## Line Strong 3D Heavy duty switches

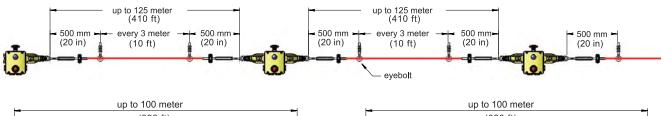
## Protection up to 250 meters

The Line Strong 3D is a Heavy Duty Safety Rope Pull switch designed to protect long conveyor lengths. The die-cast housings are robust to survive indoor or outdoor use including washdown (IP67 rating).

Lengths over 2 Km can be achieved with less than 20 switches. A bi-color LED ensures switch status can be seen easily from a distance. They have 4NC 2NO contacts to ensure flexibility with all modern control applications.

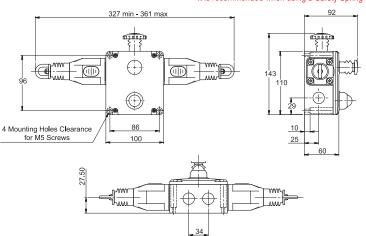
Shorter rope spans up to 200m can be achieved by using just one switch, therefore making a cost effective solution and also reducing electrical wiring runs.







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



## Line Strong 3D 2TLA050204R0332 LineStrong3D, 4NC/4NO, M20 ESTOP/LED 24VDC 2TLA050204R1332 LineStrong3D, 4NC/4NO, NPT ESTOP/LED 24VDC 2TLA050204R0333 LineStrong3D, 4NC/4NO, M20 ESTOP/LED 110VAC 2TLA050204R1333 LineStrong3D, 4NC/4NO, NPT ESTOP/LED 110VAC 2TLA050204R0334 LineStrong3D, 4NC/4NO, M20 ESTOP/LED 230VAC 2TLA050204R1334 LineStrong3D, 4NC/4NO, NPT ESTOP/LED 230VAC 2TLA050204R0232 LineStrong3D, 4NC/4NO, M20 LED 24VDC 2TLA050204R1232 LineStrong3D, 4NC/4NO, NPT LED 24VDC 2TLA050204R0233 LineStrong3D, 4NC/4NO, M20 LED 110VAC 2TLA050204R1233 LineStrong3D, 4NC/4NO, NPT LED 110VAC 2TLA050204R0234 LineStrong3D, 4NC/4NO, M20 LED 230VAC 2TLA050204R1234 LineStrong3D, 4NC/4NO, NPT LED 230VAC 2TLA050204R0130 LineStrong3D, 4NC/4NO, M20, ESTOP 2TLA050204R1130 LineStrong3D, 4NC/4NO, NPT ESTOP 2TLA050204R0030 LineStrong3D, 4NC/4NO, M20

Standards: IEC 947-5-1 IEC 947-5-5 EN954-1 EN62061 UL508 ISO13850 ISO13849-1 Safety Classification and Reliability Data: Mechanical Reliability B10d 1.5 x 106 operations at 100mA load up to Category 4 with Safety Relay ISO 13849-1 up to PLe depending upon system architecture up to SIL3 depending upon system architecture 8 cycles per hour / 24 hours per day / 365 days FN 62061 Safety Data - Annual Usage PFHd Proof Test Interval (Life) 21 years MTTFd 214 years Die-Cast - Painted Yellow Enclosure / Cover External Parts Stainless Steel IP Rating IP67 (NEMA 6) Rope Spans Dual Head 250m Tensioner / Gripper - Quick fixing Rope Tension device Rope Type: 4.0 mm Outside Dia. Steel inner – PVC sheath Mounting Mounting position Any  $4 \times M20$  or  $4 \times \frac{1}{2}$  " NPT by part number Conduit entries Mounting M5 4.0 Nm Torque settings Lid T20 Torx M4 1.5 Nm Terminals 1.0 Nm Ambient Temperature -25C +80 C. 10-500Hz 0.35mm Vibration resistance Shock resistance 15g 11ms Tension Force (typical mid setting) 130N. < 125N. < 300mm Deflection Typical Operating Force (Rope pulled)

1,000,000 operations Mechanical Life Weight 1320 g. Contact type IEC 947-5-1 Double break Type Zb Snap Action up to 4NC (positive break) 2NO (Auxiliary) Contact Material Clamp up to 2.5 sq. mm conductors Termination Rating Utilisation Category: AC15 A300 Operational Rating 240V. 3A. Thermal Current (Ith) 10A. Rated Insulation Voltage (Ui) Withstand Voltage (Uimp) 2500V Short Circuit Overload Protection Fuse Externally 10A. (FF)

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.

2TLA050204R1030 LineStrong3D, 4NC/4NO, NPT