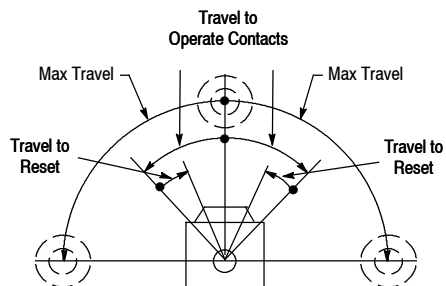
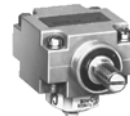


802M Lever Type • Spring Return

Pre-Wired—Factory Sealed Switches

Range of OperationComplete Switch
Without LeverOperator Head
Only

Switch Body Only

Product Selection

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.		
						Complete Switch w/o Lever ❶	Operator Head Only	Switch Body Only ❶
2	Clockwise or Counterclockwise	1 2 3 4	0.34 N•m (3 lb•in)	15°	6°	802M-AY5	802M-AX	802M-XY5
		1 2 3 4	0.56 N•m (5 lb•in)	8°	4°	802M-HY5	802M-HX	
	Clockwise	1 2 3 4	0.34 N•m (3 lb•in)	15°	6°	802M-A1Y5	802M-A1X	
		1 2 3 4	0.56 N•m (5 lb•in)	8°	4°	802M-H1Y5	802M-H1X	
	Counterclockwise	1 2 3 4	0.34 N•m (3 lb•in)	15°	6°	802M-A2Y5	802M-A2X	
		1 2 3 4	0.56 N•m (5 lb•in)	8°	4°	802M-H2Y5	802M-H2X	
4	Clockwise or Counterclockwise	1 2 3 4 5 6 7 8	0.34 N•m (3 lb•in)	15°	6°	802M-ATY5	802M-AX	802M-XTY5
		1 2 3 4 5 6 7 8	0.56 N•m (5 lb•in)	8°	4°	802M-HTY5	802M-HX	
	Clockwise	1 2 3 4 5 6 7 8	0.34 N•m (3 lb•in)	15°	6°	802M-A1TY5	802M-A1X	
		1 2 3 4 5 6 7 8	0.56 N•m (5 lb•in)	8°	4°	802M-H1TY5	802M-H1X	
	Counterclockwise	1 2 3 4 5 6 7 8	0.34 N•m (3 lb•in)	15°	6°	802M-A2TY5	802M-A2X	
		1 2 3 4 5 6 7 8	0.56 N•m (5 lb•in)	8°	4°	802M-H2TY5	802M-H2X	

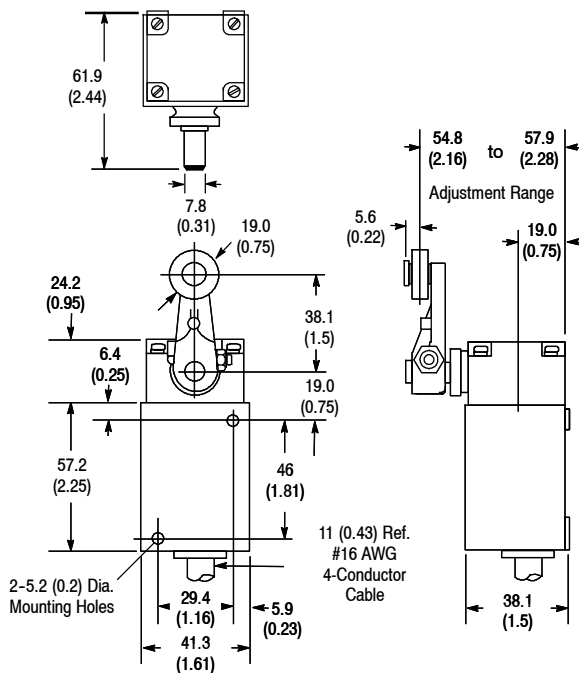
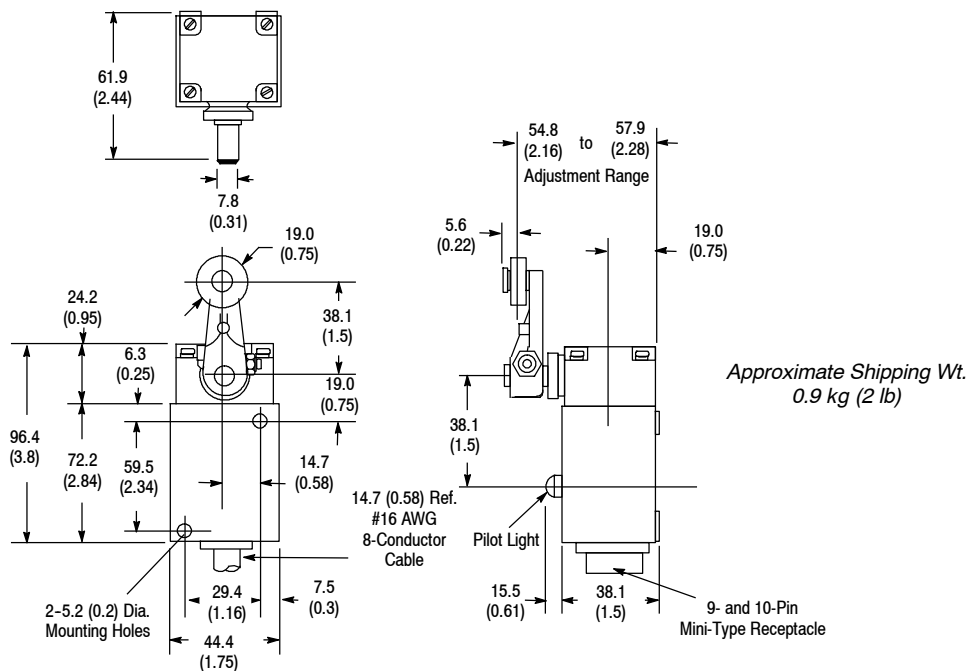
❶ The standard length of STO cable is 1.52 m (5 ft). For other lengths see Modifications and Accessories.

