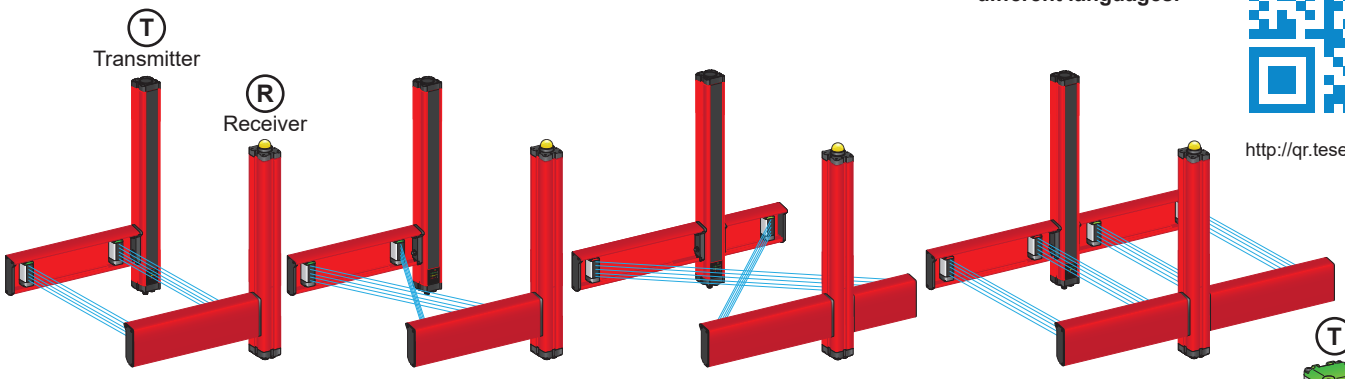
Muting arms with pre-built multibeam XUSZPM5AXPL09/XUSZPM5BXPL09 muting sensors

(Original Instruction Sheet)

Flash the Qr-code to access the complete User Manual and this Instruction Sheet in different languages.

