

## MICRO SWITCH General Purpose Toggle Switches



### DESCRIPTION

MICRO SWITCH TS Series toggles may be used anywhere manual operation is desired. They are an entry-level solution for applications that do not require a sealed toggle switch. Special on-on-on circuitry can also be furnished. MICRO SWITCH TS Series switches feature broad circuitry and action availability considering 2- or 3-position options, momentary and maintained actions, and 1- and 2-pole circuitry. Switches are available with solder, screw, or quick-connect termination styles.

### VALUE TO CUSTOMERS

- Low-cost toggle solution for applications without harsh environmental conditions or where third-party seal rating is not required
- Minimizes service costs while extending equipment life

### FEATURES

- UL recognized for the US and Canada
- 1- and 2-pole options
- 2- or 3-position; maintained and momentary action
- Electrical connections: screw, solder, quick connect (spade)
- Optional step-case design provides added space between terminals to prevent shorting

### APPLICATIONS

- Agricultural equipment
- Construction equipment
- Controllers
- Factory floor machinery

### PORTFOLIO



The TS Series is part of the MICRO SWITCH family of toggle switches that include the TL, NT, TW, AT, and ET

Series switches. To view the entire product portfolio, [click here](#).

## MICRO SWITCH GENERAL PURPOSE TOGGLE SWITCH, TS SERIES

**TABLE 1. SPECIFICATIONS**



Characteristic	Parameter
Description	general-purpose toggle switch
Sealing	unsealed
Operating temperature	-54 °C to 71 °C [-65 °F to 160 °F]
Actuators	standard, lever
Action	2- or 3- position; momentary and maintained
Mounting	bushing 15/32 in (0.47 in) Ø
Circuitry	SPDT, DPDT
Terminations	screw, solder, quick connect
Contacts	Silver tin oxide and indium oxide
Electrical rating (resistive load)	0.4 A to 10 A @ 126 Vac to 277 Vac 0.4 A to 20 A @ 0.5 Vac to 125 Vac
Approvals	UL, cUL
Measurement	55,83 mm H x 28,58 mm W x 16,51 mm D [2.198 in H x 1.125 in W x 0.65 in D]

**TABLE 2. UL ELECTRICAL RATINGS**

Rating Code	Electrical Rating
L311	10 A, 277 Vac; 20 A, 125 Vac; ¾ HP, 125 Vac / 250 Vac
L312	10 A, 277 Vac; 20 A, 125 Vac; 1½ HP, 125 Vac / 250 Vac



# MICRO SWITCH GENERAL PURPOSE TOGGLE SWITCH, TS SERIES

**TABLE 3. MICRO SWITCH TS SERIES 2-POSITION ORDER GUIDE**

No. of poles	Circuits Made with Toggle at:			UL Rating Code	Catalog Listing		
	Keyway Position	Opposite Keyway			Screw Terminals	Solder Terminals	Quick-Connect Terminals
 1	OFF	2-3 ON		L311	11TS15-2	11TS115-2	11TS95-2
	2-1 ON	2-3 ON		L311	11TS15-3	11TS115-3	11TS95-3
	OFF*	2-3 ON		L312	11TS15-4	11TS115-4	11TS95-4
	2-1 ON*	OFF		L312	11TS15-6	11TS115-6	11TS95-6
	2-1 ON*	2-3 ON		L312	11TS15-8	11TS115-8	–
 2	OFF	2-3 & 5-6 ON		L311	12TS15-2	12TS115-2	12TS95-2
	2-1 ON & 5-4 ON	2-3 & 5-6 ON		L311	12TS15-3	12TS115-3	12TS95-3
	OFF*	2-3 & 5-6 ON		L312	12TS15-4	–	–
	2-1 ON & 5-4 ON*	OFF		L312	12TS15-6	–	–
	2-1 ON & 5-4 ON*	2-3 & 5-6 ON		L312	12TS15-8	12TS115-8	–

\* Marked toggle positions are momentary. All others are maintained.

**TABLE 4. MICRO SWITCH TS SERIES 3-POSITION ORDER GUIDE**

No. of poles	Circuits Made with Toggle at:			UL Rating Code	Catalog Listing		
	Keyway Position	Center Position	Opposite Keyway		Screw Terminals	Solder Terminals	Quick-Connect Terminals
 1	2-1 ON	OFF	2-3 ON	L311	11TS15-1	11TS115-1	11TS95-1
	2-1 ON*	OFF	2-3 ON	L312	11TS15-5	11TS115-5	11TS95-5
	2-1 ON*	OFF	2-3 ON*	L312	11TS15-7	11TS115-7	11TS95-7
 2	2-1 & 5-4 ON	OFF	2-3 & 5-6 ON	L311	12TS15-1	12TS115-1	12TS95-1
	2-1 & 5-4 ON*	OFF	2-3 & 5-6 ON	L312	12TS15-5	12TS115-5	12TS95-5
	2-1 & 5-4 ON*	OFF	2-3 & 5-6 ON*	L312	12TS15-7	–	12TS95-7
	2-1 & 5-4 ON	2-1 & 5-6 ON	2-3 & 5-6 ON	L312	–	–	12TS95-10

