# Safety Interlock Switches ER5018



# **Compact Rope Pull Emergency Stop Switch**

- Compact size allows this switch to be used on smaller machines with a mounting width of 40 mm (1.57 in.) and covering rope spans up to 40 m (131 ft.)
- Tension indicator makes system setup and rop tension maintenance easy
- Contact arrangements of 2 N/C + 1 N/O or 3 N/C
- IP67 (NEMA 6) enclosure enables the ER5018 switch to withstand water washdown cleaning
- Heavy-duty housing—the die-cast housing and stainless steel eye nut makes the ER5018 suitable for demanding industrial applications
- Integral E-Stop—the optional E-stop provides emergency stopping at the extreme end of the installation
- Reset button—the blue reset button must be pushed in order to return to "machine run" condition following switch actuation by a pulled or slacked rope
- Vibration tolerant—the snap-acting switch contacts protect against nuisance tripping due to vibration
- · Rubber bellows contain UV inhibitor making the switches suitable for outdoor applications





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Conforms to IEC947-5-1, IEC947-5-5, EN418, UL508, BS5304 UL and C-UL listed, TUV certified

# Specifications

Electrical	All Models			
Contact Configurations:	2 N/C + 1 N/O, 3 N/C			
Safety Contacts:	2 N/C, 3 N/C			
Switching Ability	AC: 120 V–6 A, 240 V–3 A, Inductive DC: 24 V–2.5 A, Inductive			
Auxiliary Contacts:	1 N/O			
Max Switching Current/Volt/Amp:	240 V/720 VA			
Minimum Current:	5 V 5 mA DC			
Electrical Life:	1 x 10 <sup>6</sup> minimum			
Mechanical				
Mounting:	Any position			
Mounting Hardware:	2 x M5 screws			
Max Rope Span:	40 m (131 ft.)			
Operation Force:	< 125 N (28 lb.)			
Tensioning Force to Run Position:	130 N (23 lb.) typical			
Case Material:	Die-cast aluminum alloy			
Eye Nut Material:	Stainless steel			
Wiring Entry:	3 x M20 or 3 x 0.5 in. NPT			
Weight:	675 g (23.8 oz.)			
Color:	Yellow			
Mechanical Life:	1 x 10 <sup>6</sup> minimum			
Environmental				
Protection:	IP67 (NEMA 6)			
Operating Temperature:	-25 to 80°C (-13 to 176°F)			
Cleaning:	Water washdown			
Compliance				
Standards:	IEC947-5-1, IEC947-5-5, EN418, UL508, BS5304			
Approvals/Listings:	CE marked for all applicable directives, UL and C-UL, TUV			

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 rope properly tensioned and the machine able to be started.





## Operation



### **Blue Reset Knob**

A blue reset button is provided to easily return the unit back to its machine-run position after actuation.



### **Emergency Push Button**

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The emergency push button may be installed or repositioned in the field. The ER5018 has two possible mounting positions for the emergency stop button.

### Installation Hardware Available



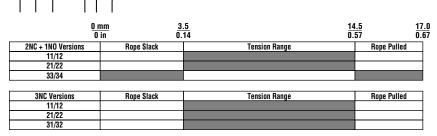
**RK Rope Tension Kit** The RK Rope Tension Kit comes with all of the required hardware for most installations. A spring is required as shown in the installation example below.

**Contact Arrangements** 



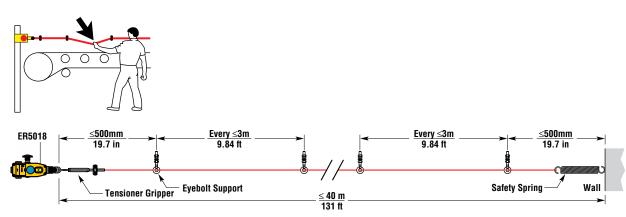
### Installation Hardware

Individual hardware items may be purchased for specific installation requirements.



🗆 Contact Open 🛛 🗖 Contact Closed





Note: Some installations may require a ER5018 on each end.

