1-830

Axial Displacement Transmitter

Applications

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

Features

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

Monitoring Systems

Description

The 1-830 series axial 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 targets axial position as sensed by the transducer and extension system. The probe Gap and buffered dynamic signal are easily accessed via the front panel BNC.

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.

RoHS COMPLIANT

ISO 9001:2000 AS9100 Certified

CEC Vibration Products • 746 Arrow Grand Circle • Covina, California 91722 • USA
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1-830 Axial Displacement Transmitter

Performance Specifications

Input:	Ref. 3300, 3300XL, 7200 series or equivalent
Operating Linear Range:	0 to 16 VDC corresponding to a gap of 25 to 80 mils.
Outputs:	
Current	4-20 mA proportional to displacement where 4mA = 25 mils & 20mA = 80 mils, voltage reversal and short circuit protected terminal connection.
Buffered Signal (GAPV)	Buffered sensor signal, short circuit protected, BNC connector
Isolation:	500 VDC case to circuit
Power Supply:	18 - 32 VDC @ 250 mA
Maximum Load Resistance:	1K ohms
Range:	50 mils, (±25 mils from 50 mil offset)
Sensitivity:	
Scale	-200 mV/mil
Accuracy	±5% at 77°F
Temperature Coefficient	±3.5% per 100°F temperature increase from 77°F
Linearity	±1 mil of best fit straight line
Target Material:	4140 stainless steel or Incoloy 901 (see Table 1)
Probe Failure Detect:	
Probe to close to target	Output goes below 2.5 mA if the gap is less than 25 mils
Probe not connected or too far from target	Output goes below 20.5 mA if gap is greater than 80 mils
Operating Temperature:	-40°F to +150°F
Relative Humidity:	To 95% non-condensing
Dimensions:	See Figure 1
Weight:	10 ounces
Mounting:	35 mm DIN rail
Case Material/shielding:	PVC with interior zinc overspray
Terminals:	Tension Loaded Contacts
BNC Connector:	Cover Provided

Hazardous Approvals

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

European
ATEX II 3 G Ex nA II T3

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.

Table 1

CEC P/N 1-830-AAA

INPUT TYPE (5mm or 8mm Tip)

	Probe Type	Target Material	System Length
A	A05 = 3300	Incoloy	5m
	A08 = 3300	Incoloy	8m
	A14 = 3300	Incoloy	14m
	B05 = 3300	4140 S.S.	5m
	B08 = 3300	4140 S.S.	8m
	B14 = 3300	4140 S.S.	14m
	C05 = 7200	Incoloy	5m
	C08 = 7200	Incoloy	8m
	C14 = 7200	Incoloy	14m
	D05 = 7200	4140 S.S.	5m
	D08 = 7200	4140 S.S.	8m
	D14 = 7200	4140 S.S.	14m

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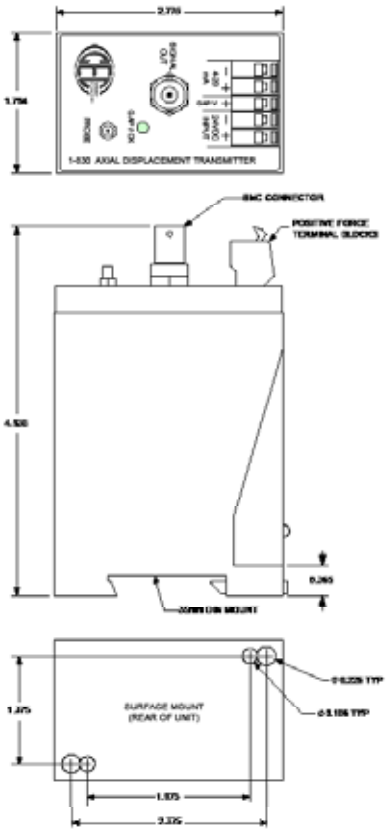
Figure 1



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