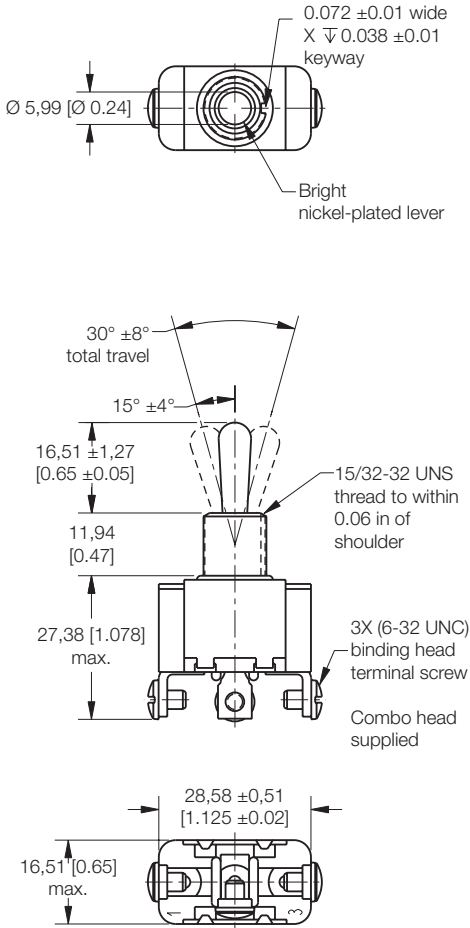
\* Marked toggle positions are momentary. All others are maintained.

# MICRO SWITCH GENERAL PURPOSE TOGGLE SWITCH, TS SERIES

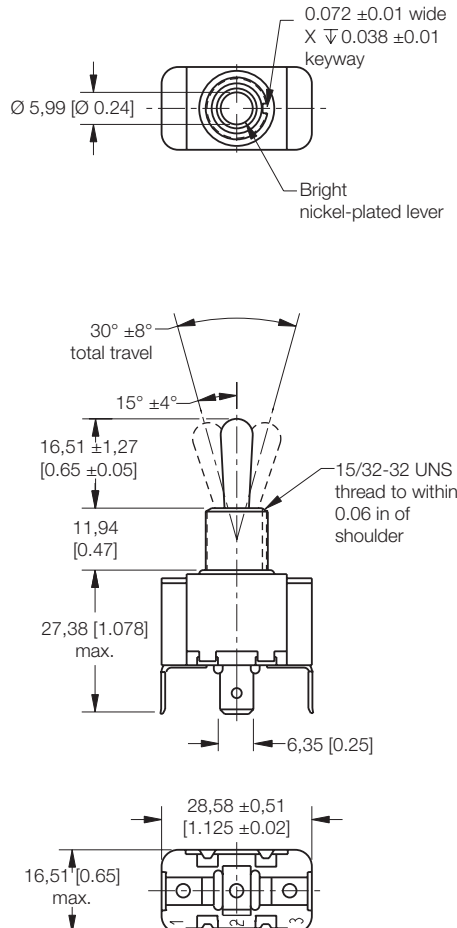
## TS SERIES STANDARD ACTUATOR OPTIONS, TERMINALS, & DIMENSIONS

Note: Two and three-position switches shown.

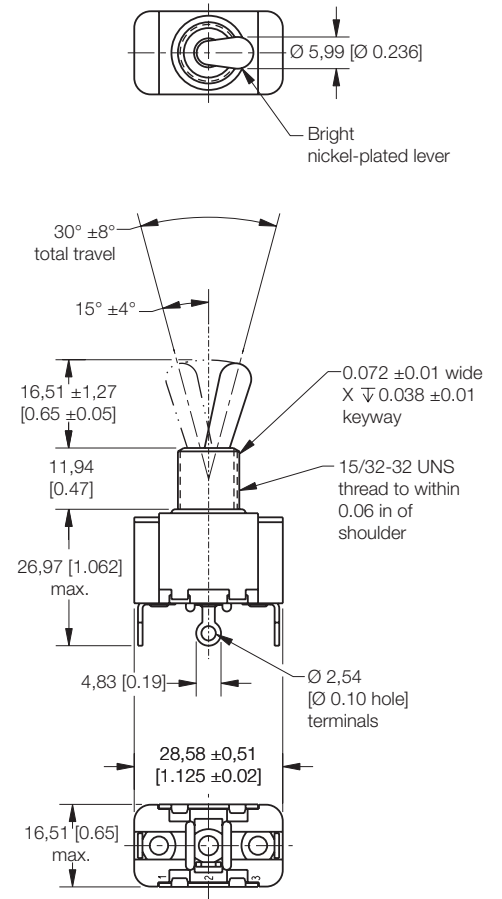
**Figure 1. Single pole, standard lever, screw terminals**



