

LVDT Oscillator Demodulator G123-817

Description

The G123-817 LVDT Oscillator Demodulator is a complete Linear Variable Differential Transformer (LVDT) signal conditioning module. It is used in conjunction with an LVDT to convert transducer mechanical position to a DC voltage of $\pm 10V$ and a DC current of 4-20mA. The outputs have high accuracy and repeatability with very low noise and ripple. Due to a unique ratiometric circuit structure, temperature stability and power supply immunity are vastly improved over older style circuits.

The module has an oscillator for driving the LVDT primary. Its level is set by a front panel trimpot. Selector switches inside the module set its frequency. A front panel test point enables the level and frequency to be measured.

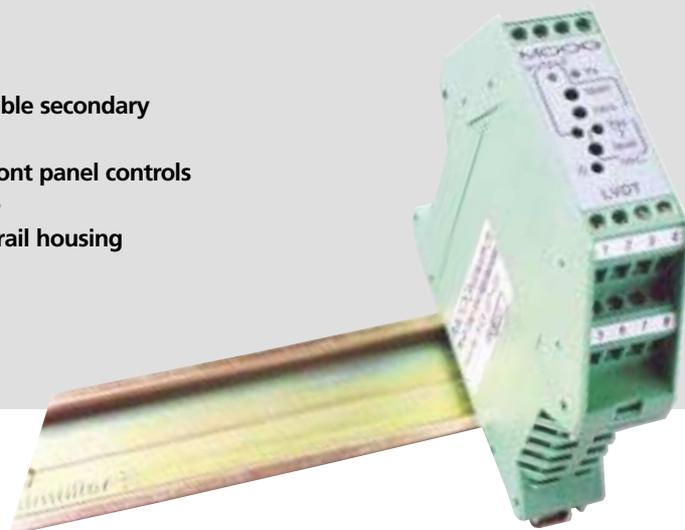
Two output signals are available. They are 0 to $\pm 10V$ and 4-20mA. The front panel has a dual colour LED to indicate the level and polarity of the $\pm 10V$ signal.

Inside the module adjustable lag and lead circuits can be switch selected to compensate for LVDT secondary phase changes. Two special monitoring circuits are provided to monitor the phase. This ensures quick and reliable set up when phase adjustments are found to be necessary.

The Oscillator Demodulator is housed in a compact DIN rail mounting enclosure and requires a +24V power supply.

Features

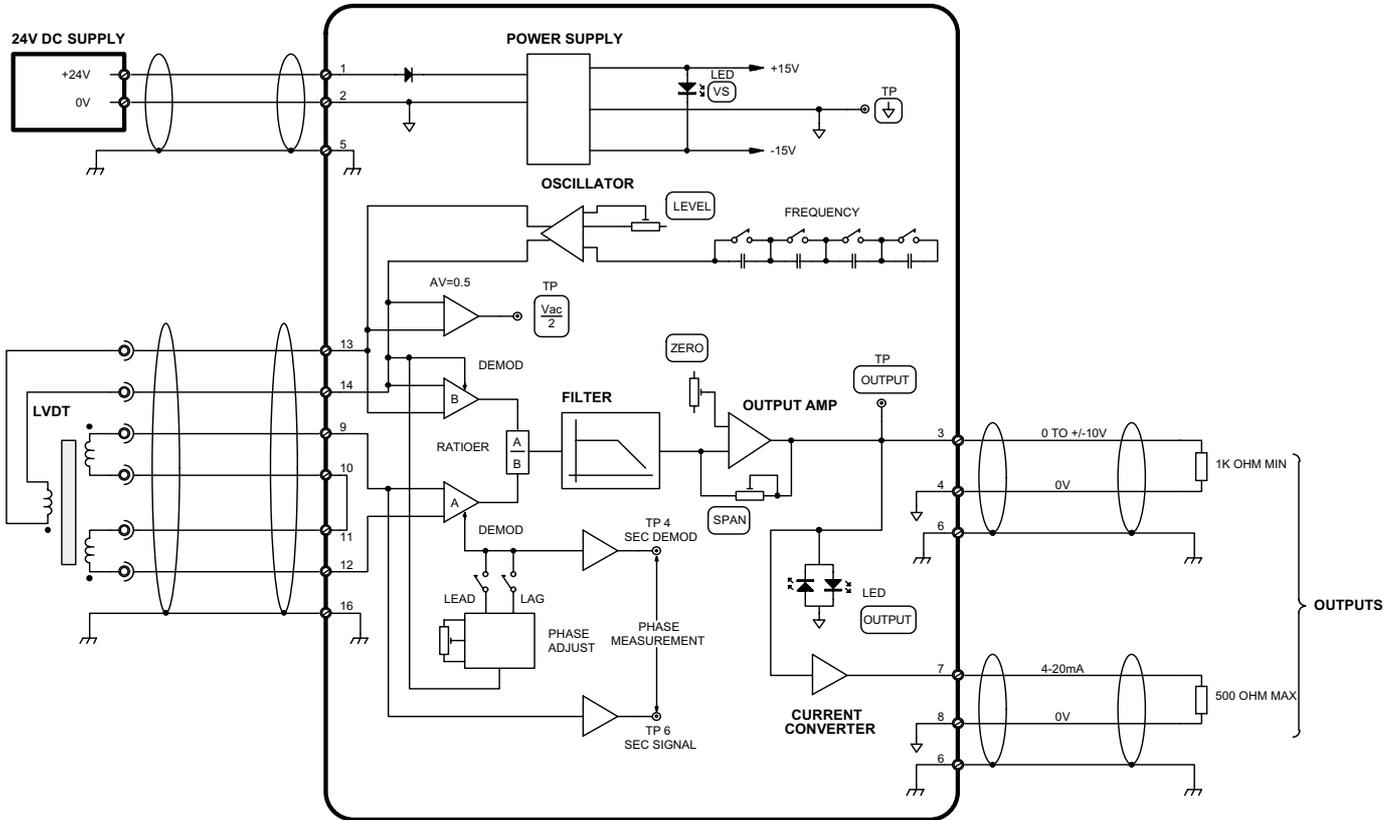
- Improved accuracy, repeatability, noise and ripple
- Output voltage and current
- High supply immunity and temperature stability
- Oscillator level and frequency adjust
- Output span and zero adjust
- Switch selectable secondary phase adjust
- Convenient front panel controls and indicators
- Compact DIN rail housing
- CE marked



Specifications

Outputs:	0 to $\pm 10V$, 1 kOhm min load 4-20mA, 500 Ohm max load 100PPM/dB excitation rejection 500PPM non-linearity 4mV RMS ripple 300Hz bandwidth	Internal trimpot:	Secondary demodulator phase adjust
Oscillator:	2 to 8.0V RMS 1 to 10kHz 50mA RMS -50dB THD 200PPM/°C frequency TC	Internal switches:	Oscillator frequency select Phase lead select Phase lag select
Front panel indicators:	Output positive = red negative = green Vs, internal supply = green	Supply:	24V nominal, 22 to 28V 50mA @ 24V, no load
Front panel test points:	Output $\pm 10V$ Oscillator, half level Signal 0V	Mounting:	DIN rail IP 20
Front panel trimpots:	Output span Output zero Oscillator level	Temperature:	0 to +40°C
		Dimensions:	100W x 108H x 22.5D
		Weight:	120g
		CE mark:	EN50081.1 emission EN61000-6-2 immunity
		C tick:	AS4251.1 emission

Operating Details



Ordering Information

LVDT Oscillator Demodulator G123-817-001

Special configurations can be provided.

Consult your Moog sales office to discuss details.



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