

Edge 1 Safety limit switches



Features:

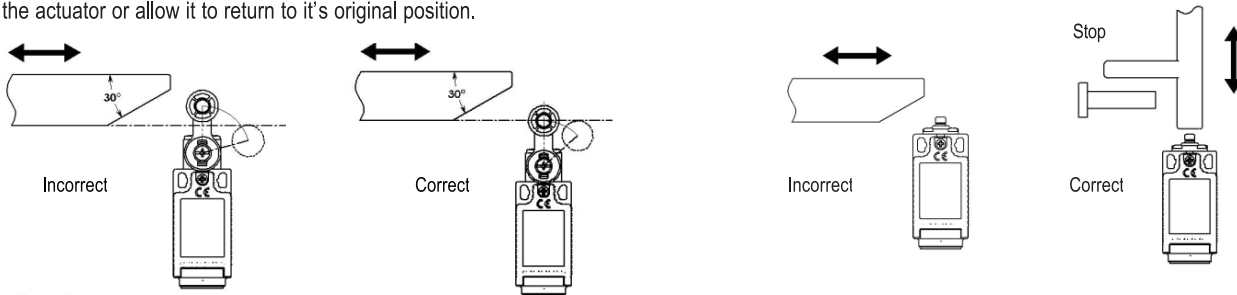
- Positive opening safety contacts to IEC 947-5-1
- Choice of 11 actuator heads Linear, Rotary and Flexible actions
- High Mechanical Life - 10,000,000 cycles
- Head position adjustment any of 4 positions
- Enclosure Protected to IP 67 - washdown suitable
- Conduit entries: M20 ½" NPT or Quick connect

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:

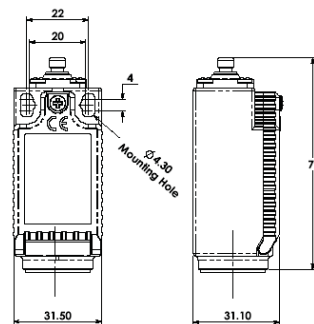
Operation of the switches is achieved by a sliding actuation of the moving object to cause deflection of the switch plungers or levers. For safety applications it is important that the moving object does not pass completely over the switch actuators so as to either cause damage to the the actuator or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

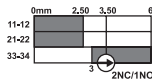
Safety Classification and Reliability Data:

Mechanical Reliability B10d	2.5 x 10 ⁶ 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 ⁻⁸
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

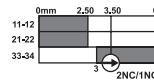


Outline fixing dimensions mm

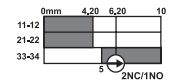
Edge 1 Safety limit switches



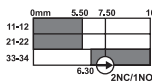
Edge 1 Pin Plunger
 2TLA050100R0000 Edge1, Pin Plunger M20, 2NC/1NO
 2TLA050100R0100 Edge1, Pin Plunger NPT, 2NC/1NO
 2TLA050100R0200 Edge1, Pin Plunger QC, 2NC/1NO



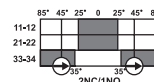
Edge 1 Roller Plunger
 2TLA050101R0000 Edge1, Roller Plunger M20, 2NC/1NO
 2TLA050101R0100 Edge1, Roller Plunger NPT, 2NC/1NO
 2TLA050101R0200 Edge1, Roller Plunger QC, 2NC/1NO



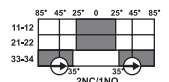
Edge 1 Hinge Lever
 2TLA050102R0000 Edge1, Hinge Lever M20, 2NC/1NO
 2TLA050102R0100 Edge1, Hinge Lever NPT, 2NC/1NO
 2TLA050102R0200 Edge1, Hinge Lever QC, 2NC/1NO



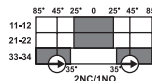
Edge 1 Long Hinge Lever
 2TLA050103R0000 Edge1, Long Hinge Lever M20, 2NC/1NO
 2TLA050103R0100 Edge1, Long Hinge Lever NPT, 2NC/1NO
 2TLA050103R0200 Edge1, Long Hinge Lever QC, 2NC/1NO