Levers—See page 5-130 for a complete listing of operating levers.**Wiring Diagrams**—See page 5-24.**Modifications and Accessories**—See page 5-27.

802M Lever Type • Spring Return

Pre-Wired—Factory Sealed Switches

Approximate Dimensions [mm (in.)]

2-Circuit**4-Circuit**

Note: Mounting foot adaptor as shown on page 5-23 is for use with 2-circuit 802M type switches only.

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

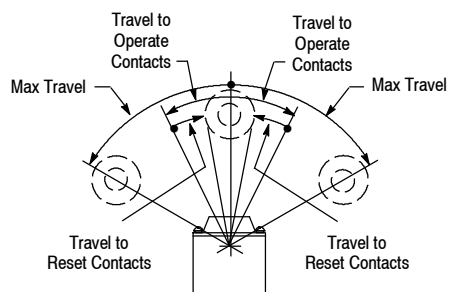
Wiring Diagrams—See page 5-24.

Modifications and Accessories—See page 5-27.

802M Lever Type Neutral Position • Spring Return

Pre-Wired—Factory Sealed Switches

Range of Operation

Complete Switch
Without LeverOperator Head
Only

Switch Body Only

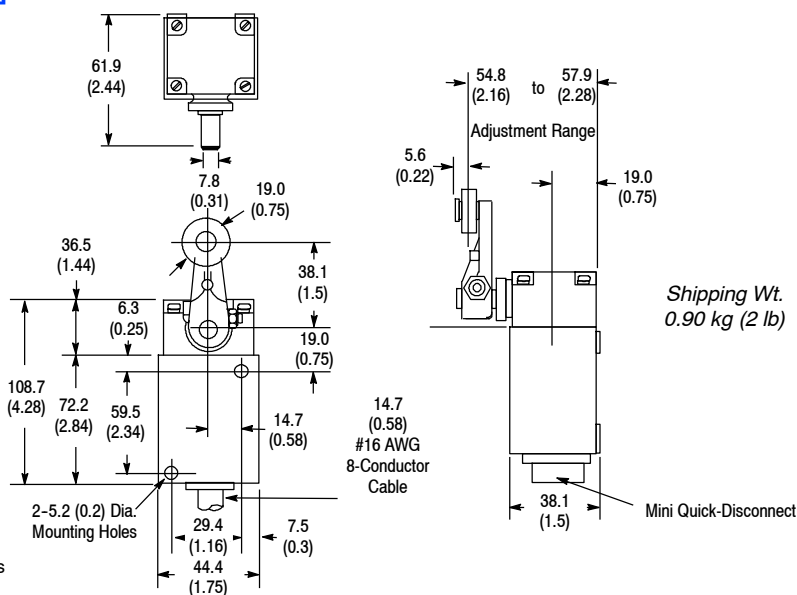
Product Selection

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.		
		CW	CCW				Complete Switch w/o Lever ❶❷	Operator Head Only ❷	Switch Body Only ❶
4		7 lb•in (0.79 N•m)	7.5 lb•in (0.85 N•m)	16°	75°	7°	802M-NPY5	802M-NPX	802M-XNPY5

❶ The standard length of STO cable is 1.52 m (5 ft). For other lengths see Modifications and Accessories.

❷ Operating lever 802T-W3F should not be used with this switch.

Approximate Dimensions [mm (in.)]



Note: Mounting foot adaptor as shown on page 5-23 is for use with 2-circuit 802M type switches only.

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

Wiring Diagrams—See page 5-24

Modifications and Accessories—See page 5-27.

Pre-Wired—Factory Sealed Switches

A schematic diagram of a cam-follower mechanism. The cam is a vertical shaft with a trapezoidal profile. A follower arm is pivoted at its base on the cam shaft. The follower arm has two contact points: a lower contact point on the left and an upper contact point on the right. Dashed circles represent the cam's profile at different positions. Arrows indicate the cam's rotation and the follower's movement. Labels include: "Max Travel" pointing to the peak of the cam profile; "Travel to Reset Contacts" pointing to the upper contact point; and "Travel to Operate Contacts" pointing to the lower contact point.

