

# LINEAR ENCODERS FOR DISPLACEMENT MEASUREMENT

## LE902 Series

Starts at  
**\$1010**

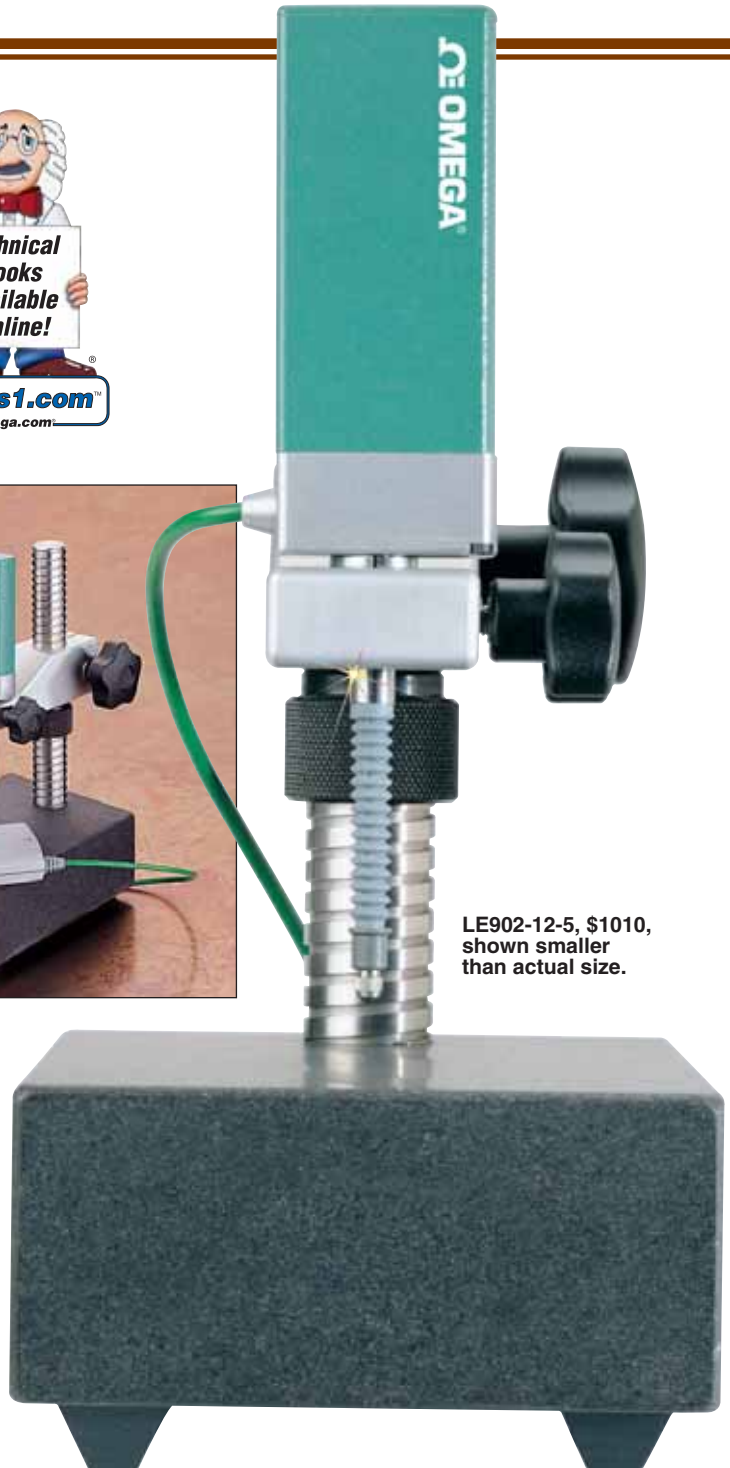


- ✓ Accuracy to 0.5 Microns (1.3  $\mu\text{m}$ )
- ✓ 0.05 Micron (0.13  $\mu\text{m}$ ) Resolution
- ✓ 12, 25, 50, and 100 mm (1, 2, and 4") Stroke Lengths
- ✓ Spring-Loaded or Pneumatic Actuation
- ✓ -20 to 80°C (-4 to 176°F)

Linear encoders are compatible with DR601 meters. See page J-12.



LE902-12-5, \$1010, shown smaller than actual size.



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:**  $\pm 0.5 \mu\text{m}$  (20  $\mu\text{in}$ )  
**Resolution:**  $\pm 0.5 \mu\text{m}$  (2  $\mu\text{in}$ )  
**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)

