# Honeywell 

# MICRO SWITCH Miniature Toggle Switches 

MT Series


## DESCRIPTION

Honeywell MICRO SWITCH MT Series miniature toggle switches are designed to meet the need for a rugged, costeffective toggle switch. Quality construction features include a seal between the toggle lever and bushing, and between the cover and case. These switches are designed for use in applications in many demanding outdoor environments, where the panels are subjected to such things as vibration from equipment, temperature extremes, dust, splashing water, and/ or hose directed water.

They are capable of withstanding exposure to heavy accumulations of early morning dew that may condense on the control panel in cabs of vehicles left outdoors overnight. The MT toggle switches with metal or plastic levers are well suited for gloved-hand operation.

The panel stand-off with O-ring feature available on some listings eliminates the need for behind-the-panel hardware, provides a uniform panel height, and a panel-to-cover seal.

## VALUE TO CUSTOMERS

- Spring-loaded mechanism provides enhanced tactile feedback for toggle switch lever
- High sealing level and electrical life cycle enable more uptime in field installations which helps in keeping machines working longer with less downtime
- Small size allows for smaller control box/panel size to reduce weight and operator fatigue


## FEATURES

- Miniature behind-panel size (case) enables overall control box or panel use
- IEC 60529-2001, IP67, IP68 (except terminal parts) sealing for harsh-duty applications
- Up to 60,000 electrical life that enhances the use time
- Available with 8 circuitry options
- 2- or 3- position maintained and momentary action to meet circuit and actuator requirements
- UL recognized, CE certified for global use


## POTENTIAL APPLICATIONS

Remote control box of

- Concrete pumping
- Cranes
- Material handling
- Boom trucks
- Any application with small panel constraints


## DIFFERENTIATION

- 60K life cycle offers an enhanced application life, keeping maintenance, replacement, and refurbishment at a minimum
- High seal rating (IP68) to protect the toggle from water ingress and support more equipment uptime


## PORTFOLIO

Honeywell offers an extensive line of MICRO SWITCH toggle switches, including the following Series: TL, NT, TW, TS, AT, and ET.

## MICRO SWITCH Miniature Toggle Switches, MT Series

Table 1. Specifications

| Characteristic | Parameter |
| :---: | :---: |
| Description | miniature, commercial-grade toggle switch |
| Sealing | IEC 60529-2001, IP67, IP68 (except terminal parts) |
| Operating temperature | $-40^{\circ} \mathrm{C}$ to $85^{\circ} \mathrm{C}$ [-40 ${ }^{\circ} \mathrm{F}$ to $\left.185^{\circ} \mathrm{F}\right]$ |
| Actuators | industry standard polished lever |
| Action | 2- or 3-position; momentary and maintained |
| Mounting | bushing 15/32 in (0.47 in) $\varnothing$ |
| Circuitry | UL 61058-1, SPST, SPDT, DPST, DPDT |
| Terminations | solder |
| Contacts | silver alloy, gold plated |
| Amp rating | $5 \mathrm{~A}, 28 \mathrm{Vdc}$ with silver contacts $100 \mathrm{~mA}, 28 \mathrm{Vdc}$ with gold-plated contacts |
| Electrical life | 60K cycles (SPDT, silver alloy and gold-plated contacts) 25 K cycles @ $5 \mathrm{~A}, 28 \mathrm{Vdc}$ (DPDT, silver alloy contacts) 60K cycles @ $100 \mathrm{~mA}, 28 \mathrm{Vdc}$ (DPDT, gold-plated contacts) |
| Mechanical life | 100 K cycles |
| Initial dielectric strength | UL 61058-1, $500 \mathrm{Vdc}, 10 \mathrm{~mA} / 1$ minute between open terminals |
| Salt spray | SAE J1455, duration 96 hours without red rust |
| Vibration | UL 60068-2-6, 10 Hz to $500 \mathrm{~Hz}, 10 \mathrm{G}$, duration two hours each direction |
| Solder ability | UL 61058-1, $350^{\circ} \mathrm{C} \pm 10^{\circ} \mathrm{C}, 3$ seconds |
| Approvals | UL, CE |
| Measurement | $26,7 \mathrm{~mm} \mathrm{H} \times 20 \mathrm{~mm} \mathrm{~W} \times 15 \mathrm{~mm} \mathrm{D}$ [1.05 in H $\times 0.79 \mathrm{in} \mathrm{W} \times 0.59 \mathrm{in} \mathrm{D]}$ |

