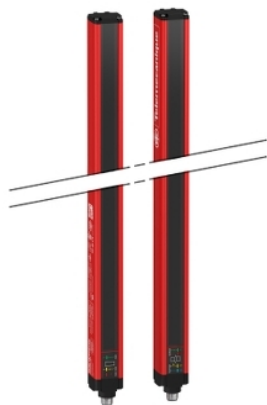


# XUSL4E2BB051L

Safety light curtain type 4, Telemecanique  
Safety light curtains XUSL, XUSL Body  
protection, Long sensing range 510 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) |
| [Sn] nominal sensing distance    | 3...20 M by cabling<br>0...10 m by cabling              |
| [Hp] Height protected            | 510 mm                                                  |
| Number of beams                  | 2                                                       |
| Space between beams              | 500 mm                                                  |
| Type of start / restart          | Automatic<br>Manual                                     |
| External Device Monitoring (EDM) | Selected by wiring                                      |

## Complementary

|                                |                                                                                                                              |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| Detection system               | Transmitter-receiver system                                                                                                  |
| Response time                  | 2.5 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 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                                                   |
| Housing colour                 | Red RAL 3000                                                                                                                 |
| Fixing mode                    | By fixing brackets                                                                                                           |
| Net weight                     | 1.1 kg                                                                                                                       |
| Offer type                     | Long distance                                                                                                                |

## Environment

|                                       |                                                                                                                                                                                  |
|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Directives                            | 89/336/EEC - electromagnetic compatibility<br>89/655/EEC - work equipment<br>98/37/EEC - machinery                                                                               |
| Product certifications                | CE[RETURN]cULus[RETURN]TÜV                                                                                                                                                       |
| 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 ISO 13849-1<br>PL = e conforming to ISO 13849-1 |
| Optical characteristic                | Resistance to light disturbance conforming to IEC 61496-2                                                                                                                        |
| Mission time                          | 20 year(s)                                                                                                                                                                       |
| Safety reliability data               | PFHd = 6.89E-9 1/h conforming to IEC 61508                                                                                                                                       |
| Ambient air temperature for operation | 14...131 °F<br>-20...55 °C                                                                                                                                                       |
| Ambient air temperature for storage   | -35...70 °C<br>-13...158 °F                                                                                                                                                      |
| 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 Height             | 14.0 cm  |
| Package 1 Width              | 19.5 cm  |
| Package 1 Length             | 68.5 cm  |
| Package 1 Weight             | 2.283 kg |
| Unit Type of Package 2       | P06      |
| Number of Units in Package 2 | 12       |
| Package 2 Height             | 75.0 cm  |
| Package 2 Width              | 80.0 cm  |
| Package 2 Length             | 60.0 cm  |
| Package 2 Weight             | 36.0 kg  |

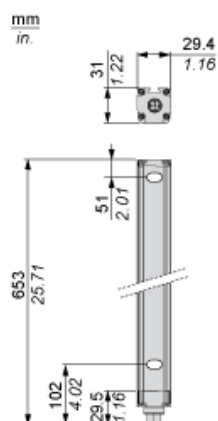
## Offer Sustainability

|                                            |                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status                   | Green Premium product                                                                                                                                                                                                                                                                                                                                                             |
| Toxic heavy metal free                     | Yes                                                                                                                                                                                                                                                                                                                                                                               |
| California proposition 65                  | WARNING: This product can expose you to chemicals including: Diisononyl phthalate (DINP), which is known to the State of California to cause cancer, and Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |
| For all Reach Rohs enquiries contact us at | <a href="mailto:sustainability@tesensors.com">sustainability@tesensors.com</a>                                                                                                                                                                                                                                                                                                    |