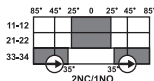
Edge 1 Roller Lever
 2TLA050111R0000 Edge1, Roller Lever M20, 2NC/1NO
 2TLA050111R0100 Edge1, Roller Lever NPT, 2NC/1NO
 2TLA050111R0200 Edge1, Roller Lever QC, 2NC/1NO



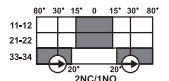
Edge 1 Long Roller Lever
 2TLA050104R0000 Edge1, Long Roller Lever M20, 2NC/1NO
 2TLA050104R0100 Edge1, Long Roller Lever NPT, 2NC/1NO
 2TLA050104R0200 Edge1, Long Roller Lever QC, 2NC/1NO



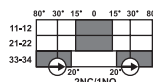
Edge 1 Adjustable Roller lever
 2TLA050105R0000 Edge1, Adj. Roller Lever M20, 2NC/1NO
 2TLA050105R0100 Edge1, Adj. Roller Lever NPT, 2NC/1NO
 2TLA050105R0200 Edge1, Adj. Roller Lever QC, 2NC/1NO



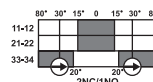
Edge 1 Lever Arm
 2TLA050106R0000 Edge1, Lever Arm M20, 2NC/1NO
 2TLA050106R0100 Edge1, Lever Arm NPT, 2NC/1NO
 2TLA050106R0200 Edge1, Lever Arm QC, 2NC/1NO



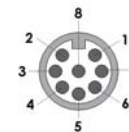
Edge 1 Spring Lever
 2TLA050107R0000 Edge1, Spring Lever M20, 2NC/1NO
 2TLA050107R0100 Edge1, Spring Lever NPT, 2NC/1NO
 2TLA050107R0200 Edge1, Spring Lever QC, 2NC/1NO



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

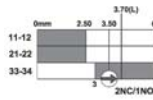


Edge 1R Safety limit switches with reset



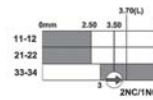
Features:

- Lockable head mechanism
- Requires manual reset after the lock is engaged
- Positive opening safety contacts to IEC 947-5-1
- Choice of 8 actuator heads Linear or Rotary actions
- Head position adjustment any of 4 positions
- Enclosure Protected to IP 67 - washdown suitable
- Conduit entries: M20 1/2" NPT or Quick connect



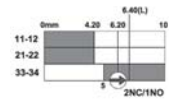
Edge 1R Pin Plunger

2TLA050100R0006 Edge1R Pin Plunger M20, 2NC/1NO RS
 2TLA050100R0106 Edge1R Pin Plunger NPT, 2NC/1NO RS
 2TLA050100R0206 Edge1R Pin Plunger QC, 2NC/1NO RS



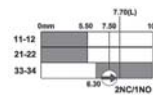
Edge 1R Roller Plunger

2TLA050101R0006 Edge1R Roller Plunger M20, 2NC/1NO RS
 2TLA050101R0106 Edge1R Roller Plunger NPT, 2NC/1NO RS
 2TLA050101R0206 Edge1R Roller Plunger QC, 2NC/1NO RS



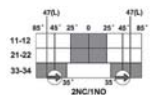
Edge 1R Hinge Lever

2TLA050102R0006 Edge1R Hinge Lever M20, 2NC/1NO RS
 2TLA050102R0106 Edge1R Hinge Lever NPT, 2NC/1NO RS
 2TLA050102R0206 Edge1R Hinge Lever QC, 2NC/1NO RS



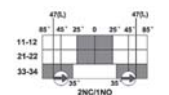
Edge 1R Long Hinge Lever

2TLA050103R0006 Edge1R Long Hinge Lever M20, 2NC/1NO RS
 2TLA050103R0106 Edge1R Long Hinge Lever NPT, 2NC/1NO RS
 2TLA050103R0206 Edge1R Long Hinge Lever QC, 2NC/1NO RS



