

Product data sheet

Specifications



Photoelectric sensors XU, XU5, diffuse, analog, Sn 0.4 m, 12...24VDCM12

XU5M18AB20D

Main

| | |
|-------------------------------|--|
| Range of product | Telemecanique Photoelectric sensors XU |
| Series name | Application material handling |
| Electronic sensor type | Photo-electric sensor |
| Sensor name | XU5 |
| Sensor design | Cylindrical M18 |
| Detection system | Diffuse |
| Material | Metal |
| Line of sight type | Axial |
| Type of output signal | Analogue |
| Supply circuit type | DC |
| Wiring technique | 3-wire |
| Discrete output type | PNP |
| Analogue output range | 4...20 mA |
| Electrical connection | 1 male connector M12, 4 pins |
| Product specific application | - |
| Emission | Infrared diffuse |
| [Sn] nominal sensing distance | 0.05...0.4 m diffuse |

Complementary

| | |
|---------------------------|---|
| Enclosure material | Nickel plated brass |
| Lens material | PMMA |
| Maximum sensing distance | 0.4 m |
| Add on output | With analogue output |
| Status LED | 1 LED (green) 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 | 4...20 mA |
| Switching frequency | <= 20 Hz |
| Current consumption | <= 30 mA no-load |

| | |
|------------------------|---|
| Maximum delay first up | 50 ms |
| Setting-up | Sensitivity adjustment with potentiometer |
| Diameter | 18 mm |
| Length | 95 mm |
| Net weight | 0.075 kg |

Environment

| | |
|---------------------------------------|--|
| Product certifications | CE UL CSA |
| Ambient air temperature for operation | -25...55 °C |
| Ambient air temperature for storage | -40...70 °C |
| Vibration resistance | 25 gn, amplitude = +/- 2 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

| | |
|------------------------------|----------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 6.4 cm |
| Package 1 Width | 9.2 cm |
| Package 1 Length | 4.2 cm |
| Package 1 Weight | 88.0 g |
| Unit Type of Package 2 | S01 |
| Number of Units in Package 2 | 22 |
| Package 2 Height | 15.0 cm |
| Package 2 Width | 15.0 cm |
| Package 2 Length | 40.0 cm |
| Package 2 Weight | 2.154 kg |

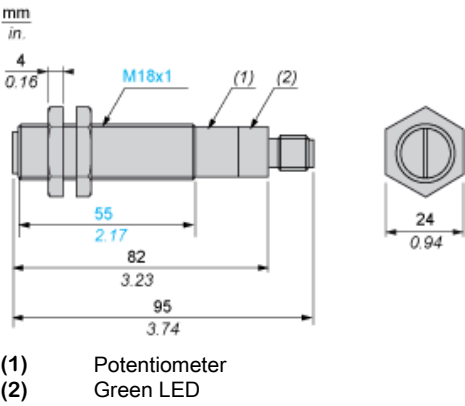
Offer Sustainability

| | |
|----------------------------|---|
| Sustainable offer status | Green Premium product |
| REACH Regulation | REACH Declaration |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration |
| Mercury free | Yes |
| RoHS exemption information | Yes |
| Environmental Disclosure | Product Environmental Profile |
| Circularity Profile | End of Life Information |
| 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 |

Contractual warranty

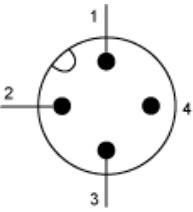
| | |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

Dimensions



Connections and Schemes

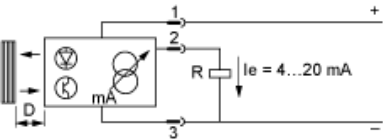
Connector Scheme



- 1 : (+)
- 2 : Analogue output
- 3 : (-)

Wiring Schemes

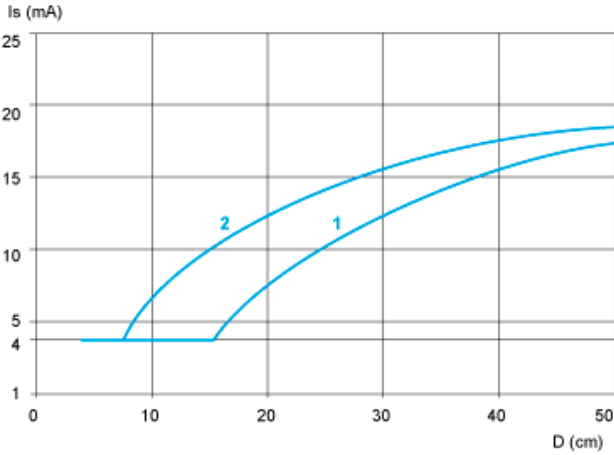
Output Current



Curves

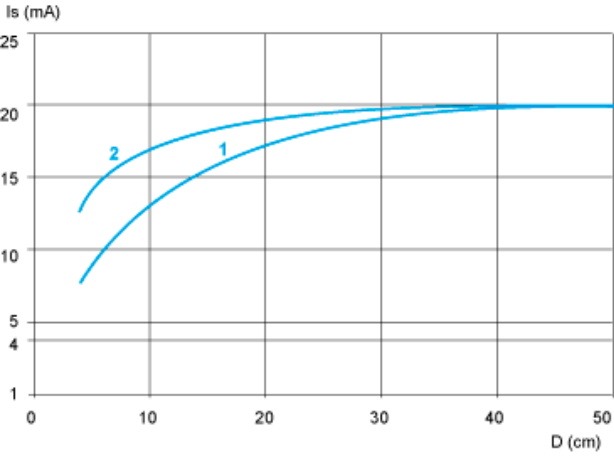
Output Signal (Related to Distance of Object)

Potentiometer Set at Maximum



- 1 : White 90% object
- 2 : Grey 15% object

Potentiometer Set at Minimum



- 1 : White 90% object
- 2 : Grey 15% object

Recommended replacement(s)