



## Description

Bulletin 802T limit switches are ideal for applications in which heavy duty pilot ratings, small size, a high degree of versatility and a rugged NEMA Type 4, 13 and 6P<sup>1</sup> construction are desirable. An important factor in the automation of industry, these limit switches are being applied extensively on conveyor systems, transfer machines, automatic turret lathes, milling and boring machines, radial drills, and many other types of modern, high speed production equipment.

A wide variety of operating heads and operating levers are available. Operating heads can be mounted in four positions, 90° apart.

## Features

- Front mount for simplified mounting
- Plug-in style for ease of wiring
- Side rotary, wobble stick, cat whisker, adjustable top and top or side push styles with and without rollers
- Quick mode change to clockwise and counterclockwise operation only
- Castle lock head design for high durability

<sup>1</sup> Plug-in lever type except low-torque models.

<sup>2</sup> Temperature range below 0 °C (+32 °F) is based on the absence of freezing moisture or water. See page 5-53 for low temperature options.

<sup>3</sup> Low operating torque-spring return ratings only.

## Specifications

Enclosure Rating	NEMA 4, 13, 6P <sup>1</sup> and IP67
Pollution Degree	3
Certifications	UL Listed, CSA Certified CE Marked for applicable directives
Ambient Temperature [C (F)] <sup>2</sup>	-18...+110° (0...+230°) Exception: Wobble stick and cat whisker devices are rated from -18...+54° (0...+130°)

### AC Contact Rating (Maximum per Pole, 50 or 60 Hz, 2 Circuits Same Polarity)

NEMA Rating Designation	Max Voltage	A		Continuous Carrying Current	VA	
		Make	Break		Make	Break
A600 AC-15	120	60	6.00	10	7200	720
	240	30	3.00	10	7200	720
	480	15	1.50	10	7200	720
	600	12	1.20	10	7200	720
B600 <sup>3</sup> AC-15	120	30	3.00	5	3600	360
	240	15	1.50	5	3600	360
	480	7.5	0.75	5	3600	360
	600	6	0.60	5	3600	360

### AC Contact Rating (Maximum per Pole, 50 or 60 Hz, 4 Circuits Same Polarity)

NEMA Rating Designation	Max Voltage	A		Continuous Carrying Current	VA	
		Make	Break		Make	Break
A300	120	60	6.00	10	7200	720
	240	30	3.00	10	7200	720

### DC Contact Rating (Maximum per Pole)

Circuits	Voltage Range	Current Rating
2	115-125	0.4 A
	230-250	0.2 A
	550-600	0.1 A
4	115-125	0.4 A
	230-250	0.2 A

