

ER1022

Rope Pull Emergency Stop Switch

- Rope spans up to 125 m (410 ft.) makes this switch ideal for applications where long rope spans are required
- IP67 (NEMA 6) enclosure enables the ER1022 switch to withstand water washdown cleaning
- Integral E-stop—the E-stop button provides emergency stopping capability at the extreme end of the installation and is field serviceable
- Tension indicator makes system setup and rope tension maintenance easy
- 4 N/C safety contacts and 2 N/O auxiliary contacts satisfy the most demanding applications
- Vibration tolerant—the snap-acting switch contacts protect against nuisance tripping due to vibration
- Indicator beacon—the 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
- 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

| Electrical | All Models |
|-----------------------------------|--|
| Contact Configurations: | 4 N/C + 2 N/O |
| Safety Contacts: | 4 N/C |
| Switching Ability | AC: 240 V–3 A, 120 V–6 A, Inductive; DC: 24 V–2.5 A, Inductive |
| Auxiliary Contacts: | 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 |
| LED Indicator Beacon: | 24 VDC or 120 VAC |
| Mechanical | |
| Mounting: | Any position |
| Mounting Hardware: | 4 x M5 screws |
| Max Rope Span: | 125 m (410 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: | 4 x M20 or 3 x 0.5 in. NPT |
| Weight: | 1100 g (39 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, 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.

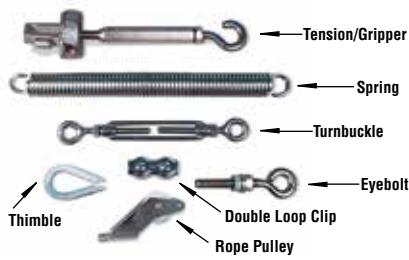
Operation



Blue Reset Knob

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

Installation Hardware Available



Installation Hardware

Individual hardware items may be purchased for specific installation requirements.



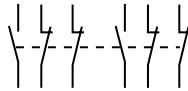
RK Rope Tension Kit

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.)

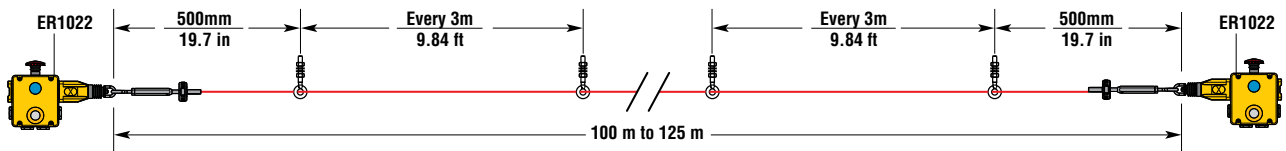
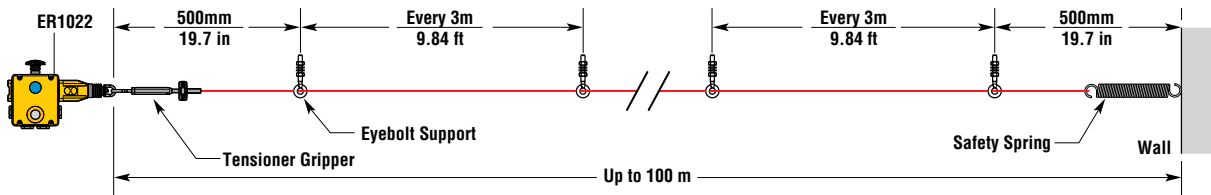
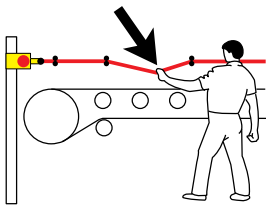
Contact Arrangements



| | 0 mm 0 in | 4.0 0.16 | 15.0 0.59 | 17.0 0.67 |
|-----------|--------------|---------------|--------------|--------------|
| 4NC + 2NO | Rope Slack | Tension Range | Rope Pulled | |
| 11/12 | | | | |
| 21/22 | | | | |
| 33/34 | | | | |
| 41/42 | | | | |
| 51/52 | | | | |
| 63/64 | | | | |

