## Water Resistant 2-Color Indicator Solid State Auto Switch: Direct Mounting Type D-M9NA(V)/D-M9PA(V)/D-M9BA(V) ( $\in$ RoHs

## 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 $\rightarrow$ Green $\leftarrow$ 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.
Please consult with SMC if using coolant liquid other than water based solution.

## Weight

| Auto switch model | D-M9NA(V) | D-M9PA(V) |
| :--- | :--- | :--- |


| Lead <br> wire <br> length | $0.5 \mathrm{~m}(\mathbf{N i l})$ | 8 | 7 |
| :---: | :---: | :---: | ---: |
|  | $1 \mathrm{~m}(\mathbf{M})$ | 14 | 13 |
|  | $3 \mathrm{~m}(\mathbf{L})$ | 41 | 38 |
|  | $5 \mathrm{~m}(\mathbf{Z})$ | 68 | 63 |

Auto Switch Specifications

| PLC: Programmable Logic Controller |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| D-M9 $\square$ A, D-M9 $\square$ 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 | $100 \mu \mathrm{~A}$ or less at 24 VDC |  |  |  | 0.8 mA or less |  |
| Indicator light | Operating range .......... Red LED illuminates. <br> Proper operating range .......... Green LED illuminates. |  |  |  |  |  |
| Standard | CE marking (EMC directive/RoHS directive) |  |  |  |  |  |

Oilproof Flexible Heavy-duty Lead Wire Specifications

| Auto switch model |  |  | D-M9NA $\square$ D-M9NAV $\square$ D-M9PA $\square$ D-M9PAV $\square$ | D-M9BA $\square$ |
| :---: | :---: | :---: | :---: | :---: |
| Sheath | Outside diameter $[\mathrm{mm}]$ | 2.6 |  |  |
| Insulator | Number of cores | 3 cores (Brown/Blue/Black) | 2 cores (Brown/Blue) |  |
|  | Outside diameter $[\mathrm{mm}]$ | 0.88 |  |  |
| Conductor | Effective area $\left[\mathrm{mm}{ }^{2}\right]$ | 0.15 |  |  |
|  | Strand diameter $[\mathrm{mm}]$ | 0.05 |  |  |
| Minimum bending radius $[\mathrm{mm}]$ |  |  |  |  |

Note 1) Refer to page 1584 for solid state auto switch common specifications. Note 2) Refer to page 1584 for lead wire lengths.

Dimensions
D-M9 $\square A$


D-M9 $\square A V$

Mounting screw M2.5 4 L Stainless steel Indicator light Slotted set screw (flat point)



D- $\square$

