



Conveyor Belt Alignment Switches from IDEM

Data Sheet Python Line Series



Die-Cast Models

Stainless Steel Models

Using Conveyor Belt Alignment Switches

Application:

Conveyor Belt Alignment switches are mounted on sections of plant conveyors to protect against excessive belt drift due to an unintentional movement. They can be fitted at appropriate points along the conveyor length to ensure that should the belt position drift, the roller arm of the switch will move to a pre-determined position and cause activation of a control circuit.

All switches conform to European Standard IEC 60947-5-1 and provide positively operated contacts at the point of tripping. They can be used to satisfy the requirements of EN 620 with regard to conveyor control hazards caused by shifting of the belt position during running.

They are available in different roller diameters to provide heavy duty performance and long life.

Operation:

The steel roller of the switch is placed near to the running edge of the conveyor belt such that deflection of the roller and arm will cause activation "tripping" of the internal contacts of the switch. Adjustment of the tripping angles and necessary activation torque is provided by the switch.

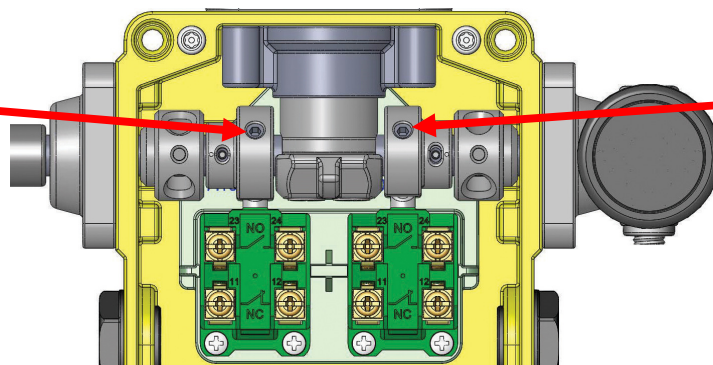
Installation Guide:

1. Installation of all switch systems must be in accordance with a risk assessment for the individual application. Installation must only be carried out by competent personnel and in accordance with these instructions.
2. M5 mounting bolts must be used to fix the switches. Tightening torque for mounting bolts to ensure reliable fixing is 4 Nm. Tightening torque for the lid screws, conduit entry plugs and cable glands must be 1.5 Nm to ensure IP seal. Only use the correct size gland for the conduit entry and cable outside diameter.
3. The position of the roller must be chosen to ensure that in normal use the belt does not touch the roller, but that should the belt move beyond its normal guides it will make contact with the roller. After selecting the correct mounting position, the switching points of the internal contact blocks can be finely adjusted via internal cams. There are 2 internal contact blocks one to provide a "STOP" signal the other to provide a "WARNING" signal. The blocks offer NC and NO circuits.

Final Adjustment of contact block action:

WARNING SIGNAL

- Contact block 1
Adjustment cam.
- Allen screw (2.5mm)
Tightening Torque 2Nm
- Factory setting 14 degrees
(Adjustable 10 to 18 degrees)



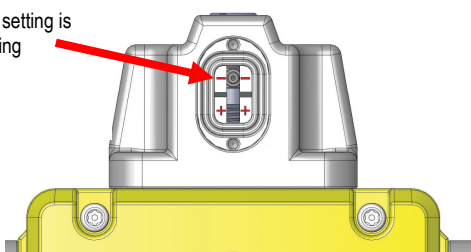
STOP SIGNAL

- Contact block 2
Adjustment cam.
- Allen screw (2.5mm)
Tightening Torque 2Nm
- Factory setting 25 degrees.
(Adjustable 15 to 35 degrees)