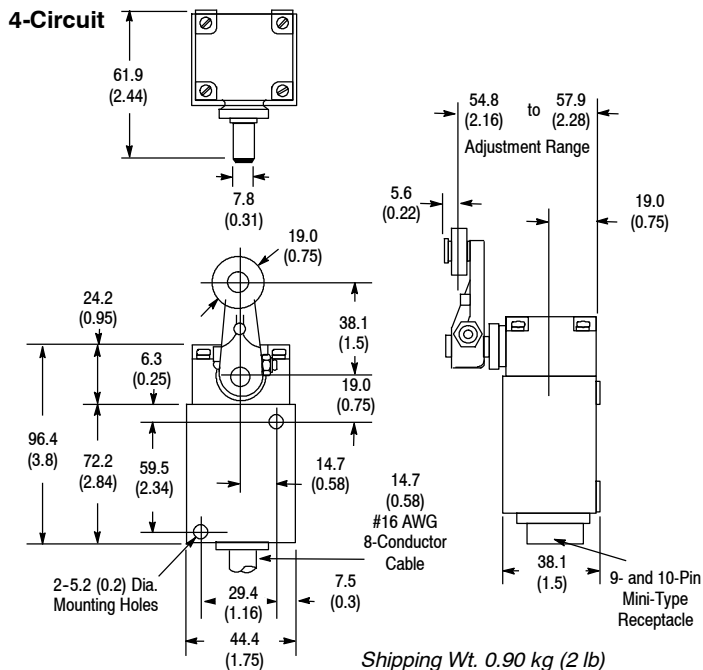
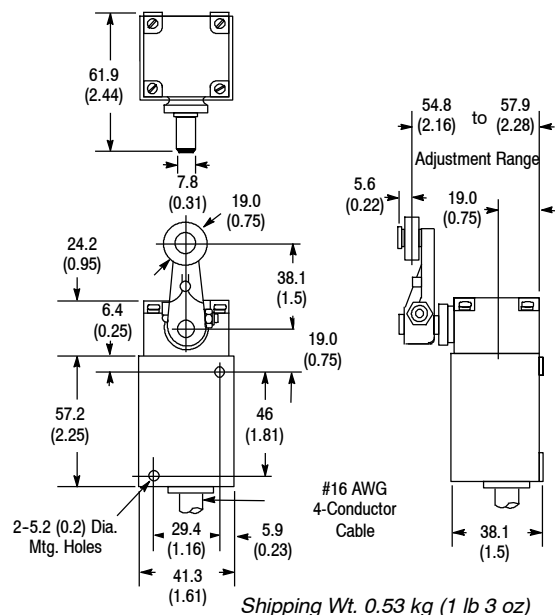


Switch Body Only

No. of Circuits	Lever Movement vs. Contact Operation		Torque to Operate (Max.)	Travel to Operate Contacts (Max.) ^②	Max Travel ^②	Travel to Reset Contacts (Max.)	Cat. No.		
							Complete Switch w/o Lever ^①	Operator Head Only	Switch Body Only ^①
2	Clockwise or Counterclockwise		0.31 N•m (2.75 lb•in)	75°	87°	35°	802M-AMY5	802M-AMX	802M-XY5
4	Clockwise or Counterclockwise						802M-AMTY5		802M-XTY5

② From one maintained position to the other.

2-Circuit

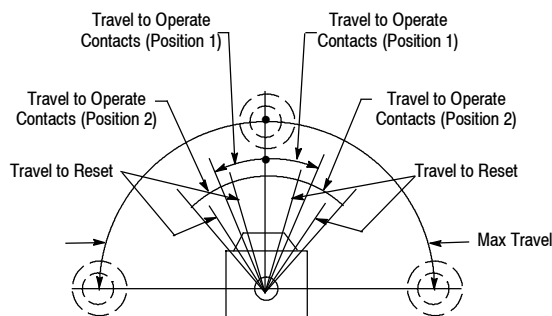


Modifications and Accessories—See page 5-27.

802M Lever Type Sequential • Spring Return

Pre-Wired—Factory Sealed Switches

Range of Operation



Complete Switch Without Lever



Operator Head Only



Switch Body Only

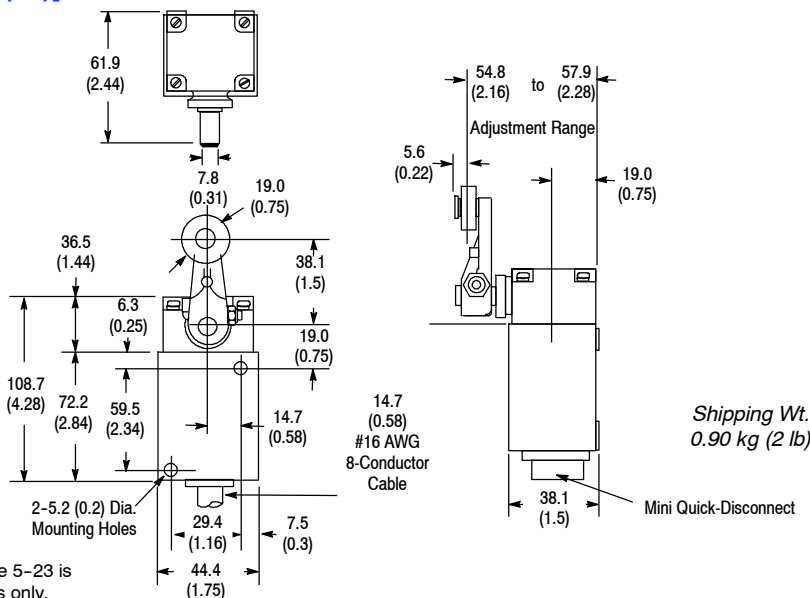
Product Selection — 4-Circuit

Lever Movement vs. Contact Operation	Position 1	Position 2	To Max Travel	Position 1	Position 2	Max Travel	Travel to Reset Contacts (Max.)	Cat. No.		
								Complete Switch w/o Lever ①②	Operator Head Only ②	Switch Body Only ①
Counterclockwise Clockwise 	0.79 N•m (7 lb•in)	0.9 N•m (8 lb•in)		10° ± 3°	20° ± 3°	88°	4° ± 3°	802M-ASY5	802M-ASX	802M-XSY5

① The standard length of STO cable is 1.52 m (5 ft). For other lengths see Modifications and Accessories.

② Operating lever 802T-W3F should not be used with this switch.

Approximate Dimensions [mm (in.)]



Note: Mounting foot adaptor as shown on page 5-23 is for use with 2-circuit 802M type switches only.

