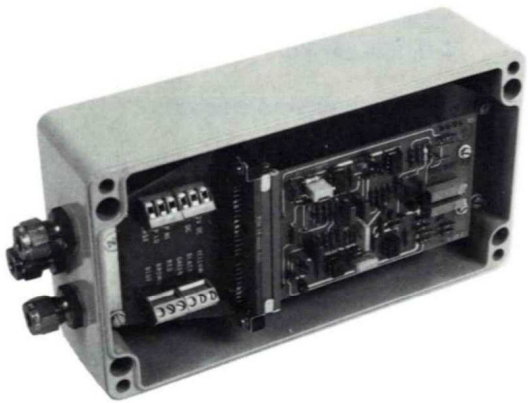


DC8042 SERIES LVDT SIGNAL CONDITIONING



- MAINS OR DC INPUT
- VOLTAGE OR CURRENT OUTPUT
- FOR USE WITH AC LVDTs
- ZERO AND GAIN CONTROLS
- SEALED TO IP55

The DC8042 series of LVDT drivers are oscillator/demodulators for LVDT transducers.

The units consist of Sensonics standard printed circuit cards housed together with a power supply unit in a weatherproof die cast box. The input and output connections to the internal terminal blocks is via fitted cable glands.

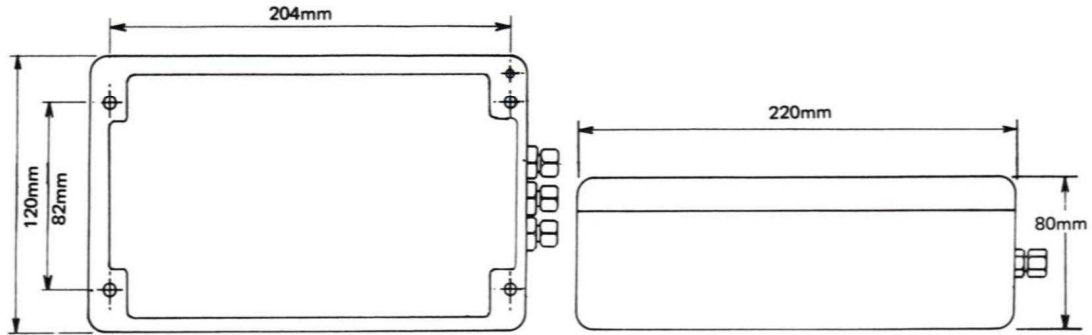
The internal card assembly is formed from discrete components mounted on a resin-bonded glass fibre laminate with tinned copper printed circuit conductors and gold plated edge contacts. The card has miniature multi-turn potentiometers for the setting of gain and zero.

The unit provides a sinusoidal output at 3KHz for excitation of the transducer, amplification, phase sensitive demodulation, a low pass active filter to give a DC voltage output signal and has, in addition, a current output stage.

L.129

SENSONICS

DC8042 Series LVDT SIGNAL CONDITIONING



SPECIFICATION

Oscillator

Amplitude current	12mA RMS max.
Frequency	3KHz \pm 10%
Amplitude Stability	\pm 0.05% per $^{\circ}$ C

Demodulator

Type	Full wave, phase sensitive
Linearity Error	Less than 0.1%
Max. input	6V RMS

Amplifier

Gain	Variable from 0 to X10
Temperature Stability of Gain	\pm 0.02% per $^{\circ}$ C
Long Term Stability	\pm 0.2%
Zero Adjustment Range	\pm 2V at input
Temperature Stability of Zero	Less than 50 μ V per $^{\circ}$ C
Frequency Response	DC to 100 Hz \pm 2%, 250 Hz - 3dB
Residual Carrier	Less than 0.2% Full Scale

Recorder output drive voltage	8 volts
Input Voltage	110V/240V 50Hz, pre-set by internal transformer tap or DC as below
Internal stabilised voltage	\pm 12V DC at 100mA max.

Signal input facility) Specify size and
Signal output facility.) type of gland to be
Mains input facility) fitted ($\frac{1}{4}$ BSP is STD)
Controls	Screwdriver - adjusted, multi-turn potentiometer accessible only from inside case

Temperature range	-10 to 60 $^{\circ}$ C
Total weight (approx.)	2Kg (about 4 $\frac{1}{2}$ lbs.)

ORDERING INFORMATION/OPTIONS

	Input Voltage	Output Signal
DC8042/A	110/240V A.C.	4-20 mA
DC8042/B	8-30V D.C.	4-20 mA
DC8042/C	110/240V A.C.	0-5V
DC8042/D	8-30V D.C.	0-5V

We reserve the right to alter the specification without notification.