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## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832
Email \& Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, \#122 Zhenhua RD., Futian, Shenzhen, China


Datasheet

## MICRO SWITCH ${ }^{\text {TM }}$ DM | DP Series Snap-in Panel Mount Basic Switches

MICRO SWITCH ${ }^{\text {TM }}$ DM/DP basic switches are designed for a variety of applications, and known for their compact, lightweight design and accurate repeatability. The DM/DP Series is a special application precision switch that can be used in a variety of applications, including appliance door lights and door interlocks, as well as service panels.

The DM/DP Series snap-action switches have momentary, push-pull, and pull-to-cheat configurations. The quickconnect terminals and snap-in, panel-mount housings provide easy installation. In addition to the standard quickconnect terminals ( $4,78 \mathrm{~mm} \times 0,51 \mathrm{~mm}$ [ $0.188 \mathrm{in} \times 0.020 \mathrm{in}$ ]), larger $6,35 \mathrm{~mm} \times 0,81 \mathrm{~mm}$ [ $0.25 \mathrm{in} \times 0.032 \mathrm{in}$ ] quickconnect terminals can be provided.

## What makes our switches better?

- The right switch at the right cost for the product performance
- Series meets industries' most common standard applications eliminating need for product modifications
- Repeatable and consistent performance for up to one million lifecycles
- DP Series meets UL 508 requirements with extended electrical endurance for industrial applications



## EASY INSTALLATION

Attractive, rugged snap-in design allows these switches to be easily installed. Quick-connect terminals reduce installation time.

## VARIETY OF CIRCUITRIES AND OPERATING ACTIONS

DM and DP Series switches offer a choice of momentary, push-pull, or pull-to-cheat actions to meet equipment requirements. Circuitry options of SPDT, DPDT, and SPNO fit a number of applications.

## Options for low energy circuits

## LONG LIFE

With a mechanical life of up to $\mathbf{1 , 0 0 0 , 0 0 0}$ operations, DM and DP Series switches deliver repeatable and consistent performance.

## UL 508 for industrial control equipment

## WIDE OPERATING TEMPERATURE RANGE

DM and DP Series operate from - $\mathbf{3 7}{ }^{\circ} \mathrm{C}$ to $\mathbf{8 2}{ }^{\circ} \mathrm{C}\left[-\mathbf{3 5}{ }^{\circ} \mathrm{F}\right.$ to $\left.\mathbf{1 8 0}{ }^{\circ} \mathrm{F}\right]$ to meet many different environmental requirements.

## EASILY CONTROLS LOW-VOLTAGE DC APPLICATIONS

Switches available with a choice of silver or gold-alloy contacts to handle a variety of electrical load requirements.

## MEETS UL 508

DP Series meets Industrial Control Equipment's (UL508) requirements with extended electrical endurance of 100,000 operations for long-life applications.

NORTH AMERICAN APPROVALS
DP: UL recognized file \#E22779, CSA certified file \#LR4442
DM: UL recognized file \#E12252, CSA certified file \#LR4442

## Potential Applications



## APPLIANCE DOOR LIGHTS

Used in turning lights "on" in refrigerators and freezers when the door is opened

## DOOR INTERLOCKS

Found as a door interlock on residential HVAC equipment and service panels to interrupt power when door access panels are opened

## INDICATOR CIRCUITS

Often used for general purposes to turn lights "on" or "off" when doors and/or panels are opened

## MICRO SWITCH ${ }^{\text {TM }}$ Snap-in Panel Mount Basic Switches

Table 1. Specifications

| Characteristic | Parameter |
| :--- | :---: |
| Description | snap-in panel mount basic switch |
| mctuators | momentary action <br> push-pull |
| push momentary, pull-to-cheat |  |
| Terminations | quick connect, $4,78 \mathrm{~mm} \times 0,51 \mathrm{~mm}[0.188$ in $\times 0.020 \mathrm{in}]$ |
| Amp rating | $10 \mathrm{~A}, 16 \mathrm{~A}$ |
| Operating temperature | $-37^{\circ} \mathrm{C}$ to $82^{\circ} \mathrm{C}\left[-35^{\circ} \mathrm{F}\right.$ to $\left.180^{\circ} \mathrm{F}\right]$ |
| Operating force | $4,17 \mathrm{~N}[15$ oz] max. |
| Mechanical life | 1 million operations, $95 \%$ survival |
| Circuitry | SPNO, SPDT, DPDT |
| Voltage | $125 \mathrm{Vac}, 250 \mathrm{Vac}, 277 \mathrm{Vac}$ |
| Approvals | $\mathrm{UL}, \mathrm{CSA}$ |

