

# 813 Series AC/AC

## Linear Variable Differential Transformer

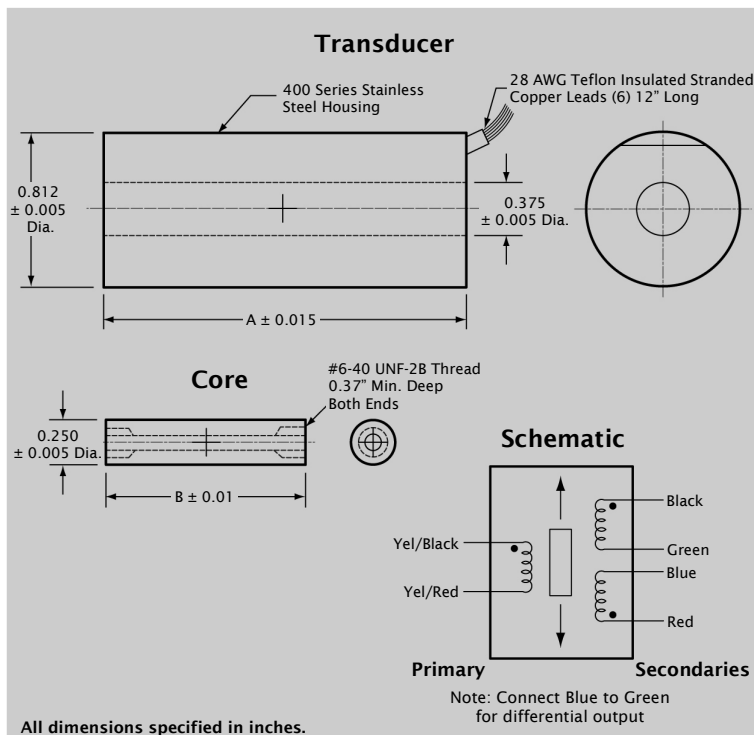


The 813 series LVDT is suitable for most applications. Combined with its rugged construction, not only does it offer high performance and reliability but will also resist the shocks and vibration occurring in most industrial environments. It features high output sensitivity yet a large core-to-bore clearance. A magnetic stainless steel housing provides electromagnetic and electrostatic shielding.

### OPTIONS

- Metric threaded core
- Smaller diameter core
- Teflon Liner in coil bore
- Testing at customer specified excitation frequency
- 4 or 5 leads configuration
- Matching signal conditioner available

### DIMENSIONS AND WIRING



### Technical Specifications @ 2.5 kHz

| Models     | Linear Range (inches) | Sensitivity (mV <sub>out</sub> /mil/V <sub>in</sub> ) | Coil Length "A" (inches) | Core Length "B" (inches) |
|------------|-----------------------|---|--------------------------|--------------------------|
| 813-00-050 | ±0.050                | 6.3   | 1.13                     | 0.80                     |
| 813-00-100 | ±0.100                | 4.5   | 1.81                     | 1.30                     |
| 813-00-200 | ±0.200                | 2.5   | 2.50                     | 1.65                     |
| 813-00-300 | ±0.300                | 1.4   | 3.23                     | 1.95                     |
| 813-00-500 | ±0.500                | 0.70  | 5.50                     | 3.45                     |
| 813-01-000 | ±1.000                | 0.39  | 6.64                     | 4.00                     |
| 813-02-000 | ±2.000                | 0.23  | 10.05                    | 5.30                     |
| 813-03-000 | ±3.000                | 0.27  | 12.89                    | 5.60                     |
| 813-05-000 | ±5.000                | 0.15  | 18.00                    | 7.00                     |
| 813-10-000 | ±10.000               | 0.08  | 31.04                    | 8.50                     |

### PERFORMANCE

|                             |                                    |
|-----------------------------|------------------------------------|
| Non-Linearity               | ±0.25% of Full Scale               |
| Operating Temperature Range | -55°F to 300°F<br>(-50°C to 150°C) |

### ELECTRICAL

|                 |                                      |
|-----------------|--------------------------------------|
| Input Voltage   | 3 Volts AC RMS (Nominal)             |
| Input Frequency | 400 Hz to 10 kHz                     |
| Null Voltage    | Less than 0.5 % of Full Scale Output |

#### WARRANTY

All Sentech Inc. products are warranted against defective materials and workmanship. This warranty applies for a period of one year from the date of delivery to the original purchaser. Any product that is found within the one year period not to meet these standards will be replaced or repaired at the discretion of Sentech Inc. No other warranty is expressed or implied. Although Sentech Inc. manufactures its products to exacting specification standards, we assume no responsibility for their misuse. Sentech Inc. accepts no liability for damages, incidental or punitive, in applications using our products. *Please note:* It is solely the user's responsibility to properly install and maintain transducers. Sentech Inc. manufactures its products to meet stringent specifications and cannot assume responsibility for those consequences arising from their misuse or unauthorized modification.

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SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

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