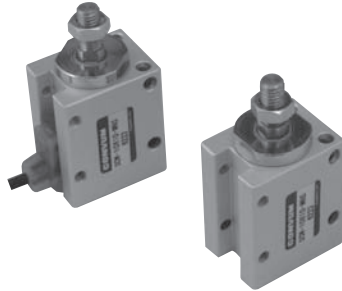
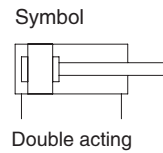


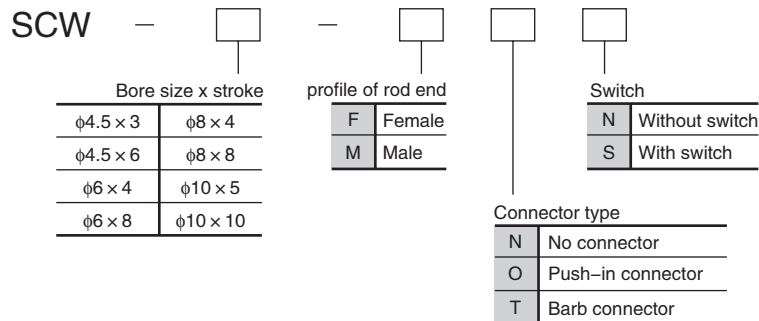
Miniature cylinders/Block type SCW series



- All types can be mounted with a switch.
A no contact switch is mountable on all sizes from $\phi 4.5$ through $\phi 10$.
- Two sides are available for mounting.
The rectangular housing has made it possible to mount on any of the two faces.
- The profile of the end of the rod is selectable.
Either a male thread or female thread can be selected.



How to order



Specifications

Bore size	mm	$\phi 4.5$	$\phi 6$	$\phi 8$	$\phi 10$
Operating type		Double acting			
Fluid		Non lubricated compressed air			
Proof pressure	MPa	0.9			
Max.operating pressure	MPa	0.6			
Min.operating pressure	MPa	0.2			
Ambient and fluid temp.	$^{\circ}\text{C}$	0 ~ 60 *1)			
Cushion		Without			
Stroke allowance	mm	0 ~ +1.0			
Piston speed range	mm / s	50 ~ 750			

*1) When using under 5°C , dry air should be supplied to prevent drain from freezing.

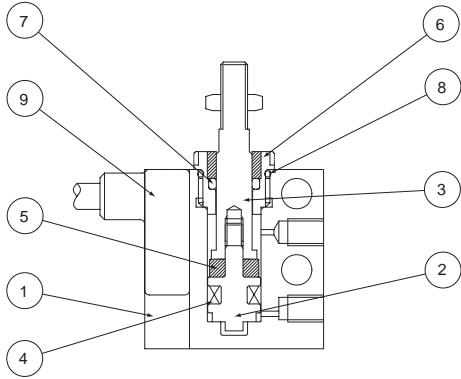
Standard stroke/applicable switch

Bore size (mm)	Standard stroke (mm)	Standard stroke
4.5	3, 6	SCW-S10
6	4, 8	
8	4, 8	
10	5, 10	

Switch

Model
SCW-S10

Structural drawing



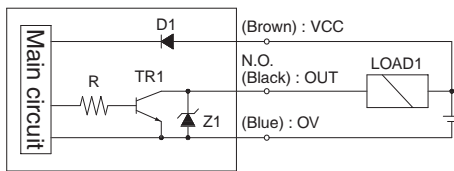
Main parts

No.	Name	material
1	Body	Aluminum
2	Piston	Stainless steel
3	Piston rod	Stainless steel
4	Piston packing	NBR
5	Magnet	—
6	Piston guide	Brass
7	Rod packing	NBR
8	Piston guide packing	NBR
9	Switch	—

Specifications (switch of cylinder)

