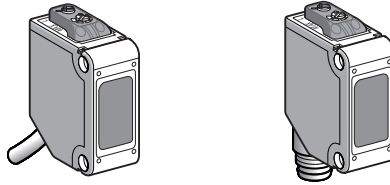


Photoelectric sensors

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

Compact design



System	Reflex
Type of transmission	Infrared
Nominal sensing distance (Sn)	0.1–1 m (0.3– 3.3 ft) with reflector XUZC50CR (1) 0.8–2 m (2.6– 6.6 ft) with reflector XUZC50 (1)
Adjustment	270° potentiometer

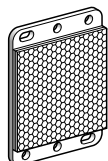
Catalog numbers		Precabled		M8		M12
3-wire, PNP or NPN programmable	NO or NC programmable function	PNP XUMTAPCNL2	NPN XUMTANCNL2	PNP XUMTAPCNM8	NPN XUMTANCNM8	PNP XUMTAPCNL03M12
Weight, kg (lb)		0.155 (0.342)	0.155 (0.342)	0.055 (0.121)	0.055 (0.121)	0.055 (0.121)

Specifications

Product certifications	CE, cURus
Ambient air temperature	Operation: –25 to +55 °C (–13 to 131 °F) Storage: –30 to +70 °C (–22 to 158 °F)
Vibration resistance	Conforming to IEC 60068-2-8 20 gn max., amplitude: 3 mm, frequency: 10–500 Hz
Shock resistance	Conforming to IEC 60068-2-27 50 gn
Degree of protection	Conforming to IEC 60529 IP67
Material	Case: PBT Lenses: polycarbonate
Indicator lights	Output state Power on, setup indication Orange LED Green LED
Connection	Cable: 2 m Conductor c.s.a.: 0.2 mm ² M8 4-pin connector M12 connector offset by 0.3 m Conductor c.s.a.: 0.2 mm ²
Rated supply voltage	12–24 V $\overline{\text{DC}}$ with protection against reverse polarity
Voltage limits	10–30 V $\overline{\text{DC}}$ (including ripple)
Switching capacity	≤ 100 mA with overload and short-circuit protection
Immunity to ambient light	Natural light 3000 lux Incandescent bulb 3000 lux
Voltage drop, closed state	< 2 V
Current consumption	≤ 10 mA
Response time	≤ 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	Catalog number	Weight kg (lb)
Standard reflector Reflector distance from the product: 0.8–2 m (2.6–6.6 ft)	50 x 50 mm	XUZC50	0.020 (0.044)
Application reflector Reflector distance from the product: 0.2–1 m (0.7–3.3 ft)	50 x 50 mm	XUZC50CR	0.020 (0.044)

(1) Reflector must be ordered separately.

Photoelectric sensors

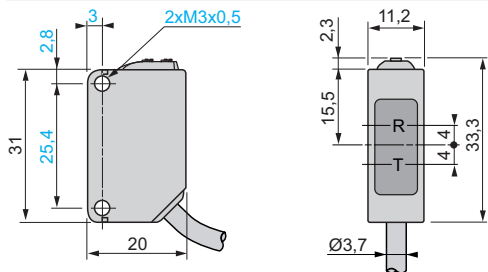
OsiSense XU, Application, packaging series

For detection of transparent materials

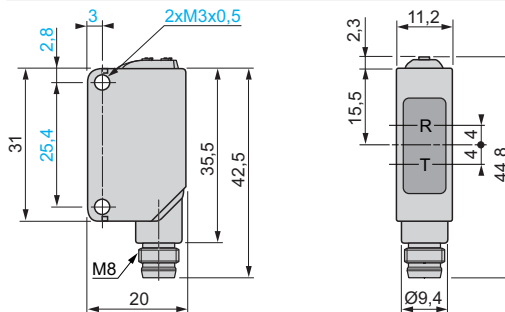
DC supply, solid-state output

Dimensions

XUMTAPCNL2, XUMTANCNL2, and XUMTAPCNL03M12

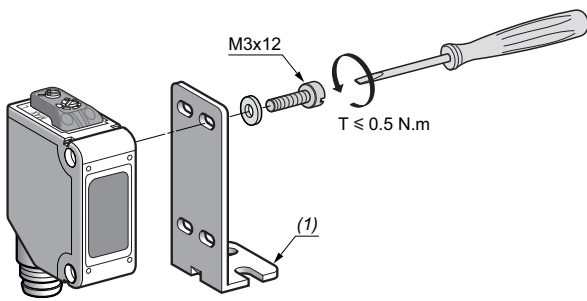


XUMTAPCNM8 and XUMTANCNM8



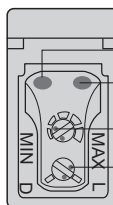
R: Reception, T: Transmission

Mounting



(1) XUZA50, XUZAM02, or XUZAM03 metal bracket (see pages 8 and 12).

Functions



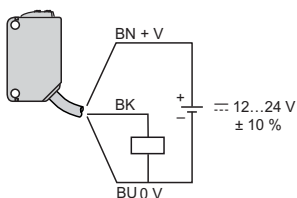
- 1 Stability indicator (green): LED lit in stable detection conditions (NO or NC)
- 2 Change indicator (orange): LED lit when the detection output has been activated
- 3 Sensitivity adjustment potentiometer
- 4 NO/NC operating mode selector switch

NO/NC selector switch	Function	Details
	NC (position L)	The NC output is activated when the selector switch is turned fully clockwise (position L).
	NO (position D)	The NO output is activated when the selector switch is turned fully counterclockwise (position D).

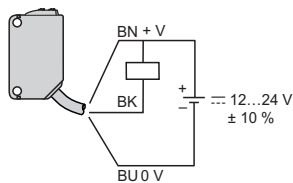
Connections

Wiring diagrams (3-wire $\overline{\text{---}}$)

PNP output



NPN output



Cable connections

XUMTA•CNL2

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

Connector diagrams

XUMTA•CNM8

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

XUMTAPCNL03M12

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

For pre-wired connectors (cables), see pages 22 and 23.