

SAFETY PRODUCTS

Linestrong 3DZ

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.

Ordering Information

Description	Material Housing	Order code
Linestrong 3DZ, ½ NPT, 2NC/2NO	Stainless Steel	2TLA050204R1020
Linestrong 3DZ, ½ NPT, 2NC/2NO, Estop	Stainless Steel	2TLA050204R1120
Linestrong 3DZ, ½ NPT, 2NC/2NO, 24VDC LED	Stainless Steel	2TLA050204R1222
Linestrong 3DZ, ½ NPT, 2NC/2NO, 110VAC LED	Stainless Steel	2TLA050204R1223
Linestrong 3DZ, ½ NPT, 2NC/2NO, 230VAC LED	Stainless Steel	2TLA050204R1224
Linestrong 3DZ, ½ NPT, 2NC/2NO, Estop, 24VDC LED	Stainless Steel	2TLA050204R1322
Linestrong 3DZ, ½ NPT, 2NC/2NO, Estop, 110VAC LED	Stainless Steel	2TLA050204R1323
Linestrong 3DZ, ½ NPT, 2NC/2NO, Estop, 230VAC LED	Stainless Steel	2TLA050204R1324

Accessories

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 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 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	Galvanized Steel	2TLA050211R0005
Anti-Tamper, Torx T20	Galvanized Steel	2TLA050211R0006
Flexible Roller with Adjustment	Stainless Steel	2TLA858006R1300

Additional information can be found in the [Linestrong Product Manual](#).

Technical Data

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 mm ² Conductors
Utilization category	AC15 A300 3A 240VAC 3A/120VAC 6A/24VDC 2.5A inductive
Thermal current (I _{th})	10A
Rated insulation/withstand voltages	500 VAC/2500 VAC
Short circuit overload protection	Fuse externally 10 A (FF)
General	
Wire span	up to 100m
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	1.635kg
Safety-related characteristic data and Conformity	
Conformity	European Machinery Directive 2006/42/EC 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 10 ⁶ 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 technical changes or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. ABB AG does not accept any responsibility 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 illustrations contained therein. Any reproduction, 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