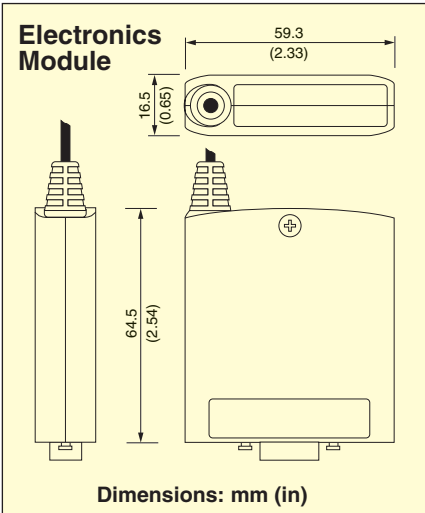
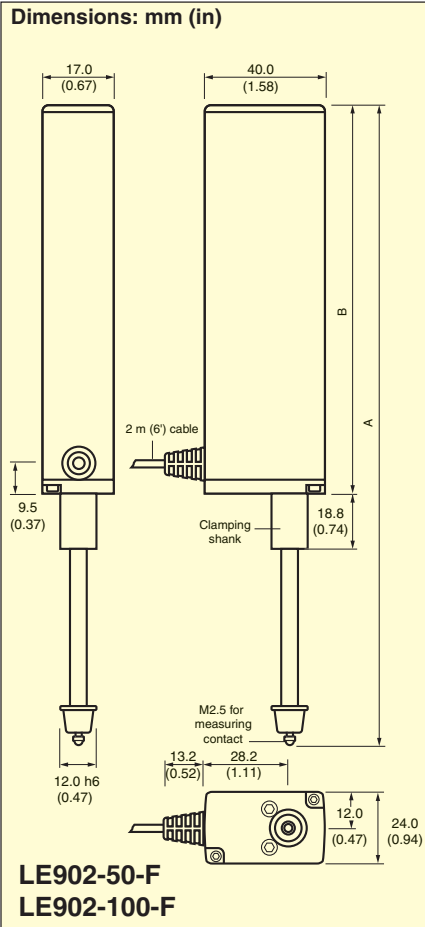
**Storage Temp, Probe:** -20 to 80°C (-4 to 176°F)

**Electronics Assembly:** -20 to 60°C (-4 to 140°F)

**Calibration Temperature:** 20°C (68°F)

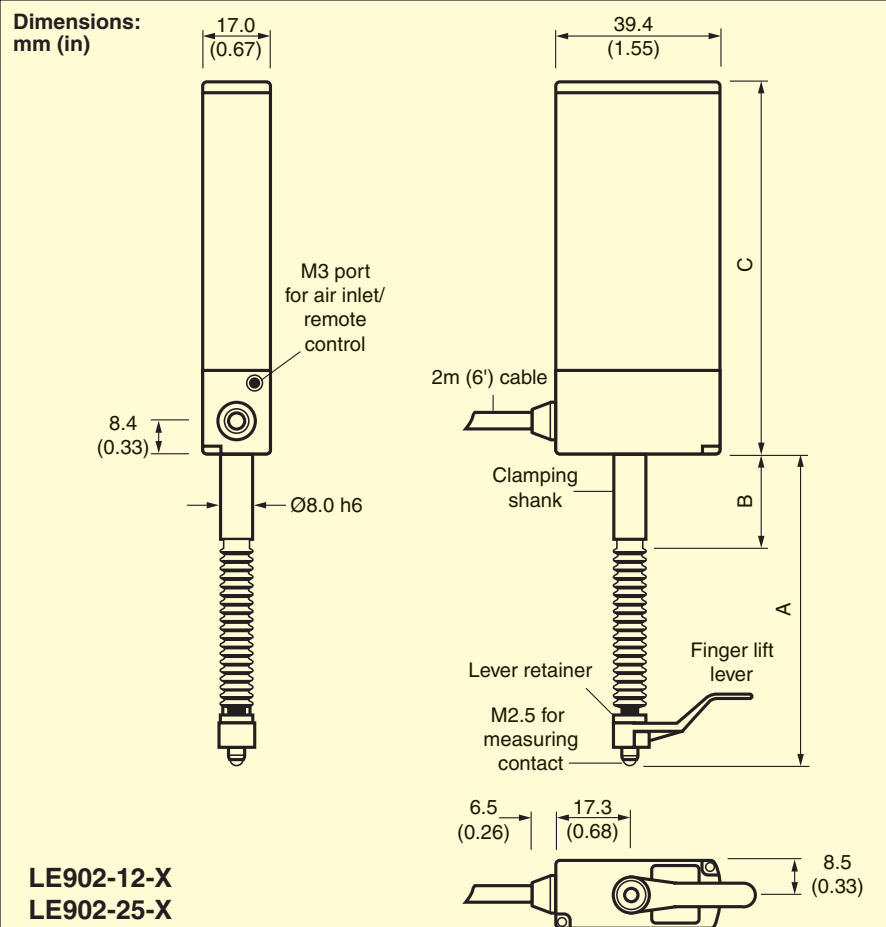
**Environmental Rating:** NEMA 12 (IP65)

# LINEAR ENCODERS



## ACCESSORY

MODEL NO.	PRICE	DESCRIPTION
CE-1911	\$175	Reference Book: Circular Storage Tanks and Silos



## Dimensions: mm (in)

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

**MOST POPULAR MODELS HIGHLIGHTED!**

## To Order (Specify Model Number)

MODEL NO.	PRICE	RANGE: mm (in)	ACTUATION
LE902-12-S	\$1010	0 to 12.7 (0 to 1.5)	Spring loaded
LE902-25-S	1280	0 to 25 (0 to 1.0)	Spring loaded
LE902-12-P	1100	0 to 12.7 (0 to 1.5)	Pneumatic
LE902-25-P	1370	0 to 25 (0 to 1.0)	Pneumatic
LE902-50-F	2150	0 to 50 (0 to 2.0)	Free extension
LE902-100-F	3100	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, \$1280.

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