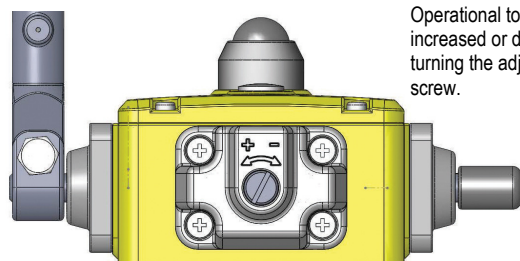
Block 1 Block 2

4. The operational torque can be adjusted to cope with belt sensitivity or mounting angle.

Factory setting is low setting

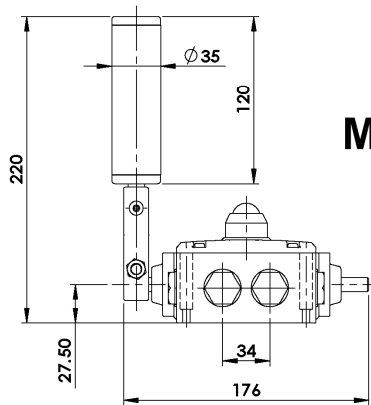
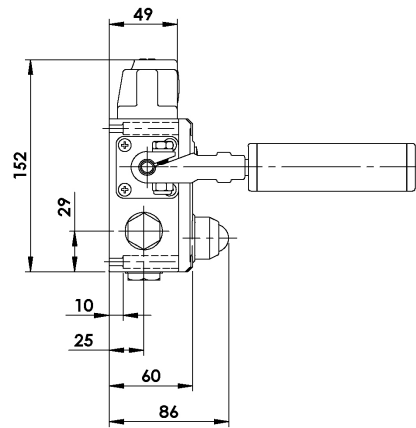
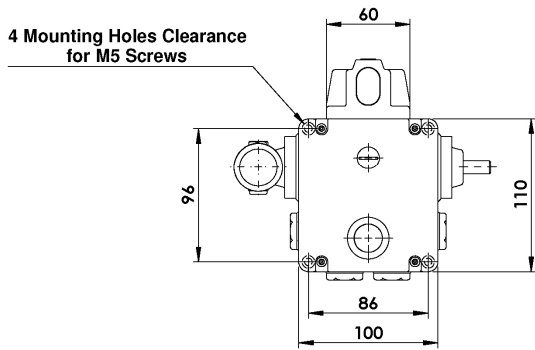


Operational torque can be increased or decreased by turning the adjustment screw.



Conveyor Belt Alignment Switches from IDEM

MODELS:



MEDIUM DUTY - DIE-CAST

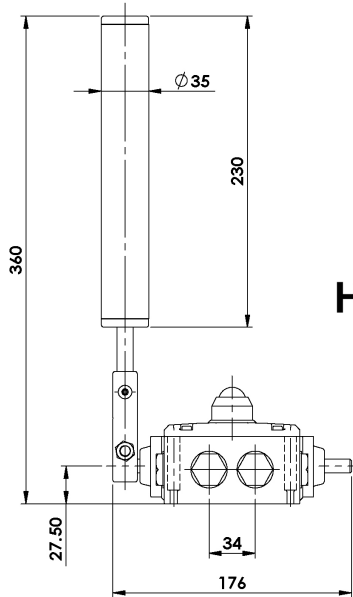
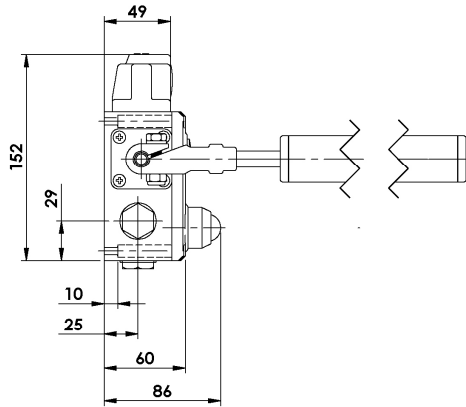
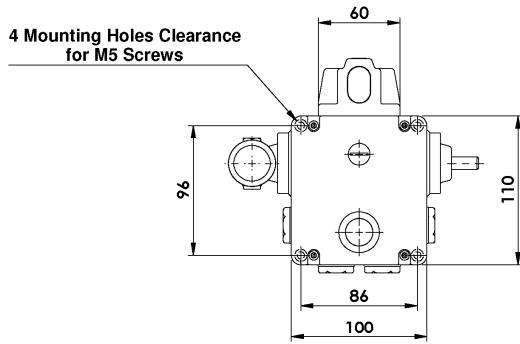
Belt Switch - 35mm Short Roller

