

Pin Cylinders

Series CJP2/CJP

2 auto switches can even be mounted on a cylinder with $\phi 4$ bore size (5 mm stroke).



Double acting / **Series CJP2**

One-touch fitting can be connected.

(Panel mount type)

$\phi 2$ One-touch fitting, miniature fitting, and speed controller can be connected.



Single acting / **Series CJP**



CJ1

CJP

CJ2

CM2

CG1

MB

MB1

CA2

CS1

CS2

D-☐

-X☐

Individual
-X☐

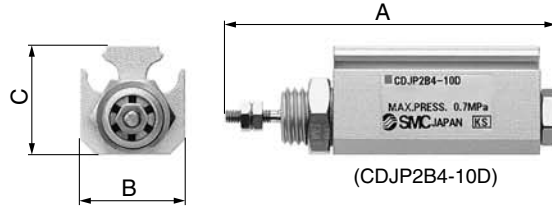
Technical
data

Small and Light

Double acting / **Series CJP2**

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

New aluminum body is light mass compared with the conventional 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

* (): Dimension for built-in magnet type

Mass

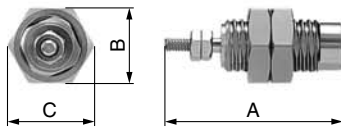
Unit: g

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

Single acting / **Series CJP**

Panel mount type (CJPB4-5)

Scale: **100%**



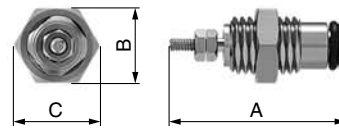
Dimensions

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%**



Mass

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 ø4 is available with basic mounting only.

Related Products

Refer to Best Pneumatics No. 6.



Pin Cylinder: Double Acting, Single Rod

Series CJP2

ø4, ø6, ø10, ø16

How to Order

Standard CJP2 **F** **10** - **15** **D** - **□** - **□**

Built-in magnet CDJP2 **F** **10** - **15** **D** - **□** - **M9BW** **S** - **□**

With auto switch
(Built-in magnet)

Mounting

Symbol	Mounting	Standard	Built-in magnet
B	Basic	●	●
F	Flange	●	●
L	Foot	●	●
D	Clevis	●	●
T	Trunnion	●	●

* Bore size of 4 mm is available with basic mounting only.
* Mounting bracket is shipped together (but not assembled).

Bore size

Symbol	Bore size
4	4 mm
6	6 mm
10	10 mm
16	16 mm

Cylinder standard stroke (mm)

Symbol	Stroke (mm)
ø4	5, 10, 15, (20) Note
ø6	5, 10, 15, 20, 25
ø10, ø16	5, 10, 15, 20, 25, 30, 35, 40

Note) A stroke of 20 is available with a standard product only.

Double acting

Auto switch

Symbol	Auto switch
Nil	Without auto switch

* For the applicable auto switch model, refer to the below table.

Number of auto switches

Symbol	Number of auto switches
Nil	2 pcs.
S	1 pc.

Rod end thread

Symbol	Rod end thread
Nil	With thread
B	Without thread

Built-in Magnet Cylinder Model

If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.
(Example) CDJP2B6-20

CJ1

CJP

CJ2

CM2

CG1

MB

MB1

CA2

CS1

CS2

Applicable Auto Switches / For detailed auto switch specifications, refer to page 1263 through to 1371.

Type	Special function	Electrical entry	Indicator light	Wiring (Output)	Load voltage			Auto switch model		Lead wire length (m)*				Pre-wired connector	Applicable load	
					DC		AC	Electrical entry direction		0.5 (Nil)	1 (M)	3 (L)	5 (Z)			
								Perpendicular	In-line							
Solid state switch	—	Grommet	Yes	3-wire (NPN)	24 V	5 V, 12 V	—	M9NV	M9N	●	●	●	○	○	IC circuit	Relay, PLC
				3-wire (PNP)				M9PV	M9P	●	●	●	○	○		
	2-wire			M9BV				M9B	●	●	●	○	○	—		
	Diagnostic indication (2-color)			3-wire (NPN)	5 V, 12 V	M9NWW		M9NW	●	●	●	○	○	IC circuit		
				3-wire (PNP)		M9PWW		M9PW	●	●	●	○	○			
				2-wire		M9BWW		M9BW	●	●	●	○	○		—	
Reed switch	—	Grommet	Yes	3-wire (NPN equiv.)	—	5 V	—	A96V**	A96**	●	—	●	—	—	IC circuit	—
				2-wire	24 V	12 V	100 V	A93V**	A93**	●	—	●	—	—	IC circuit	
			5 V, 12 V			100 V or less	A90V**	A90**	●	—	●	—	—			

* Lead wire length symbols: 0.5 m Nil (Example) M9NW
1 m M M9NWM
3 m L M9NWL
5 m Z M9NWZ

* Auto switches marked with "○" are made to order specification.
* For details about auto switches with pre-wired connector, refer to pages 1328 to 1329.
* Auto switches are shipped together, (but not assembled).

