PCS™-302

Capacitive proximity sensor

GENERAL SPECIFICATIONS

Operation

• Measurement type	Non-contact proximity, capacitive technology
• Measuring range	0.3 to 2.3 mm [11.8 to 90.6 mils]
• Output	4 to 20 mA
• Sensitivity	8 mA/mm [0.2 mA/mil]
• Accuracy	±1.25% F.S.R. (calculated on a full scale range)
• Repeatability	±0.5% F.S.R. (calculated on a full scale range)
• Residual noise	±50µm (at mid-range)
• Bandwidth	0 to 1000 Hz (-3dB)
• Load at current output	500 Ω max.
• Temperature drift	< 350 ppm/°C (at mid-range)
• Short circuit protection	Built-in

Power Requirements

• Voltage	24 Vdc ± 15%
• Consumption	60 mA max.
• Voltage reversal protection	Built-in
• Warm-up time	5 minutes

Connection

• Connector type	5-position M12 male
• Max. cable length	300 m [984 ft]

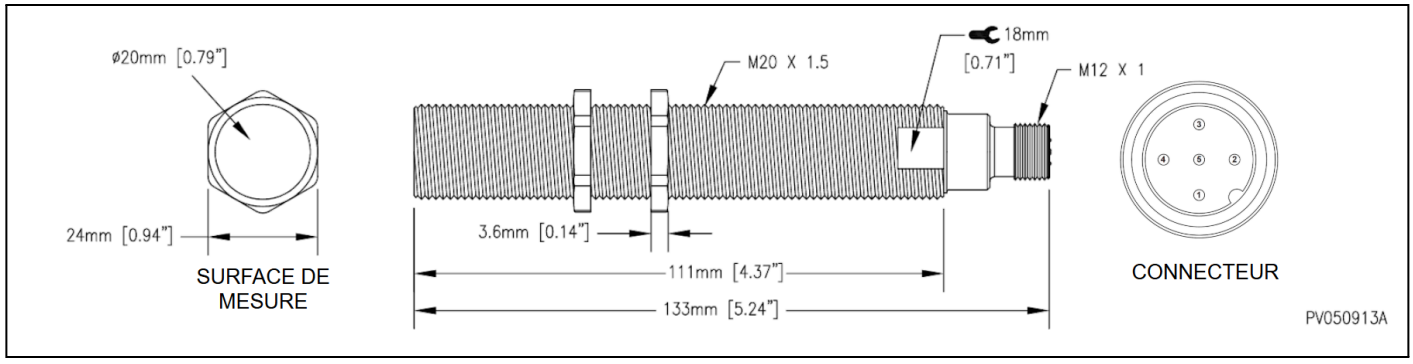
Environment

• Temperature range	
Operating	0 to 60 °C [32 to 140 °F]
Storage	-25 to 70 °C [-13 to 158 °F]
• Humidity	Up to 95%, non-condensing

Physical Characteristics

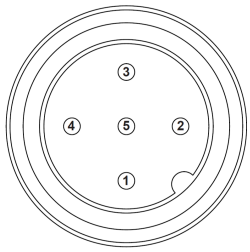
• Sensor body	Stainless steel
• Sensing face	Glass-reinforced laminate

DIMENSIONS



M12 CONNECTOR PINOUT

The following table shows the pin assignment for the A-coded, M12 male connector on the signal conditioner. The signal cable must be assembled as follows:



M12 Connector Pin	Color Code	Designation	Specifications
1	Brown	Power Supply	+24 Vdc
2	White	Current Output	4-20 mA
3	Blue	Common	0 V
4	Black	Not Used	
5	Not Used		

PRODUCT INFORMATION

Product Number	Description
VSM-PCS302	PCS-302 Capacitive proximity probe with built-in signal conditioner (0.3-2.3 mm)