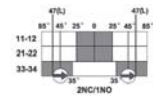
Edge 1R Roller Lever

2TLA050111R0006 Edge1R Roller Lever M20, 2NC/1NO RS
 2TLA050111R0106 Edge1R Roller Lever NPT, 2NC/1NO RS
 2TLA050111R0206 Edge1R Roller Lever QC, 2NC/1NO RS



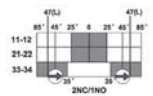
Edge 1R Long Roller Lever

2TLA050105R0006 Edge1R Long Roller Lever M20, 2NC/1NO RS
 2TLA050105R0106 Edge1R Long Roller Lever NPT, 2NC/1NO RS
 2TLA050105R0206 Edge1R Long Roller Lever QC, 2NC/1NO RS



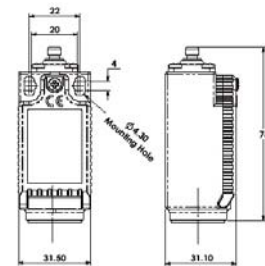
Edge 1R Adjustable Roller Lever

2TLA050104R0006 Edge1R Adj. Roller Lever M20, 2NC/1NO RS
 2TLA050104R0106 Edge1R Adj. Roller Lever NPT, 2NC/1NO RS
 2TLA050104R0206 Edge1R Adj. Roller Lever QC, 2NC/1NO RS



Edge 1R Lever Arm

2TLA050106R0006 Edge1R Lever Arm M20, 2NC/1NO RS
 2TLA050106R0106 Edge1R Lever Arm NPT, 2NC/1NO RS
 2TLA050106R0206 Edge1R Lever Arm QC, 2NC/1NO RS



Outline fixing dimensions - mm

Technical specification as Edge 1

Edge 2 and Edge 3 Safety limit switches



Features:

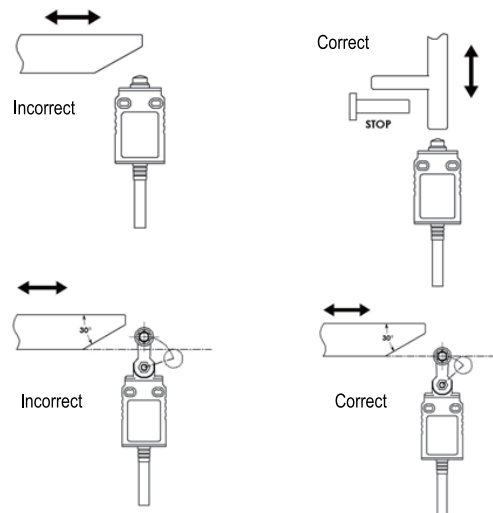
- Standard Duty Plastic body - red color
- Heavy Duty Die Cast Metal Bodies - black color
- Positive opening NC safety contacts to IEC 945-5-1
- Unique 3 pole positively operated contacts
- Choice of 7 actuator heads Linear and Rotary
- High Mechanical Life 5,000,000 cycles
- Side or End cable exit
- Enclosure Protected to IP67 - wash down suitable
- Wide operating temperature -25C to 80C.
- Contact Blocks : 2NC 1NO Slow break

Application:

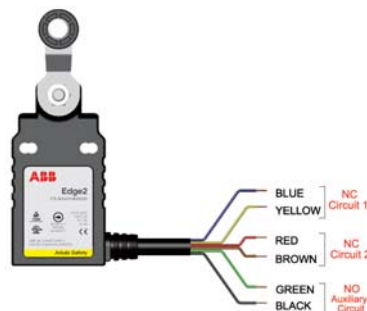
ABB Jokab Safety limit switches are designed to be mounted for position sensing of moving applications, e.g., guard doors, conveyors, machine beds, elevators. They are available with linear plungers, rotary levers or roller plungers and either slow or snap action contacts.

