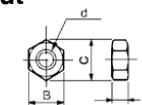
Material: Brass

Part no.	Applicable bore size (mm)	d	H	B	C
SNPS-004	4	M8 x 1.0	3	10	11.5
SNPS-006	6	M10 x 1.0	3	12	13.9
SNPS-010	10	M15 x 1.5	4	19	22
SNPS-015	15	M22 x 1.5	5	27	31

Dedicated Nut / Part No.

Bore size (mm)	4	6	10	15
Description				
Mounting nut	SNPS-004	SNPS-006	SNPS-010	SNPS-015
Rod end nut	NTJ-004	NTP-006	NTP-010	NTP-015

Rod end nut



Material: Steel

Part no.	Applicable bore size (mm)	d	H	B	C
NTJ-004	4	M2 x 0.4	1.6	4	4.6
NTP-006	6	M3 x 0.5	1.8	5.5	6.4
NTP-010	10	M4 x 0.7	2.4	7	8.1
NTP-015	15	M5 x 0.8	3.2	8	9.2

Replacement Parts / Gasket

Bore size (mm)	Order no.	Contents
4	CJPS4-G	Above no. ⑥
6	CJPS6-G	
10	CJPS10-G	
15	CJPS15-G	

* For the plug mounting type
* Since gaskets (10 pcs./set) do not include a grease pack (10 g), order it separately.
Grease pack part number: GR-S-010 (10g)

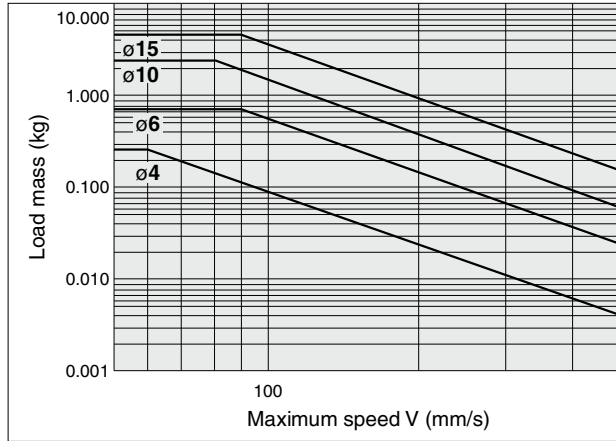
* Dedicated for the embedded type.

Allowable Kinetic Energy

⚠ Caution

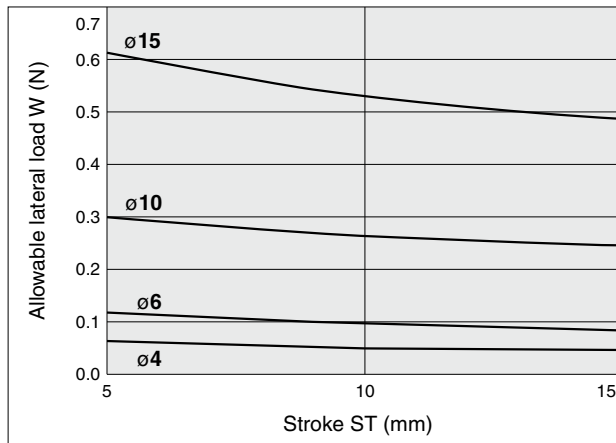
When driving an inertial load, operate a cylinder with kinetic energy within the allowable value. The range in the chart below that is delineated by bold solid lines indicates the relation between load mass and maximum driving speeds.

Bore size (mm)	4	6	10	15
Piston speed (m/s)	0.05 to 0.5			
Allowable kinetic energy (J)	0.5×10^{-3}	3×10^{-3}	8×10^{-3}	19×10^{-3}



Allowable Lateral Load

Strictly observe the limiting range of lateral load on a piston rod. (Refer to the below graph.) If this product is used beyond the limits, it may shorten the machine life or cause damage.



