## Pin Cylinder/Single Acting Spring Return

# Series CJP

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 machines can be made more compact.



Plug Mounting Style

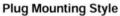
Panel Mounting Style

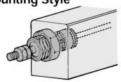


#### **Mounting Style**

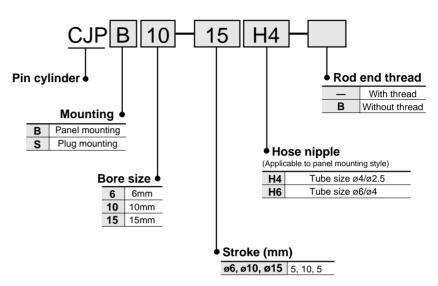
#### **Panel Mounting Style**







#### **How to Order**

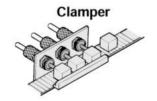


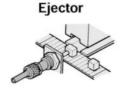
#### **Specifications**

•									
Action		Single acting spring return							
Max. operating pressure		0.7MPa							
Min appreting processing	ø6	0.2MPa							
Min. operating pressure	ø10, ø15	0.15	MPa						
Proof pressure		1.05	MPa						
Ambient and fluid temper	rature	−10 to 70°C (	Non-freezing)						
Lubrication		Not re	quired						
Operating piston speed		50 to 500mm/s							
Cushion		None							
Stroke tolerance		+1.0 0							
Thread tolerance		JIS 2	class						
Rod end thread		With thread/V	Vithout thread						
Mounting method		Panel mounting	Plug mounting						
		Mounting nut (2)	Mounting nut (1)						
Standard accessories		Hose nipple (1)	Gasket (1)						
		Rod end nut (2)* Rod end nut (2)*							
* Provided to the model w	ith rod and nut								

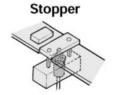
<sup>\*</sup> Provided to the model with rod end nut.

#### **Application Examples**









## Pin Cylinder/Single Acting Spring Return Series CJP

(a)

#### **Standard Strokes**

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

#### **Spring Retracting Force**

			(. 1)				
Bore size (mm)	Stroke (mm)	0 stroke	Stroke end				
6	5, 10, 15	3.92	1.42				
10	5, 10, 15	5.98	2.45				
15	5, 10, 15	10.8	4.41				

<sup>\*</sup> Same spring force for each stroke.

#### Weight

			(3)			
Model	S	1)				
Model	5	10	15			
CJP□6	10.6	13.1	15.6			
CJP□10	28	33	38			
CJP□15	72	82	92			

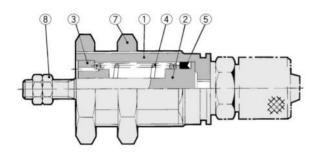
<sup>\*</sup> Weight of hose nipple (4gf) is not included.

#### **Hose Nipple For Panel Mount Style**

	(With Fixed Orifice)
Applicable tubing	Model
ø4/ø2.5	CJ-5H-4
ø6/ø4	CJ-5H-6

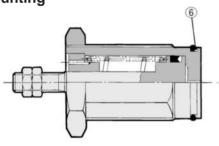
#### Construction (Disassembly is not possible.)

#### Panel mounting



(N)

#### Plug mounting



#### **Component Parts**

	D:		4	!!. ! .
(	Disassembl	y is	not	possible.

			(Biodocombil) to het poccibion)				
No.	Description	Description Material					
1	Cover	Brass	Electroless nickel plated				
2	Piston	Stainless steel					
3	Collar	Brass					
4	Return spring	Piano wire	Zinc chromate				
5	Piston seal	NBR					
6	Gasket	NBR	Special product (O ring) Plug mounting only				
7	Mounting nut	Brass	Electroless nickel plated				
8	Rod end nut	Steel	Nickel plated				

#### Provided Nut/Part No.

FIOVILLEU NUL/FA	Flovided Nutrait No.														
Bore (mm)	6	10	15												
Mounting nut	SNPS-006	SNPS-010	SNPS-015												
Rod end nut	NTP-006	NTP-010	NTP-015												

#### Theoretical Force

i i i coi cui c	ai i oi			(14						
Bore size	Operating	Operating pressure (MPa								
(mm)	direction	0.3	0.5	0.7						
6	OUT	4.56	10.2	15.9						
· ·	IN									
10	OUT	17.6	33.3	49.0						
10	IN	0.0 0.3 0.5 1.42 1.42 1.7.6 33.3 2.45								
15	OUT	42.2	77.5	113						
15	IN	4.41								

CJ1 **CJP** 

## **Precautions**

CJ2

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

CM<sub>2</sub> **C85** 

**Piping** 

CG<sub>1</sub> MB

C95

CA<sub>1</sub>

### **⚠** Caution

① Use a dedicated hose nipple. On the panel mounting style, use the CJ-5H-4 or CJ-5H-6, a dedicated hose nipple (with a fixed restriction) that is provided. If a different fitting must be used due to unavoidable circumstances, make sure to install a speed controller and use it by adjusting it to 500mm/s or less.

