

# XU8M18MA230K

photo-electric sensor - XU8 - BGS - Sn 0.12m -  
24..240VAC/DC - 1/2"



## Main

Range of product	OsiSense XU
Series name	General purpose single mode
Electronic sensor type	Photo-electric sensor
Sensor name	XU8
Sensor design	Cylindrical M18
Detection system	Diffuse with background suppression
Material	Metal
Line of sight type	Axial
Type of output signal	Discrete
Supply circuit type	AC/DC
Wiring technique	2-wire
Discrete output function	1 NO
Electrical connection	1 male connector 1/2"20 UNF, 3 pins
Product specific application	-
Emission	Infrared diffuse with background suppression
[Sn] nominal sensing distance	0.12 m diffuse with background suppression

## Complementary

Enclosure material	Nickel plated brass
Lens material	PMMA
Maximum sensing distance	0.12 m
Output type	Solid state
Add on output	Without
Status LED	1 LED (yellow) for output state
[Us] rated supply voltage	24...240 V AC/DC
Supply voltage limits	20...264 V AC/DC
Residual current	< 1.5 mA (open state)
Switching capacity in mA	10...200 mA (to be used with 0.4 A quick-blow fuse in series with the load)
Switching frequency	<= 25 Hz
Voltage drop	6 V (closed state)
Delay first up	< 300 ms
Delay response	< 20 ms
Delay recovery	< 20 ms
Setting-up	Sensitivity adjustment
Diameter	18 mm
Length	95 mm
Product weight	0.075 kg

## 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	IP67 conforming to IEC 60529

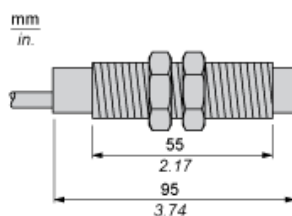
## Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 0924 - <a href="#">Schneider Electric declaration of conformity</a>
REACH	Reference not containing SVHC above the threshold

---

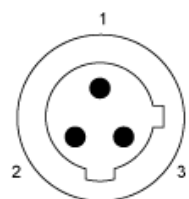
Dimensions

---



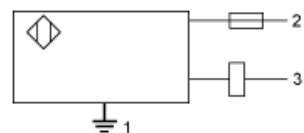
## Wiring Schemes

### Connector



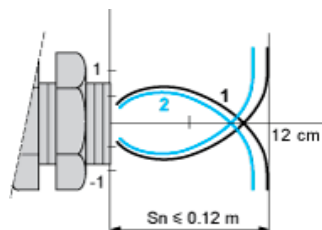
- 1 : Grounding
- 2 : AC/DC
- 3 : AC/DC

### 2-wire AC or DC



## Detection Curves

### Diffuse System with Adjustable Background Suppression



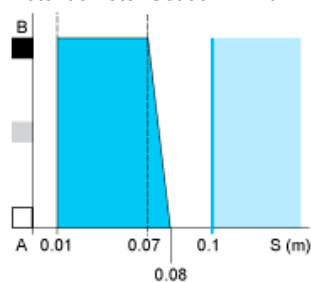
1 : White 90%

2 : Grey 18%

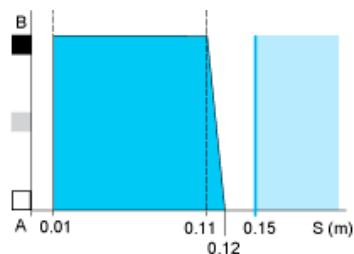
Object 10 x 10 cm

### Variation of Usable Sensing Distance $S_u$

Potentiometer Set at Minimum



Potentiometer Set at Maximum



- (1) Black 6%
- (2) Grey 18%
- (3) White 90%
- (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)