

Reed Auto Switch Band Mounting Type D-C73/D-C76/D-C80



Refer to SMC website for the details of the products conforming to the international standards.

Auto Switch Specifications

PLC: Programmable Logic Controller

Grommet



D-C7 (With indicator light)			
Auto switch model	D-C73		D-C76
Applicable load	Relay, PLC		IC circuit
Load voltage	24 VDC ⁽⁴⁾	100 VAC	4 to 8 VDC
Max. load current and range ⁽³⁾	5 to 40 mA	5 to 20 mA	20 mA
Circuit diagram*	③		⑤
Contact protection circuit	None		
Internal voltage drop	2.4 V or less		0.8 V or less
Indicator light	Red LED illuminates when turned ON.		
Standard	CE marking		
D-C8 (Without indicator light)			
Auto switch model	D-C80		
Applicable load	Relay, PLC, IC circuit		
Load voltage	24 V ^{AC} DC or less	48 V ^{AC} DC	100 V ^{AC} DC
Max. load current	50 mA	40 mA	20 mA
Circuit diagram*	④		
Contact protection circuit	None		
Internal resistance	1 Ω or less (Including lead wire length of 3 m)		
Standard	CE marking		

Oilproof Heavy-duty Lead Wire Specifications

Auto switch model		D-C73	D-C76	D-C80
Sheath	Outside diameter [mm]	ø3.4		
Insulator	Number of cores	2 cores (Brown/Blue)	3 cores (Brown/Blue/Black)	2 cores (Brown/Blue)
	Outside diameter [mm]	ø1.1		
Conductor	Effective area [mm ²]	0.2		
	Strand diameter [mm]	ø0.08		
Lead wire minimum bending radius [mm] (Reference values)		21		

* Refer to the circuit diagram no. on page 1587.

Note 1) Refer to page 1584 for reed auto switch common specifications.

Note 2) Refer to page 1584 for lead wire lengths.

Note 3) Under 5 mA, the strength of the indicator light is poor. In some cases, visibility of the indicator light will not be possible where the output signal is less than 2.5 mA. However, there is no problem in terms of contact output, when an output signal exceeds 1 mA or more.

Note 4) The auto switches can operate at 12 VDC, but consider the internal voltage drop of the auto switch described in Reed Auto Switch Precautions on page 12.

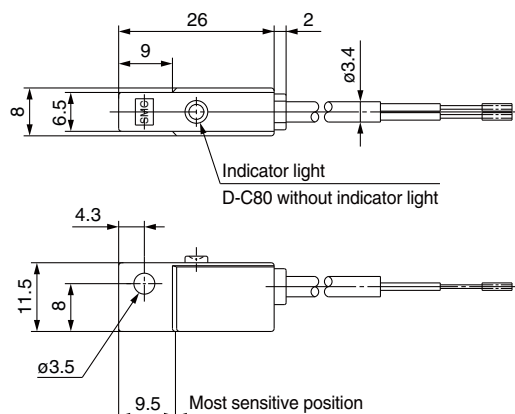
Weight

(g)

Auto switch model		D-C73	D-C76	D-C80
Lead wire length	0.5 m (Nil)	9	10	9
	3 m (L)	46	50	46
	5 m (Z)	76	—	—

Dimensions

(mm)



D-□

Made to Order Specifications: Solid State Auto Switch



Refer to SMC website for the details of the products conforming to the international standards.

1 With Pre-wired Connector

- Eliminates the harnessing work by cable with connector specifications
- Adopts global standardized connector (IEC947-5-2)
- IP67 construction



How to Order

D-M9N S A PC

Solid state auto switch
Standard part no.

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

Cable length

S	0.5 m
M	1.0 m
L	3.0 m

Note) L is available for the D-P4DW type only.

Connector model

A	M8-3 pin
B	M8-4 pin
D	M12-4 pin

Note) Type D is available for the D-P4DW type only.

