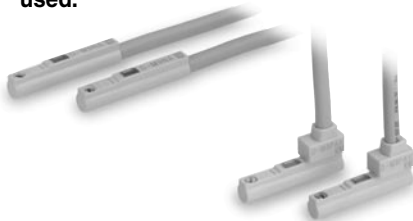


Water Resistant 2-Colour Indication Solid State Switch: Direct Mounting Style Series *D-M9NA(V)/D-M9PA(V)/D-M9BA(V)*



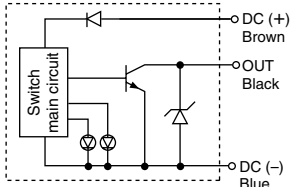
Grommet

- Water (coolant) resistant type
- 2-wire load current is reduced (2.5 to 40 mA).
- RoHS compliant
- UL certified (style 2844) lead cable is used.

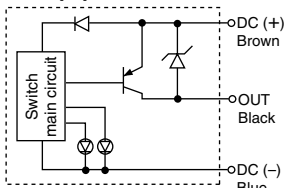


Auto Switch Internal Circuit

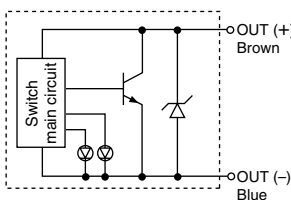
D-M9NA(V)



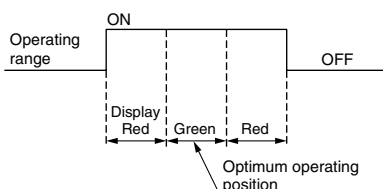
D-M9PA(V)



D-M9BA(V)



Indicator light / Display method



Auto Switch Specifications

PLC: Programmable Logic Controller

D-M9□A/D-M9□AV (With indicator light)						
Auto switch part no.	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 position Red LED illuminates. Optimum operating position Green LED illuminates.					

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

Solid State Switch Specifications

Leakage current	3-wire: 100 μA or less 2-wire: 0.8 mA or less
Operating time	1 ms or less
Impact resistance	1000 m/s ²
Insulation resistance	50 MΩ or more at 500 VDC Mega (between lead wire and case)
Withstand voltage	1000 VAC for 1 minute (between lead wire and case)
Ambient temperature	-10 to 60°C
Enclosure	IEC60529 standard IP67, JIS C 0920 waterproof construction

Weight

Unit: g

Auto switch part no.	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

How to Order

D-M9 N A V L

Model no. ●

Wiring/Output type ●

N	3-wire NPN
P	3-wire PNP
B	2-wire

● Lead wire length

-	0.5 m (Note 1)
M	1 m (Note 1)
L	3 m
Z	5 m (Note 1)

● Electrical entry direction

-	In-line
V	Perpendicular

Note 1) 0.5 m, 1 m, 5 m are produced upon receipt of order.

* With pre-wired connector is also available.

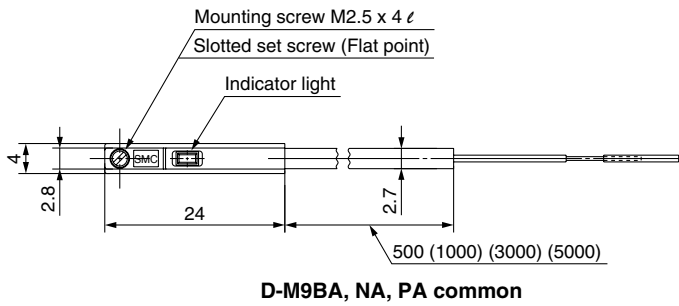
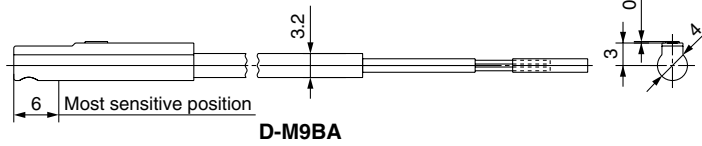
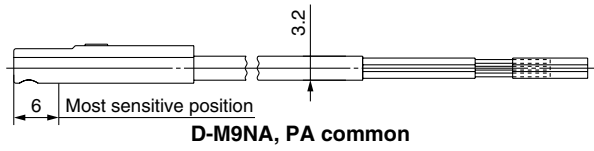
For details, refer to SMC Information 05-E527-1.

