

# 75S1DC Series DC/DC



## Linear Variable Differential Transformer

75S1DC Series LVDT includes integrated electronics with an AC/AC coil. It accepts  $\pm 15\text{V DC}$  input and offers 0-10V DC single-sided output. The stable oscillator drives the primary coil and a precision demodulator and 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 tests 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 / small diameter core
- Teflon liner
- Different supply & output voltage scheme
- Higher frequency response

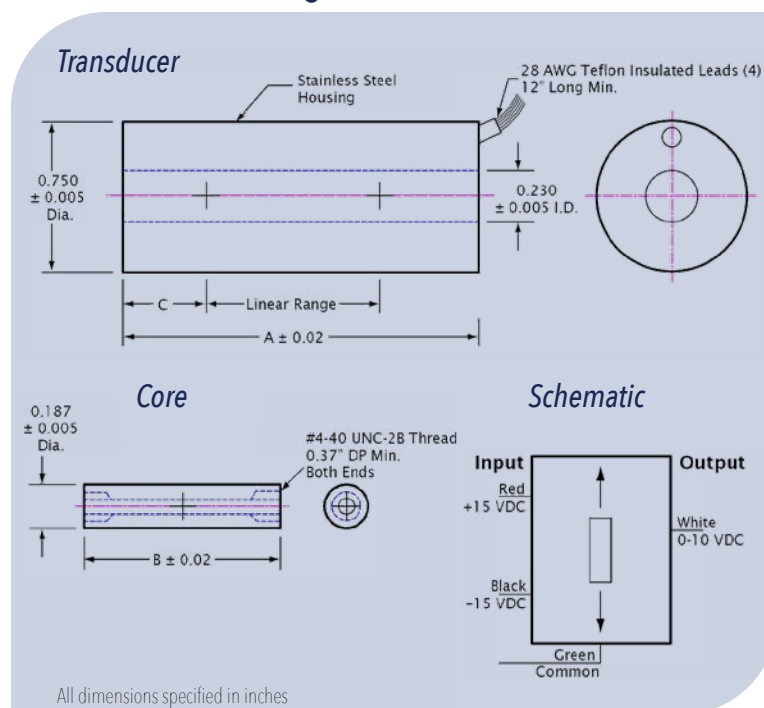
### PERFORMANCE

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	$\pm 15\text{ V DC}$ (Nominal) $\pm 20\text{ mA}$
Output Voltage	0-10 V DC
Null Voltage	0.0 V DC
Ripple Voltage	< 25 mV RMS
Output Impedance	< 1 ohm

### 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)
75S1DC-050SR	0.100	100	500	3.00	0.75	0.45
75S1DC-125SR	0.250	40	500	3.80	1.25	0.81
75S1DC-250SR	0.500	20	500	4.70	2.00	1.10
75S1DC-500SR	1.000	10	200	6.40	3.00	1.70
75S1DC-1000SR	2.000	5	200	8.75	3.80	2.19
75S1DC-2000SR	4.000	2.5	200	12.12	5.30	2.88
75S1DC-3000SR	6.000	1.65	200	17.32	6.20	4.56
75S1DC-5000SR	10.000	1.0	200	21.15	6.20	4.54
75S1DC-10KSR	20.000	0.5	200	34.00	10.00	5.88