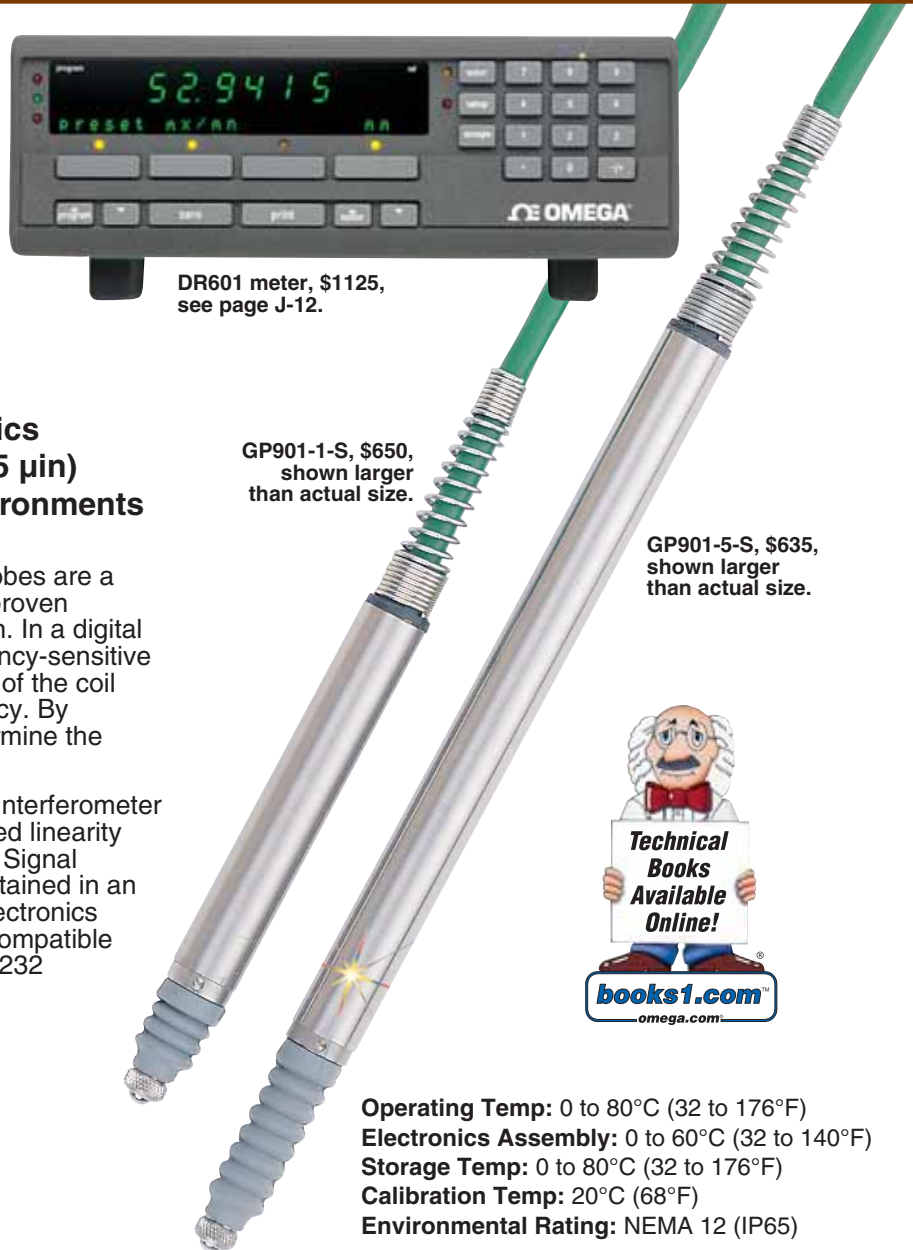


DIGITAL GAGING PROBES FOR LINEAR DISPLACEMENT MEASUREMENT

GP901 Series

Starts at
\$610



DR601 meter, \$1125,
see page J-12.

GP901-1-S, \$650,
shown larger
than actual size.

GP901-5-S, \$635,
shown larger
than actual size.

- ✓ Absolute Measurement
- ✓ Integrated Probe and Electronics
- ✓ Resolution to 0.06 Microns (1.5 μ m)
- ✓ Rugged Design for Harsh Environments

OMEGA's GP901 Series digital gaging probes are a refinement of the LVDT, making use of a proven mechanical design and robust construction. In a digital gage probe, the coil forms part of a frequency-sensitive circuit. As the core moves, the inductance of the coil changes, causing a change in the frequency. By comparing frequencies, the user can determine the movement of the core.