Operation:

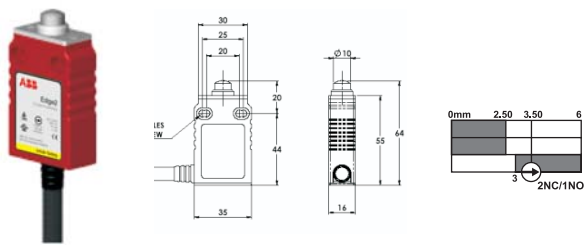
Operation of the switches is achieved by a sliding actuation of the moving object to cause deflection of the switch plungers or levers. For safety applications it is important that the moving object does not pass completely over the switch actuators so as to either cause damage to the the actuator or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



Standards	EN1088 IEC 947-5-1 UL508
Approvals	cULus TUV
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
Max. Switching Frequency	6,000 operation per hour
Case Material	Die Cast Metal or Plastic
Roller Material	Various Polymers
Enclosure Protection	IP67
Operating Temperature	Min. -25°C Max 80°C
Mechanical Life Expectancy	5,000,000
Vibration	IEC 68-2-6, 10-55Hz 0.35mm, 1 octave/min
Conductor size	1.5 sq.mm 4 Core or 6 Core
Cable OD	8mm max.
Fixing	2 x M4
Cable Length	2 Meter

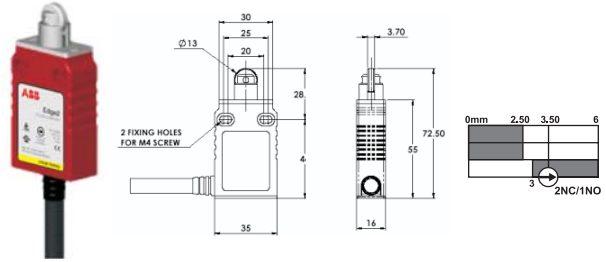


Edge 2 Safety limit switches



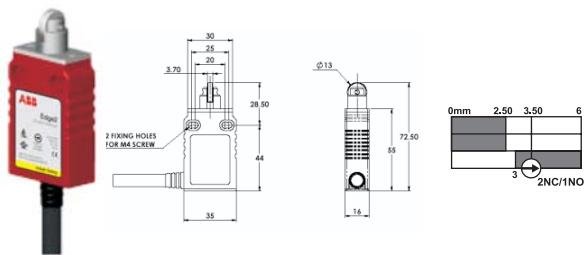
Edge 2 Pin

2TLA050120R4008 Edge2, Pin 3m side cable, 2NC/1NO
 2TLA050120R4000 Edge2, Pin 3m end cable, 2NC/1NO



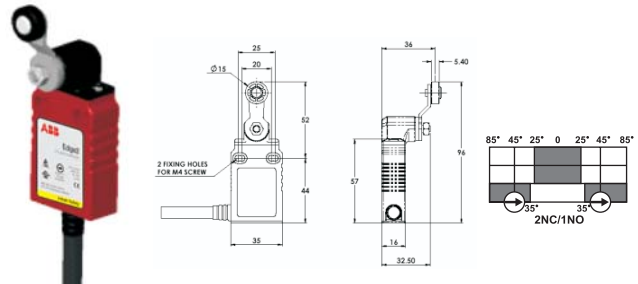
Edge 2 Roller Plunger 1

2TLA050121R4008 Edge2, Roller 3m side cable, 2NC/1NO
 2TLA050121R4000 Edge2, Roller 3m end cable, 2NC/1NO



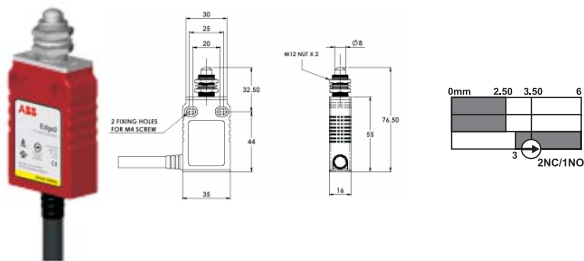
Edge 2 Roller Plunger 2

2TLA050122R4008 Edge2, Roller 3m side cable, 2NC/1NO
 2TLA050122R4000 Edge2, Roller 3m end cable, 2NC/1NO



