PCS™-304

Capacitive proximity sensor

GENERAL SPECIFICATIONS

Operation

Measurement type	Non-contact proximity, capacitive technology
Measuring range	0.5 to 4.5 mm [19.7 to 177 mils]
Output	4 to 20 mA
Sensitivity	4 mA/mm [0.1 mA/mil]
Accuracy	±2.5% 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]

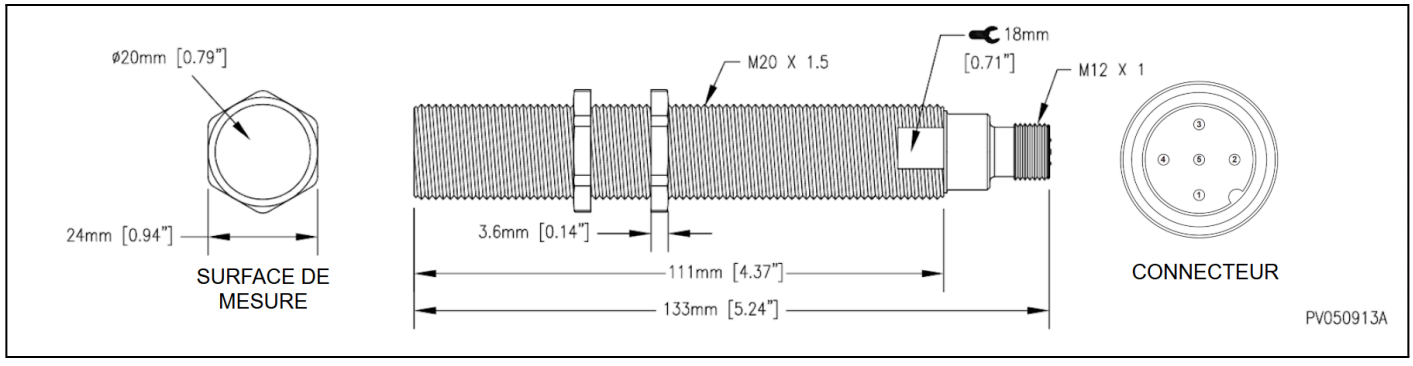
Environment

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

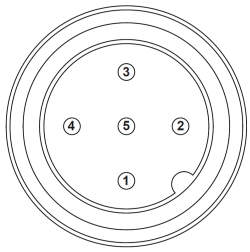
Sensor body	Stainless steel
Sensing face	Glass-reinforced laminate

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-PCS304	PCS-304 Capacitive proximity probe with built-in signal conditioner (0.5-4.5 mm)