

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 (arc suppression)
Product specific application	For hand protection
[R] Resolution	30 mm
[Sn] nominal sensing distance	0...12 m by cabling 0...4 m by cabling
[Hp] Height protected	1060 mm
Number of beams	46
Type of start / restart	Automatic Manual
External Device Monitoring (EDM)	Selected by wiring

Complementary

Detection system	Transmitter-receiver system
Kit composition	adjustable mounting bracket(s) 1 receiver(s) 1 transmitter(s) 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 Power supply conforming to IEC 60204-1
[Ie] rated operational current	2 A
Current consumption	42 mA no-load transmitter 83 mA no-load receiver 42 mA transmitter 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 2 dual colour LEDs receiver
Electrical connection	1 male connector M12 5 pins transmitter 1 male connector M12 8 pins receiver
Function available	Test Muting through external safety module XPSLCMUT1160 LED display of operating modes and faults
Marking	CE
Material	Aluminium: casing Polycarbonate: front panel Polypropylene: end caps
Housing colour	Red RAL 3000
Fixing mode	By fixing brackets
Net weight	2.02 kg
Offer type	Standard distance
Topology	Daisy chain master

Environment

Directives	89/336/EEC - electromagnetic compatibility 89/655/EEC - work equipment 98/37/EEC - machinery 2002/96/EC - WEEE directive 2002/95/EC - RoHS directive
Product certifications	CE CULus TÜV
Safety level (correctly wired)	Type 4 conforming to IEC 61496-1 SIL 3 conforming to IEC 61508 SILCL 3 conforming to IEC 62061 Category 4 conforming to EN/ISO 13849-1 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 = 1.43E-8 1/h conforming to IEC 61508
Ambient air temperature for operation	-30...55 °C 14...131 °F
Ambient air temperature for storage	-35...70 °C -13...158 °F
Relative humidity	0...95 % without condensation
IP degree of protection	IP65 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

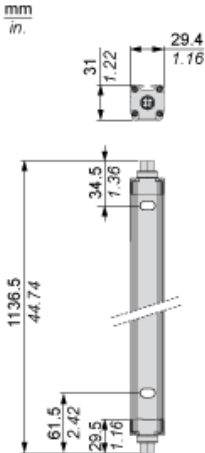
Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information

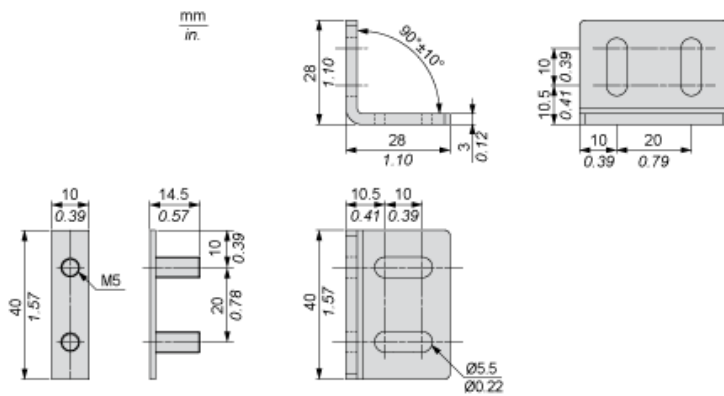
Contractual warranty

Warranty	18 months
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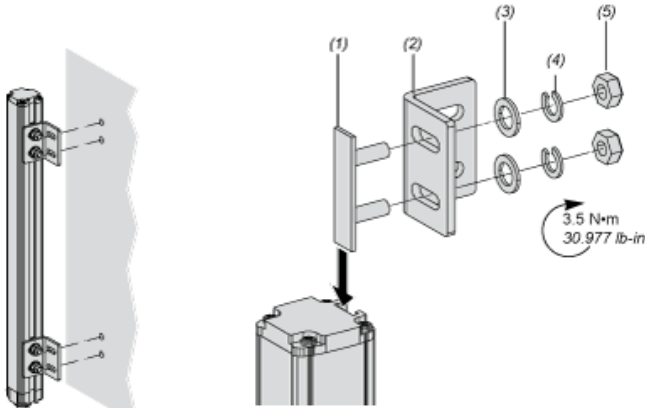
Dimensions



