



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



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safety interlock switches

ER6022

Rope Pull Emergency Stop Switch

- Long rope spans up to 80 m (262 ft.) means fewer number of switches required per application
- Tension indicator—the tension indicator makes the system easy to set up and to maintain the proper rope tension
- Contact arrangements of 2 N/C + 1 N/O or 3 N/C
- IP67 (NEMA 6) enclosure enables the ER6022 switch to withstand water washdown cleaning
- Heavy-duty housing—the die-cast housing and stainless steel eye nut makes the ER6022 suitable for demanding industrial applications
- 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
- Long life—the ER6022 switch is designed for a minimum of one million actuations
- Vibration tolerant—the snap-acting switch contacts protect against nuisance tripping due to vibration
- Indicator beacon—the optional dual indicator beacon, available in 24 VDC, can be wired to flash red to indicate a tripped switch or glow a constant green to indicate a properly reset switch
- E-stop button—the ER6022 has two mounting positions where the optional E-stop button may be installed; the E-stop button may be added or replaced in the field

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

■ 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

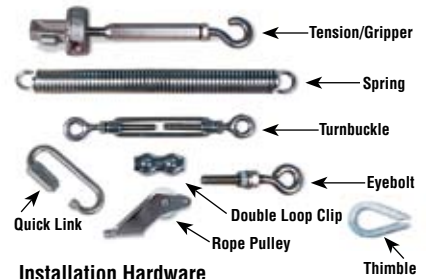
The emergency push button may be installed or repositioned in the field. The ER6022 has two possible mounting positions for the emergency stop button.

Installation Hardware Available



RK Rope Tension Kit

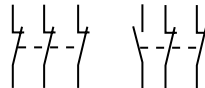
The RK Rope Tension Kit comes with all of the required hardware for most installations. A spring is required as shown in the installation example below.



Installation Hardware

Individual hardware items may be purchased for specific installation requirements.

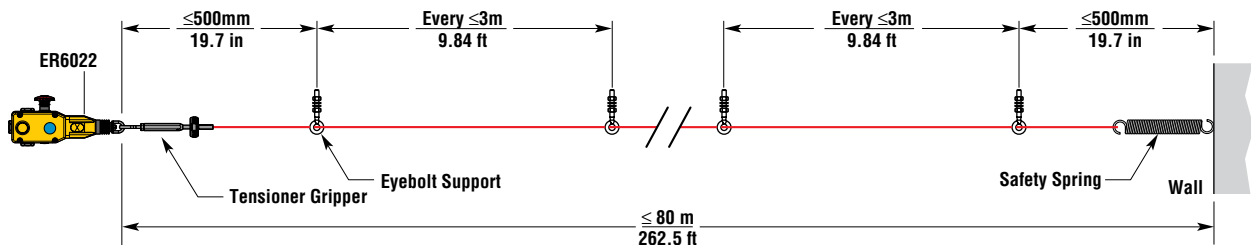
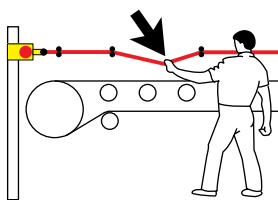
Contact Arrangements



	0 mm 0 in	3.5 0.14	14.5 0.57	17.0 0.67
2NC + 1NO Versions	Rope Slack	Tension Range		Rope Pulled
11/12				
21/22				
33/34				
3NC Versions	Rope Slack	Tension Range		Rope Pulled
11/12				
21/22				
31/32				

Contact Open Contact Closed

Mounting Specification



Note: Some installations may require a ER6022 on each end.

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

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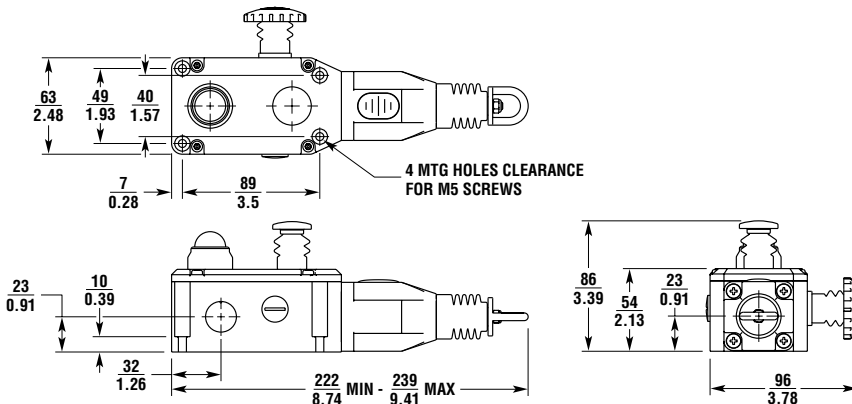
■ Specifications

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: 240 V–3 A, 120 V–6 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
LED Indicator Beacon:	24 VDC
Mechanical	
Mounting:	Any position
Mounting Hardware:	4 x M5 screws
Actuator Travel for Positive Opening:	See diagrams on previous page
Max Rope Span:	80 m (262 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:	880 g (31 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

Specifications are subject to change without notice.