## Plug-in Style

Lever Type • Spring Return page 5-42  
Standard and Low Operating Torque Models

Lever Type • Maintained . . . page 5-44  
Contact and Neutral Position

Push Type • Spring Return . . . page 5-45

Wobble Stick and Cat . . . . . page 5-47  
Whisker • Spring Return

Modifications and . . . . . page 5-53  
Accessories

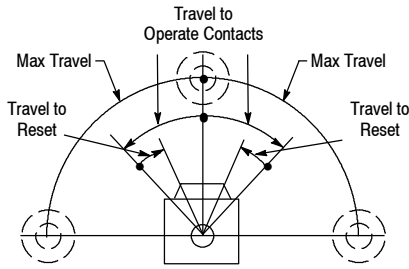
## 802T Operating Levers

Lever Selection . . . . . page 5-130

# Limit Switches

## 802T Lever Type • Spring Return Plug-in Style Oiltight Switches

### Range of Operation



### Product Selection—Standard and Low Operating Torque Models

Number of Circuits	Lever Movement vs. Contact Operation		Torque/Force to Operate, Max.	Travel to Operate Contacts, Max.	Max. Travel	Travel to Reset Contacts, Max.	Cat. No.								
							Switch w/o Lever	Switch w/o Lever and Base							
2	Clockwise or Counterclockwise		0.29 N•m (2.6 lb•in) Nominal	13°	90°	7°	802T-AP	802T-AP1							
				18°			★ 802T-A5P	★ 802T-A5P1							
			0.56 N•m (5 lb•in)	5° Nominal		2.5° Nominal	802T-FP	802T-FP1							
				9°		4°	802T-HP	802T-HP1							
			0.29 N•m (2.6 lb•in)			13°	7°	802T-A1P	802T-A1P1						
						18°	★ 802T-A3P	★ 802T-A3P1							
	0.56 N•m (5 lb•in)		13°	7°		802T-H1P	802T-H1P1								
			18°	★ 802T-A2P		★ 802T-A2P1									
	0.16 N•m (1.5 lb•in)		0.16 N•m (1.5 lb•in)	13°		7°	802T-H2P	802T-A2P1							
									9°	802T-ALP	802T-ALP1				
									0.45 N•m (4 lb•in)		0.45 N•m (4 lb•in)	13°	7°	802T-ATP	802T-ATP1
0.79 N•m (7 lb•in)									0.45 N•m (4 lb•in)	13°	7°	802T-A1TP	802T-A1TP1		
														9°	802T-H1TP
0.45 N•m (4 lb•in)		0.45 N•m (4 lb•in)	13°	7°	802T-A2TP	802T-A2TP1									
							9°	802T-H2TP	802T-H2TP1						

★ Fluorinated elastomer shaft seal is supplied with these devices.

‡ Low operating torque model.

**Approximate Dimensions**—See page 5-43.

**Levers**—See page 5-130 for a complete listing of operating levers.

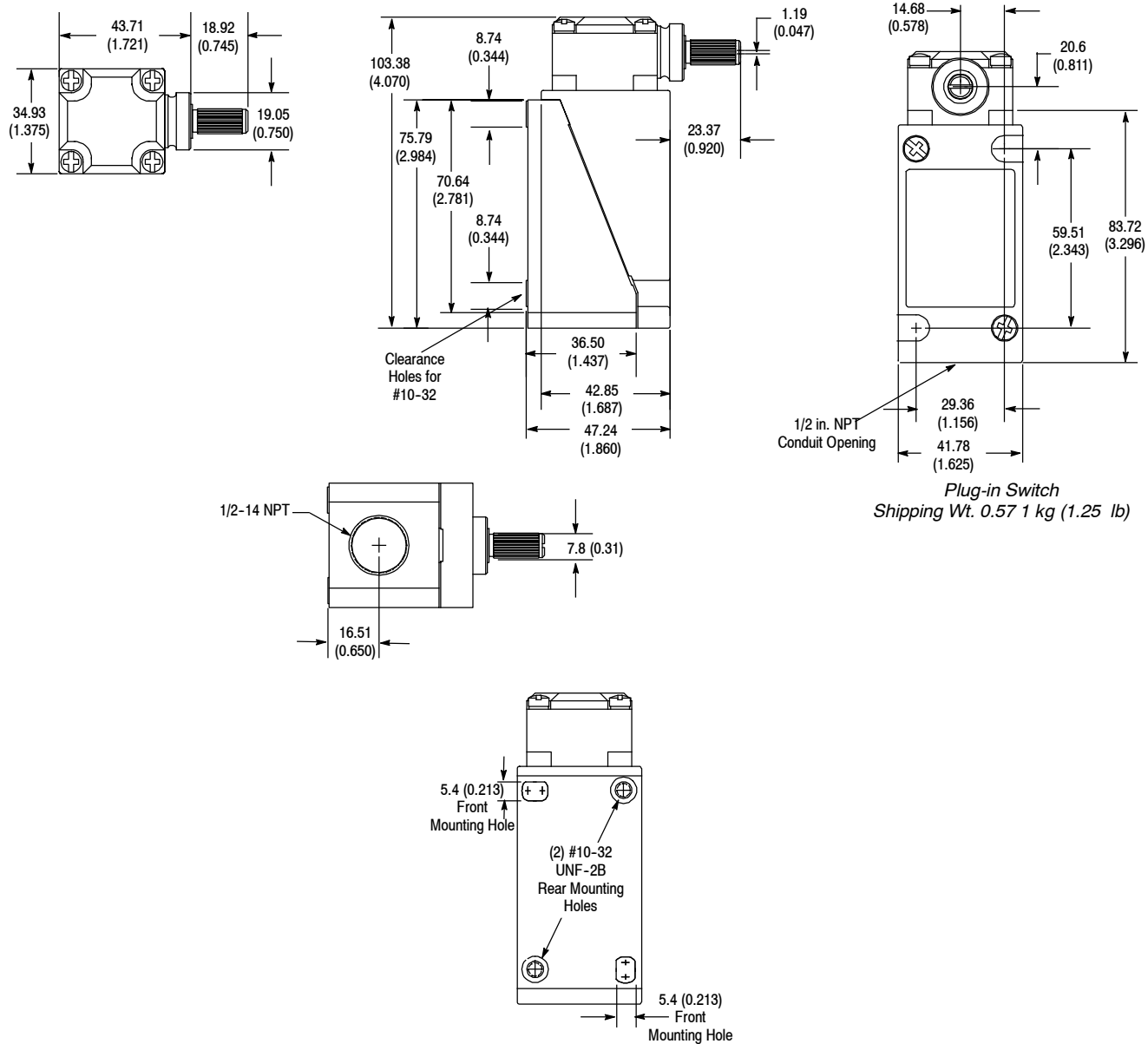
**Modifications and Accessories**—See page 5-53.



