

## Lifeline 3

The Lifeline 3 switch is a cable (rope) operated emergency stop device that is designed to meet the stringent requirements of ISO 13850 (Safety of Machinery—Emergency Stop Equipment). The Lifeline 3 system can be installed along or around awkward machinery such as conveyors and provides a constant-access emergency stop facility.

It is recommended that the LRTS be used with the Lifeline 3 cable rope switch.



## Features

- The positive-mode mechanism helps ensure that the contacts are immediately latched open on actuation and can only be reset by the intentional action of turning the blue reset knob. The design also helps protect against nuisance tripping and the effects of thermal expansion.
- The cable-status indicator makes the system easy to build and maintain for spans up to 30 m (98 ft).
- Four sets of contacts are provided: 2 N.C. + 2 N.O., or 3 N.C. + 1 N.O. contacts.
- Sealed to IP67 with rugged construction that uses die-cast alloy and stainless steel to withstand harsh conditions.
- Universal mounting and operation
- Switch lockout on cable pulled and cable slack
- Industry standard fixing centers to DIN/EN 50041
- Quick disconnect styles available

## Specifications

Attribute	Value	
Safety ratings		
Standards	IEC 60947-5-5, ISO 13850, IEC 60947-5-1 Emergency stop device in accordance with ISO 13850	
Functional safety data	Visit <a href="http://literature.rockwellautomation.com/idc/groups/literature/documents/sr/safety-sr001_-en-e.pdf">http://literature.rockwellautomation.com/idc/groups/literature/documents/sr/safety-sr001_-en-e.pdf</a>	
Certifications	c-UL-us Listed, TÜV Certified, and CE Marked for all applicable directives <a href="http://www.rockwellautomation.com/certification/overview.page">www.rockwellautomation.com/certification/overview.page</a>	
Outputs		
Safety contacts <sup>(1)</sup> (2) Direct opening action	2 N.C. direct-opening action	3 N.C. direct-opening action
Auxiliary contacts <sup>(2)</sup>	2 N.O. direct-opening action	1 N.O. direct-opening action
Thermal current/ $I_{th}$	10 A	
Rated insulation voltage (Ui)	500V	
Switching current @ voltage, min	3 mA @ 18V DC	

Cable (Rope) Pull Switches

Attribute	Value			
<b>Utilization category</b>				
A600/AC-15 (Ue)	600V	500V	240V	120V
A600/AC-15 (Ie)	1.2 A	1.4 A	3.0 A	6.0 A
DC-13 (Ue)	24V			
DC-13 (Ie)	2 A			
<b>Operating characteristics</b>				
Cable span between switches, max	30 m (98 ft)			
Tensioning force to run position	103 N (23.17 lbf) typical			
Tensioning force to lockout	188 N (42.3 lbf) typical			
Operating force, min	<125 N (28.1 lb) at 300 mm (11.81 in.) deflection			
Actuation frequency, max	1 cycle/s			
Mechanical life	1,000,000 operations			
<b>Environmental</b>				
Enclosure type rating	IP67			
Operating temperature	-20...+80 °C (-4...+176 °F)			
<b>Physical characteristics</b>				
Housing material	Heavy-duty painted zinc-based die-cast alloy			
Indicator material	Glass-filled nylon			
Eye nut material	Stainless steel			
Weight [g (lb)]	610 (1.34)			
Color	Yellow body, blue reset button			

(1) The safety contacts are described as normally closed (N.C.) that is, with the guard closed, actuator in place (where relevant) and the machine able to be started.

(2) See [Product Selection](#) on page 9.

## Product Selection

Contacts		Cat. No.				
Safety	Auxiliary	Conduits		Connectors <sup>(1)</sup>		
		M20	1/2 inch NPT	12-Pin M23	8-Pin Micro (M12) <sup>(2)</sup>	Connect to ArmorBlock Guard I/O 5-pin Micro (M12) <sup>(3)</sup>
2 N.C.	2 N.O.	440E-D13118	440E-D13120	440E-D13132	440E-D21BNYH	440E-D2NNNYS
3 N.C.	1 N.O.	440E-D13112	440E-D13114	440E-D13124	—	—

(1) For connector ratings, see [Table 5](#).

