

Product Information

Original Instructions



Allen-Bradley
by ROCKWELL AUTOMATION



Lifeline 5 Cable-pull Safety Switch

Catalog Numbers 440E-LL5SS8, 440E-LL5SS5, 440E-LL5SE8, 440E-LL5SE5, 440E-LL5SN8, 440E-LL5SN5



ATTENTION: Read this document and the documents that are listed in [Additional Resources on page 2](#) about installation, configuration, and operation of this equipment before you install, configure, operate, or maintain this product. Users are required to familiarize themselves with installation and wire instructions and requirements of all applicable codes, laws, and standards.

Suitably trained personnel are required to install, adjust, put into service, use, assemble, disassemble, and maintain this equipment in accordance with the applicable code of practice.

The protection that is provided by the equipment can be impaired if the equipment is used in a manner that the manufacturer has not specified.



WARNING: Do not defeat, tamper, remove, or bypass this unit. Severe injury to personnel could result.

Installation

IMPORTANT The operating voltage must be provided by a 24V DC +10%/-15% Class 2 SELV or PELV power supply.

We recommend using M5 or #10-32 bolts to mount the sensor to the frame of the machine.

Attach the tension spring to the eye hook on the front of the switch, as shown in the following image.



ATTENTION: The sensor must not be used without this spring attached.

IMPORTANT The first eyebolt must be located 300 mm (11.8 in.) from the switch eyelet. This distance provides for a straight and efficient pulling action on the sensor.

Additional eyebolts are spaced 2...3 m (6...9 ft) apart to help keep the perpendicular pull force within IEC 60947-5-5 specifications of 200 N (45 lbf) and 400 mm (15.75 in.).

EN ISO 13850 standard requires that the full length of the cable is within view when the reset is pressed. Or the machine must be inspected over the whole length of the cable, before and after resetting.

Install inside and outside pulley so cable can go around corners or whenever direction is changed, even slightly.

Diagnostic

Table 1 - Unit Indicators

State	Status	Troubleshooting
Off	Not powered	Normal functions
Red	OSSD not active	
Green	OSSD active	
Green flash	Power up test or OSSD inputs not valid	Check 24V DC or OSSD inputs (yellow or red wire)
Red flash	1 Hz flash OSSD fault	OSSD fault – check that OSSD outputs are not shorted to GND, 24V DC, or each other.
	4 Hz flash internal fault	Cycle power.
	4 Hz flash internal fault	Press the E-stop button, cycle power, and twist-to-release E-stop. ⁽¹⁾

(1) Firmware revision 1.005 or higher

Wiring

Table 2 - 8-pin Connection

	Pin	Wire Color	Signal
	1	White	Auxiliary Output
	2	Brown	24V DC
	3	Green	Tension Output
	4	Yellow	Safety OSSD 2 Input
	5	Gray	Safety OSSD 1 Output
	6	Pink	Safety OSSD 2 Output
	7	Blue	0V
	8	Red	Safety OSSD 1 Input

Description	Temperature Rating	Jacket Material	Coupling Nut	Cat. No. ⁽¹⁾
M12 8-pin cordset	-20...+105 °C (-4...+221 °F)	PVC	Epoxy-coated zinc	889D-F8AB-2
			Stainless steel	889DS-F8AB-2

(1) Replace the 2 with 5 (5 m [16.4 ft]) or 10 (10 m [32.8 ft]) for standard cable lengths.

Table 3 - 5-pin Connection

	Pin	Color	Signal
	1	Brown	+24V
	2	White	Safety OSSD 1 Output
	3	Blue	0V
	4	Black	Safety OSSD 2 Output
	5	Gray	Auxiliary Output

Description	Temperature Rating	Jacket Material	Coupling Nut	Cat. No. ⁽¹⁾
M12 5-pin cordset	-20...+105 °C (-4...+221 °F)	PVC	Epoxy-coated zinc	889D-F5AC-2
			Stainless steel	889DS-F5AC-2
M12 4-pin cordset	-50...+105 °C (-58...+221 °F)	TPE	Stainless steel	889DS-F4HJ-2

(1) Replace the 2 with 5 (5 m [16.4 ft]) or 10 (10 m [32.8 ft]) for standard cable lengths.

IMPORTANT If you do not require the auxiliary signal, a 4-pin cordset (catalog number 889D-F4AC-2) can be used.
For low temperature applications, use a 4-pin cordset (catalog number 889DS-F4HJ-2).

