# ER6022-SS

### **Stainless Steel Rope Pull Emergency Stop Switch**

- Rope spans up to 100 m (328 ft.) means fewer number of switches required per application
- Tension indicator maintains the proper rope tension
- Contact arrangements of 3 N/C + 1 N/O or 2 N/C + 2 N/O
- IP67 (NEMA 6) enclosure withstands water washdown cleaning
- 316 stainless steel cast housing and stainless steel hardware
- 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
- 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
- Optional E-stop button-may be added or replaced in the field
- Rubber bellows contain UV inhibitor making the switches suitable for outdoor applications
- Extreme Cold Version—for applications down to -40°C



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

### Specifications

| Electrical                        | ER6022-SS  |  |  |
|-----------------------------------|--|--|--|
| Contact Configurations:           | 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<br>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                                      |  |  |
| LED Indicator Beacon:             | 24 VDC   |  |  |
| Mechanical                        |  |  |  |
| Mounting:                         | Any position   |  |  |
| Mounting Hardware:                | 4 x M5 screws  |  |  |
| Max Rope Span:                    | 100 m (328 ft.)  |  |  |
| Operation Force:                  | < 125 N (28 lb.)   |  |  |
| Tensioning Force to Run Position: | 130 N (23 lb.) typical   |  |  |
| Case Material:                    | Die-cast 316 stainless steel                                     |  |  |
| Eye Nut Material:                 | 304 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:                            | Natural  |  |  |
| Mechanical Life:                  | 1 x 10 <sup>6</sup> 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 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-SS has 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.

#### Installation Hardware Available



#### Installation Hardware

Individual hardware items may be purchased for specific installation requirements.

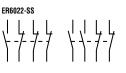


#### **RK Rope Tension Kit**

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.

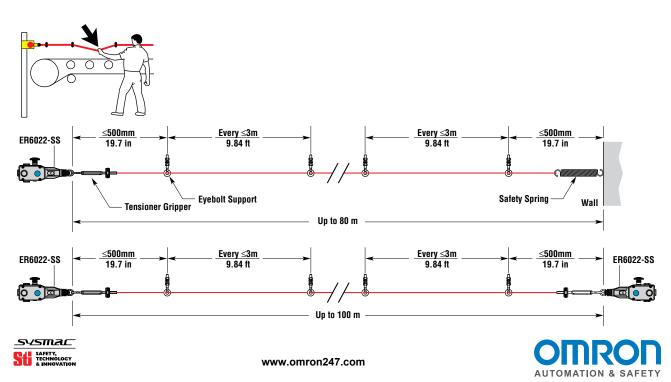
For over 50 m rope span, 2 Tension/Gripper assemblies are supplied (no quick link.)

### **Contact Arrangements**



| ER6022-SS          | <u>0 mm</u><br>0 in | <u>3.5</u><br>0.14 | <u>14.5</u> <u>17.0</u><br>0.57 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              |                     |                    |                                      |

#### **Mounting Specification**



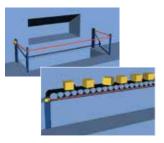
### Dimensions

#### ajuuja **H** <u>49</u> 1.93 <u>40</u> ↓\_\_\_\_ ww <u>63</u> 2.48 +Þ ō. 4 MTG HOLES CLEARANCE For M5 Screws <u>7</u> 0.28 <u>89</u> 3.5 ξ 86 3.39 54 2.13 23 0.91 <u>10</u> 0.39 <u>23</u> 0.91 $\mathcal{M}$ $\Theta$ ł wł ۷ ¥ <u>32</u> 1.26 $\frac{222}{8.74}$ MIN - $\frac{239}{9.41}$ 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-Stop       | Indicator Beacon  | Contacts      | Wiring Entry    | Part No.   |
|--|--------------|-------------------|---------------|-----------------|------------|
| 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 |
| ER6022-022MESSZ (Extreme Cold Version) | Included     | Not included      | 2 N/C + 2 N/O | 3 x M20         | 44506-5857 |

| Accessories                  |               |               |                                 |                 | Part No.   |
|------------------------------|---------------|---------------|---------------------------------|-----------------|------------|
| Stainless Steel Rope<br>Kits | Quick<br>Link | Eye-<br>bolts | Tension/<br>Gripper<br>Assembly | Allen<br>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 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-SLXER6022SS, Replacement Lid for<br>ER6022-SS and XER6022-SS without LED | 44506-5730 |
| SM06-SLER6022LSS, Replacement Lid for<br>ER6022-SS with LED 24 VDC            | 44506-5740 |
| SM06-SLER6022LSSAC, Replacement Lid for<br>ER6022-SS with LED 120 VAC         | 44506-5741 |
| (consult factory for complete switch with 120 VAC beacon)                     |            |
| SM06-TK00, Tensioner Kit (Turnbuckle, 8 Rope Grips, & 4 Thimbles)             | 44506-0700 |
| 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   | 44506-2705 |
| 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 |
| SC12-M20NPTSS, M20 to NPT Adapter Stainless Steel                             | 44512-0311 |



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