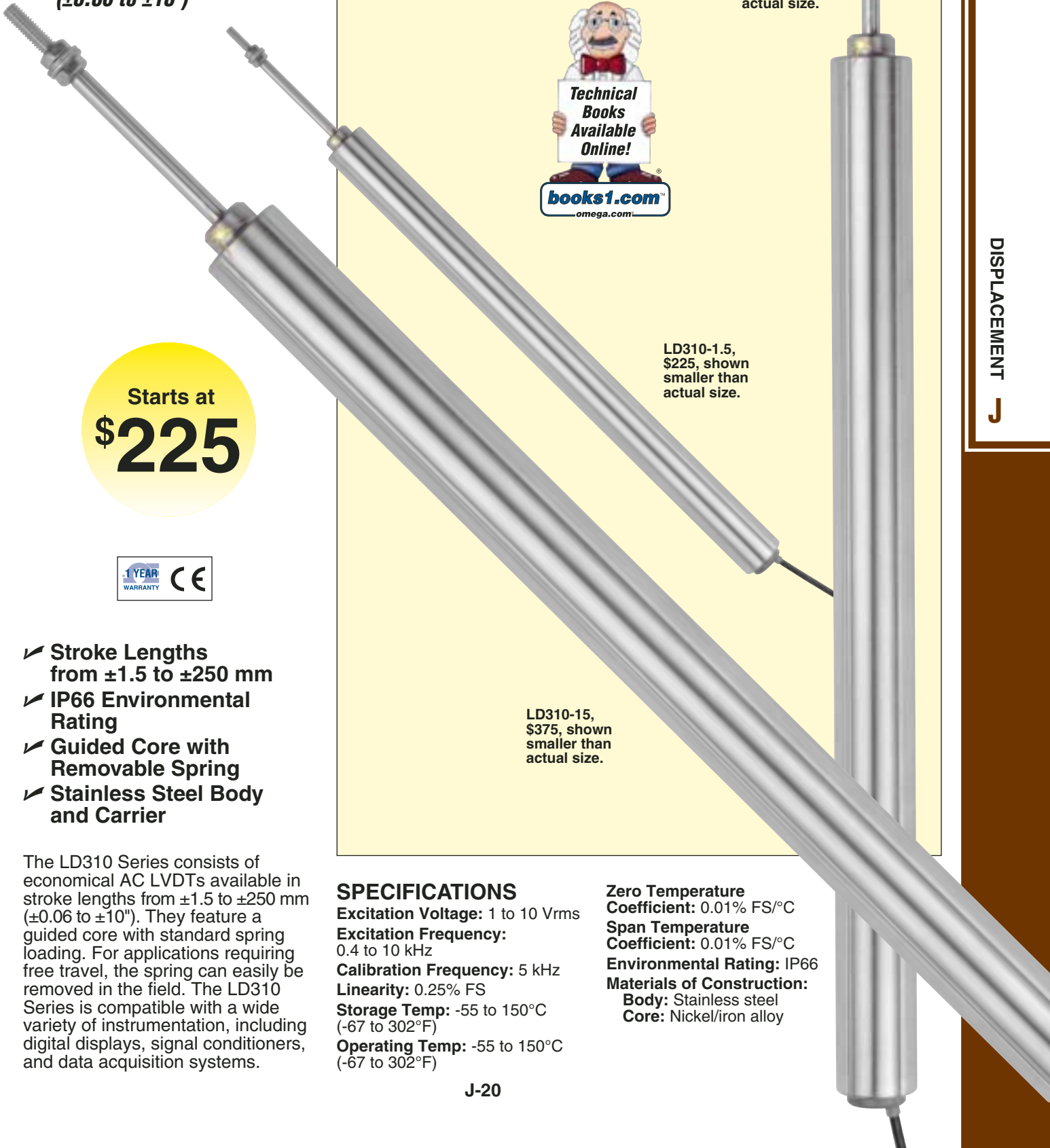


ECONOMICAL AC LVDTs

LD310 Series

± 1.5 to ± 250 mm
(± 0.06 to ± 10 ")



Starts at
\$225



- ✓ Stroke Lengths from ± 1.5 to ± 250 mm
- ✓ IP66 Environmental Rating
- ✓ Guided Core with Removable Spring
- ✓ Stainless Steel Body and Carrier

The LD310 Series consists of economical AC LVDTs available in stroke lengths from ± 1.5 to ± 250 mm (± 0.06 to ± 10 "). They feature a guided core with standard spring loading. For applications requiring free travel, the spring can easily be removed in the field. The LD310 Series is compatible with a wide variety of instrumentation, including digital displays, signal conditioners, and data acquisition systems.

SPECIFICATIONS

Excitation Voltage: 1 to 10 Vrms
Excitation Frequency: 0.4 to 10 kHz
Calibration Frequency: 5 kHz
Linearity: 0.25% FS
Storage Temp: -55 to 150°C (-67 to 302°F)
Operating Temp: -55 to 150°C (-67 to 302°F)

Zero Temperature Coefficient: 0.01% FS/°C
Span Temperature Coefficient: 0.01% FS/°C
Environmental Rating: IP66
Materials of Construction:
Body: Stainless steel
Core: Nickel/iron alloy

LD310-10,
\$350, shown
smaller than
actual size.

