

## Manual Switches

### Sealed Toggle Switches

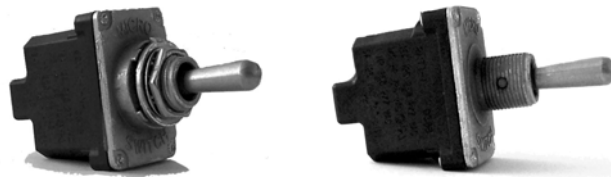
### NT Series/Step Base

#### FEATURES

- Completely sealed switching chamber
- IP67/IP68
- NEMA 3, 3R, 4, 13
- Step-design case provides added space between terminals to prevent shorting
- 1, 2, or 4-pole circuitry
- Spring-loaded actuating mechanism provides excellent tactile feedback
- UL recognized, File E12252, Vol. 1, Section 44 CSA certified, CE certified
- Optional panel stand-off with O-ring panel seal

#### TYPICAL APPLICATIONS

- Industrial equipment
- Military and commercial aviation
- Construction equipment
- Test instruments
- Agricultural machinery
- Process control
- Medical instrumentation



#### GENERAL INFORMATION

Honeywell 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 can be used where panels are subject to splashes, hosedowns, or outdoor environments. Complete sealing of the switching chamber enables NT toggles to comply with UL 508, paragraph 13.3 hosedown test. They will also withstand exposure to heavy accumulations of early morning dew that may condense on the control panel in cabs of vehicles left outdoors overnight. The "Easy Start" threaded bushing enables quick alignment of the mounting nut to decrease the chance of 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 provides a panel-to-cover seal.

#### UL AND CSA ELECTRICAL RATINGS

Rating Code	Electrical rating
L192	10 amps, 125, 250, 277 Vac; ¼ Hp, 125 Vac; ½ Hp, 250, 277 Vac; 3 amps, 125 Vac "L"
L191	15 amps, 125, 250, 277 Vac; ½ Hp, 125 Vac; 1 Hp, 250, 277 Vac; 5 amps, 125 Vac "L"

#### ELECTRICAL RATINGS

Elect. Rating Code	28 Volts DC			115 Vdc	250 Vdc	115 Vac, 60 Hz & 400 Hz			230 Vac
	Ind.	Res.	Lamp	Res.	Res.	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

#### **⚠ 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.**

# Manual Switches

## Sealed Toggle Switches

## NT Series/Step Base

### NT 2-POSITION ORDER GUIDE

No. of Poles	Circuits made with toggle at:		UL Rating Code	Elect. Rating Code	Standard Lever		
	Keyway Position	Opposite Keyway			Termination Style		
					Screw	Solder	Q-C
1	OFF	2-3	L191	1	1NT1-2	11NT1-2	1NT91-2
	1-2	2-3	L191	1	1NT1-3	11NT1-3	1NT91-3
	OFF*	2-3	L192	2	1NT1-4	11NT1-4	1NT91-4
	1-2*	OFF	L192	2	1NT1-6	11NT1-6	1NT91-6
	1-2*	2-3	L192	2	1NT1-8	11NT1-8	1NT91-8
2	OFF	2-3, 5-6	L191	3	2NT1-2	12NT1-2	2NT91-2
	1-2, 4-5	2-3, 5-6	L191	3	2NT1-3	12NT1-3	2NT91-3
	OFF*	2-3, 5-6	L192	4	2NT1-4	12NT1-4	2NT91-4
	1-2, 4-5*	OFF	L192	4	2NT1-6	12NT1-6	2NT91-6
	1-2, 4-5*	2-3, 5-6	L192	4	2NT1-8	12NT1-8	2NT91-8
4	OFF	2-3, 5-6, 8-9, 11-12	L191	5	4NT1-2	14NT1-2	4NT91-2
	1-2, 4-5, 7-8, 10-11	2-3, 5-6, 8-9, 11-12	L191	5	4NT1-3	14NT1-3	4NT91-3
	OFF*	2-3, 5-6, 8-9, 11-12	L192	6	4NT1-4	14NT1-4	4NT91-4
	1-2, 4-5, 7-8, 10-11*	OFF	L192	6	4NT1-6	14NT1-6	4NT91-6
	1-2, 4-5, 7-8, 10-11*	2-3, 5-6, 8-9, 11-12	L192	6	4NT1-8	14NT1-8	4NT91-8

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

### NT 2-POSITION ORDER GUIDE • PANEL STAND-OFF FEATURE

No. of Poles	Circuits Made with Toggle At:		UL Rating Code	Elect. Rating Code	Standard Lever
	Keyway Position	Opposite Keyway			Screw
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.

