

Solid State Auto Switches

General Purpose Type, 2-Color Indication Type, 2-Color Indication Type with Diagnostic Output, Water Resistant 2-Color Indication Type, Hygienic Type, Timer Equipped Type, Magnetic Field Resistant Type, Heat Resistant Type, Wide Range Detection Type, Trimmer Auto Switch

Type	Function	Auto switch mounting style	Electrical entry	Auto switch model	Page
Solid State Auto Switch	General purpose	Band	Grommet	D-H7A1/H7A2/H7B	1278
			Connector	D-G59/G5P/K59	1279
			Terminal conduit	D-H7C	1280
		Rail	Grommet	D-G39/K39	1281
			Connector	D-G39A/K39A	1282
			Terminal conduit	D-F79/F7P/J79	1283
		Tie-rod	Grommet	D-F7NV/F7PV/F7BV	1284
			Connector	D-J79C	1285
			Grommet	D-F59/F5P/J59/J51	1286
		Direct	Terminal conduit	D-G39C/K39C	1287
			Grommet	D-M9N/M9P/M9B	1288
			Grommet	D-M9NV/M9PV/M9BV	1289
			Grommet	D-F8N/F8P/F8B	1289
			Grommet	D-F9G/F9H (Normally closed)	1290
			Grommet	D-Y59A/Y59B/Y7P	1291
			Grommet	D-Y69A/Y69B/Y7PV	1291
			Grommet	D-Y7G/Y7H (Normally closed)	1292
			Grommet	D-M5N/M5P/M5B	1293
	2-color indication	Band	Grommet	D-H7NW/H7PW/H7BW	1294
			Grommet	D-G59W/G5PW/K59W	1295
			Grommet	D-F79W/F7PW/J79W	1296
		Rail	Grommet	D-F7NWV/F7BWV	1297
			Grommet	D-F59W/F5PW/J59W	1298
			Grommet	D-M9NW/M9PW/M9BW	1299
		Tie-rod	Grommet	D-M9NWV/M9PWV/M9BWV	1299
			Grommet	D-Y7NW/Y7PW/Y7BW	1300
			Grommet	D-Y7NWV/Y7PWV/Y7BWV	1300
	2-color indication with diagnostic output	Band	Grommet	D-H7NF	1302
			Grommet	D-G59F	1303
			Grommet	D-F79F	1304
	Water resistant 2-color indication	Band	Grommet	D-F59F	1305
			Grommet	D-H7BAL	1306
			Grommet	D-G5BAL	1307
		Rail	Grommet	D-F7BAL	1308
			Grommet	D-F7BAVL	1308
			Grommet	D-F5BAL	1309
		Direct	Grommet	D-M9PA/M9NA/M9BA	1310
			Grommet	D-M9PAV/M9NAV/M9BAV	1311
	Hygienic	Direct	Grommet	D-Y7BAL	1311
	With timer	Direct	Grommet	D-F6N/F6P/F6B	1312
			Grommet	D-G5NTL	1313
			Grommet	D-F7NTL	1314
			Grommet	D-F5NTL	1315
	Magnetic field resistance	Rail, Tie-rod, Direct	Grommet	D-M5NTL/M5PTL	1316
			Grommet	D-P3DWSC/P3DWSE	1317-1
			Grommet	D-P3DW	1317-2
			Grommet	D-P4DWSC/P4DWSE	1317-3
	Heat resistant	Sensor section: Rail Amplifier section: DIN rail	Grommet	D-P4DWL	1318
			Grommet	D-F7NJL	1319
	Wide range detection	Band	Grommet	D-G5NBL	1320
	Trimmer Auto Switch	Rail	Grommet	D-F7K/Y7K	1321
			Grommet	D-F7K/Y7K	1321

Water Resistant 2-Color Indication Type Solid State Auto Switch: Direct Mounting Style

D-M9NA(V)/D-M9PA(V)/D-M9BA(V)

Grommet

- Water (coolant) resistant type
- 2-wire load current is reduced (2.5 to 40 mA).
- The proper operating range can be determined by the color of the light. (Red → Green ← Red)
- Using flexible cable as standard spec.