** The D-A9□(V) switch is not attachable to ø4.

D-□

-X□

Individual -X□

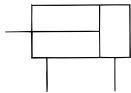
Technical data

Series CJP2



JIS Symbol

Double acting, Single rod



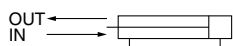
Made to Order

(For details, refer to pages 1373 to 1498 and 1502.)

Symbol	Specifications
XA □	Change of rod end style
XB6	Heat resistant cylinder (150°C)
XB7	Cold resistant cylinder
XC22	Fluororubber seals
X1666	Interchangeability of clevis and trunnion types

Theoretical Output

Bore size (mm)	Operating direction	Operating pressure (MPa)		
		0.3	0.5	0.7
4	IN	2.8	4.7	6.6
	OUT	3.8	6.3	8.8
6	IN	6.4	10.6	14.8
	OUT	8.5	14.1	19.8
10	IN	19.8	33.0	46.2
	OUT	23.6	39.3	55.0
16	IN	51.8	86.4	121.0
	OUT	60.3	100.5	140.7



Specifications

Action	Double acting, Single rod	
Maximum operating pressure	0.7 MPa	
Minimum operating pressure	ø4	0.15 MPa
	ø6	0.12 MPa
	ø10, ø16	0.06 MPa
Proof pressure	1 MPa	
Ambient and fluid temperature	Without auto switch: -10 to 70°C With auto switch: -10 to 60°C (No freezing)	
Lubrication	Not required (Non-lube)	
Stroke length tolerance	+1.0 0	
Rod end style	With thread/Without thread	
Piston speed	10 to 500 mm/s*	
Cushion	Rubber bumper	
Mounting (Note)	Basic, Flange, Foot, Clevis, Trunnion	

Note) Bore size of ø4 is available with basic mounting only. The piston speed for a bore size of ø4 is 50 to 500 mm/s.

Standard Equipment Accessory

Accessory	Mounting nut (1 pc.)	Rod end nut (2 pcs.) (with thread)	Trunnion (with pin)
Basic	●	●	—
Flange	●	●	—
Foot	●	●	—
Clevis	—	●	—
Trunnion	—	●	●

Standard Stroke

Bore size (mm)	Stroke (mm)
4	5, 10, 15, 20 (Note)
6	5, 10, 15, 20, 25
10	5, 10, 15, 20, 25, 30, 35, 40
16	5, 10, 15, 20, 25, 30, 35, 40

* 20 stroke of bore size 4 mm is standard type only.

Option

Bore size (mm)	6	10	16
Description			
Auto switch	D-A9□(V), D-M9□(V), D-M9□W(V)		
Single knuckle joint	I-P006A	I-P010A	I-P016A
Double knuckle joint (with pin)	Y-P006A	Y-P010A	Y-P016A

Mounting Bracket Part No.

Bore size (mm)	6	10	16
Bracket			
Flange	CP-F006A	CP-F010A	CP-F016A
Foot	CP-L006A	CP-L010A	CP-L016A
Trunnion (with pin)	CP-T006A	CP-T010A	CP-T016A