LD310-1.5,
\$225, shown
smaller than
actual size.

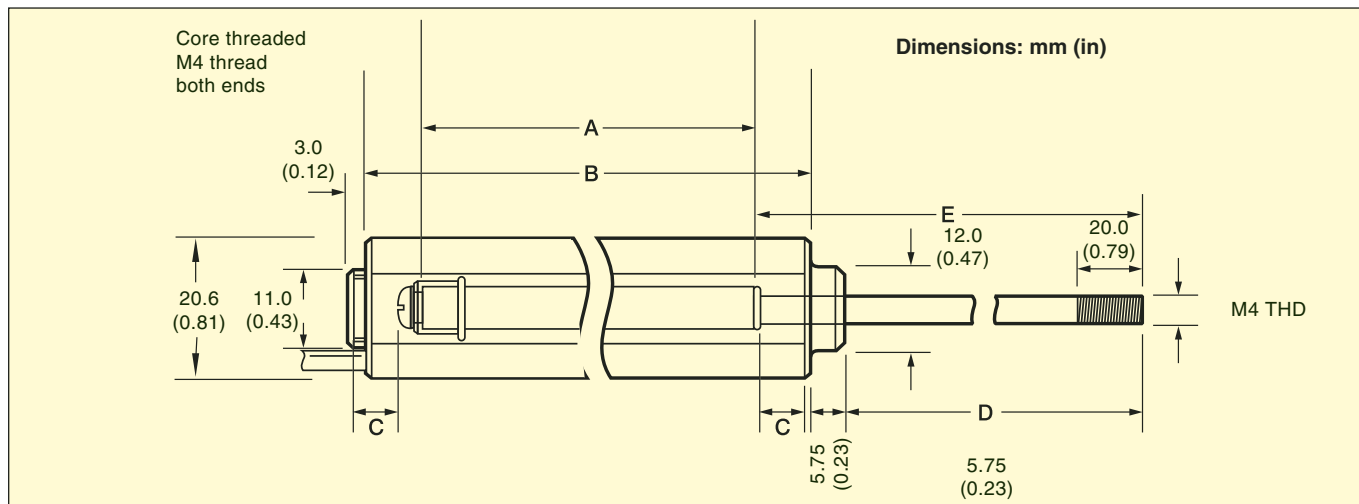
LD310-15,
\$375, shown
smaller than
actual size.

DISPLACEMENT

ECONOMICAL AC LVDTs

Dimensions: mm (in)

| RANGE (in.) | 1.5 | 2.5 | 5 | 10 | 15 | 25 | 50 | 100 | 250 |
|----------------------|----------------|----------------|----------------|-----------------|-----------------|-----------------|------------------|------------------|------------------|
| A | 20.3 (0.80) | 33.0 (1.14) | 42.0 (1.34) | 75.0 (2.95) | 88.0 (3.46) | 102.0 (4.02) | 135.0 (5.31) | 178.0 (7.01) | 216.0 (8.50) |
| B | 28.6 (1.13) | 46.3 (1.82) | 62.2 (2.45) | 112.5 (4.43) | 141.2 (5.56) | 169.9 (6.69) | 256.1 (10.08) | 399.7 (15.74) | 787.4 (31.0) |
| C | 3.3 (0.13) | 4.1 (0.24) | 7.5 (0.45) | 16.2 (0.64) | 24.0 (0.94) | 31.4 (1.24) | 58.0 (2.28) | 108.3 (4.26) | 283.0 (11.14) |
| D (@null) | 32.0 (1.26) | 35.5 (1.40) | 46.5 (1.83) | 59.5 (2.34) | 68.5 (2.70) | 82.5 (3.25) | 128.5 (5.06) | 209.5 (8.25) | 448.5 (17.66) |
| E | 42.0 (1.65) | 50.0 (1.97) | 66.0 (2.60) | 84.0 (3.31) | 100.0 (3.94) | 122.0 (4.80) | 195.0 (7.68) | 326.0 (12.83) | 740.0 (29.13) |
| Spring Rate gm/mm | 3.03 | 3.03 | 2.42 | 3.51 | 3.07 | 2.05 | 2.99 | 1.68 | N/A |



MOST POPULAR MODELS HIGHLIGHTED!

