

Dual Rod Cylinder/Compact Type

Series CXSJ

ø6, ø10, ø15, ø20, ø25, ø32

How to Order

Port thread type

Nil	M thread	ø6 to ø25
	Rc 1/8	
TN	NPT 1/8	ø32
TF	G 1/8	

Piping

Nil	Standard (ø6 to ø32)
P	Axial (ø6, ø10)

Bearing type

M	Slide bearing
L	Ball bushing bearing

Auto switch

Nil	Without auto switch (with built-in magnet)
-----	--

Number of auto switches

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

Bore size / Stroke (mm)

Bore size	Standard stroke
6	10, 20, 30, 40, 50
10	10, 20, 30, 40, 50, 75
15	10, 20, 30, 40, 50, 75, 100
20	
25	
32	

Made to Order
(For details, refer to pages 1851 to 1954.)

Symbol	Specifications
XB6	Heat resistant cylinder (-10 to 150°C)
XB13	Low speed cylinder (5 to 50 mm/s)
XC6 (Note)	Made of stainless steel
XC19	Intermediate stroke (spacer)
XC22	Fluoro rubber seals

Note) Slide bearing type (M) only

Applicable Auto Switches/Refer to pages 1719 to 1827 for detailed auto switch specifications.

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	Perpendicular	In-line	0.5 (Nil)	1 (M)	3 (L)	5 (Z)		IC circuit	Relay, PLC
Solid state switch	—	Grommet	Yes	3-wire (NPN)	5 V, 12 V	—	M9NV	M9N	●	●	●	○	○	IC circuit	Relay, PLC
				3-wire (PNP)			M9PV	M9P	●	●	●	○			
				2-wire	M9BV		M9B	●	●	●	○				
				3-wire (NPN)	M9NWX		M9NX	●	●	●	○				
	Diagnostic indication (2-color display)			3-wire (PNP)	M9PWX		M9PW	●	●	●	○	IC circuit			
				2-wire	M9BWX		M9BW	●	●	●	○				
	Water resistant (2-color display)			3-wire (NPN)	M9NAV		M9NA	○	○	●	○	IC circuit			
				3-wire (PNP)	M9PAV		M9PA	○	○	●	○				
				2-wire	M9BAV		M9BA	○	○	●	○				
				—	—		—	—	—	—	—		—		
Reed switch	—	Grommet	Yes	3-wire (NPN equiv.)	5 V	—	A96V	A96	●	—	●	—	—	IC circuit	—
				2-wire	12 V	100 V	A93V	A93	●	—	●	—	—	—	Relay, PLC
					5 V, 12 V	100 V or less	A90V	A90	●	—	●	—	—	—	IC circuit

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

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

- Since there are applicable auto switches other than listed, refer to page 559 for details.
- For details about switch with pre-wired connector, refer to pages 1784 and 1785.
- * Auto switches are shipped together (not assembled).

Gentle Automatic Solution Sdn Bhd

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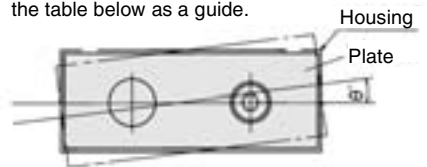
Series CXSJ



Operating Conditions

Non-rotating Accuracy

Non-rotating accuracy θ° without a load should be less than or equal to the value provided in the table below as a guide.

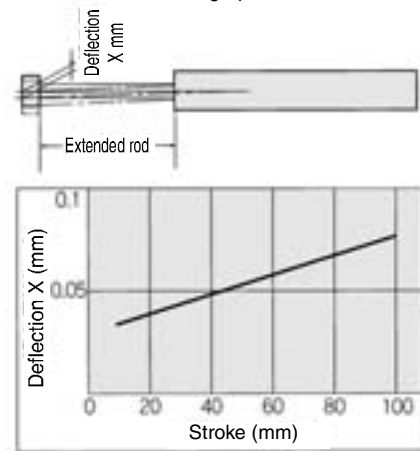


Bore size (mm)	θ
$\phi 6$ to $\phi 32$	$\pm 0.1^\circ$
CXSJM (Slide bearing)	
CXSJL (Ball bushing bearing)	

CXSJ $\phi 6$ to 32

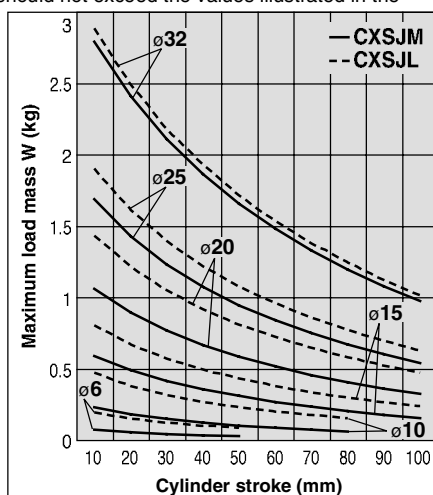
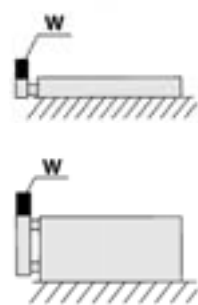
Deflection at the Plate End

An approximate plate-end deflection X without a load is shown in the graph below.



Maximum Load Mass

When the cylinder is mounted as shown in the diagrams below, the maximum load mass W should not exceed the values illustrated in the graph immediately



Specifications

Bore size (mm)	6	10	15	20	25	32
Fluid	Air (Non-lube)					
Proof pressure	1.05 MPa					
Maximum operating pressure	0.7 MPa					
Minimum operating pressure	0.15 MPa	0.1 MPa	0.05 MPa			
Ambient and fluid temperature	-10 to 60°C (No freezing)					
Piston speed	30 to 800 mm/s		30 to 700 mm/s		30 to 600 mm/s	
Cushion	Rubber bumper on both ends					
Stroke adjustable range	0 to -5 mm compared to the standard stroke					
Port size	M3 x 0.5	M5 x 0.8				Rc (NPT, PF) 1/8
Allowable kinetic energy	0.016 J	0.064 J	0.095 J	0.17 J	0.27 J	0.32 J

Standard Stroke

Model	Standard stroke	Manufacturable stroke range (mm)
CXSJ $\phi 6$	10, 20, 30, 40, 50	60 to 100
CXSJ $\phi 10$	10, 20, 30, 40, 50, 75	80 to 150
CXSJ $\phi 15$	10, 20, 30, 40, 50, 75, 100	110 to 150
CXSJ $\phi 20, 25, 32$		110 to 200

* Strokes beyond the standard stroke range are available as a special order.

