

# Edge 1 Safety limit switches



## Features:

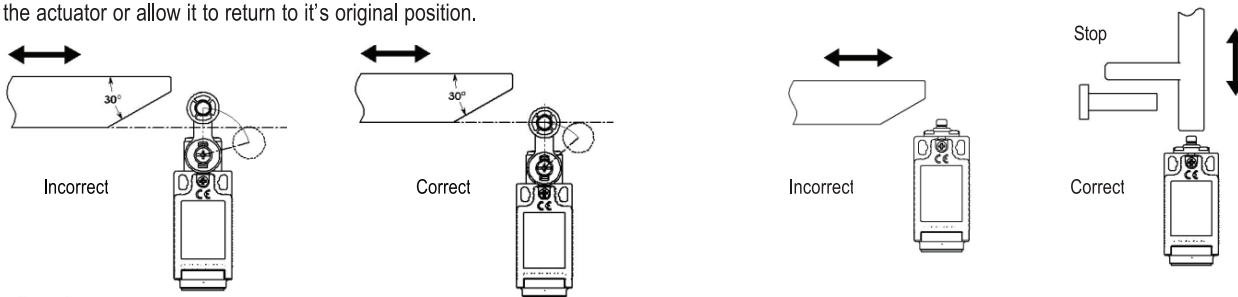
- Positive opening safety contacts to IEC 947-5-1
- Choice of 11 actuator heads Linear, Rotary and Flexible actions
- High Mechanical Life - 10,000,000 cycles
- Head position adjustment any of 4 positions
- Enclosure Protected to IP 67 - washdown suitable
- Conduit entries: M20 ½" NPT or Quick connect

## Application:

ABB Jokab Safety limit switches are designed to be mounted for position sensing of moving applications, e.g., guard doors, conveyors, machine beds, and elevators. They are available with linear plungers, rotary levers or roller plungers and either slow or snap action contacts.

## Operation:

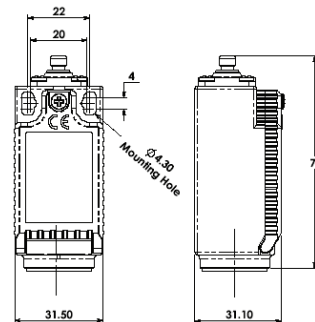
Operation of the switches is achieved by a sliding actuation of the moving object to cause deflection of the switch plungers or levers. For safety applications it is important that the moving object does not pass completely over the switch actuators so as to either cause damage to the the actuator or allow it to return to it's original position.



Standards EN1088 IEC 947-5-1 EN 60204-1  
ISO 13849-1 EN62061 EN 954-1 UL508

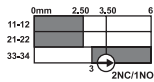
### Safety Classification and Reliability Data:

Mechanical Reliability B10d	2.5 x 10 <sup>6</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	3.44 x 10 <sup>-8</sup>
Proof Test Interval (Life)	35 years
MTTFd	356 years
Utilization Category	AC15 A300 240V. 3A.
Thermal Current (Ith)	10A
Rated Insulation Voltage	300VAC
Rated Impulse Withstand Volt	2500VAC
Insulation Resistance	100MΩmin.
Max. Switching Speed	250mm/s
Case Material	UL approved glass-filled polyester
Roller Material	Various Polymers
Enclosure Protection	IP67
Operating Temperature	Min. -25 °C Max 80 °C
Vibration	IEC 68-2-6, 10-55Hz 0.35mm, 1 octave/min
Conduit Entry	M20 or ½ NPT

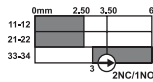


Outline fixing dimensions mm

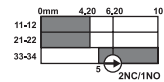
# Edge 1 Safety limit switches



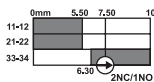
**Edge 1 Pin Plunger**  
 2TLA050100R0000 Edge1, Pin Plunger M20, 2NC/1NO  
 2TLA050100R0100 Edge1, Pin Plunger NPT, 2NC/1NO  
 2TLA050100R0200 Edge1, Pin Plunger QC, 2NC/1NO



