

802T Safety Limit Switches

Direct Opening Action Position Interlock Switches



Specifications

Enclosure Rating	NEMA 4, 6P, 12, 13 and IP67
Pollution Degree	3
Certifications	cULus Listed, TÜV, and CE Marked for all applicable directives
Standards	EN954-1, ISO13849-1, IEC/EN60204-1, NFPA79, EN1088, ISO14119, IEC/EN60947-5-1, ANSI B11.19, AS4024-1
Category	Cat. 1 Device per EN954-1 Dual channel interlocks suitable for Cat. 3 or 4 systems
Operating Temperature [C (F)]	-18...+110° (0...+230°)
Cable Versions Temperature [C (F)]	-18...60° (0...140°)
Storage Temperature [C (F)]	-40...121° (-40...250°)

Description

Bulletin 802T direct opening action limit switches have been designed for use in control reliable applications and safety applications per ISO 14119. These limit switches utilize the same mounting dimensions as other NEMA style limit switches. The rugged metal construction and plug-in body are designed for use in harsh industrial environments.

Direct opening action assures that the normally closed contacts open when the limit switch is actuated. This opening will occur even in the event of a contact weld condition, up to 10 Newtons.

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

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

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

NEMA Rating Designation	Max Voltage	A		Continuous Carrying Current	VA	
		Make	Break		Make	Break
A300 AC-15	120	60	6.00	10	7200	720
	240	30	3.00	10	7200	720

DC Contact Rating (Maximum per Pole)

NEMA Rating Designation	Max Voltage	A		Continuous Carrying Current	VA	
		Make	Break		Make	Break
Q300 DC 13	250	0.27	0.27	2.5	69	69
	125	0.55	0.55	2.5	69	69

Low Voltage DC

24 V DC @ 1.1 Amps resistive load

ATTENTION



To ensure that the normally closed (safety) contacts open, the limit switch actuator must be displaced beyond the point of Direct Opening Action (see specifications).

Features

- Direct opening action
- Snap acting contacts
- Rugged metal construction
- Long life and reliability
- Plug-in design
- NEMA 6P/IP67 sealing
- Equal length mounting back base

Typical Applications

- Machine guards
- Access gates and doors
- Cranes or hoists
- Transfer stations
- Indexing tables
- Robotic cells

Direct Opening Action

- Lever Type • Spring Return page 5-110
- Top Push Roller •
Spring Return page 5-110
- Side Push Vertical Roller •
Spring Return page 5-110
- Side Push Horizontal Roller •
Spring Return page 5-110
- Dimensions page 5-111
- Modifications page 5-112

Limit Switches

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Modifications

Metric Conduit Entry

To order a limit switch with a 20 mm conduit entry, add the suffix **S6** to the Cat. No. example: 802T-APDS6.

Pre-wired Cable

To order factory installed pre-wired type STOOW-A cable (5 conductor), add the suffix **Y** plus the number of feet required. The standard cable length is 1.52 m (5 ft). Extended cable lengths are available in multiples of 1.22 m (4 ft) only.

Example: To order a limit switch with a factory installed 1.52 m (5 ft) cable, the Cat. No. would become 802T-APDY5. To order a limit switch with a factory installed 2.44 m (8 ft) cable, the Cat. No. would become 802T-APDY8.

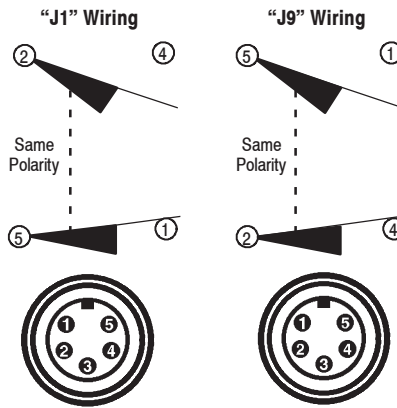
Mini Style Quick-Disconnect

To order a Bulletin 802T pre-wired limit switch with a 5-pin (2 circuit) or 9-pin (4 circuit) mini connector, add the suffix **J1** or **J9** depending on desired wiring (**J9** wiring not available for four-circuit models) to the Cat. No. example: 802T-APDJ1.

An appropriate female connector with cable is available in Connection Systems.

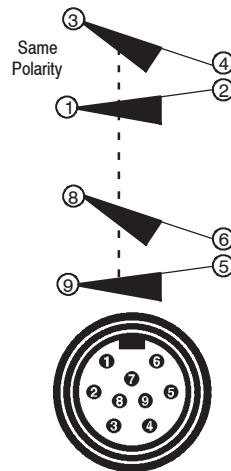
- 5-pin mini = (889N-F5AFC-6F) on page 8-4
- 9-pin mini = (889N-F9AF-2) on page 8-14
- 5-pin mini = (889R-F5AEA-2) on page 8-28
- 5-pin mini = (889D-F5AC-2) on page 8-16

5-Pin Mini-Type Receptacle (2 circuit)



9-Pin Mini-Type Receptacle (4 circuit)

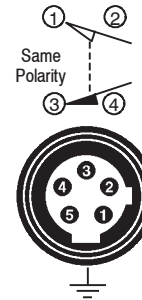
"J1" Wiring ("J9" wiring not available for 4 circuit)



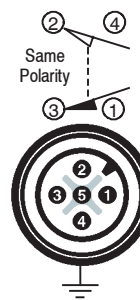
Micro Style Quick-Disconnect

Micro quick-disconnects are available with a 5-pin 2 keyway AC or 5-pin single keyway DC. To order a limit switch with a AC micro quick-disconnect, add the suffix **R5** to the cat. no. To order a limit switch with a DC micro quick-disconnect, add the suffix **D5** to the Cat. No. example: 802T-APDR5 and 802T-APDD5.