**Figure 2. Single pole, standard lever, quick-connect terminals**



**Figure 3. Single pole, standard lever, solder terminals**

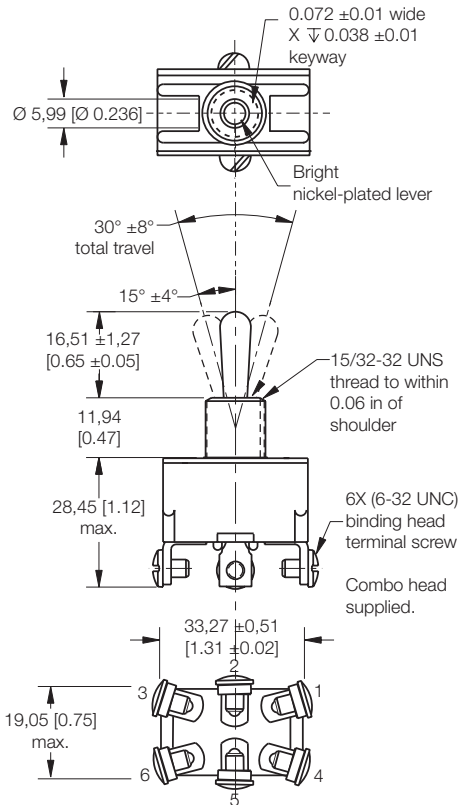


# MICRO SWITCH GENERAL PURPOSE TOGGLE SWITCH, TS SERIES

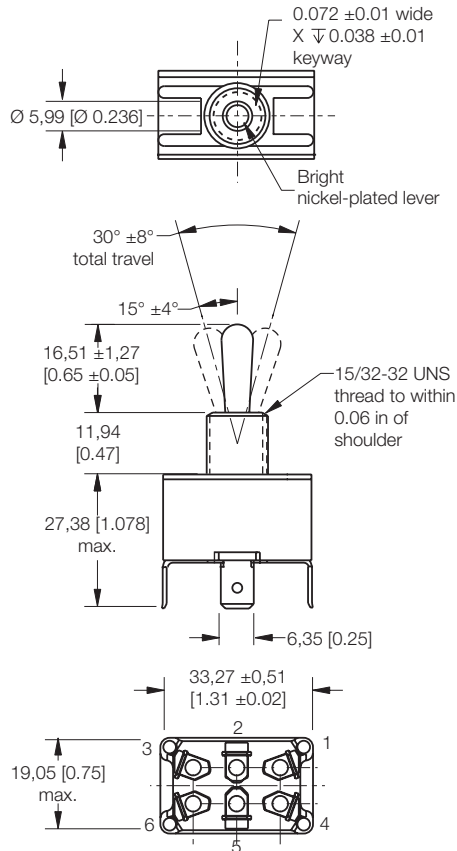
## TS SERIES STANDARD ACTUATOR OPTIONS, TERMINALS, & DIMENSIONS

Note: Two and three-position switches shown.

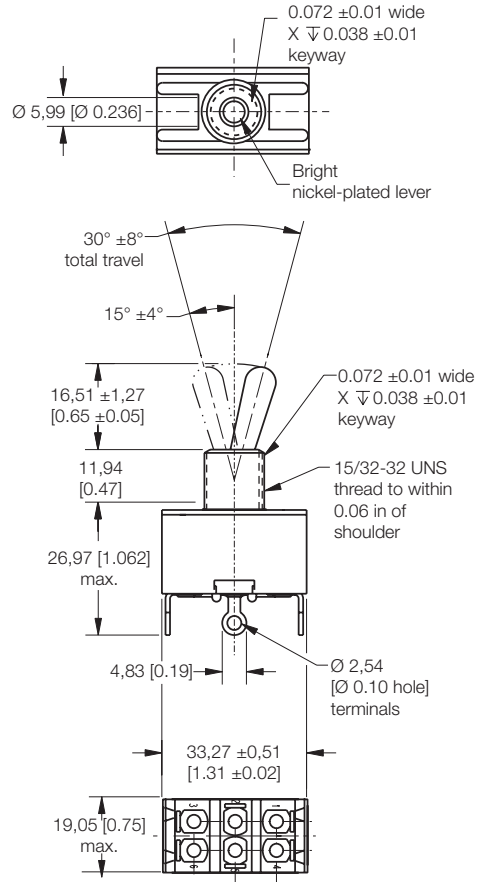
**Figure 4. Double pole, standard lever, screw terminals**



