

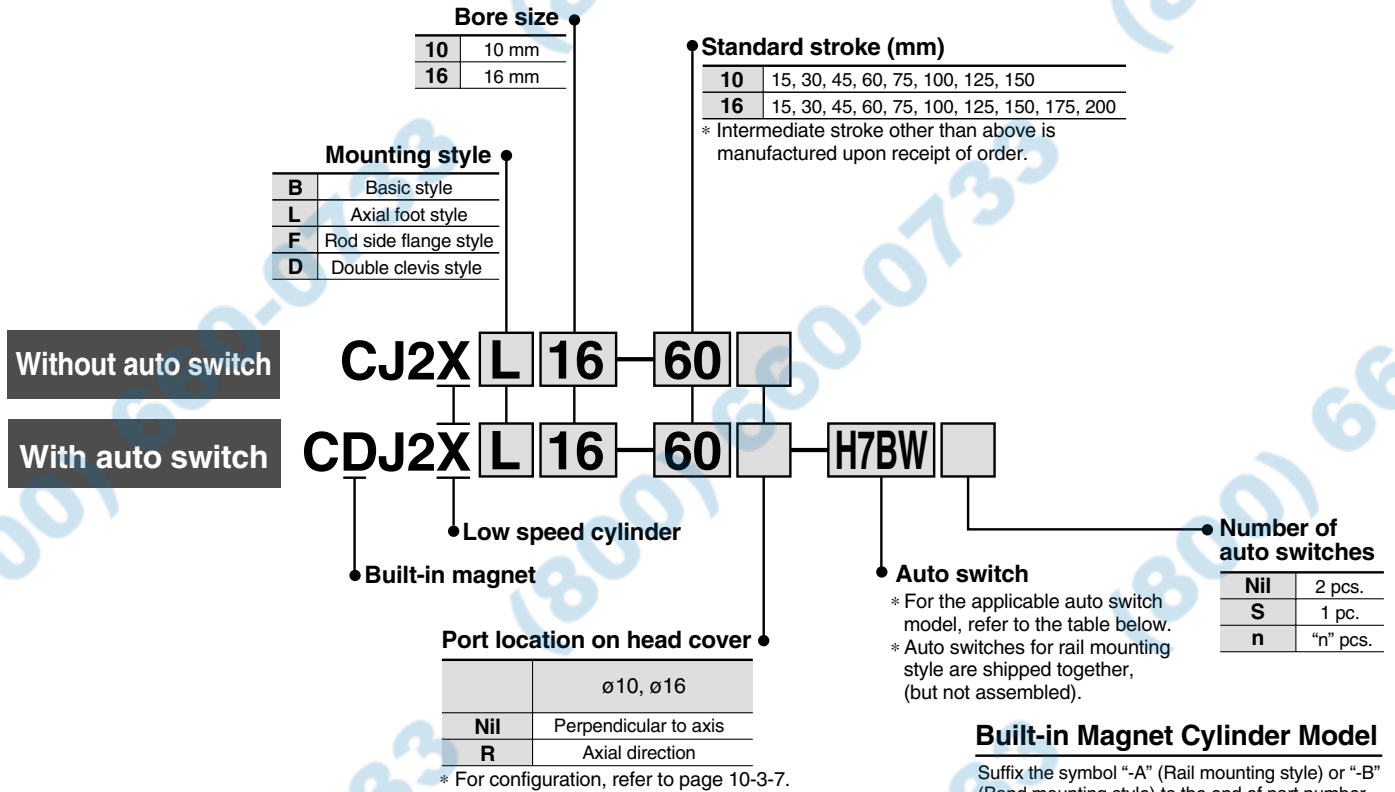


The external dimensions and the related things about auto switches are the same as standard type, double acting, single rod. For Series CJ2, refer to Best Pneumatics Vol. 6.

Low Speed Cylinder Double Acting, Single Rod Series CJ2X

ø10, ø16

How to Order



Built-in Magnet Cylinder Model

Suffix the symbol "A" (Rail mounting style) or "B" (Band mounting style) to the end of part number for cylinder with auto switch.

Example	Rail mounting style	CDJ2XB10-45-A
	Band mounting style	CDJ2XB16-60-B

Applicable Auto Switch/Refer to page 10-20-1 for further information on auto switches.

