



SPECIFICATION SUMMARY

MODEL CD289 CARRIER DEMODULATOR
For OEM APPLICATIONS

1.0 DESCRIPTION

The CD289 is a small, low-cost carrier demodulator designed for OEM application in equipment or systems requiring one or more channels of pressure measurement with a variable-reluctance transducer. It supplies 5 V rms 5 kHz carrier excitation for the transducer, demodulates the transducer signal, and provides a high-level analog output signal for display, recording, or control.

The CD289 is packaged on a circuit board, including Zero and Span controls and pin terminals for solderless header connection. See outline drawing for physical data.

The CD289 is available with a variety of options to accommodate OEM requirements. These include:

Power Input: ± 12 Vdc, ± 15 Vdc, 12 Vdc, 24 Vdc
Output: 0 to ± 5 Vdc; 0 to ± 10 Vdc (with ± 15 Vdc Power)
Frequency Response: 30 Hz to 200 Hz
Transducer Temperature Compensation: Zero and Span

Validyne is ready to discuss any modifications necessary for your OEM application. Call Validyne and ask for an Applications Engineer.

Telephones: (818) 886-2057
Toll Free: (800) 423-5851 (Except AK & CA)

2.0 SPECIFICATIONS

Input Sensitivity: 20 mV/V min. for rated F.S. output;
adjustable by Span Control

Transducer Excitation: 5 V rms, 5 kHz, Square Wave.

Transducer Configuration: Two-arm variable reluctance

Zero Adjustment: ± 10 mV/V

Output: 0 to ± 10 Vdc, 10 mA max. for ± 15 Vdc
power; 1 K ohm min. load

0 to ± 5 Vdc, 10 mA max. for ± 12 , 12,
or 24 Vdc power; 1 K ohm min. load

Other options available.



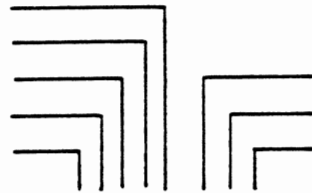
2.0 SPECIFICATIONS (Continued)

Output Ripple:	4 mV rms max.
Output Impedance:	Less than 10 ohms
Frequency Response:	30 Hz standard; optional to 200 Hz
Linearity:	$\pm 0.05\%$ F.S.
Stability:	$\pm 0.1\%$ F.S. long term
Temperature Range:	0 to 160°F
Typical Thermal Effects:	Zero: 0.005% F.S./°F Span: 0.01% F.S./°F Optional circuitry for transducer temp comp
Multi-Channel Use:	Can be connected as master or slave for multi-channel carrier frequency sync.
Electrical Connections:	0.025 square pins printed circuit header

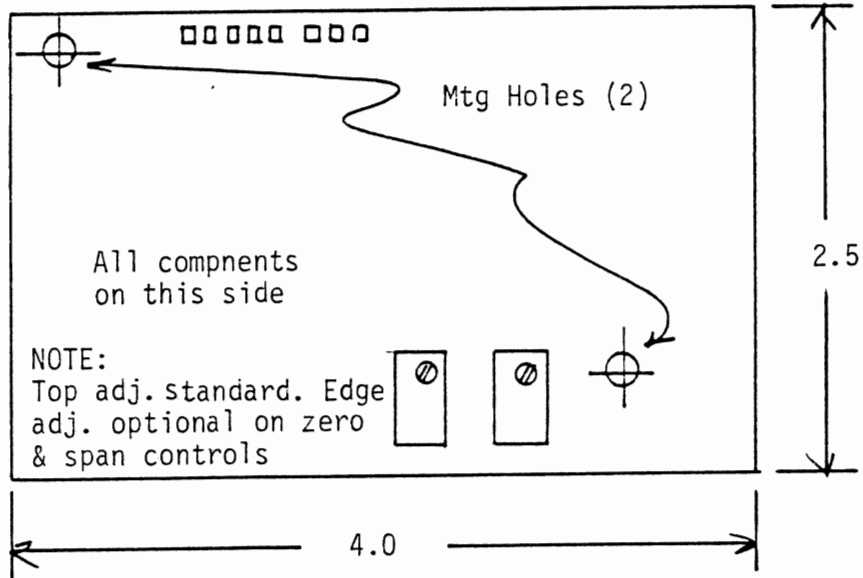


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Signal Out
+Vdc Power
Common
-Vdc Power
Master/Slave



Carrier ø1
Signal In
Carrier ø2



CD289 OUTLINE DRAWING