**Emergency Stop Devices** 

# ER6022

For full product information, visit www.sti.com. Use the SpeedSpec code or scan the QR Code for quick access to the specific web page.

# **Rope Pull Emergency Stop Switch**

- Rope spans up to 80 m (262 ft.) means fewer number of switches required per application
- Tension indicator makes system setup and rop tension maintenance easy
- Contact arrangements of 2 N/C + 1 N/O, 3 N/C + 1 N/O or 2 N/C + 2 N/O
  IP67 (NEMA 6) enclosure enables the ER6022 switch to withstand water washdown cleaning
- 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
- Indicator beacon—the optional dual indicator beacon, available in 24 VDC or 120 VAC, 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
- Rubber bellows contain UV inhibitor making the switches suitable for outdoor applications
- A Rapid Delivery Product: Select models are available for shipment today or within 3 to 5 days



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

# Specifications

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Electrical	All Models			
Contact Configurations:	2 N/C + 1 N/O, 3 N/C + 1 N/O, 2 N/C + 2 N/O			
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, 2 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				
LED Indicator Beacon:	24 VDC, 120 VAC			
Mechanical	1 million minimum			
Mounting:	Any position			
Mounting Hardware:	4 x M5 screws			
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			
Stainless Accessory Items:	304 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 <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 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 ER6022 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.

### **Contact Arrangements**



#### **RK Rope Tension Kit**

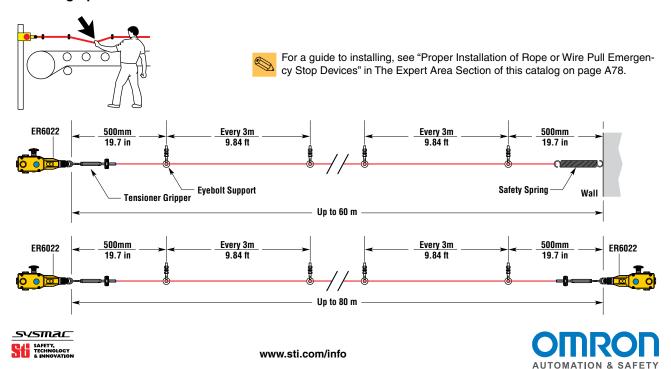
The RK Rope Tension Kit comes with all of the required hardware for most installations. A spring is required as shown in the installation example below. For up to 50 m rope span, one rope end is terminated with a thimble, permanent clamp, and quick link attached.

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

	<u>nm 3</u>	<u>.5</u>	<u>14.5</u>
0	in O.	14	0.57
2NC + 1NO Versions	Rope Slack	Tension Range	Rope Pulled
11/12			
21/22			
33/34			
3NC + 1NO Versions	Rope Slack	Tension Range	Rope Pulled
11/12	•		
21/22			
33/34			
43/44			
2NC + 2NO Versions	Rope Slack	Tension Range	Rope Pulled
11/12		3-	
21/22			
33/34			
43/44			

🗆 Contact Open 🛛 🗖 Contact Closed

## **Mounting Specification**



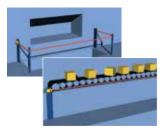
H21

# Dimensions

#### n Jungo <u>|</u>\_@0 ww $\frac{49}{1.93}$ $\frac{40}{1.57}$ <u>63</u> 2.48 Æ 0 Ð +¥ ¥ -1-(**b**)ක 4 MTG HOLES CLEARANCE For M5 Screws <u>89</u> 3.5 7 0.28 F 3 <u>23</u> 0.91 23 0.91 86 3.39 $\ominus$ ~~~~ <u>32</u> 1.26 $\frac{222}{8.74}$ MIN - $\frac{239}{9.41}$ MAX <u>96</u> 3.78

# Applications

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



# Elect models are available for Rapid Delivery.

Visit this product on www.sti.com for details.

(mm/in.)

