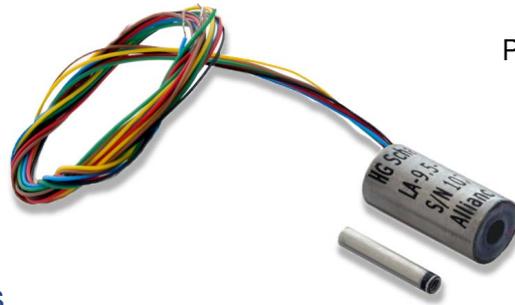




# LA-9.5 Series Miniature AC-LVDT

Reduced Size, Ideal for OEM Applications



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

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 like factory automation, automotive test stands, solar cell positioners, robotic assembly systems, packaging equipment, and motor sports vehicles. Their compact size, superior performance, and excellent stroke-to-length ratio, make 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  $\pm 0.025$  to  $\pm 2.0$  inches ( $\pm 0.63$  to  $\pm 50.8$  mm) with excellent linearity and infinite resolution. LA-9.5 series AC-LVDTs operate from a nominal 3 Vrms, 2.5 - 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 one of ASG's industrial DIN-rail-mountable LVDT signal conditioners, an LA-9.5 AC-LVDT becomes part of a complete measurement solution.

ASG AC-LVDTs are also offered in larger body and longer range versions, including the LA-19, LA-19, LA-21, LA-25, and LA-27 series. For more information, go to [www.alliancesensors.com](http://www.alliancesensors.com).

## Features:

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

## Options:

- Metric Threaded Core

## Specifications:

Available Ranges	$\pm 0.025, 0.050, 0.100, 0.250, 0.500, 1.00, 2.00$ inches
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	$\leq 0.05\%$ of FSO
Operating Temperature	-65 to 275°F (-55 to 135 C)
Temperature Coefficient	$\leq -0.02\%$ FSO/K
Humidity	90% R.H., 240 Hours
Shock	1000 gs, 11 msec.
Vibration	20 gs to 2 kHz

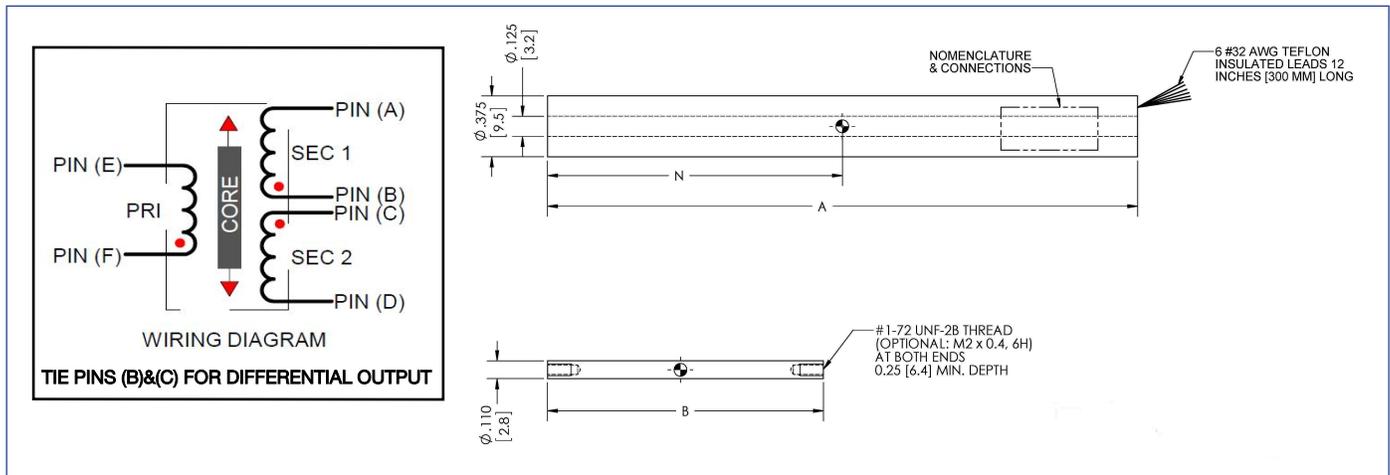
# ALLIANCE SENSORS GROUP

A DIVISION OF H.G. SCHAEVITZ LLC

# LA 9.5 Series

## Ordering Information:

Series	Body Diameter, mm (XX)	Termination Topology (X)	Bipolar Range, Inches (XX)	I/O Connection (XX)	Options
<b>LA</b>	<b>9.5</b> - 9.5 mm (0.375 inch)	<b>A</b> - Axial	<b>XX-</b>	<b>12</b> - 12-inch leads	<b>06</b> - Metric threaded Core
			0.025 - +/- .025 inches		
			0.05 - +/- .050 inches		
			0.1 - +/- .100 inches		
			0.25 - +/- .250 inches		
			0.5 - +/- .500 inch		
			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 [63]	345	0.75 [19.1]	0.60 [16.0]	0.38 [9.6]	0.20 [5.7]	0.014 [0.40]
±0.100 [2.5]	1.80 [63]	345	1.00 [25.4]	0.65 [16.3]	0.50 [12.7]	0.21 [6.0]	0.016 [0.50]
±0.250 [6.3]	2.50 [87]	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 [47]	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 [26]	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]

**ALLIANCE SENSORS GROUP**  
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Alliance Sensors Group  
7300 Rt 130 N, Suite 22  
Pennsauken, NJ 08110 USA  
Ph: 856-727-0250  
www.alliancesensors.com  
info@alliancesensors.com