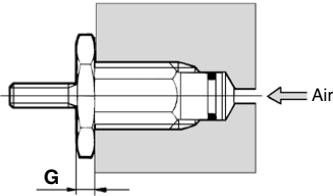
- CJ1
- CJP**
- CJ2
- JCM
- CM2
- CM3
- CG1
- CG3
- JMB
- MB
- MB1
- CA2
- CS1
- CS2

- D-
- X
- Technical Data

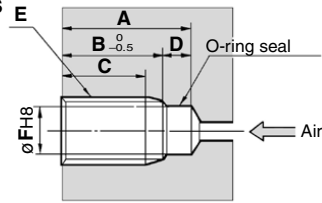
CJP Series

Recommended Mounting Hole Dimensions for Embedded Type

When embedded



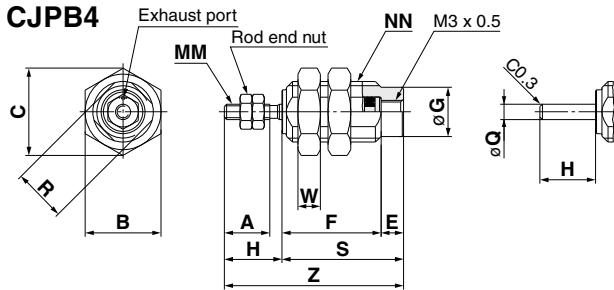
Machining dimensions for mounting



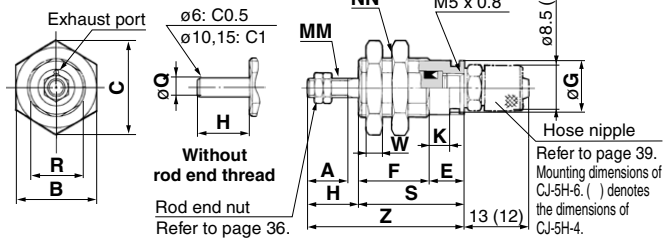
Bore size (mm)	Stroke	(mm)						
		A	B	C	D	E	F	G
4	5	12	8.5	6	3.5	M8 x 1.0	6.5	3
	10	20	16.5	14				
	15	28	24.5	22				
6	5	16	12.5	10	3.5	M10 x 1.0	8.5	3
	10	23	19.5	17				
	15	30	26.5	24				
10	5	17	13.5	10.5	3.5	M15 x 1.5	12	4
	10	23.5	20	17				
	15	30.5	27	24				
15	5	19	14.5	11.5	4.5	M22 x 1.5	19	5
	10	25	20.5	17.5				
	15	31.5	27	24				

Note) E and ϕF should be machined in a concentric manner.

Dimensions: Panel Mount Type



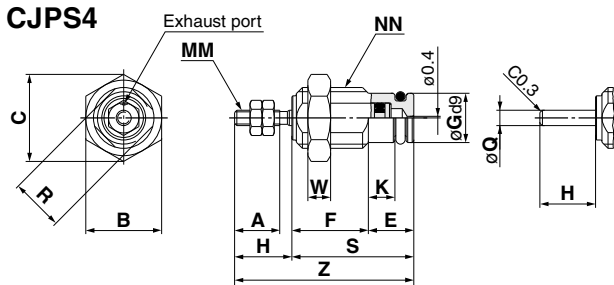
CJPB6, 10, 15



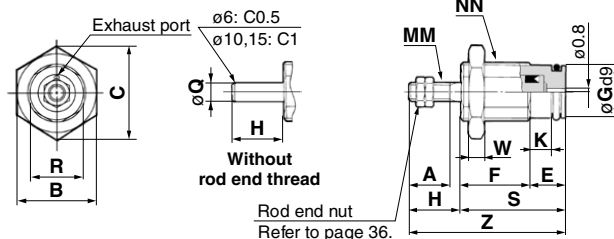
Bore size (mm)	A	B	C	E	F			G	H	K	MM
					5 st	10 st	15 st				
4	6	10	11.5	3	13	21	29	6.5	7.5	—	M2 x 0.4
6	7	12	13.9	6	12.5	19.5	26.5	8.5	9	3.5	M3 x 0.5
10	10	19	22	6	14.5	21	28	12	12	3.5	M4 x 0.7
15	12	27	31	7	16.5	22.5	29	19	14	4.2	M5 x 0.8

Bore size (mm)	NN	R	S			W	Z			Q
			5 st	10 st	15 st		5 st	10 st	15 st	
4	M8 x 1.0	7	16	24	32	3	23.5	31.5	39.5	2
6	M10 x 1.0	9	18.5	25.5	32.5	3	27.5	34.5	41.5	3
10	M15 x 1.5	13	20.5	27	34	4	32.5	39	46	5
15	M22 x 1.5	20	23.5	29.5	36	5	37.5	43.5	50	6

