

Series 11-/12- 21-/22- CXSJ ø6, ø10 Dual Rod Cylinder/Compact Type

How to Order

● **Clean series**

11	Vacuum suction type	CXSJM, CXSJL
12	Relief type (with specially treated sliding parts)	CXSJL

11 – CXS J L 6 – 50 – M9B S

21 – CXS J L 6 – 50 – M9B S

● **Number of auto switches**

Nil	2 pcs.
S	1 pc.
n	n pcs.

● **Auto switch**

Nil	Without auto switch (Built-in magnet)
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* Select the applicable auto switch from the table below.
 * The minimum stroke for auto switch mounting and operating range are the same as standard products.

● **Bore size/Stroke** (mm)

Bore size	Standard stroke
6	10, 20, 30, 40, 50
10	10, 20, 30, 40, 50

● **Copper, fluorine and silicone-free + Low particle generation**

21	Relief type	CXSJL
22	Vacuum suction type	CXSJL

● **Compact type**

● **Bearing type**

M	Slide Bearing
L	Ball bushing bearing

Auto Switch Specifications (Refer to the **WEB catalog** for detailed specifications and auto switches not in the following table.)

Type	Special function	Electrical entry	Indicator light	Wiring (Output)	Load voltage			Auto switch model	Lead wire length (m)*			Applicable load	
					DC	AC		Electrical entry direction	0.5 Nil	3 (L)	5 (Z)		
								In-line					
Reed auto switch	—	Grommet	Yes	2-wire	24 V	12 V	100 V	A93	●	●	—	—	Relay, PLC
Solid state auto switch	—	Grommet	Yes	3-wire (NPN)	24 V	12 V	—	M9N	●	●	—	—	Relay, PLC
				2-wire		12 V		M9B	●	●	—		

* Lead wire length symbols 0.5 m.....Nil (Example) A93 A93L
 3 m.....L

Refer to page 889 for the applicable auto switch list.

PLC: Programmable Logic Controller

Specifications

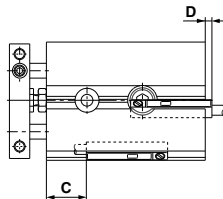
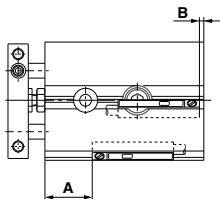
Bore size (mm)	6	10
Fluid	Air (Non-lube)	
Proof pressure	1.05 MPa	
Max. operating pressure	0.7 MPa	
Min. operating pressure	0.15 MPa	0.1 MPa
Ambient and fluid temperature	-10°C to 60°C (No freezing)	
Piston speed	30 to 400 mm/s	
Cushion	Rubber bumper	
Stroke adjustable range	0 to -5 mm compared to the standard stroke	
Port size	M3 x 0.5	M5 x 0.8
Grease	11-/12-: Fluorine grease 21-/22-: Lithium soap based grease	
Cleanliness class (ISO class)	12-: Class 4, 21-: Class 5 11-/22-: Class 3	

* The maximum piston speed shown in the table above applies to the extension side.
 The maximum piston speed for retraction is approximately 70% that of extension.

Suction Flow Rate of Vacuum Suction Type (Reference values)

Size	Suction flow rate L/min (ANR)
6	7
10	15

Auto Switch Proper Mounting Positions (Detection at Stroke End)

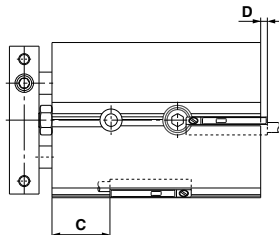
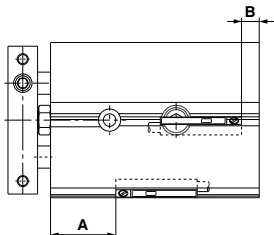
11- **CXSJ**□6 / 21- **CXSJ**□6

(mm)		
Symbol	D-A93	D-M9□
A	19 (20)	23 (24)
B Note 1)	—	2 (1)
C	14.5 (15.5)	13 (11.5)
D	6.5 (7.5)	8 (9)

Note 1) The above mentioned values are indicated as a guide for auto switch mounting positions for stroke end detection. When actually mounting an auto switch, adjust the position after confirming the operating state of the auto switch.

Note 2) For D-A93, only outward electrical entry (D dimension) is available.

Note 3) Dimensions in parentheses apply to 12-CXSJ□6.