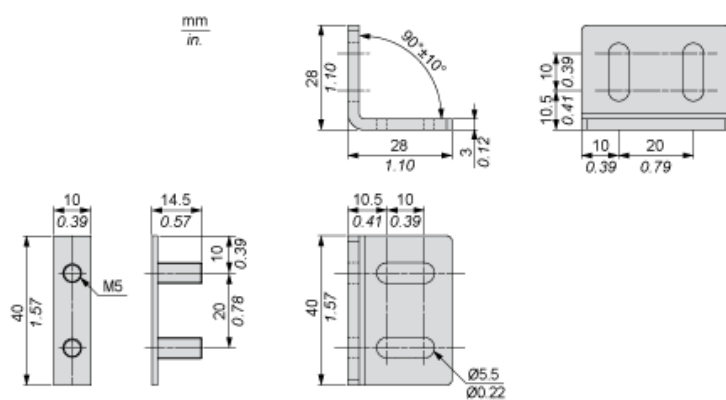
## Contractual warranty

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

## Dimensions



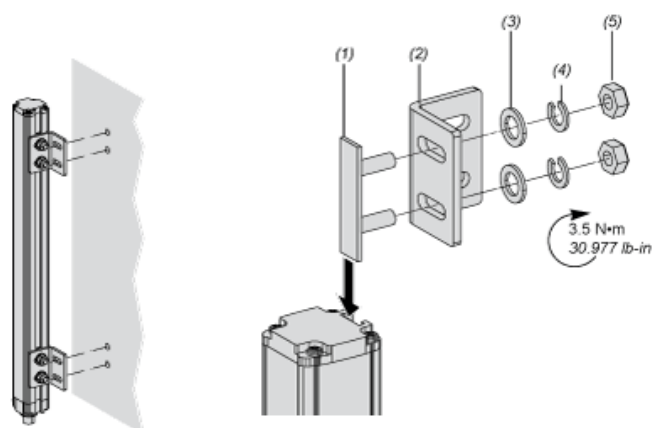
## Brackets Dimensions



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Mounting and Clearance

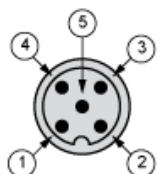
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- (1) Insert
- (2) Bracket
- (3) Washer
- (4) Spring washer
- (5) Nut

## Wiring Diagrams

### Transmitter Connections

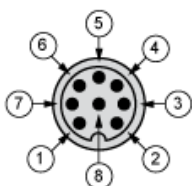


- (1) +24 Vdc
- (2) Configuration\_0
- (3) 0 Vdc
- (4) Configuration\_1
- (5) FE

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

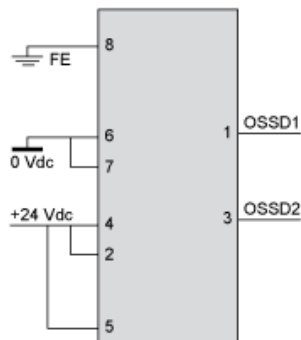


- (1) OSSD1
- (2) + 24 V
- (3) OSSD2
- (4) Configuration\_A
- (5) K1\_K2 Feedback/Restart
- (6) Configuration\_B
- (7) 0 Vdc
- (8) FE

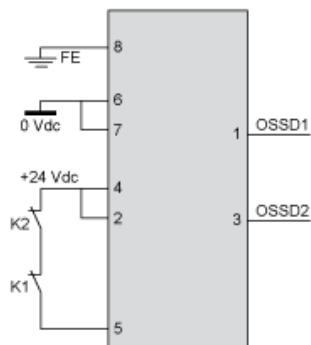
### Receiver Configurations and Operating Modes

#### Automatic Start/Restart

Without External Device Monitoring (EDM) feedback loop

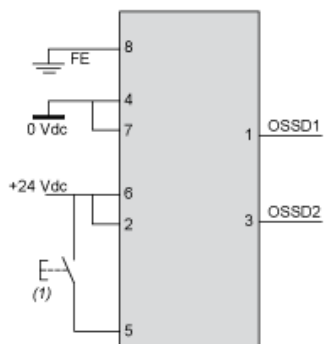


With External Device Monitoring (EDM) feedback loop



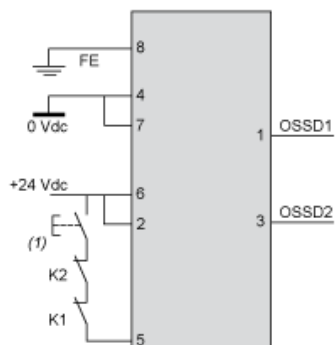
## Manual Start/Restart

Without External Device Monitoring (EDM) feedback loop



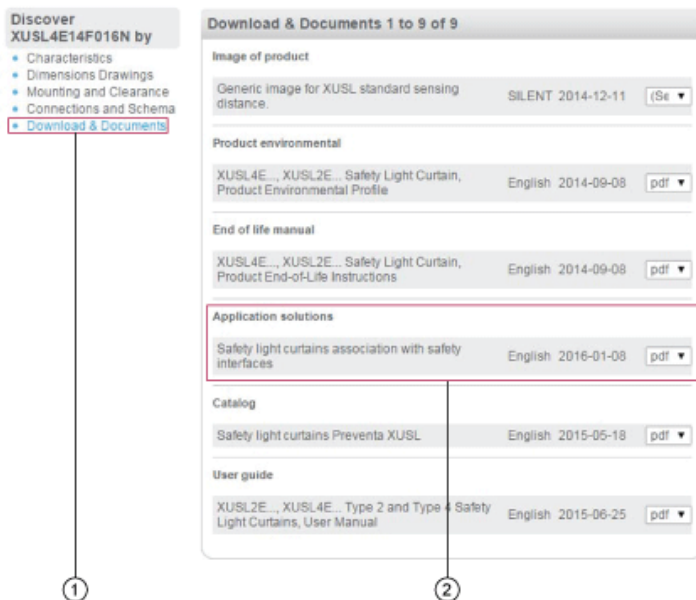
(1) Restart

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"