Product datasheet

Specifications



photo-electric sensor - XUK - multi - Sn 0..30m - 24..240VAC/DC - cable 10m

XUK0ARCTL10

XUK0ARCTL10 has not been replaced. Please contact your customer care centre for more information.

Discontinued

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	10 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 XUK0ARCTL10T 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

Disclaimer: 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

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
Depth	50 mm
Height	50 mm
Width	18 mm

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

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	550.0 g
Package 1 Height	6 cm
Package 1 width	13 cm
Package 1 Length	13.5 cm
Unit Type of Package 2	S02
Number of Units in Package 2	12
Package 2 Weight	7.074 kg
Package 2 Height	15 cm
Package 2 width	30 cm
Package 2 Length	40 cm

Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information

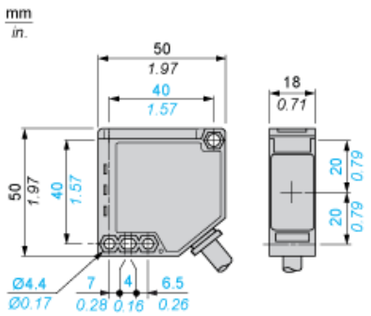
Contractual warranty

Warranty	18 months

Product datasheet XUK0ARCTL10

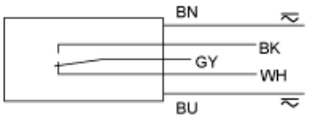
Dimensions Drawings

Dimensions



Wiring Schemes

Relay Output



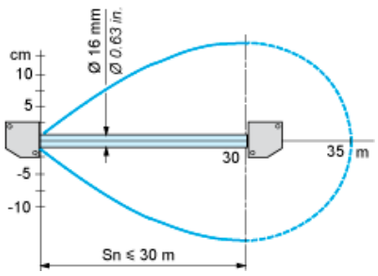
BN : Brown
BU : Blue
BK : Black (NO)
GY : Grey (Relay common)
WH : White (NC)

Product datasheet XUK0ARCTL10

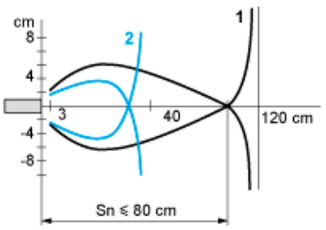
Performance Curves

Detection Curves

With Thru-beam Accessory (Thru-beam)



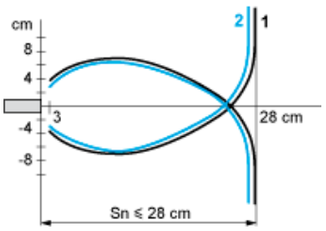
Without Accessory (Diffuse)



1 : White 90%
2 : Grey 18%

Object 10 x 10 cm

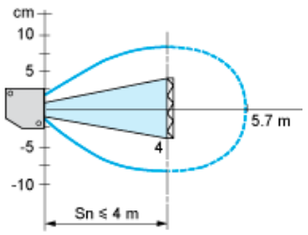
Without Accessory (Diffuse with background suppression)



1 : White 90%
2 : Grey 18%

Object 10 x 10 cm

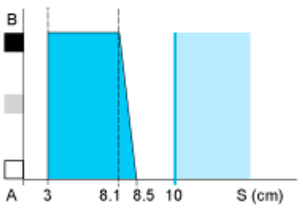
With reflector (Polarised reflex)



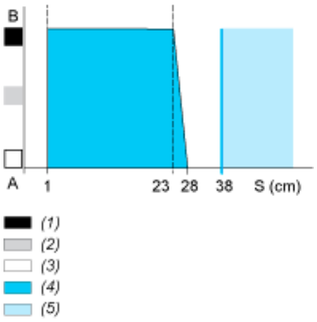
With reflector XUZC50

Variation of Usable Sensing Distance Su (Without accessory, with adjustable background suppression)

Teach Mode at Minimum



Teach Mode at Maximum



A-B : Object reflection coefficient
(1) Black 6%
(2) Grey 18%
(3) White 90%
(4) Sensing range
(5) Non sensing zone (matt surfaces)