

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 body protection
[Sn] nominal sensing distance	0.00...39.37 Ft (0...12 m) by cabling 0.00...13.12 ft (0...4 m) by cabling
[Hp] Height protected	35.83 in (910 mm)
Number of beams	4
Space between beams	11.81 in (300 mm)
Type of start / restart	Automatic Manual
External Device Monitoring (EDM)	Selected by wiring

Complementary

Detection system	Transmitter-receiver system
Response time	3 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 0.000037402 in (950 nm)
[Us] rated supply voltage	24 V DC +/- 20 %
Supply	Power supply IEC 61496-1 Power supply 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 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	3.75 lb(US) (1.7 kg)
Offer type	Standard distance

Environment

Directives	2002/95/EC - RoHS directive 89/336/EEC - electromagnetic compatibility 98/37/EEC - machinery 89/655/EEC - work equipment 2002/96/EC - WEEE directive
Product certifications	CULus TÜV CE
Safety level (correctly wired)	Type 4 IEC 61496-1 SIL 3 IEC 61508 SILCL 3 IEC 62061 Category 4 EN/ISO 13849-1 PL = e EN/ISO 13849-1
Optical characteristic	Resistance to light disturbance EN/IEC 61496-2
Mission time	20 year(s)
Safety reliability data	PFHd = 8.21E-9 1/h IEC 61508
Ambient air temperature for operation	-22...131 °F (-30...55 °C) 14...131 °F (-10...55 °C)
Ambient air temperature for storage	-13...158 °F (-25...70 °C) -31...158 °F (-35...70 °C)
Relative humidity	0...95 % without condensation
IP degree of protection	IP65 IP67
Shock resistance	10 gn 16 ms IEC 61496-1
Vibration resistance	0.35 +/- 0.05 mm 10...55 Hz)IEC 61496-1

Ordering and shipping details

Category	22455 - LIGHT CURTAINS - XUSL
Discount Schedule	DS2
GTIN	00785901151951
Nbr. of units in pkg.	1
Package weight(Lbs)	8.05 lb(US) (3.65 kg)
Returnability	No
Country of origin	IT

Packing Units

Unit Type of Package 1	PCE
Package 1 Height	43.90 in (111.5 cm)
Package 1 width	7.87 in (20 cm)
Package 1 Length	5.71 in (14.5 cm)
Unit Type of Package 2	P12
Number of Units in Package 2	20
Package 2 Weight	196.21 lb(US) (89 kg)
Package 2 Height	17.72 in (45 cm)
Package 2 width	31.50 in (80 cm)
Package 2 Length	47.24 in (120 cm)

Offer Sustainability

Sustainable offer status	Green Premium product
REACH free of SVHC	Yes
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

Technical drawing of the 1000 Series 1/2" (25.4 mm) diameter. The drawing shows a side view and a top view. The side view dimensions are: total length 1053 mm (41.46 in.), distance from the bottom to the first hole 102 mm (4.02 in.), distance between the two holes 29.5 mm (1.16 in.), distance from the second hole to the top 51 mm (2.01 in.), and a hole diameter of 2.01 mm. The top view shows a square base with a side length of 31 mm (1.22 in.) and a circular hole with a diameter of 29.4 mm (1.16 in.).

Technical drawings of a mechanical assembly showing a bracket, a plate, and a base plate with dimensions in mm and inches.

Bracket (Top Left):

- Overall height: 28 mm (1.10 in.)
- Overall width: 28 mm (1.10 in.)
- Inner corner radius: $90^{\circ} \pm 10^{\circ}$
- Flange thickness: 3 mm (0.12 in.)
- Flange width: 1.10 in.

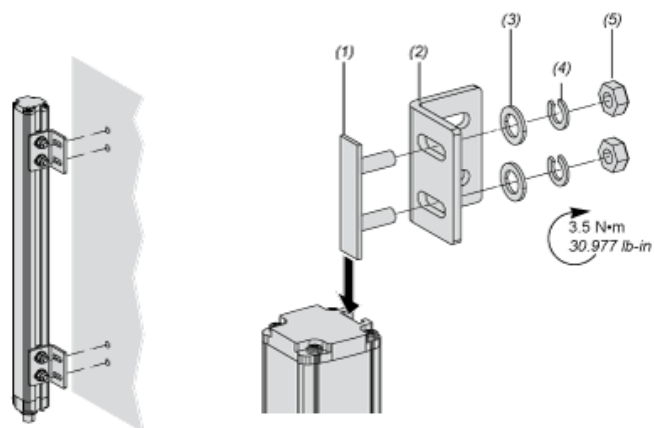
Plate (Bottom Left):

- Overall height: 40 mm (1.57 in.)
- Overall width: 10 mm (0.39 in.)
- Two circular holes, each with a diameter of $\varnothing 5$ mm.

Base Plate (Right):

- Overall height: 10.5 mm (0.41 in.)
- Overall width: 30 mm (1.18 in.)
- Two rectangular slots, each with a width of 10 mm (0.39 in.) and a depth of 20 mm (0.79 in.).

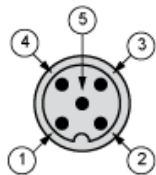
Mounting and Clearance



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

Wiring Diagrams

Transmitter Connections

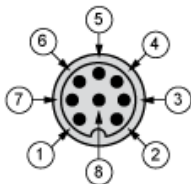


- (1) +24 Vdc
- (2) Configuration_0
- (3) 0 Vdc
- (4) Configuration_1
- (5) FE

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

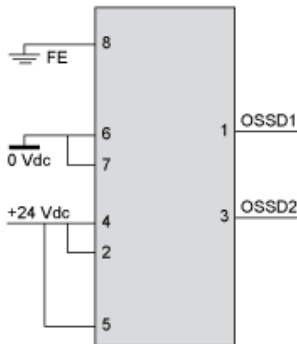


- (1) OSSD1
- (2) + 24 V
- (3) OSSD2
- (4) Configuration_A
- (5) K1_K2 Feeback/Restart
- (6) Configuration_B
- (7) 0 Vdc
- (8) FE

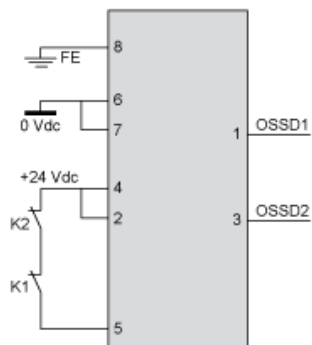
Receiver Configurations and Operating Modes

Automatic Start/Restart

Without External Device Monitoring (EDM) feedback loop

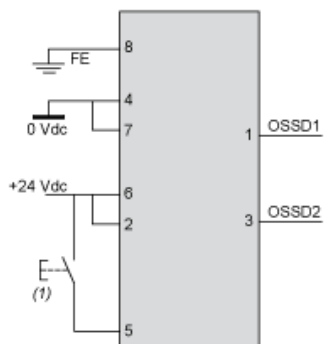


With External Device Monitoring (EDM) feedback loop



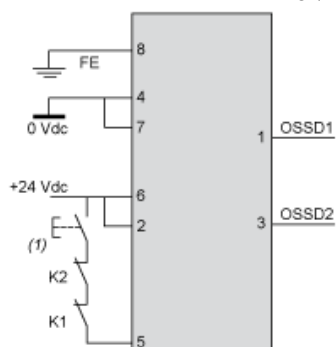
Manual Start/Restart

Without External Device Monitoring (EDM) feedback loop



(1) Restart

With External Device Monitoring (EDM) feedback loop



(1) Restart

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"