Safety Interlock Switches ER6022

Rev. 2.11

SpeedSPEC

ER6022

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



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 ⁶ 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:	Standard Versions: Die-cast aluminum alloy		
	Extreme Cold Versions: Die-cast 316 stainless steel		
Eye Nut Material:	Stainless steel		
Wiring Entry:	3 x M20 or 3 x 0.5 in. NPT		
Weight:	880 g (31 oz.)		
Color:	Standard Versions: Yellow		
	Extreme Cold Versions: Stainless steel		
Mechanical Life:	1 x 10 ⁶ minimum		
Environmental			
Protection:	IP67 (NEMA 6)		
Operating Temperature:	Standard Versions: -25 to 80°C (-13 to 176°F) Extreme Cold Versions: -40 to 80°C (-40 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

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.

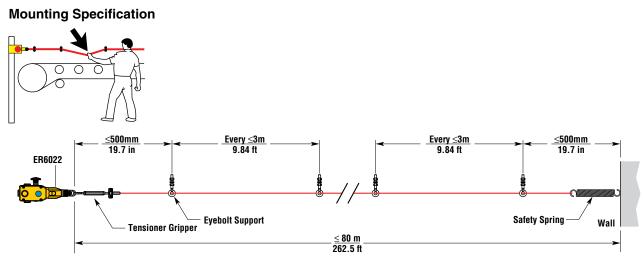




Installation Hardware Individual hardware items may be purchased for specific installation requirements.

	<u>0 mm</u> 0 in	<u>3.5</u> 0.14		<u>14.5</u> 0.57		<u>17.0</u> 0.67
2NC + 1NO Versions	Rope Slack	0.14	Tension Range	0.07	Rope Pulled	
11/12						
21/22						
33/34						
3NC + 1NO Versions	Rope Slack		Tension Range		Rope Pulled	
11/12	incpo orada		reneren runge		nopo i unou	-
21/22						
33/34						
43/44						
						_
2NC + 2NO Versions	Rope Slack		Tension Range		Rope Pulled	
11/12						
21/22						
33/34						
43/44						

🗆 Contact Open 🛛 🔲 Contact Closed



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 Safety Library Section of this catalog on page A77.





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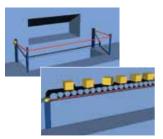
Dimensions

ažunto <u>63</u> 2.48 $\frac{49}{1.93}$ $\frac{40}{1.57}$ (f (+ ¥ -7 4 MTG HOLES CLEARANCE For M5 Screws <u>89</u> 3.5 7 0.28 ξ 23 0.91 86 3.39 <u>23</u> 0.91 ww <u>54</u> 2.13 Θ <u>32</u> 1.26 222 8.74 MIN - 239 9.41 MAX <u>96</u> 3.78

Applications

(mm/in.)

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



Ordering

Model	E stan	Indicator Beacon	Contacts	Wining Entry	Part No.
ER Switches with 3 pole contact blocks	E-stop	Indicator Beacon	Contacts	Wiring Entry	Part No.
	Net is also de al	Net is alwale al	0.01/0 . 1.01/0	01400	44500 5010
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
ER6022-021ME	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 blocks					
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	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)	
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

Accessories	Part No.
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

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

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