

## 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.

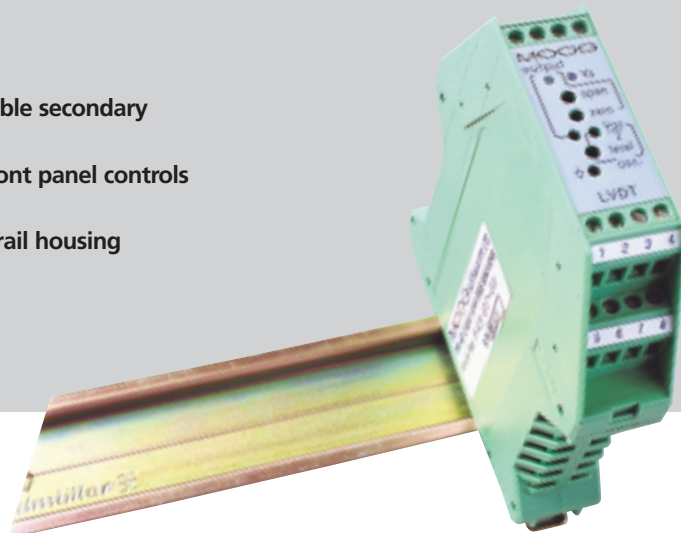
Two output signals are available. They are 0 to  $\pm 10V$  and 4-20mA. The front panel has a dual colour LED to indicate the level and polarity of the  $\pm 10V$  signal.

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

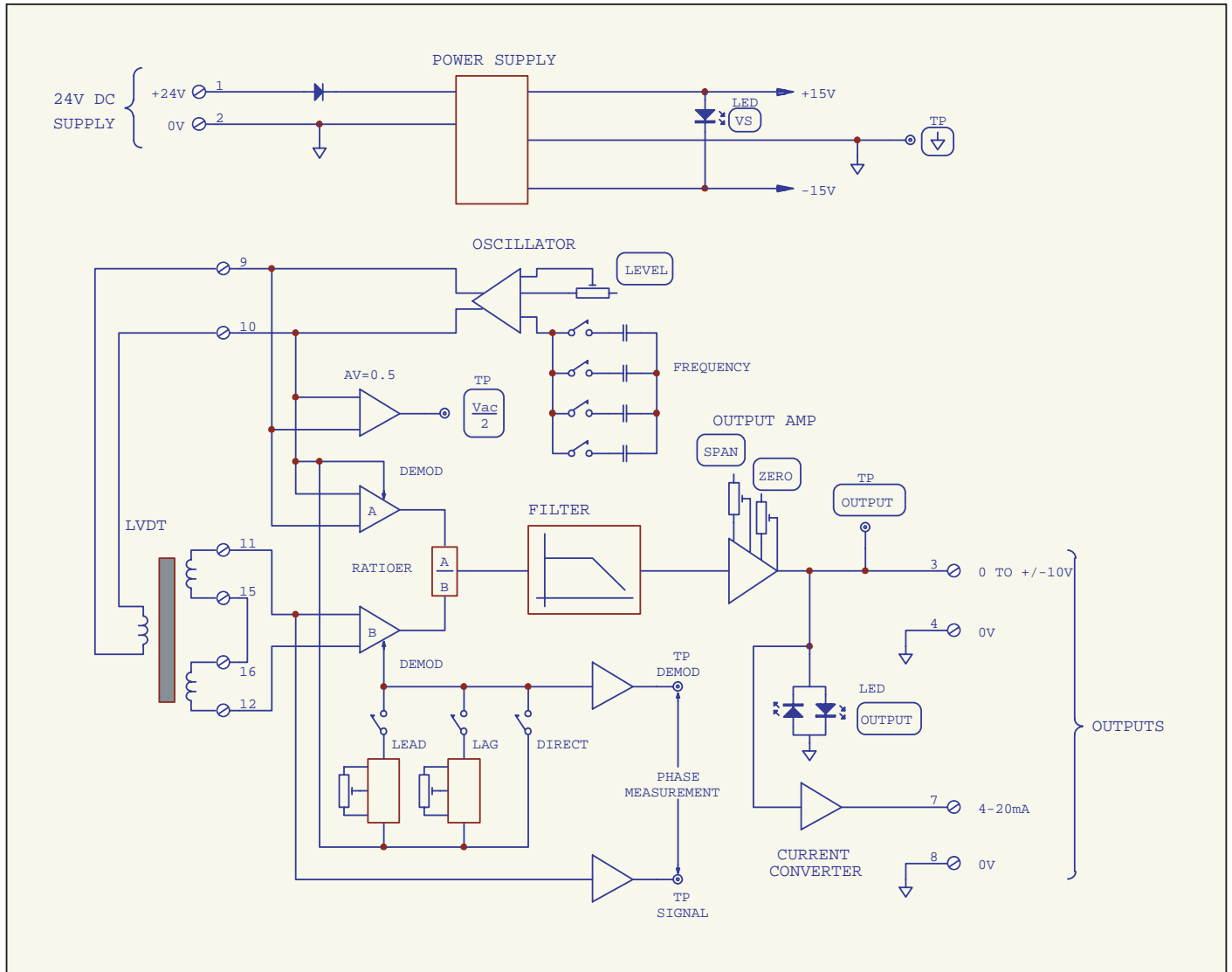
- Improved accuracy, repeatability, noise and ripple
- Output voltage and current
- High supply immunity and temperature stability
- Oscillator level and frequency adjust
- Output span and zero adjust
- Switch selectable secondary phase adjust
- Convenient front panel controls and indicators
- Compact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



### Specifications

<b>Outputs:</b>	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	<b>Supply:</b>	24V nominal, 22 to 28V 50mA @ 24V, no load
<b>Oscillator:</b>	2 to 3.5V RMS 1 to 10kHz 50mA RMS -50dB THD 200PPM/ $^{\circ}C$ frequency TC	<b>Mounting:</b>	DIN rail IP 20
<b>Front panel indicators:</b>	Output – positive = red negative = green Vs, internal supply = green	<b>Temperature:</b>	0 to +40 $^{\circ}C$
<b>Front panel test points:</b>	Output $\pm 10V$ Oscillator, half level Signal 0V	<b>Dimensions:</b>	100W x 108H x 22.5D
<b>Front panel trimpots:</b>	Output span Output zero Oscillator level	<b>Weight:</b>	120g
		<b>CE mark:</b>	EN50081.1 emission EN50082.2 immunity
		<b>C tick:</b>	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.

# MOOG

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