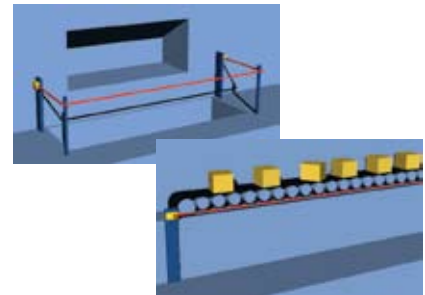
Note: The safety contacts of the Omron STI switches are described as normally closed (N/C)—i.e., with the rope properly tensioned and the machine able to be started.

■ Dimensions — mm/in.



■ Applications

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



■ Ordering

Model	E-Stop	Indicator Beacon	Contacts	Wiring Entry	Part No.
ER6022-021M	Not included	Not included	2 N/C + 1 N/O	3 x M20	44506-5010
ER6022-021N	Not included	Not included	2 N/C + 1 N/O	3 x 1/2 in. NPT	44506-5020
ER6022-030M	Not included	Not included	3 N/C	3 x M20	44506-5030
ER6022-030N	Not included	Not included	3 N/C	3 x 1/2 in. NPT	44506-5040
ER6022-021ML	Not included	Included (24 VDC)	2 N/C + 1 N/O	3 x M20	44506-5110
ER6022-021NL	Not included	Included (24 VDC)	2 N/C + 1 N/O	3 x 1/2 in. NPT	44506-5120
ER6022-030ML	Not included	Included (24 VDC)	3 N/C	3 x M20	44506-5130
ER6022-030NL	Not included	Included (24 VDC)	3 N/C	3 x 1/2 in. NPT	44506-5140
ER6022-021ME	Included	Not included	2 N/C + 1 N/O	3 x M20	44506-5210
ER6022-021NE	Included	Not included	2 N/C + 1 N/O	3 x 1/2 in. NPT	44506-5220
ER6022-030ME	Included	Not included	3 N/C	3 x M20	44506-5230
ER6022-030NE	Included	Not included	3 N/C	3 x 1/2 in. NPT	44506-5240
ER6022-021MEL	Included	Included (24 VDC)	2 N/C + 1 N/O	3 x M20	44506-5410
ER6022-021NEL	Included	Included (24 VDC)	2 N/C + 1 N/O	3 x 1/2 in. NPT	44506-5420
ER6022-030MEL	Included	Included (24 VDC)	3 N/C	3 x M20	44506-5430
ER6022-030NEL	Included	Included (24 VDC)	3 N/C	3 x 1/2 in. NPT	44506-5440

	Part No.
SM06-SL500, Replacement Lid 24 VDC	44506-5700
SM06-SL510, Replacement Lid/LED	44506-5710
SM06-SL510AC, Replacement Lid/LED 120 VAC (consult factory for complete switch with 120 VAC beacon)	44506-5711
RK5, 5 m Rope Kit, Stainless Steel	44506-2705
RK10, 10 m Rope Kit, Stainless Steel	44506-2710
RK15, 15 m Rope Kit, Stainless Steel	44506-2715
RK20, 20 m Rope Kit, Stainless Steel	44506-2720
RK30, 30 m Rope Kit, Stainless Steel	44506-2730
RK50, 50 m Rope Kit, Stainless Steel	44506-2750
RK80, 80 m Rope Kit, Stainless Steel	44506-2780
R5M, 5 m Rope Only	44506-3705
R10M, 10 m Rope Only	44506-3710
R20M, 20 m Rope Only	44506-3720
R30M, 30 m Rope Only	44506-3730
R50M, 50 m Rope Only	44506-3750
R80M, 80 m Rope Only	44506-3780
R100M, 100 m Rope Only	44506-3711
R126M, 126 m Rope Only	44506-3726

	Part No.
SM06-TG00, Tensioner Gripper, Stainless Steel	44506-4700
SM06-EB10, Eye Bolt Stainless Steel, 8 per pack	44506-4710
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-QLSS, Quick Link Stainless Steel	44506-4772
SM06-TB30, Turnbuckle, Stainless Steel	44506-4730
SM06-TB31, Turnbuckle, Galvanized	44506-4731
SM06-SP50, Spring, Stainless Steel	44506-4750
SM06-RPSS, Rope Pulley, Stainless Steel	44506-4780
SM06-ES60, E-Stop Mechanism	44506-4760
SM06-LF40, Replacement LED Indicator Beacon, 24 VDC	44506-4740
SM06-LF41, Replacement LED Indicator Beacon, 120 VAC	44506-4741

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