

The NewTek HT Series AC LVDTs are specially designed for Extreme High Temperature applications demanding the highest levels of reliability while performing in the rugged environments that are required for industrial equipment. These transducers are constructed of special high temperature materials, allowing them to operate up to 1000°F (538°C). The HT Series provide a ratiometric output, allowing their secondary difference voltages to be divided by their sum. This cancels thermal error, providing extremely low thermal sensitivity over a wide temperature range. These HT Series are available from ± 0.500 inch (± 12.7 mm) to ± 1.0 inch (±25.4 mm) and offer high sensitivity, high resolution and excellent linearity.

Features

- 1000°F operating temperature
- 1 inch diameter stainless steel housing
- Ratiometric output for reduced thermal error
- Linearity ±0.5% of Full Range Typical
- Through-bore design
- Choice of imperial or metric threaded core
- Standard and custom models available

Applications

- Power Generation
- Engine Control System
- Furnace
- Autoclave

Mechanical and Electrical Specifications

Nominal Range (Inches) ± 1.0
Nominal Range (mm) ± 25.4

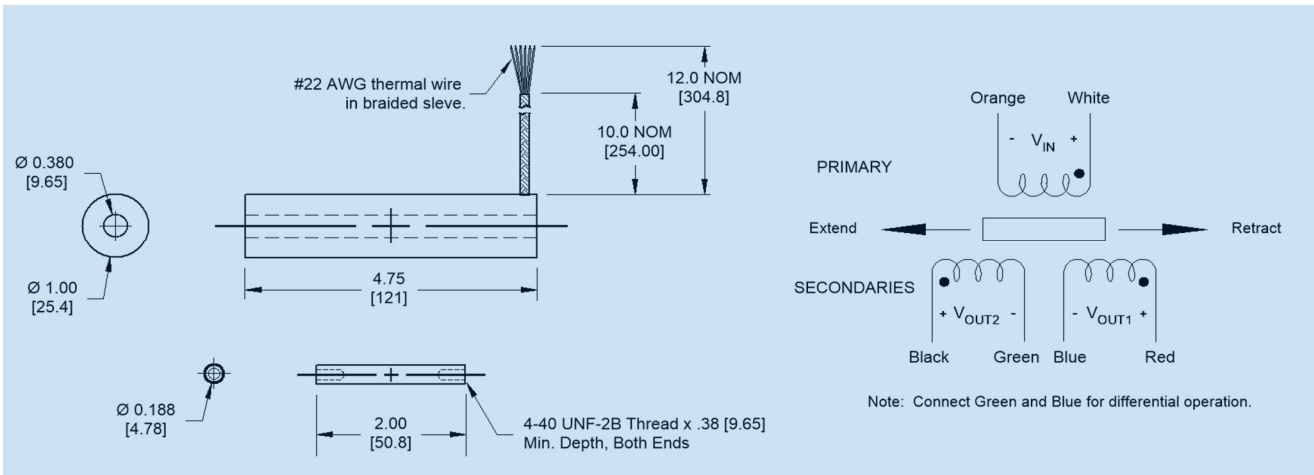
Input Voltage 3 Vrms (Nominal)
Input Frequency 400Hz to 10KHz
Sensitivity (mV/V/.001 Inch) 0.25
Sensitivity (mV/V/mm) 9.78
Primary Impedance (Ω) 400
Linearity ± 0.5% Full Range Typical
Null Voltage 0.5% Full Range
Hysteresis <0.01% of Full Range Typical
Repeatability <0.01% of Full Range Typical
Body Weight (grams) 300
Core Weight (grams) 0.5

Environmental Specifications

Operating Temperature -65°F to 1000° F (-55°C to 538°C)
Thermal Coefficient 25 ppm/°F (45 ppm/°C) of Full Range
Humidity: 90% R.H., 240 Hours
Shock Survival: 1000 g, 11 ms
Vibration: 20 g to 2 KHz



Dimensions and Wiring



Ordering Info

NT – HT – 1000 –	1000 –	XXX
Extreme Temperature LVDT	Range 1 inch	Options – M: Metric Threads [none]: Standard Product

Notes:

- Electrical specifications measured at 3KHz excitation frequency.
- Additional options and displacements 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.