Theoretical Output

Bore size (mm)	Rod size (mm)	Operating direction	Piston area (mm ²)	Operating pressure (MPa)							
				0.1	0.15	0.2	0.3	0.4	0.5	0.6	0.7
CXSJ $\phi 6$	4	OUT	56	—	8.4	11.2	16.8	22.4	28.0	33.6	39.2
		IN	31	—	4.6	6.2	9.3	12.4	15.5	18.6	21.7
CXSJ $\phi 10$	6	OUT	157	15.7	—	31.4	47.1	62.8	78.5	94.2	110
		IN	100	10.0	—	20.0	30.0	40.0	50.0	60.0	70.0
CXSJ $\phi 15$	8	OUT	353	35.3	—	70.6	106	141	177	212	247
		IN	252	25.2	—	50.4	75.6	101	126	151	176
CXSJ $\phi 20$	10	OUT	628	62.8	—	126	188	251	314	377	440
		IN	471	47.1	—	94.2	141	188	236	283	330
CXSJ $\phi 25$	12	OUT	982	98.2	—	196	295	393	491	589	687
		IN	756	75.6	—	151	227	302	378	454	529
CXSJ $\phi 32$	16	OUT	1608	161	—	322	482	643	804	965	1126
		IN	1206	121	—	241	362	482	603	724	844

Note) Theoretical output (N) = Pressure (MPa) x Piston area (mm²)

Mass

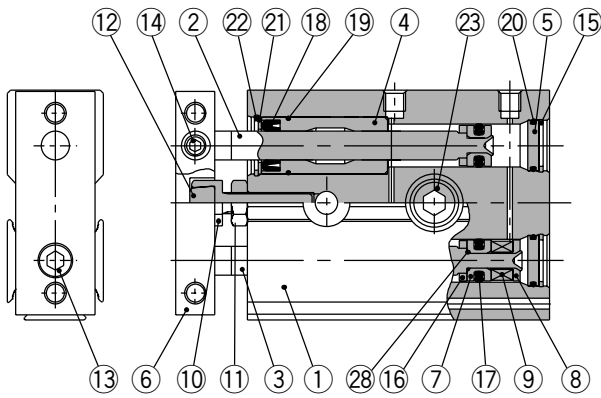
Model	Standard stroke (mm)						
	10	20	30	40	50	75	100
CXSJM6	0.047	0.057	0.067	0.077	0.087	—	—
CXSJL6	0.048	0.058	0.068	0.078	0.088	—	—
CXSJM10	0.099	0.114	0.129	0.144	0.159	0.198	—
CXSJL10	0.106	0.121	0.136	0.151	0.166	0.205	—
CXSJM15	0.198	0.219	0.240	0.261	0.282	0.335	0.387
CXSJL15	0.218	0.239	0.260	0.281	0.302	0.355	0.407
CXSJM20	0.345	0.371	0.397	0.423	0.449	0.514	0.579
CXSJL20	0.375	0.401	0.427	0.453	0.479	0.544	0.609
CXSJM25	0.506	0.544	0.582	0.620	0.658	0.753	0.848
CXSJL25	0.516	0.554	0.592	0.630	0.668	0.763	0.858
CXSJM32	1.022	1.078	1.134	1.190	1.246	1.386	1.526
CXSJL32	1.032	1.088	1.144	1.200	1.256	1.396	1.536

Note) For axial piping of CXSJ $\phi 6P$ -□ and CXSJ $\phi 10P$ -□, please add the following mass. CXSJ $\phi 6P$ -□: 0.009 kg, CXSJ $\phi 10P$ -□: 0.014 kg

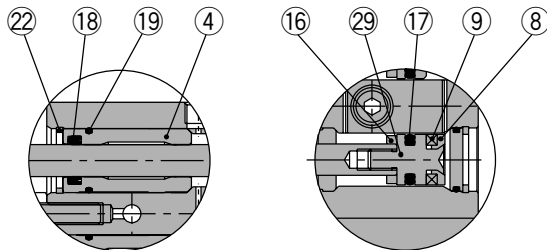
Construction: Standard Piping

CXSJM (Slide bearing)

CXSJM6



CXSJM10

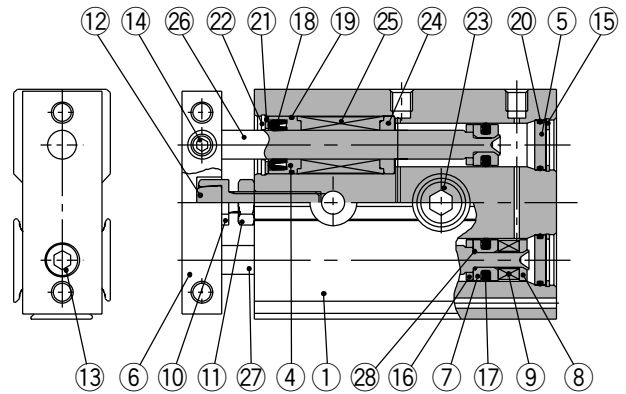


Rod cover

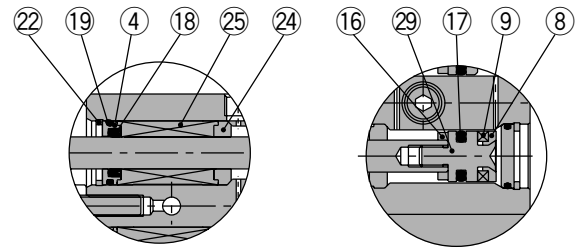
Piston rod B-side piston

CXSJL (Ball bushing bearing)

CXSJL6



CXSJL10



Rod cover

Piston rod B-side piston

Component Parts: Standard Piping

No.	Description	Material	Note
1	Housing	Aluminum alloy	Hard anodized
2	Piston rod A	Carbon steel <small>Note)</small>	Hard chromium electroplated
3	Piston rod B	Carbon steel <small>Note)</small>	Hard chromium electroplated
4	Rod cover	Aluminum bearing alloy	
5	Head cover	Aluminum alloy	Anodized
6	Plate	Aluminum alloy	Glossy, self-coloring hard anodized
7	Piston A	Aluminum alloy	Chromated
8	Piston B	Aluminum alloy	Chromated
9	Magnet	—	
10	Bumper bolt	Carbon steel	Nickel plated
11	Hexagon nut	Carbon steel	Nickel plated
12	Bumper	Polyurethane	
13	Hexagon socket head cap screw	Chromium steel	Nickel plated
14	Hexagon socket head set screw	Chromium steel	Nickel plated
15	Retaining ring	Special steel	Phosphate coated

Note) Stainless steel for CXSJM6.

No.	Description	Material	Note
16	Bumper B	Polyurethane	
17	Piston seal	NBR	
18	Rod seal	NBR	
19	O-ring	NBR	
20	O-ring	NBR	
21	Seal retainer	Stainless steel	
22	Retaining ring B	Special steel	Phosphate coated
23	Bolt holder	Stainless steel	
24	Bearing spacer	Aluminum bearing alloy	
25	Ball bushing	—	
26	Piston rod A	Special steel	Hard chromium electroplated
27	Piston rod B	Special steel	Hard chromium electroplated
28	O-ring	NBR	
29	Piston C	Stainless steel	
30	Bumper holder	Resin	

Replacement Parts/ Seal Kit

Model	Seal kit no.	Contents
CXSJM6	CXSJM6-PS	Set of nos. above 17, 18, and 20
CXSJL6	CXSJL6-PS	
CXSJM10	CXSJM10-PS	
CXSJL10	CXSJL10-PS	

* Seal kit includes 17, 18, and 20. Order the seal kit, based on each bore size.

