

## SAFETY PRODUCTS

# Linestrong 3LZ and 3RZ Rope Pull Emergency Stop Data Sheet

LineStrong is a rope pull emergency stop switch, used for easy reach of the emergency stop function along machines and sections of conveyors.

A rope pull emergency stop switch allows to initiate the emergency stop command from any point along the installed wire length by pulling the wire. It replaces a series of emergency stop buttons and is easier to install.





# Easy to Install

#### **Quick Installation**

A pull wire emergency stop switch is easier to install than a system of several emergency stop buttons along a carriage path.

#### Variety of accessories

Quick link rope system makes installation of rope easy. Different pulleys allow for easier installation



# Continuous operation

## Reliable in extreme conditions

Robust construction makes LineStrong ideal for use in demanding environments.

#### LED diagnostics

Integrated LED diagnostics ensures status can be seen easily from a distance.



# Safety and Protection

## Easily accessible

Easy reach of the emergency stop function along machines, conveyors and processes.

#### High level of safety

The positive forced disconnect contacts provide a high level of safety and are double switching, i.e. triggers emergency stop in both directions of the wire.

| Description                                       | Material Housing | Order code      |
|---|------------------|-----------------|
| Linestrong 3LZ, ½ NPT, 2NC/2NO                    | Stainless Steel  | 2TLA050206R1020 |
| Linestrong 3LZ, ½ NPT, 2NC/2NO, Estop             | Stainless Steel  | 2TLA050206R1120 |
| Linestrong 3LZ, ½ NPT, 2NC/2NO, 24VDC LED         | Stainless Steel  | 2TLA050206R1222 |
| Linestrong 3LZ, ½ NPT, 2NC/2NO, 110VAC LED        | Stainless Steel  | 2TLA050206R1223 |
| Linestrong 3LZ, ½ NPT, 2NC/2NO, 230VAC LED        | Stainless Steel  | 2TLA050206R1224 |
| Linestrong 3LZ, ½ NPT, 2NC/2NO, Estop, 24VDC LED  | Stainless Steel  | 2TLA050206R1322 |
| Linestrong 3LZ, ½ NPT, 2NC/2NO, Estop, 110VAC LED | Stainless Steel  | 2TLA050206R1323 |
| Linestrong 3LZ, ½ NPT, 2NC/2NO, Estop, 230VAC LED | Stainless Steel  | 2TLA050206R1324 |
| Linestrong 3RZ, ½ NPT, 2NC/2NO                    | Stainless Steel  | 2TLA050208R1020 |
| Linestrong 3RZ, ½ NPT, 2NC/2NO, Estop             | Stainless Steel  | 2TLA050208R1120 |
| Linestrong 3RZ, ½ NPT, 2NC/2NO, 24VDC LED         | Stainless Steel  | 2TLA050208R1222 |
| Linestrong 3RZ, ½ NPT, 2NC/2NO, 110VAC LED        | Stainless Steel  | 2TLA050208R1223 |
| Linestrong 3RZ, ½ NPT, 2NC/2NO, 230VAC LED        | Stainless Steel  | 2TLA050208R1224 |
| Linestrong 3RZ, ½ NPT, 2NC/2NO, Estop, 24VDC LED  | Stainless Steel  | 2TLA050208R1322 |
| Linestrong 3RZ, ½ NPT, 2NC/2NO, Estop, 110VAC LED | Stainless Steel  | 2TLA050208R1323 |
| Linestrong 3RZ, ½ NPT, 2NC/2NO, Estop, 230VAC LED | Stainless Steel  | 2TLA050208R1324 |

NOTE: Anything in **bold** is typically stocked.

| Description                                   | Material Housing | Order code      |
|---|------------------|-----------------|
| ½ NPT Cable Gland                             | Stainless Steel  | 2TLA050040R0001 |
| 5M Rope Kit, Stainless Steel with Allen Key   | Stainless Steel  | 2TLA050210R0020 |
| 10M Rope Kit, Stainless Steel with Allen Key  | Stainless Steel  | 2TLA050210R0120 |
| 15M Rope Kit, Stainless Steel with Allen Key  | Stainless Steel  | 2TLA050210R0220 |
| 20M Rope Kit, Stainless Steel with Allen Key  | Stainless Steel  | 2TLA050210R0320 |
| 30M Rope Kit, Stainless Steel with Allen Key  | Stainless Steel  | 2TLA050210R0420 |
| 50M Rope Kit, Stainless Steel with Allen Key  | Stainless Steel  | 2TLA050210R0520 |
| 80M Rope Kit, Stainless Steel with Allen Key  | Stainless Steel  | 2TLA050210R0620 |
| 100M Rope Kit, Stainless Steel with Allen Key | Stainless Steel  | 2TLA050210R0720 |
| 126M Rope Kit, Stainless Steel with Allen Key | Stainless Steel  | 2TLA050210R0820 |
| Rope Tensioner, Stainless Steel               | Stainless Steel  | 2TLA050210R4020 |
| Eyebolt M8x1.25, Stainless Steel              | Stainless Steel  | 2TLA050210R8020 |
| Pully, Stainless Steel                        | Stainless Steel  | 2TLA050210R6020 |
| LED Green/Red 24 VDC                          |                  | 2TLA050211R0001 |
| LED Green/Red 110 VAC                         |                  | 2TLA050211R0002 |
| LED Green/Red 230VAC                          |                  | 2TLA050211R0003 |
| Safety Spring. 220mm long                     | Stainless Steel  | 2TLA050211R0004 |
| E-Stop Button                                 |                  | 2TLA050211R0005 |
| Anti-Tamper, Torx T20                         |                  | 2TLA050211R0006 |
| Flexible Roller with Adjustment               | Stainless Steel  | 2TLA858006R1300 |