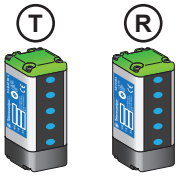
http://qr.tesensors.com/XU0006



XUSZAML2XP
XUSZAML2PTS *(1)(2)*

XUSZAMT2XT

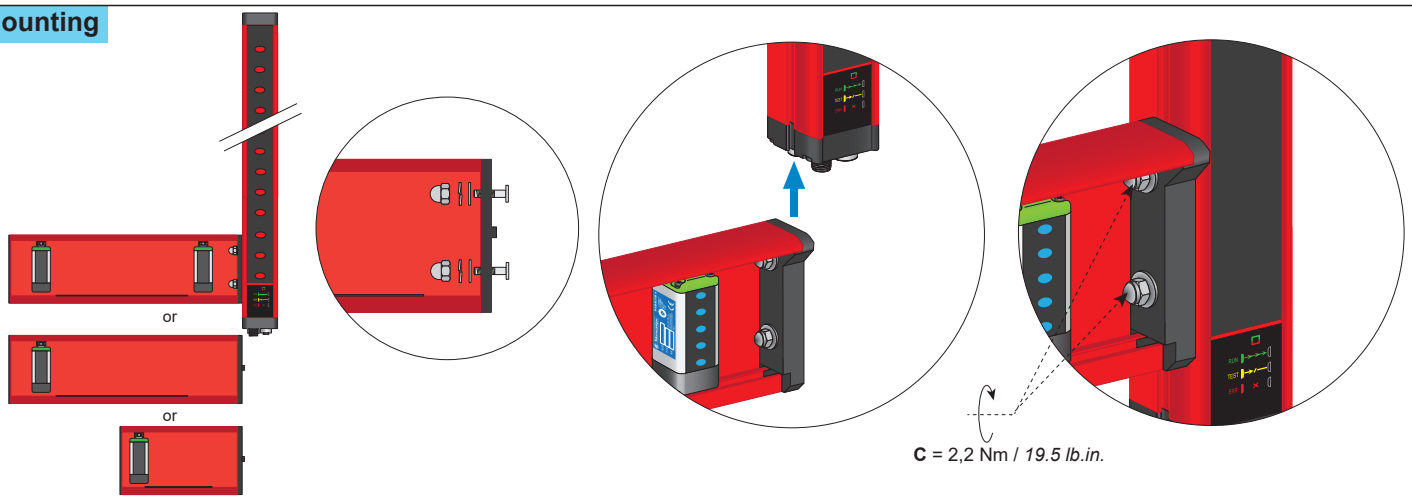
XUSZAMT4PT
XUSZAMT4PTS *(1)*



A coding: XUSZPM5AXPL09
B coding: XUSZPM5BXPL09

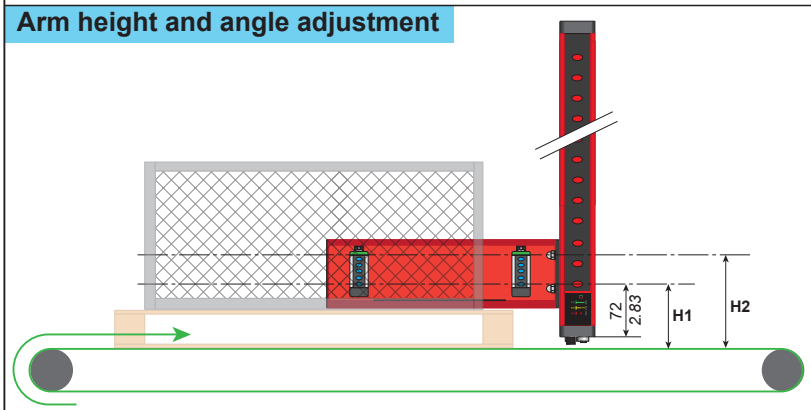
(1): Model for the detection of transparent material.
(2): Only in parallel beam muting type.

Mounting

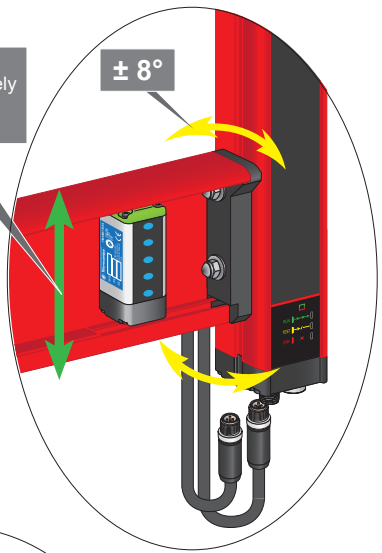


C = 2,2 Nm / *19.5 lb.in.*

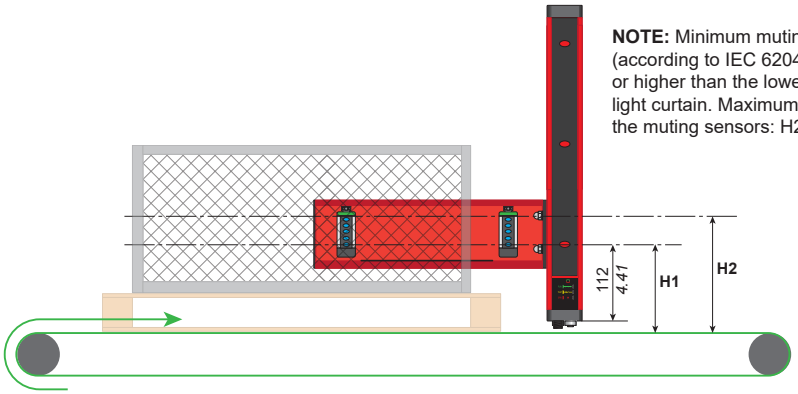
Arm height and angle adjustment

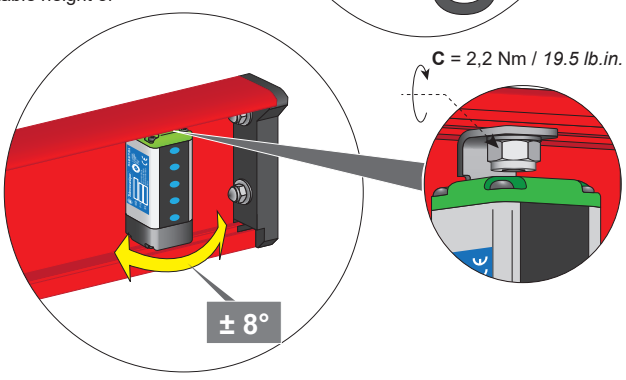


Vertical adjustment (amplitude approximately 70mm / *2.76 in*, limited by the cable length)



