

# Line Strong 1 Mini-duty switches

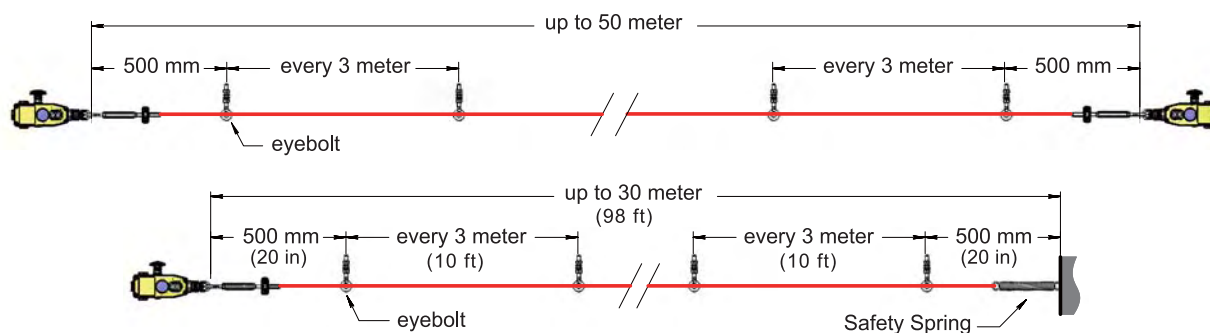
## Protection up to 50 meters



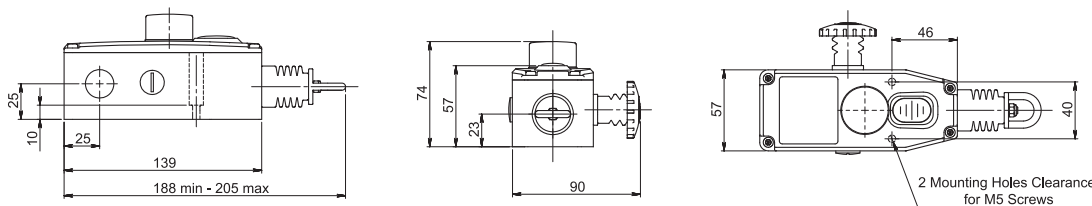
Line Strong 1 is a compact, yet robust die-cast Mini Duty SafetyReop Pull switch designed to protect short conveyor lengths where protection is required up to 50m using two switches or up to 30m using a single switch.

They provide reliable, cost effective safety solutions for conveyor systems and can be enhanced by adding external mushroom Type E Stope at the switch or bi-color LED available to show switch status from a distance.

They have 4 pole contact to ensure flexibility with all modern control applications. Rugged integral sealing bellows means they can be high pressure hosed.



It is recommended when using a Safety Spring that a maximum of one corner pulley is used.



All Dimensions in mm

### Line Strong 1

2TLA050200R0030	LineStrong1, 2NC/2NO, M20
2TLA050200R1030	LineStrong1, 2NC/2NO, NPT
2TLA050200R0130	LineStrong1, 2NC/2NO, M20, ESTOP
2TLA050200R1130	LineStrong1, 2NC/2NO, NPT ESTOP
2TLA050200R0232	LineStrong1, 2NC/2NO, M20 LED 24VDC
2TLA050200R1232	LineStrong1, 2NC/2NO, NPT LED 24VDC
2TLA050200R0233	LineStrong1, 2NC/2NO, M20 LED 110VAC
2TLA050200R1233	LineStrong1, 2NC/2NO, NPT LED 110VAC
2TLA050200R0234	LineStrong1, 2NC/2NO, M20 LED 230VAC
2TLA050200R1234	LineStrong1, 2NC/2NO, NPT LED 230VAC
2TLA050200R0332	LineStrong1, 2NC/2NO, M20 ESTOP/LED 24VDC
2TLA050200R1332	LineStrong1, 2NC/2NO, NPT ESTOP/LED 24VDC
2TLA050200R0333	LineStrong1, 2NC/2NO, M20 ESTOP/LED 110VAC
2TLA050200R1333	LineStrong1, 2NC/2NO, NPT ESTOP/LED 110VAC
2TLA050200R0334	LineStrong1, 2NC/2NO, M20 ESTOP/LED 230VAC
2TLA050200R1334	LineStrong1, 2NC/2NO, NPT ESTOP/LED 230VAC

For all ABB Jokab Safety Rope Switches, the normally closed (NC) circuits are closed when the system is tensioned correctly and the switch has been reset.

Standards: IEC 947-5-1 IEC947-5-5 EN954-1 EN62061  
UL508 ISO13850 ISO13849-1

#### Safety Classification and Reliability Data:

Mechanical Reliability B10d	1.5 x 10 <sup>8</sup> operations at 100mA load
EN 954-1	up to Category 4 with Safety Relay
ISO 13849-1	up to PLe depending upon system architecture
EN 62061	up to SIL3 depending upon system architecture
Safety Data - Annual Usage	8 cycles per hour / 24 hours per day / 365 days
PfHd	<1.0 x 10 <sup>-7</sup>
Proof Test Interval (Life)	21 years
MTTFd	214 years
Enclosure Material	Die Cast Painted Yellow
IP Rating	IP67 (NEMA 6)
Rope Span	up to 50m.
Rope Tension device	Tensioner / Gripper – Quick Fixing
Rope Type:	4.0 mm Outside Dia. Steel Inner – PVC sheath
Mounting	4 x M5
Mounting position	Any
Conduit entries	3 x M20 or 3 x 1/2" NPT by part number
Torque settings	Mounting M5 4.0 Nm Lid T20 Torx M4 1.5 Nm Terminals 1.0 Nm
Ambient Temperature	-25C +80C.
Vibration resistance	10-500Hz 0.35mm
Shock resistance	15g 11ms
Tension Force (typical mid setting)	130N.
Typical Operating Force (Rope pulled)	< 125N. < 300mm Deflection
Weight	700g.
Contact type	IEC 947-5-1 Double break Type Zb Snap Action up to 2NC (Positive break) 2NO (Auxiliary)
Termination	Clamp up to 2.5 sq. mm conductors
Rating	Utilisation Category: AC15 A300
Operational Rating	240V. 3A.
Thermal Current (Ith)	10A.
Rated Insulation Voltage (Ui)	500V.
Withstand Voltage (Uimp)	2500V.
Short Circuit Overload Protection	Fuse Externally 10A. (FF)