The recommended patchcord for use with ArmorBlock® Guard I/O™ is 2 m (6.5 ft) - 889D-F4ACDM-2. Replace the 2 with OM3 (0.3 m [0.98 ft]), 1 (1 m [3.28 ft]), 5 (5 m [16.4 ft]), or 10 (10 m [32.8 ft]) for standard cable lengths.

Approximate Dimensions

Figure 1 - Standard Housing [mm (in.)]

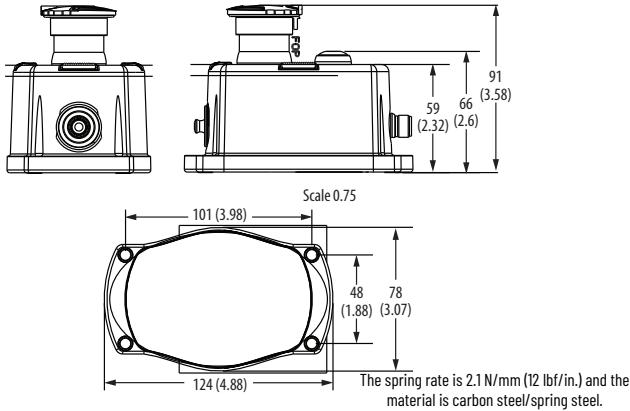
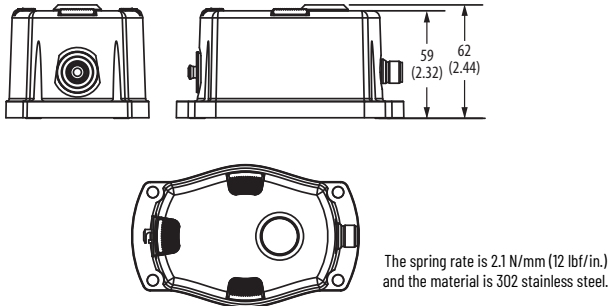


Figure 2 - Stainless Steel Housing [mm (in.)]



Declaration of Conformity

CE Conformity

Rockwell Automation declares that the products that are shown in this document are in compliance with the Essential Health and Safety Requirement (EHSRs) of the European Machinery Directive 2006/42/EC.

For a comprehensive CE certificate visit: rok.auto/certifications

UKCA Conformity

Rockwell Automation declares that the products that are shown in this document are in compliance with the Supply of Machinery (Safety) Regulation (2008 No. 1597).

For a comprehensive UKCA certificate visit: rok.auto/certifications

Additional Resources

To download publications, visit rok.auto/literature and search for the following publication numbers.

Resource	Description
Lifeline 5 Cable-pull Safety Switch Installation Instructions, publication 440E-IN008	Provides a detailed description of Lifeline™ 5 switch functionality, configuration, specifications, installation procedure, and information on how to use the switch.
Cable (Rope) Pull Switches Technical Data, publication 440E-TD001	Provides specification and selection information for cable (rope) pull switches.
Functional Safety Data Sheet, publication SAFETY-SR001	Provides functional safety data for Rockwell Automation products.
Industrial Automation Wiring and Grounding Guidelines, publication 1770-4.1	Provides general guidelines for installing a Rockwell Automation industrial system.
Product Certifications website, rok.auto/certifications	Provides declarations of conformity, certificates, and other certification details.

Waste Electrical and Electronic Equipment (WEEE)







At the end of life, this equipment should be collected separately from any unsorted municipal waste.

Rockwell Automation maintains current product environmental compliance information on its website at rok.auto/pec.

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Rockwell Otomasyon Ticaret A.Ş. Kar Plaza İş Merkezi E Blok Kat:6 34752, İçerenköy, İstanbul, Tel: +90 (216) 5698400 EEE Yönetmeliğine Uygundur

Connect with us.    

rockwellautomation.com

expanding **human possibility**®

AMERICAS: Rockwell Automation, 1201 South Second Street, Milwaukee, WI 53204-2496 USA, Tel: (1) 414.382.2000, Fax: (1) 414.382.4444

EUROPE/MIDDLE EAST/AFRICA: Rockwell Automation NV, Pegasus Park, De Kleetlaan 12a, 1831 Diegem, Belgium, Tel: (32) 2 663 0600, Fax: (32) 2 663 0640

ASIA PACIFIC: Rockwell Automation, Level 14, Core F, Cyberport 3, 100 Cyberport Road, Hong Kong, Tel: (852) 2887 4788, Fax: (852) 2508 1846

UNITED KINGDOM: Rockwell Automation Ltd. Pitfield, Kiln Farm Milton Keynes, MK11 3DR, United Kingdom, Tel: (44)(1908) 838-800, Fax: (44)(1908) 261-917

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