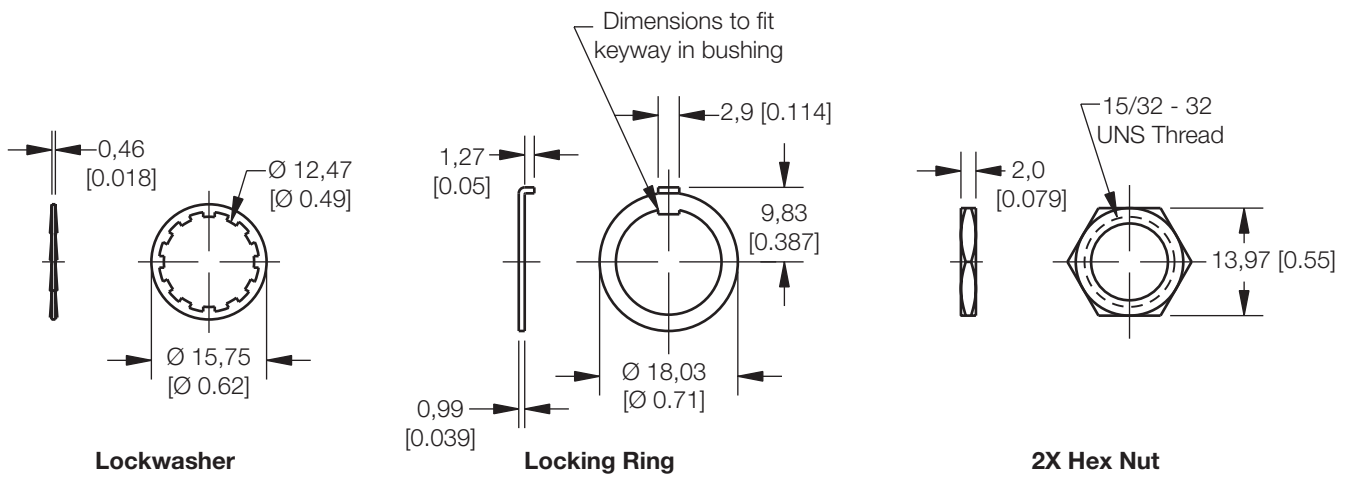
**Figure 5. Double pole, standard lever, quick-connect terminals**



**Figure 6. Double pole, standard lever, solder terminals**



**Figure 7. TS Series Hardware**



## ADDITIONAL MATERIALS

The following associated literature is available at [sensing.honeywell.com](http://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

## FOR MORE INFORMATION

Honeywell Sensing and Internet of Things services its customers through a worldwide network of sales offices and distributors. For application assistance, current specifications, pricing, or the nearest Authorized Distributor, visit [sensing.honeywell.com](http://sensing.honeywell.com) or call:

USA/Canada	+302 613 4491
Latin America	+1 305 805 8188
Europe	+44 1344 238258
Japan	+81 (0) 3-6730-7152
Singapore	+65 6355 2828
Greater China	+86 4006396841

### Honeywell Sensing and Internet of Things

830 East Arapaho Road  
Richardson, TX 75081  
[sensing.honeywell.com](http://sensing.honeywell.com)

## WARRANTY/REMEDY

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship during the applicable warranty period. Honeywell's standard product warranty applies unless agreed to otherwise by Honeywell in writing; please refer to your order acknowledgment 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 that Honeywell, in its sole discretion, 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 Honeywell may provide application assistance personally, through our literature and the Honeywell web site, it is buyer's sole responsibility 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 writing. However, Honeywell assumes no responsibility for its use.

## WARNING 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.**

## WARNING 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.**

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

## Honeywell:

[11TS115-1](#) [11TS115-2](#) [11TS115-3](#) [11TS115-5](#) [11TS115-6](#) [11TS115-7](#) [11TS115-8](#) [11TS15-1](#) [11TS15-2](#) [11TS15-3](#) [11TS15-4](#) [11TS15-5](#) [11TS15-6](#) [11TS15-7](#) [11TS15-8](#) [11TS95-1](#) [11TS95-2](#) [11TS95-3](#) [11TS95-5](#) [11TS95-6](#) [11TS95-7](#) [12TS115-1](#) [12TS115-2](#) [12TS115-3](#) [12TS115-5](#) [12TS115-7](#) [12TS115-8](#) [12TS15-1](#) [12TS15-2](#) [12TS15-3](#) [12TS15-4](#) [12TS15-5](#) [12TS15-6](#) [12TS15-7](#) [12TS15-8](#) [12TS95-1](#) [12TS95-10](#) [12TS95127-3](#) [12TS95127-7](#) [12TS95-2](#) [12TS95-3](#) [12TS95-5](#) [12TS95-7](#) [12TS95-70](#) [13TS15-1](#) [13TS15-2](#) [13TS15-3](#) [13TS15-7](#)