



Conforms to EN418, EN292, ISO/IEC13850, EN60947-5-1
UL and C-UL listed



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safety interlock switches

ER6019

Combination Rope and Push-Button Actuated Emergency Stop Switch

- Long rope spans of up to 75 m (246 ft.) for standard model and up to 125 m (410 ft.) for extended model means fewer number of switches required per application
- Heavy-duty housing—the die-cast housing and stainless steel eye nut make the ER6019 suitable for demanding industrial applications
- NEMA 6 enclosure enables the ER6019 switch to withstand water washdown cleaning
- Integral E-stop—the lid-mounted E-stop button provides emergency stopping capability at the extreme end of the installation
- Status indicator—the lid-mounted status indicator makes the system easy to set up and to maintain the proper rope tension
- Variety of contacts—three or four sets of contacts to satisfy the most demanding applications
- Vibration tolerant—the snap-acting switch contacts protect against nuisance tripping due to vibration
- Long life—the ER6019 switch is designed for a minimum of one million actuations
- Conduit beacons are available to provide visual status indication (order separately from accessories section)



Go to the Engineering Guide
For in-depth information on safety standards and use.



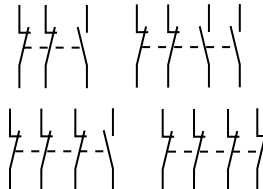
■ Operation

Rope-Status Indicator on Lid



The rope status indicator makes the system easy to set up and maintain for spans up to 410 ft.

Contact Arrangements



Eye-Nut Extended (mm)
2N/C + 1N/O Version

	3	6	9	10.5	12.5
0mm	0.12	0.24	0.35	0.41	0.49
11/12					
21/22					
33/34					

Rope Slack Lockout Rope Tension Range Rope Pulled Lockout

☐ Contact Open ☒ Contact Closed

4N/C Version

	3	6	9	10.5	12.5
0mm	0.12	0.24	0.35	0.41	0.49
11/12					
21/22					
31/32					
41/42					

Rope Slack Lockout Rope Tension Range Rope Pulled Lockout

☐ Contact Open ☒ Contact Closed

3N/C + 1N/O Version

	3	6	9	10.5	12.5
0mm	0.12	0.24	0.35	0.41	0.49
11/12					
21/22					
31/32					
43/44					

Rope Slack Lockout Rope Tension Range Rope Pulled Lockout

☐ Contact Open ☒ Contact Closed

2N/C + 2N/O Version

	3	6	9	10.5	12.5
0mm	0.12	0.24	0.35	0.41	0.49
11/12					
21/22					
33/34					
43/44					

Rope Slack Lockout Rope Tension Range Rope Pulled Lockout

☐ Contact Open ☒ Contact Closed

Installation Hardware Available



Rope Tension Kits

The RTK Rope Tension Kits provide a revolutionary tensioning system that substantially reduces set-up time and provides all the necessary components in a single package.



Installation Hardware

All conventional hardware items are available and may be ordered as separate items.



RTK Tensioner



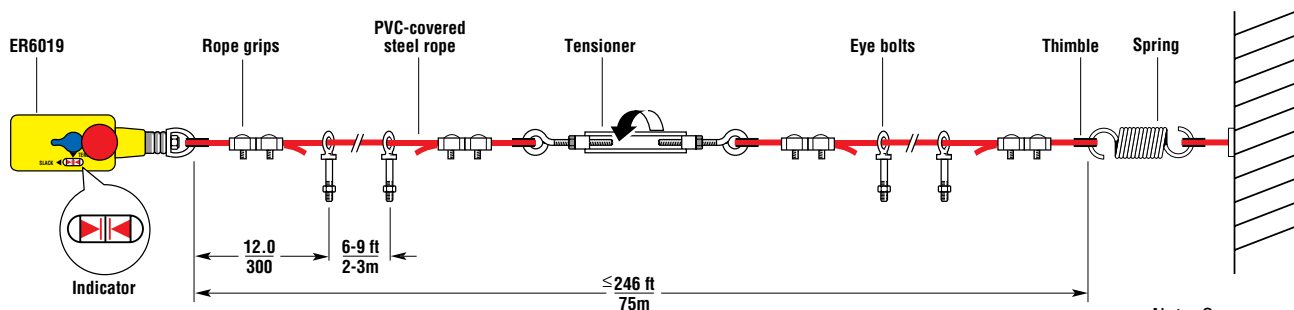
RTK Grippers

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■ Operation (continued)