* Since the seal kit does not include a grease pack, order it separately.

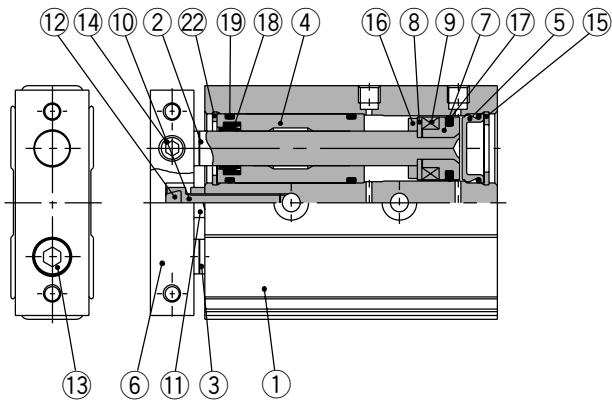
Grease pack part no.: GR-S-010 (10 g)

Series CXSJ

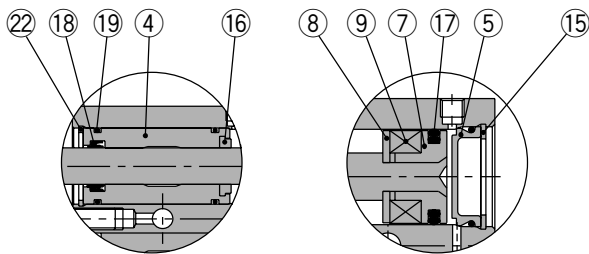
Construction: Standard Piping

CXSJM (Slide bearing)

CXSJM15



CXSJM20 to 32

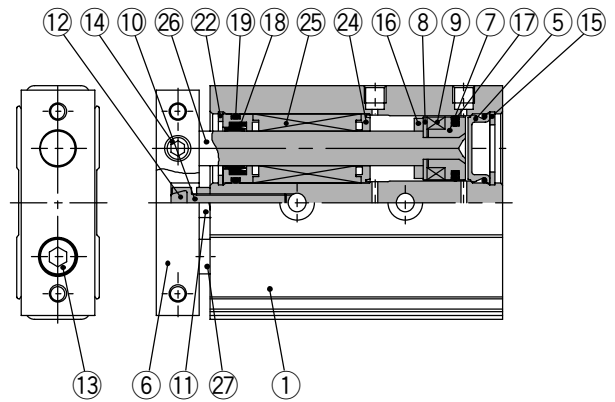


Rod cover

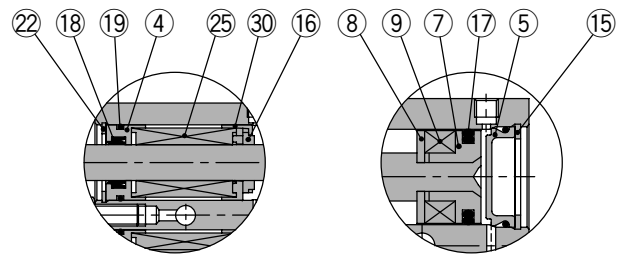
Head cover

CXSJL (Ball bushing bearing)

CXSJL15



CXSJL20 to 32



Rod cover

Head cover

Component Parts: Standard Piping

No.	Description	Material	Note
1	Housing	Aluminum alloy	Hard anodized
2	Piston rod A	Carbon steel	Hard chromium electroplated
3	Piston rod B	Carbon steel	Hard chromium electroplated
4	Rod cover	Aluminum bearing alloy	
5	Head cover	Special steel	
6	Plate	Aluminum alloy	Glossy, self-coloring hard anodized
7	Piston A	Aluminum alloy	Chromated
8	Piston B	Stainless steel	
9	Magnet	—	
10	Bumper bolt	Carbon steel	Nickel plated
11	Hexagon nut	Carbon steel	Nickel plated
12	Bumper	Polyurethane	
13	Hexagon socket head cap screw	Chromium steel	Nickel plated
14	Hexagon socket head set screw	Chromium steel	Nickel plated
15	Retaining ring	Special steel	Phosphate coated

No.	Description	Material	Note
16	Bumper B	Polyurethane	
17	Piston seal	NBR	
18	Rod seal	NBR	
19	O-ring	NBR	
20	O-ring	NBR	
21	Seal retainer	Stainless steel	
22	Retaining ring B	Special steel	Phosphate coated
23	Bolt holder	Stainless steel	
24	Bearing spacer	Resin	
25	Ball bushing	—	
26	Piston rod A	Special steel	Hard chromium electroplated
27	Piston rod B	Special steel	Hard chromium electroplated
28	O-ring	NBR	
29	Piston C	Stainless steel	
30	Bumper holder	Resin	

Replacement Parts/ Seal Kit

Model	Seal kit no.	Contents
CXSJM15	CXSM15-PS	Set of nos. above 17, 18, and 19
CXSJM20	CXSM20-PS	
CXSJM25	CXSM25-PS	
CXSJM32	CXSM32-PS	
CXSJL15	CXSL15APS	
CXSJL20	CXSL20APS	
CXSJL25	CXSL25APS	
CXSJL32	CXSL32APS	

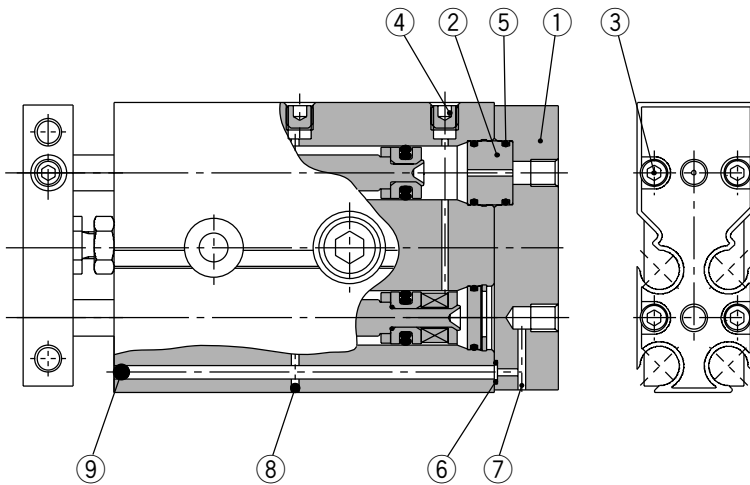
* Seal kit includes 17, 18, and 19. Order the seal kit, based on each bore size.

* Since the seal kit does not include a grease pack, order it separately.