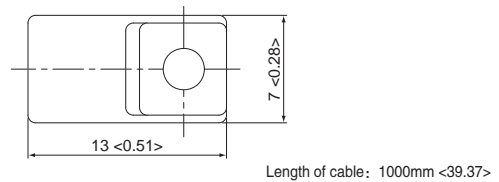
Type	Unit	SCW-S10
Power supply	V	DC12 ~ 24 V ± 10%, Ripple Vp-p 10% or less
Power consumption	mA	10 or less
Load current	mA	max 80
Load voltage	V	DC30V or less
Output system		NPN open collector, normal open
Response time	ms	Maximum driving frequency: Not more than 1
Indicator light		When output is ON, Red LED comes on.
Protection circuit		Power source reverse connection protection circuit
Protection structure		IP67
Operating ambient temperature	°C	-10 ~ +60(without dewing and freezing)
Range of operating humidity	%	35 ~ 85(RH)
Vibration resistance	Hz	10 ~ 150, double amplitude 1.5mm, 2 hours/each direction of XYZ
Shock resistance	m/s ²	100
Cable		Grommrnt: 2.5, 3-cores 1000mm robot cable

Switch internal circuit diagram



Dimensions

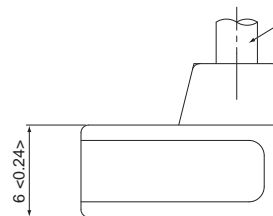
Unit : mm <inch>



Length of cable: 1000mm <39.37>

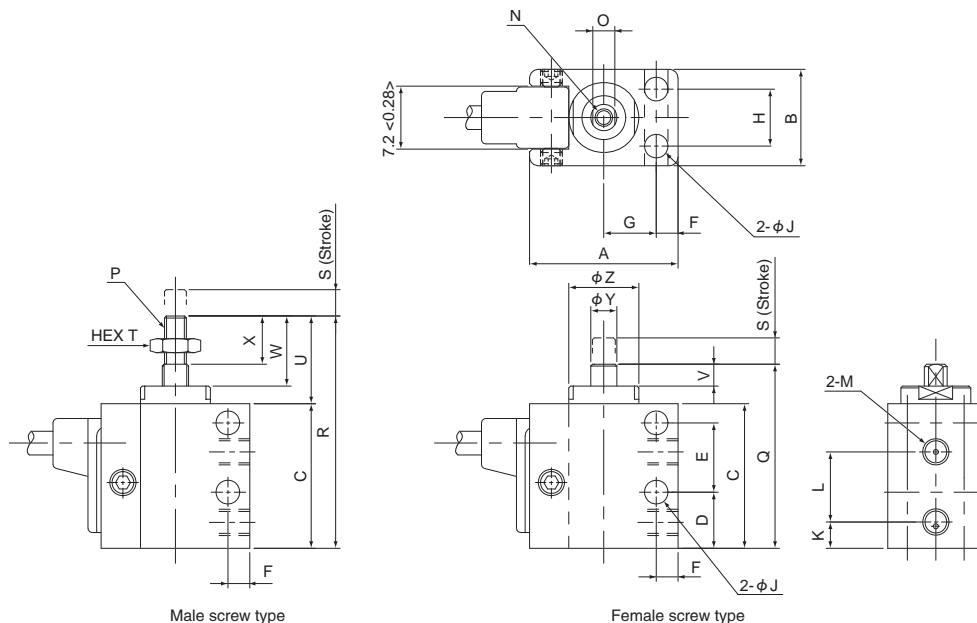
Mounting method of the switch

Mount the cylinder switch in the switch groove, with the side of the body fixed by the screw in it.



Dimensions

Unit : mm <inch>



mm

MODEL	A	B	C	D	E	F	G	H	J	K	L	M
SCW-4.5 × 3	17	11	16.5	6.4	7.9	2.5	6	6.5	2.7	3	8	M3
SCW-4.5 × 6	17	11	19.5	6.4	10.9	2.5	6	6.5	2.7	3	11	M3
SCW-6 × 4	20	13	20	8.8	8.5	3	7	7	3.2	4.5	8.5	M3
SCW-6 × 8	20	13	24	8.8	12.5	3	7	7	3.2	4.5	12.5	M3
SCW-8 × 4	24	16	22.5	8.5	11	3	9	10	3.2	4.5	9.5	M3
SCW-8 × 8	24	16	26.5	8.5	15	3	9	10	3.2	4.5	13.5	M3
SCW-10 × 5	24	18	23.5	9	11.5	3	9	12	3.2	4.5	11	M3
SCW-10 × 10	24	18	28.5	9	16.5	3	9	12	3.2	4.5	16	M3

