



## Main

Range of product	OsiSense XU
Series name	General purpose multimode
Electronic sensor type	Photo-electric sensor
Sensor name	XUK
Sensor design	Compact 50 x 50
Detection system	Multimode
Material	Plastic
Type of output signal	Discrete
Supply circuit type	AC/DC
Wiring technique	5-wire
Discrete output function	1 NO or 1 NC programmable
Electrical connection	Cable
Cable length	5 m
Product specific application	-
Emission	Infrared diffuse Infrared diffuse with background suppression Infrared thru beam Red polarised reflex
[Sn] nominal sensing distance	0.28 m diffuse with background suppression 0.8 m diffuse 4 m polarised reflex need reflector XUZC50 30 m thru beam need a transmitter XUK0ARCTL5T

## Complementary

Enclosure material	PBT
Lens material	PMMA
Maximum sensing distance	35 m thru beam 0.28 m diffuse with background suppression 1.2 m diffuse 5.7 m polarised reflex
Output type	Relay
Add on output	Without, <= 50 mA with overload and short-circuit protection
Wire insulation material	PvR
Status LED	1 LED (green) for supply

	1 LED (red) for instability 1 LED (yellow) for output state
[Us] rated supply voltage	24...240 V AC 24...240 V DC
Supply voltage limits	20...264 V AC 20...264 V DC
Switching capacity in mA	3 A (cos $\varphi$ = 1 for 0.5 million cycles at 1 operating cycle per second at 250 V)
Switching frequency	<= 20 Hz
Voltage drop	<= 1.5 V (closed state)
Power consumption in W	3 W AC/DC
Time delay range	0...10 s monostable, on-delay or off-delay (programmable) delay
Delay first up	< 300 ms
Delay response	< 25 ms
Delay recovery	< 25 ms
Setting-up	Self-teaching
Electrical durability	500000 cycles, cos f = 1, 60 cyc/mn at 250 V
Depth	50 mm
Height	50 mm
Width	18 mm
Product weight	0.175 kg

## Environment

Product certifications	CE CSA UL
Ambient air temperature for operation	-25...55 °C
Ambient air temperature for storage	-40...70 °C
Vibration resistance	7 gn, amplitude = +/- 1.5 mm (f = 10...55 Hz) conforming to IEC 60068-2-6
Shock resistance	30 gn (duration = 11 ms) conforming to IEC 60068-2-27
IP degree of protection	IP65 double insulation conforming to IEC 60529

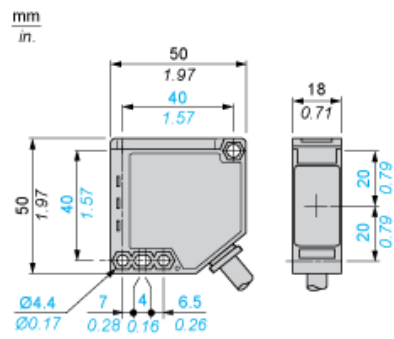
## Offer Sustainability

RoHS (date code: YYWW)	Compliant - since 0903 - Schneider Electric declaration of conformity <a href="#">Schneider Electric declaration of conformity</a>
Product environmental profile	Available <a href="#">Product Environmental Profile</a>
Product end of life instructions	Available <a href="#">End of Life Information</a>

## Contractual warranty

Warranty period	18 months
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Dimensions

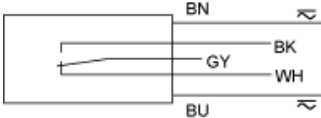


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Wiring Schemes

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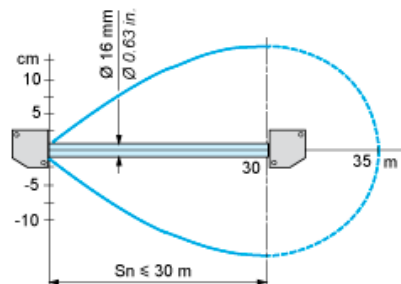
Relay Output



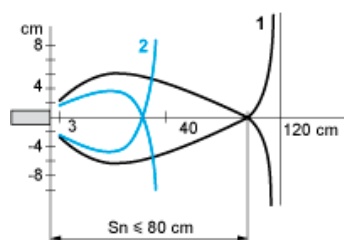
- BN : Brown
- BU : Blue
- BK : Black (NO)
- GY : Grey (Relay common)
- WH : White (NC)

Detection Curves

With Thru-beam Accessory (Thru-beam)

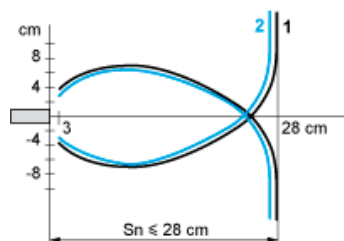


Without Accessory (Diffuse)



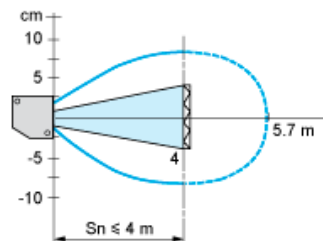
- 1 : White 90%
  - 2 : Grey 18%
- Object 10 x 10 cm

Without Accessory (Diffuse with background suppression)



- 1 : White 90%
  - 2 : Grey 18%
- Object 10 x 10 cm

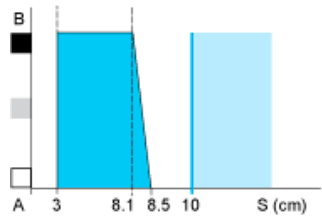
With reflector (Polarised reflex)



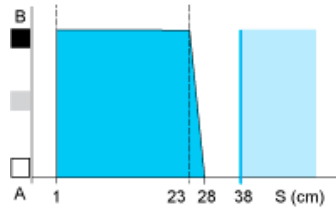
With reflector XUZC50

## Variation of Usable Sensing Distance $S_u$ (Without accessory, with adjustable background suppression)

Teach Mode at Minimum



Teach Mode at Maximum



- (1) Black
- (2) Grey
- (3) White
- (4) Sensing range
- (5) Non sensing zone (matt surfaces)

A-B : Object reflection coefficient

- (1) Black 6%
- (2) Grey 18%
- (3) White 90%
- (4) Sensing range
- (5) Non sensing zone (matt surfaces)