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

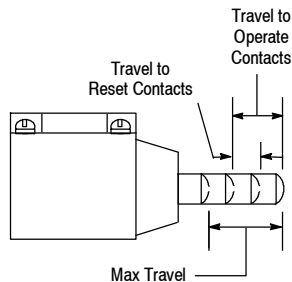
Wiring Diagrams—See page 5-24.

Modifications and Accessories—See page 5-27.

802M Push Type • Spring Return

Pre-Wired—Factory Sealed Switches

Range of Operation



Switch Body Only

Adjustable
Top Push Rod
Switch and HeadAdjustable
Side Push Rod
Switch and Head

Top Push Rod Head



Side Push Rod Head



Top Push Roller Head

Side Push Vertical
Roller HeadSide Push Horizontal
Roller Head

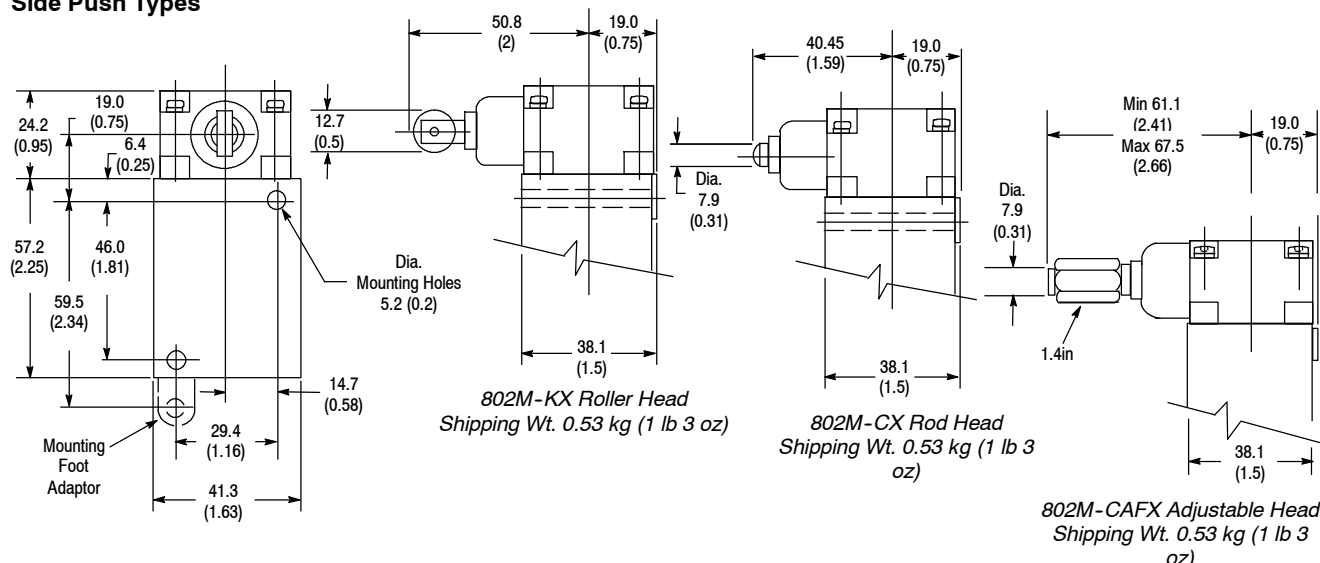
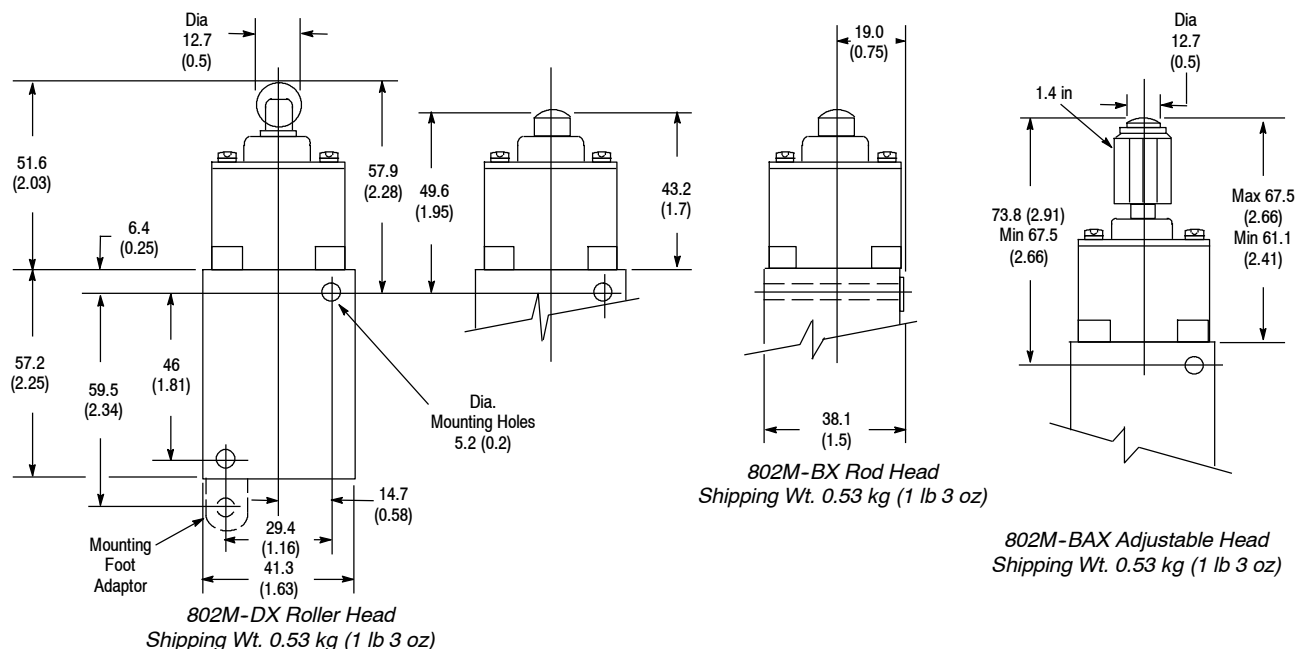
Product Selection