All Dimensions in mm



| Description | Sales Part No. | Medium Duty | | |
|---|----------------|--|---|---|
| | | Operating Torque | WARNING | STOP |
| Belt Switch 35mm Roller Short M20 2NC 2NO | 500001 | 1.8Nm to 2.8Nm (Factory set : 1.8Nm) | 10-18 degrees (Factory set: 14 degrees) | 15-35 degrees (Factory set: 25 degrees) |
| Belt Switch 35mm Roller Short ½" 2NC 2NO | 500002 | | | |
| Belt Switch 35mm Roller Short M20 2NC 2NO 24v LED | 500003A | | | |
| Belt Switch 35mm Roller Short M20 2NC 2NO 110v LED | 500003B | | | |
| Belt Switch 35mm Roller Short M20 2NC 2NO 230v LED | 500003C | | | |
| Belt Switch 35mm Roller Short ½" 2NC 2NO 24v LED | 500004A | | | |
| Belt Switch 35mm Roller Short ½" 2NC 2NO 110v LED | 500004B | | | |
| Belt Switch 35mm Roller Short ½" 2NC 2NO 230v LED | 500004C | | | |
| Belt Switch 35mm Roller Short M20 2NC 2NO EX 3m PRE-WIRED | 500021 | | | |

Conveyor Belt Alignment Switches from IDEM



HEAVY DUTY - DIE-CAST

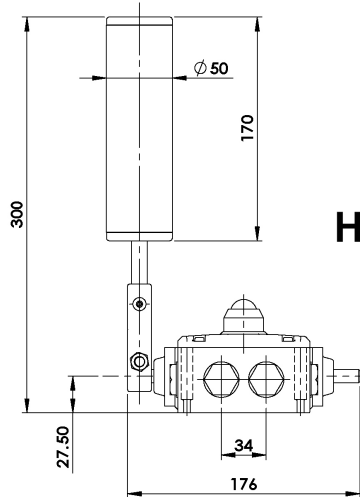
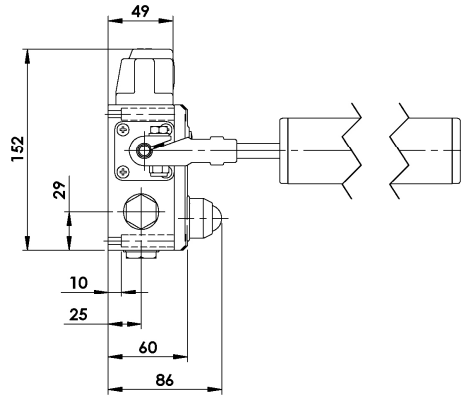
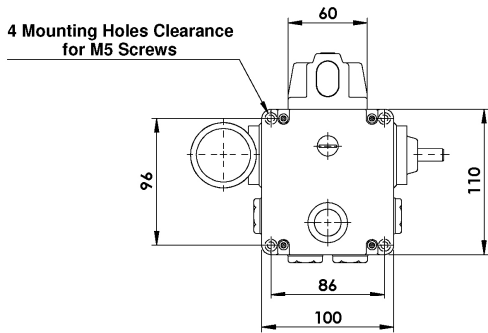
Belt Switch - 35mm Long Roller

All Dimensions in mm



| Description | Sales Part No. | Heavy Duty | | |
|--|----------------|--|---|---|
| | | Operating Torque | WARNING | STOP |
| Belt Switch 35mm Roller Long M20 2NC 2NO | 500005 | 3.0Nm to 5.0Nm (Factory set : 3.0Nm) | 10-18 degrees (Factory set: 14 degrees) | 15-35 degrees (Factory set: 25 degrees) |
| Belt Switch 35mm Roller Long ½" 2NC 2NO | 500006 | | | |
| Belt Switch 35mm Roller Long M20 2NC 2NO 24v LED | 500007A | | | |
| Belt Switch 35mm Roller Long M20 2NC 2NO 110v LED | 500007B | | | |
| Belt Switch 35mm Roller Long M20 2NC 2NO 230v LED | 500007C | | | |
| Belt Switch 35mm Roller Long ½" 2NC 2NO 24v LED | 500008A | | | |
| Belt Switch 35mm Roller Long ½" 2NC 2NO 110v LED | 500008B | | | |
| Belt Switch 35mm Roller Long ½" 2NC 2NO 230v LED | 500008C | | | |
| Belt Switch 35mm Roller Long M20 2NC 2NO EX 3m PRE-WIRED | 500051 | | | |