MICRO SWITCH Miniature Toggle Switches, MT Series

Table 2. MT Series: Single Pole Order Guide

| No. of Poles | Circuits Made with Toggle At: |  |  | Catalog LIsting | Catalog Listing |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Keyway Side (1-2) | Center Position (1-2) | Opposite Keyway $(2-3)$ | Silver Alloy Contacts (5 A, 28 Vdc ) | Gold-Plated <br> Contacts <br> ( $100 \mathrm{~mA}, 28 \mathrm{Vdc}$ ) |
| 1 | ON | OFF | ON | 1MT1-1 | 1MT2-1 |
|  | OFF | - | ON | 1MT1-2 | 1MT2-2 |
|  | ON | - | ON | 1MT1-3 | 1MT2-3 |
|  | OFF* | - | ON | 1MT1-4 | 1MT2-4 |
|  | ON* | OFF | ON | 1MT1-5 | 1MT2-5 |
|  | ON* | - | OFF | 1MT1-6 | 1MT2-6 |
|  | ON* | OFF | ON* | 1MT1-7 | 1MT2-7 |
|  | ON* | - | ON | 1MT1-8 | 1MT2-8 |

* These positions are momentary. All others are maintained.

Table 3. MT Series: Double Pole Order Guide

| No. of Poles | Circuits Made with Toggle At: |  |  | Catalog LIsting | Catalog Listing |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Keyway Side $(1-2,4-5)$ | Center Position $(1-2,4-5)$ | Opposite Keyway $(2-3,5-6)$ | Silver Alloy Contacts (5 A, 28 Vdc ) | Gold-Plated Contacts ( $100 \mathrm{~mA}, 28 \mathrm{Vdc}$ ) |
| 2 | ON | OFF | ON | 2MT1-1 | 2MT2-1 |
|  | OFF | - | ON | 2MT1-2 | 2MT2-2 |
|  | ON | - | ON | 2MT1-3 | 2MT2-3 |
|  | OFF* | - | ON | 2MT1-4 | 2MT2-4 |
|  | ON* | OFF | ON | 2MT1-5 | 2MT2-5 |
|  | ON* | - | OFF | 2MT1-6 | 2MT2-6 |
|  | ON* | OFF | ON* | 2MT1-7 | 2MT2-7 |
|  | ON* | - | ON | 2MT1-8 | 2MT2-8 |

[^0]
## MICRO SWITCH Miniature Toggle Switches, MT Series

Figure 1. Dlmensions mm [in]


Figure 2. Panel Cutout


## ADDITIONAL MATERIALS

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

- Product installation instructions
- Product range guide
- Product application-specific information


## Find out more

Honeywell serves its customers through a worldwide network of sales offices, representatives and distributors. For application assistance, current specifications, pricing or name of the nearest Authorized Distributor, contact your local sales office. To learn more about Honeywell's sensing and switching products,
call +1-815-235-6847 or
1-800-537-6945,
visit sensing.honeywell.com, or
e-mail inquiries to
info.sc@honeywell.com

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components
Click to view similar products for Toggle Switches category:
Click to view products by Honeywell manufacturer:

Other Similar products are found below :
8928K478 020017-13 60012L 6006L CS115W CS120W 637H/25 6663 7101SPDV30BE 7103SDV30BE 7105D 7108P3YAV2BE 71YY50282 7300 K 367301 K 38 7306K36 7310 K 367506 K 4 7592K6 7660 K 12 7691K14 7700 K 18391 K 1088396 K 1088824 K 14 8828K13 8835K3 8858K44 PS83-121G 1-1825192-0 A201SCWZB04 A207SYCB04 A208J61ZQ0004 A221T1TCQ A232M1YCQ A323S1CWZQ A423S1CWZG-M8 1201W 12156AX408 12147AGKX679 12246X778 12TW49-3D 130312 13037L 13001X AE101MD1W4B04 AE208SD1W4B04 MS24659-22D MS27407-5 1520230-9


[^0]:    * These positions are momentary. All others are maintained.