Contact Open Contact Closed

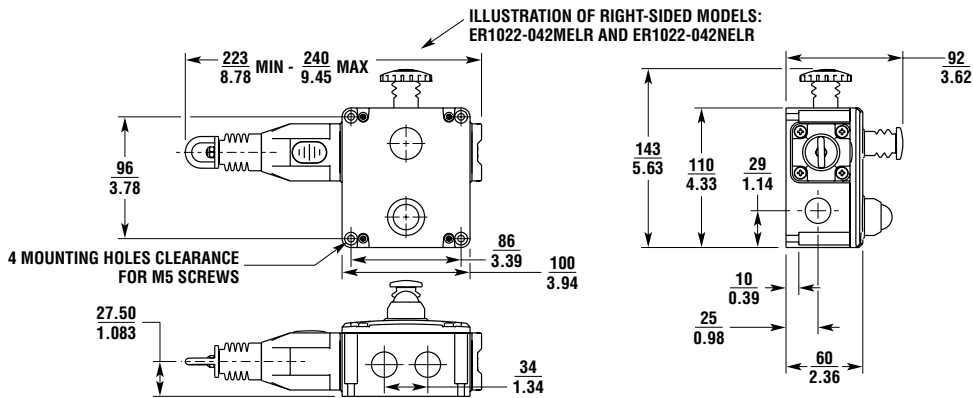
Mounting Specification



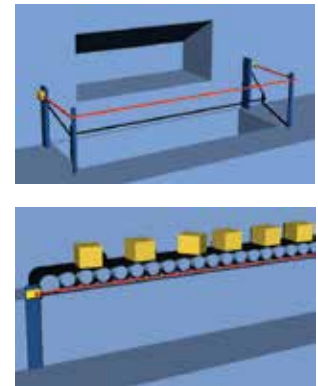
Dimensions

(mm/in.)

Applications



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



Note: The designation of the ER1022 switch as left-sided or right-sided is based upon the mounted position of the switch, in the installation.

Ordering

| Model | E-Stop | Indicator Beacon | Contacts | Wiring Entry | Part No. |
|------------------|----------|--------------------|---------------|-----------------|------------|
| ER1022-042MELL | Included | Included (24 VDC) | 4 N/C + 2 N/O | 4 x M20 | 44506-6410 |
| ER1022-042MELLAC | Included | Included (120 VAC) | 4 N/C + 2 N/O | 4 x M20 | 44506-6411 |
| ER1022-042NELL | Included | Included (24 VDC) | 4 N/C + 2 N/O | 4 x 1/2 in. NPT | 44506-6420 |
| ER1022-042NELLAC | Included | Included (120 VAC) | 4 N/C + 2 N/O | 4 x 1/2 in. NPT | 44506-6421 |
| ER1022-042MELR | Included | Included (24 VDC) | 4 N/C + 2 N/O | 4 x M20 | 44506-6510 |
| ER1022-042MELRAC | Included | Included (120 VAC) | 4 N/C + 2 N/O | 4 x M20 | 44506-6511 |
| ER1022-042NELR | Included | Included (24 VDC) | 4 N/C + 2 N/O | 4 x 1/2 in. NPT | 44506-6520 |
| ER1022-042NELRAC | Included | Included (120 VAC) | 4 N/C + 2 N/O | 4 x 1/2 in. NPT | 44506-6521 |

| Accessories | | | | | Part No. |
|---------------------------|------------|-----------|--------------------------|--------------|------------|
| 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 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-SL710, Replacement Lid/LED, 24 VDC | 44506-6710 |
| SM06-SL710AC, Replacement Lid/LED, 120 VAC | 44506-6711 |
| 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-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-SL711, Replacement Lid with LED 24 VDC | 44506-7710 |
| SM06-SL711AC, Replacement Lid with LED 120 VAC | 44506-7711 |

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