

Auto Switch Variations 2

Function	Type	Auto switch mounting style	Electrical entry	Auto switch model	Page
2-color indication	Solid state	Band	Grommet	D-H7NW/H7PW/H7BW	1294
				D-G59W/G5PW/K59W	1295
				D-F79W/F7PW/J79W	1296
		Rail	Grommet	D-F7NWV/F7BWV	1297
				D-F59W/F5PW/J59W	1298
				D-M9NW/M9PW/M9BW*	1299
		Tie-rod	Grommet	D-M9NWV/M9PWV/M9BWV*	
				D-Y7NW/Y7PW/Y7BW**	1300
				D-Y7NWV/Y7PWV/Y7BWV**	
		Direct	Grommet	D-M5NW/M5PW/M5BW	1301
	Reed				
	Band	Grommet	D-B59W	1345	
			D-A79W	1346	
			D-A59W	1347	

* These auto switches can be mounted with a band (except D-M9□WV and M9□AVL), a rail, a tie-rod or a square groove when auto switch mounting brackets are used. Refer to pages 1356, 1360, 1364, 1368 and 1369 for details.

** These auto switches can be mounted with a tie-rod when auto switch mounting brackets are used. Refer to page 1367 for details.

2-color indication

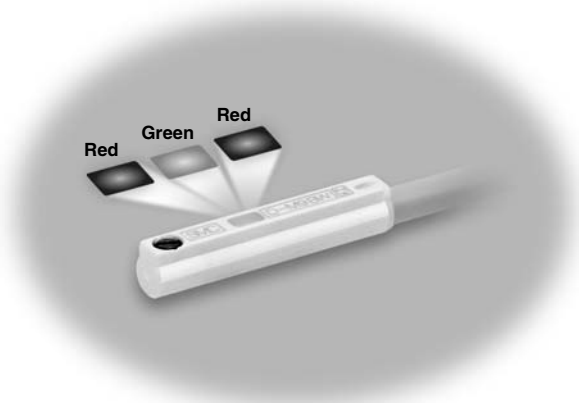
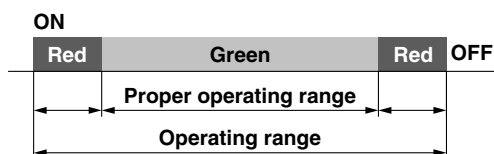
Easily identifiable, proper operating range

● Mounting positions can be set easily.

Proper operating range can be set while watching the lights.

● Displacement of the detecting position can be visually checked.

Trouble caused by incorrect detection can be prevented beforehand.



Even if 2-color indication solid state auto switches are fixed at a proper operating range (the green light lights up), the operation may become unstable depending on the installation environment or magnetic field disturbance.
 (Magnetic body, external magnetic field, proximal installation of cylinders with built-in magnet and actuators, temperature change, other factors for magnetic force fluctuation during operation, etc.)

Band mounting



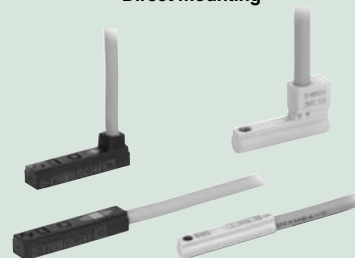
Rail mounting



Tie-rod mounting



Direct mounting



Solid State Auto Switch Direct Mounting Style D-F8N/D-F8P/D-F8B



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

Auto Switch Specifications

PLC: Programmable Logic Controller

D-F8□ (With indicator light)

Auto switch model	D-F8N	D-F8P	D-F8B
Electrical entry direction	Perpendicular	Perpendicular	Perpendicular
Wiring type	3-wire		2-wire
Output type	NPN	PNP	—
Applicable load	IC circuit, 24 VDC Relay, PLC		24 VDC relay, PLC
Power supply voltage	5, 12, 24 VDC (4.5 to 28 VDC)		—
Current consumption	10 mA or less		—
Load voltage	28 VDC or less	—	24 VDC (10 to 28 VDC)
Load current	40 mA or less	80 mA or less	2.5 to 40 mA
Internal voltage drop	1.5 V or less (0.8 V or less at 10 mA load current)	0.8 V or less	4 V or less
Leakage current	100 μ A or less at 24 VDC		0.8 mA or less at 24 VDC
Indicator light	Red LED illuminates when turned ON.		
Standard	CE marking		

- Lead wires — Oilproof heavy-duty vinyl cord, $\phi 2.7$
D-F8N, D-F8P 0.15 mm² x 3 cores (Brown, Black, Blue)
D-F8B 0.18 mm² x 2 cores (Brown, Blue)

Note 1) Refer to page 1272 for solid state auto switch common specifications.

Note 2) Refer to page 1272 for lead wire lengths.

Grommet



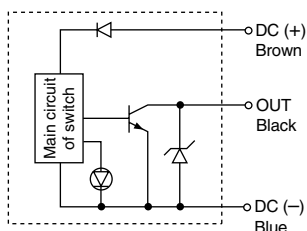
Caution

Precautions

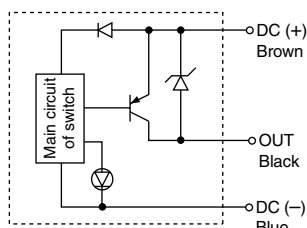
Fix the auto switch with the existing screw installed on the auto switch body. The auto switch may be damaged if a screw other than the one supplied is used.

Auto Switch Internal Circuit

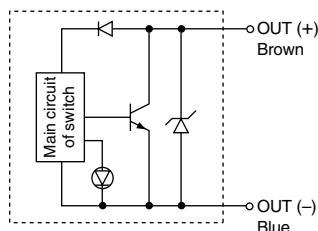
D-F8N



D-F8P



D-F8B



Mass

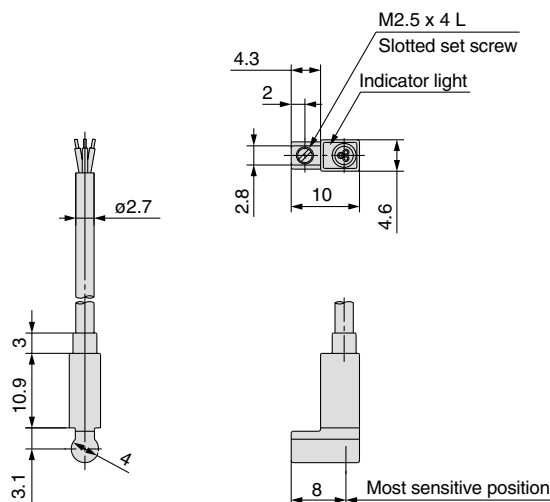
(g)

Auto switch model	D-F8N	D-F8P	D-F8B
Lead wire length (m)	0.5	7	7
	3	32	32
	5	52	52

Dimensions

(mm)

D-F8N/D-F8P/D-F8B



D-□