



For use in:
Packaging Equipment
Factory Automation
Robotic Actuators
OEM Systems



LA-9.5 Series

Miniature AC-LVDT

Reduced Size, Ideal for OEM Applications

The LA-9.5 series miniature AC-LVDT (Linear Variable Differential Transformer) linear position sensors by H.G. Schaevitz LLC *dba* Alliance Sensors Group are contactless devices designed for industrial and commercial applications, such as: factory automation, automotive test stands, solar cell positioners, robotic assembly systems, packaging equipment, and motorsports. Their compact size, superior performance, and excellent stroke-to-length ratio, make the LA-9.5 AC-LVDT sensors ideal for use in test and measurement laboratories, industrial automation equipment, and many OEM position sensing applications.

LA-9.5 series AC-LVDTs are offered in 7 ranges from ± 0.025 to ± 2.0 inches (± 0.635 to ± 50.8 mm) with excellent linearity and infinite resolution. LA-9.5 series AC-LVDTs operate from a nominal 3 Vrms, 2.5 to 3.3 kHz excitation source. They are packaged in a 0.375 inch (9.5 mm) OD stainless steel housing, come with either a unified or metric threaded 0.110 inch (2.8 mm) diameter core, have a 0.125 inch (3.2 mm) ID for a reasonable core-to-bore clearance, and feature 12 inch (300 mm) long lead wires. When mated with ASG's industrial AC-LVDT DIN-rail-mountable signal conditioners, an LA-9.5 series AC-LVDT becomes part of a complete measurement solution.

ASG's AC-LVDTs are also offered in larger body and longer range versions, including the LA-19, LHA-19, LA-21, LA-25, and LA-27.

Features:

- Miniature AC-LVDT
- 0.375 inch OD Stainless Steel Housing

Options:

- Metric Threaded Core

Specifications:

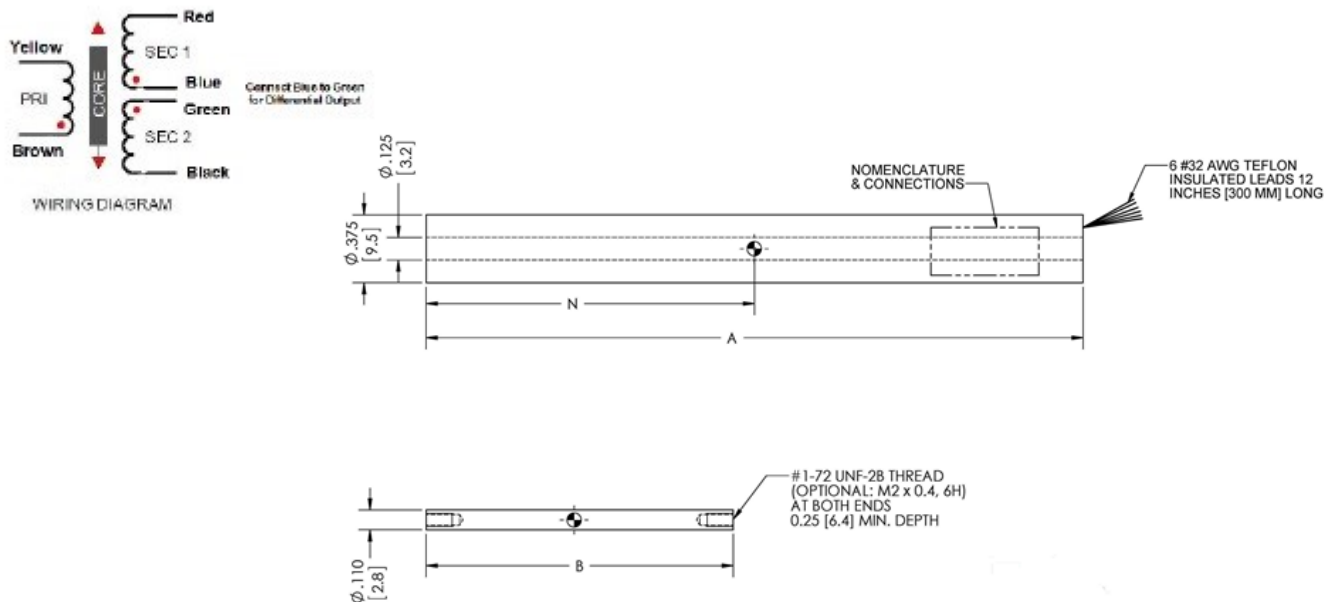
Available Ranges: $\pm 0.025"$, $0.050"$, $0.100"$, $0.250"$, $0.500"$, 1.00 , and $2.0"$
Excitation Frequency: 2.5 to 3.3 kHz
Excitation Voltage: 3 V ACrms nominal
Linearity Error: $\leq \pm 0.25\%$ of FSO (typical 0.15%)
Null Voltage: $< 0.05\%$ of FSO
Operating Temperature: -55 to 125 C
Operating Coefficient: $< -0.02\%$ FSO/K
Humidity: 95% RH, non-condensing
Shock: 1000 g, 11 msec.
Vibration: 20 g to 2 kHz

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LA-9.5 Series

Ordering Information:

Series Name	Body Diameter, mm (XX)	Termination Topology (X)	Bipolar Range, Inches (XXX)	I/O Connection (XX)	Options
LA	9.5 - 9.5 mm (0.375 inch)	A - Axial	0.025 - +/- .025 inches	12 - 12 Inch Leads	06—Metric Threaded Core
			0.05 - +/- .050 inches		
			0.1 - +/- .100 inches		
			0.25 - +/- .250 inches		
			0.5 - +/- .500 inches		
			01 - +/- 1.0 inches		
			02 - +/- 2.0 inches		



Nominal Range inches [mm]	Sensitivity mV/V/.001in [mm]	Primary Z Ohms	Body Length A inches [mm]	Core Length B inches [mm]	Null Point N inches [mm]	Body Weight oz. [grams]	Core Weight [grams]
±0.025 [0.63]	3.50 [138]	95	0.50 [12.7]	0.40 [10.2]	0.25 [6.3]	0.10 [2.8]	0.007 [0.23]
±0.050 [1.3]	1.70 [67]	345	0.75 [19.1]	0.60 [15.2]	0.38 [9.6]	0.20 [5.7]	0.014 [0.40]
±0.100 [2.5]	1.80 [71]	345	1.00 [25.4]	0.65 [16.5]	0.50 [12.7]	0.21 [6.0]	0.016 [0.50]
±0.250 [6.3]	2.50 [98]	505	1.75 [44.5]	1.15 [29.3]	0.88 [22.1]	0.40 [11.3]	0.035 [1.00]
±0.500 [12.7]	1.70 [67]	130	3.30 [83.8]	2.00 [50.8]	1.65 [41.9]	0.63 [18.0]	0.056 [1.60]
±1.000 [25]	0.75 [30]	240	5.60 [142.2]	3.00 [76.2]	2.80 [71.1]	0.99 [28.0]	0.092 [2.60]
±2.000 [50]	0.50 [20]	540	9.95 [252.7]	5.30 [134.6]	4.98 [126.2]	1.98 [56.0]	0.183 [5.20]

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