## Honeywell

## MICRO SWITCH ${ }^{\text {™ }}$ <br> Commercial-Grade Toggle Switches NT Series



Datasheet

## MICRO SWITCH™ NT Series Commercial-Grade Toggle Switches

Honeywell MICRO SWITCH ${ }^{\text {TM }}$ NT Series toggle switches meet the need for a rugged, cost-effective toggle switch. Quality construction features include a seal between the toggle lever and bushing, and between the cover and case. These switches are suitable for applications in many demanding outdoor environments, where the panels are subjected to 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 NT toggle switches with larger standard metal or plastic levers are well suited for gloved-hand operation.

Available in both step-base and flat-base styles, the NT Series offers three popular styles of termination: 6-32 screws, solder lugs with $3,0 \mathrm{~mm}$ [ 0.12 in ] diameter hole, or $6,35 \mathrm{~mm}$ [ 0.25 in$]$ quick connect terminals.

The optional "Easy Start" threaded bushing enables quick alignment of the mounting nut to minimize any cross threading. 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.

## What makes our switches better?

- NEMA 3, 3R, 4, 13 and IP67/68 environmental sealing for demanding applications
- UL recognized, CSA certified, and CE certified for global use
- 1-, 2-, and 4-pole options to meet a variety of circuitry requirements
- 2- or 3-position maintained and momentary action to meet circuit and actuator requirements
- Optional step-case design provides added space between terminals to prevent shorting


Tough environmental sealing makes harsh environments seem like just another sunny day.

SEALED TO NEMA 3, 3R, 4, 13 AND IP67/IP68 FOR GLOBAL USE MICRO SWITCH ${ }^{\text {TM }}$ NT toggle switches feature a moveable seal between the toggle lever and bushing and a completely sealed case to meet NEMA and IP seal ratings. They are suitable for applications in many demanding outdoor environments, where the panels are subjected to vibration from equipment, temperature extremes, dust, splashing water, and/or hose directed water. UL recognized, File E12252, Vol. 1, Section 44, CSA certified, and CE certified for global use

## Excellent tactile feedback

## WELL-SUITED FOR GLOVED-HAND OPERATION

Spring-loaded actuating mechanism provides excellent tactile feedback for the toggle switch lever. The NT toggle switches with larger standard metal or plastic levers are well suited for gloved-hand operation

## Locking levers reduce unintended actuation

## LOCKING LEVERS

Optional lever locks (pull-to-unlock) require two separate actions to actuate the switch in order to prevent unintended actuation

## MINIMIZES INSTALLATION TIME

Optional flat base case design with a quick connect terminal pattern mates to a commercial-type connector for plug-and-play connectivity, reducing installation time

## VARIETY OF CIRCUITRIES AND OPERATING ACTIONS

NT Series' 2- and 3-position, maintained and momentary toggle action, for a breadth of circuitry and actuator requirements. Delivers high performance in a wide range of temperatures: $-40^{\circ} \mathrm{C}$ to $71^{\circ} \mathrm{C}\left[-40^{\circ} \mathrm{F}\right.$ to $\left.160^{\circ} \mathrm{F}\right]$

## EASILY CONTROLS LOW-VOLTAGE DC APPLICATIONS

 Toggle switches available with a choice of silver alloy or gold-plated contacts to handle a variety of electrical load requirements
## INNOVATIVE PRODUCT DESIGN

Optional engineered step-design case provides added space between terminals to prevent shorting. Optional panel stand-off with O-ring panel seal eliminates behind-the-panel hardware

## Potential Applications



## AERIAL PLATFORM LIFTS

Momentary toggles are used to operate the movement of aerial platform lifts. Toggle can be used to raise \& lower, extend \& retract and rotate platform or outriggers.

## PLATFORM LIFTS FOR TRUCKS

Used to fold/unfold and raise/lower from a lift gate's control panel.

## INDUSTRIAL EQUIPMENT

Used in the control panel of overhead cranes and factory floor equipment.


## RAILROAD LOCOMOTIVES AND MAINTENANCE EQUPMENT

Designed into control panels often found in locomotives, rail grinders, tie removal, ballast spreaders, and tampers.