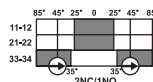
**Edge 1 Roller Plunger**  
 2TLA050101R0000 Edge1, Roller Plunger M20, 2NC/1NO  
 2TLA050101R0100 Edge1, Roller Plunger NPT, 2NC/1NO  
 2TLA050101R0200 Edge1, Roller Plunger QC, 2NC/1NO



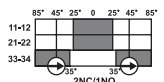
**Edge 1 Hinge Lever**  
 2TLA050102R0000 Edge1, Hinge Lever M20, 2NC/1NO  
 2TLA050102R0100 Edge1, Hinge Lever NPT, 2NC/1NO  
 2TLA050102R0200 Edge1, Hinge Lever QC, 2NC/1NO



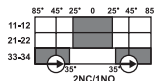
**Edge 1 Long Hinge Lever**  
 2TLA050103R0000 Edge1, Long Hinge Lever M20, 2NC/1NO  
 2TLA050103R0100 Edge1, Long Hinge Lever NPT, 2NC/1NO  
 2TLA050103R0200 Edge1, Long Hinge Lever QC, 2NC/1NO



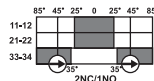
**Edge 1 Roller Lever**  
 2TLA050111R0000 Edge1, Roller Lever M20, 2NC/1NO  
 2TLA050111R0100 Edge1, Roller Lever NPT, 2NC/1NO  
 2TLA050111R0200 Edge1, Roller Lever QC, 2NC/1NO



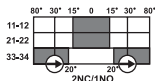
**Edge 1 Long Roller Lever**  
 2TLA050104R0000 Edge1, Long Roller Lever M20, 2NC/1NO  
 2TLA050104R0100 Edge1, Long Roller Lever NPT, 2NC/1NO  
 2TLA050104R0200 Edge1, Long Roller Lever QC, 2NC/1NO



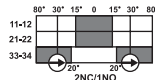
**Edge 1 Adjustable Roller lever**  
 2TLA050105R0000 Edge1, Adj. Roller Lever M20, 2NC/1NO  
 2TLA050105R0100 Edge1, Adj. Roller Lever NPT, 2NC/1NO  
 2TLA050105R0200 Edge1, Adj. Roller Lever QC, 2NC/1NO



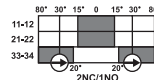
**Edge 1 Lever Arm**  
 2TLA050106R0000 Edge1, Lever Arm M20, 2NC/1NO  
 2TLA050106R0100 Edge1, Lever Arm NPT, 2NC/1NO  
 2TLA050106R0200 Edge1, Lever Arm QC, 2NC/1NO



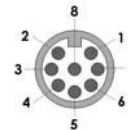
**Edge 1 Spring Lever**  
 2TLA050107R0000 Edge1, Spring Lever M20, 2NC/1NO  
 2TLA050107R0100 Edge1, Spring Lever NPT, 2NC/1NO  
 2TLA050107R0200 Edge1, Spring Lever QC, 2NC/1NO



**Edge 1 Spring Whisker**  
 2TLA050108R0000 Edge1, Spring Whisker M20, 2NC/1NO  
 2TLA050108R0100 Edge1, Spring Whisker NPT, 2NC/1NO  
 2TLA050108R0200 Edge1, Spring Whisker QC, 2NC/1NO



**Edge 1 Plastic Spring Lever**  
 2TLA050110R0000 Edge1, Plas.Spring Lever M20, 2NC/1NO  
 2TLA050110R0100 Edge1, Plas.Spring Lever NPT, 2NC/1NO  
 2TLA050110R0200 Edge1, Plas.Spring Lever QC, 2NC/1NO



Switch Circuit	Quick Connect (QC) M12 8 Way Male (on Flying Lead 250mm) Pin view from switch
11 / 12	1 7
21 / 22	6 5
33 / 34	4 3