Each digital probe is calibrated on a laser interferometer in a controlled environment, giving improved linearity over the full stroke compared with LVDTs. Signal conditioning and an A/D converter are contained in an in-line probe electronics assembly. The electronics assembly provides a digital signal that is compatible with the DR601 display or the LDN232 RS232 adaptor featured on the following pages.

SPECIFICATIONS

Accuracy:

GP901-1-X: ± 0.24 microns $\pm K \times 1.0$ micron

GP901-2-X: ± 0.24 microns $\pm K \times 1.0$ micron

GP901-5-X: ± 0.64 microns $\pm K \times 2.0$ micron

GP901-10-X: ± 1.20 microns $\pm K \times 2.0$ micron

(K = the difference between component range and setting master)

Operating Temp: 0 to 80°C (32 to 176°F)

Electronics Assembly: 0 to 60°C (32 to 140°F)

Storage Temp: 0 to 80°C (32 to 176°F)

Calibration Temp: 20°C (68°F)

Environmental Rating: NEMA 12 (IP65)



MOST POPULAR MODELS HIGHLIGHTED!

To Order (Specify Model Number)

MODEL NO.	PRICE	RANGE: mm (in)	ACTUATION	COMPATIBLE INSTRUMENTS*
GP901-1-S	\$650	0 to 1 (0 to 0.04)	Spring loaded	DR601, LDN232
GP901-2-S	610	0 to 2 (0 to 0.08)	Spring loaded	DR601, LDN232
GP901-5-S	635	0 to 5 (0 to 0.2)	Spring loaded	DR601, LDN232
GP901-10-S	660	0 to 10 (0 to 0.4)	Spring loaded	DR601, LDN232
GP901-2-P	660	0 to 2 (0 to 0.08)	Pneumatic	DR601, LDN232
GP901-5-P	700	0 to 5 (0 to 0.2)	Pneumatic	DR601, LDN232
GP901-10-P	745	0 to 10 (0 to 0.4)	Pneumatic	DR601, LDN232

Comes with complete operator's manual.

*Search omega.com for compatible meters.

Ordering Example: GP901-10-S, spring-loaded digital gaging probe, 0 to 10 mm (0 to 0.04") range, \$660.

DIGITAL GAGING PROBES

SPRING ACTUATED Dimensions: mm (in)