Conveyor Belt Alignment Switches from IDEM



HEAVY DUTY - DIE-CAST

Belt Switch - 50mm Roller

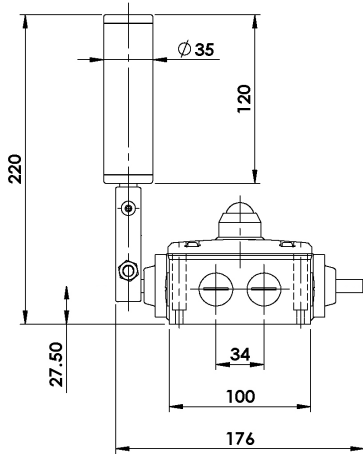
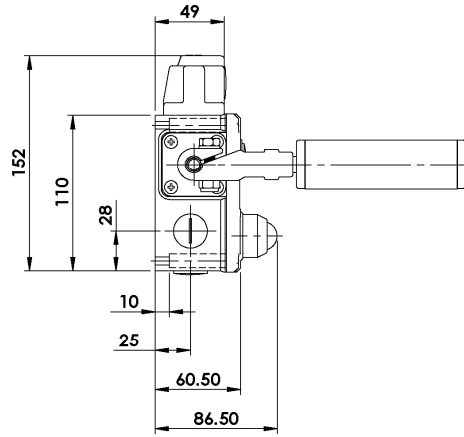
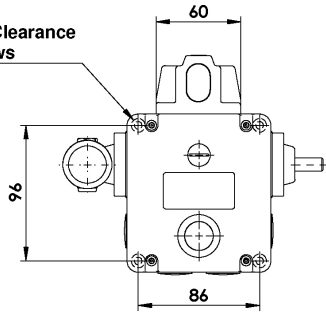
All Dimensions in mm



| Description | Sales Part No. | Heavy Duty | | |
|---|----------------|--|---|---|
| | | Operating Torque | WARNING | STOP |
| Belt Switch 50mm Roller M20 2NC 2NO | 500009 | 3.0Nm to 5.0Nm (Factory set : 3.0Nm) | 10-18 degrees (Factory set: 14 degrees) | 15-35 degrees (Factory set: 25 degrees) |
| Belt Switch 50mm Roller ½" 2NC 2NO | 500010 | | | |
| Belt Switch 50mm Roller M20 2NC 2NO 24v LED | 500011A | | | |
| Belt Switch 50mm Roller M20 2NC 2NO 110v LED | 500011B | | | |
| Belt Switch 50mm Roller M20 2NC 2NO 230v LED | 500011C | | | |
| Belt Switch 50mm Roller ½" 2NC 2NO 24v LED | 500012A | | | |
| Belt Switch 50mm Roller ½" 2NC 2NO 110v LED | 500012B | | | |
| Belt Switch 50mm Roller ½" 2NC 2NO 230v LED | 500012C | | | |
| Belt Switch 50mm Roller M20 2NC 2NO EX 3m PRE-WIRED | 500091 | | | |

