



Conforms to IEC947-5-1, IEC947-5-5, EN418, UL508, BS5304



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safety interlock switches

ER6022-SS and XER6022-SS

Stainless Steel Rope Pull Emergency Stop Switch

- Long rope spans up to 100 m (328 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 3 N/C + 1 N/O or 2 N/C + 2 N/O available for ER6022-SS models; Contact arrangement of 1 N/C + 1 N/O or 2 N/C available for XER6022-SS models
- IP67 (NEMA 6) enclosure enables these switches to withstand water washdown cleaning
- Heavy-duty housing—the 316 stainless steel cast housing and stainless steel hardware make the ER6022-SS and XER6022-SS 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-SS and XER6022-SS switches are 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 dual indicator beacon is optional on the ER6022-SS; the indicator beacon 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-SS and XER6022-SS have two mounting positions where the optional E-stop button may be installed; the E-stop button may be added or replaced in the field



Operation



Blue Reset Knob

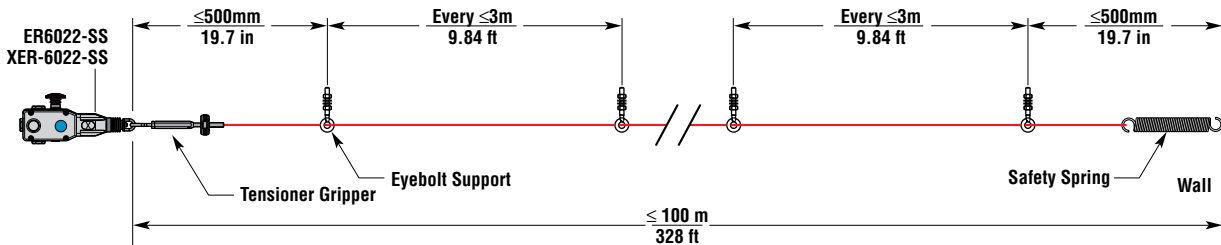
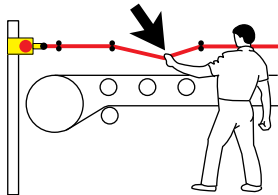
A blue reset button is provided to easily return the unit back to its machine-run position after actuation.



Emergency Push Button

The emergency push button may be installed or repositioned in the field. The ER6022-SS and XER6022-SS have two possible mounting positions for the emergency stop button. To assure compliance with all applicable European and Canadian standards, the supplied yellow background label must be applied.

Mounting Specification



Note: Some installations may require a ER6022-SS/XER6022-SS on each end.

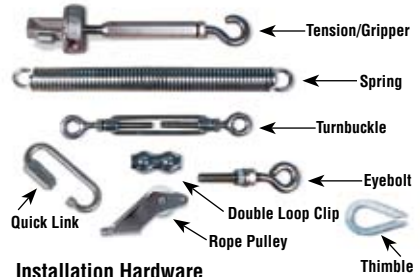
For a guide to installing, see "Proper Installation of Rope or Wire Pull Switches" in the Engineering Section of this catalog.

Installation Hardware Available



RK Rope Tension Kit

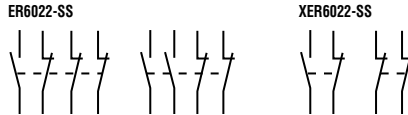
The RK Rope Tension Kit comes with all of the required hardware for most installations. A spring is required as shown in the installation example below.



Installation Hardware

Individual hardware items may be purchased for specific installation requirements.

Contact Arrangements



ER6022-SS	0 mm 0 in	3.5 0.14	14.5 0.57	17.0 0.67
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				
21/22				
33/34				
43/44				
XER6022-SS	0 mm 0 in	3.5 0.14	14.5 0.57	17.0 0.67
2NC Versions	Rope Slack	Tension Range		Rope Pulled
Brown/Blue				
Black/Black				
1NC + 1 NO Versions	Rope Slack	Tension Range		Rope Pulled
Brown/Blue				
Black/Black				

