

# XURK1KSMM12

photoelectric sensor - diffuse - Sn 9 mm - NO or NC - M12 connector



## Main

Range of product	OsiSense XU
Series name	Application packaging
Electronic sensor type	Photo-electric sensor
Sensor name	XUR
Sensor design	Compact
Detection system	Diffuse
Emission	Red or green
[Sn] nominal sensing distance	0.71 in (18 mm) 2 x 7 mm need lens XURZ01 0.28 in (7 mm) 1 x 4 mm need lens XURZ02 0.35 in (9 mm) 1.5 x 5 mm without lens
Material	Metal
Switching frequency	<= 10 kHz
Type of output signal	Discrete Analogue
Supply circuit type	DC
Wiring technique	3-wire
Discrete output type	PNP or NPN
Discrete output function	1 NO or 1 NC programmable
Analogue output range	0...5.5 V, DC
Electrical connection	1 male connector M12 adjustable 3 positions, 4 pins
Product specific application	Colour mark
Sale per indivisible quantity	1

## Complementary

Enclosure material	Zinc alloy
Lens material	Glass
Minimum width of mark detected	0.02 in (0.5 mm)
Maximum inclination of reader	20 °
Maximum passing speed of object	32.81 ft/s (10 m/s) 0.04 in (1 mm)
Output type	Solid state
Output function governance	Light or dark programmable
Add on output	With analogue output
Status LED	Output state 1 LED red)
[Us] rated supply voltage	12...24 V DC reverse polarity protection
Supply voltage limits	DC
Switching capacity in mA	<= 200 mA overload and short-circuit protection)
Maximum voltage drop	<1 V closed state), NPN <2 V closed state), PNP
Current consumption	<= 80 mA no-load
Time delay range	20 ms off-delay activation/deactivation by internal switch
Maximum delay first up	100 ms
Maximum delay response	0.05 ms
Maximum delay recovery	0.05 ms
Setting-up	Sensitivity adjustment with teach mode
Depth	2.28 in (58 mm)
Height	3.23 in (82 mm)

Maximum Width	1.22 in (31 mm)
Net Weight	1.21 lb(US) (0.55 kg)

## Environment

Product certifications	CE
Ambient air temperature for operation	14...131 °F (-10...55 °C)
Ambient air temperature for storage	-4...158 °F (-20...70 °C)
Vibration resistance	7 gn +/- 0.6 mm 10...55 Hz) IEC 60068-2-6
Shock resistance	30 gn 11 ms) IEC 60068-2-27
IP degree of protection	IP67 conforming to IEC 60529

## Ordering and shipping details

Category	22481 - SENSORS, PHOTOELECTRIC
Discount Schedule	DS2
GTIN	00785901784777
Nbr. of units in pkg.	1
Package weight(Lbs)	0.73 lb(US) (0.33 kg)
Returnability	Yes
Country of origin	HU

## Packing Units

Unit Type of Package 1	PCE
Package 1 Height	1.97 in (5 cm)
Package 1 width	3.35 in (8.5 cm)
Package 1 Length	5.31 in (13.5 cm)
Unit Type of Package 2	S02
Number of Units in Package 2	21
Package 2 Weight	16.25 lb(US) (7.37 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>
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>

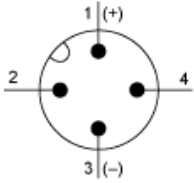
## Contractual warranty

Warranty	18 months
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## Wiring Schemes

### Connector Scheme



1/ 10...30 VDC

Brown :

2/ Adjustment input

White :

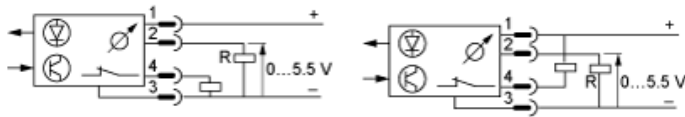
3/ 0 V

Blue :

4/ Output

Black :

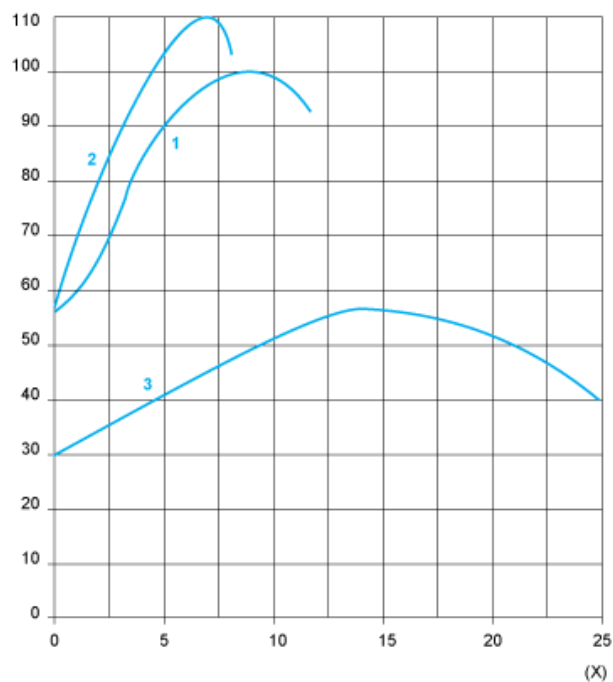
### PNP or NPN Programmable



R = 2.2 k $\Omega$

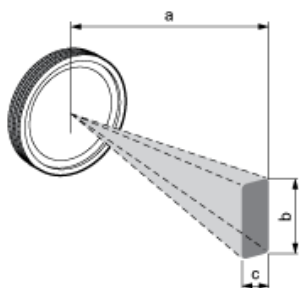
Curves

Detection Curve



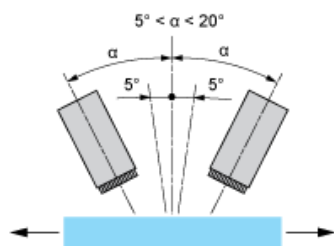
- (x) Distance (mm)
- 1 : XURK●●●●●●●●
- 2 : With XURZ01
- 3 : With XURZ02

Detection Zone and Spot Size (mm)



	a	b	c
	9	9	1.5
With XURZ01	18	7	2
With XURZ02	7	4	1

## Vertical Inclination



An angle of 5 to 10° from vertical is recommended for reflective or transparent surfaces Maximum vertical inclination: 20°