# Ordering

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Model	E-stop	Indicator Beacon	Contacts	Wiring Entry	Part No.		
ER Switches with 3 pole contact blo	ocks						
ER6022-021M	Not included	Not included	2 N/C + 1 N/O	3 × M20	44506-5010		
ER6022-021N	Not included	Not included	2 N/C + 1 N/O	3 x 1/2 in. NPT	44506-5020		
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		
ER6022-021MEL	Included	Included	2 N/C + 1 N/O	3 x M20	44506-5410		
ER6022-021NEL	Included	Included	2 N/C + 1 N/O	3 x 1/2 in. NPT	44506-5420		
ER6022-021NELAC	Included	Included, 120VAC	2 N/C + 1 N/O	1/2" NPT	44506-5423		
ER Switches with 4 pole contact blo	ocks						
ER6022-031M	Not included	Not included	3 N/C + 1 N/O	M20	44506-5050		
ER6022-031N	Not included	Not included	3 N/C + 1 N/O	1/2 in. NPT	44506-5060		
ER6022-022M	Not included	Not included	2 N/C + 2 N/O	M20	44506-5070		
ER6022-022N	Not included	Not included	2 N/C + 2 N/O	1/2 in. NPT	44506-5080		
ER6022-031ML	Not included	Included, 24 VDC	3 N/C + 1 N/O	M20	44506-5150		
ER6022-031NL	Not included	Included, 24 VDC	3 N/C + 1 N/O	1/2 in. NPT	44506-5160		
ER6022-022ML	Not included	Included, 24 VDC	2 N/C + 2 N/O	M20	44506-5170		
ER6022-022NL	Not included	Included, 24 VDC	2 N/C + 2 N/O	1/2 in. NPT	44506-5180		
ER6022-031ME	Included	Not included	3 N/C + 1 N/O	M20	44506-5250		
ER6022-031NE	Included	Not included	3 N/C + 1 N/O	1/2 in. NPT	44506-5260		
ER6022-022ME	Included	Not included	2 N/C + 2 N/O	M20	44506-5270		
ER6022-022NE	Included	Not included	2 N/C + 2 N/O	1/2 in. NPT	44506-5280		
ER6022-031MEL	Included	Included, 24 VDC	3 N/C + 1 N/O	M20	44506-5450		
ER6022-031NEL	Included	Included, 24 VDC	3 N/C + 1 N/O	1/2 in. NPT	44506-5460		
ER6022-022MEL	Included	Included, 24 VDC	2 N/C + 2 N/O	M20	44506-5470		
ER6022-022NEL	Included	Included, 24 VDC	2 N/C + 2 N/O	1/2 in. NPT	44506-5480		
ER6022-031NELAC	Included	Included, 120 VAC	3 N/C + 1 N/O	1/2 in. NPT	44506-5463		
ER6022-022NELAC	Included	Included, 120 VAC	2 N/C + 2 N/O	1/2 in. NPT	44506-5483		

Accessories	Accessories				
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 Only					44506-3710
R20M, 20 m Rope Only					44506-3720
R30M, 30 m Rope Only					44506-3730
R50M, 50 m Rope Or	44506-3750				
R80M, 80 m Rope Or	44506-3780				
R100M, 100 m Rope Only					44506-3711
R126M, 126 m Rope	Only				44506-3726

Accessories	Part No.
SM06-SL500, Replacement Lid 24 VDC	44506-5700
SM06-SL510, Replacement Lid/LED 24 VDC	44506-5710
SM06-SL510AC, Replacement Lid/LED 120 VAC	44506-5711
(consult factory for complete switch with 120 VAC beacon)	
SM06-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-QLSS, Quick Link, Stainless Steel	44506-4772
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
SM06-LF40, Replacement LED Indicator Beacon, 24 VDC	44506-4740
SM06-LF41, Replacement LED Indicator Beacon, 120 VAC	44506-4741



# **Mouser Electronics**

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Omron: ER6022-022N ER6022-021NE