# Manual Switches

## Sealed Toggle Switches

## NT Series/Step Base

### NT 3-POSITION ORDER GUIDE

No. of Poles	Circuits Made with Toggle At:			UL Rating Code	Elect. Rating Code	Standard Lever Termination Style		
	Keyway Position	Center Position	Opposite Keyway			Screw	Solder	Q-C
1	1-2	OFF	2-3	L191	1	1NT1-1	11NT1-1	1NT91-1
	1-2*	OFF	2-3	L192	2	1NT1-5	11NT1-5	1NT91-5
	1-2*	OFF	2-3*	L192	2	1NT1-7	11NT1-7	1NT91-7
	NONE**	OFF	2-3	L191	1	1NT1-21	11NT1-21	1NT91-21
	NONE**	1-2	2-3	L191	1	1NT1-31	11NT1-31	1NT91-31
	NONE**	1-2	2-3*	L192	2	1NT1-51	11NT1-51	1NT91-51
2	1-2, 4-5	OFF	2-3, 5-6	L191	3	2NT1-1	12NT1-1	2NT91-1
	1-2, 4-5*	OFF	2-3, 5-6	L192	4	2NT1-5	12NT1-5	2NT91-5
	1-2, 4-5	OFF	2-3, 5-6*	L192	4	2NT1-7	12NT1-7	2NT91-7
	NONE*	OFF	2-3, 5-6	L191	3	2NT1-21	12NT1-21	2NT91-21
	NONE**	1-2, 4-5	2-3, 5-6	L191	3	2NT1-31	12NT1-31	2NT91-31
	NONE**	1-2, 4-5	2-3, 5-6*	L192	4	2NT1-51	12NT1-51	2NT91-51
	1-2, 4-5*	OFF	NONE**	L192	4	2NT1-61	12NT1-61	2NT91-61
	1-2, 4-5	2-3, 4-5	2-3, 5-6	L191	3	2NT1-12	12NT1-12	2NT91-12
	1-2, 4-5	1-2, 5-6	2-3, 5-6	L191	3	2NT1-10	12NT1-10	2NT91-10
	1-2, 4-5*	1-2, 5-6	2-3, 5-6	L192	4	2NT1-50	12NT1-50	2NT91-50
4	1-2, 4-5, 7-8, 10-11	OFF	2-3, 5-6, 8-9, 11-12	L191	5	4NT1-1	14NT1-1	4NT91-1
	1-2, 4-5, 7-8, 10-11*	OFF	2-3, 5-6, 8-9, 11-12	L192	6	4NT1-5	14NT1-5	4NT91-5
	1-2, 4-5, 7-8, 10-11*	OFF	2-3, 5-6, 8-9, 11-12*	L192	6	4NT1-7	14NT1-7	4NT91-7
	NONE*	OFF	2-3, 5-6, 8-9, 11-12	L191	5	4NT1-21	14NT1-21	4NT91-21
	NONE**	1-2, 4-5, 7-8, 10-11	2-3, 5-6, 8-9, 11-12	L191	5	4NT1-31	14NT1-31	4NT91-31
	NONE**	1-2, 4-5, 7-8, 10-11	2-3, 5-6, 8-9, 11-12*	L192	6	4NT1-51	14NT1-51	4NT91-51
	1-2, 4-5, 7-8, 10-11*	OFF	NONE**	L192	6	4NT1-61	14NT1-61	4NT91-61
	1-2, 4-5, 7-8, 10-11	2-3, 4-5, 7-8, 11-12	2-3, 5-6, 8-9, 11-12	L191	5	4NT1-12	14NT1-12	4NT91-12
	1-2, 4-5, 7-8, 10-11	2-3, 4-5	2-3, 5-6, 8-9, 11-12	L191	5	4NT1-10	14NT1-10	4NT91-10
	1-2, 4-5, 7-8, 10-11*	2-3, 4-5, 7-8, 11-12	2-3, 5-6, 8-9, 11-12	L192	6	4NT1-50	14NT1-50	4NT91-50
1-2, 4-5, 7-8, 10-11*	2-3, 4-5	2-3, 5-6, 8-9, 11-12*	L192	6	4NT1-70	14NT1-70	4NT91-70	

\* 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.