(2) With an 8-pin micro (M12) connector, not all contacts are connected. See [Typical Wiring Diagrams](#) on page 11.

(3) For connection to ArmorBlock Guard I/O. With a 5-pin micro (M12) connector, not all contacts are connected. See [Typical Wiring Diagrams](#) on page 11.

**Table 5 - Connector Ratings**

	Max Ratings		Applicable Standards
	AC	DC	
4-Pin Micro (M12)	250V, 4 A	250V, 4 A	IEC 61076-2-101:2003
5-pin Micro (M12)	60V, 4 A	60V, 4 A	IEC 61076-2-101:2003
8-Pin Micro (M12)	30V, 2 A	30V, 2 A	IEC 61076-2-101:2003
12-Pin M23	63V, 6 A	63V, 6 A	IEC 61984:2001

**Table 6 - Connection Systems**

Description	5-pin Micro (M12) <sup>(1)</sup>	8-Pin Micro (M12)	12-Pin M23
Cordset	—	889D-F8AB-x <sup>(3)</sup>	889M-F12X9AE-x <sup>(3)</sup>
Patchcord	889D-F5ACDM-y <sup>(2)</sup>	889D-F8ABDM-y <sup>(2)</sup>	889M-F12AHMU-z <sup>(4)</sup>

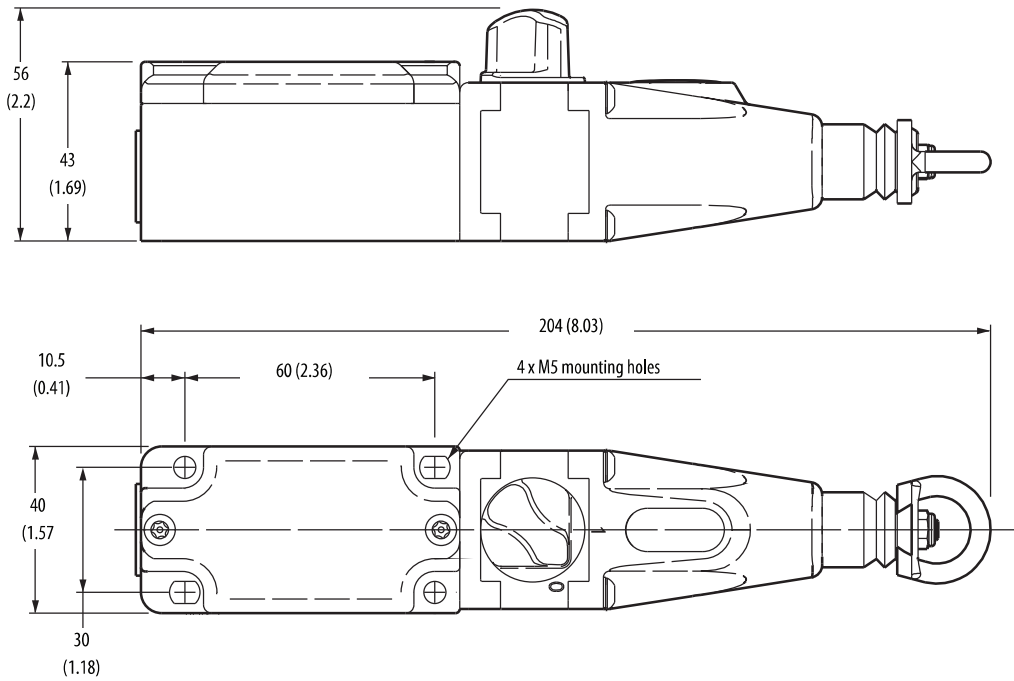
(1) To connect to ArmorBlock Guard I/O.

(2) Replace y with 1 (1 m), 2 (2 m), 3 (3 m), 5 (5 m), or 10 (10 m) for standard cable lengths.

(3) Replace x with 2 (2 m), 5 (5 m), or 10 (10 m) for standard cable lengths.

(4) Replace z with 0M3 (0.3 m), 0M6 (0.6 m), 1 (1 m), 2 (2 m) or 3 (3 m) for standard lengths.

### Approximate Dimensions



Dimensions are shown in mm (in.). Dimensions are not intended to be used for installation purposes.  
2D, 3D, and electrical drawings are available on <https://ab.rockwellautomation.com/>.