

Product data sheet

XUM0APSAM8

Photoelectric miniature sensor XUM, multimode, Sn 0...10 m, 12...24 VDC, M8, PNP, NO/NC

Main

Range of product	Telemecanique Photoelectric sensors XU
Series name	General purpose multimode
Sensor name	XUM
Electronic sensor type	Photo-electric sensor
Sensor design	Miniature
Product specific application	Not applicable
ETIM classification	ETIM 9 - EC002716 - Through beam photoelectric sensor
Material	Plastic
Lens material	PMMA
Enclosure material	PBT
[Sn] nominal sensing distance	3-3 m polarised reflex need reflector XUZC50, 10-10 m thru beam need a transmitter XUM0AKSAM8T, 0.1-0.1 m diffuse with background suppression, 0.4-0.4 m diffuse
Maximum sensing distance	14 m thru beam, 4 m polarised reflex, 0.1 m diffuse with background suppression, 0.55 m diffuse
Wiring technique	3-wire
Detection system	Multimode
Delay response	2 ms
Indivisible sale quantity	1

Complementary

Sensing range	> 0...10 m
Electrical connection	1 male connector M8, 4 pins
[Us] rated supply voltage	12...24 V DC with reverse polarity protection
Supply circuit type	DC
Switching capacity in mA	<= 100 mA (overload and short-circuit protection)
Maximum voltage drop	<1.5 V (closed state)
Current consumption	35 mA no-load
Emission	Infrared diffuse, infrared diffuse with background suppression, infrared thru beam, red polarised reflex
Setting-up	Self teaching
Output type	Solid state

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein.
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.
It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof.
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Type of output signal	Discrete
Add on output	With alarm output, 50 mA
Discrete output type	PNP
Discrete output function	1 NO or 1 NC programmable
Switching frequency	240 Hz 250 Hz
Status LED	1 LED (green) for supply, 1 LED (red) for instability, 1 LED (yellow) for output state
Delay first up	100 ms
Delay recovery	2 ms
Height	45 mm
Width	12 mm
Depth	20 mm
Product weight	0.035 kg

Environment

IP degree of protection	IP65 conforming to IEC 60529, IP67 conforming to IEC 60529
Ambient air temperature for storage	-40...70 °C
Shock resistance	30 gn (duration = 11 ms) conforming to IEC 60068-2-27
Vibration resistance	7 gn, amplitude = +/- 1.5 mm (f = 10-55 Hz) conforming to IEC 60068-2-6

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

Warranty

Warranty	18 months

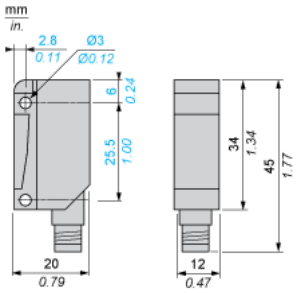
Packing Units

Country of origin	ID (Indonesia)
Unit type of package 1	PCE
Number of units in package 1	1
New Package 1 GTIN-13	3666916033807
Package 1 height	4.2 cm
Package 1 width	6.7 cm
Package 1 length	9.7 cm
Package 1 weight	0.035 kg
Unit type of package 2	S02
Number of units in package 2	22
New Package 2 GTIN 14	13666916033804

Package 2 height	30 cm
Package 2 width	15 cm
Package 2 length	40 cm
Package 2 weight	1.2585 kg
Unit type of package 3	CAR
Number of units in package 3	1
New Package 3 GTIN 14	23666916033801
Package 3 height	4.2 cm
Package 3 width	9.7 cm
Package 3 length	6.7 cm
Package 3 weight	0.035 kg

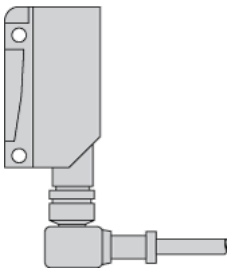
Technical Drawings

Dimensions



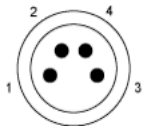
Mounting and Clearance

Possible Orientation of Elbowed Connector



Wiring Schemes

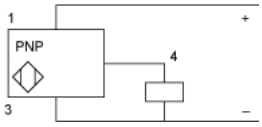
M8 Connector



- 1 : (+)
- 3 : (-)
- 4 : OUT/Output

Wiring Schemes

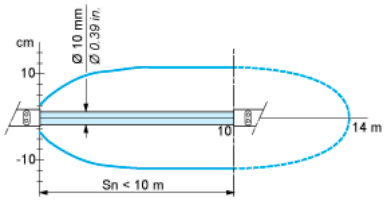
Receiver, PNP Output



- 1 : (+)
- 3 : (-)
- 4 : OUT/Output

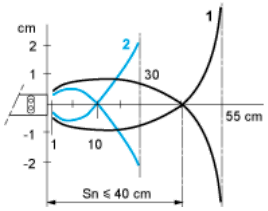
Detection Curves

With Thru-beam Accessory (Thru-beam)



Detection Curves

Without Accessory (Diffuse)

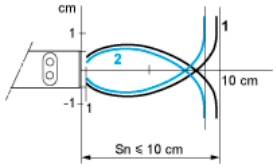


- 1 : White 90%
- 2 : Grey 18%

Object 10 x 10 cm

Detection Curves

Without Accessory (Diffuse with background suppression)

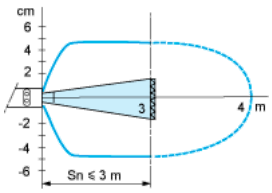


- 1 : White 90%
- 2 : Grey 18%
- 1 : White 90%
- 2 : Grey 18%

Object 10 x 10 cm

Detection Curves

With reflector (Polarised reflex)

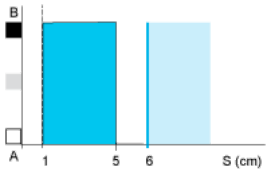


- 1 : White 90%
- 2 : Grey 18%
- 1 : White 90%
- 2 : Grey 18%

With reflector XUZC50

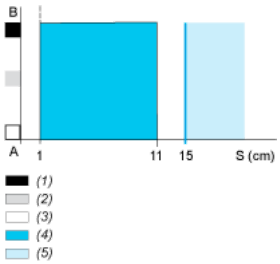
Detection Curves

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



- 1 : White 90%
- 2 : Grey 18%
- 1 : White 90%
- 2 : Grey 18%

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



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