

Dual Rod Cylinder Double Rod Type Series CXSW

ø6, ø10, ø15, ø20, ø25, ø32

How to Order

Thread type

Symbol	Type	Bore size
Nil	M thread	ø6 to ø20
	Rc 1/8	
TN	NPT 1/8	ø25, ø32
TF	G 1/8	

CXS W L 20 - 100 - Y7BW

Double rod type

Bearing type

Symbol	Type
M	Slide bearing
L	Ball bushing bearing

Bore size/Stroke (mm)

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

Number of auto switches

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

Auto switch

Symbol	Type
Nil	Without auto switch (Built-in magnet)

* For the applicable auto switch model, refer to the table below.

Applicable Auto Switch/Refer to pages 1719 to 1827 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-wired connector	Applicable load		
					DC	AC			Perpendicular	In-line	0.5 (Nil)	3 (L)				5 (Z)
Solid state switch	—	Grommet	Yes	3-wire (NPN)	24 V	5 V, 12 V	—	Y69A	Y59A	●	●	○	○	IC circuit	Relay, PLC	
				3-wire (PNP)		Y7PV		Y7P	●	●	○	○				
				2-wire		Y69B		Y59B	●	●	○	○				
	Diagnostic indication (2-color indication)			3-wire (NPN)		5 V, 12 V		Y7NWV	Y7NW	●	●	○	○	IC circuit		
				3-wire (PNP)		Y7PWV		Y7PW	●	●	○	○				
				2-wire		Y7BWV		Y7BW	●	●	○	○				
	Water resistant (2-color indication)				—	Y7BA**	—	●	○	○	—					
	Reed switch	—	Grommet	Yes	3-wire (NPN equivalent)	—	5 V	—	—	Z76	●	●	—	—	IC circuit	—
None				2-wire	24 V	12 V	100 V or less	—	Z73	●	●	●	—	—	—	Relay, PLC

* Lead wire length symbols: 0.5 m Nil (Example) Y59A
3 m L (Example) Y59AL
5 m Z (Example) Y59AZ

* Solid state auto switches marked with "○" are produced upon receipt of order.
** ø10, 15, 20 are not applicable. Please consult with SMC separately.

- Since there are other applicable auto switches than listed, refer to page 569 for details.
- For details about auto switches with pre-wired connector, refer to pages 1784 and 1785.
- Auto switches are shipped together (not assembled).

CX2

CXW

CXT

CXSJ

CXS

D-□

-X□

Individual
-X□

Series CXSW



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		
Ambient and fluid temperature	−10 to 60°C (No freezing)					
Piston speed	50 to 500 mm/s					
Cushion	Bumper is standard on both ends					
Stroke adjustable range	0 to −10 mm compared to the standard stroke (Extended end: 5 mm, Retracted end: 5 mm)					
Port size	M5 x 0.8				Rc 1/8	
Bearing type	Slide bearing, Ball bushing bearing (Same dimensions for both)					

Standard Stroke

Model	Standard stroke	Long stroke
CXSW□ 6	10, 20, 30, 40, 50	—
CXSW□10	10, 20, 30, 40, 50	75, 100, 125, 150
CXSW□15		
CXSW□20	10, 20, 30, 40, 50, 75, 100	125, 150, 175, 200
CXSW□25		
CXWS□32		

* For long strokes, it will be made-to-order. (-XB11)

Theoretical Output

Model	Rod size (mm)	Piston area (mm ²)	Operating pressure (MPa)						
			0.1	0.2	0.3	0.4	0.5	0.6	0.7
CXSW□ 6	4	31	4.6	6.2	9.3	12.4	15.5	18.6	21.7
CXSW□10	6	100	10	20	30	40	50	60	70
CXSW□15	8	252	25.2	50.4	75.6	101	126	151	176
CXSW□20	10	471	47.1	94.2	141	188	236	283	330
CXSW□25	12	756	75.6	151	227	302	378	454	529
CXSW□32	16	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
CXSWM 6	0.11	0.13	0.14	0.16	0.17	—	—
CXSWL 6	0.12	0.13	0.15	0.16	0.18	—	—
CXSWM10	0.24	0.26	0.28	0.30	0.32	0.37	0.42
CXSWL 10	0.25	0.27	0.29	0.31	0.33	0.38	0.43
CXSWM15	0.43	0.45	0.48	0.51	0.54	0.61	0.68
CXSWL 15	0.47	0.50	0.52	0.55	0.58	0.65	0.72
CXSWM20	0.71	0.74	0.78	0.82	0.85	0.95	1.04
CXSWL 20	0.75	0.79	0.82	0.86	0.90	0.99	1.08
CXSWM25	1.06	1.11	1.17	1.22	1.28	1.41	1.55
CXSWL 25	1.07	1.12	1.18	1.23	1.29	1.42	1.56
CXSWM32	2.04	2.12	2.21	2.29	2.38	2.59	2.81
CXSWL 32	2.06	2.15	2.23	2.32	2.41	2.62	2.83



Made to Order Specifications
(For details, refer to page 1861.)

Symbol	Specifications
-XB11	Long stroke