## CONSTRUCTION EQUIPMENT

Used to operate movement of machinery and/or turn on lights, pumps, etc. in road milling, road pavers, trenchers, stump cutting and other construction and mining equipment. Also widely used for remote control of concrete pumping and drilling machines.

## AGRICULTURAL MACHINERY

Used in control panels for harvesting equipment, grain handlers, and grain dryers.

## MICRO SWITCH ${ }^{\text {TM }}$ Commercial-Grade Toggle Switches

Table 1. Specifications

| Characteristic Parameter |  |
| :---: | :---: |
| Description | Commercial-grade toggle switch (step base and flat base options) |
| Sealing | IP67/IP68; NEMA 3, 3R, 4, and 13 |
| Operating temperature | $-40^{\circ} \mathrm{C}$ to $71{ }^{\circ} \mathrm{C}\left[-40^{\circ} \mathrm{F}\right.$ to $\left.160{ }^{\circ} \mathrm{F}\right]$ |
| Actuators | Standard, locking, special design, tab |
| Action | 2- or 3-position; momentary and maintained |
| Mounting | Bushing 15/32 in (0.47 in) $\varnothing$ |
| Circuitry | SPST, SPDT, DPST, DPDT, 4PST, 4PDT |
| Terminations | Screw, solder, quick connect |
| Contacts | Silver alloy, gold plated |
| Amp rating | Up to 20 A (resistive) |
| Approvals | UL, CSA, CE |
| Measurement | $26,7 \mathrm{~mm} \mathrm{H} \times 33,5 \mathrm{~mm} \mathrm{~W} \times 22,6 \mathrm{~mm} \mathrm{D}$ [1.05 in $\mathrm{H} \times 1.32$ in $\mathrm{W} \times 0.89 \mathrm{in} \mathrm{D}]$ |

Table 2. UL and CSA Electrical Ratings

| Rating code | Electrical rating |
| :--- | :---: |
| L 192 | $10 \mathrm{amps}, 125,250,277 \mathrm{Vac} ; 1 / 4 \mathrm{Hp}, 125 \mathrm{Vac} ; 1 / 2 \mathrm{Hp}, 250,277 \mathrm{Vac} ; 3 \mathrm{amps}, 125 \mathrm{Vac}$ " L " |
| L 191 | $15 \mathrm{amps}, 125,250,277 \mathrm{Vac} ; 1 / 2 \mathrm{Hp}, 125 \mathrm{Vac} ; 1 \mathrm{Hp}, 250,277 \mathrm{Vac} ; 5 \mathrm{amps}, 125 \mathrm{Vac}$ "L" |

Table 3. Electrical Ratings (in amperes)

| Electrical rating code | 28 Vdc |  |  | Res. | 250 Vdc <br> Res. | $115 \mathrm{Vac}, 60 \mathrm{~Hz}$ \& 400 Hz Max. |  |  | 230 Vac |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Ind. | Res. | Lamp |  |  | Ind. | Res. | Lamp | Res. |
| 1 | 12 | 20 | 5 | 0.75 | 0.5 | 10 | 15 | 3 | 6 |
| 2 | 10 | 15 | 4 | 0.75 | 0.5 | 7 | 15 | 2 | 6 |
| 3 | 15 | 20 | 7 | 0.75 | 0.5 | 15 | 15 | 4 | 6 |
| 4 | 10 | 18 | 5 | 0.75 | 0.5 | 8 | 11 | 2 | 6 |
| 5 | 12 | 20 | 5 | 0.75 | 0.5 | 15 | 15 | 4 | 6 |
| 6 | 10 | 18 | 4 | 0.75 | 0.5 | 8 | 11 | 2 | 6 |

## TERMINAL CIRCUIT IDENTIFICATION

Terminal identifications are referred to in the order guides to indicate which circuits are made in each toggle position (i.e., 1-2 refers to circuit closure through terminals 1 and 2).