For a guide to installing, see "Proper Installation of Rope or Wire Pull Switches" in The Safety Library Section of this catalog on page A77.



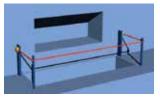
# Dimensions

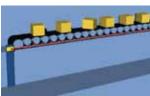
### <u>46</u> 1.81 ¥ 1 $\sim$ <u>40</u> 1.57 57 2.24 ΠD ₽ MM A 2 MTG HOLES CLEARANCE FOR M5 SCREWS 23 0.91 <u>25</u> 0.98 57 2.24 <u>74</u> 2.9 $\mathcal{W}$ $\bigcirc$ ۲ wwl l ∮ <u>10</u> 0.39 <u>25</u>-0.98 <u>90</u> 3.54 <u>139</u> 5.47 $\frac{188}{7.40}$ MIN - $\frac{205}{8.07}$ MAX

# Applications

(mm/in.)

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





# Ordering

Model	E-Stop	Contacts	Wiring Entry	Part No.
ER5018-021M	Not included	2 N/C + 1 N/O	3 x M20	44506-4010
ER5018-021N	Not included	2 N/C + 1 N/O	3 x 1/2 in. NPT	44506-4020
ER5018-030M	Not included	3 N/C	3 x M20	44506-4030
ER5018-030N	Not included	3 N/C	3 x 1/2 in. NPT	44506-4040
ER5018-021ME	Included	2 N/C + 1 N/O	3 x M20	44506-4110
ER5018-021NE	Included	2 N/C + 1 N/O	3 x 1/2 in. NPT	44506-4120
ER5018-030ME	Included	3 N/C	3 x M20	44506-4130
ER5018-030NE	Included	3 N/C	3 x 1/2 in. NPT	44506-4140

Accessories	Part No.	Accessories	Part No.
SM06-SL400, Replacement Lid	44506-3700	SMO6-TK00, Tensioner Kit (Turnbuckle, 8 Rope Grips &	44506-0700
RK5, 5 m Rope Kit, Stainless Steel	44506-2705	4 Thimbles)	
RK10, 10 m Rope Kit, Stainless Steel	44506-2710	SM06-TG00, Tensioner Gripper, Stainless Steel	44506-4700
RK15, 15 m Rope Kit, Stainless Steel	44506-2715	SM06-EB10, Eye Bolt, Stainless Steel, 8 per pack	44506-4710
RK20, 20 m Rope Kit, Stainless Steel	44506-2720	SM06-EB20, Eye Bolt ,Stainless Steel, 8 per pack	44506-0720
RK30, 30 m Rope Kit, Stainless Steel	44506-2730	SM06-DL20, Double Loop Clip, Stainless Steel, 4 per pack	44506-4720
RK50, 50 m Rope Kit, Stainless Steel	44506-2750	SM06-DL21, Double Loop Clip, Galvanized, 4 per pack	44506-4721
R5M, 5 m Rope Only	44506-3705	SM06-THSS, Thimble, Stainless Steel, 4 per pack	44506-4770
R10M, 10 m Rope Only	44506-3710	SM06-THGV, Thimble, Galvanized, 4 per pack	44506-4771
R20M, 20 m Rope Only	44506-3720	SM06-TB30, Turnbuckle, Stainless Steel	44506-4730
R30M, 30 m Rope Only	44506-3730	SM06-TB31, Turnbuckle, Galvanized	44506-4731
R50M, 50 m Rope Only	44506-3750	SM06-SP30, Spring, Galvanized	44506-0730
R80M, 80 m Rope Only	44506-3780	SM06-SP50, Spring, Stainless Steel	44506-4750
R100M, 100 m Rope Only	44506-3711	SM06-RPSS, Rope Pulley, Stainless Steel	44506-4780
R126M, 126 m Rope Only	44506-3726	SM06-ES60, E-Stop Mechanism	44506-4760

 Highlighted Rapid Delivery products are available for shipment today or within FIVE days.