NOTE: Minimum muting sensors height "H1" (according to IEC 62046) = Same height as or higher than the lowest beam of the safety light curtain. Maximum adjustable height of the muting sensors: H2

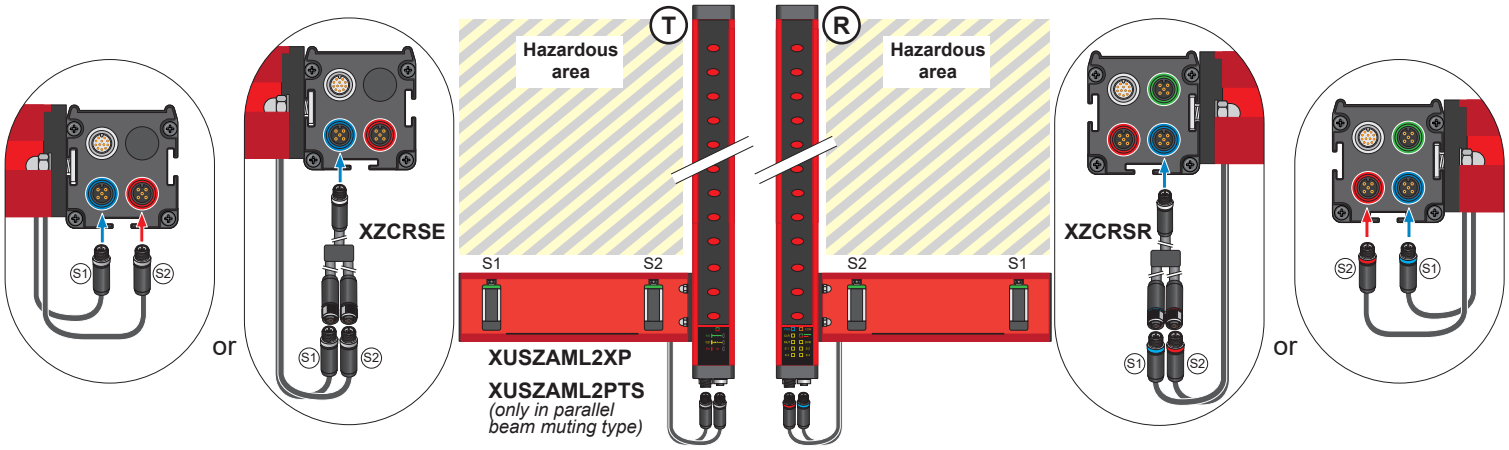




Printed in

Wiring Diagram

Refer to each arm label to identify transmitter and receiver (**S1/S3= XUSZPM5AXPL09 - S2/S4= XUSZPM5BXPL09**).