# 802T Lever Type • Spring Return

## Plug-in Style Oiltight Switches

### Approximate Dimensions [mm (in.)]



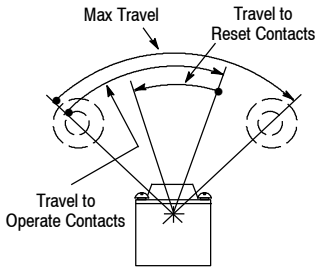
**Levers**—See page 5-130 for a complete listing of operating levers.

**Modifications and Accessories**—See page 5-53.

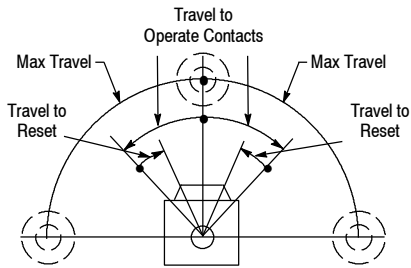
**Limit Switches**

**802T Lever Type • Maintained Contact and Neutral Position**  
**Plug-in Style Oiltight Switches**

**Range of Operation**



Maintained Contact Models



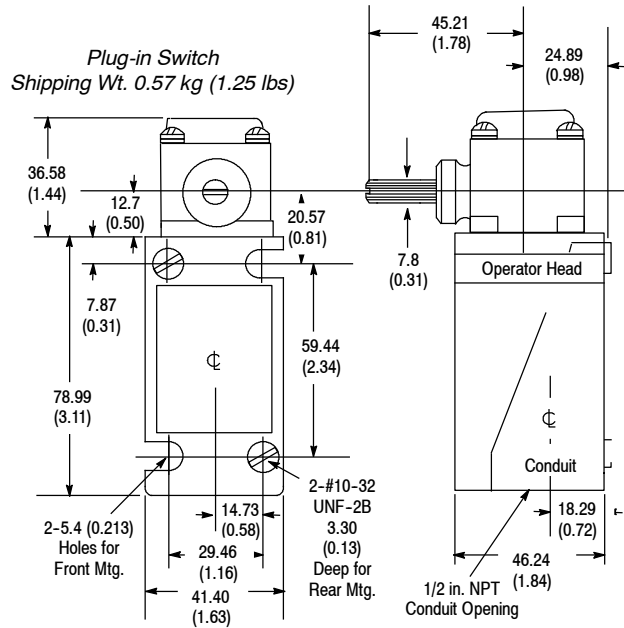
Neutral Position Models



Switch Without Lever

Switch Without Lever and Base

**Approximate Dimensions [mm (in.)]**



**Product Selection—Maintained Contact Models**

No. of Circuits	Lever Movement vs. Contact Operation	Torque to Operate (Max.)	Travel to Operate Contacts (Max.)	Max Travel	Travel to Reset Contacts (Max.)	Cat. No.	
						Switch w/o Lever	Switch w/o Lever & Base
2	Clockwise or Counterclockwise 	0.31 N•m (2.75 lb•in)	70° ⚙	88° ⚙	32°	802T-AMP	802T-AMP1
4	Clockwise or Counterclockwise 	0.32 N•m (2.8 lb•in)				802T-AMTP	802T-AMTP1

⚙ From one maintained position to another.

