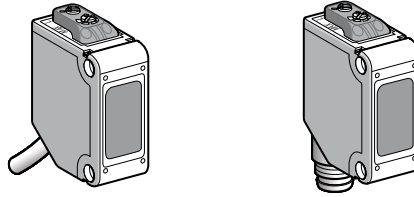


# Photo-electric sensors

OsiSense XU, Application, packaging series  
For detection of transparent materials  
DC supply. Solid-state output

## Compact design



<b>System</b>	<b>Reflex</b>
<b>Type of transmission</b>	Infra-red
<b>Nominal sensing distance (Sn)</b>	<b>0.1...1 m with reflector XUZC50CR (1)</b> <b>0.8...2 m with reflector XUZC50 (1)</b>
<b>Adjustment</b>	270° potentiometer

## References

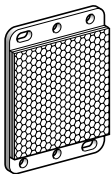
<b>3-wire</b>	NO or NC programmable function	PNP <b>XUMTAPCNL2</b>	NPN <b>XUMTANCNL2</b>	PNP <b>XUMTAPCNM8</b>	NPN <b>XUMTANCNM8</b>	PNP <b>XUMTAPCNL03M12</b>
<b>Weight (kg)</b>		0.155	0.155	0.055	0.055	0.055

## Characteristics

<b>Product certifications</b>	CE, cURus		
<b>Ambient air temperature</b>	For operation: - 25...+ 55°C. For storage: - 30...+ 70°C		
<b>Vibration resistance</b>	Conforming to IEC 60068-2-8	20 gn max., amplitude: 3 mm, frequency: 10...500 Hz	
<b>Shock resistance</b>	Conforming to IEC 60068-2-27	50 gn	
<b>Degree of protection</b>	Conforming to IEC 60529	IP 67	
<b>Material</b>	Case: PBT Lenses: polycarbonate		
<b>Indicator lights</b>	Output state Power on, help with setting	Orange LED Green LED	
<b>Connection</b>	2 m cable Conductor c.s.a.: 0.2 mm <sup>2</sup>	M8 4-pin connector	Remote M12 connector 0.3 m cable Conductor c.s.a.: 0.2 mm <sup>2</sup>
<b>Rated supply voltage</b>	<b>12...24 V</b> with protection against reverse polarity		
<b>Voltage limits</b>	10...30 V (including ripple)		
<b>Switching capacity</b>	≤ 100 mA with overload and short-circuit protection		
<b>Immunity to ambient light</b>	Natural light	3000 lux	
	Incandescent bulb	3000 lux	
<b>Voltage drop, closed state</b>	< 2 V		
<b>Current consumption</b>	≤ 10 mA		
<b>Response time</b>	≤ 1 ms		

Function table	Function	Diffuse system	
		No object present in the beam	Object present in the beam
State of output (PNP or NPN) and orange LED (illuminated when sensor output is ON)	NO (position D)		
	NC (position L)		

## Accessories



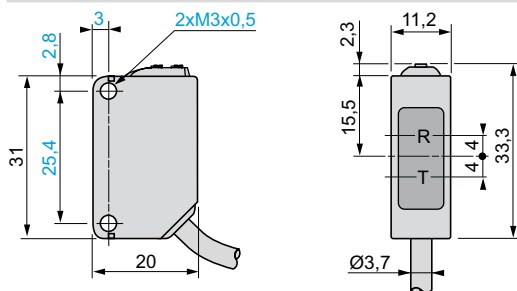
XUZC50  
XUZC50CR

Description	Dimensions	Reference	Weight kg
<b>Standard reflector</b> Reflector distance from the product: 0.8 to 2 m	50 x 50 mm	<b>XUZC50</b>	0.020
<b>Application reflector</b> Reflector distance from the product: 0.2 to 1 m	50 x 50 mm	<b>XUZC50CR</b>	0.020

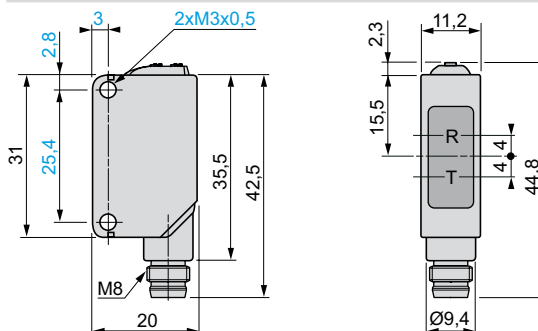
(1) Reflector to be ordered separately.

### Dimensions

**XUMTAPCNL2, XUMTANCNL2 and XUMTAPCNL03M12**

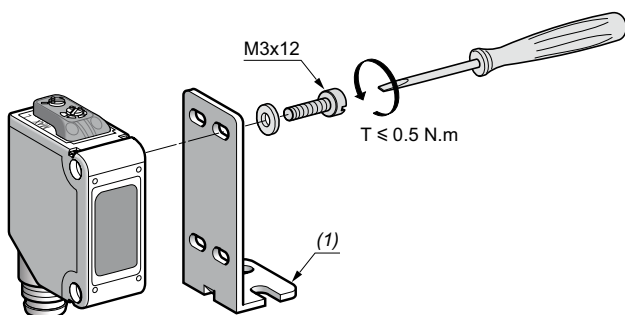


**XUMTAPCNM8 and XUMTANCNM8**



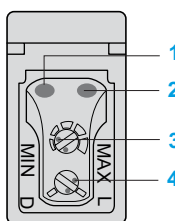
R: Reception, T: Transmission

### Mounting



(1) XUZA50, XUZAM02 or XUZAM03 metal bracket (see page 34).

### Functions



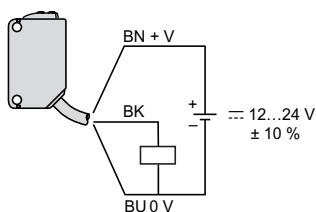
- 1 Stability indicator (green). LED on in stable detection conditions (NO or NC).
- 2 Change indicator (orange). LED lit when the detection output has been activated.
- 3 Sensitivity adjustment potentiometer.
- 4 NO/NC operating mode selector switch.

NO/NC selector switch	Function	Details
	NC (position L)	NC mode is obtained when the selector switch slot is fully turned to position L.
	NO (position D)	NO mode is obtained when the selector switch slot is fully turned to position D.

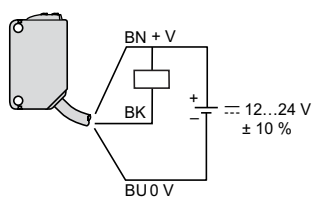
### Connections

Wiring schemes (3-wire ---)

PNP output



NPN output



Cable connections

XUMTA●CNL2

- (-) BU (Blue)
- (+) BN (Brown)
- (OUT) BK (Black)

Connector schemes

XUMTA●CNM8

- M8 connector
- 2 4 3 (-)
  - 1 (+)
  - 4 Output
  - 2 Not connected

XUMTAPCNL03M12

- M12 connector
- 4 3 3 (-)
  - 1 (+)
  - 4 Output
  - 1 2 2 Not connected

Please refer to our "Cabling accessories OsiSense XZ" catalogue.