Conveyor Belt Alignment Switches from IDEM

4 Mounting Holes Clearance for M5 Screws



MEDIUM DUTY STAINLESS STEEL

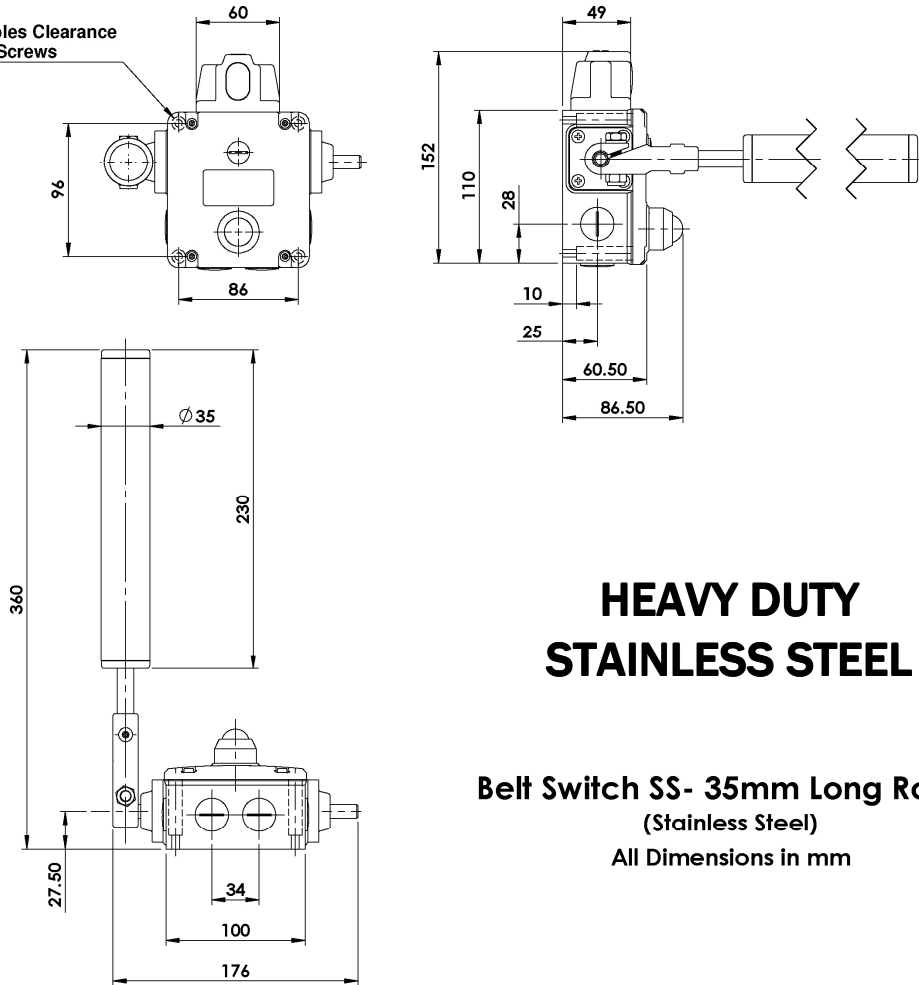
Belt Switch SS- 35mm Short Roller
(Stainless Steel)
All Dimensions in mm



| Description | Sales Part No. | Medium Duty | | |
|--|----------------|--|---|---|
| | | Operating Torque | WARNING | STOP |
| Belt Switch SS 35mm Roller Short M20 2NC 2NO | 501001 | 1.8Nm to 2.8Nm (Factory set : 1.8Nm) | 10-18 degrees (Factory set: 14 degrees) | 15-35 degrees (Factory set: 25 degrees) |
| Belt Switch SS 35mm Roller Short ½" 2NC 2NO | 501002 | | | |
| Belt Switch SS 35mm Roller Short M20 2NC 2NO 24v LED | 501003A | | | |
| Belt Switch SS 35mm Roller Short M20 2NC 2NO 110v LED | 501003B | | | |
| Belt Switch SS 35mm Roller Short M20 2NC 2NO 230v LED | 501003C | | | |
| Belt Switch SS 35mm Roller Short ½" 2NC 2NO 24v LED | 501004A | | | |
| Belt Switch SS 35mm Roller Short ½" 2NC 2NO 110v LED | 501004B | | | |
| Belt Switch SS 35mm Roller Short ½" 2NC 2NO 230v LED | 501004C | | | |
| Belt Switch SS 35mm Roller Short M20 2NC 2NO EX 3m PRE-WIRED | 501021 | | | |

Conveyor Belt Alignment Switches from IDEM

4 Mounting Holes Clearance for M5 Screws



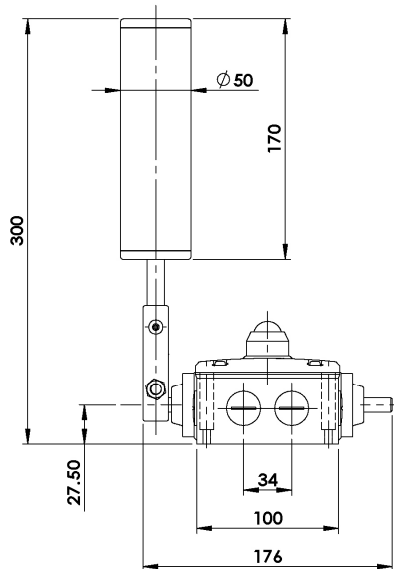
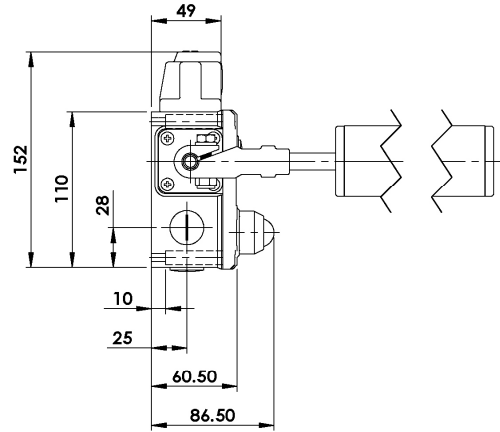
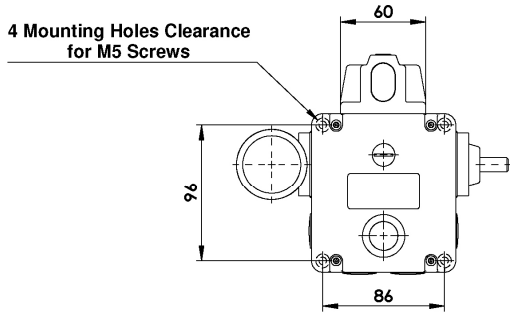
HEAVY DUTY STAINLESS STEEL