Type	Special function	Electrical entry	Indicator light	Wiring (Output)	Load voltage		Auto switch model			Lead wire length (m)*				Pre-wire connector	Applicable load						
					DC	AC	Band mounting	Rail mounting		0.5 (Nil)	3 (L)	5 (Z)	None (N)		IC circuit	Relay, PLC					
Reed switch	—	Grommet	Yes	3-wire (NPN equivalent)	—	5 V	—	C76	—	A76H	●	●	—	—			—	—	—		
						—	200 V	—	A72	A72H	●	●	—	—	—	—					
		Connector		2-wire	24 V	12 V	100 V	C73	A73	A73H	●	●	●	—	—	—	—	—			
						12 V	—	C73C	A73C	—	●	●	●	—	—	—	—				
Solid state switch	—	Grommet	Yes	3-wire (NPN)	—	5 V, 12 V	—	H7A1	F7NV	F79	●	●	○	—	○	—	—				
								3-wire (PNP)	H7A2	F7PV	F7P	●	●	○	—	○	—	—			
		Connector		2-wire	24 V	12 V	—	H7B	F7BV	J79	●	●	○	—	○	—	—	—			
						—	—	H7C	J79C	—	●	●	●	—	○	—	—				
		Grommet		Diagnostic indication (2-color indication)	Connector	Yes	3-wire (NPN)	—	5 V, 12 V	—	H7NW	F7NWV	F79W	●	●	○	—	○	—	—	
											3-wire (PNP)	H7PW	—	F7PW	●	●	○	—	○	—	—
							2-wire	24 V	12 V	—	H7BW	F7BWV	J79W	●	●	○	—	○	—	—	—
									—	—	H7NF	—	F79F	●	●	○	—	○	—	—	

* Lead wire length symbols: 0.5 m Nil (Example) C73C
 3 m L (Example) C73CL
 5 m Z (Example) C73CZ
 None N (Example) C73CN

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

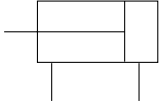
• Since there are other applicable auto switches than listed, refer to Best Pneumatics Vol. 6 for details.
 • For details about auto switches with pre-wire connector, refer to page 10-20-66.

Low Speed Cylinder Double Acting, Single Rod Series CJ2X



JIS Symbol

Double acting,
Single rod



⚠️ Precautions

Be sure to read before handling. For Safety Instructions and Actuator Precautions, refer to pages 10-24-3 to 10-24-6.

Mounting

⚠️ Caution

- 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 is tightened, the cover could rotate, leading to the deviation.
- Proper tightening torque for mounting thread should be within the range specified. Apply a Loctite® (no. 242 Blue) for mounting thread.

Bore size (mm)	Proper tightening torque for mounting thread (N·m) (tightening torque for mounting nut)
10	3.0 to 3.2
16	5.4 to 5.9

- 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 type C snap ring).
Especially with $\phi 10$, use ultra thin pliers, such as Super Tool Corp., CSM-07A.
- For the auto switch mounting rail, do not remove the pre-equipped rail. Since the mounting thread is drilled through inside a the cylinder, it will result in air leakage.

Operating Precautions

⚠️ Warning

- It might not be able to control by meter-out at a low speed operation.

⚠️ Caution

- For Series CJ2X, 0.1 N_l/min is the values at maximum in terms of its construction and there is internal leakage (ANR).

Specifications

Action	Double acting, Single rod	
Fluid	Air	
Proof pressure	1.05 MPa	
Maximum operating pressure	0.7 MPa	
Minimum operating pressure	0.06 MPa	
Ambient and fluid temperature	Without auto switch: -10 to 70°C (No freezing) With auto switch: -10 to 60°C (No freezing)	
Cushion	Rubber bumper (Standard equipment)	
Lubrication	Not required (Non-lube)	
Thread tolerance	JIS Class 2	
Stroke length tolerance	$\begin{matrix} +1.0 \\ 0 \end{matrix}$	
Piston speed	1 to 300 mm/s	
Allowable kinetic energy	$\phi 10$	0.035 J
	$\phi 16$	0.090 J

Standard Stroke

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

Mounting Style and Accessory

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

* Pin and snap ring are shipped together with double clevis and double knuckle joint.

Port Location on Head Cover

For basic style, the port position in a head cover is available either perpendicular to the axis or in-line with the cylinder axis.



Axial direction

Perpendicular

Mounting Bracket Part No.

Mounting bracket	Bore size (mm)	
	10	16
Foot bracket	CJ-L010B	CJ-L016B
Flange bracket	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 style)

Bore size (mm)	Auto switch mounting bracket part no.	Note
10	BJ2-010	Common for the types of D-C7/C8 and D-H7
16	BJ2-016	