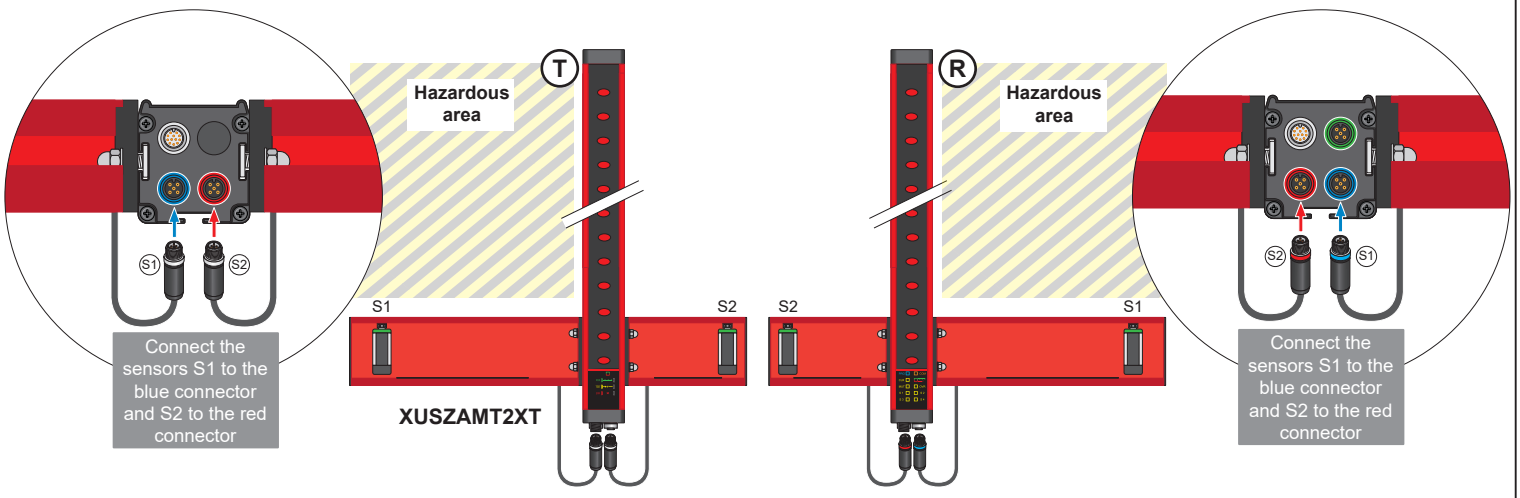


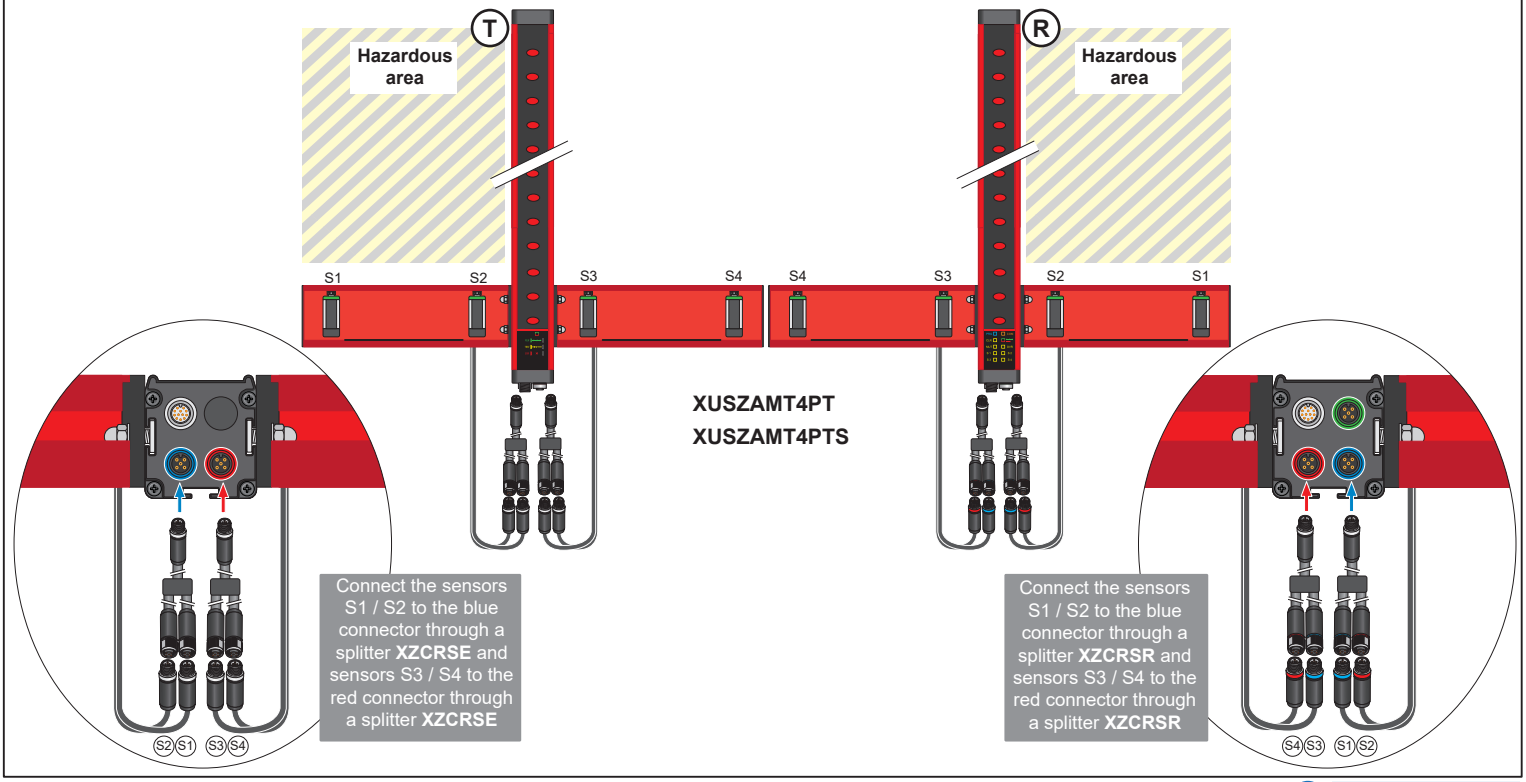
Note: Concerning 2 sensors muting types:

When using **XUSZAML2●** or **XUSZAMT2X●** integrated muting arms (with 2 separate connectors):
Sensor 1 connector has to be wired on Sensor 1 input (Blue connector) and Sensor 2 connector must be connected to the Red connector (Sensor 3 input).
Sensor 1 and Sensor 2 can also be both connected to the Blue connector through **XZCRSR** (for receiver) and **XZCRSE** (for transmitter) splitters.

Note: In hardware configuration, the **XUSL4M** detects automatically the position of the connectors at the first switch of sensor 2 after power-up.
In software configuration (**XUSL4MA●** only), the physical position of the connectors must be set in accordance with SoMute software:

Sensor 2 Position		Sensor 2 Position
Red Connector	or	Blue Connector
S1 Blue S2 Red		S1 - S2 Blue

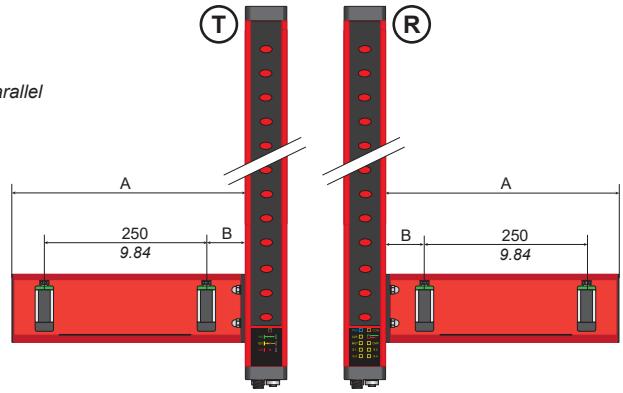




Dimensions

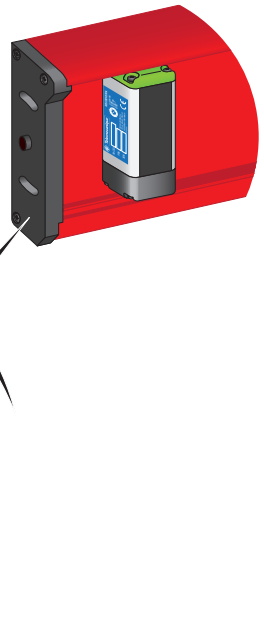
XUSZAML2XP

XUSZAML2PTS *(only in parallel beam muting type)*