Series D-M9

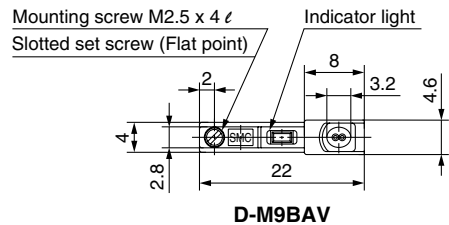
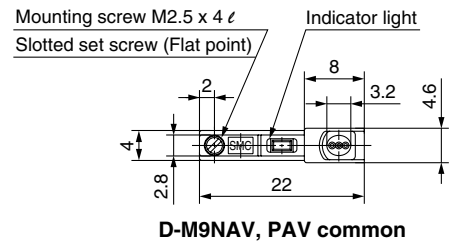
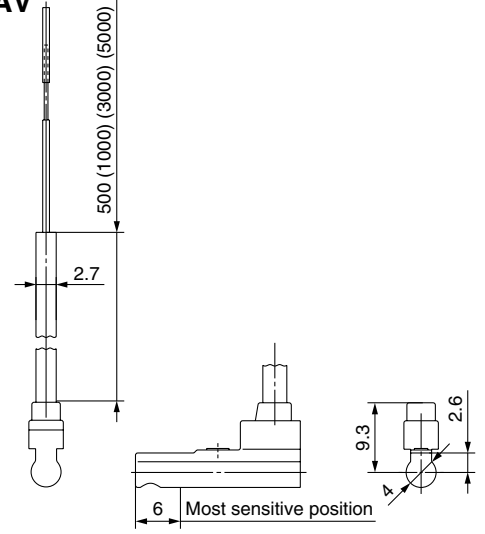
Dimensions

Unit: mm

D-M9□A



D-M9□AV



Applicable Cylinders and Operating Range

(Operating range: mm)

Series	Bore size													
	6	10	12	15	16	20	25	32	40	50	63	80	100	
CQS	—	—	3	—	4	5.5	5.5	—	—	—	—	—	—	
CQ2	—	—	—	—	—	—	—	6	6	7	7.5	8	8.5	
RQ	—	—	—	—	—	5.5	6	6	6	7	9.5	10	11	
CXT	—	—	3	—	4	5.5	5.5	6	6	—	—	—	—	
CLQ	—	—	—	—	—	4.5	4.5	5	5	6	6	6.5	7	
MK	—	—	3	—	4	—	—	6.5	5.5	6.5	6.5	—	—	
MK2	—	—	—	—	—	—	—	6.5	5.5	6.5	6.5	—	—	
RSQ	—	—	3	—	—	—	—	6	6	7	—	—	—	
CEP1	—	—	3	—	—	4	—	—	—	—	—	—	—	
CE1	—	—	—	—	—	—	—	6	6	6	7	—	—	
CXSJ	2.5	3	—	3.5	—	4.5	4.5	5	—	—	—	—	—	
RZQ	—	—	—	—	—	—	—	6	5.5	6	6.5	—	—	
RLQ	—	—	—	—	—	—	—	5.5	5	5.5	7	—	—	
CHKDB	—	—	—	—	—	4.5	4.5	—	—	—	—	—	—	
CHKGB	—	—	—	—	—	6	6	—	—	—	—	—	—	
CHQB	—	—	—	—	—	—	—	5.5	6	6.5	6.5	6.5	7.5	

Applicable Air Grippers and Hysteresis

(Hysteresis: mm)

Series	Size										
	6	10	12	16	20	25	32	40	50	63	80
MHZJ2	0.5	0.5	—	0.5	0.5	0.5	—	—	—	—	—
MHK(L)2	—	—	0.5	0.5	0.5	0.5	—	—	—	—	—
MHS2	—	—	—	0.5	0.5	0.5	—	—	—	—	—
MHSH3	—	—	—	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
MHSL3	—	—	—	0.5	0.5	0.5	—	—	—	—	—
MHSJ3	—	—	—	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
MHS4	—	—	—	0.5	0.5	0.5	—	—	—	—	—
MHT2	—	—	—	—	—	—	0.5	0.5	0.5	0.5	—
MHQJ2	—	0.5	—	0.5	0.5	0.5	—	—	—	—	—

Other

Coolant valve SGC series

Operating Range (mm)

Coolant valve	200	300	400
SGC	3	3.5	3.5

⚠ Specific Product Precautions

Be sure to read this before handling and refer to SMC's "Best Pneumatics" catalogue for safety instructions. For all other specifications, please consult with SMC.

Precautions for Handling

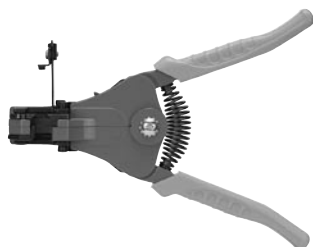
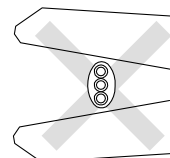
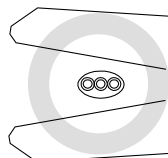
⚠ Caution

When using this product, use caution as below.

- When the cable sheath is stripped, confirm the stripping direction. The insulator may be split or damaged depending on the direction.
- Recommended Tool

Model name	Model no.
Wire stripper	D-M9N-SWY

* Stripper for a round cable (ø2.0) can be used for the 2-wire type cable.



- Fix the switch with the appropriate screw installed on the switch body. The switch may be damaged if other screws are used.