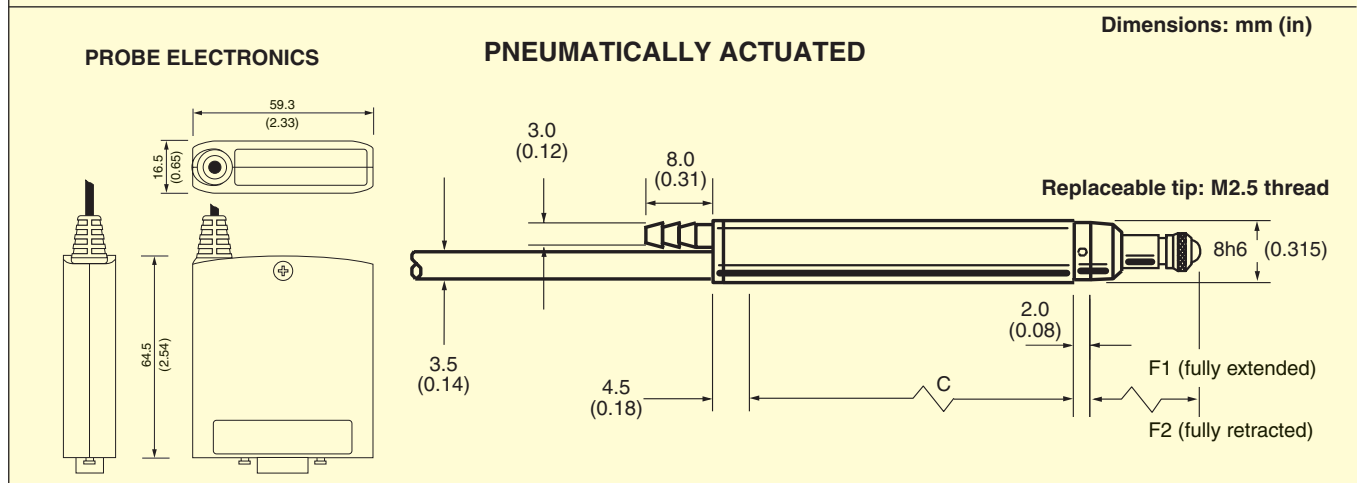
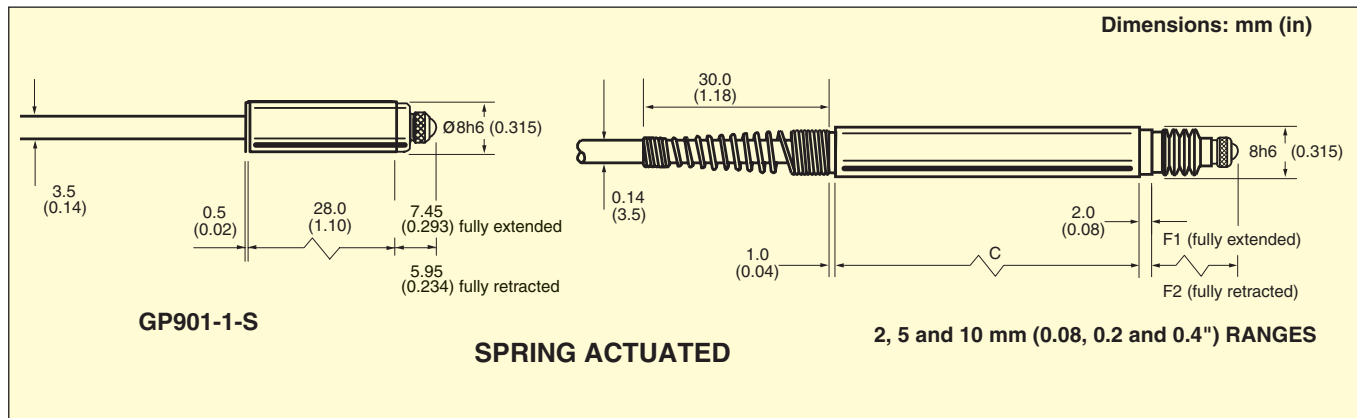
MODEL	GP901-1-S	GP901-2.5-S	GP901-5-S
C	46.00 (1.81)	65.00 (2.56)	89.00 (3.50)
F1	13.90 (0.55)	17.40 (0.69)	25.40 (1.00)
F2	10.90 (0.43)	11.40 (0.45)	14.40 (0.57)

PNEUMATICALLY ACTUATED Dimensions: mm (in)

MODEL	GP901-1-P	GP901-2.5-P	GP901-5-P
C	52.00 (2.05)	71.00 (2.80)	96.00 (3.78)
F1	13.90 (0.55)	17.40 (0.69)	25.4 (1.0)
F2	10.90 (0.43)	11.40 (0.45)	14.40 (0.57)

GP901-1-S, \$650, shown close to actual size.

GP901-5-S, \$635, shown close to actual size.



SPECIFICATION BY RANGE

DESCRIPTION	SPRING ACTUATED				PNEUMATIC		
	1 (0.04)	2 (0.08)	5 (0.20)	10 (0.4)	2 (0.08)	5 (0.2)	10 (0.4)
Calibrated stroke mm (in)	1 (0.04)	2 (0.08)	5 (0.20)	10 (0.4)	2 (0.08)	5 (0.2)	10 (0.4)
Total travel mm (in)	1.5 (0.6)	3 (0.12)	6 (0.24)	11 (0.43)	3 (0.32)	6 (0.24)	11 (0.43)
Resolution (micron)	0.06	0.12	0.32	0.64	0.12	0.32	0.64
Temp coef. (0 to 60°C) ppm/°C	100	80	100	150	80	100	150
Tip pressure: g (oz)	70 (2.5)	70 (2.5)	70 (2.5)	70 (2.5)	80 (2.8)	80 (2.8)	70 (2.5)

COMPATIBLE INSTRUMENTS

MODEL NO.	DESCRIPTION	PAGE
DR601	Digital readout	J-12
LDN232	RS232 adaptor	J-11

ACCESSORY

MODEL NO.	PRICE	DESCRIPTION
EE-2560	\$125	Reference Book: Analog Signal Processing



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• 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

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