Table 2. Electrical Ratings

| Series |  |
| :--- | :---: |
| DM | UL and CSA rating: $10 \mathrm{~A}, 1 / 2 \mathrm{HP}, 125,250$ or 277 Vac |
| DP | UL standard 508, $14 \mathrm{~A}, 3 / 4 \mathrm{HP}, 125,250 \mathrm{Vac} ;$ |
|  | Pilot Duty: $150 \mathrm{VA}-125,250 \mathrm{Vac} ; 16 \mathrm{~A}, 125,250,277 \mathrm{Vac} ; 3 / 4 \mathrm{HP}, 125,250 \mathrm{Vac}$ |

## MOMENTARY ACTION

Momentary action switches are available in a choice of concave, convex, or bullet nose plunger styles.


## PUSH-PULL

When plunger is depressed, it remains in the depressed position and maintains circuit transfer. Switch contacts return to the previous position when the plunger is pulled to the original extended position.

## PULL-TO-CHEAT

Pull-to-cheat operates normally as a momentary action switch.
However, by pulling the plunger beyond the normal free position, a maintained-on position is achieved.

## POSSIBLE VARIATIONS

In addition to the standard quick-connect $4,78 \mathrm{~mm} \times 0,51 \mathrm{~mm}$ [ $0.188 \mathrm{in} \times 0.020 \mathrm{in}$ ] terminals, $6,35 \mathrm{~mm} \times 0,81 \mathrm{~mm}[0.25 \mathrm{in} \mathrm{x}$ 0.032 in terminals can be provided. The quick-connect terminals can be provided with terminals formed at different angles. DM plungers and faceplates are available in combinations of white, black, gray, or red.

## DM | DP Series

## DM SERIES ORDER GUIDE



** Extended position 23,6 mm (.930 in. max.)

## MICRO SWITCH™ Snap-in Panel Mount Basic Switches

## DM SERIES ORDER GUIDE



* Latch position 16,9 mm $\pm 0,76 \mathrm{~mm}$ (. $665 \mathrm{in} . \pm .030 \mathrm{in}$.)


## DP SERIES ORDER GUIDE



## DM | DP Series

## 1DM1, 1DM2, 1DM3 DIMENSIONS



## 1DM18 DIMENSIONS



## 1DM21, 1DM38 DIMENSIONS



## MICRO SWITCH ${ }^{\text {TM }}$ Snap-in Panel Mount Basic Switches



## 2DM6 DIMENSIONS



## 1DM401 DIMENSIONS



## DM | DP Series

## 2DM1 DIMENSIONS



## 2DM409 DIMENSIONS



## MICRO SWITCH ${ }^{\text {TM }}$ Snap-in Panel Mount Basic Switches

## 1DP5, 1DP8 DIMENSIONS



## PANEL CUTOUTS



This Honeywell datasheet supports the following MICRO SWITCH ${ }^{\text {TM }}$ DM \& DP Series Basic Switch Listings

| 1DM1 | 1DM338 | 1DP8 |
| :--- | :--- | :--- |
| 1DM152 | 1DM401 | 2DM1 |
| 1DM171 | 1DM418 | 2DM11 |
| 1DM175 | 1DM423 | 2DM301 |
| 1DM176 | 1DM425 | 2DM310 |
| 1DM18 | 1DM435 | 2DM4 |
| 1DM2 | 1DM437 | 2DM409 |
| 1DM21 | 1DM5 | 2DM438 |
| 1DM23 | 1DM502 | 2DM6 |
| 1DM3 | 1DM503 | 2DM640 |
| 1DM301 | 1DM57 | 2DM8 |
| 1DM32 | 1DM79 | 2DM83 |
| 1DM335 | 1DP5 | DM-10692 |

## ADDITIONAL INFORMATION

The following associated literature is available on Honeywell's web site at sensing.honeywell.com:

- Product installation instructions
- Product range guide
- Product application-specific information
- Application note: Sensors and Switches in Chemistry Analyzers


## A WARNING PERSONAL INJURY <br> DO NOT USE these products as safety or emergency stop devices or in any other application where failure of the product could result in personal injury. <br> Failure to comply with these instructions could result in death or serious injury.

## AWARNING MISUSE OF DOCUMENTATION

- The information presented in this product sheet is for reference only. Do not use this document as a product installation guide.
- Complete installation, operation, and maintenance information is provided in the instructions supplied with each product.
Failure to comply with these instructions could result in death or serious injury.


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or e-mail inquiries to
info.sc@honeywell.com

Sensing and Control
Honeywell
1985 Douglas Drive North
Golden Valley, MN 55422
honeywell.com