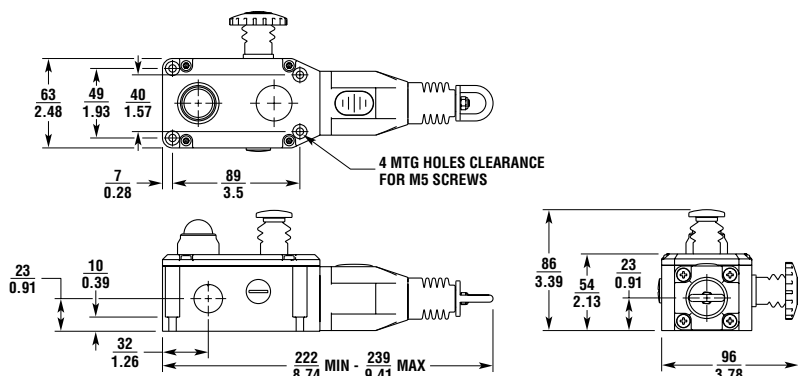
Contact Open Contact Closed

■ Specifications

Electrical	ER6022-SS	XER6022-SS
Ex Classification:		II 2 G EEx d II C T6
Certification:		PTB 00 ATEX 1093X IBExU 01 ATEX 1007X
Contact Configurations:	3 N/C + 1 N/O, 2 N/C + 2 N/O	1 N/C + 1 N/O, 2 N/C
Safety Contacts:	2 N/C, 3 N/C	1 N/C, 2 N/C
Switching Ability	AC: 240 V—3 A, 120 V—6 A, Inductive DC: 24 V—2.5 A, Inductive	250 V—3 A, 125 V—3A, Inductive 30 V—5 A, Inductive
Auxiliary Contacts:	1 N/O, 2 N/O	1 N/O
Max Switching Current/Volt/Amp:	240 V/720 VA	240 V/720 VA
Minimum Current:	5 V 5 mA DC	5 V 5 mA DC
Electrical Life:	1 x 10 ⁶ minimum	1 x 10 ⁶ minimum
LED Indicator Beacon:	24 VDC	N/A
Mechanical		
Mounting:	Any position	Any position
Mounting Hardware:	4 x M5 screws	4 x M5 screws
Actuator Travel for Positive Opening:	See diagrams on previous page	See diagrams on previous page
Max Rope Span:	100 m (328 ft.)	100 m (328 ft.)
Operation Force:	< 125 N (28 lb.)	< 125 N (28 lb.)
Tensioning Force to Run Position:	130 N (23 lb.) typical	130 N (23 lb.) typical
Case Material:	Die-cast aluminum alloy	316 stainless steel casting
Eye Nut Material:	Stainless steel	Stainless steel
Wiring Entry:	3 x M20 or 3 x 0.5 in. NPT	3 m cable
Weight:	880 g (31 oz.)	1750 g (62 oz.)
Color:	Natural	Natural
Mechanical Life:	1 x 10 ⁶ minimum	1 x 10 ⁶ minimum
Environmental		
Protection:	IP67 (NEMA 6)	IP67 (NEMA 6)
Operating Temperature:	-25 to 80°C (-13 to 176°F)	-25 to 80°C (-13 to 176°F)
Cleaning:	Water washdown	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 pending, TUV pending)	

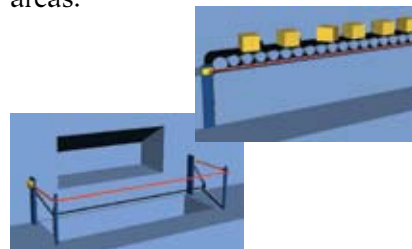
Specifications are subject to change without notice. Note: The safety contacts of the Omron STI switches are described as normally closed (N/C)—i.e., with the rope properly tensioned and the machine able to be started.

■ 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-SS					
ER6022-022MSS	Not included	Not included	2 N/C + 2 N/O	3 x M20	44506-5810
ER6022-022NSS	Not included	Not included	2 N/C + 2 N/O	3 x 1/2 in. NPT	44506-5820
ER6022-031MSS	Not included	Not included	3 N/C + 1 N/O	3 x M20	44506-5830
ER6022-031NSS	Not included	Not included	3 N/C + 1 N/O	3 x 1/2 in. NPT	44506-5840
ER6022-022MESS	Included	Not included	2 N/C + 2 N/O	3 x M20	44506-5850
ER6022-022NESS	Included	Not included	2 N/C + 2 N/O	3 x 1/2 in. NPT	44506-5860
ER6022-031MESS	Included	Not included	3 N/C + 1 N/O	3 x M20	44506-5870
ER6022-031NESS	Included	Not included	3 N/C + 1 N/O	3 x 1/2 in. NPT	44506-5880
ER6022-022MLSS	Not included	Included (24 VDC)	2 N/C + 2 N/O	3 x M20	44506-5910
ER6022-022NLSS	Not included	Included (24 VDC)	2 N/C + 2 N/O	3 x 1/2 in. NPT	44506-5920
ER6022-031MLSS	Not included	Included (24 VDC)	3 N/C + 1 N/O	3 x M20	44506-5930
ER6022-031NLSS	Not included	Included (24 VDC)	3 N/C + 1 N/O	3 x 1/2 in. NPT	44506-5940
ER6022-022MELSS	Included	Included (24 VDC)	2 N/C + 2 N/O	3 x M20	44506-5950
ER6022-022NELSS	Included	Included (24 VDC)	2 N/C + 2 N/O	3 x 1/2 in. NPT	44506-5960
ER6022-031MELSS	Included	Included (24 VDC)	3 N/C + 1 N/O	3 x M20	44506-5970
ER6022-031NELSS	Included	Included (24 VDC)	3 N/C + 1 N/O	3 x 1/2 in. NPT	44506-5980
XER6022-SS					
ER6022-011C3SS	Not included	N/A	1 N/C + 1 N/O	3 m cable	44506-5610
ER6022-020C3SS	Not included	N/A	2 N/C	3 m cable	44506-5620

	Part No.
SM06-SLXER6022SS, Replacement Lid for ER6022-SS and XER6022-SS without LED	44506-5730
SM06-SLER6022LSS, Replacement Lid for ER6022-SS with LED 24 VDC	44506-5740
SM06-SLER6022LSSAC, Replacement Lid for ER6022-SS with LED 120 VAC (consult factory for complete switch with 120 VAC beacon)	44506-5741
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-YLES, Yellow E-Stop Background Label	44506-4791
SM06-LF40, Replacement LED Indicator Beacon, 24 VDC	44506-4740
SM06-LF41, Replacement LED Indicator Beacon, 120 VAC	44506-4741

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