

Solid State Switch, Made to Order With Pre-wired Connector



- Eliminates harnessing work by using a cable with a pre-wired connector specification.
- Adopts global standardised connector (IEC947-5-2).
- IP67 construction



How to Order

D-M9N S A PC

**Solid state switch
 standard model no.**

* For applicable auto switch models,
 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,
 D-M9N, D-M9P
 and D-M9B types

Connector type

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

Note 1) Only D is available with
 the D-P4DW type.

Note 2) D-M9NL, D-M9PL and
 D-M9BL types are only
 available with M8-3 pin
 connector

Connector Specifications

Connector type	M8-3 pins	M8-4 pins	M12-4 pins
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 for 1 minute (between contacts), Leakage current 1 mA or less		

Applicable Auto Switches

Mounting	Function	Electrical entry	Applicable model	Lead wire length (m)		
				0.5	1.0	3.0
Rail mounting style	—	Grommet (In-line)	F79, F7P, J79	●	●	—
		Grommet (Perpendicular)	F7NV, F7PV, F7BV	●	●	—
	2-colour indication	Grommet (In-line)	F79W, F7PW, J79W	●	●	—
		Grommet (Perpendicular)	F7NWV, F7BWV	●	●	—
	With diagnostic output	Grommet (In-line)	F79F	●	●	—
			F7BA	●	●	—
	Water resistant	Grommet (Perpendicular)	F7BAV	●	●	—
F7NT			●	●	—	
Magnetic field resistant	—	P4DW	●	●	●	
Band mounting style	—	Grommet (In-line)	H7A1, H7A2, H7B	●	●	—
			G59, G5P, K59	●	●	—
	2-colour indication		H7NW, H7PW, H7BW	●	●	—
			G59W, G5PW, K59W	●	●	—
	Diagnostic output		H7NF, G59F	●	●	—
			H7BA, G5BA	●	●	—
	Water resistant		G5NT	●	●	—
G5NB		●	●	—		
Tie-rod mounting style	—	F59, F5P, J59	●	●	—	
		F59W, F5PW, J59W	●	●	—	
	Diagnostic output	F59F	●	●	—	
	Water resistant	F5BA	●	●	—	
F5NT		●	●	—		

Mounting	Function	Electrical entry	Applicable model	Lead wire length (m)		
				0.5	1.0	3.0
Direct mounting style	—	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	●	●	—
			F9G, F9H	●	●	—
	2-colour indication	Grommet (In-line)	Y7NW, Y7PW, Y7BW	●	●	—
			Grommet (Perpendicular)	Y7NWV, Y7PWV, Y7BWV	●	●
Grommet (In-line)			M9NW, M9PW, M9BW	●	●	—
Grommet (Perpendicular)			M9NWV, M9PWV, M9BWV	●	●	—
Water resistant	Grommet (In-line)	Y7BA	●	●	—	
		M9NA, M9PA, M9BA	●	●	—	
		Grommet (Perpendicular)	M9NAV, M9PAV, M9BAV	●	●	—
Rotary actuator	—	Grommet (In-line)	S791/2, S7P1/2, T791/2	●	●	—
			S991/2, S9P1/2, T991/2	●	●	—
			Grommet (Perpendicular)	S99V1/2, T99V1/2	●	●

With Pre-wired Connector



M8-3 pins



M8-4 pins



M12-4 pins

Connector Pin Arrangement

Sensor type	Colour distinction of lead wire				Meaning of contact number			
	1 pin	2 pins	3 pins	4 pins	1 pin	2 pins	3 pins	4 pins
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

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Pin arrangement			
Conformed standard	JIS C 4524, JIS C 4525, IEC 947-5-2, NECA 0402		
Impact resistance	300 m/s ²		
Enclosure	IP67 (IEC529 standard)		
Insulation resistance	100 MΩ or more (at 500 VDC measured via Megohmmeter)		
Withstand voltage	1500 VAC for 1 minute (between contacts), Leak current 1 mA or less		

Dimensions

Connector type	Diagram
M8-3 pins 4 pins	
M12-4 pins	

Connection (Female Side) Connector Cable

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

Weight for Connector Type

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

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