

Linear Variable Inductive Transducers for Position Sensing (Heavy-Duty)



0 to 10V Output with 12 to 30V Input
4 to 20 mA (3-Wire) Output with
18 to 30V Input

LDI-127 Series



LDI-127-150-A010A
shown smaller than
actual size.

The LDI-127 Series LVIT (Linear Variable Inductive Transducer) position sensors from TRODEX® are contactless devices designed for factory automation and a variety of industrial and commercial applications such as solar cell positioners, wind turbine prop pitch and brakes, chute or gate positions on off-road or agri-vehicles and packing equipment. The modular design, high end performance and excellent stroke-to-length ratio make the LDI-127 sensors ideal for in-plant or mobile equipment OEMs.

With their compact device, superior performance, and excellent stroke-to-length ratio, the LDI-127 sensors are ideal for both industrial testing, laboratories, and OEM applications.

LDI-127 sensors are offered in 5 full scale ranges from 25 to 200 mm (1 to 8"). Operating from a variety of DC voltages, these sensors offer a choice of outputs and all include the Field Programmability calibration feature. LDI-127 products come with radial exiting cable and two swivel rod eye ends for easy installation.

The LDI series also include a smaller body version, the LDI-119, for those applications not requiring a heavy-duty unit.

- ✓ **Heavy-Duty, Long Lasting, Contactless Device**
- ✓ **Excellent Stroke-to-Length Ratio**
- ✓ **27 mm (1.05") Diameter Anodized Aluminum Housing Sealed to IP67**
- ✓ **Wide Choice of Range: 25 to 200 mm (1 to 8") Full Scale**
- ✓ **High Accuracy with Low Linearity Error**
- ✓ **Radial Cable Exit with Swivel Rod Eye Ends**
- ✓ **Designed to Operate Under Adverse Temperature, Vibration, Shock, and Humidity Conditions**

Specifications

Analog I/Os:

0 to 10V output with 12 to 30V input, 35 mA max;
4 to 20 mA (3-wire) output with 18 to 30V input,
60 mA max 75°C (167°F max)

Measuring Range: 25 to 200 mm (1 to 8") full scale

Linearity Error: ±0.15% of Full Scale Output (FSO) typical, ±0.25% max

Resolution: 0.025% of FS

Update Rate: 300 Hz nominal

Operating Temperature: -20 to 85°C (-4 to 185°F)

Temperature Coefficient: 0.015% of FS/degree°C

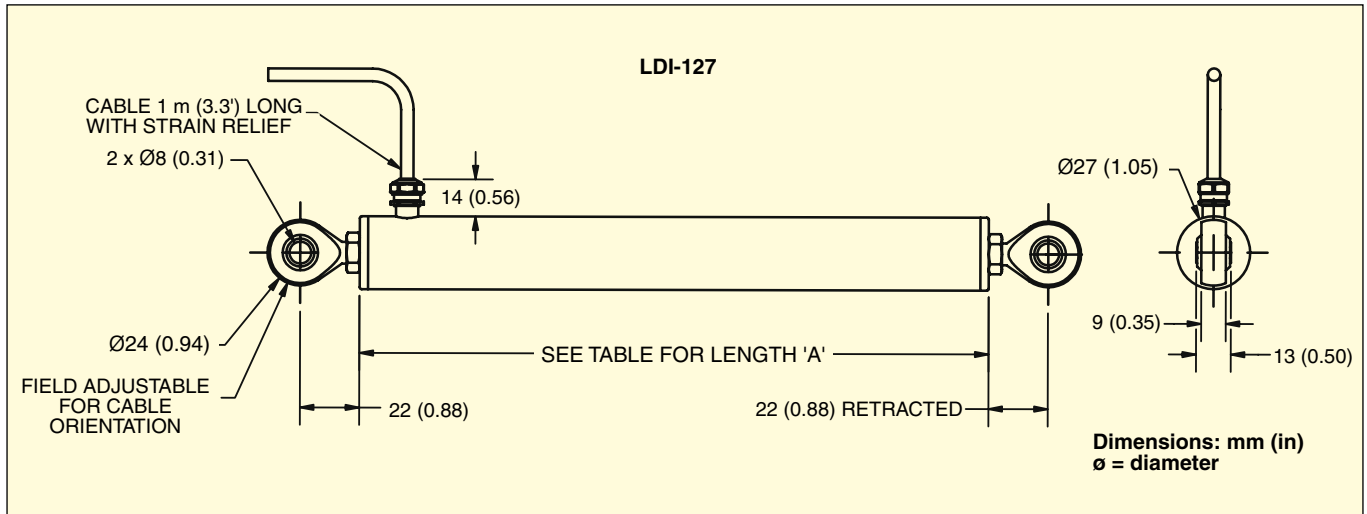
Vibration: 5 to 20 Hz, 0.5" p-p; 20 to 2000 Hz, 4.2 g p-p

Shock: 1000 g, 11 ms

Terminations: IEC IP67

Humidity: 95% RH, non-condensing

Housing Material: Aluminum



Wiring Table	
Function	Cable Code
+ Power Input	Red
Ground	Black
Analog Output	Green
Field Programmability	White

Unit Length Table, Dimensions: mm (in)	
Linear Range	Length "A"
25 (1)	102 (4)
50 (2)	127 (5)
100 (4)	178 (7)
150 (6)	229 (9)
200 (8)	279 (11)

To Order	
Model No.	Description
LDI-127-025-A010A	Linear sensor, 25 mm range, 27 mm housing, radial cable, rodeye ends, 0 to 10 Vdc output
LDI-127-050-A010A	Linear sensor, 50 mm range, 27 mm housing, radial cable, rodeye ends, 0 to 10 Vdc output
LDI-127-100-A010A	Linear sensor, 100 mm range, 27 mm housing, radial cable, rodeye ends, 0 to 10 Vdc output
LDI-127-150-A010A	Linear sensor, 150 mm range, 27 mm housing, radial cable, rodeye ends, 0 to 10 Vdc output
LDI-127-200-A010A	Linear sensor, 200 mm range, 27 mm housing, radial cable, rodeye ends, 0 to 10 Vdc output
LDI-127-025-A020A	Linear sensor, 25 mm range, 27 mm housing, radial cable, rodeye ends, 4 to 20 mA output
LDI-127-050-A020A	Linear sensor, 50 mm range, 27 mm housing, radial cable, rodeye ends, 4 to 20 mA output
LDI-127-100-A020A	Linear sensor, 100 mm range, 27 mm housing, radial cable, rodeye ends, 4 to 20 mA output
LDI-127-150-A020A	Linear sensor, 150 mm range, 27 mm housing, radial cable, rodeye ends, 4 to 20 mA output
LDI-127-200-A020A	Linear sensor, 200 mm range, 27 mm housing, radial cable, rodeye ends, 4 to 20 mA output

Ordering Examples: **LDI-127-100-A010A**, 100 mm range, 27 mm housing, radial cable, rodeye ends, 0 to 10 Vdc output, aluminum housing.
LDI-127-050-A020A, 50 mm range, 27 mm housing, radial cable, rodeye ends, 4 to 20 mA output, aluminum housing.