Grease pack part no.: GR-S-010 (10 g)

Construction: Axial Piping

CXSJ□6P, CXSJ□10P



Component Parts: Axial Piping

No.	Description	Material	Note
1	Cover	Aluminum alloy	Hard anodized
2	Adapter	Aluminum alloy	Anodized
3	Hexagon socket head cap screw	Chromium steel	Nickel plated
4	Hexagon socket head plug	Chromium steel	Nickel plated
5	O-ring	NBR	
6	O-ring	NBR	
7	Steel ball	Special steel	Hard chromium electroplated
8	Steel ball	Special steel	Hard chromium electroplated
9	Steel ball	Special steel	Hard chromium electroplated

* Parts other than those listed above are the same as those of CXSJ basic type.

Clean Series

There are two types of cylinders, relieving type and vacuum type, available for a clean room environment. The relieving type specification with the double-seal construction of the rod section allows the cylinder to channel exhaust through the relief port directly to the outside of a clean room environment. The vacuum type specification allows for the application of a vacuum on the rod section while forced exhaust of air takes place through the vacuum port to the outside of a clean room environment.

How to Order

11 - CXSJ **M** Bore size - Stroke - Auto switch

● Bore size / Stroke

6	10, 20, 30, 40, 50
10	10, 20, 30, 40, 50

● Bearing type

M	Slide bearing
L*	Ball bushing bearing

* 12-series is compatible with the ball bushing bearing type only.

● Clean room specifications

11	Vacuum type
12	Relieving type (with specially treated sliding parts)

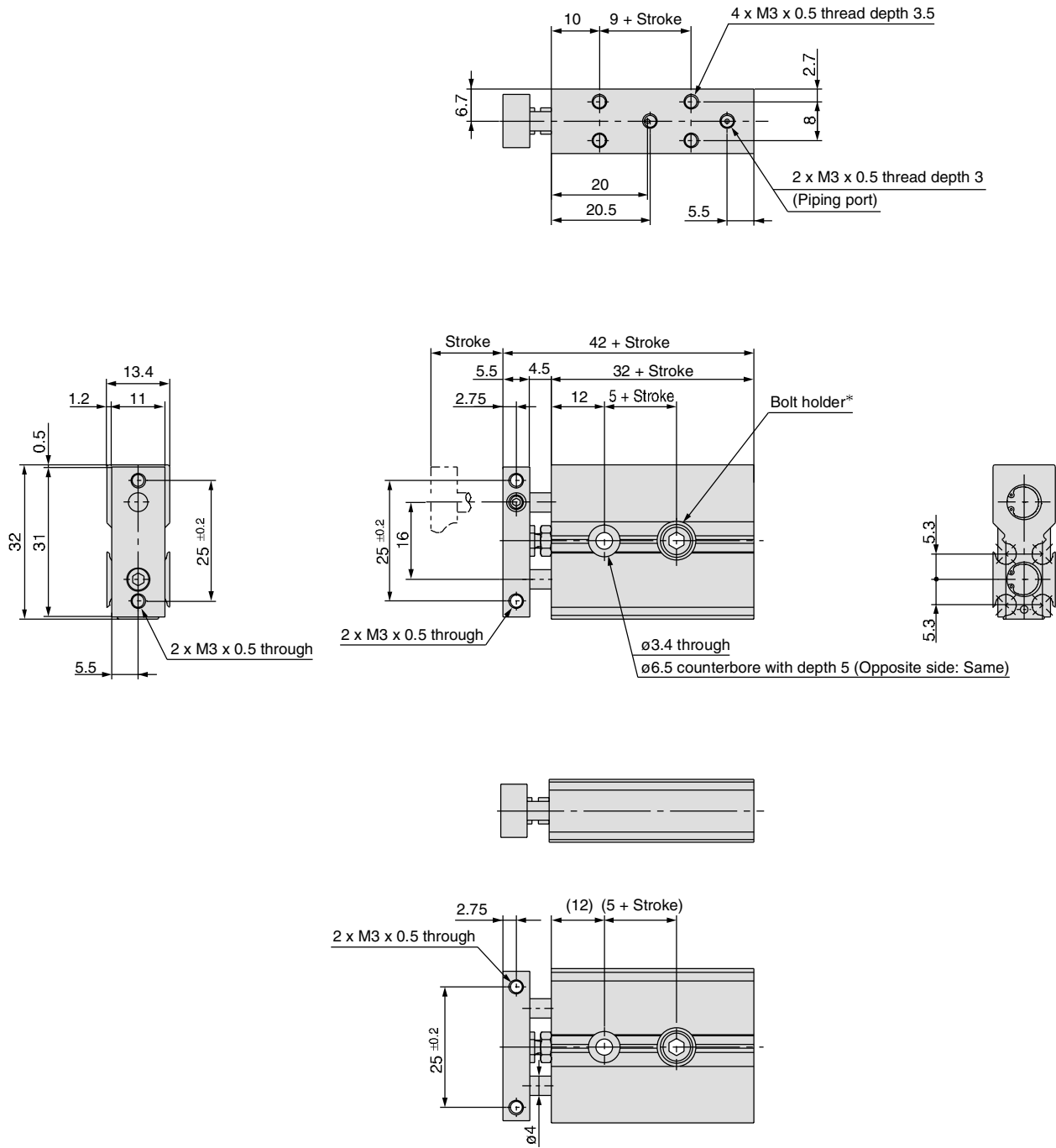
Specifications

Bore size (mm)	6	10
Proof pressure	1.05 MPa	
Maximum operating pressure	0.7 MPa	
Minimum operating pressure	0.15 MPa	0.1 MPa
Ambient and fluid temperature	-10 to 60°C (No freezing)	
Piston speed	30 to 400 mm/s	
Stroke adjustable range	0 to -5 mm compared to the standard stroke	
Bearing type	Slide bearing, Ball bushing bearing	

* Refer to "SMC Pneumatic Clean Series" catalog for dimensions.

