



E-series Economy series LVDT

- Economical
- Stroke ranges from ± 0.1 to ± 2.0 inch
- AC operation, 50Hz to 10kHz
- Magnetically shielded case
- Available with imperial or metric core



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

Performance specifications

Parameter	E-100	E-200	E-300	E-500	E-1000	E-2000
Stroke range	± 0.1 [± 2.54]	± 0.2 [± 5.08]	± 0.3 [± 7.62]	± 0.5 [± 12.7]	± 1.0 [± 25.4]	± 2.0 [± 50.8]
Sensitivity, mV/V/.001in	2.40	1.57	1.20	0.68	0.76	0.46
Sensitivity, mV/V/mm	95	62	47	27	30	18
Output at stroke ends (*)	240mV/V	314mV/V	360mV/V	340mV/V	760mV/V	920mV/V
Linearity (maximum band)	$\pm 0.5\%$ FS	$\pm 0.5\%$ FS	$\pm 0.5\%$ FS	$\pm 0.5\%$ FS	$\pm 0.5\%$ FS	$\pm 1.0\%$ FS
Phase shift	-3°	-5°	-8.5°	$+6^\circ$	$+4^\circ$	0°
Input impedance (PRI)	660 Ω	970 Ω	960 Ω	408 Ω	525 Ω	585 Ω
Output impedance (SEC)	960 Ω	1010 Ω	1005 Ω	162 Ω	690 Ω	875 Ω
Input voltage	3Vrms sine wave					
Input frequency range	50Hz to 10kHz					
Test input frequency	2.5KHz					
Null voltage (maximum)	1.0% of FSO					

■ Enviromental specifications & materials

Operating temperature	-65°F to +200°F [-55°C to 95°C]
Shock survival	500 g (11ms half-sine)
Vibration tolerance	20 g up to 2KHz
Housing material	AISI 400 Series stainless steel
Lead wire type/length	Six lead-wires, 28 AWG, PTFE insulated, 1 foot [0.3m] long

Notes:

All values are nominal unless otherwise noted

Electrical specifications are for the test frequency indicated in the table

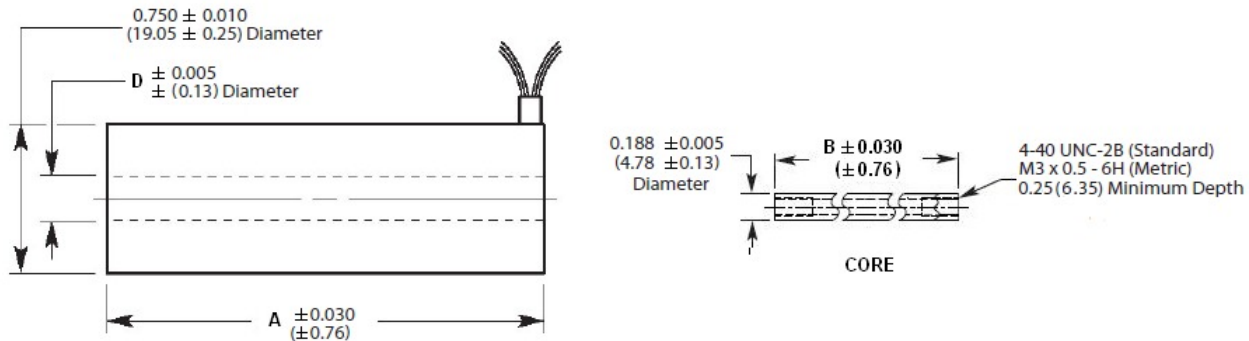
Dimensions are in inch [mm] unless otherwise noted

(*): 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

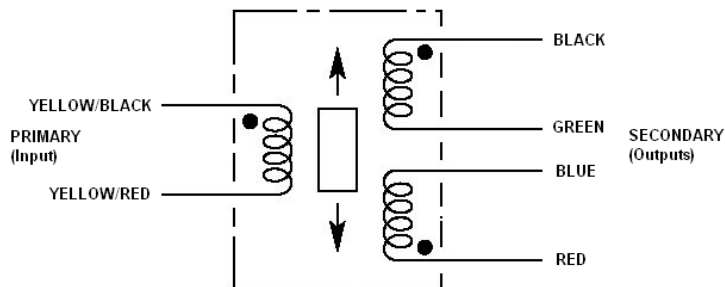
■ Mechanical specifications

	E-100	E-200	E-300	E-500	E-1000	E-2000
Body length "A"	1.75 [44.5]	2.25 [57.2]	2.77 [70.4]	4.56 [115.8]	7.05 [179.1]	10.57 [268.5]
Core length "B"	1.25 [31.8]	1.48 [37.6]	1.62 [41.2]	3.00 [76.2]	3.80 [96.5]	6.20 [157.5]
Bore diameter "D"	0.236 [6.00]	0.236 [6.00]	0.236 [6.00]	0.220 [5.59]	0.220 [5.59]	0.220 [5.59]
Body weight, oz [gram]	1.09 [31]	1.27 [36]	1.59 [45]	1.98 [56]	2.43 [69]	4.48 [127]
Core weight, oz [gram]	0.12 [3.4]	0.13 [3.8]	0.17 [4.8]	0.30 [8.4]	0.39 [11]	0.60 [17]



Dimensions are in inches [mm]

■ Wiring schematic



Connect Blue to Green for differential output

■ Ordering information

Description	Model	Part Number
±0.1 inch	E-100	02560541-000
±0.2 inch	E-200	02560542-000
±0.3 inch	E-300	02560543-000
±0.5 inch	E-500	02560544-000
±1.0 inch	E-1000	02560545-000
±2.0 inch	E-2000	02560546-000
Metric core option (M3x0.5-6H threads)	All	XXXXXXXX-006
Accessories		
Core connecting rod, 6 inches long, 4-40 threads		05282946-006
Core connecting rod, 12 inches long, 4-40 threads		05282946-012
Core connecting rod, 24 inches long, 4-40 threads		05282946-024
Core connecting rod, 36 inches long, 4-40 threads		05282946-036
Core connecting rod, 6 inches long, M3x0.5 metric threads		05282977-006
Core connecting rod, 12 inches long, M3x0.5 metric threads		05282977-012
Mounting block		04560950-000

ALThERIS bv

Scheveningseweg 15
2517 KS DEN HAAG
The Netherlands

☎ +31 (0)70 3924421

☎ +31 (0)70 3644249

Offices in : Benelux | Germany | France | UK | Italy | USA

🌐 www.altheris.com

✉ sales@altheris.nl

LEADERS IN SENSORS & HEAVY DUTY JOYSTICKS

ALThERIS
SENSORS & CONTROLS