

The NewTek GI Series Gage Head LVDTs are designed for a loop-powered 4-20 mA circuit, and have excellent linearity, high sensitivity and high resolution. They permit highly accurate readout and recording of an output signal directly without auxiliary signal conditioning electronics. These GI Series spring-loaded LVDTs are designed for a wide range of position measurement and dimensional gaging applications and available in ranges of 0.10 inch (2.5mm) to 4 inches (100mm).

Features

- Spring loaded probe
- Welded 3/4 inch hermetically sealed steel housing
- Measurement ranges from 0.10 to 4 inches
- Linearity $\pm 0.15\%$ of Full Range Typical
- Available in Air Extend Option
- Choice of probe contact tips
- Standard and custom models available
- Cable runs can be hundreds of feet

Electrical Specifications

Input Power: 11-28 VDC (24 VDC nom.)

Full Scale Output: 4 - 20 mA

Linearity: $< \pm 0.15\%$ Full Range Typical

Hysteresis: $< 0.01\%$ of Full Range Typical

Repeatability: $< 0.01\%$ of Full Range Typical

Applications

- Pinch and roller alignment
- Dimensional gaging
- Factory automation
- Materials testing
- Packaging equipment
- TIR measurements



Environmental Specifications

Operating Temperature: 0°F to 185°F (-20°C to 85°C)

Thermal Coefficient: $< -0.014\%/^{\circ}\text{F}$ ($< -0.025\%/^{\circ}\text{C}$) of Full Range

Humidity: 90% R.H., 240 Hours

Shock Survival: 100 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

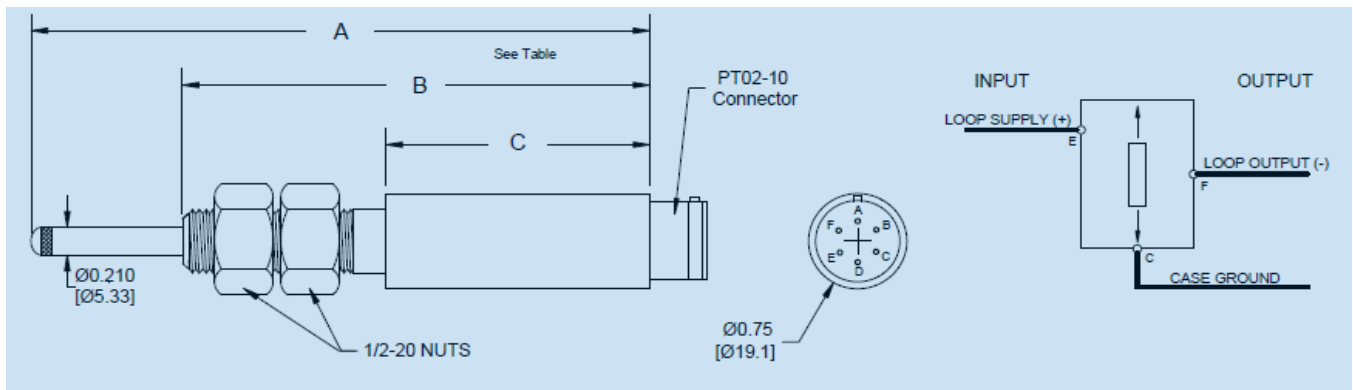
Connector: PT02A-10-6P

Probe: AGD #9 contact tip

Specifications

Model	NT-GI-750-100	NT-GI-750-250	NT-GI-750-500	NT-GI-750-1000	NT-GI-750-2000	NT-GI-750-4000
Parameter						
Nominal Range (inches)	0.10	0.25	0.50	1.0	2.0	4.0
Nominal Range (mm)	2.5	6.3	12.5	25.0	50.0	100.0
Scale Factor (mA/inch)	160	64	32	16	8.0	4.0
Scale Factor (mA/mm)	6.3	2.6	1.3	0.6	0.3	0.2
Dimension " A " (inches)	5.45	6.05	6.85	11.35	13.80	21.75
Dimension " B " (inches)	4.35	5.00	5.70	9.85	11.35	17.19
Dimension " C " (inches)	2.80	3.45	4.15	6.75	8.15	11.71
Body Weight (ounces)	3.0	3.5	4.1	6.5	6.9	10.5
Body Weight (grams)	83	101	171	182	298	296

Dimensions and Wiring



Ordering Info

GI - 750 - XXX - X

Measuring Range

Options

M - Calibration in millimeters

Notes:

- Electrical specifications measured 24 VDC power supply.
- Additional options and alternate contact tips are available. Please consult factory for custom designs.
- Specifications subject to change.

Warranty

NewTek products are warranted 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.