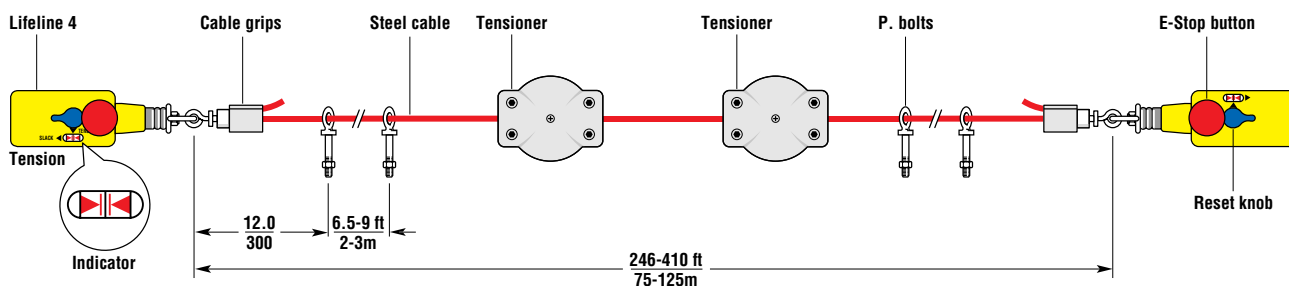
Mounting Specifications

Standard Model



Note: Some installations may require a ER6019 on both ends.

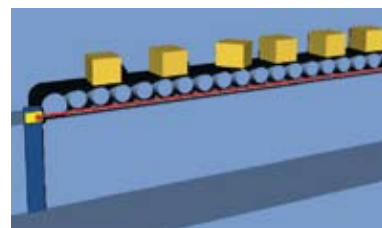
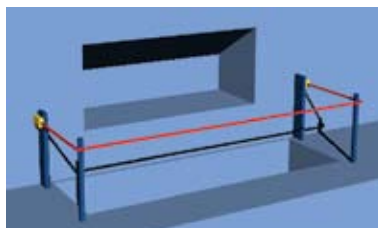
Extended Model



For a guide to installing, see "Proper Installation of Rope or Wire Pull Switches" in the Engineering Section of this catalog.

■ Applications

Typical applications are on conveyor systems, across rotating machinery, and around hazardous areas.



A Go to the Engineering Guide
For in-depth information on safety standards and use.

■ Specifications

Electrical	All Models
Contact Configurations:	2 N/C + 1 N/O , 2 N/C + 2 N/O, 3 N/C + 1 N/O, 4 N/C
Safety Contacts:	2 N/C, 3 N/C, 4 N/C positive break
Switching Ability	
AC:	500 V–1 A, 250 V–2 A, 100 V–5 A
DC:	250 V–0.5 A, 125 V–1 A, 24 V–2 A
Safety Contact Gap:	2 x 2 mm or 3 x 2 mm or 4 x 2 mm
Auxiliary Contacts:	1 N/O or 1 N/C or 2 N/O
Max Switching Current/Volt/Amp:	500 V/500 VA
Minimum Current:	5 V 5 mA DC
Electrical Life:	1 x 10 ⁶ minimum
Mechanical	
Mounting:	Any position
Mounting Hardware:	4 x M5 screws
Actuator Travel for Positive Opening:	See diagram on previous page
Max Rope Span:	75 m (246 ft.) for standard model 75 to 125 m (246 to 410 ft.) for extended model
Break Contact Min Force:	< 125 N (28 lb.)
Max Actuation Speed:	N/A
Max Actuation Frequency:	1 cycle per sec
Case Material:	Die-cast alloy
Eye Nut Material:	Stainless steel
Wiring Entry:	3 x 0.5 in. NPT conduit
Weight:	630 g (22.2 oz.)
Color:	Yellow body, Red E-stop button
Mechanical Life:	1 x 10 ⁶ minimum
Environmental	
Protection:	IP66 (NEMA 6)
Operating Temperature:	-25 to 80°C (-13 to 176°F)
Cleaning:	Water washdown
Compliance	
Standards:	EN418, EN292, ISO/IEC13850, EN60947-5-1
Approvals/Listings:	CE marked for all applicable directives, UL and C-UL

Specifications are subject to change without notice.

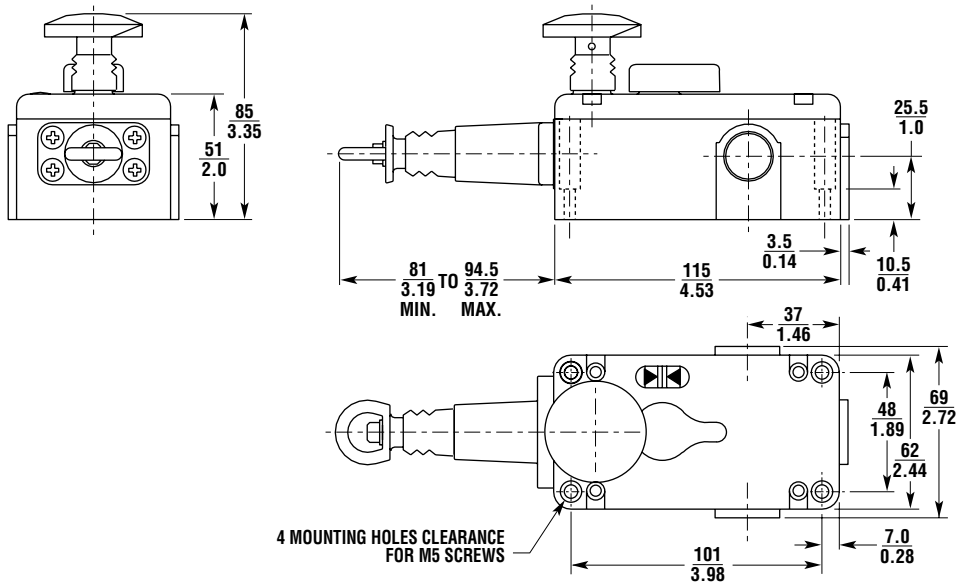
Note: The safety contacts of the Omron STI switches are described as normally closed (N/C)—i.e., with the guard closed, actuator in place, and the machine able to be started.