AC Micro QD




DC Micro QD



Pin 5 = Ground






Levers

Type	Roller			Cat. No.
	Material	Diameter [mm (in.)]	Width [mm (in.)]	
 Non-Adj. Cast Lever 1.5 in. Radius Roller on Front	Nylon	19 (0.75)	7.11 (0.28)	802T-W1
	Nylon	19 (0.75)	25.4 (1.0)	802T-W1H
	Steel	19 (0.75)	6.35 (0.25)	802T-W1A
	Ball Bearing	19 (0.75)	5.84 (0.23)	802T-W1B







Operating Levers

For use with 802T, 802M, 802MC, 802X, 802XR

Roller Levers

Type	Roller			Cat. No.
	Material	Dia.	Width	
 Non-Adj. Cast Lever 0.75" Radius	Metal	0.75"	0.27"	802T-W9A
 Non-Adj. Cast Lever 1.5" Radius Roller on Front	Nylon	0.75"	0.28"	802T-W1
	Nylon	0.75"	1"	802T-W1H
	Dual Nylon	0.75"	1" each	802T-W1HH
	Steel	0.75"	0.25"	802T-W1A
	Steel	0.75"	0.75"	802T-W1N
	Ball Bearing	0.75"	0.23"	802T-W1B
	Beryllium Copper (Nonsparking)	0.75"	0.28"	802T-W1J
 Non-Adj. Cast Lever 1.5" Radius Roller on Rear	Nylon	0.75"	0.28"	802T-W1E
	Nylon	0.75"	1"	802T-W1D
	Nylon	1.5"	0.28"	802T-W1G
	Steel	0.75"	0.25"	802T-W1F
	Steel	0.75"	0.75"	802T-W1C
	Nylon	0.75"	0.75"	802T-W1M
	 Non-Adj. Steel Lever 2.0" Radius Roller on Front	Nylon	0.75"	0.28"
Nylon		0.75"	1"	802T-W20D
Steel		0.75"	0.25"	802T-W20A
Steel		0.75"	0.75"	802T-W20B
Ball Bearing		0.75"	0.23"	802T-W20C
Beryllium Copper		0.75"	0.28"	802T-W20E
 Non-Adj. Steel Lever 2.0" Radius Roller on Rear		Nylon	0.75"	0.28"
	Nylon	0.75"	1"	802T-W20K
	Steel	0.75"	0.25"	802T-W20L
	Steel	0.75"	0.75"	802T-W20M
	Ball Bearing	0.75"	0.23"	802T-W20N
 Non-Adj. Steel Lever 2 1/8" Radius Roller on Front	Beryllium Copper	0.75"	0.28"	802T-W20P
	Nylon	0.75"	0.75"	802T-W18
 Non-Adj. Steel Lever 2 1/8" Radius Roller on Front	Nylon	0.75"	1"	802T-W18A

Approximate Dimensions—See page 5-133.

Type	Roller			Cat. No.
	Material	Dia.	Width	
 Non-Adj. Steel Lever 2.5" Radius Roller on Front	Nylon	0.75"	0.28"	802T-W25
	Nylon	0.75"	1"	802T-W25D
	Steel	0.75"	0.25"	802T-W25A
	Steel	0.75"	0.75"	802T-W25B
	Ball Bearing	0.75"	0.23"	802T-W25C
	Beryllium Copper	0.75"	0.28"	802T-W25E
 Non-Adj. Steel Lever 2.5" Radius Roller on Rear	Nylon	0.75"	0.28"	802T-W25J
	Nylon	0.75"	1"	802T-W25K
	Steel	0.75"	0.25"	802T-W25L
	Steel	0.75"	0.75"	802T-W25M
	Ball Bearing	0.75"	0.23"	802T-W25N
	Beryllium Copper	0.75"	0.28"	802T-W25P
	 Non-Adj. Steel Lever 3.0" Radius Roller on Front	Nylon	0.75"	0.28"
Nylon		0.75"	1"	802T-W30D
Steel		0.75"	0.25"	802T-W30A
Steel		0.75"	0.75"	802T-W30B
Ball Bearing		0.75"	0.23"	802T-W30C
Beryllium Copper		0.75"	0.28"	802T-W30E
 Non-Adj. Steel Lever 3.0" Radius Roller on Rear	Nylon	0.75"	0.28"	802T-W30J
	Nylon	0.75"	1"	802T-W30K
	Steel	0.75"	0.25"	802T-W30L
	Steel	0.75"	0.75"	802T-W30M
	Ball Bearing	0.75"	0.23"	802T-W30N
	Beryllium Copper	0.75"	0.28"	802T-W30P
 Adjustable Lever 1.19" to 3" Radius	Nylon	0.75"	0.28"	802T-W2
	Nylon	0.75"	1"	802T-W2D
	Nylon	1.5"	0.28"	802T-W2A
	Steel	0.75"	0.25"	802T-W2B
	Ball Bearing	0.75"	0.23"	802T-W2C
	Steel	1.4"	0.27"	802T-W2E
	Rubber	1.5"	0.5"	802T-W2R
	Beryllium Copper	0.75"	0.28"	802T-NX94
	 Adjustable Lever 1.19" to 3.5" Radius	Nylon	0.75"	0.28"
Metal		802T-W17B		
Nylon		1.5"		802T-W17A