

# E Series

## Economical LVDT

The economical E series of LVDTs satisfies numerous applications where LVDT performance and reliability are desired, but where budgets are limited. Linearity is 0.5% of full-range for all units except long-stroke models. The E series is particularly suitable for moderate operating temperatures. Its rugged construction will resist the shocks and vibrations encountered in most industrial applications. The E series is housed in magnetic stainless steel for protection against electromagnetic and electrostatic interference.

### Features

- Customary LVDT performance at minimal cost**
- Magnetically shielded case**
- Compatible with all Schaevitz® signal conditioners**

### Applications

- Moderate operating temperatures**

### Options

- Metric thread core**



### Specifications

<b>Input Voltage</b> .....	3 V rms (nominal)
<b>Frequency Range</b> .....	50 Hz to 10 kHz
<b>Operating Temperature Range</b> ...	-65°F to 200°F (-55°C to 95°C)
<b>Null Voltage</b> .....	<1.0% full scale output
<b>Shock Survival</b> .....	500 g for 11 msec
<b>Vibration Tolerance</b> .....	20 g up to 2 kHz
<b>Coil Form Material</b> .....	High density, glass-filled polymer
<b>Housing Material</b> .....	AISI 400 series stainless steel
<b>Lead Wires</b> .....	28 AWG, stranded copper, Teflon-insulated, 12 inches (300 mm) long (nominal)

\* Performance and electrical specifications for alternative frequencies will differ from the standard specifications listed below which are based on a 2.5 kHz excitation frequency. Consult factory for further information.

### Performance and Electrical Specifications @ 2.5 kHz<sup>1</sup>

E Series Model Number	Nominal Linear Range		Linearity (±% full range)	Sensitivity mV out/V in Per		Impedance Ohms		Phase Shift Degrees
	inches	mm		0.001 in	mm	Pri	Sec	
<b>E 100</b>	±0.100	±2.54	0.5	2.4	96	660	960	-3
<b>E 200</b>	±0.200	±5.08	0.5	1.57	63	970	1010	-5
<b>E 300</b>	±0.300	±7.62	0.5	1.2	48	960	1005	-8.5
<b>E 500</b>	±0.500	±12.70	0.5	0.68	29	408	162	+6
<b>E 1000</b>	±1.00	±25.4	0.5	0.76	30	525	690	+3.7
<b>E 2000</b>	±2.00	±50.8	1.0	0.46	18	535	875	0

<sup>1</sup>All calibration is performed at room ambient temperature.

### How to Order

Specify the E Model followed by the desired option number(s) added together.

#### Ordering Example:

**Model Number E 100-006** is an E Series LVDT with a  $\pm 0.10''$  range (E 100), and a Metric thread core (006).

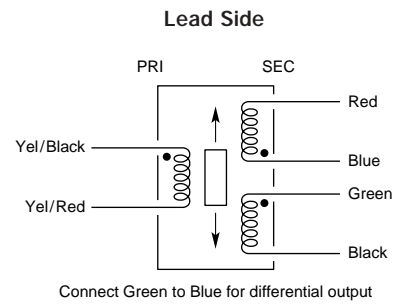
#### E Model

E 100  
E 200  
E 300  
E 400  
E 500  
E 1000  
E 2000

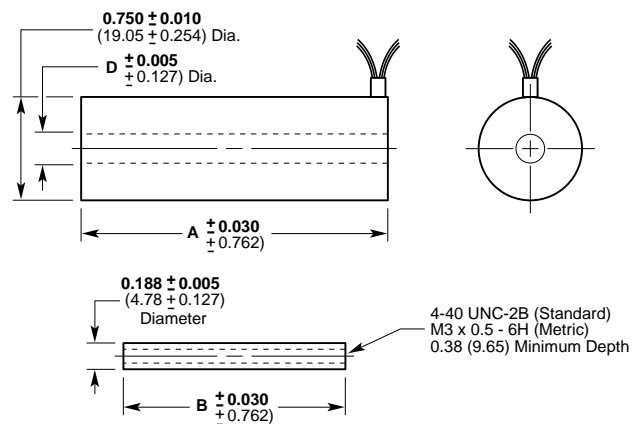
#### Options

Number	Description
006	Metric Thread Core

### Wiring



#### Dimensions in (mm)



### Mechanical Specifications

E Series Model Number	Weight				Dimensions					
	Body		Core		A (Body)		B (Core)		D (Bore)	
	oz	gm	oz	gm	in	mm	in	mm	in	mm
E 100	1.09	31	0.12	3.4	1.75	44.5	1.25	31.8	0.236	6.00
E 200	1.27	36	0.13	3.8	2.25	57.2	1.48	37.6	0.236	6.00
E 300	1.59	45	0.15	4.3	2.77	70.4	1.63	41.4	0.236	6.00
E 500	1.98	56	0.30	8.4	4.56	115.8	3.00	76.2	0.210	5.33
E 1000	2.44	69	0.39	11	7.00	177.8	3.80	96.5	0.210	5.33
E 2000	4.49	127	0.60	17	10.50	266.7	6.20	157.5	0.210	5.33