

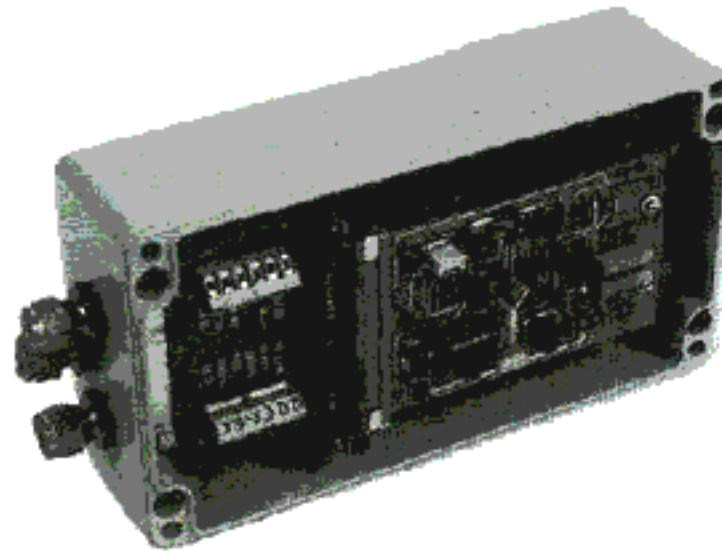
DC 8042 Series

(LVDT Signal Conditioning)



PREDICTIVE
MAINTENANCE
SYSTEMS

SENSONICS LTD



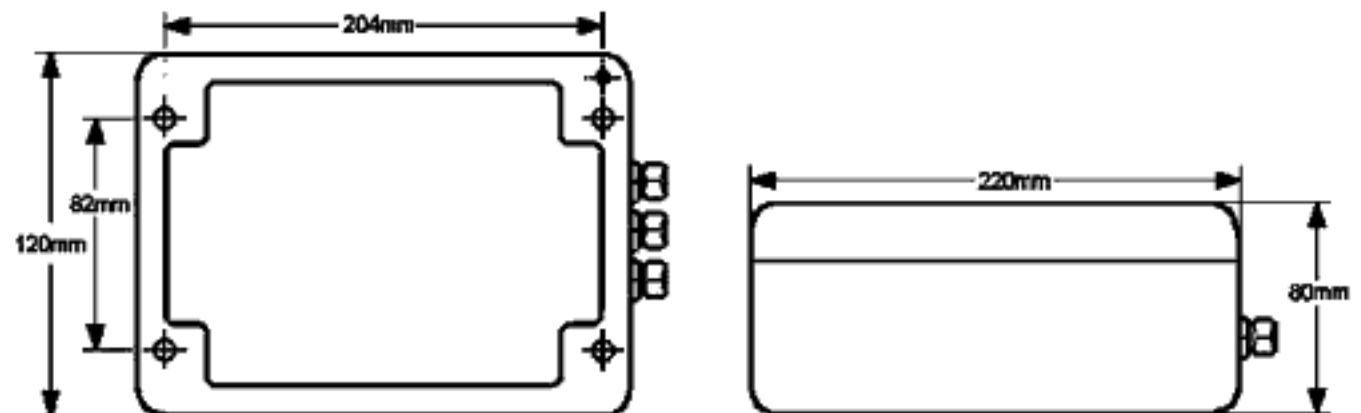
- Mains or DC input
- Voltage or current output
- For use with AC LVDTs
- Zero and gain controls.
- Sealed to IP55

The DC 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 weather proof 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 circuit 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.



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 100Hz \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 100 mA max.
	Signal Input facility.....	
	Signal Output Facility.....	Specify size and type of gland to be fitted (1/4 BSP is STD)
	Mains Input Facility.....	be fitted (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 1/2 lbs..)

Ordering Information/options

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

DS1194-1



Sensonics Ltd,
 Berkhamsted,
 Hert's, HP4 1EF,
 England
 Tel: +44(0) 1442 876 833.
 Fax: +44(0) 1442 876 477.