NOTE: Keyside is on \#3 terminal side.
Step Base - One Pole


Step Base - Two Pole


Step Base - Four Pole


Flat Base - One Pole


Flat Base - Two Pole


## SPECIAL CIRCUITRIES

Catalog listings with $-10,-50$, and -70 suffix numbers, as shown in the order guides, have special "on-on-on" circuits, as illustrated below. NTs with -12 suffix are the same as -50 except the keyway position is maintained, and the center position circuits 2-3 and 4-5 are made.
-10 CIRCUITRY

| No of poles | Keyway Side Maint. Position | Center Maint. Position | Opposite Keyway Maint. Position |
| :---: | :---: | :---: | :---: |
| 2 | $\begin{aligned} & 0_{3}^{3}=0 \\ & 6 \\ & 6 \\ & 6 \\ & \hline \end{aligned}$ |  |  |
| 4 |  |  |  |

## -50 CIRCUITRY

| No of poles | Keyway Side Maint. Position | Center Maint. Position | Opposite Keyway Maint. Position |
| :---: | :---: | :---: | :---: |
| 2 |  |  |  |
| 4 |  |  |  |

## -70 CIRCUITRY

| No of poles | Keyway Side Maint. Position | Center Maint. Position | Opposite Keyway Maint. Position |
| :---: | :---: | :---: | :---: |
| 2 | $\begin{array}{ll} 0 & 0 \\ 3 & 2 \\ 3 & 2 \\ 6 & 5 \end{array}$ | $\begin{gathered} 0.0 \\ 3 \\ 20 \\ 6 \\ 6 \\ 6 \end{gathered}$ |  |
| 4 |  |  |  |

## MICRO SWITCH ${ }^{\text {TM }}$ Commercial-Grade Toggle Switches

## NT (STEP BASE) 2-POSITION ORDER GUIDE

|  | Circuits Made with Toggle At: |  |  |  | Catalog Listing (Standard Lever) |  |  | Pull-ToUnlock Lever (Add suffix to Standard Lever Listing)** |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. of poles | Keyway Position | Opposite Keyway | UL Rating Code | Elect. <br> Rating Code | Screw | Solder | Quick <br> Connect |  |
| 1 | OFF | 2-3 | L191 | 1 | 1NT1-2 | 11NT1-2 | 1NT91-2 | D, F, G |
|  | 1-2 | 2-3 | L191 | 1 | 1NT1-3 | 11NT1-3 | 1NT91-3 | D, F, G |
|  | OFF* | 2-3 | L192 | 2 | 1NT1-4 | 11NT1-4 | 1NT91-4 | F |
|  | 1-2* | OFF | L192 | 2 | 1NT1-6 | 11NT1-6 | 1NT91-6 | F |
|  | 1-2* | 2-3 | L192 | 2 | 1NT1-8 | 11NT1-8 | 1NT91-8 | F |
| 2 | OFF | 2-3, 5-6 | L191 | 3 | 2NT1-2 | 12NT1-2 | 2NT91-2 | D, F, G |
|  | 1-2, 4-5 | 2-3, 5-6 | L191 | 3 | 2NT1-3 | 12NT1-3 | 2NT91-3 | F |
|  | OFF* | 2-3, 5-6 | L192 | 4 | 2NT1-4 | 12NT1-4 | 2NT91-4 | F |
|  | 1-2, 4-5* | OFF | L192 | 4 | 2NT1-6 | 12NT1-6 | 2NT91-6 | D, F, G |
|  | 1-2, 4-5* | 2-3, 5-6 | L192 | 4 | 2NT1-8 | 12NT1-8 | 2NT91-8 | F |
| 4 | OFF | 2-3, 5-6, 8-9, 11-12 | L191 | 5 | 4NT1-2 | 14NT1-2 | 4NT91-2 | D, F, G |
|  | 1-2, 4-5, 7-8, 10-11 | 2-3, 5-6, 8-9, 11-12 | L191 | 5 | 4NT1-3 | 14NT1-3 | 4NT91-3 | F |
|  | OFF* | 2-3, 5-6, 8-9, 11-12 | L192 | 6 | 4NT1-4 | 14NT1-4 | 4NT91-4 | F |
|  | $\begin{aligned} & 1-2,4-5,7-8,10- \\ & 11^{*} \end{aligned}$ | OFF | L192 | 6 | 4NT1-6 | 14NT1-6 | 4NT91-6 | D, F, G |
|  | $\begin{aligned} & \begin{array}{l} 1-2,4-5,7-8,10- \\ 11^{*} \end{array} \end{aligned}$ | 2-3, 5-6, 8-9, 11-12 | L192 | 6 | 4NT1-8 | 14NT1-8 | 4NT91-8 | F |

* These positions are momentary. All others are maintained.
** See page 17 for locking configurations.