No. of Circuits	Operator Type	Contact Operation		Force to Operate (Max)	Travel to Operate Contacts (Max)	Max Travel	Travel to Reset Contacts (Max)	Cat. No.		
		Normal	Operated					Complete Switch ❶	Operator Head Only	Switch Body Only ❶
2	Top Push Rod			13.3 N (3 lb)	1.45 mm (0.057 in.)	5.26 mm (0.207 in.)	0.56 mm (0.022 in.)	802M-BY5	802M-BX	802M-XY5
	Adjustable Top Push Rod							802M-BAY5	802M-BAX	
	Side Push Rod			20 N (4.5 lb)	2.59 mm (0.102 in.)	5.16 mm (0.203 in.)	1.14 mm (0.045 in.)	802M-CY5	802M-CX	
	Top Push Roller			14.7 N (3.3 lb)	1.45 mm (0.057 in.)	5.26 mm (0.207 in.)	0.56 mm (0.022 in.)	802M-DY5	802M-DX	
	Side Push Vertical Roller							802M-KY5	802M-KX	
	Side Push Horizontal Roller			20 N (4.5 lb)	2.59 mm (0.102 in.)	5.1 mm (0.203 in.)	1.14 mm (0.045 in.)	802M-K1Y5	802M-K1X	
	Adjustable Side Push Rod							802M-CAFY5	802M-CAFX	
4	Top Push Rod			13.3 N (3.5 lb)	1.45 mm (0.057 in.)	5.13 mm (0.202 in.)	0.076 mm (0.030 in.)	802M-BTY5	802M-BX	802M-XTY5
	Adjustable Top Push Rod							802M-BATY5	802M-BAX	
	Side Push Rod			20 N (4.5 lb)	3.18 mm (0.125 in.)	5.54 mm (0.218 in.)	1.14 mm (0.045 in.)	802M-CTY5	802M-CX	
	Top Push Roller			14.7 N (3.5 lb)	1.45 mm (0.057 in.)	5.13 mm (0.202 in.)	0.076 mm (0.030 in.)	802M-DTY5	802M-DX	
	Side Push Vertical Roller							802M-KTY5	802M-KX	
	Side Push Horizontal Roller			20 N (4.5 lb)	3.18 mm (0.125 in.)	5.54 mm (0.218 in.)	1.14 mm (0.045 in.)	802M-K1TY5	802M-K1X	
	Adjustable Side Push Rod			2.59 mm (0.102 in.)	5.16 mm (0.203 in.)			802M-CAFTY5	802M-CAFX	

❶ The standard length of STO cable is 1.52 m (5 ft). For other lengths see Modifications and Accessories.

Wiring Diagrams—See page 5-24.

Modifications and Accessories—See page 5-27.

802M Push Type • Spring Return**Pre-Wired—Factory Sealed Switches****Approximate Dimensions [mm (in.)]****Side Push Types****Top Push Types**

Note: Mounting foot adaptor as shown above is for use with 2-circuit 802M type switches only.

Wiring Diagrams—See page 5-24.

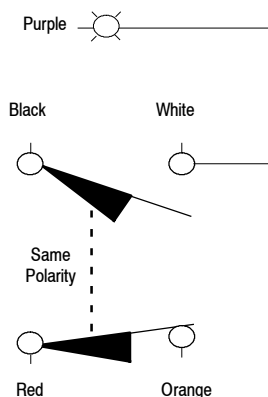
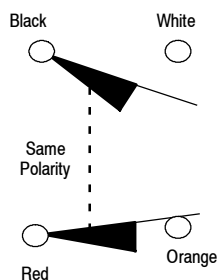
Modifications and Accessories—See page 5-27.

802M Wiring Diagrams for 2-Circuit Models

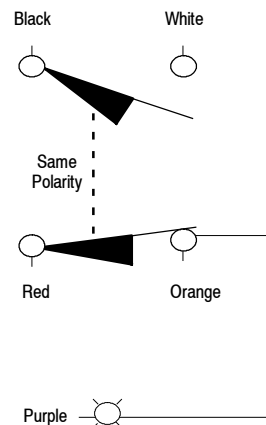
Pre-Wired—Factory Sealed Switches

Cable Models

(See Applicable Codes and Laws)



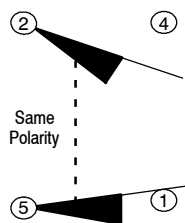
Light Wired to N.O. (White) Wire



Light Wired to N.C. (Orange) Wire

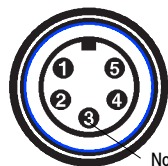
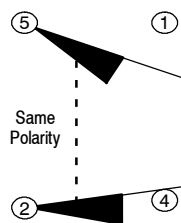
5-Pin Mini-Type Receptacle

"J1" Wiring



No Connection

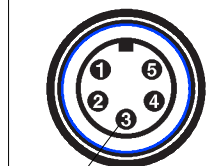
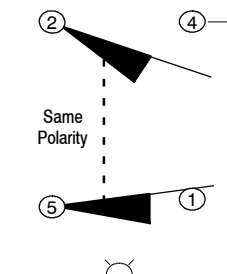
"J9" Wiring



