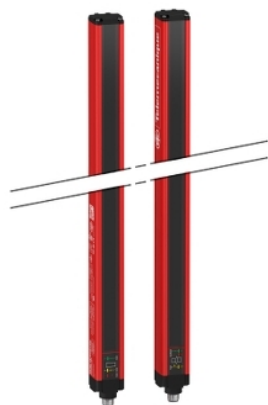


# XUSL4E30H181N

Safety light curtain type 4, Telemecanique  
Safety light curtains XUSL, XUSL For hand  
protection, Std sensing range, Hp = 1810 mm,  
R=30 mm



## Main

|                                  |                                                         |
|----------------------------------|---------------------------------------------------------|
| Range of product                 | Telemecanique Safety light curtains XUSL                |
| Product or component type        | Safety light curtain type 4                             |
| Device short name                | XUSL4E                                                  |
| Output type                      | 2 safety outputs OSSD solid-state PNP (arc suppression) |
| Product specific application     | For hand protection                                     |
| [R] Resolution                   | 30 mm                                                   |
| [Sn] nominal sensing distance    | 0...12 M by cabling<br>0...4 m by cabling               |
| [Hp] Height protected            | 1810 mm                                                 |
| Number of beams                  | 91                                                      |
| Type of start / restart          | Automatic<br>Manual                                     |
| External Device Monitoring (EDM) | Selected by wiring                                      |

## Complementary

|                                |                                                                                                                              |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| Detection system               | Transmitter-receiver system                                                                                                  |
| Response time                  | 22 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 950 nm                                                                                                                |
| [Us] rated supply voltage      | 24 V DC +/- 20 %                                                                                                             |
| Supply                         | Power supply conforming to IEC 61496-1<br>Power supply conforming to 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<br>900 mA with maximum load receiver                |
| Output current limits          | 0.4 A for safety outputs OSSD                                                                                                |
| Output voltage                 | 24 V                                                                                                                         |
| Output circuit type            | DC                                                                                                                           |
| Maximum 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             | Test<br>Muting through external safety module XPSLCMUT1160<br>LED display of operating modes and faults                      |
| Marking                        | CE                                                                                                                           |
| Material                       | Aluminium: casing<br>Polycarbonate: front panel<br>Polypropylene: end caps                                                   |

The information provided in this documentation contains general descriptions and/or technical characteristics of the products of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

|                |                    |
|----------------|--------------------|
| Housing colour | Red RAL 3000       |
| Fixing mode    | By fixing brackets |
| Net weight     | 3.3 kg             |
| Offer type     | Standard distance  |

## Environment

|                                       |                                                                                                                                                                                        |
|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Directives                            | 89/336/EEC - electromagnetic compatibility<br>89/655/EEC - work equipment<br>98/37/EEC - machinery                                                                                     |
| Product certifications                | TÜV<br>CE<br>CULus                                                                                                                                                                     |
| Safety level (correctly wired)        | Type 4 conforming to IEC 61496-1<br>SIL 3 conforming to IEC 61508<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 |
| Optical characteristic                | Resistance to light disturbance conforming to EN/IEC 61496-2                                                                                                                           |
| Mission time                          | 20 year(s)                                                                                                                                                                             |
| Safety reliability data               | PFHd = 2.02E-8 1/h conforming to IEC 61508                                                                                                                                             |
| Ambient air temperature for operation | -10...55 °C<br>-30...55 °C                                                                                                                                                             |
| Ambient air temperature for storage   | -25...70 °C<br>-35...70 °C                                                                                                                                                             |
| Relative humidity                     | 0...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                                                                                                                             |

## Packing Units

|                              |          |
|------------------------------|----------|
| Unit Type of Package 1       | PCE      |
| Number of Units in Package 1 | 1        |
| Package 1 Weight             | 6.249 kg |
| Package 1 Height             | 14 cm    |
| Package 1 width              | 19.5 cm  |
| Package 1 Length             | 194 cm   |

## Offer Sustainability

|                            |                                                                                                                                                                                      |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                                                                                |
| REACH Regulation           |  <a href="#">REACH Declaration</a>                                                                |
| REACH free of SVHC         | Yes                                                                                                                                                                                  |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope)  <a href="#">EU RoHS Declaration</a> |
| Toxic heavy metal free     | Yes                                                                                                                                                                                  |
| Mercury free               | Yes                                                                                                                                                                                  |
| RoHS exemption information |  <a href="#">Yes</a>                                                                              |
| Environmental Disclosure   |  <a href="#">Product Environmental Profile</a>                                                    |
| Circularity Profile        |  <a href="#">End Of Life Information</a>                                                          |

## Contractual warranty

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

Technical drawings of a mechanical part, showing dimensions in mm and inches.

**Front View (Left):** Shows a rectangular part with a total height of 40 mm (1.57 in.) and a width of 10 mm (0.39 in.). It features two circular holes, with the top one labeled M5.

**Top View (Bottom):** Shows the part's width of 40 mm (1.57 in.) and a central slot with a width of 10.5 mm (0.41 in.) and a depth of 10 mm (0.39 in.). The distance from the left edge to the start of the slot is 14.5 mm (0.57 in.). The distance from the end of the slot to the right edge is 10 mm (0.39 in.). The total width of the part is 20 mm (0.79 in.).

**Side View (Right):** Shows the part's height of 40 mm (1.57 in.) and a central slot with a width of 10.5 mm (0.41 in.) and a depth of 10 mm (0.39 in.). The distance from the left edge to the start of the slot is 14.5 mm (0.57 in.). The distance from the end of the slot to the right edge is 10 mm (0.39 in.). The total width of the part is 20 mm (0.79 in.).

