

LOOP-POWERED DISPLACEMENT TRANSMITTERS WITH EXCITATION WORKS WITH AC LVDT TRANSDUCERS

**LVDT Signal Conditioner
Loop Powered**

LDX-2



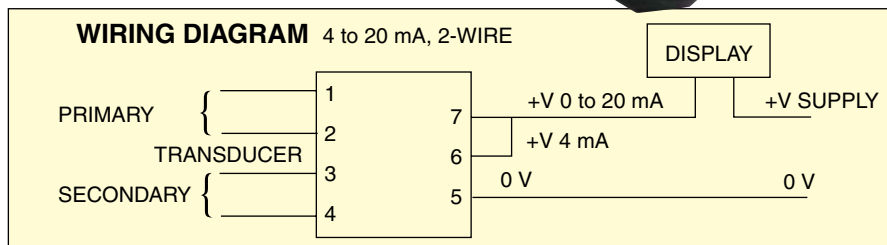
LDX-2, shown smaller than actual size.

- ✓ Wide Input Range of 30 to 530 mV/V
- ✓ Rugged Sealed Housing
- ✓ 2-Wire, 4 to 20 mA Signal for Remote Locations
- ✓ 0.02% of Reading Accuracy
- ✓ Powers AC LVDTs and Converts Signal to Standard 4 to 20 mA Signal

The LDX-2 linear displacement transmitter is a 2-wire, 4 to 20 mA conditioner for AC LVDT transducers. It is designed for use where long transmission distances are required before the signal can interface with a controller or meter. A feature of 2-wire operation is its low susceptibility to noise and cable resistance, ideal for industrial environments.

Two-wire operation enables both power and signal to use the same pair of wires. The position of the transducer is indicated by the amount of current, from 4 to 20 mA full scale. If a cable break occurs, zero current is indicated, thereby showing a fault.

The LDX-2 is housed in an ABS impact-resistant plastic case with 2 water-resistant ports for the transducer cable and supply cable. The box is sealed to NEMA 12 (IP65) standards and is supplied with mounting nuts for a DIN 46277-1 rail, or it can be bolted to any surface without affecting the seal.



SPECIFICATIONS ELECTRICAL

Power Supply: 13 to 48 Vdc, up to 30 mA

Supply Protection: Reverse polarity protected

Transducer Drive: 0.9 Vrms @ 5 kHz nominal, 13 kHz switchable

Oscillator Protection: Open and short circuit protected

Transducer Sensitivity Range: 30 to 530 mV/V in 2 coarse gain positions

Range of Gain Control: 3.5 to 1 switched, 5 to 1 adjustable

Range of Zero Control: Up to 100% on max gain

Output Current: 4 to 20 mA 2-wire or 0 to 20 mA 3-wire

Output Impedance: Effectively infinite

Output Protection: Open and short circuit protected

Output Ripple: <50 μ A p-p @ 10 kHz

Output Filter: Cutoff frequency -3 dB @ 25 Hz second-order linearity: <0.02%

Operating Temperature Range: 0 to 70°C (32 to 158°F)

Storage Temperature Range: -40 to 80°C (-40 to 176°F)

Temperature Coefficient:
Zero: Better than 0.01% FS/°C
Gain: Better than 0.01% FS/°C

Long-Term Stability:
Zero: 0.2%/year typical
Gain: 0.3%/year typical

Effect of Supply Change: Negligible

Terminations: Screw terminals; access through 2 cable ports for wires 1 to 5 mm (0.04 to 0.2") diameter

MECHANICAL

Weight: 220 g (7.7 oz)

Mounting: Through holes in base by 2 screws and nuts; can be mounted to DIN 46277-1 rail

Accessories: 2 fixing screws and nuts

Environment: Sealed to NEMA 12 (IP65)

Dimensions: 120.65 H x 80 W x 54.86 mm D (4.75 x 3.14 x 2.16")

To Order Visit omega.com/ldx-2 for Pricing and Details

MODEL NO.	DESCRIPTION
LDX-2	Loop-powered signal conditioner for AC LVDTs

Comes complete with operator's manual.

Ordering Example: LDX-2, loop-powered signal conditioner for AC LVDTs.