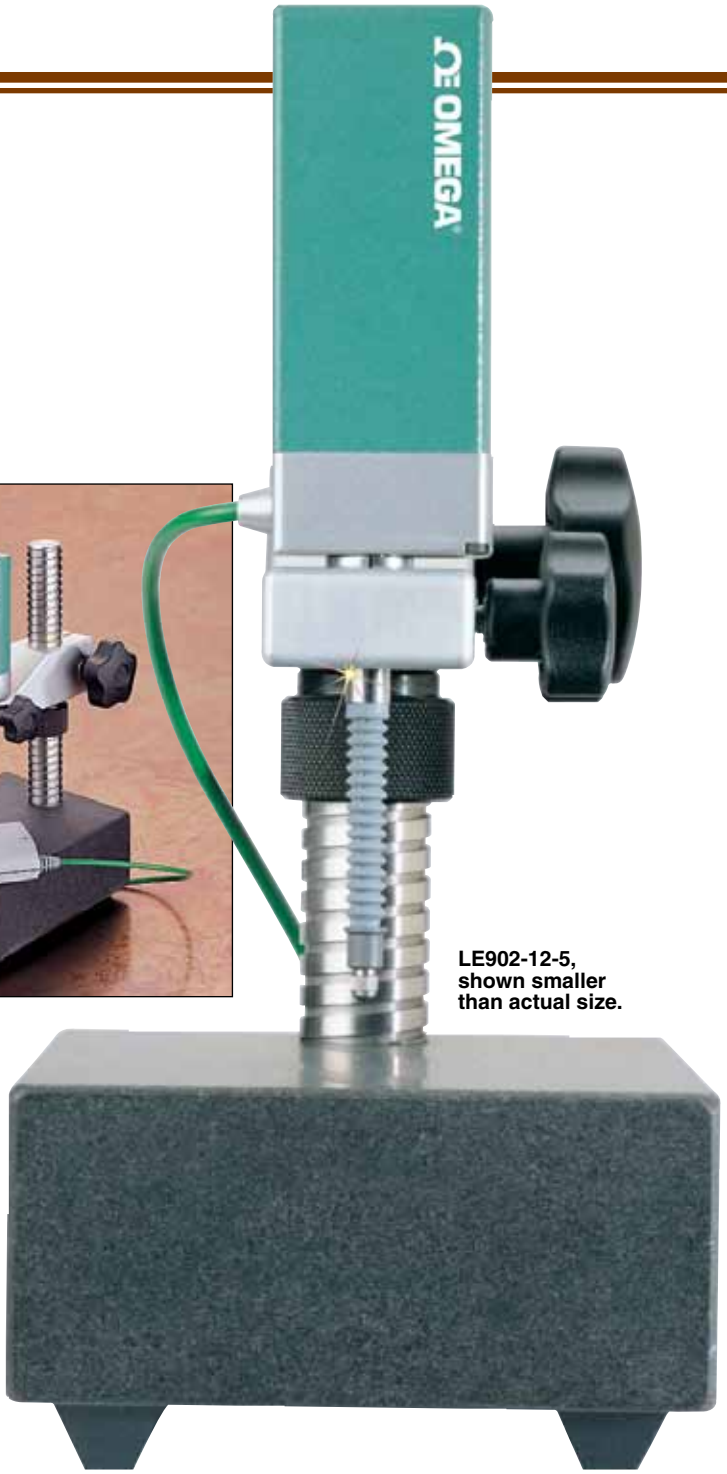
LINEAR ENCODERS
FOR DISPLACEMENT MEASUREMENT

DISCONTINUED

LE902 Series

- **Accuracy to 0.5 Microns (1.3 µin)**
- **0.05 Micron (0.13 µin) Resolution**
- **12, 25, 50, and 100 mm (1, 2, and 4") Stroke Lengths**
- **Spring-Loaded or Pneumatic Actuation**
- **-20 to 80°C (-4 to 176°F)**



LE902-12-5, shown smaller than actual size.

Linear encoders are compatible with DR601 meters.

OMEGA's LE902 Series linear encoders count pulses as a series of graduations move past a detector. These graduations are deposited on a low-temperature-coefficient glass (quartz glass) and counted by photodetectors. Because the glass is exceptionally stable, the pitch of the graduations does not change, resulting in long-term stability.

Signal conditioning is performed in an in-line electronics assembly that converts signals from the probe head to a digital format. This format can be plugged directly into a digital readout, computer, or PLC via an RS232 adaptor or the LDN101 network card.

SPECIFICATIONS

Reading Rate: 1000/s
Accuracy: ±0.5 µm (20 µin)
Resolution: ±0.5 µm (2 µin)
Gaging Speed: 0.5 mm/s (0.020 in/s)
Operating Temp, Probe: 0 to 80°C (32 to 176°F)
Electronics Assembly: 0 to 60°C (32 to 140°F)
Storage Temp, Probe: -20 to 80°C (-4 to 176°F)
Electronics Assembly: -20 to 60°C (-4 to 140°F)
Calibration Temperature: 20°C (68°F)
Environmental Rating: NEMA 12 (IP65)