## NT (STEP BASE) 2-POSITION ORDER GUIDE•PANEL STAND-OFF FEATURE

|  | Circuits Made with Toggle At: |  |  |  | Catalog Listing (Standard Lever) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| No. of poles | Keyway Position | Opposite Keyway | UL Rating Code | Elect. Rating Code | Screw Terminals |
| 1 | OFF | 2-3 | L191 | 1 | 61NT1-2 |
|  | 1-2 | 2-3 | L191 | 1 | 61NT1-3 |
|  | 1-2* | OFF | L192 | 2 | 61NT1-6 |
|  | 1-2* | 2-3 | L192 | 2 | 61NT1-8 |
| 2 | OFF | 2-3, 5-6 | L191 | 3 | 62NT1-2 |
|  | 1-2, 4-5 | 2-3, 5-6 | L191 | 3 | 62NT1-3 |
|  | 1-2, 4-5* | OFF | L192 | 4 | 62NT1-6 |
|  | 1-2, 4-5* | 2-3, 5-6 | L192 | 4 | 62NT1-8 |

*These positions are momentary. All others are maintained.

## NT (STEP BASE) 3-POSITION ORDER GUIDE • PANEL STAND-OFF FEATURE

|  | Circuits Made with Toggle At: |  |  |  |  | Catalog Listing (Standard Lever) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. of poles | Keyway Position | Center Position | Opposite Keyway | UL Rating Code | Elect. Rating Code | Screw Terminals |
| 1 | 1-2 | OFF | 2-3 | L191 | 1 | 61NT1-1 |
|  | 1-2* | OFF | 2-3* | L192 | 2 | 61NT1-7 |
| 2 | 1-2, 4-5 | OFF | 2-3, 5-6 | L191 | 3 | 62NT1-1 |
|  | 1-2, 4-5* | OFF | 2-3, 5-6* | L192 | 4 | 62NT1-7 |

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## NT (STEP BASE) 3-POSITION ORDER GUIDE