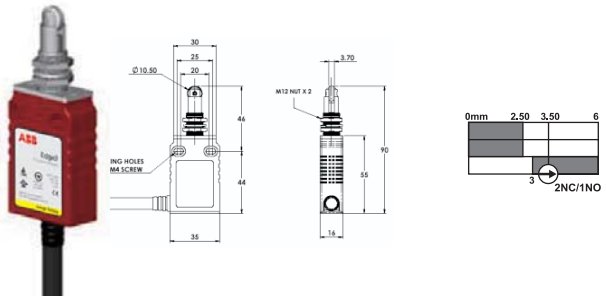
Edge 2 Roller Lever

2TLA050123R4008 Edge2, Lever 3m side cable, 2NC/1NO
 2TLA050123R4000 Edge2, Lever 3m end cable, 2NC/1NO



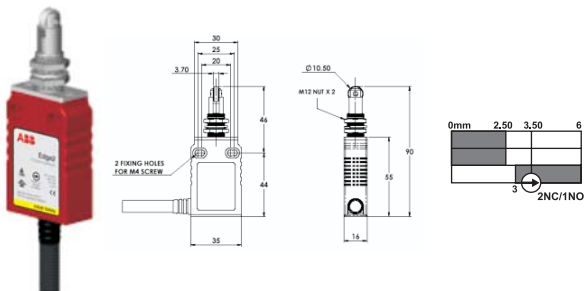
Edge 2 Panel Mount Pin

2TLA050124R4008 Edge2, Panel Pin 3m side cable, 2NC/1NO
 2TLA050124R4000 Edge2, Panel Pin 3m end cable, 2NC/1NO



Edge 2 Panel Roller 1

2TLA050125R4008 Edge2, Panel Roll 3m side cable, 2NC/1NO
 2TLA050125R4000 Edge2, Panel Roll 3m end cable, 2NC/1NO

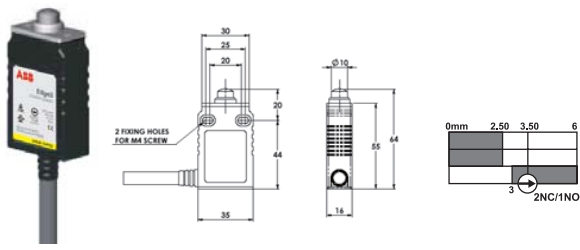


Edge 2 Panel Roller 2

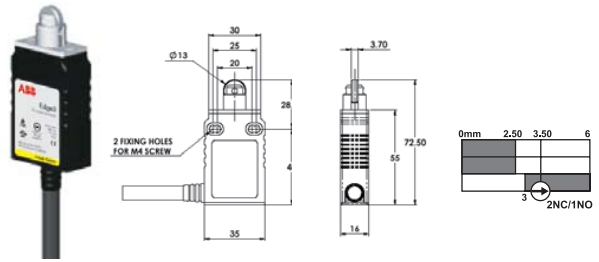
2TLA050126R4008 Edge2, Panel Roll 3m side cable, 2NC/1NO
 2TLA050126R4000 Edge2, Panel Roll 3m end cable, 2NC/1NO



