

# XUK0ARCTL2

Photoelectric sensors XU, XUK, multi, Sn 0...30 m, 24...240VAC/DC, cable 2 m



## Main

Range of product	Telemecanique Photoelectric sensors 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	2 m
Product specific application	-
Emission	Infrared diffuse Infrared diffuse with background suppression Infrared thru beam Red polarised reflex
[Sn] nominal sensing distance	4 M polarised reflex need reflector XUZC50 30 M thru beam need a transmitter XUK0ARCTL2T 0.28 M diffuse with background suppression 0.8 m diffuse

## 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 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)
Maximum power consumption in W	3 W AC/DC
Time delay range	0...10 s monostable, on-delay or off-delay (programmable) delay
Maximum delay first up	300 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

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 TWSS Holding nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

Depth	50 mm
Height	50 mm
Width	18 mm
Net weight	0.175 kg

## Environment

Product certifications	CE[RETURN]UL[RETURN]CSA
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

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.2 cm
Package 1 Width	9.7 cm
Package 1 Length	13.2 cm
Package 1 Weight	180.0 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	4.539 kg
Unit Type of Package 3	P06
Number of Units in Package 3	352
Package 3 Height	80.0 cm
Package 3 Width	80.0 cm
Package 3 Length	60.0 cm
Package 3 Weight	79.14 kg

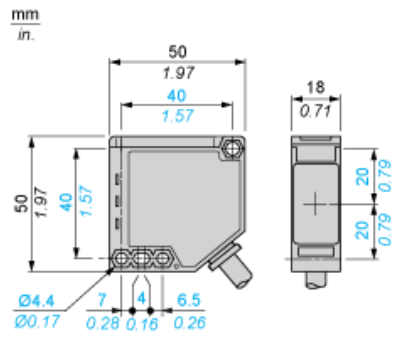
## Offer Sustainability

Sustainable offer status	Green Premium product
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End of Life Information</a>
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>
For all Reach Rohs enquiries contact us at	<a href="mailto:sustainability@tesensors.com">sustainability@tesensors.com</a>

## Contractual warranty

Warranty	18 months
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## Dimensions

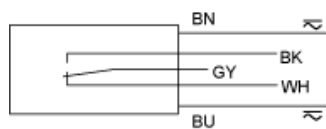


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## Wiring Schemes

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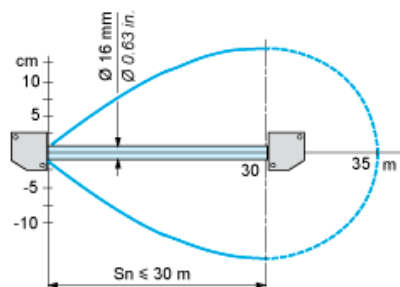
### Relay Output



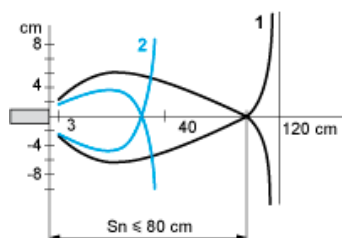
BN : Brown  
BU : Blue  
BK : Black (NO)  
GY : Grey (Relay common)  
WH : White (NC)

Detection Curves

With Thru-beam Accessory (Thru-beam)

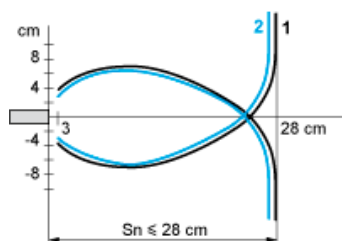


Without Accessory (Diffuse)



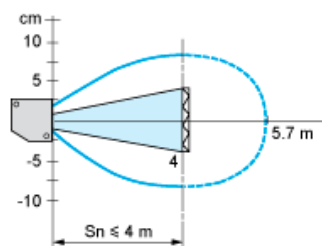
1 : White 90%  
2 : Grey 18%  
Object 10 x 10 cm

Without Accessory (Diffuse with background suppression)



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

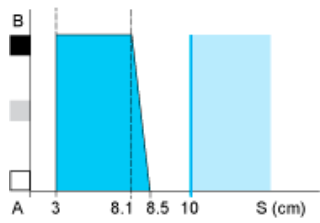
With reflector (Polarised reflex)



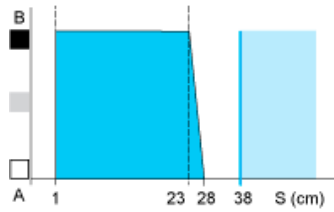
With reflector XUZC50

## 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)