

# 42DC Series DC/DC

Linear Variable Differential Transformer

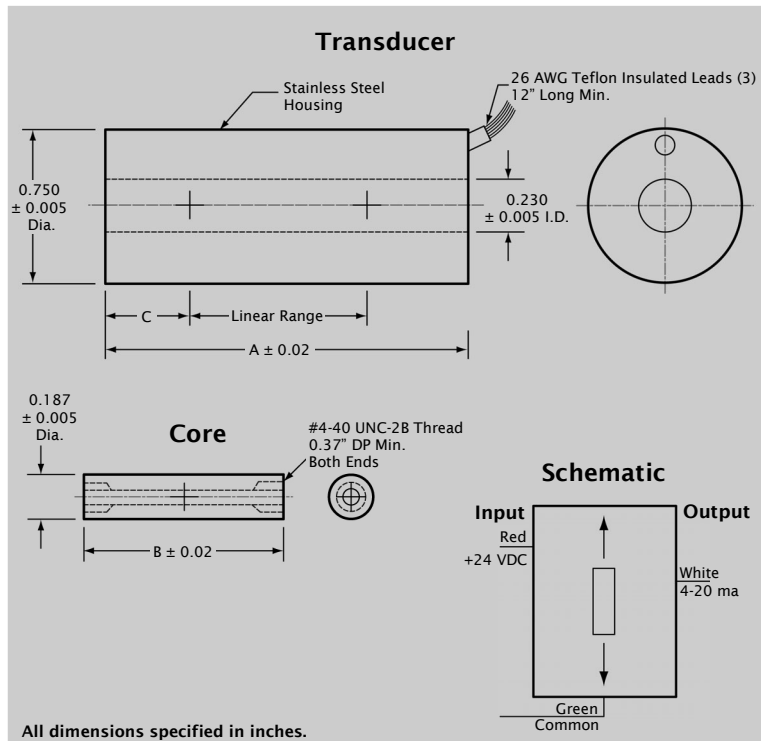


The 42DC Series LVDT includes integrated electronics with an AC/AC coil. It accepts 24V DC input and offers 4-20 mA current output. The stable oscillator drives the primary coil and a precision demodulator, state-of-the-art filter and V/I converter produce smooth DC current output. The output, unaffected by power supply variations, can be useful for applications in power generation, process control and also, where long cable length is needed. Its rugged construction will resist the shocks and vibrations occurring in most industrial environments. Units are also magnetically shielded.

## OPTIONS

- Different strokes / Shorter body length
- Metric threaded / Smaller diameter core
- Teflon Liner
- Higher Frequency response
- Mounting block or flange

## DIMENSIONS AND WIRING



## Technical Specifications

Models	Linear Range (inches)	Response -3dB (Hz)	Length "A" (inches)	Core "B" (inches)	Null "C" (inches)
42DC-500SR	1.00	500	7.00	2.00	1.56
42DC-750SR	1.50	500	7.00	2.00	1.45
42DC-1000SR	2.00	500	9.00	3.00	2.19
42DC-1250SR	2.50	200	9.00	3.00	1.94
42DC-1500SR	3.00	200	10.00	3.00	2.25
42DC-2000SR	4.00	200	12.50	3.80	2.88
42DC-2500SR	5.00	200	14.015	4.00	3.23
42DC-3000SR	6.00	200	16.32	4.00	3.01
42DC-5000SR	10.00	200	20.15	5.00	3.55
42DC-10000SR	20.00	200	31.00	5.00	3.62

## PERFORMANCE

**Non-Linearity**  $\pm 0.50\%$  of Full Scale ( $\pm 0.25\%$  available)

**Operating Temperature Range** 32°F to 160°F (0°C to 70°C)  
Wider range available

## ELECTRICAL

**Input Voltage** 24 V DC (Nominal), 20 mA (no load)

**Output Current** 4 - 20 mA (0 - 20 mA available)

**Null Output** 4 mA

**Ripple Current** < 0.04 mA RMS

**Loop Resistance** < 750 ohms (higher values possible)

### 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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