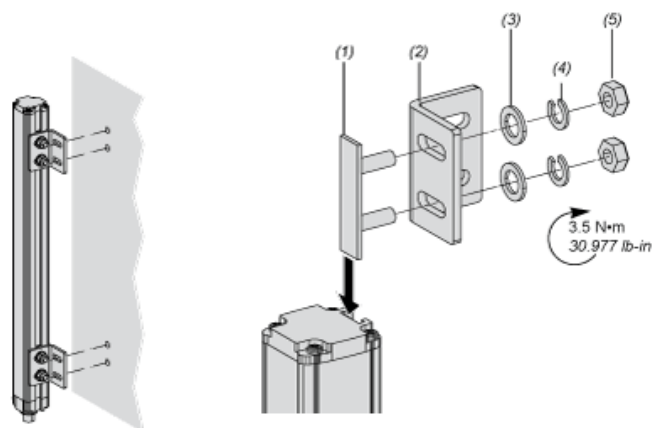
**Isometric View (Top Right):** Shows the part's overall dimensions: 40 mm (1.57 in.) height, 10 mm (0.39 in.) width, and 20 mm (0.79 in.) depth. It also shows the 10.5 mm (0.41 in.) slot width and 10 mm (0.39 in.) slot depth.

**Detail View (Bottom Right):** Shows a detail of the corner with a 90° ± 10° angle. The dimensions are 28 mm (1.10 in.) for the horizontal and vertical segments, and 3 mm (0.12 in.) for the thickness.

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Mounting and Clearance

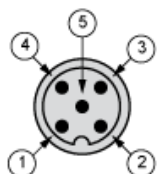
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- (1) Insert
- (2) Bracket
- (3) Washer
- (4) Spring washer
- (5) Nut

## Wiring Diagrams

### Transmitter Connections

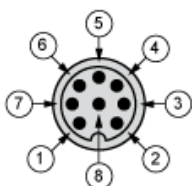


- (1) +24 Vdc
- (2) Configuration\_0
- (3) 0 Vdc
- (4) Configuration\_1
- (5) FE

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

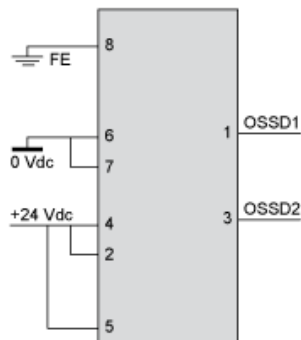


- (1) OSSD1
- (2) + 24 V
- (3) OSSD2
- (4) Configuration\_A
- (5) K1\_K2 Feedback/Restart
- (6) Configuration\_B
- (7) 0 Vdc
- (8) FE

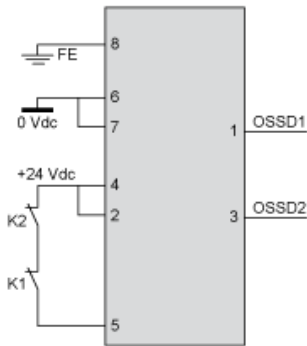
### Receiver Configurations and Operating Modes

#### Automatic Start/Restart

Without External Device Monitoring (EDM) feedback loop

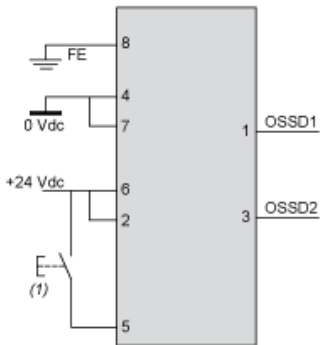


With External Device Monitoring (EDM) feedback loop



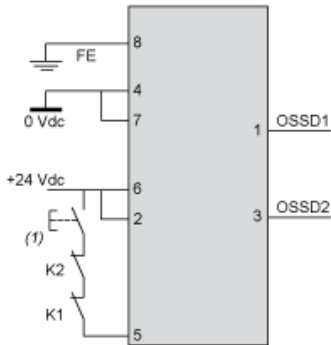
Manual Start/Restart

Without External Device Monitoring (EDM) feedback loop



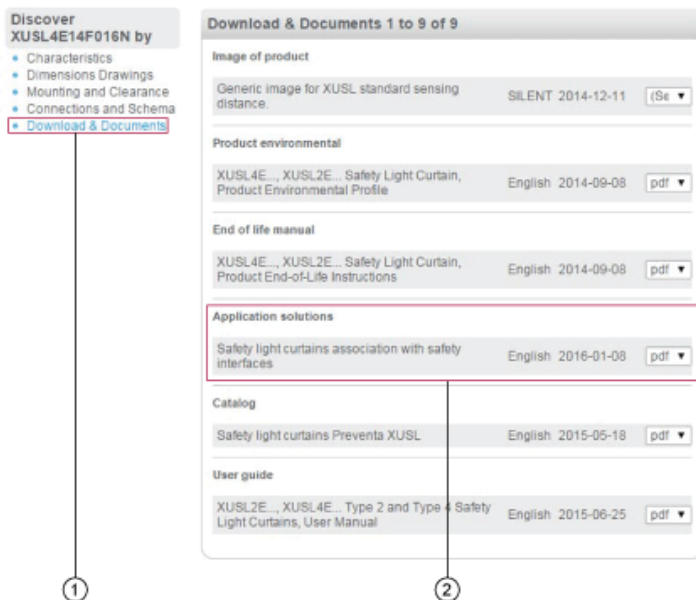
(1) Restart

With External Device Monitoring (EDM) feedback loop



(1) Restart

Connecting to a Safety Interface



- 1 : Click on Download & Documents
- 2 : Click on Application solutions

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