

The NewTek HI Series sensors are rugged hermetically sealed 0-10 VDC output LVDTs with excellent linearity, high resolution, and superior repeatability. These sensors are constructed of ¾ inch diameter stainless steel and manufactured for general industrial use. Electrical connection is made through an axial mounted connector. Designed for a wide range of position measurement applications, they are available in ranges of 0.1 inches (2.54mm) to 20 inches (500mm). In addition to being sealed to IP-68, the HE Series windings are potted inside the housing with a 2 component epoxy, providing excellent protection against hostile environments.

## **Features**

- Welded 3/4 inch hermetically sealed steel housing
- Axial mounted connector
- Measurement ranges from 0.1 inches to 20 inches
- Linearity ±0.25% of Full Range Max (±0.1% optional)
- Wide operating temperature range (-65°F to 275°F)
- Standard and custom models available
- "Plug & Play," 0-10 VDC compatible with most PLCs and Controllers

### **Electrical Specifications**

Input Power: 11-30 VDC (24 VDC nom.) Full Scale Output: 0 - 10 VDC

un scale Output. 0 - 10 VDC

Linearity: ± 0.25% Full Range Max (±0.1% Optional)

- Hysteresis: <0.01% of Full Range Typical
- Repeatability: <0.01% of Full Range Typical

# **Applications**

- Factory automation
- Materials testing
- Packaging equipment
- Valve position sensing
- Corrosive environments
- Customs Available



## **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 Humidity: 90% R.H., 240 Hours Shock Survival: 100 g, 11 ms Vibration: 20 g to 2 KHz

## **Materials Specifications**

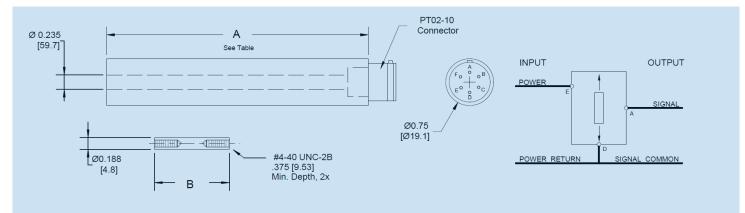
Housing:	Corrosion-resistant nickel-iron alloy
Core:	Hi-permeability nickel-iron alloy
Magnet Wire:	Film insulated copper
Connector:	PT02A-10-6P



# **Specifications**

Model	NT-HE-750-										
Parameter	100	250	500	1000	2000	4000	6000	8000	10000	15000	20000
Nominal Range (inches)	0.10	0.250	0.500	1.00	2.00	4.00	6.00	8.00	10.00	15.00	20.00
Nominal Range (mm)	2.54	6.00	12.60	25.4	50.0	100.0	150.0	200.0	250.0	380.0	500.0
Scale Factor (V/inch)	100.0	40.0	20.0	10.0	5.0	2.5	1.7	1.3	1.0	0.7	0.5
Scale Factor (V/mm)	3.94	1.57	0.79	0.39	0.20	0.10	0.07	0.05	0.04	0.03	0.02
Dimension " A" (inches)	2.86	3.48	4.25	6.7	8.2	11.7	14.5	16.95	19.45	25.01	32.38
Dimension " B" (inches)	0.80	1.25	1.65	3.45	3.45	5.30	6.20	6.20	6.20	7.00	9.50
Body Weight ( ounces)	1.90	2.50	3.00	4.20	5.00	8.20	10.60	11.50	12.10	16.30	20.50
Core Weight (ounces)	0.10	0.12	0.18	0.41	0.41	0.66	0.80	0.80	0.80	0.91	1.20

## **Dimensions and Wiring**



# **Ordering Info**



### **Notes**

- Electrical specifications measured at 24 VDC supply voltage.
- Additional customization options available. 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