# XUSL4E14F031N

XUSL type 4 - Finger protection - Std sensing range - Hp = 310 mm, R=14mm



## Main

| | |
|---|---|
| Range of product | Preventa Safety detection |
| Product or component type | Safety light curtain type 4 |
| Device short name | XUSL4E |
| Output type | 2 safety outputs OSSD solid-state PNP (integrated arc suppression) |
| Product specific application | For finger protection |
| Minimum object diameter for detection | 14 mm |
| [Sn] nominal sensing distance | 1...6 m by cabling<br>0...3 m by cabling |
| Height protected | 310 mm |
| Number of beams | 30 |
| Type of start | Manual<br>Automatic |
| Control type | Selected by wiring |

## Complementary

| | |
|---|---|
| Detection system | Transmitter-receiver system |
| Response time | 5.5 ms |
| Kit composition | Adjustable mounting bracket(s)<br>1 receiver(s)<br>1 transmitter(s)<br>1 user guide with certificate of conformity on CD-ROM |
| [EAA] effective aperture angle | +/- 2.5 ° at 3 m |
| Emission | IR LED (λ = 950 nm) |
| [Us] rated supply voltage | 24 V DC (+/- 20 %) |
| Supply | Power supply must meet requirements of IEC 61496-1<br>Power supply must meet requirements of IEC 60204-1 |
| [Ie] rated operational current | 2 A |
| Current consumption | 42 mA no-load (transmitter)<br>83 mA no-load (receiver)<br>42 mA (transmitter) |

1

| | 900 mA with maximum load (receiver) |
|---|---|
| Output current limits | 0.4 A for safety outputs OSSD |
| Output voltage | 24 V |
| Output circuit type | DC |
| Voltage drop | <= 0.5 V |
| Local signalling | 1 multi-colour LED (transmitter)<br>2 dual colour LEDs (receiver) |
| Electrical connection | 1 male connector M12 5 pins (transmitter)<br>1 male connector M12 8 pins (receiver) |
| Function available | Muting through external safety module XPSLCMUT1160<br>LED display of operating modes and faults<br>Test |
| Marking | CE |
| Material | Front panel : polycarbonate<br>End caps : polypropylene<br>Casing : aluminium |
| Housing colour | RAL 3000 : red |
| Fixing mode | By fixing brackets |
| Product weight | 0.7 kg |
| Offer type | Standard distance |

## Environment

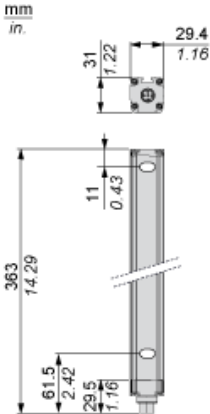| | |
|---|---|
| Directives | 2002/96/EC - WEEE directive<br>89/336/EEC - electromagnetic compatibility<br>89/655/EEC - work equipment<br>2002/95/EC - RoHS directive<br>98/37/EEC - machinery |
| Product certifications | TÜV<br>cULus<br>CE |
| Safety level | SIL 3 conforming to IEC 61508<br>Type 4 conforming to IEC 61496-1<br>SILCL 3 conforming to IEC 62061<br>Category 4 conforming to EN/ISO 13849-1<br>PL = e conforming to EN/ISO 13849-1 |
| Environmental characteristic | Resistance to light disturbance conforming to EN/IEC 61496-2 |
| Service life | 20 yr |
| Safety reliability data | PFHd = 1.27E-8 1/h conforming to IEC 61508 |
| Ambient air temperature for operation | 14...131 °F<br>-10...55 °C |
| Ambient air temperature for storage | -13...158 °F<br>-25...70 °C |
| Relative humidity | <= 95 % without condensation |
| IP degree of protection | IP65<br>IP67 |
| Shock resistance | 10 gn for 16 ms conforming to IEC 61496-1 |
| Vibration resistance | 0.35 +/- 0.05 mm (f = 10...55 Hz) conforming to IEC 61496-1 |

## Offer Sustainability

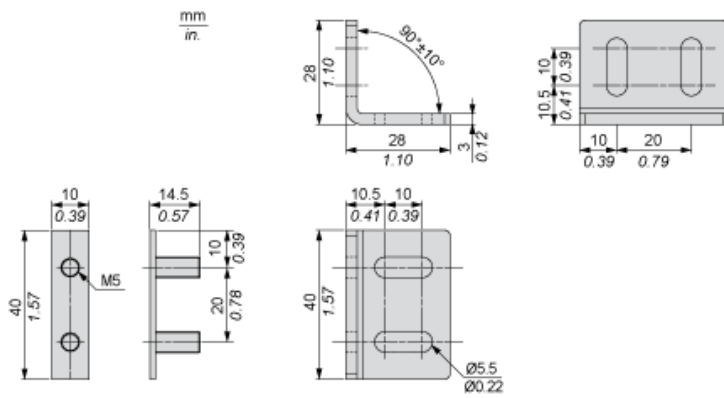| | |
|---|---|
| Sustainable offer status | Green Premium product |
| RoHS (date code: YYWW) | Compliant  - since  1425  -  Schneider Electric declaration of conformity<br>Schneider Electric declaration of conformity |
| REACh | Reference not containing SVHC above the threshold<br>Reference not containing SVHC above the threshold |
| Product environmental profile | Available<br>Product environmental |
| Product end of life instructions | Available<br>End of life manual |