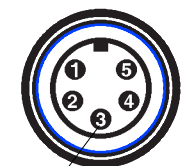
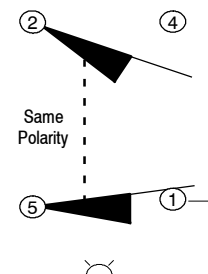
No Connection

5-Pin Mini-Type Receptacle with One Indicating Light

"J1" Wiring

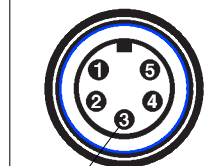
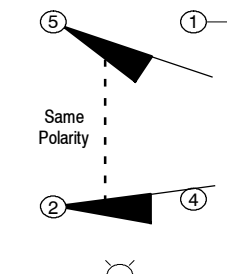


Light Wired to N.O.

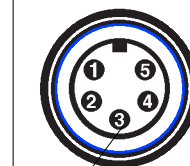
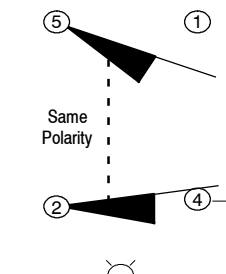


Light Wired to N.C.

"J9" Wiring



Light Wired to N.O.

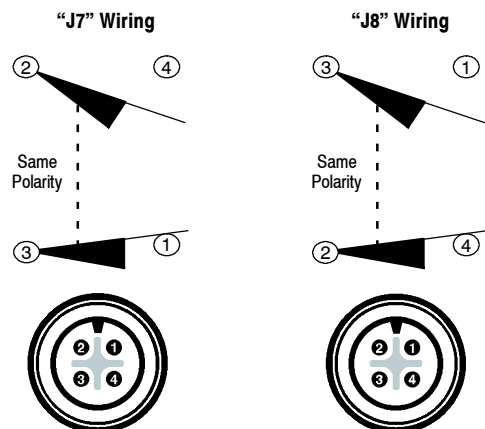


Light Wired to N.C.

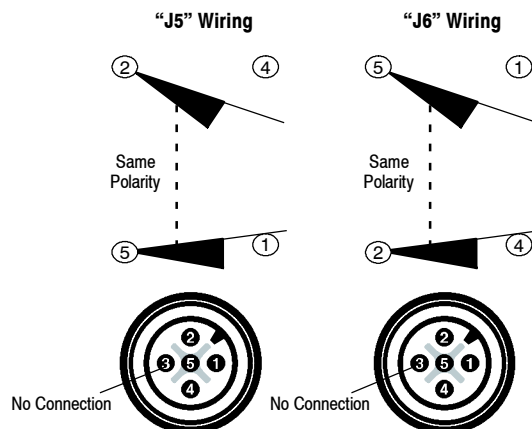
802M Wiring Diagrams for 2-Circuit Models

Pre-Wired—Factory Sealed Switches

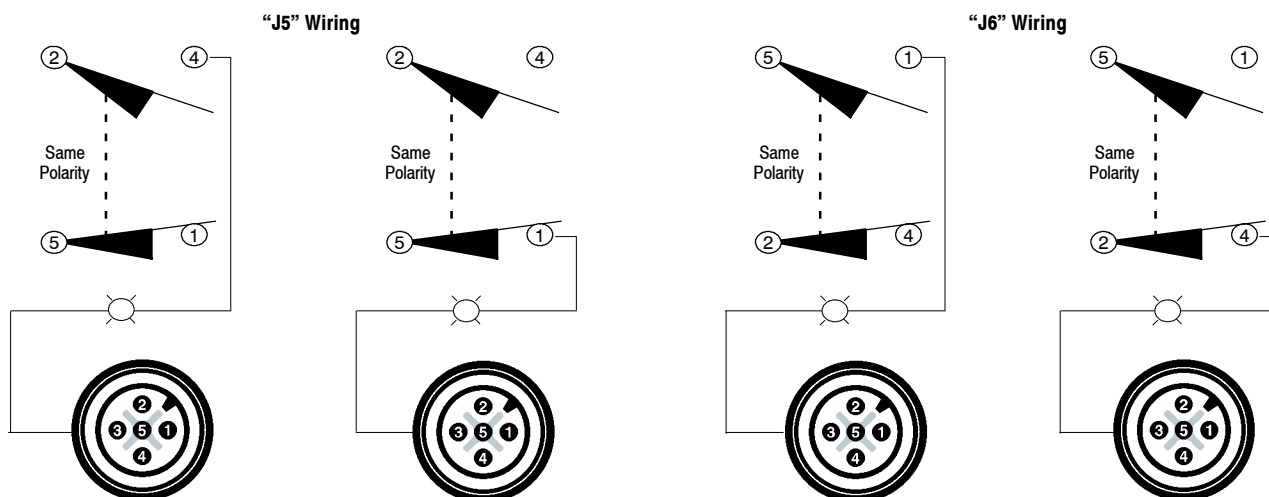
4-Pin Micro-Type Receptacle (DC only)



5-Pin Micro-Type Receptacle (DC only)



5-Pin Micro-Type Receptacle with One Indicating Light (DC only)

