

LDM-1000

LDM-1000 Schaevitz® Sensors introduces the new LDM-1000 LVDT conditioning module, for Industrial applications requiring the DIN standard rail mount, form factor.

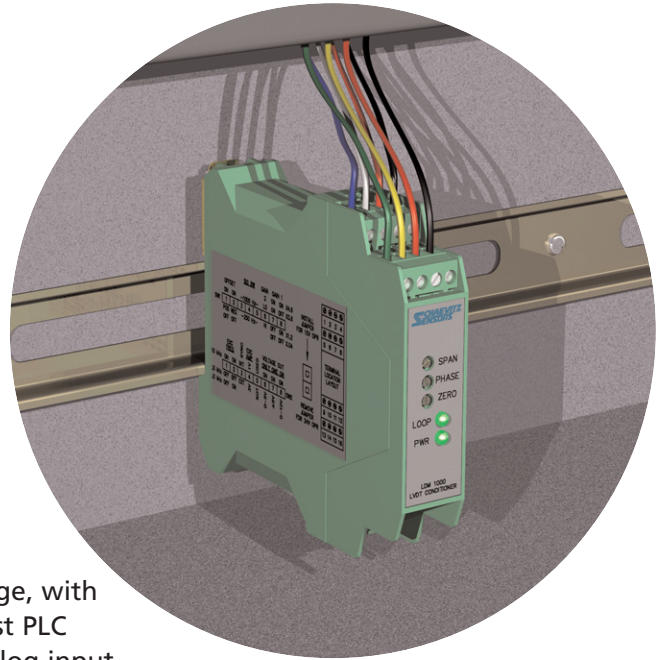
The New Schaevitz® LDM LVDT / RVDT conditioner provides everything you will need for interfacing AC powered linear and rotary differential transformers, to your industrial position control system.

The LDM-1000 is designed with maximum sensor / system compatibility in mind. A wide range combination of gains, drive voltages and oscillator frequencies insure compatibility with virtually all LVDT and RVDT type sensors.

The Schaevitz® LDM-1000 provides several different input / output options, to accommodate varying PLC analog I/O requirements.

Single-ended voltage outputs are possible, with the use of 100% zero suppression, to maximize the sensor stroke utilization while simplifying programming, (no need to deal with sign).

Bipolar voltage output will maximize A/D bit



usage, with most PLC analog input modules, for applications requiring highest resolution.

The 4-20 mA current output is most useful for applications requiring long signal runs to the PLC, where noise immunity may be an issue. The 4-20 loop is driven by an internal loop supply, provided by the LDM-110.

FEATURES

- ◆ Standard DIN Rail Form Factor
- ◆ 10 To 30 Volt DC Operation
- ◆ Voltage And Current Output Signals
- ◆ Internal Loop Drive
- ◆ Status LEDs For Power & Loop Integrity
- ◆ 2.5, 5.0 & 10.0 kHz Sensor Excitation
- ◆ Low Noise Three Pole Butterworth Filter
- ◆ Front Mounted Zero, Phase & Span, Controls
- ◆ 4-Wire Hook-Up
- ◆ Phase Correction, For Use With Long Cable Runs
- ◆ 100% Zero Suppression
- ◆ Multiple LVDT Master / Slave Capability
- ◆ Compatible With Four, Five or Six-Wire LVDTs

APPLICATIONS

- ◆ Gas and Steam Turbine Control Systems
- ◆ Paper Head Box Control
- ◆ Automotive Test Track Instrumentation
- ◆ Reeler / De-reeler Control Systems
- ◆ Bridge Deflection Testing
- ◆ Remote Monitoring Of Road
- ◆ Surface Expansion / Compression
- ◆ Industrial Conveyor Belt Tension

LDM-1000

specifications

Electrical Input:

Voltage	18 to 30 V dc. (default) 10 to 18 V dc. (jumper selectable)
Current Output:	60 mA. (max)
Voltage	± 5, 0 to 5 and 0 to 10 Volts dc
Noise and Ripple	5 mV rms.
Current	4 to 20 mA
Noise and Ripple	20 μ Amps
Frequency Response	3 dB down @ 250 or 1000 Hz

Sensor Excitation:

Volts ac.	1 & 3 Volts RMS
LVDT drive current	25 mA RMS (max.)
Oscillator Frequency	2.5, 5.0 & 10.0 kHz
Minimum LVDT Input Impedance	50 (at 1.0 V rms. excitation)

Accuracy:

Linearity (typical)	±0.02 % of full scale
Temperature Coefficient	<± .02% per deg. F. (fso), (<± .04% per deg. C)

Environmental:

Operating Temperature	-25° to +85° C
Survival Temperature	-55° to +125° C

Mechanical:

Form Factor	DIN rail 22.5 mm. wide 99.0 mm. high 114.5 mm. Deep
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Wire Size	24 to 12 AWG (0.2 to 2.5 mm)
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dimensions

in (mm)

