



Main

Range of product	Telemecanique Photoelectric sensors XU
Series name	Application food and beverage
Electronic sensor type	Photo-electric sensor
Sensor name	XU5
Sensor design	Cylindrical M18
Detection system	Diffuse
Material	Stainless steel
Line of sight type	90° lateral
Type of output signal	Discrete
Supply circuit type	DC
Wiring technique	3-wire
Discrete output type	NPN
Discrete output function	1 NO or 1 NC programmable
Electrical connection	Cable
Cable length	5 m
Product specific application	-
Emission	Infrared diffuse
[Sn] nominal sensing distance	0.1 m diffuse



Complementary

Enclosure material	Stainless steel : 304 CU
Lens material	PMMA
Maximum sensing distance	0.15 m
Output type	Solid state
Add on output	Without
Add on input	Programming
Cable composition	4 x 0.34 mm ²
Wire insulation material	PvR
Cable outer diameter	4.2 mm
Status LED	1 LED (green) for supply on 1 LED (yellow) for output state
[Us] rated supply voltage	12...24 V DC with reverse polarity protection

Supply voltage limits	10...30 V DC
Switching capacity in mA	<= 100 mA (overload and short-circuit protection)
Switching frequency	<= 500 Hz
Maximum voltage drop	<1.5 V (closed state)
Current consumption	<= 25 mA no-load
Maximum delay first up	15 ms
Maximum delay response	1 ms
Maximum delay recovery	1 ms
Setting-up	Without sensitivity adjustment
Diameter	18 mm
Length	78 mm

Environment

Product certifications	UL CSA CE
Ambient air temperature for operation	-25...55 °C
Ambient air temperature for storage	-40...70 °C
Vibration resistance	25 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

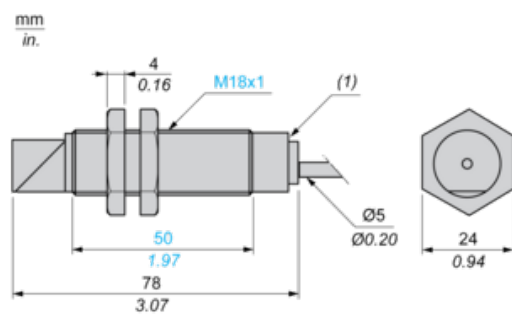
Packing Units

Package 1 Weight	0.285 kg
Package 1 Height	1.300 dm
Package 1 width	0.660 dm
Package 1 Length	0.940 dm

Contractual warranty

Warranty	18 months
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Dimensions



(1) LED

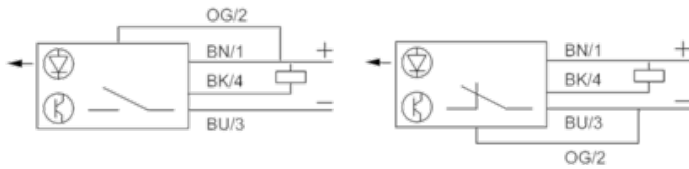
Mounting and Clearance

Fixing nut tightening torque: < 15 N.m

Connector tightening torque: 2 N.m

Wiring Schemes

3-wire, NPN NO or NC Programmable Function



BN : Brown

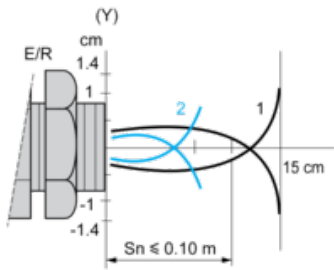
BK : Black (out / output)

BU : Blue

OG : Orange (program)

Detection Curves

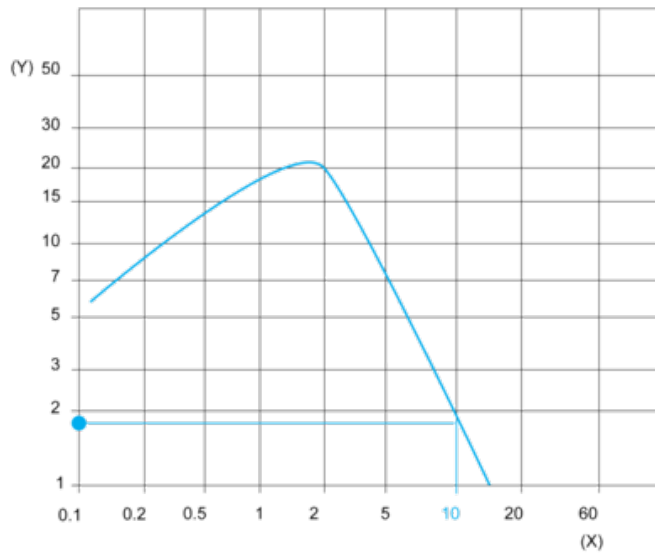
Diffuse System



(y) Ø of beam
1 : White 90%
2 : Grey 18%
Object 10 x 10 cm

Excess Gain Curves (Ambient Temperature: + 25° C)

Diffuse System



(y) Gain
(x) Distance (m)
Object 10 x 10 cm
White 90%