

The UNIVO GA Series gage head sensors are spring-loaded AC LVDTs with excellent linearity, high sensitivity and infinite resolution. Construction consists of stainless steel probe assembly and 3/4 inch diameter hermetically sealed housing. Designed for a wide range of position measurement and dimensional gaging applications, they are available in ranges of ± 0.50 inch (1.27mm) to ± 2 inches (50mm). The GA Series windings are potted inside its housing with a 2 component epoxy, providing excellent protection against hostile environments.

Features

- Spring loaded probe
- Welded 3/4 inch hermetically sealed steel housing
- Measurement ranges from ± 0.05 to ± 2 inches
- Linearity $\pm 0.15\%$ of Full Range Typical
- Shock and vibration tolerant
- Wide operating temperature range (-65°F to 275°F)
- Choice of probe contact tips
- Standard and custom models available

Applications

- Dimensional gaging
- Factory automation
- Materials testing
- Packaging equipment
- Automotive testing

Electrical Specifications

Input Voltage:	3 Vrms (Nominal)
Input Frequency:	400Hz to 10KHz
Linearity:	$< \pm 0.15\%$ Full Range Typical
Null Voltage:	0.5% Full Range
Hysteresis:	$< 0.01\%$ of Full Range Typical
Repeatability:	$< 0.01\%$ of Full Range Typical



Environmental Specifications

Operating Temperature:	-65°F to 275°F (-55°C to 135°C)
Thermal Coefficient:	$< -0.01\%/^{\circ}\text{F}$ ($< -0.02\%/^{\circ}\text{C}$)
Humidity:	90% R.H., 240 Hours
Shock Survival:	1000 g, 11 ms
Vibration:	20 g to 2 KHz

Materials Specifications

Housing:	Corrosion-resistant nickel-iron alloy
Core:	Hi-permeability nickel-iron alloy
Magnet Wire:	Film insulated copper
Connector:	PT02A-10-6P
Probe:	AGD #9 contact tip

**Univo Sensor Solution, LLC**

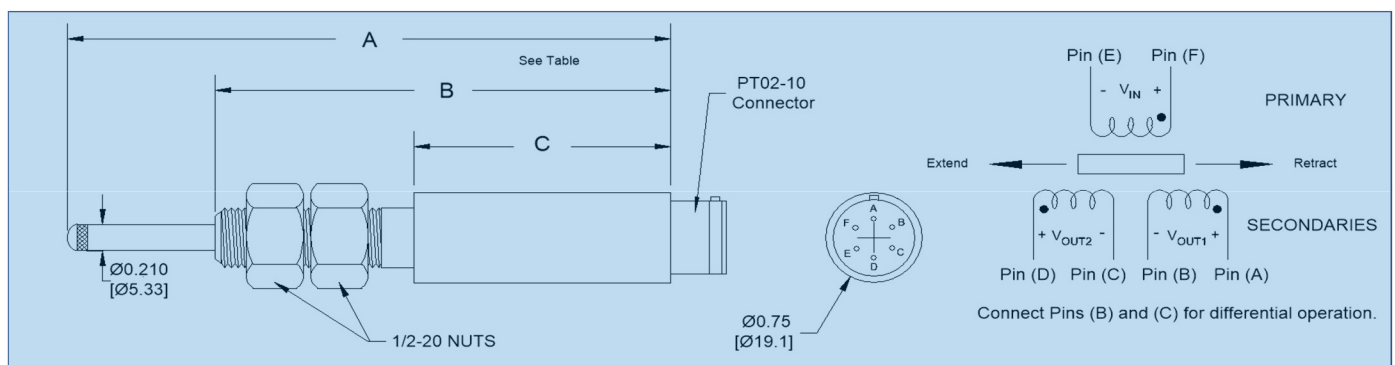
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Specifications

Model	UGA-750 050	UGA-750 125	UGA-750 250	UGA-750 500	UGA-750 1000	UGA-750 2000
Parameter						
Nominal Range (Inches)	± 1.27	± 0.125	± 0.25	± 0.5	± 1	± 2
Nominal Range (mm)	± 1.27	± 3.0	± 6.3	± 12.5	± 25.0	± 50.0
Sensitivity (mV/V/.001 Inch)	6.3	4.0	2.75	0.70	0.65	0.40
Sensitivity (mV/V/mm)	248	158	108	28	26	16
Primary Impedance (Ω)	330	740	1410	1210	1300	2200
Dimension "A" (inches)	4.62	5.30	6.00	11.00	13.00	21.00
Dimension "B" (inches)	3.50	4.20	5.00	9.00	10.45	16.45
Dimension "C" (inches)	2.00	2.65	3.38	5.85	7.38	10.80
Body Weight (ounces)	2.7	3.3	3.6	5.6	7.0	11.0
Body Weight (grams)	77	94	102	159	198	312

Dimensions and Wiring



Ordering Info

UGA-750 Gage Head AC LVDT	XXX Range (See Table)	XXX Options Consult factory
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Notes

- Electrical specifications measured at 3KHz excitation frequency.
- Additional options available (alternate contact tips, high temperature, mild radiation tolerant etc.). Please consult factory for custom designs.
- Specifications subject to change.

Warranty

UNIVO products are warrantied against defective materials and workmanship for a period of one year from the date of delivery to the original purchaser. UNIVO accepts no liability for damages in the misuse of our products.



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