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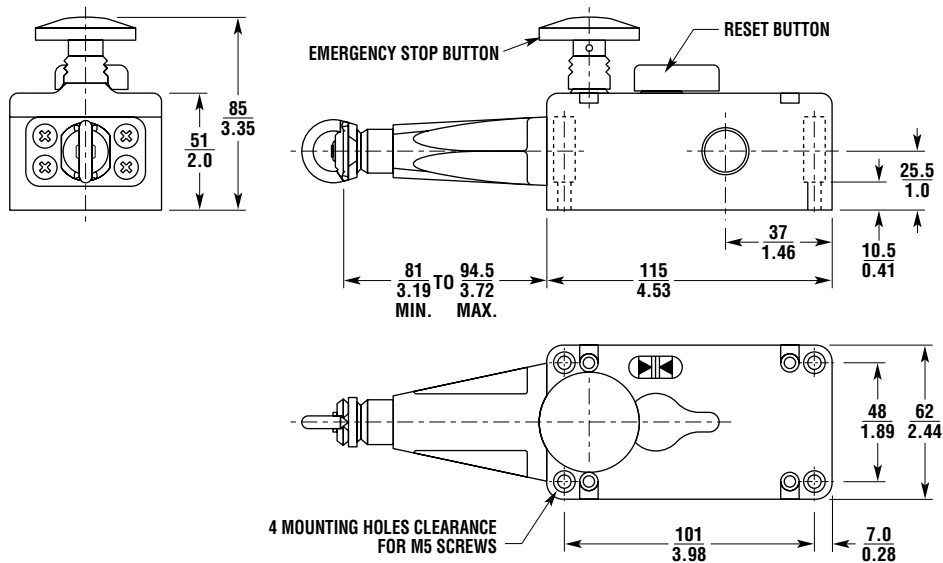
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■ Dimensions — mm/in.

Standard Model



Extended Model



■ Ordering

Model	Contacts	Wiring Entry	Part No.
ER6019-021SN	2 N/C + 1 N/O	3 x 0.5 in. NPT conduit	44506-0050
ER6019-021SM	2 N/C + 1 N/O	3 x M20	44506-0100
ER6019-022SN	2 N/C + 2 N/O	3 x 1/2 in. NPT	44506-2020
ER6019-031SN	3 N/C + 1 N/O	3 x 1/2 in. NPT	44506-2030
ER6019-040SN	4 N/C	3 x 1/2 in. NPT	44506-2040
ER6019-022SNE	2 N/C + 2 N/O	3 x 1/2 in. NPT	44506-3020
ER6019-031SNE	3 N/C + 1 N/O	3 x 1/2 in. NPT	44506-3030
ER6019-040SNE	4 N/C	3 x 1/2 in. NPT	44506-3040
RTK-5, Rope Tension Kit with 5 m of Red Steel Rope			44506-1705
RTK-10, Rope Tension Kit with 10 m of Red Steel Rope			44506-1710
RTK-15, Rope Tension Kit with 15 m of Red Steel Rope			44506-1715
RTK-20, Rope Tension Kit with 20 m of Red Steel Rope			44506-1720
RTK-30, Rope Tension Kit with 30 m of Red Steel Rope			44506-1730
RTK-50, Rope Tension Kit with 50 m of Red Steel Rope			44506-1750
RTK-75, Rope Tension Kit with 75 m of Red Steel Rope			44506-1775
RTK Hardware Only (2 Grippers and Tensioner)			44506-1700
RTK Tensioner Only (with Allen Wrench)			44506-1701
RTK Gripper (2 Pack)			44506-1702
RTK Extended Hardware Only (2 Tensioners, 2 Grippers)			44506-1703
Tensioner Kit (1 Turnbuckle, 8 Rope Grips, 4 Thimbles)			44506-0700
PVC-Covered Steel Rope (Red) 1/8 in. Diameter			44506-0710
PVC-Covered Steel Rope (Yellow) 1/8 in. Diameter			44506-0740
Eyebolt			44506-0720
Replacement Eye Nut			44506-0160
Spring			44506-0730
Spare Lid with E-Stop Button			44506-0150
Conduit Lights (see pages G239 & G240)			
Accessories (see page G238)			

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