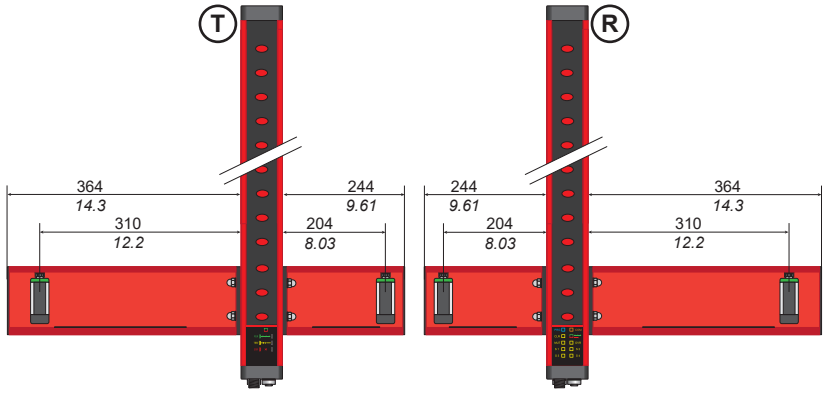


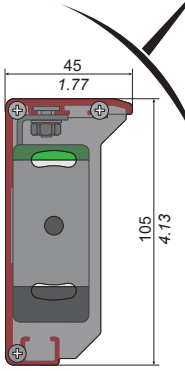
mm
in.

Reference	A	B
XUSZAML2XP	364/*14.3*	60/*2.36*
XUSZAML2PTS	424/*16.7*	120/*4.72*



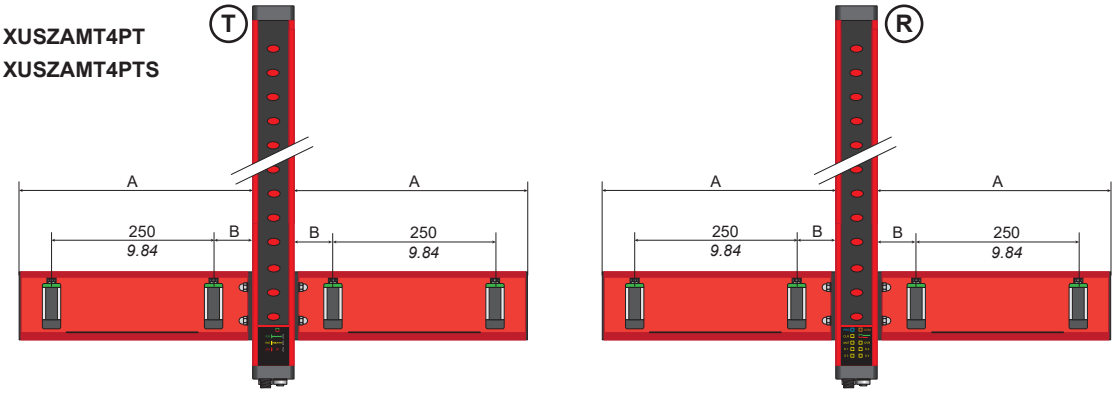
XUSZAMT2XT





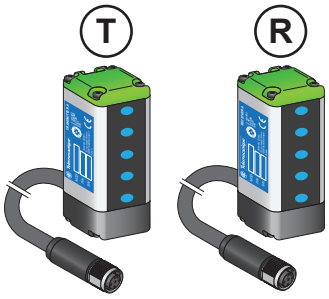
XUSZAMT4PT

XUSZAMT4PTS



Reference	A	B
XUSZAMT4PT	364/*14.3*	60/*2.36*
XUSZAMT4PTS	424/*16.7*	120/*4.72*

Multi-Beam Photoelectric cells

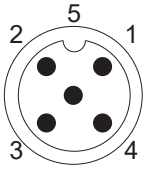


A coding: XUSZPM5AXPL09
B coding: XUSZPM5BXPL09

Note: The use of different coding is recommended for the installation of two multi-beam photoelectric cells, next to each other, in order to avoid interference.

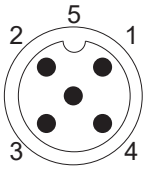
Connectors description and wiring

Transmitter



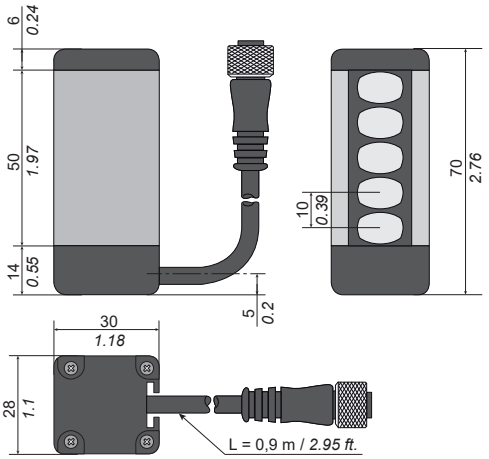
1: +24 Vdc
2: DISABLE
(0 Vdc → **ENABLE** / 24 Vdc → **DISABLE**)
3: 0 Vdc
4: Not Connected
5: FE(Functional Earth)

