# 2-Colour Indication Solid State Switch: Direct Mounting Style Series $D-M 9 N W(V) / D-M 9 P W(V) / D-M 9 B W(V)$ 

## Grommet

- 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-M9NW(V)


D-M9BW(V)


Indicator light / Display method


Auto Switch Specifications

| PLC: Programmable Logic Controller |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| D-M9 $\square$ W/D-M9 $\square$ WV (With indicator light) |  |  |  |  |  |  |
| Auto switch part no. | D-M9NW | D-M9NWV | D-M9PW | D-M9PWV | D-M9BW | D-M9BWV |
| 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 r | relay, PLC |
| Power supply voltage | 5, 12, 24 VDC ( 4.5 to 28 V ) |  |  |  |  | - |
| Current consumption | 10 mA or less |  |  |  |  |  |
| Load voltage | 28 VD | 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 | r less |
| Leakage current | $100 \mu \mathrm{~A}$ or less at 24 VDC |  |  |  | 0.8 mA | or less |
| Indicator light | Operating position .......... Red LED illuminates. <br> Optimum operating position .......... Green LED illuminates. |  |  |  |  |  |
| - Lead wires - Oilproof heavy-duty vinyl cable: ø2.7 x 3.2 ellipse D-M9BW(V) $0.15 \mathrm{~mm}^{2} \times 2$ cores D-M9NW(V), D-M9PW(V) $0.15 \mathrm{~mm}^{2}$ x 3 cores |  |  |  |  |  |  |
| Solid State Switch Specifications |  |  |  |  |  |  |
| Leakage current | 3-wire: $100 \mu \mathrm{~A}$ or less 2 -wire: 0.8 mA or less |  |  |  |  |  |
| Operating time | 1 ms or less |  |  |  |  |  |
| Impact resistance | $1000 \mathrm{~m} / \mathrm{s}^{2}$ |  |  |  |  |  |
| Insulation resistance | $50 \mathrm{M} \Omega$ 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 $60^{\circ} \mathrm{C}$ |  |  |  |  |  |
| Enclosure | IEC60529 standard IP67, JIS C 0920 waterproof construction |  |  |  |  |  |

Weight
Unit: g

| Auto switch part no. |  | D-M9NW(V) | D-M9PW(V) | D-M9BW(V) |
| :---: | :---: | :---: | :---: | :---: |
| Lead wire length <br> $(\mathrm{m})$ | 0.5 | 8 | 8 | 7 |
|  | 1 | 14 | 14 | 13 |
|  | 3 | 41 | 41 | 38 |
|  | 5 | 68 | 68 | 63 |

How to Order


- Electrical entry direction
* With pre-wired connector is also available.

For details, refer to SMC Information 05-E527.

| - | In-line |
| :---: | :---: |
| V | Perpendicular |

## Series D-M9

Dimensions
D-M9■W



## $\triangle$ Specific Product Precautions

## Be sure to read this before handing and refer to SMC's "Best Pneumatics" catalogue for Safety Instructions. For all other specifications, please consult with SMC.

## Precautions for Handling

## $\triangle$ 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.