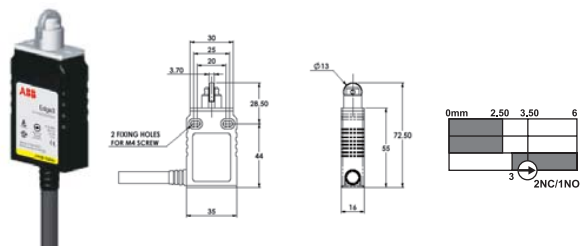
Edge 3 Safety limit switches



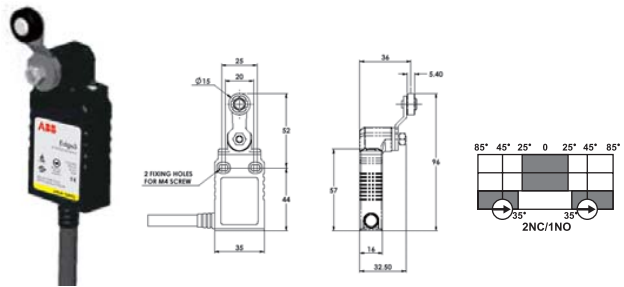
Edge 3 Pin
 2TLA050120R4038 Edge3, Pin 3m side cable, 2NC/1NO
 2TLA050120R4030 Edge3, Pin 3m end cable, 2NC/1NO



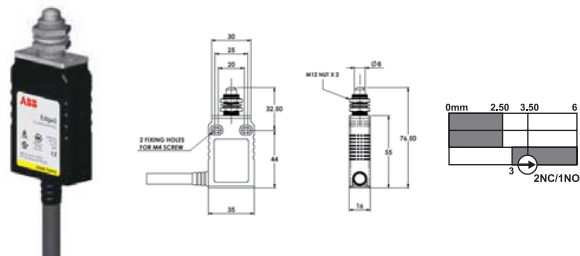
Edge 3 Roller Plunger 1
 2TLA050121R4038 Edge3, Roller 3m side cable, 2NC/1NO
 2TLA050121R4030 Edge3, Roller 3m end cable, 2NC/1NO



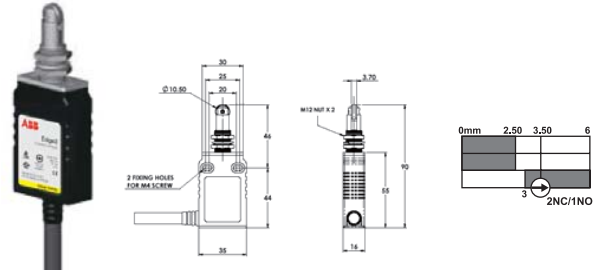
Edge 3 Roller Plunger 2
 2TLA050122R4038 Edge3, Roller 3m side cable, 2NC/1NO
 2TLA050122R4030 Edge3, Roller 3m end cable, 2NC/1NO



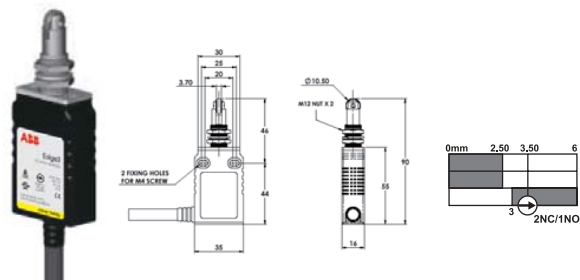
Edge 3 Roller Lever
 2TLA050123R4038 Edge3, Lever 3m side cable, 2NC/1NO
 2TLA050123R4030 Edge3, Lever 3m end cable, 2NC/1NO



Edge 3 Panel Mount Pin
 2TLA050124R4038 Edge3, Panel Pin 3m side cable, 2NC/1NO
 2TLA050124R4030 Edge3, Panel Pin 3m end cable, 2NC/1NO



Edge 3 Panel Roller 1
 2TLA050125R4038 Edge3, Panel Roll 3m side cable, 2NC/1NO
 2TLA050125R4030 Edge3, Panel Roll 3m end cable, 2NC/1NO



Edge 2 Panel Roller 2
 2TLA050126R4038 Edge3, Panel Roll 3m side cable, 2NC/1NO
 2TLA050126R4030 Edge3, Panel Roll 3m end cable, 2NC/1NO