Receiver



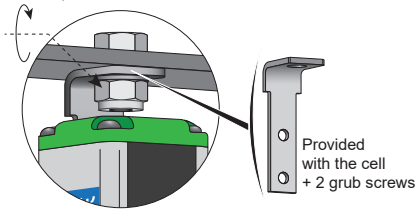
1: +24 Vdc
2: Not Connected
3: 0 Vdc
4: OUTPUT
(Status: 0 Vdc → **Protected area cleared**
24 Vdc → **Protected area obstructed**)
5: FE(Functional Earth)

Dimensions



Cells Mounting

C = 2,2 Nm / *19.5 lb.in.*

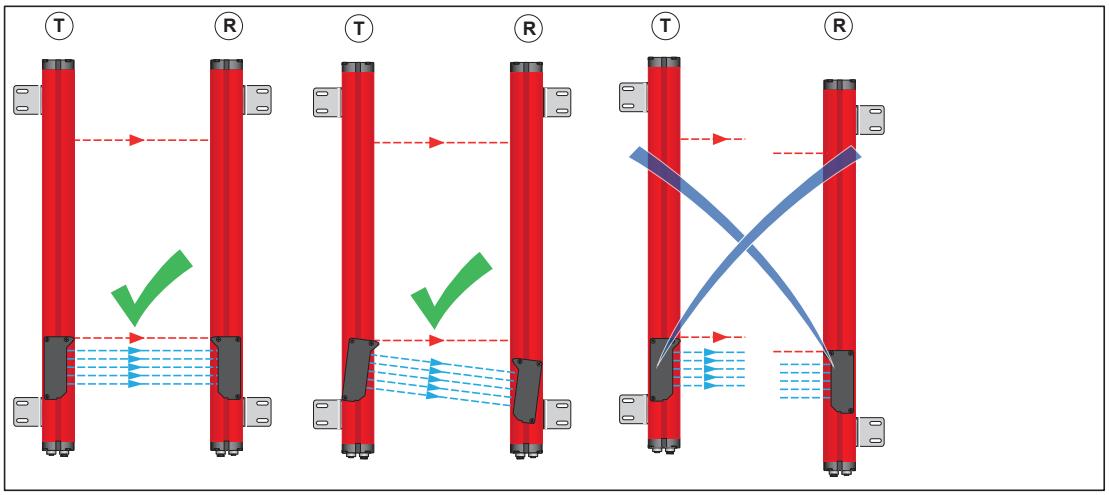


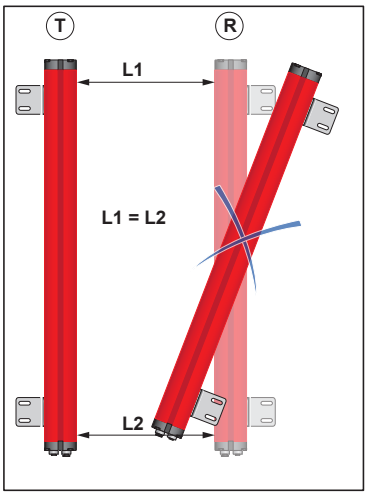
LEDs Status

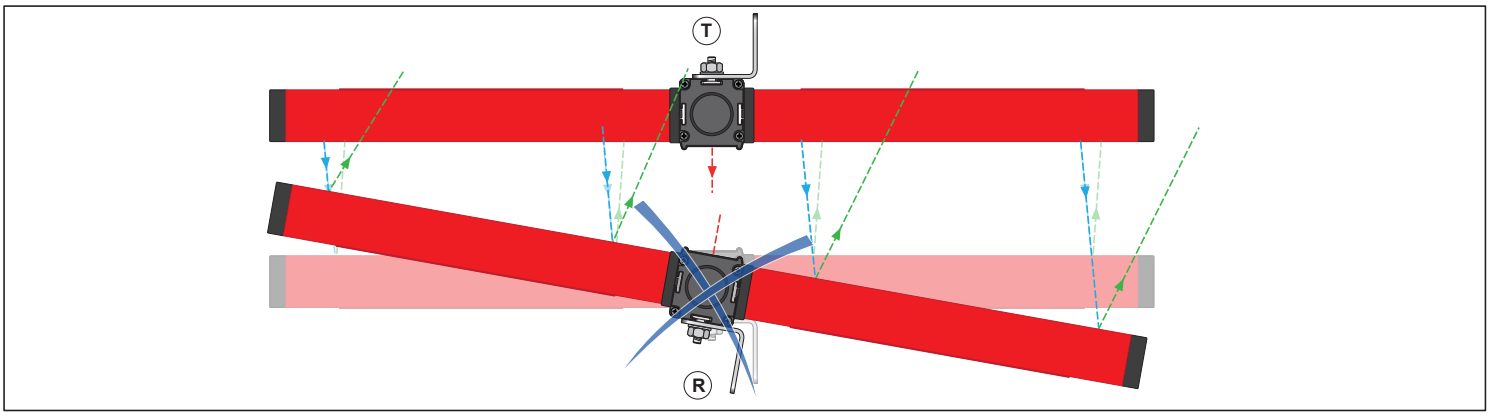
	LEDs	LEDs Meaning
Transmitter	**OFF**	No beam
	Yellow ON	Beam emitted
Receiver	**Green ON**	Controlled area is free
	Red ON	Break condition (controlled area is obstructed)

Alignment procedure

The transmitter, receiver and the arms must be installed with the optical surfaces face to face, connectors oriented in the same way. Perfect alignment of the transmitter and the receiver corresponding beams is mandatory for an optimum functioning, meaning that the transmitter and receiver must have the same height and be parallel. A good positioning will be facilitated by using the provided mounting accessories.
- For an easier alignment setting, configure the safety light curtain in Automatic mode. That will avoid to restart the system during the alignment adjustments.
- Place the optical axis of the first and last beams of the Emitter on the same axis as that of the corresponding beams on the Receiver.
- Move the Transmitter to find the area within which the green LED on the Receiver stays on, then place the first transmitter beam (the one near the signal LED) at the centre of this area.
