

Solid State Switch with Prewired Connector Series D-PC

Eliminates troublesome connections

Harnessing work is reduced by the cable with connector specifications

Employs international standard (IEC947-5-2) connector

IP67 construction



How to Order

D — **F9N** **S** **A** **PC**

Solid state switch standard part number

* Refer to the table below for applicable auto switch part numbers.

Cord length

S	0.5m
M	1.0m
L	3.0m

Note) L is available for series D-P5DW only.

Connector type

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

Note) Series D-P5DW is available with type D only.

Connector specifications

Connector type	M8-3 pin	M8-4 pin	M12-4 pin
Pin arrangement			
Applicable standards	JIS C 4524, JIS C 4525, IEC 947-5-2, NECA 0402		
Impact resistance	300m/s ² {30, 6G}		
Enclosure	IP-67 (standard IEC529)		
Insulation resistance	100MΩ or more at 500VDC		
Withstand voltage	1500VAC for 1 min. (between connectors), leakage current 1mA or less		

Applicable Auto Switches

Mounting	Function	Electrical entry	Applicable model number	Lead wire length (m)		
				0.5	1.0	3.0
Rail mount	—	Grommet in-line	F79, F7P, J79	●	●	—
		Grommet perpendicular	F7NV, F7PV, F7BV	●	●	—
	2 color indicator	Grommet in-line	F79W, F7PW, J79W	●	●	—
		Grommet perpendicular	F7NWV, F7BWV	●	●	—
	With diagnostic output		F7LF, F79F	●	●	—
	Water resistant		F7BA	●	●	—
	With timer		F7NT	●	●	—
Magnetic field resistant		P5DW	●	●	●	
Band mount	—		H7A1, H7A2, H7B	●	●	—
			G59, G5P, K59	●	●	—
	2 color indicator		H7NW, H7PW, H7BW	●	●	—
			G59W, G5PW, K59W	●	●	—
	Diagnostic output		H7LF, H7NF, G59F	●	●	—
	Water resistant		H7BA, G5BA	●	●	—
	With timer		G5NT	●	●	—
Wide area detection		G5NB	●	●	—	
Tie-rod mount	—		F59, F5P, J59	●	●	—
			F59W, F5PW, J59W	●	●	—
	Diagnostic output		F5LF, F59F	●	●	—
	Water resistant		F5BA	●	●	—
	With timer		F5NT	●	●	—

Mounting	Function	Electrical entry	Applicable model number	Lead wire length (m)		
				0.5	1.0	3.0
Direct mount	—	Grommet in-line	M5N, M5P, M5B	●	●	—
			Y59A, Y7P, Y59B	●	●	—
		Grommet perpendicular	Y69A, Y7PV, Y69B	●	●	—
		Grommet in-line	F9N, F9P, F9B	●	●	—
	Grommet perpendicular	F9NV, F9PV, F9BV	●	●	—	
	2 color indicator	Grommet in-line	M5NW, M5PW, M5BW	●	●	—
			Y7NW, Y7PW, Y7BW	●	●	—
Grommet perpendicular		Y7NWV, Y7PWV, Y7BWV	●	●	—	
Water resistant	Grommet in-line	F9NW, F9PW, F9BW	●	●	—	
		F9NWV, F9PWV, F9BWV	●	●	—	
With timer	Grommet in-line	Y7BA, F9BA	●	●	—	
Rotary actuator	—	Grommet in-line	S791/2, S7P1/2, T791/2	●	●	—
			S991/2, S9P1/2, T991/2	●	●	—
		Grommet perpendicular	S99V1/2, T99V1/2	●	●	—

Connector Pin Layout



M8-3 pin



M8-4 pin



M12-4 pin

Sensor configuration	Lead wire colors				Connector number designations			
	1 pin	2 pin	3 pin	4 pin	1 pin	2 pin	3 pin	4 pin
DC 2 wire	Brown	-	-	Blue	OUT (+)	-	-	OUT (-)
DC 2 wire non-polar	-	-	Brown	Blue	-	-	OUT (±)	OUT (±)
DC 3 wire	Brown	-	Blue	Black	DC (+)	-	DC (-)	OUT
DC 4 wire	Brown	Orange	Blue	Black	DC (+)	Diagnostic output	DC (-)	OUT

Connector specifications

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Enclosure	IP67 (standard IEC529)		
Insulation resistance	100MΩ or more at 500VDC		
Withstand voltage	1500VAC for 1 min. (between connectors), leakage current 1mA or less		

Dimensions

Connector type	
M8-3 pin 4 pin	
M12-4 pin	

Matching (Female) Connector Cables

Since these are not supplied by SMC, refer to the table below for applicable examples. (Contact the respective manufacturers for catalogs or other details.)

Connector size	Number of pins	Manufacturer	Applicable series example
M8	3	Hirschmann	ELKA-KV 3308
		BRAD HARRISON	45310
		Lumberg	RKMV 3
		TURCK	PKGM 3
	4	Hirschmann	ELKA-KV 4408
		BRAD HARRISON	45410
		Lumberg	RKMV 4
		TURCK	PKGM 4
M12	4	OMRON	XS3
		Hirschmann	ELKA-KV 4412
		BRAD HARRISON	80456
		Lumberg	RKT 4-633
		TURCK	RK 4.4T
		OMRON	XS2