## Product data sheet Characteristics

## XURK1KSMM12

Photoelectric sensors XU, diffuse, Sn 9 mm, NO or NC, M12 connector



#### Main

Range of Product	Telemecanique Photoelectric sensors 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	05.5 V, DC
Electrical connection	1 male connector M12 adjustable 3 positions, 4 pins
Product Specific Application	Colour mark
Sale per indivisible quantity	1

### Complementary

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	1224 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)		

Environment Product Certifications Ambient air temperature for operation Ambient Air Temperature for Storage Vibration resistance Shock resistance IP degree of protection  Ordering and shipping details Category Discount Schedule GTIN Nbr. of units in pkg. Package weight(Lbs) Returnability Country of origin  Packing Units Unit Type of Package 1 Package 1 Height Package 1 Length Unit Type of Package 2 Number of Units in Package 2	1.22 in (31 mm) 1.21 lb(US) (0.55 kg)  CE 14131 °F (-1055 °C) 4158 °F (-2070 °C) 7 gn +/- 0.6 mm 1055 Hz) IEC 60068-2-6 30 gn 11 ms) IEC 60068-2-27 P67 IEC 60529  22481 - SENSORS, PHOTOELECTRIC DS2 3389110178227 1 11.57 oz (328 g)		
Environment  Product Certifications  Ambient air temperature for operation  Ambient Air Temperature for Storage  Vibration resistance  Shock resistance  IP degree of protection  Ordering and shipping details  Category  Discount Schedule  GTIN  Nbr. of units in pkg.  Package weight(Lbs)  Returnability  Country of origin  Packing Units  Unit Type of Package 1  Package 1 Height  Package 1 Length  Unit Type of Package 2  Number of Units in Package 2	CE  14131 °F (-1055 °C)  4158 °F (-2070 °C)  7 gn +/- 0.6 mm 1055 Hz) IEC 60068-2-6  30 gn 11 ms) IEC 60068-2-27  P67 IEC 60529  22481 - SENSORS, PHOTOELECTRIC  DS2  3389110178227  1  11.57 oz (328 g)		
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Shock resistance IP degree of protection  Ordering and shipping details  Category Discount Schedule  GTIN  Nbr. of units in pkg.  Package weight(Lbs)  Returnability  Country of origin  Packing Units  Unit Type of Package 1  Package 1 Height  Package 1 Length  Unit Type of Package 2  Number of Units in Package 2	30 gn 11 ms) IEC 60068-2-27 P67 IEC 60529  22481 - SENSORS, PHOTOELECTRIC DS2 3389110178227 1 11.57 oz (328 g)		
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Ordering and shipping details Category Discount Schedule GTIN Nbr. of units in pkg. Package weight(Lbs) Returnability Country of origin  Packing Units Unit Type of Package 1 Package 1 Height Package 1 Length Unit Type of Package 2 Number of Units in Package 2	22481 - SENSORS, PHOTOELECTRIC DS2 3389110178227 1 11.57 oz (328 g)		
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Country of origin  Packing Units  Unit Type of Package 1  Package 1 Height  Package 1 width  Package 1 Length  Unit Type of Package 2  Number of Units in Package 2	Yes		
Packing Units Unit Type of Package 1 Package 1 Height Package 1 width Package 1 Length Unit Type of Package 2 Number of Units in Package 2	HU		
Package 1 width Package 1 Length Unit Type of Package 2 Number of Units in Package 2	PCE		
Package 1 Length Unit Type of Package 2 Number of Units in Package 2	1.97 in (5 cm)		
Unit Type of Package 2 Number of Units in Package 2	3.35 in (8.5 cm)		
Number of Units in Package 2	5.31 in (13.5 cm)		
	S02		
Pookaga 2 Waight	21		
rackage 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 www.P65Warnings.ca.gov		
REACh Regulation	REACh Declaration		
REACh free of SVHC	Yes		
	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS		
Toxic heavy metal free	Yes		
Mercury free			

Yes

18 months

RoHS exemption information

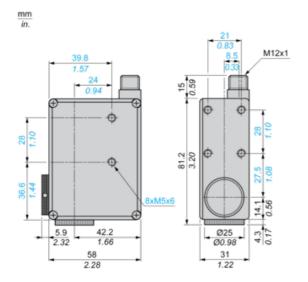
Contractual warranty

Warranty

# Product data sheet Dimensions Drawings

# XURK1KSMM12

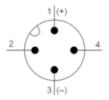
#### **Dimensions**



## XURK1KSMM12

#### Wiring Schemes

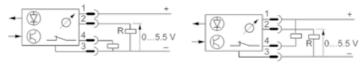
#### Connector Scheme



1/Brown: 10...30 VDC 2/White: Adjustment input

3/Blue : 0 V 4/Black : Output

#### PNP or NPN Programmable

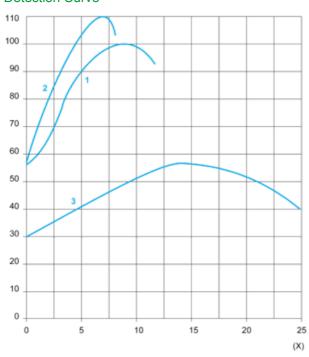


 $R = 2.2 \text{ k}\Omega$ 

## XURK1KSMM12

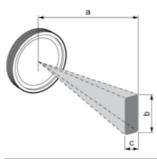
#### Curves

#### **Detection Curve**



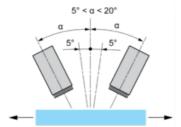
- (x) Distance (mm)
- 1:XURK••••••
- 2: With XURZ01
- 3: With XURZ02

#### Detection Zone and Spot Size (mm)



	а	b	С
	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°