|  | Circuits Made with Toggle At: |  |  |  |  | Catalog Listing (Standard Lever) |  |  | Pull-ToUnlock Lever (Add suffix to Standard Lever Listing)*** |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. of poles | Keyway Position | Center Position | Opposite Keyway | S |  | Screw | Solder | Quick <br> Connect |  |
| 1 | 1-2 | OFF | 2-3 | L191 | 1 | 1NT1-1 | 11NT1-1 | 1NT91-1 | ALL TYPES |
|  | 1-2* | OFF | 2-3 | L192 | 2 | 1NT1-5 | 11NT1-5 | 1NT91-5 | $\begin{aligned} & \mathrm{E}, \mathrm{~F}, \mathrm{~K}, \mathrm{~L}, \\ & \mathrm{M}, \mathrm{~N} \end{aligned}$ |
|  | 1-2* | OFF | 2-3* | L192 | 2 | 1NT1-7 | 11NT1-7 | 1NT91-7 | E, L, N |
|  | NONE** | OFF | 2-3 | L191 | 1 | 1NT1-21 | 11NT1-21 | 1NT91-21 | E, F, K, M |
|  | NONE** | 1-2 | 2-3 | L191 | 1 | 1NT1-31 | 11NT1-31 | 1NT91-31 | E, F, K, M |
|  | NONE** | 1-2 | 2-3* | L192 | 2 | 1NT1-51 | 11NT1-51 | 1NT91-51 | E |
|  | 1-2* | OFF | NONE** | L192 | 2 | 1NT1-61 | 11NT1-61 | 1NT91-61 | E |
| 2 | 1-2, 4-5 | OFF | 2-3, 5-6 | L191 | 3 | 2NT1-1 | 12NT1-1 | 2NT91-1 | ALL TYPES |
|  | 1-2, 4-5* | OFF | 2-3, 5-6 | L192 | 4 | 2NT1-5 | 12NT1-5 | 2NT91-5 | $\begin{aligned} & \mathrm{E}, \mathrm{~F}, \mathrm{~K}, \mathrm{~L}, \\ & \mathrm{M}, \mathrm{~N} \end{aligned}$ |
|  | 1-2, 4-5* | OFF | 2-3, 5-6* | L192 | 4 | 2NT1-7 | 12NT1-7 | 2NT91-7 | E, L, N |
|  | NONE* | OFF | 2-3, 5-6 | L191 | 3 | 2NT1-21 | 12NT1-21 | 2NT91-21 | E, F, K, M |
|  | NONE** | 1-2, 4-5 | 2-3, 5-6 | L191 | 3 | 2NT1-31 | 12NT1-31 | 2NT91-31 | E, F, K, M |
|  | NONE** | 1-2, 4-5 | 2-3, 5-6* | L192 | 4 | 2NT1-51 | 12NT1-51 | 2NT91-51 | E |
|  | 1-2, 4-5* | OFF | NONE** | L192 | 4 | 2NT1-61 | 12NT1-61 | 2NT91-61 | E |
|  | 1-2, 4-5 | 2-3, 4-5 | 2-3, 5-6 | L191 | 3 | 2NT1-12 | 12NT1-12 | 2NT91-12 | ALL TYPES |
|  | 1-2, 4-5 | 1-2, 5-6 | 2-3, 5-6 | L191 | 3 | 2NT1-10 | 12NT1-10 | 2NT91-10 | ALL TYPES |
|  | 1-2, 4-5* | 1-2, 5-6 | 2-3, 5-6 | L192 | 4 | 2NT1-50 | 12NT1-50 | 2NT91-50 | $\begin{aligned} & \mathrm{E}, \mathrm{~F}, \mathrm{~K}, \mathrm{~L}, \\ & \mathrm{M}, \mathrm{~N} \end{aligned}$ |
|  | 1-2, 4-5* | 1-2, 5-6 | 2-3, 5-6* | L192 | 4 | 2NT1-70 | 12NT1-70 | 2NT91-70 | E, L, N |
| 4 | $\begin{aligned} & 1-2,4-5,7-8 \text {, } \\ & 10-11 \end{aligned}$ | OFF | 2-3, 5-6, 8-9, 11-12 | L191 | 5 | 4NT1-1 | 14NT1-1 | 4NT91-1 | ALL TYPES |
|  | $\begin{aligned} & 1-2,4-5,7-8, \\ & 10-11^{*} \end{aligned}$ | OFF | 2-3, 5-6, 8-9, 11-12 | L192 | 6 | 4NT1-5 | 14NT1-5 | 4NT91-5 | $\begin{aligned} & \mathrm{E}, \mathrm{~F}, \mathrm{~K}, \mathrm{~L}, \\ & \mathrm{M}, \mathrm{~N} \end{aligned}$ |
|  | $\begin{aligned} & 1-2,4-5,7-8, \\ & 10-11^{*} \end{aligned}$ | OFF | $\begin{aligned} & 2-3,5-6,8-9,11- \\ & 12^{*} \end{aligned}$ | L192 | 6 | 4NT1-7 | 14NT1-7 | 4NT91-7 | E, L, N |
|  | NONE* | OFF | 2-3, 5-6, 8-9, 11-12 | L191 | 5 | 4NT1-21 | 14NT1-21 | 4NT91-21 | E, F, K, M |
|  | NONE** | $\begin{aligned} & 1-2,4-5,7-8, \\ & 10-11 \end{aligned}$ | 2-3, 5-6, 8-9, 11-12 | L191 | 5 | 4NT1-31 | 14NT1-31 | 4NT91-31 | E, F, K, M |
|  | NONE** | $\begin{aligned} & 1-2,4-5,7-8, \\ & 10-11 \end{aligned}$ | $\begin{aligned} & 2-3,5-6,8-9,11- \\ & 12^{*} \end{aligned}$ | L192 | 6 | 4NT1-51 | 14NT1-51 | 4NT91-51 | E |
|  | $\begin{aligned} & 1-2,4-5,7-8, \\ & 10-11^{*} \end{aligned}$ | OFF | NONE ${ }^{* *}$ | L192 | 6 | 4NT1-61 | 14NT1-61 | 4NT91-61 | E |
|  | $\begin{aligned} & 1-2,4-5,7-8, \\ & 10-11 \end{aligned}$ | $\begin{aligned} & 2-3,4-5,7-8 \\ & 11-12 \end{aligned}$ | $2-3,5-6,8-9,11-12$ | L191 | 5 | 4NT1-12 | 14NT1-12 | 4NT91-12 | ALL TYPES |
|  | $\begin{aligned} & 1-2,4-5,7-8, \\ & 10-11 \end{aligned}$ | 2-3, 4-5 | 2-3, 5-6, 8-9, 11-12 | L191 | 5 | 4NT1-10 | 14NT1-10 | 4NT91-10 | ALL TYPES |
|  | $\begin{aligned} & 1-2,4-5,7-8, \\ & 10-11^{*} \end{aligned}$ | $\begin{aligned} & 2-3,4-5,7-8, \\ & 11-12 \end{aligned}$ | 2-3, 5-6, 8-9, 11-12 | L192 | 6 | 4NT1-50 | 14NT1-50 | 4NT91-50 | $\begin{aligned} & \mathrm{E}, \mathrm{~F}, \mathrm{~K}, \mathrm{~L}, \\ & \mathrm{M}, \mathrm{~N} \end{aligned}$ |
|  | $\begin{aligned} & 1-2,4-5,7-8, \\ & 10-11^{*} \end{aligned}$ | 2-3, 4-5 | $\begin{aligned} & 2-3,5-6,8-9,11- \\ & 12^{\star} \end{aligned}$ | L192 | 6 | 4NT1-70 | 14NT1-70 | 4NT91-70 | E, L, N |
|  | $\begin{aligned} & 1-2,4-5,7-8 \\ & 10-11^{*} \end{aligned}$ | $\begin{aligned} & 2-3,4-5,7-8, \\ & 11-12 \end{aligned}$ | $\begin{aligned} & 2-3,5-6,8-9,11- \\ & 12^{*} \end{aligned}$ | L192 | 6 | 4NT1-72 | - | - | E, L, N |