Life Is On   Schneider Electric

## Contractual warranty

| Warranty period | 18 months |
| --- | --- |

# XUSL4E14F031N

## Dimensions

# XUSL4E14F031N

## Brackets Dimensions

## Mounting and Clearance
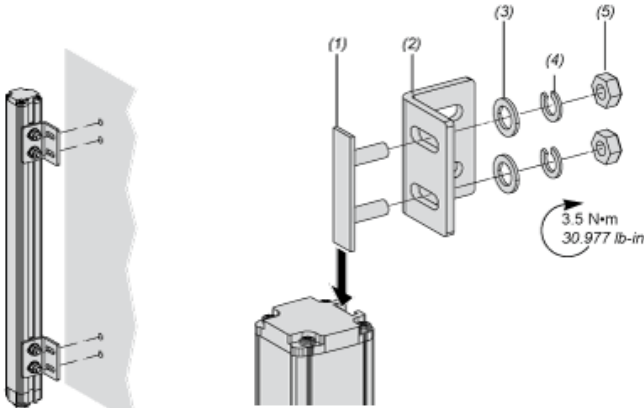


(1)  Insert
(2)  Bracket
(3)  Washer
(4)  Spring washer
(5)  Nut

# XUSL4E14F031N
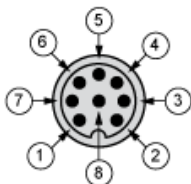
## Wiring Diagrams

### Transmitter Connections
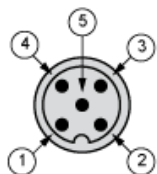
(1)   +24 Vdc
(2)   Configuration_0
(3)   0 Vdc
(4)   Configuration_1
(5)   FE

Transmitter configurations and operating modes

|  | High range option | Low range option | Transmitter in Test state | Forbidden wiring |
|---|---|---|---|---|
| Pin 4 : Configuration_1 | 24 V | 0 V | 0 V | 24 V |
| Pin 2 : Configuration_0 | 0 V | 24 V | 0 V | 24 V |

### Receiver Connections

(1)   OSSD1
(2)   + 24 V
(3)   OSSD2
(4)   Configuration_A
(5)   K1_K2 Feeback/Restart
(6)   Configuration_B
(7)   0 Vdc
(8)   FE

## Receiver Configurations and Operating Modes

### Automatic Start/Restart

Without External Device Monitoring (EDM) feedback loop
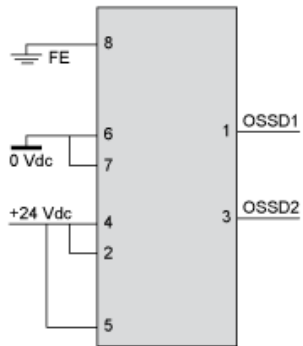


With External Device Monitoring (EDM) feedback loop
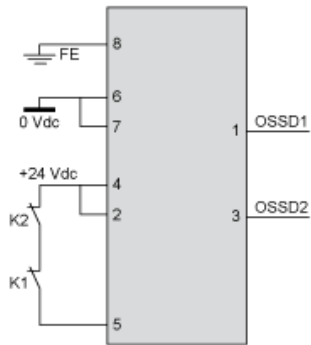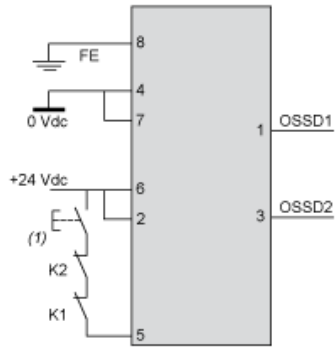


### Manual Start/Restart

Without External Device Monitoring (EDM) feedback loop
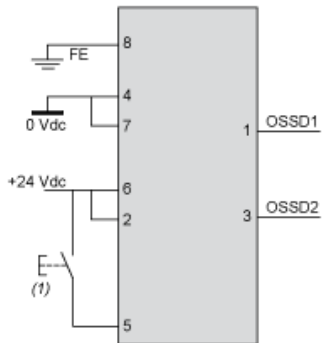


(1)    Restart

With External Device Monitoring (EDM) feedback loop



(1)    Restart

# XUSL4E14F031N

## Connecting to a Safety Interface



1 :   Click on Download &amp; Documents
2 :   Click on System user guide

To have all connection schematics concerning our safety module, select "download and document" and download the file "Safety light curtains association with safety interfaces"