11- **CXSJ**□10 / 21- **CXSJ**□10

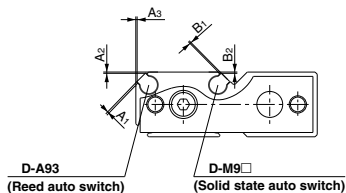
(mm)		
Symbol	D-A93	D-M9□
A	30 (31.5)	34 (35.5)
B Note 1)	—	3.5 (2)
C	25.5 (27)	24 (25.5)
D	5 (6.5)	6.5 (8)

Note 1) The above mentioned values are indicated as a guide for auto switch mounting positions for stroke end detection. When actually mounting an auto switch, adjust the position after confirming the operating state of the auto switch.

Note 2) For D-A93, only outward electrical entry (D dimension) is available.

Note 3) Dimensions in parentheses apply to 12-CXSJ□10.

Auto switch mounting dimensions



(mm)		
Auto switch model	Symbol	Bore size
		6, 10
D-A93	A1	0.4
	A2, A3	0.3
	B1	0.4
D-M9□	B2	0.3

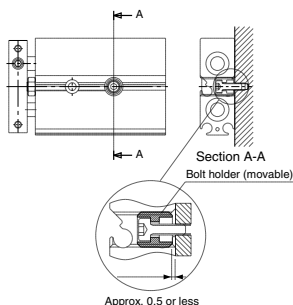
! Specific Product Precautions

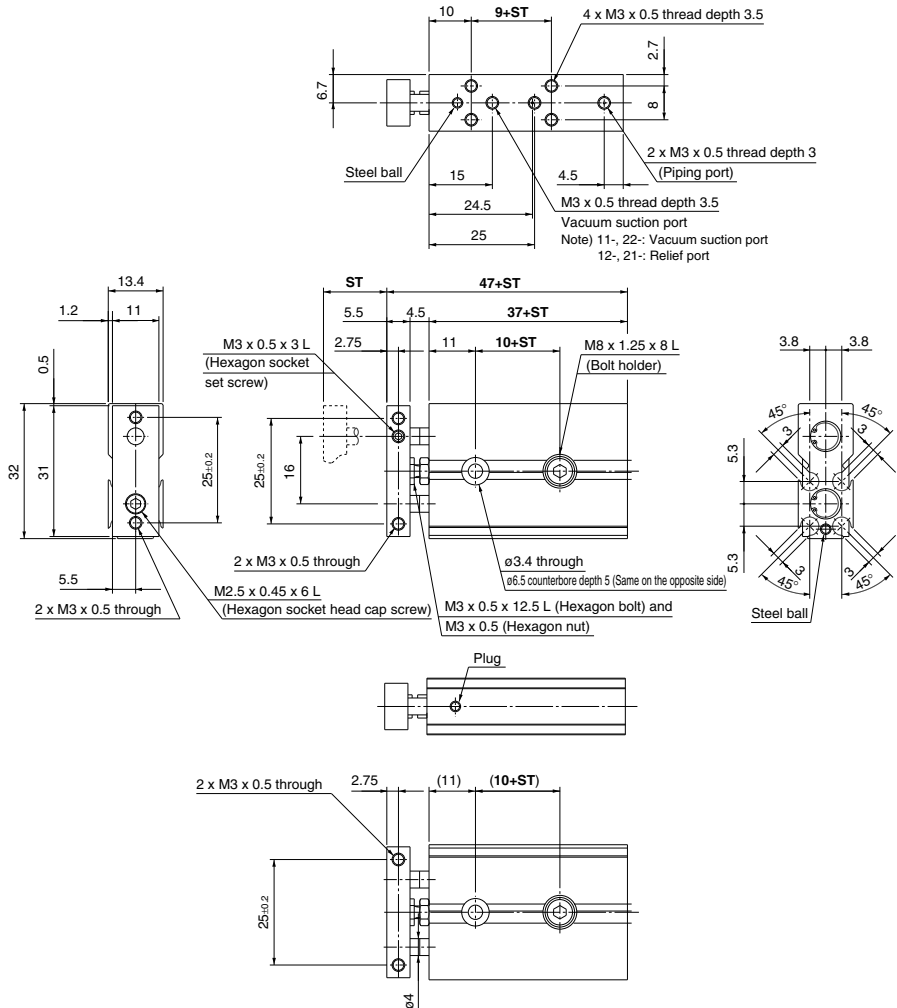
Be sure to read this before handling.

