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 rope 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
- Long life-the ER5018 switch is designed for a minimum of one million actuations



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 ⁶ 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			
Stainless Accessory Items:	304 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 ⁶ 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 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

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



Installation Hardware

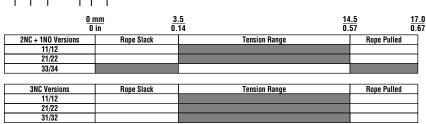
Individual hardware items may be purchased for specific installation requirements.



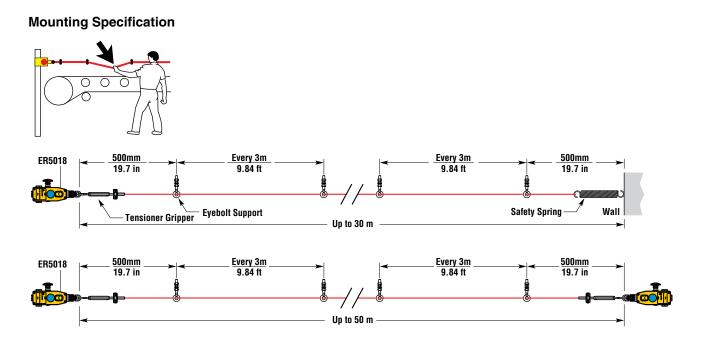
RK Rope Tension Kit

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. For up to 50 m rope span, one rope end is terminated with a thimble, permanent clamp, and quick link attached.

For over 50 m rope span, 2 Tension/Gripper assemblies are supplied (no quick link.)



🗆 Contact Open 🛛 Contact Closed



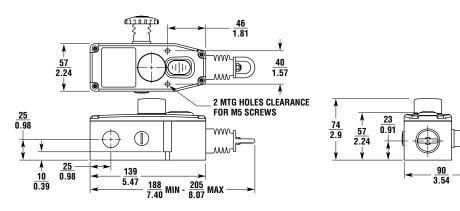


Applications

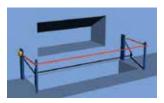
hazardous areas.

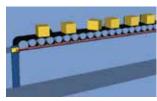
Dimensions

(mm/in.)



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





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.					
Stainless Steel Rope Kits	Quick Link	Eye- bolts	Tension/ Gripper Assembly	Allen Wrench		
RK5, 5 m Kit	Yes	3	1	1	44506-2705	
RK10, 10 m Kit	Yes	5	1	1	44506-2710	
RK15, 15 m Kit	Yes	7	1	1	44506-2715	
RK20, 20 m Kit	Yes	9	1	1	44506-2720	
RK30, 30 m Kit	Yes	12	1	1	44506-2730	
RK50, 50 m Kit	Yes	20	1	1	44506-2750	
RK80, 80 m Kit	No	30	2	2	44506-2780	
RK100, 100 m Kit	No	37	2	2	44506-2711	
RK126, 126 m Kit	No	45	2	2	44505-2726	
Rope Only						
R5M, 5 m Rope Only	44506-3705					
R10M, 10 m Rope Or	44506-3710					
R20M, 20 m Rope Or	44506-3720					
R30M, 30 m Rope Or	44506-3730					
R50M, 50 m Rope Or	44506-3750					
R80M, 80 m Rope Or	44506-3780					
R100M, 100 m Rope	44506-3711					
R126M, 126 m Rope	44506-3726					

Accessories	Part No.
SM06-SL400, Replacement Lid	44506-3700
SMO6-TK00, Tensioner Kit (Turnbuckle, 8 Rope Grips &	44506-0700
4 Thimbles)	
SM06-TG00, Tensioner Gripper, Stainless Steel	44506-4700
SM06-EB10, Eye Bolt, Stainless Steel, 8 per pack	44506-4710
SM06-EB20, Eye Bolt, Galvanized	44506-0720
SM06-DL20, Double Loop Clip, Stainless Steel, 4 per pack	44506-4720
SM06-DL21, Double Loop Clip, Galvanized, 4 per pack	44506-4721
SM06-THSS, Thimble, Stainless Steel, 4 per pack	44506-4770
SM06-THGV, Thimble, Galvanized, 4 per pack	44506-4771
SM06-TB30, Turnbuckle, Stainless Steel	44506-4730
SM06-TB31, Turnbuckle, Galvanized	44506-4731
SM06-SP30, Spring, Galvanized	44506-0730
SM06-SP50, Spring, Stainless Steel	44506-4750
SM06-RPSS, Rope Pulley, Stainless Steel	44506-4780
SM06-ES60, E-Stop Mechanism	44506-4760





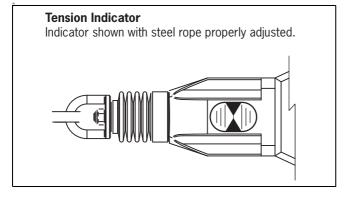
Safety Precuations

Operating instructions

Installation must be in accordance with the following steps and stated specifications and should be carried out by suitably competent personnel. Adherence to the recommended maintenance instructions forms part of the warranty.



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



WARNING

1.Installation of all Safety Rope Switch systems must be in accordance with a risk assessment for the individual application. Installation must only be carried out by competent personnel and in accordance with these instructions.

- 2. Rope support eyebolts must be fitted at 2.5 m. min. to 3 m. max. intervals along all rope lengths between switches. The rope must be supported no more than 500 mm from the switch eyebolt or Safety Spring (if used). It is important that this first 500 mm is not used as part of the active protection coverage.
- 3.M5 mounting bolts must be used to fix the switches. Tightening torque for mounting bolts to ensure reliable fixing is 4 Nm. Tightening torque for the lid screws, conduit entry plugs and cable glands must be 1.5 Nm to ensure IP seal. Only use correct sizing glands for conduit entry and cable outside diameter.
- 4. Tensioning of rope is achieved by use of tensioner / gripper assemblies. Upon installation, tension to mid-position as indicated by the red arrows in the viewing window of each switch. Check operation for all switches and the control circuits by puling the rope at various locations along the active protection area and resetting each switch by depressing the Blue Reset button. Ensure each time that the switches latch off and require manual resetting by depressing the Blue Reset button. Increase the system tension further, if required, depending upon the checks along the active length of coverage. If fitted with a Mushroom type E-Stop button (Red) then test and reset each switch to ensure function of control circuits. Typical operational conditions for successful operation of system is less than 75 N. pulling force and less than 150 mm deflection of rope between eyebolt supports. If the optional LED is fitted but is not used, ensure that the conductors remain coiled and tied to the tie hole in the LED flange.
- 5. Every week: Check correct operation of system at locations along all coverage length. Check for nominal tension setting, re-tension rope if necessary. Every 6 months: Isolate power and remove cover. Check screw terminal tightness and check for signs of moisture ingress. Never attempt to repair any switch.

ALL DIMENSIONS SHOWN ARE IN MILLIMETERS. To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.



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