Belt Switch SS- 35mm Long Roller
(Stainless Steel)
All Dimensions in mm



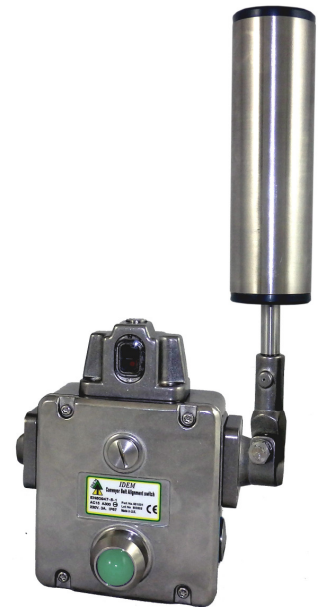
| Description | Sales Part No. | Heavy Duty | | |
|---|----------------|--|--|---|
| | | Operating Torque | WARNING | STOP |
| Belt Switch SS 35mm Roller Long M20 2NC 2NO | 501005 | 3.0Nm to 5.0Nm (Factory set : 3.0Nm) | 10-18 degrees (Factory set: 14 degrees) | 15-35 degrees (Factory set: 25 degrees) |
| Belt Switch SS 35mm Roller Long ½" 2NC 2NO | 501006 | | | |
| Belt Switch SS 35mm Roller Long M20 2NC 2NO 24v LED | 501007A | | | |
| Belt Switch SS 35mm Roller Long M20 2NC 2NO 110v LED | 501007B | | | |
| Belt Switch SS 35mm Roller Long M20 2NC 2NO 230v LED | 501007C | | | |
| Belt Switch SS 35mm Roller Long ½" 2NC 2NO 24v LED | 501008A | | | |
| Belt Switch SS 35mm Roller Long ½" 2NC 2NO 110v LED | 501008B | | | |
| Belt Switch SS 35mm Roller Long ½" 2NC 2NO 230v LED | 501008C | | | |
| Belt Switch SS 35mm Roller Long M20 2NC 2NO EX 3m PRE-WIRED | 501051 | | | |

Conveyor Belt Alignment Switches from IDEM



HEAVY DUTY STAINLESS STEEL

Belt Switch SS- 50mm Roller
(Stainless Steel)
All Dimensions in mm



| Description | Sales Part No. | Heavy Duty | | |
|--|----------------|--|--|---|
| | | Operating Torque | WARNING | STOP |
| Belt Switch SS 50mm Roller M20 2NC 2NO | 501009 | 3.0Nm to 5.0Nm (Factory set : 3.0Nm) | 10-18 degrees (Factory set: 14 degrees) | 15-35 degrees (Factory set: 25 degrees) |
| Belt Switch SS 50mm Roller ½" 2NC 2NO | 501010 | | | |
| Belt Switch SS 50mm Roller M20 2NC 2NO 24v LED | 501011A | | | |
| Belt Switch SS 50mm Roller M20 2NC 2NO 110v LED | 501011B | | | |
| Belt Switch SS 50mm Roller M20 2NC 2NO 230v LED | 501011C | | | |
| Belt Switch SS 50mm Roller ½" 2NC 2NO 24v LED | 501012A | | | |
| Belt Switch SS 50mm Roller ½" 2NC 2NO 110v LED | 501012B | | | |
| Belt Switch SS 50mm Roller ½" 2NC 2NO 230v LED | 501012C | | | |
| Belt Switch SS 50mm Roller M20 2NC 2NO EX 3m PRE-WIRED | 501091 | | | |