

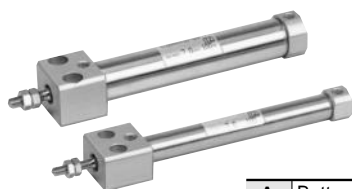
Non-rotating Rod/Direct Mount: Double Acting Single Rod

Series CJ2RK



ø10, ø16

How to Order

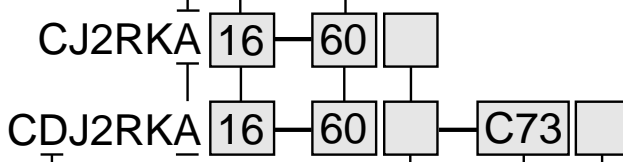


Bore size	
10	10mm
16	16mm

Mounting	
A	Bottom mounting

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

Standard
With auto switch



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

Port location on head cover	
Symbol	Port location
—	Perpendicular
R	In-line

* Refer to p.1.3-67 for the configuration.

• **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.

• **Number of switches**

—	2
S	1
n	n



CJ1
CJP
CJ2
CM2
C85
CG1
MB
C95
CA1
CS1

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* (m)				Applicable load															
					DC	AC	Band	Rail		0.5 (-)	3 (L)	5 (Z)	None (N)	IC	—													
								Perp.	In-line																			
Reed switch	—	Grommet	Yes	3 wire (NPN)	—	5V	—	C76	—	A76H	●	●	—	—	IC	—												
											24V	2 wire	5V, 12V ≤100V	C73			A73	A73H	●	●	●	—	Relay PLC					
																			12V	—	C73C	A73C		—	●	●	●	●
																									5V, 12V ≤24V	—	C80C	A80C
																			—	—	—	A79W		—				
											Solid state switch	—	Grommet	Yes			3 wire (NPN)	5V, 12V					—		H7A1	F7NV	F79	●
3 wire (PNP)	—	H7A2	F7PV	F7P	●	●	○	—																				
					2 wire	12V	—	H7B	F7BV	J79					●	●			○	—								
3 wire (NPN)	5V, 12V	—	H7C	J79C											—	●			●	●	●							
					3 wire (PNP)	—	H7NW	F7NWV	F79W	●						●			○	—								
3 wire (PNP)	—	H7PW	—	F7PW						●					●	○			—									
					2 wire	12V	—	H7BW	H7BWV	J79W					●	●			○	—								
2 wire	—	H7BA	—	F7BA											—	●			○	—								
					3 wire (NPN)	5V, 12V	—	—	F7NT	—					●	○			—									
4 wire (NPN)	—	H7NF	—	F79F						●					●	○			—									
					—	—	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.

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.	Rail mounting	Band mounting
	CDJ2RKA16-60-A	CDJ2RKA10-45-B

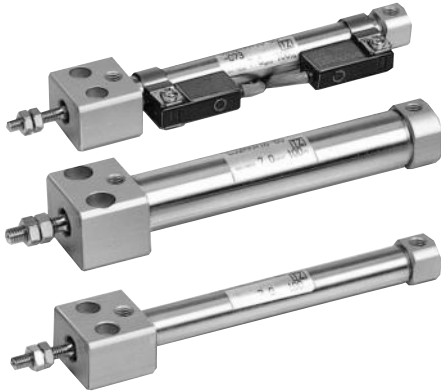
Series CJ2RK

Non-rotating rod with hexagon rod.

High non-rotating accuracy

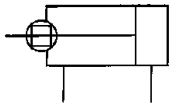
ø10: ±1.5°, ø16: ±1°

Auto switch can be mounted to detect the cylinder stroke position.



JIS symbol

Double acting/Single rod



⚠ Precautions

Refer to p.0-39 to 0-46 before handling.

Specifications

Action	Double acting/Single rod	
Fluid	Air	
Proof pressure	1.05MPa	
Max. operating pressure	0.7MPa	
Min. operating pressure	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	
Lubrication	Non-lube	
Thread tolerance	JIS class 2	
Stroke tolerance	+1.0 0	
Non-rotating accuracy	ø10: ±1.5°, ø16: ±1°	
Mounting	Bottom mounting	
Piston speed	50 to 750mm/s	
Allowable kinetic energy	ø10	0.035J
	ø16	0.090J

* No freezing

Standard Stroke

(mm)

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

Minimum Strokes for Auto Switch Mounting

•Refer to p.1.3-57.

Accessory/Refer to p.1.3-12 for details.

Standard	Rod end nut
Option	Single knuckle joint, Double knuckle joint*

* Double knuckle joint is packaged with pins and rings.

Non-rotating Rod/Direct Mount: Double Acting Single Rod *Series CJ2RK*

Weight (g)

Bore size (mm)	10	16
Basic weight*	36	71.5
Additional weight for each 15 of stroke	4	6.5

* This basic weight includes weight of rod end nut.

Calculation example: CJ2RKA10-45

- Basic weight: 36 (ø10)
 - Additional weight: 4/15 stroke
 - Cylinder stroke: 45 stroke
- $36 + 4/15 \times 45 = 48g$

Port Location on Head Cover

Either perpendicular to the cylinder axis or in-line with the cylinder axis is available for basic.



In-line



Perpendicular

Auto Switch Mounting Bracket Part No. (Band mounting)

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



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.

