

# 75DC Series DC/DC

Linear Variable Differential Transformer

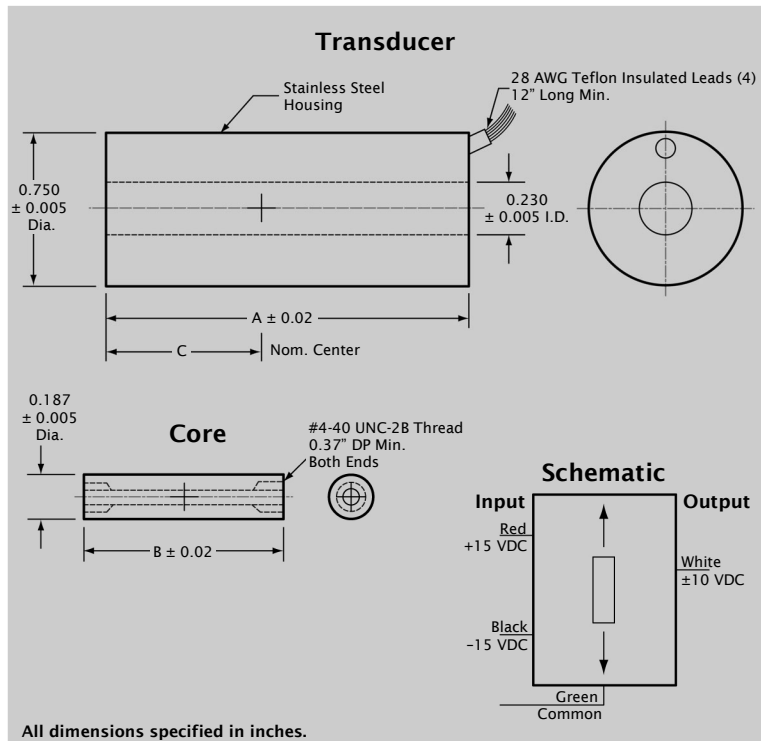


The 75DC Series LVDT is easy to use as it includes integrated electronics with an AC/AC coil. It accepts  $\pm 15$  V DC input and offers  $\pm 10$  V DC output. A stable oscillator drives the primary coil and a precision demodulator & state-of-the-art filter produce smooth DC output voltage. The output, unaffected by power supply variations, can be connected directly to a meter, op amp, or data acquisition board, and therefore is very useful for feedback, monitoring, or test systems. 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
- Different supply & output voltage scheme
- Higher Frequency response

## DIMENSIONS AND WIRING



## Technical Specifications

Models	Linear Range (inches)	Scale Factor (V/inch)	Response -3dB (Hz)	Length "A" (inches)	Core "B" (inches)	Center "C" (inches)
75DC-050	$\pm 0.050$	200	500	2.10	0.75	0.50
75DC-125	$\pm 0.125$	80	500	2.93	1.25	0.93
75DC-250	$\pm 0.250$	40	500	3.80	2.00	1.35
75DC-500	$\pm 0.500$	20	200	5.49	3.00	2.20
75DC-1000	$\pm 1.000$	10	200	7.75	3.80	3.18
75DC-2000	$\pm 2.000$	5	200	11.12	5.30	4.88
75DC-3000	$\pm 3.000$	3.3	200	16.32	6.20	7.57
75DC-5000	$\pm 5.000$	2.0	200	20.15	6.20	9.53
75DC-10000	$\pm 10.000$	1.0	200	34.00	10.00	15.88

## PERFORMANCE

**Non-Linearity**  $\pm 0.25\%$  of Full Scale

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

## ELECTRICAL

**Input Voltage**  $\pm 15$  Volts DC (Nominal)  
 $\pm 20$  mA

**Output Voltage**  $\pm 10.0$  V DC

**Null Voltage** 0.0 V DC

**Ripple Voltage** < 25 mV RMS

**Output Impedance** < 1 ohm

### 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.

Printed in USA.

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

**Sentech Inc.**  
2851 Limekiln Pike  
North Hills, PA 19038 USA  
Tel: (215) 887-8665  
Fax: (215) 887-8449  
sales@sentechlvd.com  
www.sentechlvd.com