CS<sub>1</sub>

#### Mounting

## **⚠** Caution

1) Do not operate in such a way that a load is applied to the piston rod during its 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 will not be able to retract to the end of the stroke.

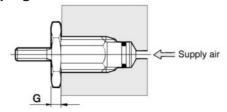
## Series CJP

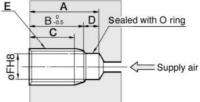


#### **Recommended Mounting Hole Dimensions for Plug Mounting Style**

#### When plug mounted

## Machining dimensions for Mounting

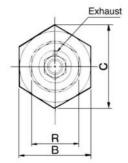


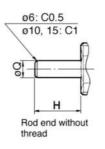


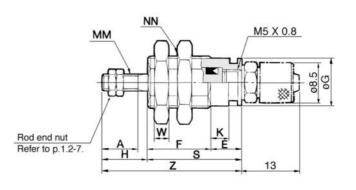
Bore (mm)	Stroke	Α	В	С	D	Е	F	G	
	5	16	12.5	10					
6	10	23	19.5	17	3.5	M10 X 1.0	8.5	3	
	15	30	26.5	24					
	5	17	13.5	10.5			12		
10	10	23.5	20	17	3.5	M15 X 1.5		4	
	15	30.5	27	24					
	5	19	14.5	11.5					
15	10	25	20.5	17.5	4.5	M22 X 1.5	19	5	
	15	31.5	27	24					

#### **Panel Mounting Style**

#### **CJPB**



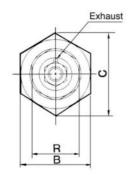


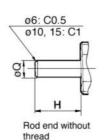


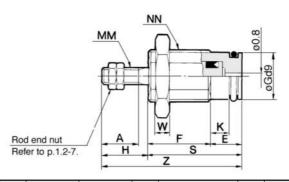
Bore	_	В		_	F				1/		NIN!		S			۱۸/	Z			Q	
(mm)	A				5 <sup>st</sup>	10 <sup>st</sup>	15 <sup>st</sup>	G	Н	r.	MM	NN	R	5 <sup>st</sup>	10 <sup>st</sup>	15 <sup>st</sup>	VV	5 <sup>st</sup>	10 <sup>st</sup>	15 <sup>st</sup>	Q
6	7	12	13.9	6	12.5	19.5	26.5	8.5	9	3.5	M3 X 0.5	M10 X 1.0	9	18.5	25.5	32.5	3	27.5	34.5	41.5	3
10	10	19	22	6	14.5	21	28	12	12	3.5	M4 X 0.7	M15 X 1.5	13	20.5	27	34	4	32.5	39	46	5
15	12	27	31	7	16.5	22.5	29	19	14	4.2	M5 X 0.8	M22 X 1.5	20	23.5	29.5	36	5	37.5	43.5	50	6

#### **Plug Mounting Style**

#### **CJPS**







Bore		ь		_		F			G H K		NINI	_	S			W	Z				
(mm)	A	В		=	5 <sup>st</sup>	10 <sup>st</sup>	15 <sup>st</sup>	G	H	K	MM	NN	R	5 <sup>st</sup>	10 <sup>st</sup>	15 <sup>st</sup>	VV	5 <sup>st</sup>	10 <sup>st</sup>	15 <sup>st</sup>	Q
6	7	12	13.9	6	12.5	19.5	26.5	8.5	9	3.5	M3 X 0.5	M10 X 1.0	9	18.5	25.5	32.5	3	27.5	34.5	41.5	3
10	10	19	22	6	14.5	21	28	12	12	3.5	M4 X 0.7	M15 X 1.5	13	20.5	27	34	4	32.5	39	46	5
15	12	27	31	7	16.5	22.5	29	19	14	4.2	M5 X 0.8	M22 X 1.5	20	23.5	29.5	36	5	37.5	43.5	50	6