Mounting

Adjust the bolt holder with a hexagon wrench 3 mm in width across flats so that it does not protrude from the cylinder surface (approx. 0.5 mm depth from the cylinder surface to the top of the holder).

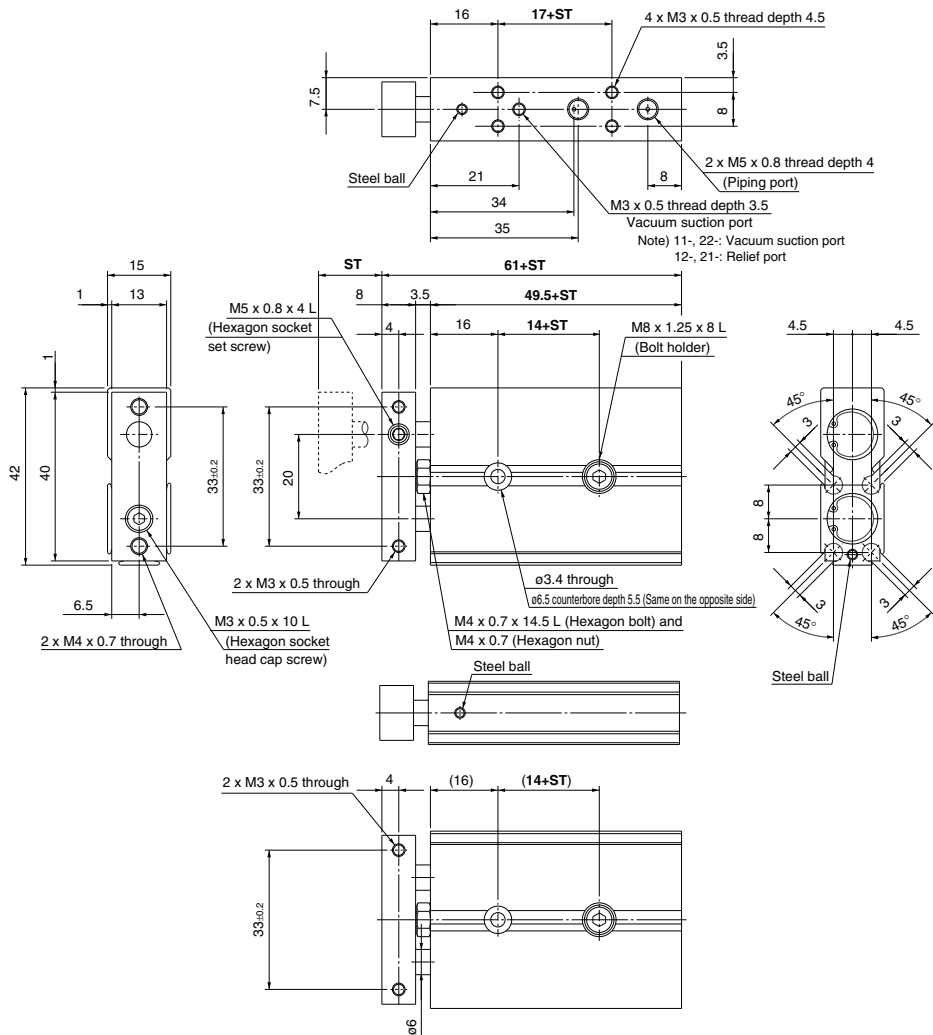
If the bolt holder is not properly adjusted, it can interfere with the switch rail, hindering the auto switch mounting.



Dimensions: $\phi 6$ 

Part no.	ST	9+ST	10+ST	37+ST	47+ST
11-12-CXSJ□6-10	10	19	20	47	57
11-12-CXSJ□6-20	20	29	30	57	67
11-12-CXSJ□6-30	30	39	40	67	77
11-12-CXSJ□6-40	40	49	50	77	87
11-12-CXSJ□6-50	50	59	60	87	97

Dimensions: Ø10



(mm)

Part no.	ST	14+ST	17+ST	49.5+ST	61+ST
11- <i>CXSJ</i> □10-10	10	24	27	59.5	71
11- <i>CXSJ</i> □10-20	20	34	37	69.5	81
11- <i>CXSJ</i> □10-30	30	44	47	79.5	91
11- <i>CXSJ</i> □10-40	40	54	57	89.5	101
11- <i>CXSJ</i> □10-50	50	64	67	99.5	111