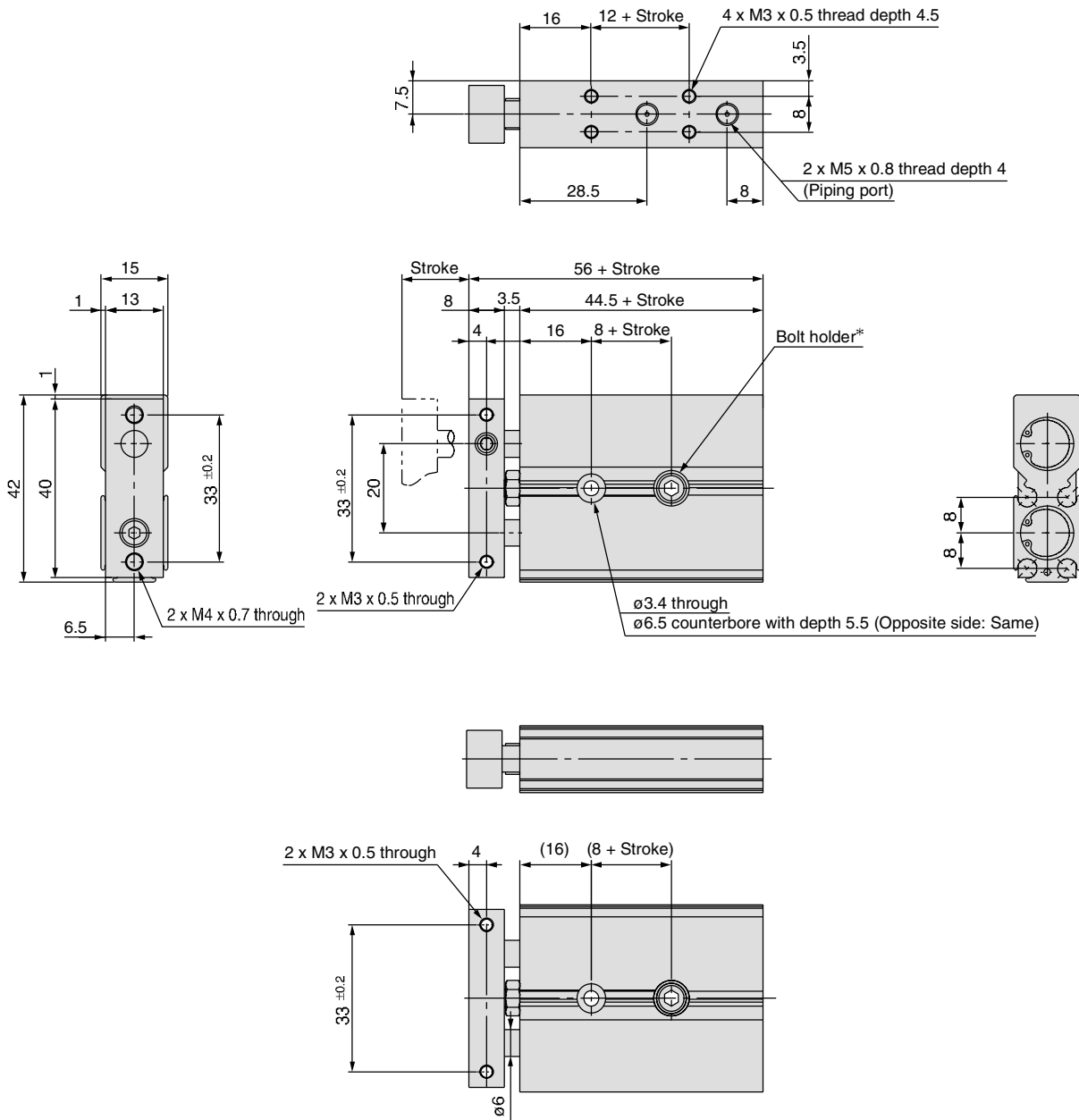
Series CXSJ

Dimensions: $\varnothing 6$ Standard Piping



* For bolt holder, refer to page 560, "Mounting".

Dimensions: $\varnothing 10$ Standard Piping

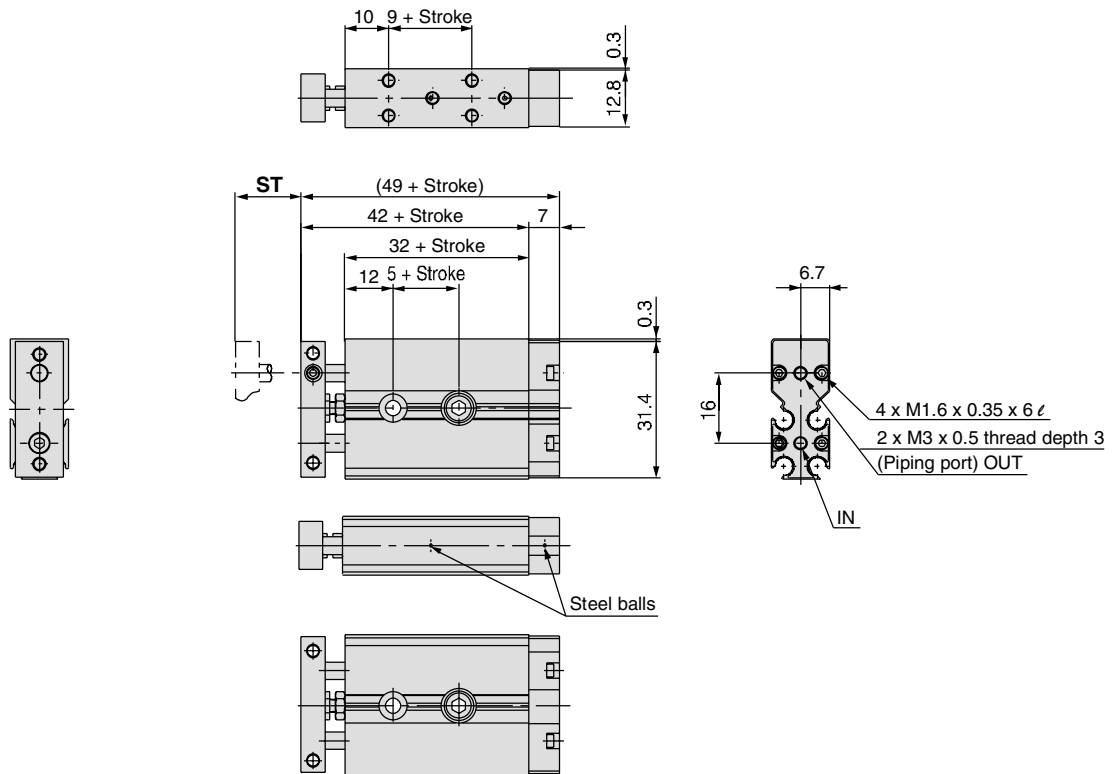


* For bolt holder, refer to page 560, "Mounting".