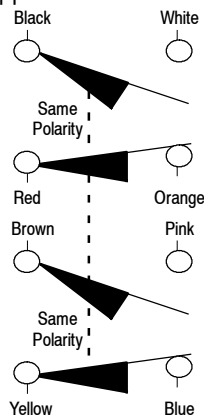


802M Wiring Diagrams for 4-Circuit Models

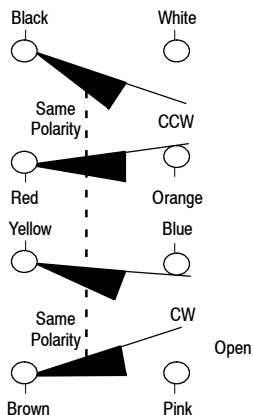
Pre-Wired—Factory Sealed Switches

Cable Models

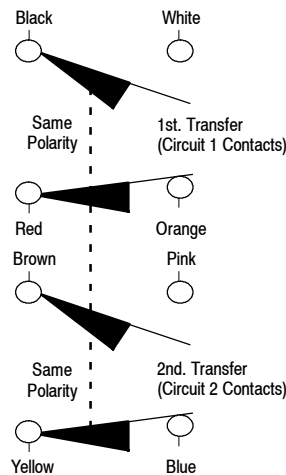
(See Applicable Codes and Laws)



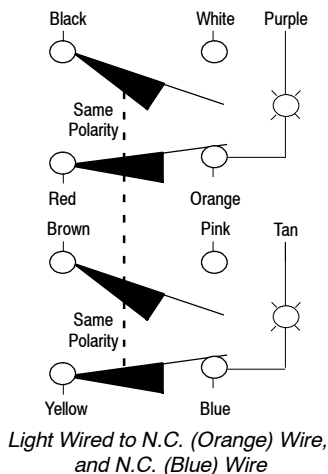
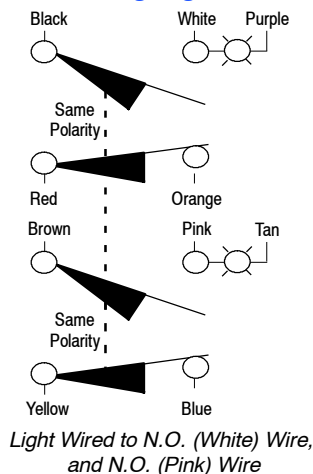
Neutral Position with Cable



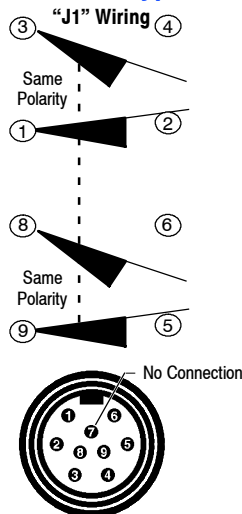
Sequential with Cable



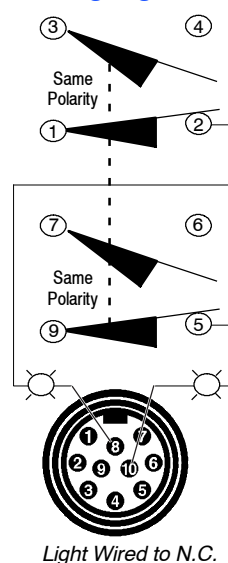
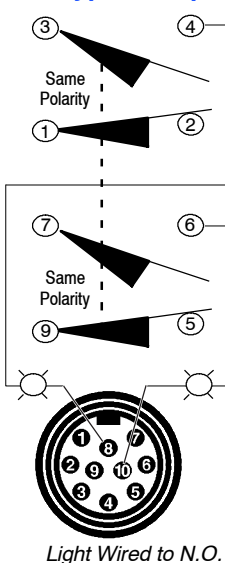
Cable Models with Two Indicating Lights



9-Pin Mini-Type Receptacle



10-Pin Mini-Type Receptacle with Two Indicating Lights



802M Modifications

Pre-Wired—Factory Sealed Switches

24V DC Switches

All two-circuit 802M limit switches are available with silver-nickel contacts rated for 24V DC applications. To order a switch rated for 24V DC use, insert the letter **Z** before the cable or connector designation. Example: 802M-AZY5 is a 24V DC version of the 802M-AY5. The use of the 24V DC micro connector option or 24V DC indicating light option require the switch be rated for 24V DC operation.

Extended Cable Lengths

The factory installed type STO cable is normally supplied in 1.52 m (5 ft) lengths. Extended cable lengths are available in multiples of four feet. To order, replace the suffix **Y5** in the cat. no. with the appropriate suffix from the table below. Example: To order a lever type two-circuit spring return switch with 1.83 m (8 ft) of STO cable the cat. no. would be 802M-AY8.

Additional Cable Length

Modification	Cat. Number Suffix
1.83 m (8 ft) Cable	Y8
3.66 m (12 ft) Cable	Y12
4.78 m (16 ft) Cable	Y16

5-Pin Mini-Type Receptacle^①
(2-Circuit Models Only)

802M with Mini-Type Receptacle
2-Circuit

To order a Bulletin 802M pre-wired limit switch with a 5-pin mini connector in place of the 1.52 m (5 ft) of "STO"^② cable, replace the **Y5** in the cat. no. with the suffix **J1** or **J9** depending upon the wiring configuration required. Maximum voltage rating for this receptacle is 250V AC.

An appropriate female connector with cable (889N-F5AFC-6F) is available on page 8-4 in Connection Systems.

9-Pin Mini-Type Receptacle^①
(4-Circuit Models without Indicator Lights Only)

802M with Mini-Type Receptacle
4-Circuit

To order a Bulletin 802M pre-wired limit switch with a 9-pin mini connector in place of the 1.52 m (5 ft) of STO cable, replace the **Y5** in the cat. no. with the suffix **J1**. Maximum voltage rating for this receptacle is 250V AC.

