# **Proximity Sensor Signal Conditioners** 5510 (Radial Vibration) & 5516 (Position/Thrust)

# PROXIMITY PRODUCT



Convert proximity transducer system to a transmitter for connection to a PLC or DCS. Replace older monitor racks incrementally at low cost.

### **Features**

- Easiest conversion of obsolete monitor racks on the market today
- · Powers Metrix drivers or Bently Nevada Proximitors\*
- · Gives 4-20mA output proportional to vibration or position
- Dynamic signal is available at the signal conditioner or remotely

\*Note: Proximitor is a registered trademark of Bently Nevada.

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Weight & Dimensions

Weight: 0.5 kg (1.1 lb) Height: 69.9 (2.75) max. (with DIN-rail)

Dimensions in mm [inches]

1.26



## **Specifications**

PC Series Input Power: 18-30 VDC, 60 mA

**Probe Driver Power Provided:** -24VDC \*

Input Signal: -8 mV/um (-200 mV/mil) from a proximity probe driver

Frequency Response (5510): 5 Hz-10 KHz

Test Output (AC & DC): -8 mV/um (-200 mV/mil), buffered

4-20 mA (Source) Output: Proportional to shaft radial vibration (5510). 4-20 mA proportional to shaft axial position (5516).

Sensor Malfunction: Output current driven below 3.6 mA and LED indicates either probe/cable not OK or probe gap is outside the linear range.

Max. Load Resistance (R,): 600 ohms

Max. Current Draw: 40 mA Full Scale Output Range (20 mA): See How To Select.

Isolation: 500 V, circuit to case **Temperature Limits:** -51°C to +100°C Housing: Polymer internally coated for EMI protection. 35 mm DIN-rail available.

**Electromagnetic Compatibility:** CE mark

### **How To Select**

- 1) Verify Probe Driver is -8 mV/um (-200 mV/mil) and note -VDC required. 24 Vdc is standard. For 18 Vdc, add -18V to end of model number (see example).
- 2) Choose Model 5510 or 5516, desired 4-20 mA range and mounting style:

### 5510C - Radial Vibration



### Vibration Range (4-20 mA) / Mount Α

- 0 0 1 = 0-5 mils (125 um), pk-pk/Base
- 1 0 1 = 0-5 mils (125 um), pk-pk/DIN-rail
- 0 0 2 = 0-10 mils (250 um), pk-pk/Base
- 1 0 2 = 0-10 mils (250 um), pk-pk/DIN-rail

### 5516C - Position (Thrust) Vibration



Α Vibration Range (4-20 mA) / Mount

0	0	1	= ± 30 mils (± 750 um) Baseplate*
1	0	1	= ± 30 mils (± 750 um) DIN-rail*
0	0	2	= ± 20 mils (± 1000 um) Baseplate
1	0	2	= ± 20 mils (± 1000 um) DIN-rail

\*not available with 18 Vdc option



# Proximity Products Wiring Diagrams & Installation Tips



**PROXIMITY PRODUCTS** 