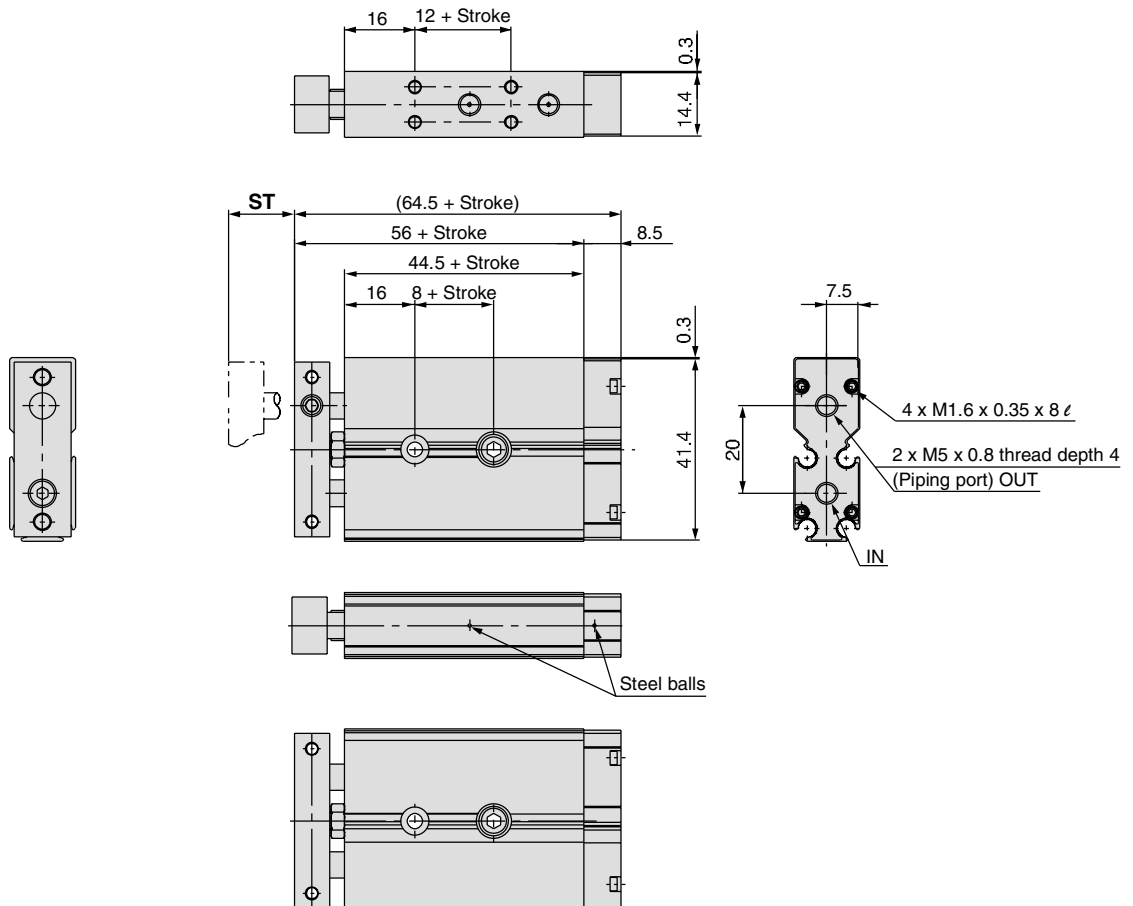
Series CXSJ

Dimensions: $\varnothing 6$, $\varnothing 10$ Axial Piping

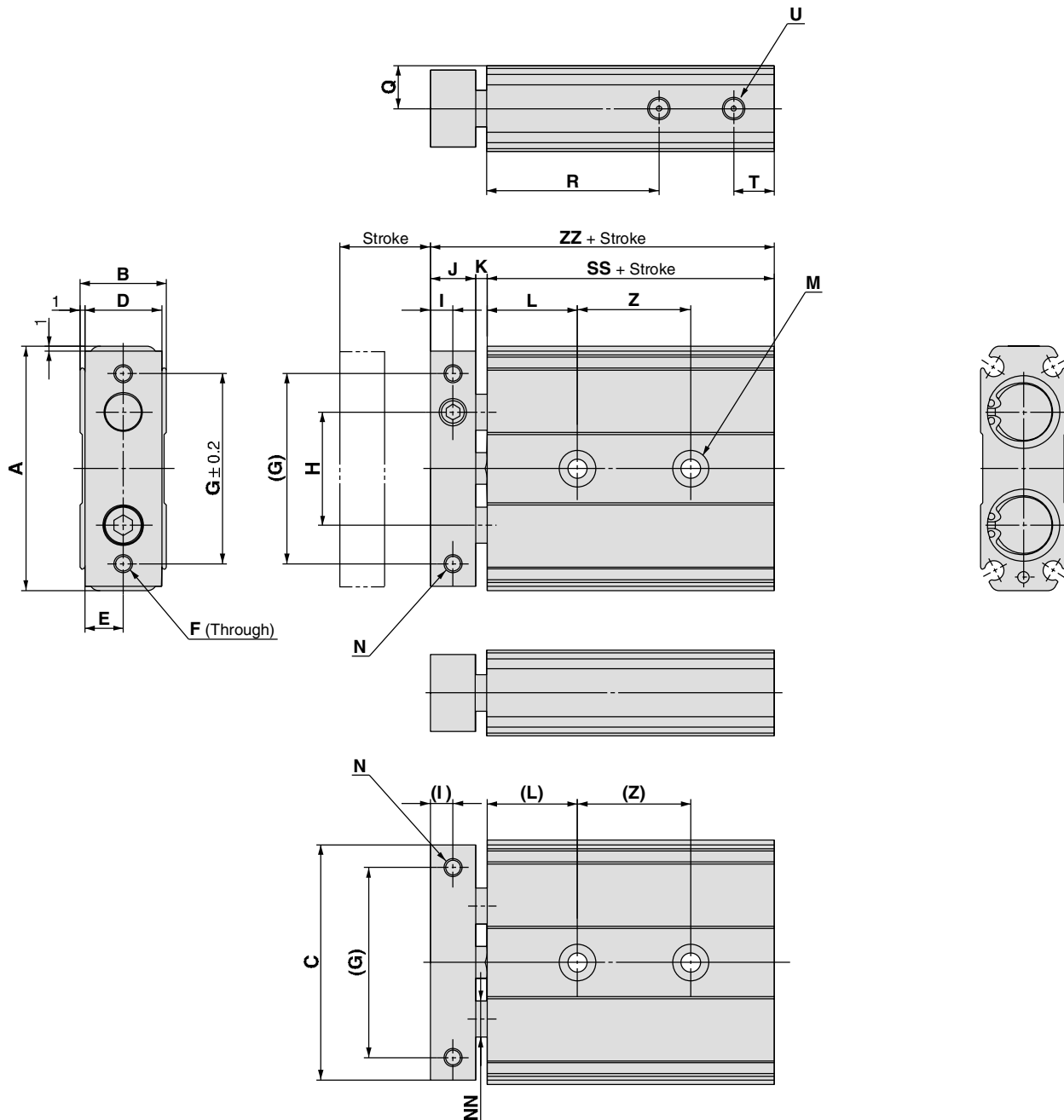
CXSJ□6P



CXSJ□10P



Dimensions: $\phi 15$ to 32 Standard Piping



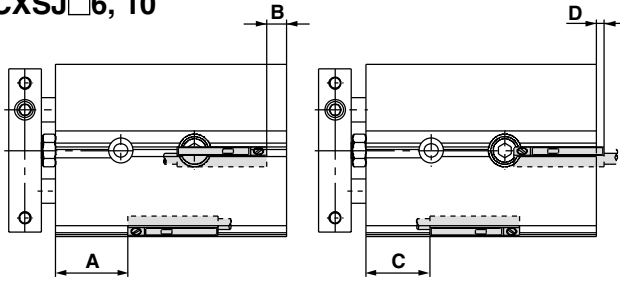
Bore size (mm)	A	B	ZZ	C	D	E	F	G	H	I	J	K	L	M	N	NN	Q	R	T	U	SS
15	54	19	70	52	17	8.5	2 x M5 x 0.8	42	25	5	10	2.5	20	2 x 2 x $\phi 4.3$ through 2 x 2 x $\phi 8$ counterbore with depth 4.3	2 x M4 x 0.7 with thread depth 6	$\phi 8$	9.5	38	9	2 x M5 x 0.8 with thread depth 4	57.5
20	62	24	84	60	22	11	2 x M5 x 0.8	50	29	6	12	4.5	25	2 x 2 x $\phi 5.5$ through 2 x 2 x $\phi 9.5$ counterbore with depth 5.3	2 x M4 x 0.7 with thread depth 6	$\phi 10$	12	45	9	2 x M5 x 0.8 with thread depth 4	67.5
25	73	29	87	71	27	13.5	2 x M6 x 1.0	60	35	6	12	4.5	30	2 x 2 x $\phi 6.5$ through 2 x 2 x $\phi 11$ counterbore with depth 6.3	2 x M5 x 0.8 with thread depth 7.5	$\phi 12$	14.5	46	9	2 x M5 x 0.8 with thread depth 4	70.5
32	94	37	100.5	92	35	17.5	2 x M6 x 1.0	75	45	8	16	4	30	2 x 2 x $\phi 6.5$ through 2 x 2 x $\phi 11$ counterbore with depth 6.3	2 x M5 x 0.8 with thread depth 7.5	$\phi 16$	18.5	56	10	2 x Rc1/8 with thread depth 5	80.5

Bore size (mm)	Symbol	Z				
	Stroke	10, 20	30, 40, 50	75	100	
15		25	35	45	55	
20		30	40	60	60	
25		30	40	60	60	
32		40	50	70	70	

Series CXSJ

Auto Switch Proper Mounting Position for Stroke End Detection

CXSJ□6, 10



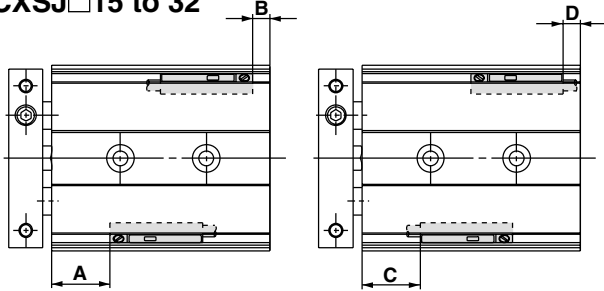
Operating Range

(mm)

Auto switch model	Bore size					
	6	10	15	20	25	32
D-A9□, D-A9□V	5	6	6	7.5	8	9
D-M9□, D-M9□V	2.5	3	3.5	4.5	4.5	5
D-M9□A, D-M9□AV						
D-M9□W, D-M9□WV						