### NT 3-POSITION ORDER GUIDE • PANEL STAND-OFF FEATURE

No. of Poles	Circuits Made with Toggle At:			UL Rating Code	Elect. Rating Code	Termination
	Keyway Position	Center Position	Opposite Keyway			Screw
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

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

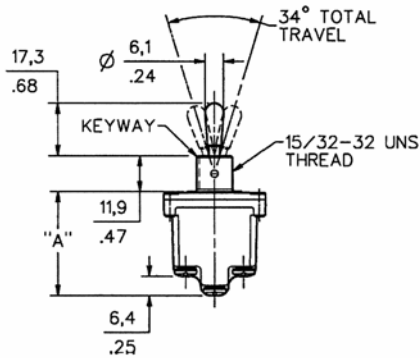
# Manual Switches

## Sealed Toggle Switches

## NT Series/Step Base

### MOUNTING DIMENSIONS

For reference only mm/in



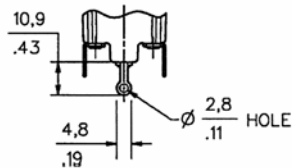
DIM "A"

1-pole	29,5/1.16
2 & 4-pole	34,4/1.35

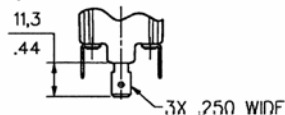
#### NOTES:

1. Pull-to-unlock levers have 10,7/42 dia. knob
2. Locking ring, lockwasher, 2 hexnuts and terminal screws are furnished unassembled.

#### Solder Terminals

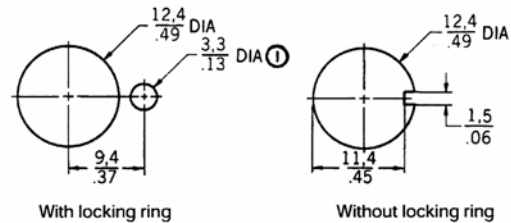


#### Quick Connect Terminals



Bushing mounting torque is 10-15 in./lbs.  
 Terminal screw mounting torque is 5 in./lbs. max.

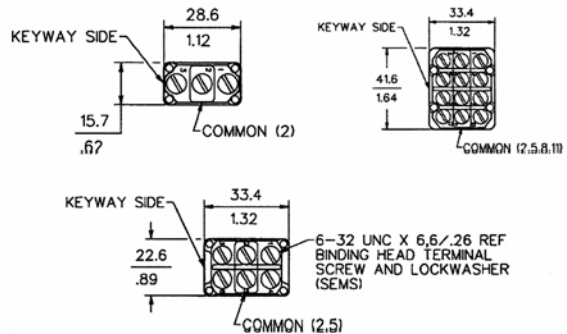
#### Panel cutout



#### Note:

Ⓢ 1,4/.06 MIN DEEP TO ACCOMMODATE LOCKING RING. 15PA87 PANEL SEAL REQUIRES BLIND HOLE TO INSURE SEAL INTEGRITY

#### Terminal Circuit Identification



### WARRANTY/REMEDY

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Contact your local sales office for warranty information. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace 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.**

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.

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

For application assistance, current specifications, or name of the nearest Authorized Distributor, contact a nearby sales office. Or call:

- 1-800-537-6945 USA
- 1-800-737-3360 Canada
- 1-815-235-6847 International

#### FAX

1-815-235-6545 USA

#### INTERNET

[www.honeywell.com/sensing](http://www.honeywell.com/sensing)  
[info.sc@honeywell.com](mailto:info.sc@honeywell.com)

# Honeywell

### Sensing and Control

Honeywell  
 11 West Spring Street  
 Freeport, Illinois 61032

005421-2-EN\_IL50\_GLO 1103 Printed in USA  
 Copyright 2003 Honeywell International Inc.

[www.honeywell.com/sensing](http://www.honeywell.com/sensing)