* These positions are momentary. All others are maintained.
** Toggle lever is blocked from these products. Toggle becomes 2-position, with center being one extreme position.
*** See page 17 for locking configurations.


## MICRO SWITCH ${ }^{\text {TM }}$ Commercial-Grade Toggle Switches

## NT (FLAT BASE) 2-POSITION ORDER GUIDE

|  | Circuits Made with Toggle At: |  |  |  | Catalog Listing |
| :---: | :---: | :---: | :---: | :---: | :---: |
| No. of poles | Keyway Position | Opposite Keyway | UL Rating Code | Elect. Rating Code | Quick Connect |
| 1 | OFF | 2-3 | L191 | 1 | 31NT91-2 |
|  | 1-2 | 2-3 | L191 | 1 | 31NT91-3 |
|  | OFF** | 2-3 | L192 | 2 | 31NT91-4 |
|  | 1-2** | OFF | L192 | 2 | 31NT91-6 |
|  | 1-2** | 2-3 | L192 | 2 | 31NT91-8 |
| 2 | OFF | 2-3, 5-6 | L191 | 3 | 32NT91-2 |
|  | 1-2, 4-5 | 2-3, 5-6 | L191 | 3 | 32NT91-3 |
|  | OFF** | 2-3, 5-6 | L192 | 4 | 32NT91-4 |
|  | 1-2, 4-5** | OFF | L192 | 4 | 32NT91-6 |
|  | 1-2, 4-5** | 2-3, 5-6 | L192 | 4 | 32NT91-8 |