To Order (Specify Model Number)

| MODEL NO. | PRICE | RANGE: mm (in) | COMPATIBLE INSTRUMENTATION* |
|-----------|-------|----------------|-------------------------------|
| LD310-1.5 | \$225 | ±1.5 (±0.06) | LDX-100, LDX-2, LDX-3A, LDX-4 |
| LD310-2.5 | 250 | ±2.5 (±0.1) | LDX-100, LDX-2, LDX-3A, LDX-4 |
| LD310-5 | 295 | ±5 (±0.2) | LDX-100, LDX-2, LDX-3A, LDX-4 |
| LD310-10 | 350 | ±10 (±0.4) | LDX-100, LDX-2, LDX-3A, LDX-4 |
| LD310-15 | 375 | ±15 (±0.5) | LDX-100, LDX-2, LDX-3A, LDX-4 |
| LD310-25 | 415 | ±25 (±1) | LDX-100, LDX-2, LDX-3A, LDX-4 |
| LD310-50 | 440 | ±50 (±2) | LDX-100, LDX-2, LDX-3A, LDX-4 |
| LD310-100 | 630 | ±100 (±4) | LDX-100, LDX-2, LDX-3A, LDX-4 |

Comes with complete operator's manual.

* See pages J-31 through J-35 for compatible instruments.

Ordering Example: LD310-15, AC LVDT with ±15 mm (±0.5") stroke, \$375.

ACCESSORY

| MODEL NO. | PRICE | DESCRIPTION |
|-----------|-------|--|
| AV-1043 | \$150 | Reference Book: Dictionary of Scientific and Technical Terms |

SPECIFICATIONS BY RANGE

| DESCRIPTION | -1.5 | -2.5 | -5 | -10 | -15 | -25 | -50 | -100 |
|---------------------------------|---------------|--------------|------------|-------------|-------------|-----------|-----------|------------|
| Range Suffix | -1.5 | -2.5 | -5 | -10 | -15 | -25 | -50 | -100 |
| Linear Stroke ±mm (±in) | 1.5 (0.06) | 2.5 (0.1) | 5 (0.2) | 10 (0.4) | 15 (0.6) | 25 (1) | 50 (2) | 100 (4) |
| Transducer Weight (g) | 38 | 50 | 60 | 86 | 105 | 126 | 195 | 350 |
| Core Weight (g) | 3.8 | 6 | 7.5 | 15 | 17 | 20 | 26 | 35 |
| Sensitivity @ 5 kHz mV/V/mm | 158 | 154 | 108 | 27 | 16 | 10.8 | 8.2 | 3.0 |
| Output Impedance @ 5 kHz (Ω) | 1680 | 2870 | 3120 | 380 | 750 | 340 | 375 | 342 |



UNITED STATES

www.omega.com
1-800-TC-OMEGA
Stamford, CT.

CANADA

www.omega.ca
Laval(Quebec)
1-800-TC-OMEGA

GERMANY

www.omega.de
Deckenpfronn, Germany
0800-8266342

UNITED KINGDOM

www.omega.co.uk
Manchester, England
0800-488-488

FRANCE

www.omega.fr
Guyancourt, France
088-466-342

CZECH REPUBLIC

www.omegaeng.cz
Karviná, Czech Republic
596-311-899

BENELUX

www.omega.nl
Amstelveen, NL
0800-099-33-44



More than 100,000 Products Available!

• Temperature

Calibrators, Connectors, General Test and Measurement Instruments, Glass Bulb Thermometers, Handheld Instruments for Temperature Measurement, Ice Point References, Indicating Labels, Crayons, Cements and Lacquers, Infrared Temperature Measurement Instruments, Recorders Relative Humidity Measurement Instruments, RTD Probes, Elements and Assemblies, Temperature & Process Meters, Timers and Counters, Temperature and Process Controllers and Power Switching Devices, Thermistor Elements, Probes and Assemblies, Thermocouples Thermowells and Head and Well Assemblies, Transmitters, Wire

• Flow and Level

Air Velocity Indicators, Doppler Flowmeters, Level Measurement, Magnetic Flowmeters, Mass Flowmeters, Pitot Tubes, Pumps, Rotameters, Turbine and Paddle Wheel Flowmeters, Ultrasonic Flowmeters, Valves, Variable Area Flowmeters, Vortex Shedding Flowmeters

• pH and Conductivity

Conductivity Instrumentation, Dissolved Oxygen Instrumentation, Environmental Instrumentation, pH Electrodes and Instruments, Water and Soil Analysis Instrumentation

• Data Acquisition

Auto-Dialers and Alarm Monitoring Systems, Communication Products and Converters, Data Acquisition and Analysis Software, Data Loggers Plug-in Cards, Signal Conditioners, USB, RS232, RS485 and Parallel Port Data Acquisition Systems, Wireless Transmitters and Receivers

• Pressure, Strain and Force

Displacement Transducers, Dynamic Measurement Force Sensors, Instrumentation for Pressure and Strain Measurements, Load Cells, Pressure Gauges, Pressure Reference Section, Pressure Switches, Pressure Transducers, Proximity Transducers, Regulators, Strain Gages, Torque Transducers, Valves

• Heaters

Band Heaters, Cartridge Heaters, Circulation Heaters, Comfort Heaters, Controllers, Meters and Switching Devices, Flexible Heaters, General Test and Measurement Instruments, Heater Hook-up Wire, Heating Cable Systems, Immersion Heaters, Process Air and Duct, Heaters, Radiant Heaters, Strip Heaters, Tubular Heaters