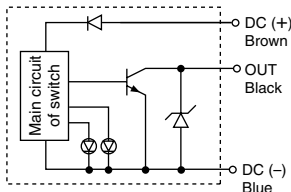
⚠ Caution

Precautions

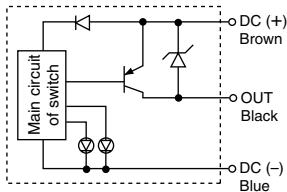
Fix the auto switch with the existing screw installed on the auto switch body. The auto switch may be damaged if a screw other than the one supplied is used.

Auto Switch Internal Circuit

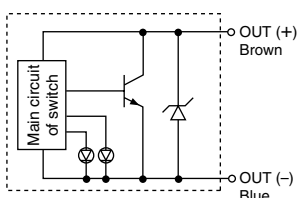
D-M9NA, D-M9NAV



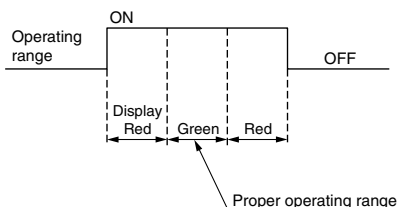
D-M9PA, D-M9PAV



D-M9BA, D-M9BAV



Indicator light/Display method



Auto Switch Specifications

PLC: Programmable Logic Controller

D-M9□A, D-M9□AV (With indicator light)						
Auto switch model	D-M9NA	D-M9NAV	D-M9PA	D-M9PAV	D-M9BA	D-M9BAV
Electrical entry direction	In-line	Perpendicular	In-line	Perpendicular	In-line	Perpendicular
Wiring type	3-wire				2-wire	
Output type	NPN		PNP		—	
Applicable load	IC circuit, Relay, PLC				24 VDC relay, PLC	
Power supply voltage	5, 12, 24 VDC (4.5 to 28 V)				—	
Current consumption	10 mA or less				—	
Load voltage	28 VDC or less		—		24 VDC (10 to 28 VDC)	
Load current	40 mA or less				2.5 to 40 mA	
Internal voltage drop	0.8 V or less at 10 mA (2 V or less at 40 mA)				4 V or less	
Leakage current	100 μA or less at 24 VDC				0.8 mA or less	
Indicator light	Operating range Red LED illuminates. Proper operating range Green LED illuminates.					
Standard	CE marking					

- Lead wires — Oilproof flexible heavy-duty vinyl cord: ø2.7 x 3.2 ellipse, 0.15 mm², 2 cores (D-M9BA(V)), 3 cores (D-M9NA(V), D-M9PA(V))

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

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

Mass

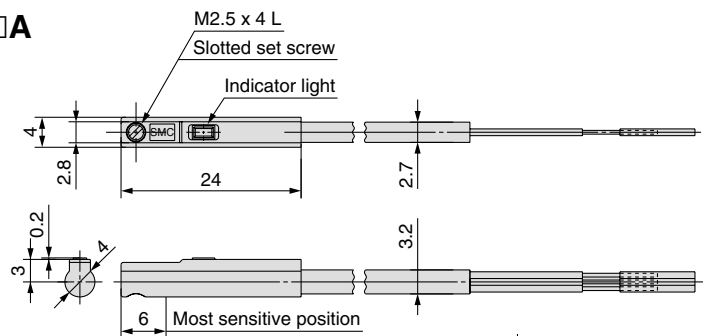
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Auto switch model		D-M9NA(V)	D-M9PA(V)	D-M9BA(V)
Lead wire length (m)	0.5	8	8	7
	1	14	14	13
	3	41	41	38
	5	68	68	63

Dimensions

(mm)

D-M9□A



D-M9□AV