** These positions are momentary. All others are maintained.

## NT (FLAT BASE) 2-POSITION ORDER GUIDE • PANEL STAND-OFF FEATURE

|  | Circuits Made with Toggle At: |  |  |  | Catalog Listing (Standard Lever) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| No. of poles | Keyway Position | Opposite Keyway | UL Rating Code | Elect. Rating Code | Quick Connect |
| 1 | OFF | 2-3 | L191 | 1 | 631NT91-2 |
|  | 1-2** | 2-3 | L191 | 1 | 631NT91-3 |
|  | OFF | 2-3 | L192 | 2 | 631NT91-4 |
|  | 1-2** | OFF | L192 | 2 | 631NT91-6 |
|  | $1-2^{* *}$ | 2-3 | L192 | 2 | 631NT91-8 |
| 2 | OFF | 2-3, 5-6 | L191 | 3 | 632NT91-2 |
|  | 1-2, 4-5 | 2-3, 5-6 | L191 | 3 | 632NT91-3 |
|  | OFF** | 2-3, 5-6 | L192 | 4 | 632NT91-4 |
|  | 1-2, 4-5** | OFF | L192 | 4 | 632NT91-6 |
|  | 1-2, 4-5** | 2-3, 5-6 | L192 | 4 | 632NT91-8 |

**These positions are momentary. All others are maintained

## MATING CONNECTORS ORDER GUIDE

| Catalog listing | Description |
| :--- | :--- |
| 19PA168-NT | 2-pole connector |
| 19PA169-NT | 1-pole connector, same package size as 2-pole connector |

## NT Series

## NT (FLAT BASE) 3-POSITION ORDER GUIDE

|  | Circuits Made with Toggle At: |  |  |  |  | Catalog Listing (Standard Lever) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. of poles | Keyway Position | Center Position | Opposite Keyway | UL Rating Code | Elect. Rating Code | Quick Connect |
| 1 | 1-2 | OFF | 2-3 | L191 | 1 | 31NT91-1 |
|  | 1-2** | OFF | 2-3 | L192 | 2 | 31NT91-5 |
|  | 1-2** | OFF | 2-3** | L192 | 2 | 31NT91-7 |
|  | NONE*** | OFF | 2-3 | L191 | 1 | 31NT91-21 |
|  | NONE*** | 1-2 | 2-3 | L191 | 1 | 31NT91-31 |
|  | NONE*** | 1-2 | 2-3** | L192 | 2 | 31NT91-51 |
|  | 1-2** | OFF | NONE*** | L192 | 2 | 31NT91-61 |
| 2 | 1-2, 4-5 | OFF | 2-3, 5-6 | L191 | 3 | 32NT91-1 |
|  | 1-2, 4-5** | OFF | 2-3, 5-6 | L192 | 4 | 32NT91-5 |
|  | 1-2, 4-5** | OFF | 2-3, 5-6** | L192 | 4 | 32NT91-7 |
|  | NONE*** | OFF | 2-3, 5-6 | L191 | 3 | 32NT91-21 |
|  | NONE*** | 1-2, 4-5 | 2-3, 5-6 | L191 | 3 | 32NT91-31 |
|  | NONE*** | 1-2, 4-5 | 2-3, 5-6** | L192 | 4 | 32NT91-51 |
|  | 1-2, 4-5** | OFF | NONE*** | L192 | 4 | 32NT91-61 |
|  | 1-2, 4-5 | 2-3, 5-6 | 2-3, 5-6 | L191 | 3 | 32NT91-12 |
|  | 1-2, 4-5 | 1-2, 5-6 | 2-3, 5-6 | L191 | 3 | 32NT91-10 |
|  | 1-2, 4-5** | 1-2, 5-6 | 2-3, 5-6 | L192 | 4 | 32NT91-50 |
|  | 1-2, 4-5** | 1-2, 5-6 | 2-3, 5-6** | L192 | 4 | 32NT91-70 |

** These positions are momentary. All others are maintained.
${ }^{* * *}$ Toggle lever is blocked from these positions. Toggle becomes 2-position, with center being one extreme position.

## NT (FLAT BASE) 3-POSITION ORDER GUIDE • PANEL STAND-OFF FEATURE

|  | Circuits Made with Toggle At: |  |  |  |  | Catalog Listing (Standard Lever) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. of poles | Keyway Position | Center Position | Opposite Keyway | UL Rating Code | Elect. Rating Code | Quick Connect |
| 1 | 1-2** | OFF | 2-3** | L192 | 2 | 631 NT91-7 |
|  | 1-2 | OFF | 2-3 | L191 | 1 | 631NT91-1 |
|  | 1-2** | OFF | 2-3 | L191 | 2 | 631NT91-5 |
| 2 | 1-2, 4-5 | OFF | 2-3, 5-6 | L191 | 3 | 632NT91-1 |
|  | 1-2, 4-5** | OFF | 2-3, 5-6 | L192 | 4 | 632NT91-5 |
|  | 1-2, 4-5** | OFF | 2-3, 5-6** | L192 | 4 | 632NT91-7 |
|  | 1-2, 4-5** | 1-2, 5-6 | 2-3, 5-6** | L192 | 4 | 632NT91-70 |