**Product Selection—Neutral Position Models**

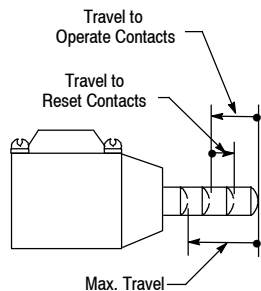
Lever Movement vs. Contact Operation	Torque to Operate (Max.)		Travel to Operate Contacts (Max.)	Max Travel	Travel to Reset Contacts (Max.)	Cat. No.	
	Clockwise	Counter-clockwise				Switch w/o Lever	Switch w/o Lever & Base
	0.28 N•m (2.5 lb•in)	0.47 N•m (4.2 lb•in)	13°	75°	7°	802T-NPTP	802T-NPTP1

**Levers**—See page 5-130 for a complete listing of operating levers.

**Modifications and Accessories**—See page 5-53.

# 802T Push Type • Spring Return Plug-in Style Oiltight Switches

## Range of Operation



## Product Selection

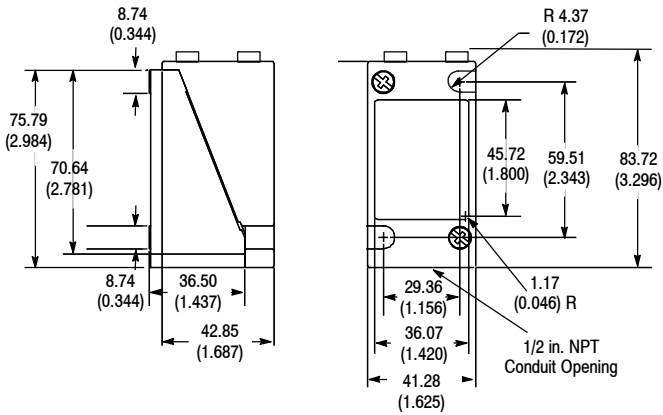
Number of Circuits	Contact Operation		Operator Type	Torque/Force to Operate, Max.	Travel to Operate Contacts, Max.	Maximum Travel	Travel to Reset Contacts, Max.	Cat. No.																	
	Normal	Operated						Switch w/o Lever	Switch w/o Lever and Base																
2	<table border="1"> <tr><td>1</td><td>2</td></tr> <tr><td>3</td><td>4</td></tr> </table>	1	2	3	4	<table border="1"> <tr><td>1</td><td>2</td></tr> <tr><td>3</td><td>4</td></tr> </table>	1	2	3	4	Top Push Rod	13.8 N (3.1 lb)	1.4 mm (0.057 in.)	6.0 mm (0.236 in.)	0.9 mm (0.034 in.)	802T-BP	802T-BP1								
		1	2																						
		3	4																						
		1	2																						
		3	4																						
		Adjustable Top Push Rod	802T-BAP	802T-BAP1																					
Side Push Rod	16.4 N (3.7 lb)	3.3 mm (0.131 in.)	5.7 mm (0.226 in.)	1.9 mm (0.074 in.)	802T-CP	802T-CP1																			
Top Push Roller	13.8 N (3.1 lb)	1.4 mm (0.057 in.)	6.0 mm (0.236 in.)	0.9 mm (0.034 in.)	802T-DP	802T-DP1																			
Side Push Vertical Roller	16.4 N (3.7 lb)	3.3 mm (0.131 in.)	5.7 mm (0.226 in.)	1.9 mm (0.074 in.)	802T-KP	802T-KP1																			
Side Push Horizontal Roller					802T-K1P	802T-K1P1																			
4	<table border="1"> <tr><td>1</td><td>2</td></tr> <tr><td>3</td><td>4</td></tr> <tr><td>5</td><td>6</td></tr> <tr><td>7</td><td>8</td></tr> </table>	1	2	3	4	5	6	7	8	<table border="1"> <tr><td>1</td><td>2</td></tr> <tr><td>3</td><td>4</td></tr> <tr><td>5</td><td>6</td></tr> <tr><td>7</td><td>8</td></tr> </table>	1	2	3	4	5	6	7	8	Top Push Rod	22.2 N (5.0 lb)	1.4 mm (0.057 in.)	6.0 mm (0.236 in.)	0.9 mm (0.034 in.)	802T-BTP	802T-BTP1
		1	2																						
		3	4																						
		5	6																						
		7	8																						
		1	2																						
3	4																								
5	6																								
7	8																								
Adjustable Top Push Rod	802T-BATP	802T-BATP1																							
Side Push Rod	24.9 N (5.6 lb)	3.3 mm (0.131 in.)	5.7 mm (0.226 in.)	1.9 mm (0.074 in.)	802T-CTP	802T-CTP1																			
Top Push Roller	22.2 N (5.0 lb)	1.4 mm (0.057 in.)	6.0 mm (0.236 in.)	0.9 mm (0.034 in.)	802T-DTP	802T-DTP1																			
Side Push Vertical Roller	24.9 N (5.6 lb)	3.3 mm (0.131 in.)	5.7 mm (0.226 in.)	1.9 mm (0.074 in.)	802T-KTP	802T-KTP1																			
Side Push Horizontal Roller					802T-K1TP	802T-K1TP1																			

