



PCS™-200 SERIES

Capacitive Non-Contact Measuring Chains

The PCS-202SB and PCS-200ESB are non-contact capacitive proximity sensors that measure relative vibration and relative displacement. They use passive components allowing them to operate at high temperature levels. The raw signal picked up by these sensors is sent to a conditioner to be converted into a linearized 4 to 20 mA signal.

General Specifications

Sensors

Operation

- Measurement Type Non-Contact Proximity, Capacitive Technology

Connection

- Integral Cable Triaxial
- Absolute Minimum Length Nominal Minus 0.5 m [19.7 in]
- Connector Male, Gold-Plated SMA and Ground Terminal

Environment

- Temperature Range
 - Operating 0 to 125°C [32 to 257°F]
- Dust and Oil Contamination Films Have No Effect
- Humidity Up to 95%, Non-Condensing

Physical Characteristics

- Sensor Material Stainless Steel 303
- Integral Cable Material FEP Jacket / Teflon® Insulation
- Armor Material Flexible Stainless Steel Metallic Conduit

LIN™-300 Conditioner

Power Requirements

- Voltage 24 Vdc ±15%
- Consumption 100 mA max.
- Protection Auto-Reset Fuse
- Warm-Up Time 30 Minutes

Connection

- Power / Output 5-Pin M12 Male
- Sensor Input Female, Gold-Plated SMA and Grounding Terminal

Environment

- Temperature Range
 - Operating 0 to 55°C [32 to 131°F]
 - Storage (Measuring Chain) -25 to 70°C [-13 to 158°F]

Physical Characteristics

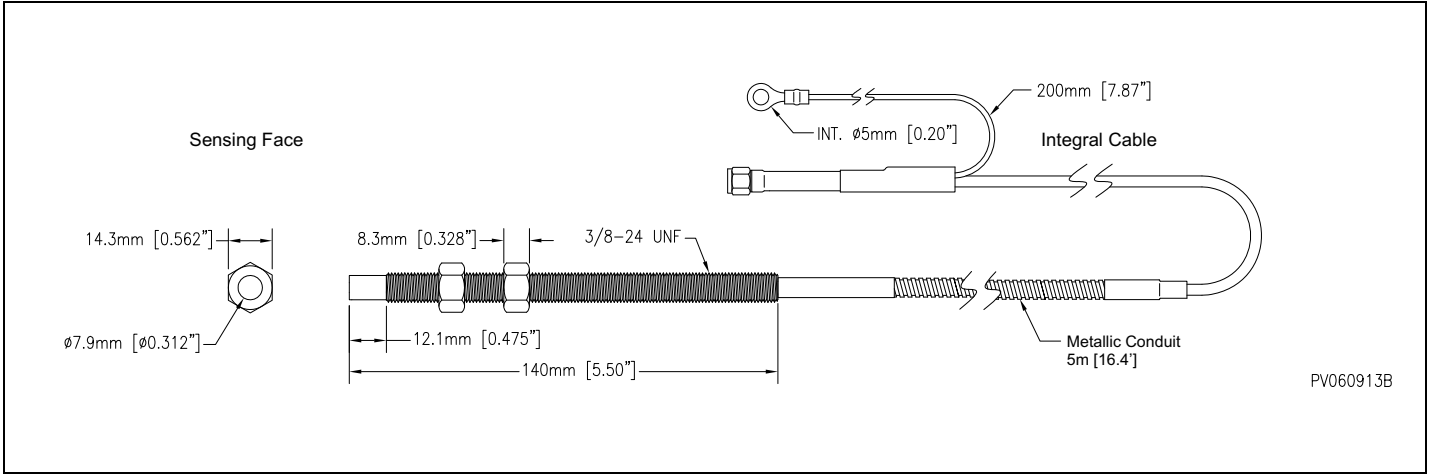
- Body Nickel-Plated Aluminum
- Mounting 4 Slots for #6 (M3.5) Screws
- Max. Torque on SMA 1.1 Nm [10 in-lb]
- Status Indicator Bi-Color LED

Specifications for the PCS-200 Series Measuring Chains

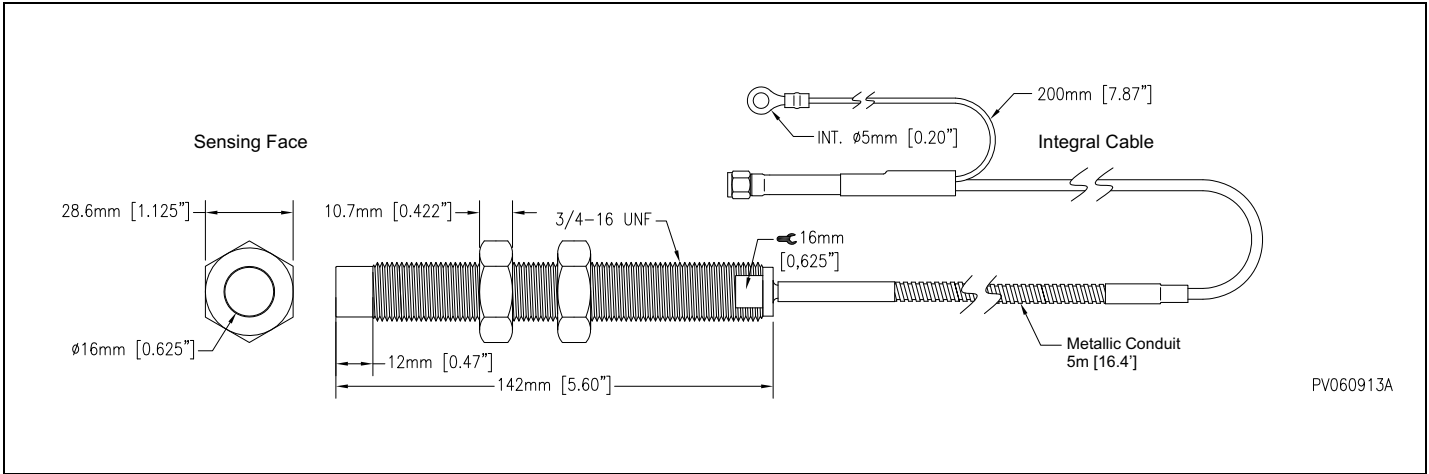
Sensor	PCS-202SB		PCS-200ESB	
Nominal Measuring Range	0.3 to 2.3 mm [12 to 91 mils]		0.3 to 4.3 mm [12 to 169 mils]	0.3 to 6.3 mm [12 to 248 mils]
Integral Cable Nominal Length	6 m [19.7 ft]		6 m [19.7 ft]	
Conditioner Model	LIN-302S-6I-0.3/2.3		LIN-304S-6I-0.3/4.3	LIN-306S-6I-0.3/6.3
Output	4 to 20mA			
Bandwidth	DC to 1.2 kHz (-3 dB)			
Sensitivity	8 mA/mm [203 µA/mil]		4 mA/mm [102 µA/mil]	2.67 mA/mm [68 µA/mil]
Accuracy (full scale)				
0 to 30%	± 1 %		± 1 %	± 1 %
0 to 70%	± 3 %		± 3 %	± 4 %
0 to 100%	± 6 %		± 6 %	± 8 %
Repeatability (% of reading)	± 0.3 %		± 0.3 %	± 0.3 %
Temperature Drift (at mid-range)	< 800 ppm / °C		< 800 ppm / °C	< 1500 ppm / °C
Load at Output	500 Ω max.			



PCS-202SB Dimensions



PCS-200ESB Dimensions



LIN-300 Conditioner Dimensions

