

Applications

Dimensional gaging

Materials testing

Factory automation

Packaging equipment

Automotive testing

The NewTek GAR Series gage head sensors are spring-loaded AC LVDTs with excellent linearity, high sensitivity and infinite resolution. Construction consists of a stainless steel probe assembly and $\frac{3}{4}$ inch diameter hermetically sealed housing. Electrical connection is made through a radially mounted connector, resulting in a reduced housing length. 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 GAR Series windings are potted inside its housing with a 2 component epoxy, providing excellent protection against hostile environments.

Features

- Spring loaded probe
- Radially mounted connector
- Welded 3/4 inch hermetically sealed steel housing
- Measurement ranges from ± 0.05 to ± 2 inches
- Linearity ±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

Electrical Specifications

Input Voltage:3 Vrms (Nominal)Input Frequency:400Hz to 10KHzLinearity:< ± 0.15% Full Range Typical</td>Null Voltage:0.5% Full RangeHysteresis:<0.01% of Full Range Typical</td>Repeatability:<0.01% of Full Range Typical</td>

NEWTEK SENSOR

Environmental Specifications

Operating Temperature:-65°F to 275°F (-55∘C to 135∘C)Thermal Coefficient:<-0.01%/∘F (<-0.02%/∘C) of Full Range</th>Humidity:90% R.H., 240 HoursShock Survival:1000 g, 11 msVibration:20 g to 2 KHz

Materials Specifications

Housing:Corrosion-resistant nickel-iron alloyCore:Hi-permeability nickel-iron alloyMagnet Wire:Film insulated copperConnector:PT02A-10-6PProbe:AGD #9 contact tip

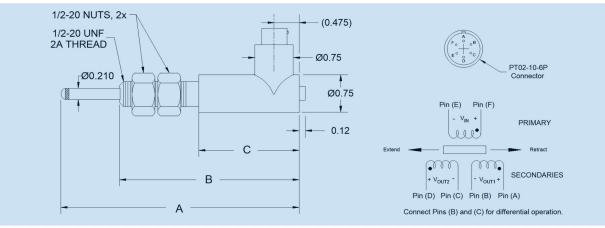
NewTek Sensor Solutions, LLC 7300 US Route 130 North, Bld # 7 Pennsauken, NJ 08110-1541 USA Tel: (856) 406-6877 Fax: (856) 406-6578 www.newteksensors.com



Specifications

Model	NT-GAR-750-	NT-GAR-750-	NT-GAR-750-	NT-GAR-750-	NT-GAR-750-	NT-GAR-750-
Parameter	050	125	250	500	1000	2000
Nominal Range (Inches)	± 0.05	± 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



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

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



NewTek Sensor Solutions, LLC 7300 US Route 130 North, Bld # 7 Pennsauken, NJ 08110-1541 USA Tel: (856) 406-6877 Fax: (856) 406-6578 www.newteksensors.com