

# XUK8ARCTL2

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



## 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	6.56 ft (2 m)
Product Specific Application	-
Emission	Infrared diffuse with background suppression
[Sn] nominal sensing distance	2.46 ft (0.75 m) diffuse with background suppression

## Complementary

Enclosure Material	PBT
Lens material	PMMA
Maximum sensing distance	2.46 ft (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	0.24 in (6 mm)
Status LED	1 LED green)supply on 1 LED yellow)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 $\varphi$ = 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 1 60 cyc/mn 250 V
Depth	1.97 in (50 mm)
Height	1.97 in (50 mm)
Width	0.71 in (18 mm)
Net Weight	0.33 lb(US) (0.15 kg)

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

## Environment

Product Certifications	CE Ecolab
Ambient air temperature for operation	-4...140 °F (-20...60 °C)
Ambient Air Temperature for Storage	-22...158 °F (-30...70 °C)
Vibration resistance	7 gn 10...55 Hz IEC 60068-2-6
Shock resistance	30 gn 11 ms) IEC 60947-5-2
IP degree of protection	IP65 double insulation IEC 60529

## Ordering and shipping details

Category	22481 - SENSORS, PHOTOELECTRIC
Discount Schedule	DS2
GTIN	3389119053990
Nbr. of units in pkg.	1
Package weight(Lbs)	6.38 oz (181 g)
Returnability	Yes
Country of origin	ID

## Packing Units

Unit Type of Package 1	PCE
Package 1 Height	1.57 in (4 cm)
Package 1 width	3.74 in (9.5 cm)
Package 1 Length	5.20 in (13.2 cm)
Unit Type of Package 2	S02
Number of Units in Package 2	22
Package 2 Weight	9.83 lb(US) (4.46 kg)
Package 2 Height	5.91 in (15 cm)
Package 2 width	11.81 in (30 cm)
Package 2 Length	15.75 in (40 cm)

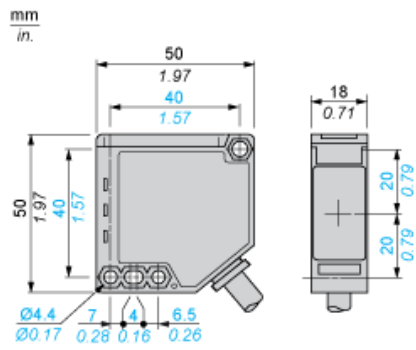
## Offer Sustainability

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>
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	<a href="#">Yes</a>

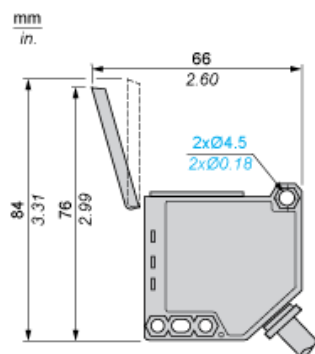
## Contractual warranty

Warranty	18 months
----------	-----------

## Dimensions



With cover open

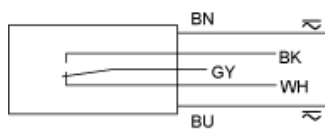


---

## Connections and Schemes

---

### Cable Connection, Relay Output



AC/ BN (Blue)

DC :

AC/ BN (Brown)

DC :

RelayGY (Grey)

common :

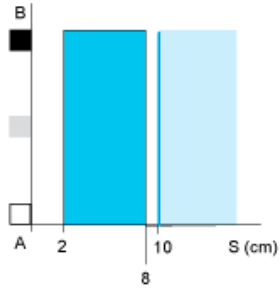
NO : BK (Black), detection of object

NC : WH (White), detection of object absence

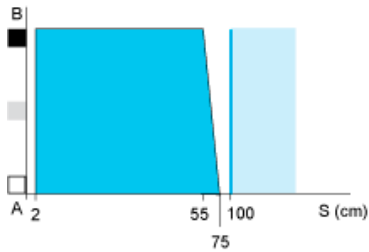
Detection Curves

Variation of Usable Sensing Distance  $S_u$

Adjustment at 10 cm



Adjustment at 1 m

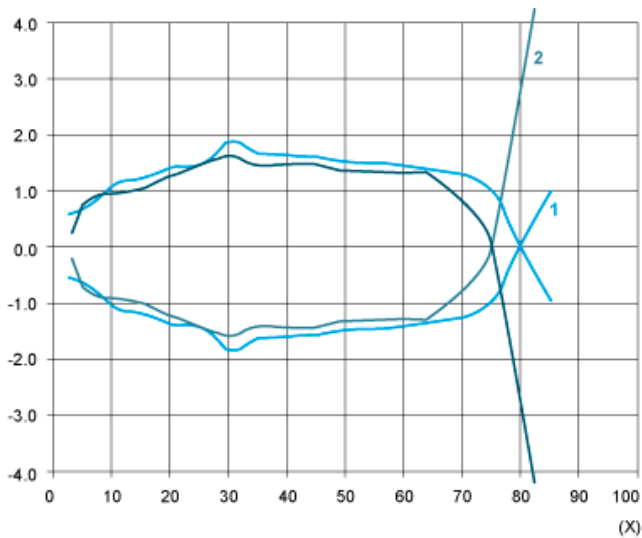


- (1) Black 6%
- (2) Grey 18%
- (3) White 90%
- (4) Sensing range
- (5) Non sensing zone (matt surfaces)

A-B : Object reflection coefficient

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

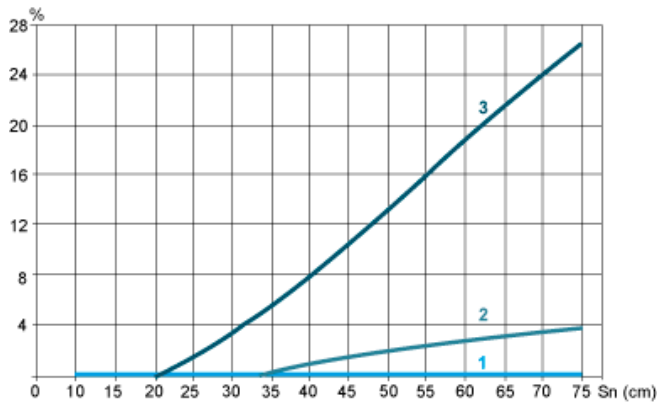
Detection Curves



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

Screen: 20 x 20 cm

## Relative Difference in Sensing Distances According to Object Colour



- 1 : White 90%
- 2 : Grey 18%
- 3 : Black 6%