

# **LVDT Signal Conditioner**



#### **FEATURES**

- 2 individual measurement channels
- Transducer excitation: 2.5 3.2kHz
- Primary feed-back or sum feed-back
- Voltage output: 0 10 or ± 10V
- Current output: 4 20mA
- Power supply: 24VDC
- · Quick installation on DIN-rail
- · CE-marking, meets EMC

### **DESCRIPTION**

Signal conditioner LVD 3 is developed for accurate and rapid position measurements by means of LVDT transducers.

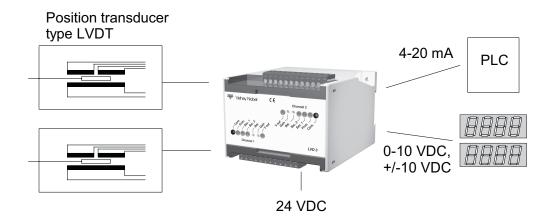
The module consists of two identical channels, electrically isolated from each other and from the power supply.

Each channel has an oscillator that supplies the transducer with AC excitation, inputs for the two position sensitive signals from the transducer and an adjustable signal amplifier with current and voltage output.

Calibration of LVD 3 and the connected LVDT transducers is easily performed by switches, potentiometers and test sockets on the module.

LVD 3 is mounted on a DIN rail or any flat surface. All electric connections to the module are made through one plug-in terminal block for each channel.

#### **APPLICATIONS**



## **Nobel Weighing Systems**

### LVDT Signal Conditioner



#### **SPECIFICATIONS**

**OSCILLATOR FOR PRIMARY COIL** 

Frequency Stability 2.5 - 3.2kHz Frequency Stability ± 1%

Distortion max. 4%

Voltage max. 6V AC, 150mA

Amplitude Stability ± 0.1%

INPUTS FOR SECONDARY COILS

Voltage max. 6.8V AC Impedance min. 150 kohm

SIGNAL CONVERSION

 $\begin{array}{ll} \text{Linearity} & \pm \ 0.05\% \\ \text{Offset Adjustment} & \pm \ 2 \ - \ \pm \ 7\% \\ & \text{of output range} \end{array}$ 

Offset Drift max. 2mV
Gain Ranges low: 2.1 - 5.8
(AC differential input to bipolar DC output)
Gain Drift max. 0.1%
Filter Bandwidth (-3dB)

max. 2mV
mid: 2mV
mid: 5.2 - 15
high: 14 - 39
max. 0.1%

**OUTPUTS** 

Current Load < 500ohm 4-20mA

Voltage Load > 6kohm

Bipolar ± 10V Monopolar 0 - 10V **POWER SUPPLY (Per Channel)** 

Supply Voltage 24V DC, ± 20% Fuse 200mA, slow Continuous Current <120mA Surge Current 250mA

**ENVIRONMENT** 

Temperature Range

Operation 0 - + 50°C Storage -25 - + 85°C

**MECHANICAL DATA** 

Width x Height x Depth 75 x 100 x 110mm

Test Sockets Ø2mm

Mounting Rail (35mm) DIN 46 277/3

**DIN EN 50022** 

Protection IP20 Article Number 110 171

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