mm

MODEL	N	P	Q	R	S	T	U	V	W	X	Y	Z
SCW-4.5 × 3	M2 depth 3.5	M2.5	21	26.5	3	5	10	2.5	8	5	3	8
SCW-4.5 × 6	M2 depth 3.5	M2.5	24	29.5	6	5	10	2.5	8	5	3	8
SCW-6 × 4	M3 depth 5	M3	24.5	31.5	4	5.5	11.5	2.7	9.5	7	4	9
SCW-6 × 8	M3 depth 5	M3	28.5	35.5	8	5.5	11.5	2.7	9.5	7	4	9
SCW-8 × 4	M3 depth 5	M4	27	35	4	7	12.5	2.5	10.5	7.5	5	14
SCW-8 × 8	M3 depth 5	M4	31	39	8	7	12.5	2.5	10.5	7.5	5	14
SCW-10 × 5	M3 depth 5	M5	29	39	5	8	15.5	2.5	12.5	8.5	6	16
SCW-10 × 10	M3 depth 5	M5	34	44	10	8	15.5	2.5	12.5	8.5	6	16

inch

MODEL	A	B	C	D	E	F	G	H	J	K	L	M
SCW-4.5 × 3	0.67	0.43	0.65	0.25	0.31	0.1	0.24	0.26	0.11	0.12	0.31	M3
SCW-4.5 × 6	0.67	0.43	0.77	0.25	0.43	0.1	0.24	0.26	0.11	0.12	0.43	M3
SCW-6 × 4	0.79	0.51	0.79	0.35	0.33	0.12	0.28	0.28	0.13	0.18	0.33	M3
SCW-6 × 8	0.79	0.51	0.94	0.35	0.49	0.12	0.28	0.28	0.13	0.18	0.49	M3
SCW-8 × 4	0.94	0.63	0.89	0.33	0.43	0.12	0.35	0.39	0.13	0.18	0.37	M3
SCW-8 × 8	0.94	0.63	1.04	0.33	0.59	0.12	0.35	0.39	0.13	0.18	0.53	M3
SCW-10 × 5	0.94	0.71	0.93	0.35	0.45	0.12	0.35	0.47	0.13	0.18	0.43	M3
SCW-10 × 10	0.94	0.71	1.12	0.35	0.65	0.12	0.35	0.47	0.13	0.18	0.63	M3

inch

MODEL	N	P	Q	R	S	T	U	V	W	X	Y	Z
SCW-4.5 × 3	M2 depth 0.14	M2.5	0.83	1.04	0.12	0.2	0.39	0.1	0.31	0.2	0.12	0.31
SCW-4.5 × 6	M2 depth 0.14	M2.5	0.94	1.16	0.24	0.2	0.39	0.1	0.31	0.2	0.12	0.31
SCW-6 × 4	M3 depth 0.2	M3	0.96	1.24	0.16	0.22	0.45	0.11	0.37	0.28	0.16	0.35
SCW-6 × 8	M3 depth 0.2	M3	1.12	1.4	0.31	0.22	0.45	0.11	0.37	0.28	0.16	0.35
SCW-8 × 4	M3 depth 0.2	M4	1.06	1.38	0.16	0.28	0.49	0.1	0.41	0.3	0.2	0.55
SCW-8 × 8	M3 depth 0.2	M4	1.22	1.54	0.31	0.28	0.49	0.1	0.41	0.3	0.2	0.55
SCW-10 × 5	M3 depth 0.2	M5	1.14	1.54	0.2	0.31	0.61	0.1	0.49	0.33	0.24	0.63
SCW-10 × 10	M3 depth 0.2	M5	1.34	1.73	0.39	0.31	0.61	0.1	0.49	0.33	0.24	0.63

Cylinders