* The operating ranges are provided as guidelines including hystereses and are not guaranteed values (assuming approximately ±30% variations). They may vary significantly with ambient environments.

CXSJ□15 to 32



Electrical entry direction:
Inward

Electrical entry direction:
Outward

Auto Switch Proper Mounting Position

Bore size (mm)	D-A90, D-A96				D-A93				D-M9□, D-M9□W D-M9□AVL				D-M9□V, D-M9□WV			
	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
6	15.5	—	13.5	5.5	15.5	—	11	8	19.5	0.5	9.5	9.5	19.5	0.5	11.5	7.5
10	25.5	—	23.5	3	25.5	—	21	5.5	29.5	3	19.5	7	29.5	3	21.5	5
15	31.5	6	29.5	4	31.5	6	27	1.5	35.5	10	25.5	0	35.5	10	27.5	2
20	39	9	37	7	39	9	34.5	4.5	43	13	33	3	43	13	35	5
25	40	11	38	9	40	11	35.5	6.5	44	15	34	5	44	15	36	7
32	49	11.5	47	9.5	49	11.5	44.5	7	53	15.5	43	5.5	53	15.5	45	7.5

Bore size (mm)	D-M9□AL			
	A	B	C	D
6	19.5	0.5	7.5	11.5
10	29.5	3	17.5	9
15	35.5	10	23.5	2
20	43	13	31	5
25	44	15	32	7
32	53	15.5	41	7.5

Note 1) ø6: D-A90, A96, A93, F9BAL

ø10: D-A90, A96, A93

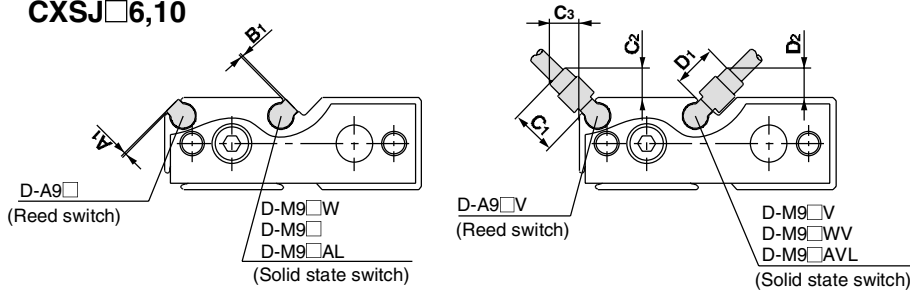
Only outward electrical entry (D dimension) is available.

Note 2) Minus value in D column (ø15, ø20, ø25, ø32) means that the auto switches are to be mounted beyond the cylinder body edges.

Note 3) When setting an auto switch, confirm the operation and adjust its mounting position.

Auto switch mounting dimensions

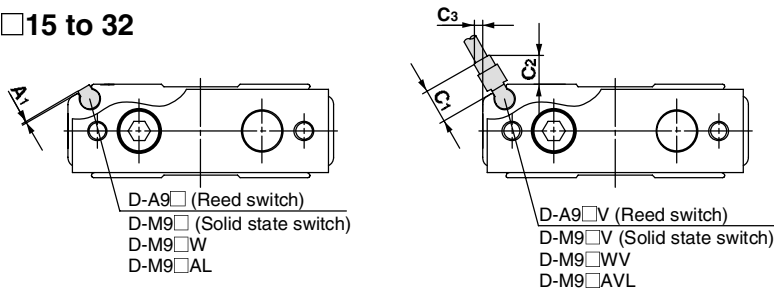
CXSJ□6,10



(mm)

Auto switch model	Symbol	Bore size	
		6	10
D-A9□	A ₁	1	1
D-M9□, D-M9□W	B ₁	1	1
D-M9□AL	B ₁	2	2
D-A9□V	C ₁ , D ₁	5.5	5.5
	C ₂ , C ₃ , D ₂	4	4
D-M9□V, D-M9□WV	C ₁ , D ₁	8	8
	C ₂ , C ₃ , D ₂	6	6