- Using this beam as a pivot, with small lateral displacements of the opposite end, move to the free guarded area condition, which in this situation will be indicated by turning on the green LED on the receiver.
- Firmly tighten the Emitter and the Receiver.
- Do not forget to reconfigure the safety light curtain in Manual start mode if this operating mode is required.







Characteristics

Reference		XUSZAML2XP XUSZAML2PTS	XUSZAMT2XT	XUSZAMT4PT XUSZAMT4PTS
Working range (m / *ft.*)		0...3,5 / *0...11.5*	0...3,5 / *0...11.5*	0...3,5 / *0...11.5*
Ambient air temperature	Operation	- 30 °C...55 °C (- *22 °F...131 °F*)		
	Storage	- 30 °C…70 °C (- *22 °F...158 °F*)		
Response time (ms)		< 100		
Power consumption (w)		2		4
Opto-electronic integrated sensors		2 Multi-Beam Photoelectric cells crossed or parallel beams (**XUSZAML2XT**) and parallel beams (**XUSZAML2PTS**)	2 Multi-Beam Photoelectric cells crossed beams	4 Multi-Beam Photoelectric cells parallel beams
Degree of protection		Conforming **EN/IEC 60529**: IP65		

Reference		XUSZPM5AXPL09 / XUSZPM5BXPL09
Working range (m / *ft.*)		0...3,5 / *0...11.5*
Ambient air temperature	Operation	- 30 °C...55 °C (- *22 °F...131 °F*)
	Storage	- 30 °C…70 °C (- *22 °F...158 °F*)
Response time (ms)		< 100
Output (Receiver)		PNP - NO - 100mA
Power consumption (w)		1
Number of beams		5
Immunity to the ambient light (lx)		> 10000 (solar light)
Emission angle		± 5°
Emission wavelenght (nm)		940 modulated infrared
Degree of protection		Conforming **EN/IEC 60529**: IP65