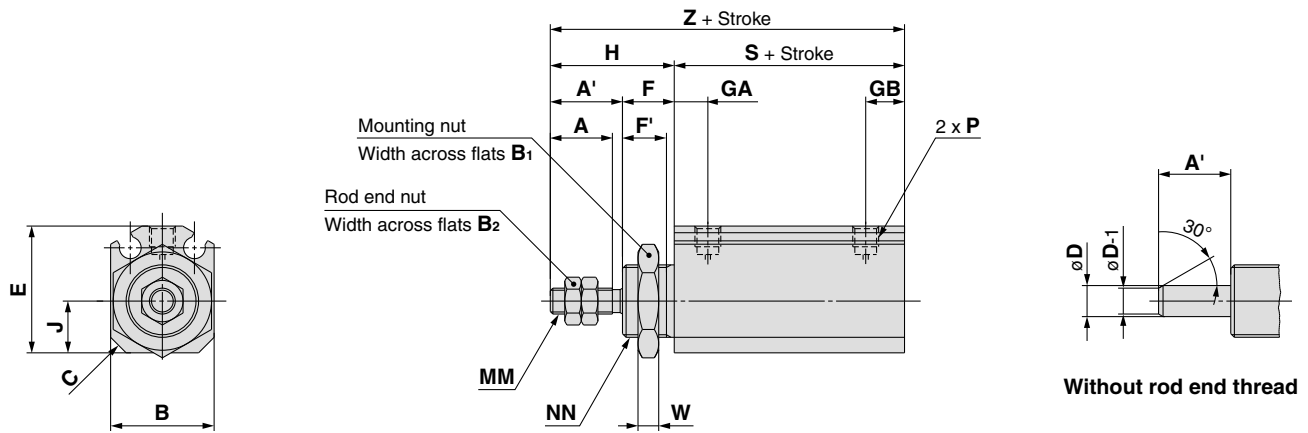
Mass

Stroke (mm)	Mounting	Bore size (mm)			
		4	6	10	16
Basic mass	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
Bracket mass	Flange	—	5	6	16
	Foot	—	7	9	24
	Clevis	—	2	5	8
	Trunnion (with pin)	—	15	25	70
Additional mass for built-in magnet		2	3	5	7

Series CJP2

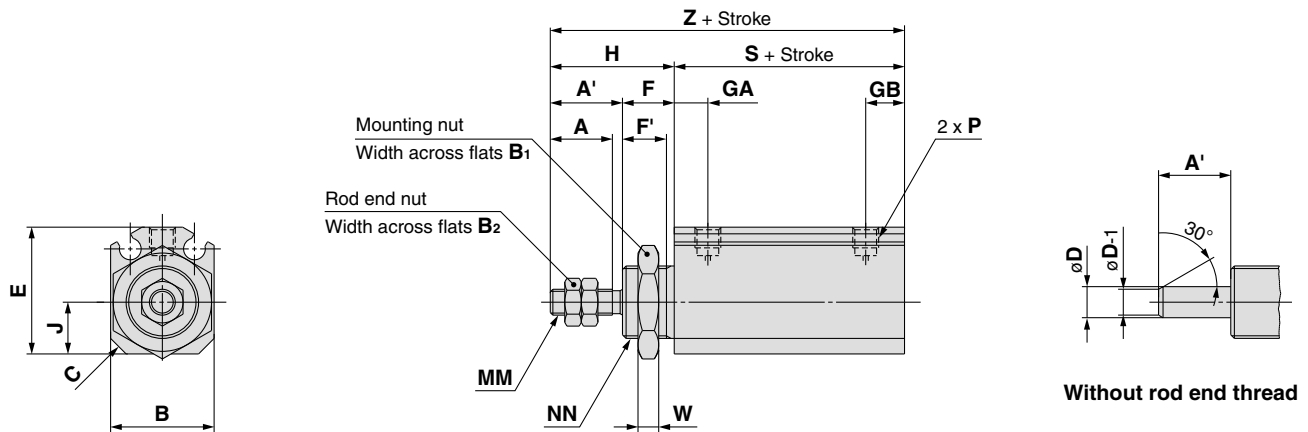
Dimensions: Basic Mounting (ø6 to ø16)

Standard: CJP2B6 to 16



Symbol	A	A'	B	B ₁	B ₂	C	D	E	F	F'	GA	GB	H	J	MM	NN	P	S	W	Z
Bore size																				
6	7	9	14	14	5.5	2	3	16.5	8	6.5	5.5	6.5	17	6	M3 x 0.5	M10 x 1.0	M3 x 0.5	16	3	33
10	10	12	15	17	7	2.5	4	19	8	6.5	6	7	20	7	M4 x 0.7	M12 x 1.0	M3 x 0.5	19.5	3	39.5
16	12	14	20	19	8	3	6	24.5	10	8.5	6.5	7.5	24	10	M5 x 0.8	M14 x 1.0	M5 x 0.8	19.5	4	43.5

Built-in magnet: CDJP2B6 to 16



Symbol	A	A'	B	B ₁	B ₂	C	D	E	F	F'	GA	GB	H	J	MM	NN	P	S	W	Z
Bore size																				
6	7	9	14	14	5.5	2	3	16.5	8	6.5	5.5	6.5	17	6	M3 x 0.5	M10 x 1.0	M3 x 0.5	21	3	38
10	10	12	15	17	7	2.5	4	19	8	6.5	6	7	20	7	M4 x 0.7	M12 x 1.0	M3 x 0.5	24.5	3	44.5
16	12	14	20	19	8	3	6	24.5	10	8.5	6.5	7.5	24	10	M5 x 0.8	M14 x 1.0	M5 x 0.8	24.5	4	48.5