NOTE: Anything in **bold** is typically stocked.

Additional information can be found in the Linestrong Product Manual.

| Manufacturer                                      |  |  |
|---|--|--|
| Address   | ABB Electrification Sweden AB / JOKAB SAFETY             |  |
|   | Varlabergsvägen 11                                       |  |
|   | SE-434 39 Kungsbacka                                     |  |
|   | Sweden   |  |
| Electrical characteristics                        |  |  |
| Contact type                                      | IEC/EN60947-5-1 double break typ Zb                      |  |
| Contact material                                  | Silver   |  |
| Termination                                       | Clamp up to 2,5 mm2 Conductors                           |  |
| Utilization category                              | AC15 A300 3A 240VAC 3A/120VAC 6A/24VDC 2.5A indu<br>tive |  |
| Thermal current (Ith)                             | 10A  |  |
| Rated insulation/withstand voltages               | 500 VAC/2500 VAC   |  |
| Short circuit overload protection                 | Fuse externally 10 A (FF)                                |  |
| General   |  |  |
| Wire span   | up to 125m   |  |
| Wire tension devise                               | ABB Jokab Safety Wire Tensioner                          |  |
| Wire type   | PVC sheath steel wire 4.0 mm outside diameter            |  |
| Torque settings                                   | Mounting M5 4.0Nm  |  |
|   | Lid T20 Torx M4 1.5Nm                                    |  |
|   | Terminals 1.0Nm  |  |
| Tension force (typical mid setting)               | 130 N  |  |
| Tension operating force (wire pulled)             | < 125N < 300 mm deflection                               |  |
| Vibration resistance                              | 10-500 Hz 0.35 mm  |  |
| Shock resistance                                  | 15 g 11 ms   |  |
| Conduit entries                                   | 3 x ½ NPT  |  |
| Enclosure classification                          | IP67, IP69K  |  |
| Operating temperature                             | -25+80°C(100°C cleaning)                                 |  |
| Size  | See manual   |  |
| Material  | Stainless Steel 316                                      |  |
| Size  | See manual   |  |
| Mounting Positions                                | Any  |  |
| Mounting Bolts                                    | 4 x M5   |  |
| Weight  | 2.000kg  |  |
| Safety-related characteristic data and Conformity | 2.000kg  |  |
| Conformity  | European Machinery Directive 2006/42/EC                  |  |
| comonney  | EN ISO 12100:2010, EN ISO 13850:2008, EN 60204-          |  |
|   | 1:2006+A1:2009   |  |
|   | EN 60947-1:2007+A1:2011, EN 60947-5-1:2004+A1:2009,      |  |
|   | EN 60947-5-5:1997+A1:2005                                |  |
| EN ISO 13849-1                                    | Up to PL e, Cat. 4 depending on system architecture      |  |
| EN 62061  | Up to SIL3 depending on system architecture              |  |
| Safety data                                       |  |  |
| Mechanical reliability B10d                       | 1.5 x 106 operations at 100mA load                       |  |
| PFHD  | <1.0 x 10-7  |  |
| Proof test interval (life)                        | 21 years   |  |
| MTTFd   | 214 years (8 cycles per hour/24 hours per day/365 days   |  |
|   | per year)  |  |
| Certifications                                    | TÜV, cULus   |  |
| Information with regard to UL 508                 | Use 12AWG copper conductors only                         |  |
|   | Electrical Rating: A300 48W5                             |  |
|   | Type 1 Enclosure   |  |
|   | Max. Switching Current / Volt / Amp: 120V 6A (720VA      |  |
|   | break) PF 0.38, 240V 3A (720VA break) PF 0.38            |  |

ABB Inc.

305 Gregson Drive Cary, North Carolina 27511 United States electrification.us.abb.com/ products/machine-motor-control

We reserve the right to make tech-nical changes or modify the contents of this document without prior no-tice. With regard to purchase orders, the agreed particulars shall prevail. ABB AG does not accept any responsi-bility whatsoever for potential errors or possible lack of information in this document. We reserve all rights in this document and in the subject matter and illus-trations contained therein. Any repro-duction, disclosure to third parties or utilization of its contents - in whole or in parts – is forbidden without prior written consent of ABB AG. Copyright© 2022 ABB All rights reserved