

# Product datasheet

Specifications



## photoelectric sensor - color mark - Sn 20 mm - NC - M12 connector

Local distributor code: 388766422 XUKR1PSMM12

### Main

Range of product	Telemecanique Photoelectric sensors XU
Series name	Application packaging
Electronic sensor type	Photo-electric sensor
Sensor name	XUK
Sensor design	Compact 50 x 50
Detection system	Diffuse
Emission	White LED
[Sn] nominal sensing distance	19 mm spot Ø 3.5 mm
Material	Plastic
Switching frequency	<= 5 kHz
Type of output signal	Discrete
Supply circuit type	DC
Wiring technique	3-wire
Discrete output type	PNP
Discrete output function	1 NO or 1 NC programmable
Electrical connection	1 male connector M12 adjustable through 90°, 4 pins
Product specific application	Colour mark
Sale per indivisible quantity	1

### Complementary

Enclosure material	ABS
Lens material	Glass
Resolution	0.5 mm
Depth of field	+/- 2 mm
Maximum passing speed of object	2.5 m/s, minimum detected mark width: 1 mm
Output type	Solid state
Output function governance	Light or dark teaching
Add on output	Without

<b>Add on input</b>	Remote teaching
<b>Status LED</b>	Stability: 1 LED (green) Error: 1 LED (green/red (flashing)) Output state: 1 LED (yellow)
<b>[Us] rated supply voltage</b>	12...24 V DC
<b>Supply voltage limits</b>	DC
<b>Switching capacity in mA</b>	<= 100 mA (reverse polarity, overload and short-circuit protection)
<b>Maximum voltage drop</b>	<2 V (closed state)
<b>Current consumption</b>	<= 30 mA no-load
<b>Maximum delay response</b>	0.1 ms
<b>Maximum delay recovery</b>	0.1 ms
<b>Setting-up</b>	Sensitivity adjustment with teach mode
<b>Depth</b>	50 mm
<b>Height</b>	50 mm
<b>Width</b>	15 mm
<b>Net weight</b>	0.045 kg

## Environment

<b>Product certifications</b>	cULus CE
<b>Ambient air temperature for operation</b>	-10...55 °C
<b>Ambient air temperature for storage</b>	-20...70 °C
<b>Vibration resistance</b>	+/-0.5 mm (f = 10...55 Hz) conforming to IEC 60068-2-6
<b>Shock resistance</b>	30 gn (duration = 11 ms) for 6 shocks on each axis conforming to IEC 60068-2-27
<b>IP degree of protection</b>	IP65 conforming to IEC 60529

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Weight</b>	52.0 g
<b>Package 1 Height</b>	3.5 cm
<b>Package 1 width</b>	8.2 cm
<b>Package 1 Length</b>	8.5 cm
<b>Unit Type of Package 2</b>	S02
<b>Number of Units in Package 2</b>	21
<b>Package 2 Weight</b>	1.576 kg
<b>Package 2 Height</b>	15.0 cm
<b>Package 2 width</b>	30.0 cm
<b>Package 2 Length</b>	40.0 cm

## Offer Sustainability

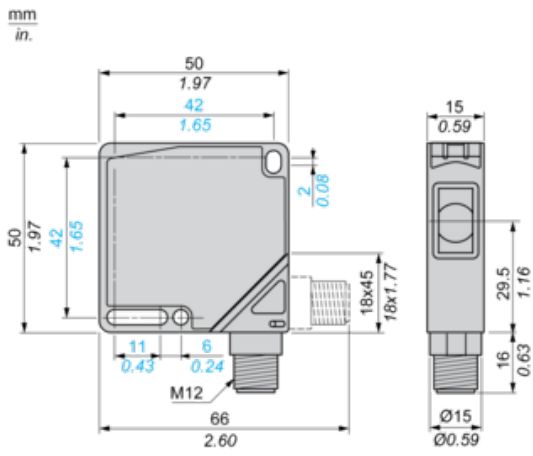
<b>Sustainable offer status</b>	Green Premium product
<b>REACH Regulation</b>	<a href="#">REACH Declaration</a>
<b>REACH free of SVHC</b>	Yes

<b>EU RoHS Directive</b>	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
<b>Toxic heavy metal free</b>	Yes
<b>Mercury free</b>	Yes
<b>RoHS exemption information</b>	<a href="#">Yes</a>
<b>Environmental Disclosure</b>	<a href="#">Product Environmental Profile</a>
<b>Circularity Profile</b>	<a href="#">End of Life Information</a>

### **Contractual warranty**

<b>Warranty</b>	18 months
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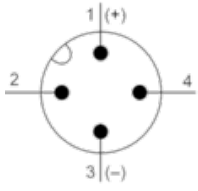
## Dimensions



**Wiring Schemes**

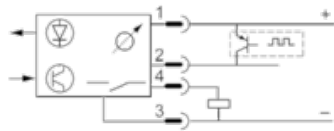
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**Connector Scheme**



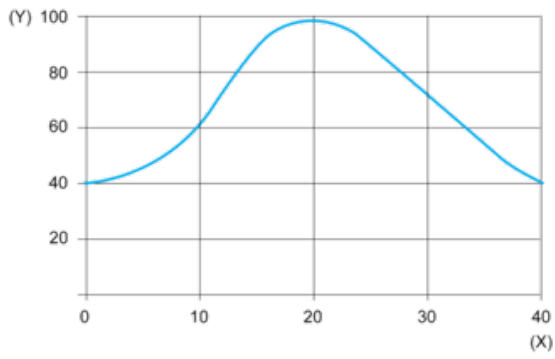
- 1/Brown : 10...30 VDC
- 2/White : Adjustment input
- 3/Blue : 0 V
- 4/Black : Output

**PNP Output**



**Curves**

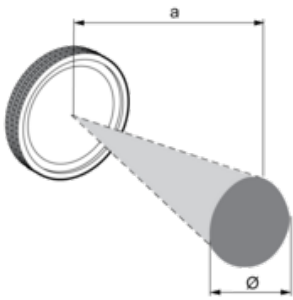
**Detection Curve**



(y) % of signal

(x) Detection distance (mm)

**Detection Zone and Spot Size**



a (mm)	Ø (mm)
19	3.5