

## 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	1.18 in (30 mm)
[Sn] nominal sensing distance	9.84...65.62 ft (3...20 m) by cabling 0.00...32.81 ft (0...10 m) by cabling
[Hp] Height protected	71.26 in (1810 mm)
Number of beams	91
Type of start / restart	Manual Automatic
External Device Monitoring (EDM)	Selected by wiring

## Complementary

Detection system	Transmitter-receiver system
Response time	13 ms
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

Disclaimer: 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

	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	7.28 lb(US) (3.3 kg)
Offer type	Long distance

## Environment

Directives	2002/95/EC - RoHS directive 89/655/EEC - work equipment 98/37/EEC - machinery 89/336/EEC - electromagnetic compatibility 2002/96/EC - WEEE directive
Product certifications	TÜV CE CULus
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 = 2.02E-8 1/h IEC 61508
Ambient air temperature for operation	14...131 °F (-10...55 °C) -4...131 °F (-20...55 °C)
Ambient air temperature for storage	-31...158 °F (-35...70 °C) -13...158 °F (-25...70 °C)
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

## Packing Units

Package 1 Weight	7.28 lb(US) (3.300 kg)
Package 1 Height	1.350 dm
Package 1 width	1.950 dm
Package 1 Length	19.400 dm

## Offer Sustainability

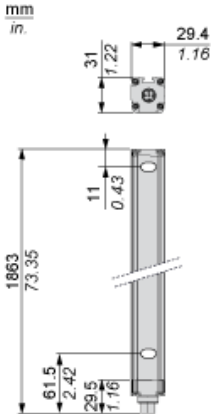
Sustainable offer status	Green Premium product
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REACH Regulation	<a href="#">REACH Declaration</a>
REACH free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Toxic heavy metal 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>

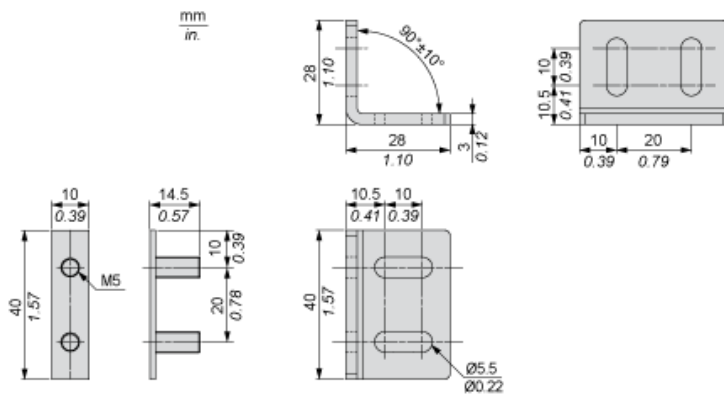
### Contractual warranty

Warranty	18 months
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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



- (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

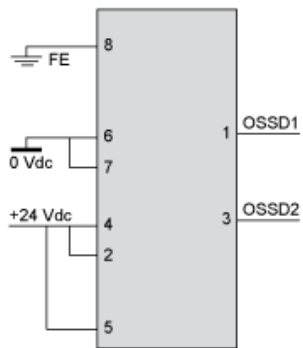
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Receiver Configurations and Operating Modes

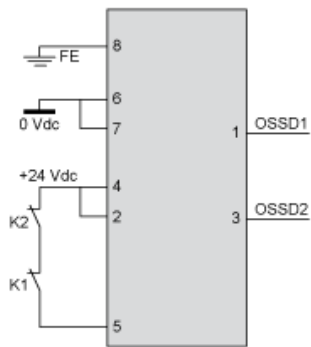
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Automatic Start/Restart

Without External Device Monitoring (EDM) feedback loop

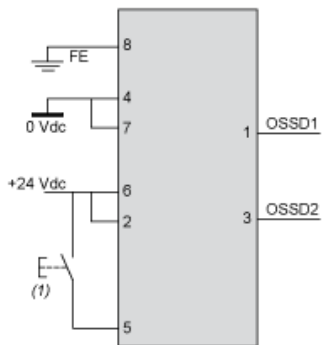


With External Device Monitoring (EDM) feedback loop



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 'Discover' sidebar lists categories: Characteristics, Dimensions Drawings, Mounting and Clearance, Connections and Schema, and Download & Documents. A red box highlights 'Download & Documents', with a line labeled '1' pointing to it. The main content area is titled 'Download & Documents 1 to 9 of 9' and contains several sections: 'Image of product', 'Product environmental', 'End of life manual', 'Application solutions', 'Catalog', and 'User guide'. The 'Application solutions' section is highlighted with a red box, and a line labeled '2' points to it. Below the screenshot, two numbered steps are provided: '1: Click on Download & Documents' and '2: Click on Application solutions'.

- 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"