Dimensions: Embedded Type



CJPS6, 10, 15



Bore size (mm)	A	B	C	E	F			G	H	K	MM
					5 st	10 st	15 st				
4	6	10	11.5	6	10	18	26	6.5	7.5	3.5	M2 x 0.4
6	7	12	13.9	6	12.5	19.5	26.5	8.5	9	3.5	M3 x 0.5
10	10	19	22	6	14.5	21	28	12	12	3.5	M4 x 0.7
15	12	27	31	7	16.5	22.5	29	19	14	4.2	M5 x 0.8

Bore size (mm)	NN	R	S			W	Z			Q
			5 st	10 st	15 st		5 st	10 st	15 st	
4	M8 x 1.0	7	16	24	32	3	23.5	31.5	39.5	2
6	M10 x 1.0	9	18.5	25.5	32.5	3	27.5	34.5	41.5	3
10	M15 x 1.5	13	20.5	27	34	4	32.5	39	46	5
15	M22 x 1.5	20	23.5	29.5	36	5	37.5	43.5	50	6



CJP Series Specific Product Precautions

Be sure to read this before handling the products. Please consult with SMC for the use other than the specifications.

Piping

⚠ Caution

The following fittings are recommended for this cylinder connection. However, there may be a case where the piston speed exceeds 500 mm/sec. even with the recommended fittings for this cylinder. Use a speed controller in such cases.

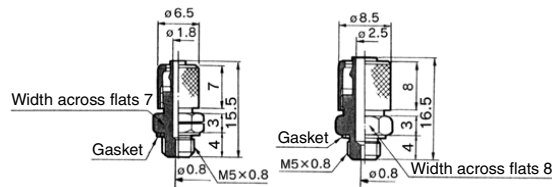
Cylinder bore size	Applicable bore size	Fitting type	Connection thread	Model
ø4	ø2	One-touch fitting	M3 x 0.5	KQ2□02-M3G
		Miniature fitting		M-3AU-2
One-touch fitting		M5 x 0.8	KQ2□02-M5N	
Miniature fitting			M-5AU-2	
ø6 ø10 ø15	ø4/2.5	Dedicated hose nipple (with fixed orifice)	M5 x 0.8	CJ-5H-4
	ø6/4			CJ-5H-6

* Please be aware that cylinder speed may slow down on the retracting side when using the above one-touch fittings and miniature fittings with a cylinder bore size of ø15.

Hose nipple

CJ-5H-4
(For ø4/ø2.5 tubing)

CJ-5H-6
(For ø6/ø4 tubing)



In addition to the above fittings and hose nipples, the below fittings can also be attached to the cylinder. When using the below fittings be sure to provide a speed controller after adjusting it to 500 mm/s or less.

Cylinder bore size	Applicable bore size	Fitting type	Connection thread	Model
ø4	3.2	One-touch fitting	M3 x 0.5	KQ2□23-M3G
	4			KQ2□04-M3G
ø6 ø10 ø15	3.2		M5 x 0.8	KQ2□23-M5□
	4			KQ2□04-M5□
ø15	6			KQ2□06-M5□

Recommended Speed Controller

Applicable bore size (mm)	Connection thread	Elbow type meter-in	Universal type meter-in	In-line type meter-in
ø2	M3	AS1211F-M3-02	—	AS1002F-02
	M5	AS1211F-M5E-02A	—	
ø3.2	M3	AS1211F-M3-23	AS1311F-M3-23	AS1002F-23
	M5	AS1211F-M5E-23A	AS1311F-M5E-23A	
ø4	M3	AS1211F-M3-04	AS1311F-M3-04	AS1002F-04
	M5	AS1211F-M5E-04A	AS1311F-M5E-04A	
ø6	M5	AS1211F-M5E-06A	AS1311F-M5E-06A	AS1002F-06

* For details about one-touch fittings, miniature fittings and speed controllers (applicable tubing O.D. ø2 only), refer to the Best Pneumatics No. 7.

Also, for details about speed controllers (applicable tubing O.D. ø3.2 to ø6), refer to the Best Pneumatics No. 7.

* Refer to the Fittings and Tubing Precautions (Best Pneumatics No. 7) for how to handle one-touch fittings.

Mounting

⚠ Caution

Do not use it in such a way that a load could be applied to the piston rod during the retraction. The spring that is built into the cylinder provides only enough force to retract the piston rod. Thus, if a load is applied, the piston rod may not be able to retract to the end of the stroke.

CJ1

CJP

CJ2

JCM

CM2

CM3

CG1

CG3

JMB

MB

MB1

CA2

CS1

CS2

D-□

-X□

Technical
Data