An appropriate female connector with cable (889N-F9AF-2) is available on page 8-14 in Connection Systems.

10-Pin Mini-Type Receptacle^①
(4-Circuit Models with 2 Indicating Lights Only)

To order a Bulletin 802M pre-wired limit switch with a 10-pin mini connector and two indicating lights, replace the **Y5** in the cat. no. with the suffix **J4**. Maximum voltage rating for this receptacle is 250V AC. Also, specify the indicating lights per the table on page 5-28.

Example: Cat. No. 802M-ATY5 with mini-connector and (2) 120V AC indicating lights wired to one side of each N.O. contact would be Cat. No. 802M-ATJ4L1F.

An appropriate female connector with cable (889N-F10AF-2) is available on page 8-14 in Connection Systems.

4-Pin Micro-Type Receptacle
(2-Circuit 24V DC Models Only)

802M with Micro-Type
Receptacle—2-Circuit

To order a Bulletin 802M pre-wired limit switch with a 4-pin micro connector in place of the 1.52 m (5 ft) of "STO"^② cable, replace the **Y5** in the cat. no. with the suffix **J7** or **J8** depending upon the wiring configuration required. This option requires that the switch is rated 24V DC.

An appropriate female connector with cable (889D-F4AC-2) is available on page 8-16 in Connection Systems.

5-Pin Micro-Type Receptacle
(2-Circuit 24V DC Models Only)

To order a Bulletin 802M pre-wired limit switch with a 5-pin micro connector in place of the 1.52 m (5 ft) of "STO"^② cable, replace the **Y5** in the cat. no. with the suffix **J5** or **J6** depending upon the wiring configuration required. This option requires that the switch is rated 24V DC.

An appropriate female connector with cable (889D-F5AC-2) is available on page 8-16 in Connection Systems.

① A 5-pin, 9-pin or 10-pin plug-in receptacle is supplied to facilitate retrofitting existing installations. The normal ground wire pin is not required and is not connected inside the switch.

② STO is a common identification of this cable. The more complete identification of the cable used on the Bulletin 802M is ST00W-A which incorporates an oil resistant jacket and conductor insulation, for indoor and outdoor use.

Indicating Lights

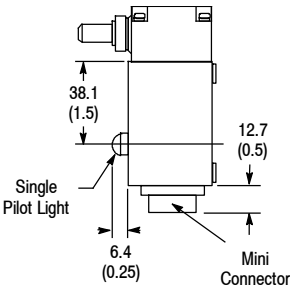


802M with Indicating Light
2-Circuit

2-Circuit—Bulletin 802M pre-wired limit switches can be supplied with an indicating light which is wired to one side of either the N.O. or N.C. contact. The second lead of the light is available as a fifth conductor for wiring flexibility. See pages 5-24 through 5-25 for wiring diagrams.

To order, add the appropriate suffix listed in the table to the right to the cat. no. Example: Cat. No. 802M-AY5 with a 120V AC LED indicating light wired to one side of the N.O. contact would be Cat. No. 802M-AY5**L1F**.

Example: Cat. No. 802M-AY5 with mini-connector and 120V AC indicating light wired to one side of the N.O. contact would be Cat. No. 802M-AJ1**L1F**.

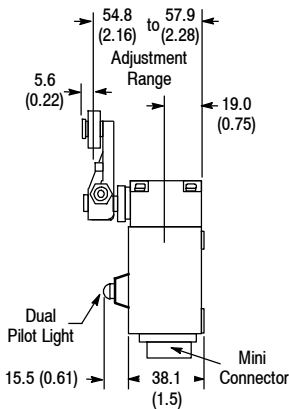


802M with Indicating Lights
4-Circuit

4-Circuit—Bulletin 802M pre-wired limit switches can be supplied with 2 indicating lights wired to one side of each N.O. or N.C. contact of the 4-circuit contact block. Second leads from each light are available as ninth and tenth conductors for wiring flexibility. See page 5-26 for wiring diagram.

To order, add the appropriate suffix listed in the table to the right to the cat. no.

Example: Cat. No. 802M-ATY5 with 120V AC LED indicating lights wired to one side of each N.C. contact would be Cat. No. 802M-ATY5**L1C**.



LED Indicating Lights		
Voltage	Wired to ❶	Cat. No. Suffix
24V DC ❷	N.O. Contact	LF
	N.C. Contact	LC
120V AC 50-60Hz	N.O. Contact	L1F
	N.C. Contact	L1C

Neon Indicating Lights		
Voltage	Wired to ❶	Cat. No. Suffix
120V AC 50-60Hz	N.O. Contact	NF
	N.C. Contact	NC
240V AC 50-60Hz	N.O. Contact	N5F
	N.C. Contact	N5C

Fitting for Liquid-Tight Flexible Metal Conduit

802M 2-circuit switches can be obtained provided with a fitting for liquid-tight flexible metal conduit (flexible metal conduit not provided) and a pigtail for wiring. Add the following suffix to the cat. no. (dashes indicate pigtail length):

- GS_ straight-out fitting
- GF_ front oriented 90° elbow fitting
- GL_ left oriented 90° elbow fitting
- GB_ back oriented 90° elbow fitting
- GR_ right oriented 90° elbow fitting.

Example: GS5=5 foot long pigtail. Additional cable length over 1.5 m (5 ft) is available in multiples of 1.2 m (4 ft).

❶ See wiring diagrams page 5-24...5-26.

❷ Requires the switch be rated for 24V DC operation.