

E

Schaevitz™ Economical LVDT

- Measurement ranges from ± 2.54 mm to ± 50.8 mm
- LVDT
- Linearity 0.5 % (E-2000: 1.0 %)
- Output signal 18 ... 95 mV/V per mm
- Supply voltage 3 V_{rms}



The E Series of LVDTs is highly economical, satisfying numerous applications in which LVDT performance and reliability are desired, but where budgets are limited. With a linearity of just $\pm 0.5\%$ of full-range (E-2000 $\pm 1.0\%$), the E Series is suitable for most applications with moderate operating temperature environments. Housed in magnetic stainless steel for protection against electromagnetic and electrostatic interference, the E Series rugged construction is capable of resisting the shock and vibration of most industrial applications

■ Features

- Customary LVDT performance
- AISI 400 Series stainless steel case
- Imperial or metric core

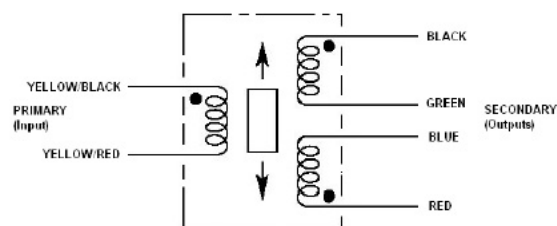
■ Applications

- General industrial
- Moderate operating temperature environments
- Cost sensitive applications

■ Specifications

Supply voltage	3 V _{rms} sine wave
Frequency range	50 Hz ... 10 kHz
Operating temperature	-55 ... +95 °C
Null voltage	<1.0 % of FSO
Shock survival	500 g (11 ms half-sine)
Vibration tolerance	20 g up to 2 kHz
Housing material	AISI 400 Series stainless steel
Lead wires	Six lead-wires, 28 AWG, PTFE insulated, 0.3m long

■ Wiring



Connect „green“ to „blue“ for differential output

■ Performance and Electrical Specifications

Model number	Stroke range		Linearity ±% FS	Sensitivity mV/V per		Output at stroke ends(*) mV/V	Impedance		Phase shift °
	Inch	mm		0.001 inch	mm		Pri Ohm	Sec Ohm	
E-100	±0.1	±2.54	0.5	2.40	95	240	660	960	-3
E-200	±0.2	±5.08	0.5	1.57	62	314	970	1010	-5
E-300	±0.3	±7.62	0.5	1.20	47	360	960	1005	-8.5
E-500	±0.5	±12.7	0.5	0.68	27	340	408	162	+6
E-1000	±1.0	±25.4	0.5	0.76	30	760	525	690	+4
E-2000	±2.0	±50.8	1.0	0.46	18	920	585	875	0

Notes:

All values are nominal unless otherwise noted

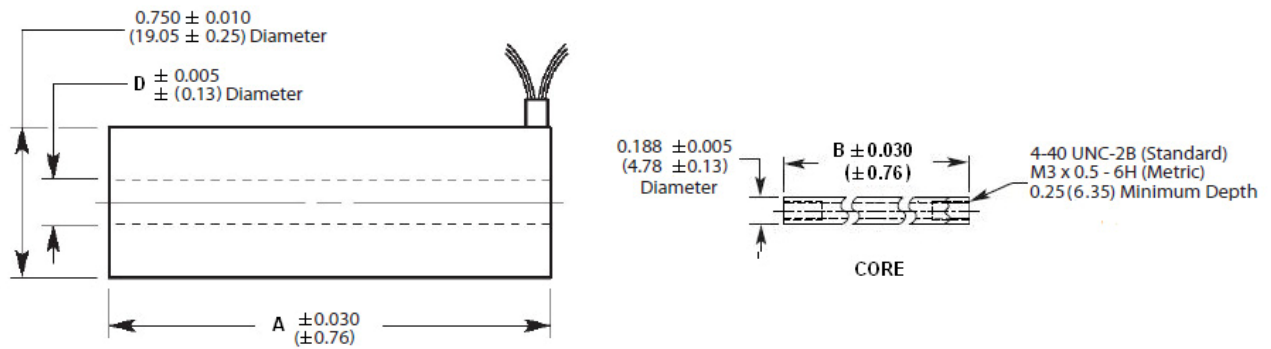
Electrical specifications are for the test frequency 2.5 kHz

Dimensions are in inch [mm] unless otherwise noted

(*): Unit for output at stroke ends is millivolt per volt of excitation

FS: Full Scale is 2X for $\pm X$ stroke; FSO: Full Scale Output is the output at X position for $\pm X$ stroke

Mechanical Specifications



All dimensions in inches, values in brackets in mm, approx. values.

These drawings are for information only and not intended for construction purpose.
Please ask for detailed drawings.

Model number	Weight, approx.				Dimensions, approx.					
	Body		Core		A (Body)		B (Core)		D	
	oz	g	oz	g	inch	mm	inch	mm	inch	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	0.17	4.8	2.77	70.4	1.62	41.2	0.236	6.00
E-500	1.98	56	0.30	8.4	4.56	115.8	3.00	76.2	0.220	5.59
E-1000	2.43	69	0.39	11	7.05	179.1	3.80	96.5	0.220	5.59
E-2000	4.48	127	0.60	17	10.57	268.5	6.20	157.5	0.220	5.59

Ordering Information

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

Example:

Model E-100-006 is an E Series LVDT with a ± 2.54 mm range and a metric thread core (006)

Options

Option number	Description
006	metric thread core

Due to continual product development, ALTHEN and partners reserve the right to vary the foregoing details without prior notice.