[^1]
## MICRO SWITCH ${ }^{\text {TM }}$ Commercial-Grade Toggle Switches

STEP BASE • STANDARD ACTUATOR OPTIONS, TERMINALS, \& DIMENSIONS
Note: Three-position switches shown


Locking lever dimensions for single pole NT toggles


STEP BASE • STANDARD ACTUATOR OPTIONS, TERMINALS, \& DIMENSIONS
Note: Three-position switches shown


Locking lever dimensions for double pole NT toggles


## MICRO SWITCH ${ }^{\text {TM }}$ Commercial-Grade Toggle Switches

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Note: Three-position switches shown


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Note: Three-position switches shown


## MICRO SWITCH ${ }^{\text {TM }}$ Commercial-Grade Toggle Switches

FLAT BASE • STANDARD ACTUATOR OPTIONS, TERMINALS, \& DIMENSIONS
Note: Three-position switches shown

| 31NT91: Single pole, standard lever, quick-connect terminals | 631NT91: Single pole, standard lever, panel standoff, quick-connect terminals |
| :---: | :---: |
|  |  |
| 32NT91: Double pole, standard lever, quick-connect terminals | 632NT91: standard lever, panel standoff, quick-connect terminals |
|  |  |

## MICRO SWITCH™ NT SERIES LOCKING CONFIGURATIONS



## PULL-TO-UNLOCK LEVERS

Pull-to-unlock toggle levers prevent accidental toggle movement. The knobbed toggle lever must be pulled out approximately $2,3 \mathrm{~mm}$ [0.09 in] to change positions. Thirteen different locking configurations are available. This lever style also has a non-glare matte nickel finish. See table below for specific locking configurations.

## MICRO SWITCH ${ }^{\text {™ }}$ NT SERIES PANEL CUTOUT



With locking ring


Without locking ring

Note:
(0) $1,4 / .06$ MIN DEEP TO ACCOMMODATE LOCKING

RING. 15PA87 PANEL SEAL REQUIRES BLIND HOLE TO INSURE SEAL INTEGRITY

## ADDITIONAL INFORMATION

The following associated literature is available at sensing.honeywell.com:

- Product range guide
- Product application-specific information
- Sensors and switches in front loaders
- Sensors and switches in mobile cranes
- Sensors and switches in oil rig applications


## 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 control products,
call +1-815-235-6847 or
1-800-537-6945,
visit sensing.honeywell.com,
or e-mail inquiries to
info.sc@honeywell.com

## A WARNING <br> PERSONAL INJURY

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.
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.


## WARRANTY/REMEDY

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Honeywell's standard product warranty applies unless agreed to otherwise by Honeywell in writing; please refer to your order acknowledgement or consult your local sales office for specific warranty details. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace, at its option, without charge those items it finds defective. The foregoing is buyer's sole remedy and is in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose. In no event shall Honeywell be liable for consequential, special, or indirect damages.

While we provide application assistance personally, through our literature and the Honeywell website, it is up to the customer to determine the suitability of the product in the application.

Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this printing. However, we assume no responsibility for its use.

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G2VX G3VX PS83-121G A101MD9AB04 A101SD9AB04 A101SDCQ04 A103SD9AQ04 A107TZB04 A123P32YZQ A123S1YZG
A127S1YCQ 1-1825192-0 A131S1YZQ A201SCWZB04 A207SYCB04 A208J61ZQ0004 A221K12KAG A221S1YZQ A221T1TCQ
A232K12KZQ A232M1YCQ A323S1CWZQ A423S1CWZG-M8 A423S1YZQ 12149A-3V 12156AX408 12147AGKX679


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

[^1]:    ** These positions are momentary. All others are maintained

