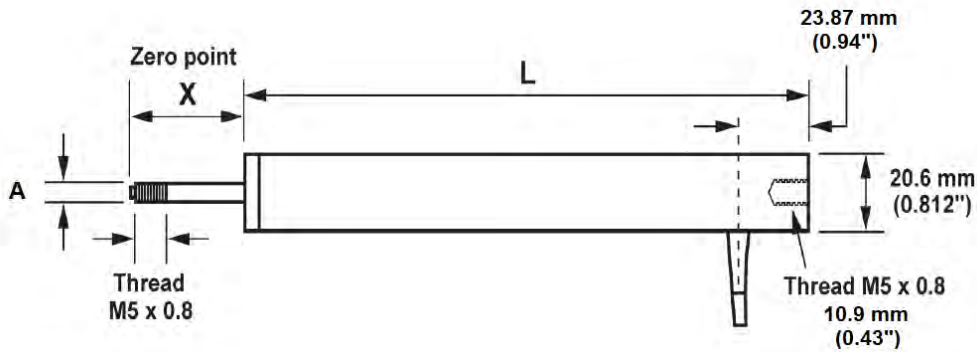




AC "LC" LVDT SERIES

These high-performance transducers are the standard AC-EXCITED LONG-STROKE LVDT models with CAPTIVE ARMATURE. They are ideal for harsh applications under conditions of high ambient temperature and/or vibration. Each model requires separate signal conditioning, and will deliver its best performance when energized between 0.5 and 7 V-AC (RMS) at 5 kHz, using a high-quality carrier amplifier. Compact size allows use where physical space is limited. All models are fitted with 2 meters (6.6 ft.) of shielded cable.



Model	Range \pm	L	X (nom)	A	Total weight	Inward Thread over-travel	Outward over-travel	Sensitivity (nom)
DS1000LC	12.5mm (0.5")	5.98"	1.5"	0.187"	10.0oz	0.59"	0.4"	0.7V/V
DS2000LC	25mm (1")	7.09"	2.5"	0.187"	12.0oz	0.59"	0.5"	0.9V/V
DS4000LC	50mm (2")	11.61"	3.0"	0.187"	1.1lb	0.59"	0.4"	1.5V/V
DS6000LC	75mm (3")	15.98"	4.5"	0.187"	1.4lb	0.59"	0.9"	1.5V/V
DS8000LC	100mm (4")	17.80"	5.0"	0.187"	1.6lb	0.59"	0.3"	1.5V/V
DS20000LC	250mm (10")	40.55"	12.0"	0.187"	3.5lb	1.05"	1.3"	2.0V/V
DS30000LC	380mm (15")	56.50"	16.0"	0.187"	4.7lb	0.75"	0.5"	3.2V/V
DS37000LC	470mm (18.5")	67.01"	20.0"	0.236"	5.6lb	1.05"	0.2"	3.6V/V

LVDT

AC, LONG-STROKE, CAPTIVE GUIDED
[LC SERIES]

SPECIFICATIONS

Excitation: 0.5 to 7 V-AC (RMS), regulated*

Armature: Captive

Linearity: $\pm 0.5\%$ of full scale**

Output (full-scale RMS): See table, above

Residual Null Output: 0.1% of full-scale output (quadrature and harmonic)

Phase Shift: Typically 10° (depends on frequency)

Output Load (optimum): $100k \Omega$

Temperature Coefficient (Zero and Span): 0.01% of full scale/ $^\circ\text{C}$ (0.005% of full scale/ $^\circ\text{F}$)

Operating Temperature Range: -50°C to $+125^\circ\text{C}$ (-58°F to $+257^\circ\text{F}$)***

* Factory calibration is at 5 V-AC (RMS) at 5 kHz (50 mA maximum), with output load of $100k \Omega$

** $\pm 0.25\%$ and $\pm 0.1\%$ linearity are available as options on some ranges (contact the factory for details).

*** -50°C to $+200^\circ\text{C}$ (-58°F to $+392^\circ\text{F}$) optional.

Wiring Details

