

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

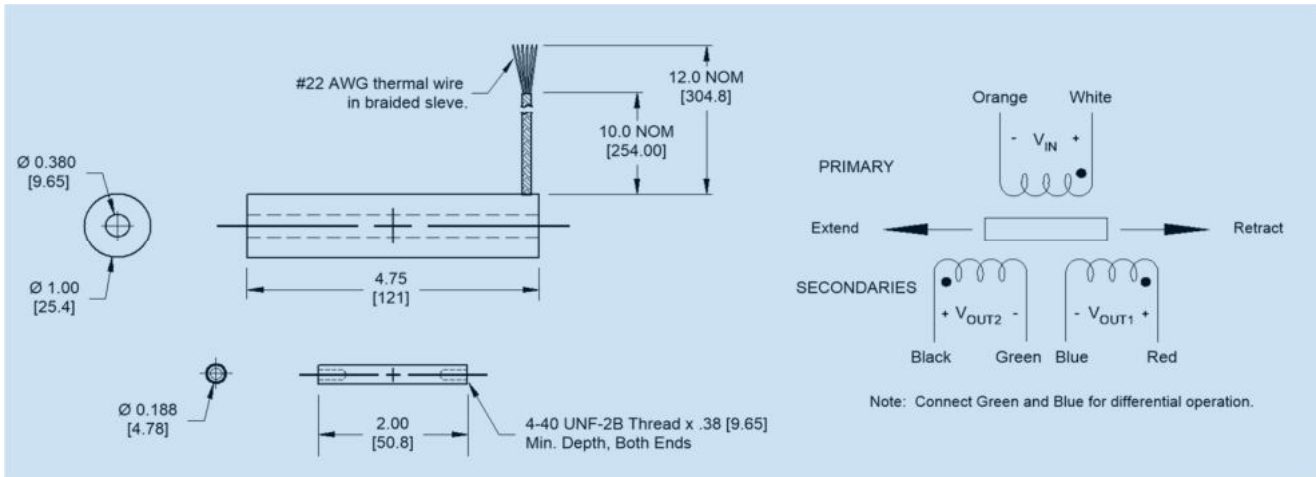
Input Voltage 3 Vrms (Nominal)  
 Input Frequency 400Hz to 10KHz  
 Sensitivity (mV/V/.001 Inch) 0.25  
 Sensitivity (mV/V/mm) 9.78  
 Primary Impedance ( Ω ) 400  
 Linearity ± 0.5% Full Range Typical  
 Null Voltage 0.5% Full Range  
 Hysteresis <0.01% of Full Range Typical  
 Repeatability <0.01%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



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