

# Product data sheet

Specifications



## Photoelectric sensors XU, XUK, BGS, Sn 0.7 m, 24...240VAC/DC, cable 2 m

XUK8ARCTL2

### Main

Range of product	Telemecanique Photoelectric sensors XU
Series name	General purpose single mode
Electronic sensor type	Photo-electric sensor
Sensor name	XUK
Sensor design	Compact 50 x 50
Detection system	Diffuse with background suppression
Material	Plastic
Type of output signal	Discrete
Supply circuit type	AC/DC
Wiring technique	5-wire
Discrete output function	1 C/O
Electrical connection	Cable
Cable length	2 m
Product specific application	-
Emission	Infrared diffuse with background suppression
[Sn] nominal sensing distance	0.75 m diffuse with background suppression

### Complementary

Enclosure material	PBT
Lens material	PMMA
Maximum sensing distance	0.75 m diffuse with background suppression
Output type	Relay
Cable composition	5 x 0.34 mm <sup>2</sup>
Wire insulation material	PVC
Cable outer diameter	6 mm
Status LED	1 LED (green) for supply on 1 LED (yellow) for output state
[Us] rated supply voltage	24...240 V AC/DC
Supply voltage limits	20...264 V AC 20...264 V DC

Switching capacity in mA	3 A (cos φ = 1 for 0.5 million cycles at 1 operating cycle per second at 250 V)
Switching frequency	<= 20 Hz
Maximum voltage drop	<1.5 V (closed state)
Current consumption	<= 35 mA no-load
Maximum power consumption in W	2 W AC
Maximum delay first up	60 ms
Maximum delay response	25 ms
Maximum delay recovery	25 ms
Setting-up	Self teaching
Electrical durability	500000 cycles, cos f = 1, operating rate <60 cyc/mn at 250 V
Depth	50 mm
Height	50 mm
Width	18 mm
Product weight	0.15 kg

## Environment

Product certifications	CE Ecolab
Ambient air temperature for operation	-20...60 °C
Ambient air temperature for storage	-30...70 °C
Vibration resistance	7 gn (f = 10...55 Hz) conforming to IEC 60068-2-6
Shock resistance	30 gn (duration = 11 ms) conforming to IEC 60947-5-2
IP degree of protection	IP65 double insulation conforming to IEC 60529

## Packing Units

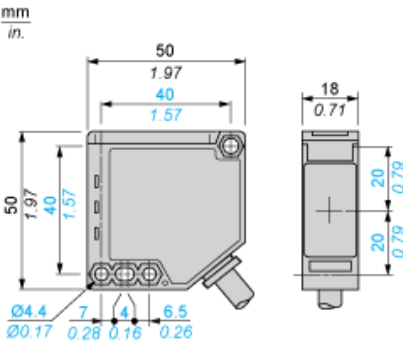
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.0 cm
Package 1 Width	9.5 cm
Package 1 Length	13.2 cm
Package 1 Weight	181.0 g
Unit Type of Package 2	S02
Number of Units in Package 2	22
Package 2 Height	15.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	4.46 kg

## Offer Sustainability

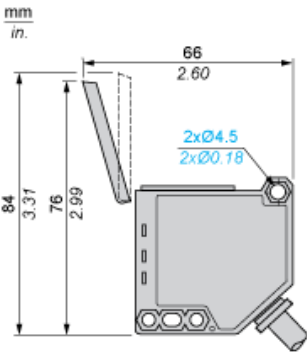
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Mercury free	Yes

RoHS exemption information	Yes
California proposition 65	WARNING: This product can expose you to chemicals including: Diisononyl phthalate (DINP), which is known to the State of California to cause cancer, and Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
Contractual warranty	
Warranty	18 months

Dimensions

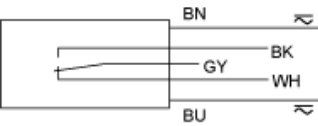


With cover open



Connections and Schemes

Cable Connection, Relay Output

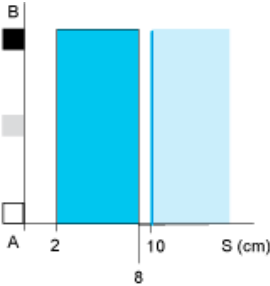


- AC/DC : BN (Blue)
- AC/DC : BN (Brown)
- Relay common (Grey)
- NO : BK (Black), detection of object
- NC : WH (White), detection of object absence

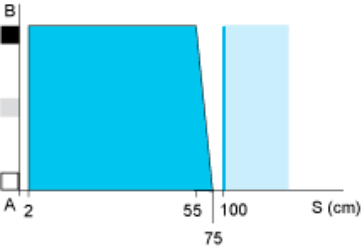
Detection Curves

Variation of Usable Sensing Distance Su

Adjustment at 10 cm



Adjustment at 1 m



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

A-B : Object reflection coefficient

(1) Black 6%

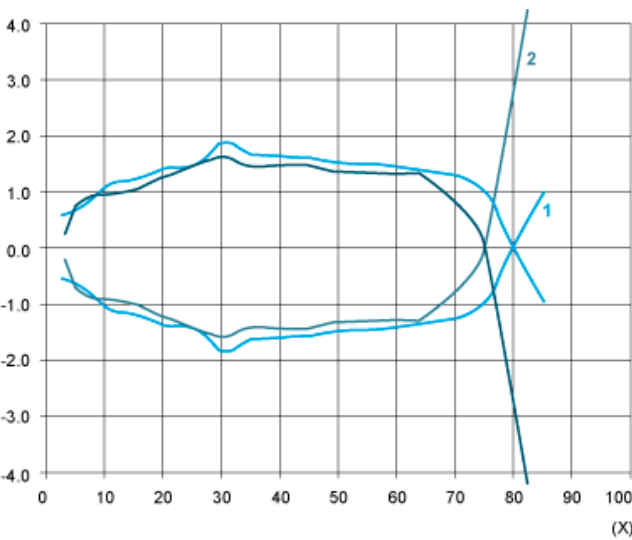
(2) Grey 18%

(3) White 90%

(4) Sensing range

(5) Non sensing zone (matt surfaces)

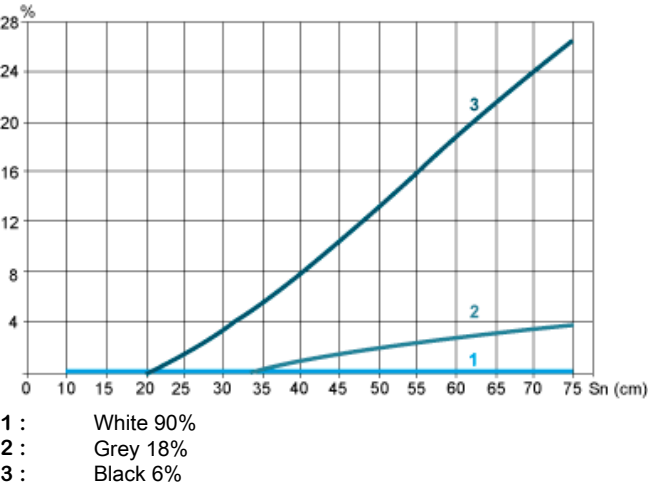
Detection Curves



- 1 : White 90%
- 2 : Grey 18%

Screen: 20 x 20 cm

Relative Difference in Sensing Distances According to Object Colour



Recommended replacement(s)