⚠ Caution

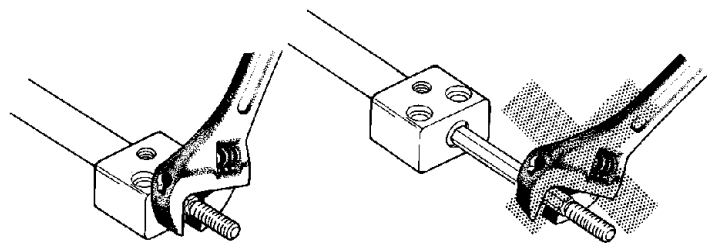
Precautions on handling

<Mounting>

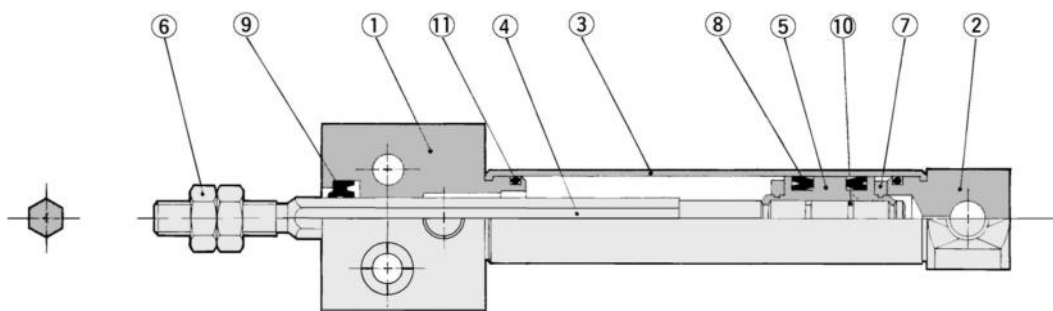
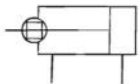
• Avoid using the air cylinder in such a way that rotational torque would be applied to the piston rod because this will deform the non-rotating guide, thus affecting the non-rotating accuracy. Refer to the table below for the approximate values of the allowable range of rotational torque.

Allowable rotational torque (Nm)	ø10	ø16
	0.02	0.04

- Operate the cylinder in such a way that the load to the piston rod is always applied in the axial direction.
- To screw a bracket onto the threaded portion at the tip of the piston rod, make sure to retract the piston rod entirely, and place a wrench over the flat portion of the rod that protrudes. To tighten, take precautions to prevent the tightening torque from being applied to the non-rotating guide.



Construction (The cylinder cannot be disassembled.)



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	Rod end nut	Rolled steel	Nickel plated

No.	Description	Material	Note
⑦	Bumper	Urethane	
⑧	Piston seal	NBR	
⑨	Rod seal	NBR	
⑩	Piston gasket	NBR	
⑪	Tube gasket	NBR	

CJ1

CJP

CJ2

CM2

C85

CG1

MB

C95

CA1

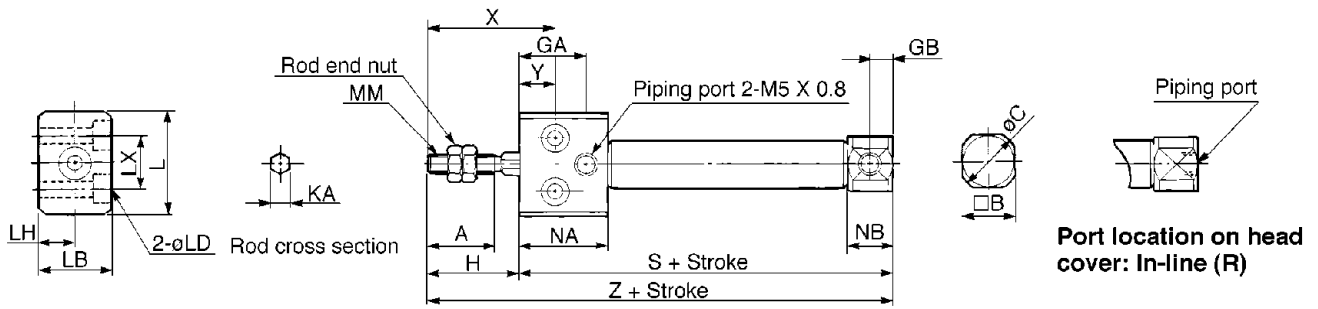
CS1

Series CJ2RK

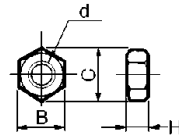
Bottom Mounting



CJ2RKA **Bore size** **Stroke** **Port location on head cover**



Rod end nut



Material: Iron

Part No.	Bore size	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	GA	GB	H	KA	L	LB	LD	LH	LX	MM	NA	NB	X	Y	S	Z
10	15	12	14	16	5	20	4.2	23	16	ø3.5, ø6.5 Depth of counter bore: 4	8	12	M4 X 0.7	20.5	9.5	28	8	54	74
16	15	18	20	16	5	20	5.2	26	20	ø4.5, ø8 Depth of counter bore: 5	10	16	M5 X 0.8	20.5	9.5	28	8	55	75

(mm)



Bottom mounting
CJ2RKA10 SCJ210, #10
CJ2RKA16 SCJ216, #10

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