Product data sheet
Characteristics

XUB0BPSWL08M12
photo-electric sensor - XUB - multi - 90° - Sn 0..7m - 12..24VDC - M12 0.8m

Main

Range of product	Telemecanique Photoelectric sensors XU
Series name	General purpose multimode
Electronic sensor type	Photo-electric sensor
Sensor name	XUB
Sensor design	Cylindrical M18
Detection system	Multimode
Material	Metal
Line of sight type	90° lateral
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 remote male connector M12, 4 pins
Cable length	0.8 m
Product specific application	-
Emission	Infrared diffuse Infrared diffuse with background suppression Infrared thru beam Red polarised reflex
[Sn] nominal sensing distance	1.5 M polarised reflex need reflector XUZC50 7 M thru beam need a transmitter 0.11 M diffuse with background suppression 0.2 m diffuse

Complementary

Enclosure material	Nickel plated brass
Lens material	PMMA
Maximum sensing distance	2 M polarised reflex 0.11 M diffuse with background suppression 0.3 M diffuse 10 m thru beam
Output type	Solid state
Add on output	Without
Status LED	1 LED (green) for supply 1 LED (red) for instability 1 LED (yellow) for output state
[Us] rated supply voltage	12...24 V DC with reverse polarity protection
Supply voltage limits	10…36 V DC
Switching capacity in mA	<= 100 mA (overload and short-circuit protection)
Switching frequency	<= 250 Hz
Maximum voltage drop	<1.5 V (closed state)
Current consumption	35 mA no-load
Maximum delay first up	200 ms
Maximum delay response	2 ms
Maximum delay recovery	2 ms
Setting-up	Self-teaching

Diameter	18 mm
Length	78 mm

Environment

Product certifications	CE[RETURN]UL[RETURN]CSA
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	IP65 double insulation conforming to IEC 60529 IP67 double insulation conforming to IEC 60529

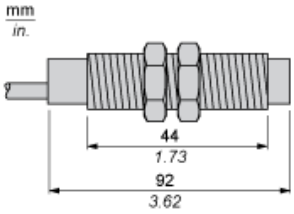
Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1

Contractual warranty

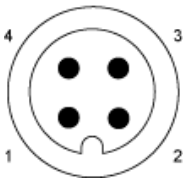
Warranty	18 months

Dimensions



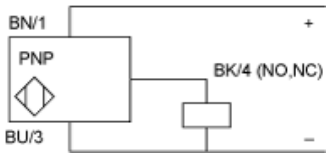
Wiring Schemes

M12 Connector



1 : (+)
2 : Beam break input (1)
3 : (-)
4 : OUT/Output
(1) Beam break input on thru-beam transmitter only

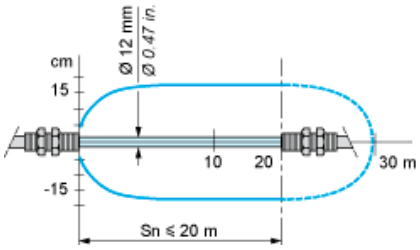
Receiver, PNP Output



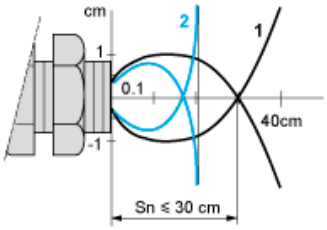
BN : Brown
BU : Blue
BK : Black

Detection Curves

With Thru-beam Accessory (Thru-beam)



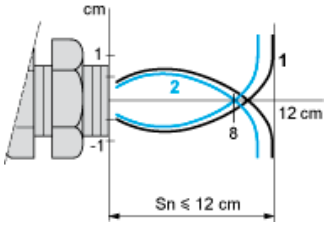
Without Accessory (Diffuse)



1 : White 90%
2 : Grey 18%

Object 10 x 10 cm

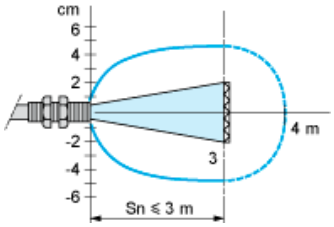
Without Accessory (Diffuse with background suppression)



1 : White 90%
2 : Grey 18%

Object 10 x 10 cm

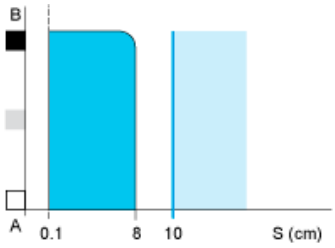
With reflector (Polarised reflex)



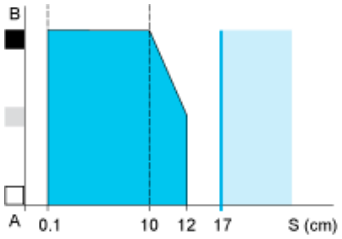
With reflector XUZC50

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

Teach Mode at Minimum



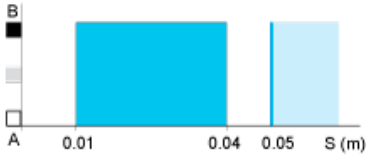
Teach Mode at Maximum



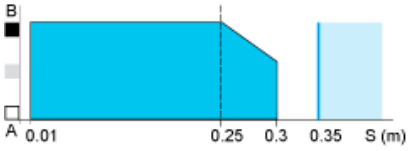
A-B : Object reflection coefficient
(1) Black 6%
(2) Grey 18%
(3) White 90%
(4) Sensing range
(5) Non sensing zone (matt surfaces)

Variation of Usable Sensing Distance

Minimum Setting



Maximum Setting



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