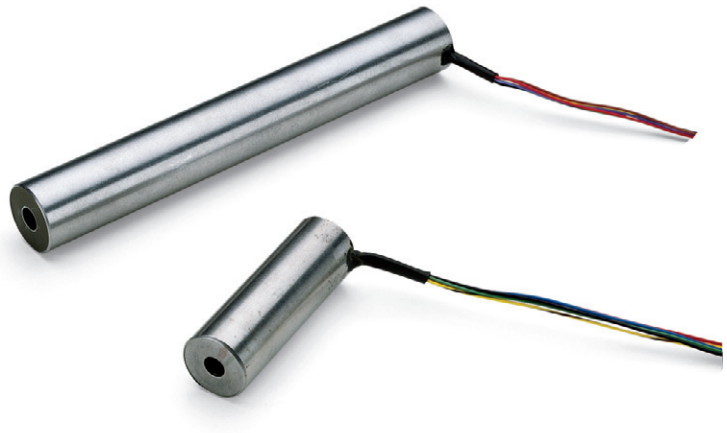
E-Series

Economical LVDT

DESCRIPTION

The E Series of LVDTs is economical and 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

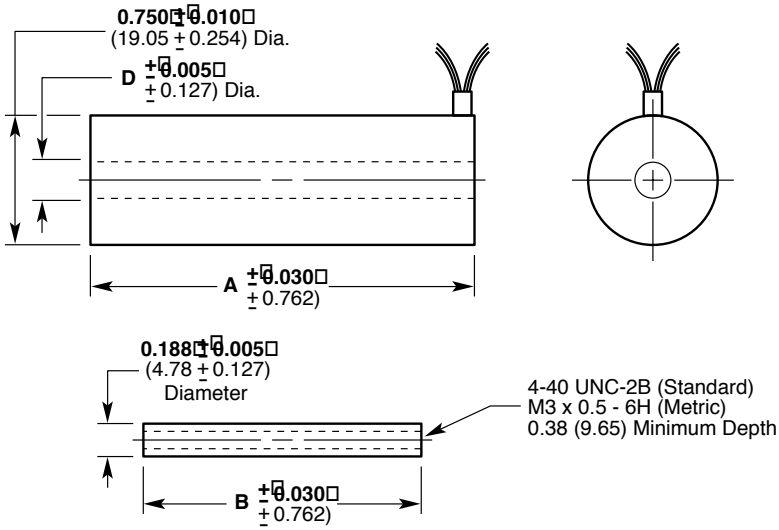
- Metric Thread Core

* 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.

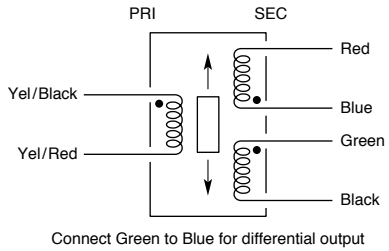
specifications

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

dimensions



wiring



Connect Green to Blue for differential output

E-Series

performance and electrical specifications @ 2.5 kHz[1]

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

1All calibration is performed at room ambient temperature.

mechanical specifications

E Series Model	Weight				Dimensions					
	Body		Core		A (Body)		B (Core)		D (Bore)	
Number	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

ordering information

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

Ordering Example:
Model NumberE 100-006 is an E Series LVDT with a ±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

Measurement Specialties, Inc. • 1000 Lucas Way Hampton, VA 23666 USA • www.meas-spec.com • 757-766-1500 • 800-745-8008 • Fax 757-766-4297