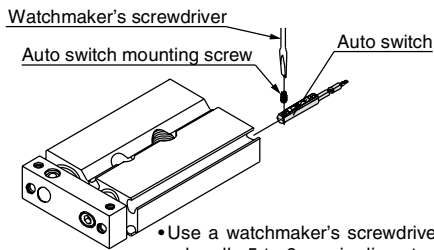
CXSJ□15 to 32



(mm)

Auto switch model	Symbol	Bore size			
		15	20	25	32
D-M9□, D-M9□W	A ₁	1	1	1	1
D-M9□AL	A ₁	2	2	2	2
D-A9□V	C ₁	5.5	5.5	5.5	5.5
	C ₂	4.5	4.5	4.5	4.5
D-M9□WV	C ₁ , D ₁	8	8	8	8
	C ₂	1	—	—	—

Auto Switch Mounting



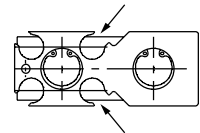
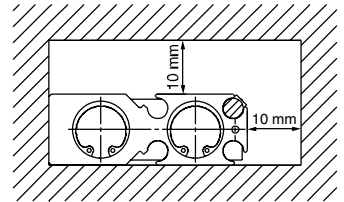
- Use a watchmaker's screwdriver with a handle 5 to 6 mm in diameter when tightening the auto switch mounting screw.

Tightening Torque of Auto Switch Mounting Screw (N·m)

Auto switch model	Tightening torque
D-A9□(V)	0.10 to 0.20
D-M9□(V)	0.05 to 0.15
D-M9□W(V)	

⚠ Caution

- ① **Avoid proximity to magnetic objects.**
When magnetic substances such as iron (including flange brackets) are in close proximity to an auto switch cylinder (auto switch mounting side), be sure to provide a clearance between the magnetic substance and the cylinder body as shown in the drawing below. If the clearance is less than 10 mm, the auto switch may not function properly.
- ② **For CXSJ□6/10, the switch cannot be attached or detached from the plate side if the middle groove (indicated by arrows in the figure on the right) is used. (It will interfere with the bumper bolt at the end of the groove.)**



Other than the applicable auto switches listed in "How to Order," the following auto switches can be mounted.

* Normally closed (NC = b contact), solid state auto switches (D-F9G and D-F9H type) are also available. For details, refer to page 1746.



Series CXSJ Specific Product Precautions

Be sure to read before handling.

Refer to front matters 42 and 43 for Safety Instructions and pages 3 to 11 for Actuator and Auto Switch Precautions.

Mounting

⚠ Caution

1. Make sure that the surface on which the cylinder is to be mounted is flat (reference value for flatness: 0.05 or less).

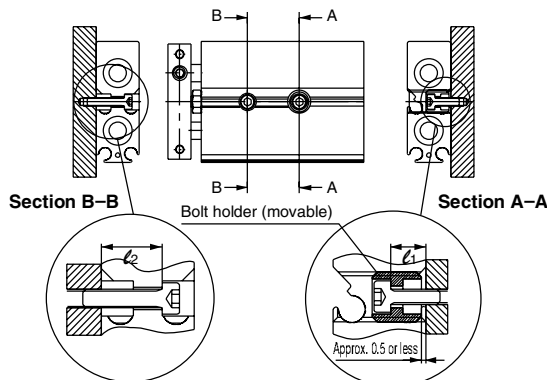
Dual-rod cylinders can be mounted from 3 directions, however, make sure that the surface on which the cylinder is to be mounted is flat (reference value for flatness: 0.05 or less). Otherwise, the accuracy of the piston rod operation is not achieved, and malfunctioning can occur.

2. The piston rod must be retracted when mounting the cylinder.

Scratches or gouges in the piston rod may lead to damaged bearings and seals and cause malfunctions or air leakage.

3. CXSJ (ø6, ø10)

Adjust the bolt holder using 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. The required length of the mounting bolt for a bolt holder and mounting hole in the rod cover side varies depending on the bearing surface position for the mounting bolt. Refer to dimensions l_1 and l_2 provided below to select the appropriate mounting bolt length.



	l_1 (mm)	l_2 (mm)	Applicable mounting bolt size
CXSJ□6	5	8.4	M3
CXSJ□10	5	9.5	M3

Be sure to mount the cylinder to the bolt holder. If it is operated without using the bolt holder, the bolt holder may drop.

Piping

⚠ Caution

1. For axial piping, the side port of the standard cylinder is plugged. However, a plugged port can be switched according to the operating conditions. When switching the plugged port, check the air leakage. If small air leakage is detected, order the below plugs, and reassemble it.

Plug part no.: (ø6) MTS08-08-P6830
(ø10) CXS10-08-28747A

Stroke Adjustment

⚠ Caution

1. After adjusting the stroke, make sure to tighten the hexagon nut to prevent it from loosening.

Dual-rod cylinders have a bolt to adjust 0 to -5 mm strokes on the retracted end (IN).

Loosen the hexagon nut to adjust the stroke; however, make sure to tighten the hexagon nut after making an adjustment.

2. Never operate a cylinder with its bumper bolt removed. Also, do not attempt to tighten the bumper bolt without using a nut.

If the bumper bolt is removed, the piston hits the head cover causing damage to the cylinder. Therefore, do not use a cylinder without a bumper bolt.

Furthermore, if the bumper bolt is tightened without a nut, the piston seal is caught in the leveled part, damaging the seal.

3. A bumper at the end of the bumper bolt is replaceable.

In case of a missing bumper, or a bumper has a permanent settling, use the right part numbers for ordering.

Bore size (mm)	6, 10, 15	20, 25	32
Part no.	CXS10-34A 28747	CXS20-34A 28749	CXS32-34A 28751
Qty.	1		

Disassembly and Maintenance

⚠ Caution

1. Never use a cylinder with its plate removed.

When removing the hexagon socket head cap screw on the end plate, the piston rod must be secured to prevent from rotating. However, if the sliding parts of the piston rod are scratched and gouged, a malfunction may occur.

2. When disassembling and reassembling the cylinder, contact SMC or refer to the separate instruction manual.

⚠ Warning

1. Take precautions when your hands are near the plate and housing.

When the cylinder is operated, take extra precautions to avoid getting your hands and fingers caught between the plate and housing, that can cause a bodily injury.

Operating Environment

⚠ Caution

1. Do not operate the cylinder in a pressurized environment.
The pressurized air may flow inside the cylinder due to its construction.
2. Do not use as a stopper. This may cause malfunction.
When using as a stopper, select a stopper cylinder (Series RS) or a compact guide cylinder (Series MGP).

Speed Adjustment

⚠ Caution

1. When CXSJ□6 is operated at a low speed, adjust the speed with an IN/OUT control by installing two dual speed controllers due to the small cylinder capacity. This can prevent the cylinder from ejecting.