Connector Specifications

Connector model	M8-3 pin	M8-4 pin	M12-4 pin
Pin arrangement			

Applicable Auto Switch

Mounting	Function	Electrical entry	Applicable model	Lead wire length (m)		
				0.5	1.0	3.0
Rail mounting type	—	Grommet (In-line)	F79, F7P, J79	●	●	—
	—	Grommet (Perpendicular)	F7NV, F7PV, F7BV	●	●	—
	2-color indicator	Grommet (In-line)	F79W, F7PW, J79W	●	●	—
	—	Grommet (Perpendicular)	F7NWW, F7BWW	●	●	—
	With diagnostic output	Grommet (In-line)	F79F	●	●	—
	Water resistant	Grommet (In-line)	F7BA	●	●	—
	—	Grommet (Perpendicular)	F7BAV	●	●	—
Band mounting type	—	—	F7NT	●	●	—
	—	—	P4DW	●	●	●
	—	—	H7A1, H7A2, H7B	●	●	—
	2-color indicator	—	G59, G5P, K59	●	●	—
	—	—	H7NW, H7PW, H7BW	●	●	—
	Diagnostic output	Grommet (In-line)	G59W, G5PW, K59W	●	●	—
	Water resistant	Grommet (In-line)	H7NF, G59F	●	●	—
Tie-rod mounting type	—	—	H7BA, G5BA	●	●	—
	With timer	—	G5NT	●	●	—
	Wide detection	—	G5NB	●	●	—
	—	—	F59, F5P, J59	●	●	—
	2-color indicator	—	F59W, F5PW, J59W	●	●	—
	Diagnostic output	—	F59F	●	●	—
	Water resistant	—	F5BA	●	●	—
Tie-rod mounting type	With timer	—	F5NT	●	●	—

Mounting	Function	Electrical entry	Applicable model	Lead wire length (m)		
				0.5	1.0	3.0
Direct mounting type	—	Grommet (In-line)	Y59A, Y7P, Y59B	●	●	—
		Grommet (Perpendicular)	Y69A, Y7PV, Y69B	●	●	—
		Grommet (In-line)	M9N, M9P, M9B	●	●	—
		Grommet (Perpendicular)	M9NV, M9PV, M9BV	●	●	—
		Grommet (In-line)	F8N, F8P, F8B	●	●	—
		Grommet (In-line)	F6N, F6P, F6B	●	●	—
	Normally closed	Grommet (In-line)	Y7G, Y7H	●	●	—
		Grommet (In-line)	F9G, F9H	●	●	—
	2-color indicator	Grommet (In-line)	Y7NW, Y7PW, Y7BW	●	●	—
		Grommet (Perpendicular)	Y7NWW, Y7PWW, Y7BWW	●	●	—
		Grommet (In-line)	M9NW, M9PW, M9BW	●	●	—
		Grommet (Perpendicular)	M9NWW, M9PWW, M9BWW	●	●	—
	Water resistant	Grommet (In-line)	Y7BA	●	●	—
		Grommet (Perpendicular)	M9NA, M9PA, M9BA	●	●	—
Rotary actuator	—	Grommet (In-line)	M9NAV, M9PAV, M9BAV	●	●	—
		Grommet (In-line)	S791/2, S7P1/2, T791/2	●	●	—
		Grommet (In-line)	S991/2, S9P1/2, T991/2	●	●	—
		Grommet (Perpendicular)	S99V1/2, T99V1/2	●	●	—

With Pre-wired Connector

Connector Pin Arrangement



M8-3 pin



M8-4 pin



M12-4 pin

Sensor type	Color distinction of lead wire				Meaning of contact number			
	1 pin	2 pin	3 pin	4 pin	1 pin	2 pin	3 pin	4 pin
DC 2-wire type	Brown	—	—	Blue	OUT (+)	—	—	OUT (–)
DC 2-wire, Non-polar type	—	—	Brown	Blue	—	—	OUT (±)	OUT (∓)
DC 3-wire type	Brown	—	Blue	Black	DC (+)	—	DC (–)	OUT
DC 4-wire type	Brown	Orange	Blue	Black	DC (+)	Diagnostic output	DC (–)	OUT

Connector Specifications

Connector model	M8-3 pin	M8-4 pin	M12-4 pin
Pin arrangement			
Conformed standard	JIS C 4524, JIS C 4525, IEC 947-5-2, NECA 0402		
Impact resistance	300 m/s ²		
Enclosure	IP67 (IEC60529 standard)		
Insulation resistance	100 MΩ or more at 500 VDC measured via megohmmeter		
Withstand voltage	1500 VAC 1 minute (between contacts), Leak current 1 mA or less		

Dimensions

Connector model	
M8-3 pin 4 pin	
M12-4 pin	

Weight for Connector Type

Part no.	Connector type	Weight
D-□□□APC	M8-3 pin	4 g
D-□□□BPC	M8-4 pin	4 g
D-□□□DPC	M12-4 pin	About 11 g

Connection (Female side) Connector Cable

As the parts are not supplied from SMC, refer to the application examples listed in the below.
(For detail such as catalog availability, etc., please contact each manufacturer.)

Connector size	Number of pins	Manufacturer	Applicable series example
M8	3	Phoenix Contact	SAC-3P
		Corrence Corporation	M8-3D
		OMRON Corporation	XS3
M12	4	Phoenix Contact	SAC-4P
		Corrence Corporation	VA-4D
		OMRON Corporation	XS2
		Azbil Corp.	PA5-4I
		HIROSE ELECTRIC CO., LTD.	HR24
		DDK Ltd.	CM01-8DP4S