



Radial Displacement Transmitter



Description

The 1-828 series radial displacement transmitters continue the successful line of vibration transmitters designed and manufactured by CEC. These single channel signal conditioners interface with proximity transducers like the 3300, 3300XL and 7200 series or probe types with similar specifications.

Each unit provides a calibrated 4-20 mA output that is proportional to the radial peak to peak displacement vibration sensed by the transducer and extension system. The probe Gap and buffered dynamic signal are easily accessed via the front panel BNC.

Applications

- Turbine / Generator Sets
- Fans or Blowers
- Motors
- Gear Boxes
- Bearing Caps

Features

- 4-20 mA output proportional to mils Peak-to-Peak displacement
- Compatible with major probe types
- DIN Rail mountable
- Probe failure detect modes
- BNC buffered output and Gap voltage

Probe failure conditions are quickly identified via the multicolored status LED and the 4-20 mA output. This unique feature allows for instant feedback of the probe system condition during installation or machine operation.

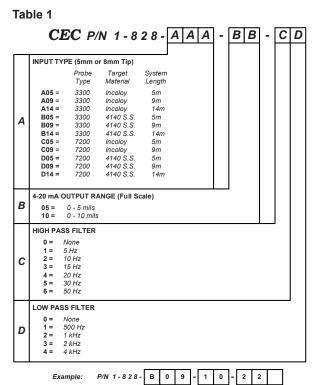


1-828 Radial Displacement Transmitter

ions
5 Hz - 4kHz (-3 dB)
Ref. 3300, 3300XL, 7200 series or equivalent
4-20 mA proportional to 5 mils or 10 mils peak to peak displacement ranges (see table 1)
Buffered sensor signal, short circuit protected, BNC connector
0 to 16 VDC corresponding to a gap of 10 to 90 mils.
500 VDC case to circuit
18 - 32 VDC @ 250 mA
1K ohms
5 to 10 mils (see table 1)
-200 mV/mil
±5% at 77°F
±3.5% per 100°F temperature
increase from 77°F ±1 mil of best fit straight line
4140 stainless steel or Incoloy 901 (see Table 1)
Output goes below 2.5 mA if the gap is less than 10 mils
Output goes to 20.5 mA if gap is greater than 90 mils
-40°F to +150°F
To 95% non-condensing
Yes, see case material
See Figure 1
8 ounces
35 mm DIN rail
PVC with interior zinc overspray
PVC with interior zinc overspray Tension Loaded Contacts

Ordering Information

When ordering, use table 1 to develop part number. In keeping with CEC's policy of continuing product improvement, specifications may be changed without notice.

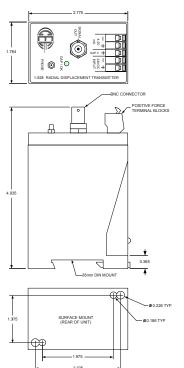


The example unit's input is from a 3300 type proximity probe with a total system length of 9 meters and a target material of 4140 S.S. The output is 4-20 mA scaled from 0 to 10 mils, peak to peak. The filtering includes a combination of a 10 Hz high pass and 1,000 Hz low pass filters.

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Figure 1



Hazardous Approvals

North America

European

ATEX



CSA C/US Class I, Division 2, Groups A, B, C and D Temp Code T3C; Amb. Temp -40°C to 65°C

Ex

II 3 G Ex nA II T3