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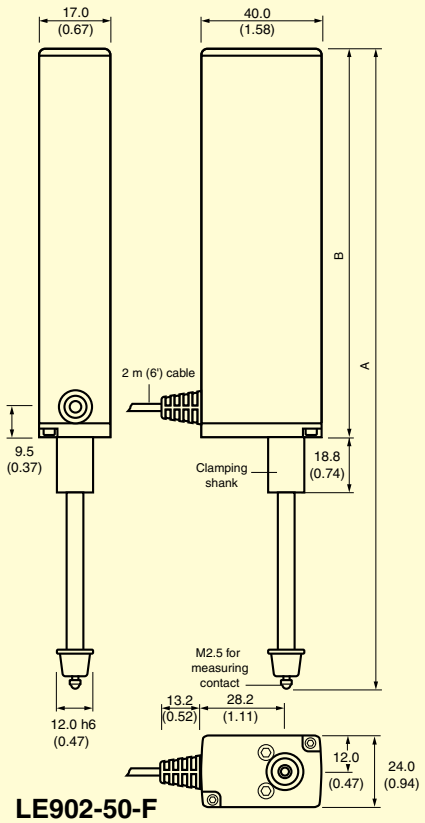
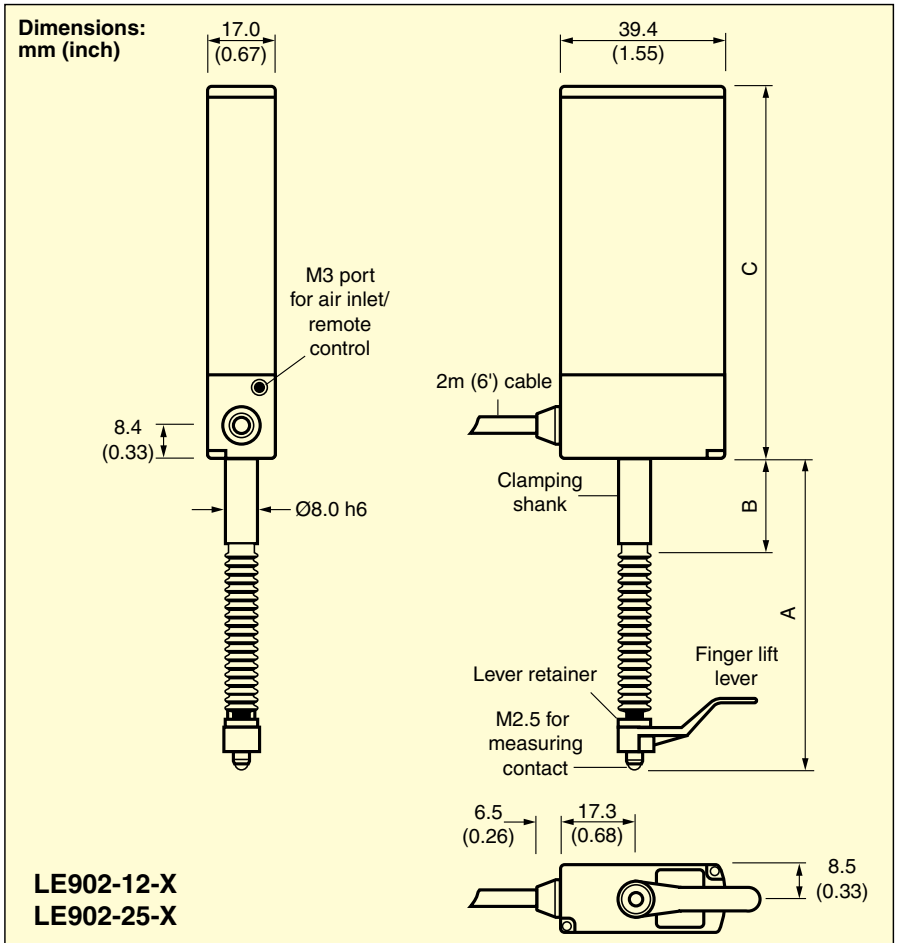
Dimensions: mm (inch)



LE902-50-F
LE902-100-F

Dimensions: mm (inch)

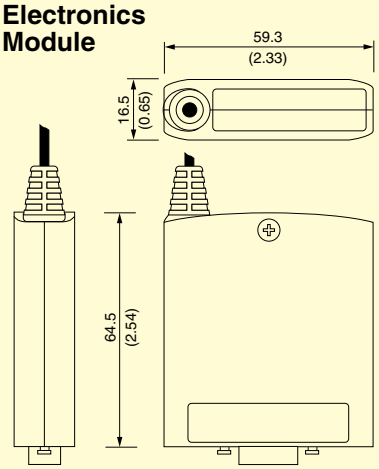


LE902-12-X
LE902-25-X

Dimensions: mm (inch)

MODEL NO.	A	B	C
LE902-12-S	51.0 (2.01)	22.4 (0.88)	66.0 (2.60)
LE902-25-S	76.5 (3.01)	34.9 (1.37)	92.0 (3.62)
LE902-12-P	56.5 (2.22)	22.4 (0.88)	66.0 (2.60)
LE902-25-P	69.5 (2.74)	34.9 (1.37)	92.0 (3.62)
LE902-50-F	100.4 (3.95)	154.0 (6.06)	N/A
LE902-100-F	150.4 (5.92)	204.5 (8.05)	N/A

Electronics Module



Dimensions: mm (inch)

To Order

MODEL NO.	RANGE: mm (inch)	ACTUATION
LE902-12-S	0 to 12.7 (0 to 1.5)	Spring loaded
LE902-25-S	0 to 25 (0 to 1.0)	Spring loaded
LE902-12-P	0 to 12.7 (0 to 1.5)	Pneumatic
LE902-25-P	0 to 25 (0 to 1.0)	Pneumatic
LE902-50-F	0 to 50 (0 to 2.0)	Free extension
LE902-100-F	0 to 100 (0 to 4.0)	Free extension

Comes with complete operator's manual.

***Ordering Example: LE902-25-S**, spring-loaded linear encoder with 25 mm (1.0") stroke.*