Modifications and Accessories—See page 5-53.

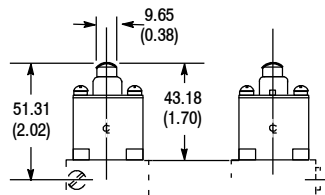
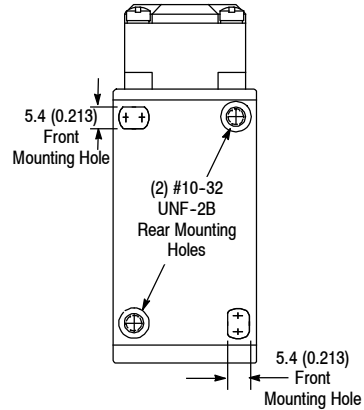
Limit Switches

**802T Push Type • Spring Return**  
**Plug-in Style Oiltight Switches**

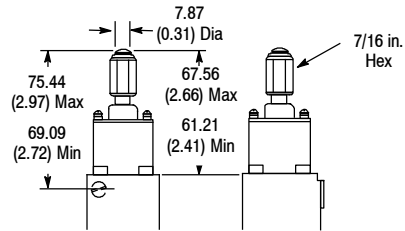
Approximate Dimensions [mm (in.)]



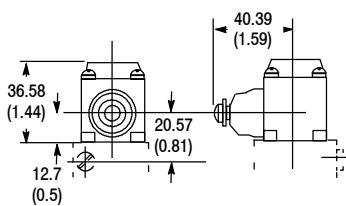
Switch Body



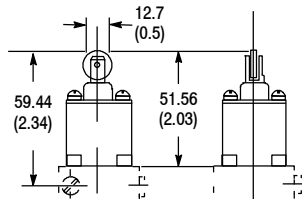
40146-013-59  
 Top Push Rod Head  
 Shipping Wt. 0.142 kg (5 oz)



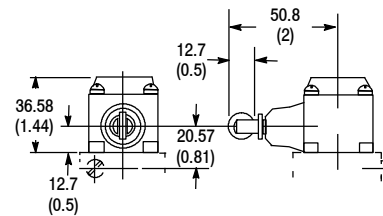
40146-013-65  
 Adjustable Top Push Rod Head  
 Shipping Wt. 0.142 kg (5 oz)



40146-017-63  
 Side Push Rod Head  
 Shipping Wt. 0.142 kg (5 oz)



40146-013-60  
 Top Push Roller Head  
 Shipping Wt. 0.142 kg (5 oz)



40146-017-64  
 Side Push Roller Head  
 Shipping Wt. 0.142 kg (5 oz)

Modifications and Accessories—See page 5-53.