Brackets Dimensions



Mounting and Clearance

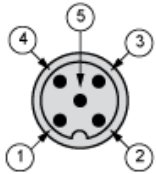


- (1) Insert
- (2) Bracket
- (3) Washer
- (4) Spring washer
- (5) Nut

Wiring Diagrams

Transmitter Connections

Master primary connector at the bottom

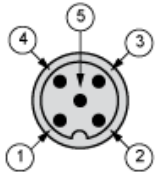


- (1) +24 Vdc
- (2) Configuration_0
- (3) 0 Vdc
- (4) Configuration_1
- (5) FE

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

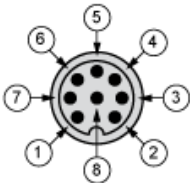
Master secondary connector at the top



- (1) +24 Vdc
- (2) Master/Slave_A
- (3) 0 Vdc
- (4) Master/Slave_B
- (5) FE

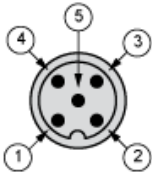
Receiver Connections

Master primary connector at the bottom



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

Master secondary connector at the top

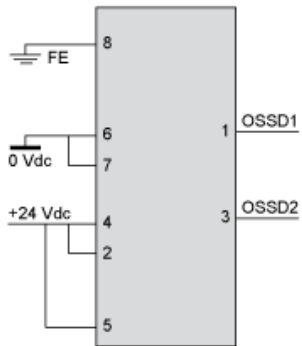


- (1) +24 Vdc
- (2) Master/Slave_A
- (3) 0 Vdc
- (4) Master/Slave_B
- (5) FE

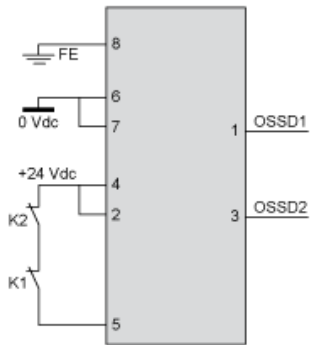
Receiver Configurations and Operating Modes

Automatic Start/Restart

Without External Device Monitoring (EDM) feedback loop

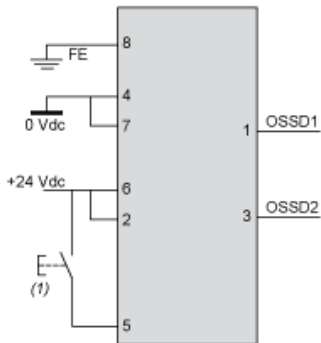


With External Device Monitoring (EDM) feedback loop



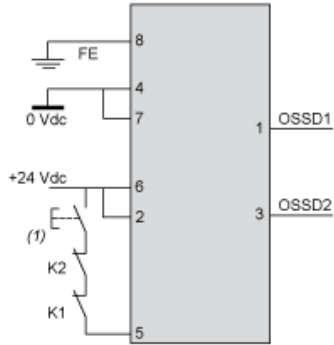
Manual Start/Restart

Without External Device Monitoring (EDM) feedback loop



(1) Restart

With External Device Monitoring (EDM) feedback loop



(1) Restart

Connecting to a Safety Interface

The screenshot shows a web interface for product documentation. On the left, a sidebar titled 'Discover XUSL4E14F016N by' contains a list of categories: Characteristics, Dimensions Drawings, Mounting and Clearance, Connections and Schema, and Download & Documents. The 'Download & Documents' link is highlighted with a red box and a circled '1' below it. A vertical line connects this link to the 'Download & Documents 1 to 9 of 9' section on the right. This section contains several document entries. The 'Application solutions' entry, titled 'Safety light curtains association with safety interfaces', is highlighted with a red box and a circled '2' below it. Other entries include 'Image of product', 'Product environmental', 'End of life manual', 'Catalog', and 'User guide'.

- 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"