



For use in:

Standard Industrial Measurements
Test and Measurement Facilities
Factory Automation
OEM Systems

LA-19-A Series

General Purpose AC-LVDT

Well suited for Many Industrial Sensing Applications

The LA-19-A series AC-LVDT (Linear Variable Differential Transformer) position sensors by H.G. Schaevitz LLC dba Alliance Sensors Group are contactless devices designed for industrial and commercial applications, such as: factory automation, metal and paper mills, valve position, robotic assembly systems, and engine throttle position feedback. These general purpose linear position sensing devices have excellent price-to-performance and stroke-to-length ratios, making LA-19-A AC-LVDT sensors ideal for use in test and measurement laboratories, industrial automation equipment, and many OEM positioning sensing applications.

LA-19-A series AC-LVDTs are offered in 11 ranges from ± 0.050 to ± 10.0 inches (± 1.27 to ± 254.0 mm) with excellent linearity and infinite resolution. LA-19-A series AC-LVDTs operate from a nominal 3 Vrms, 2.5 to 3.3 kHz excitation source. They are packaged in a 0.750 inch (19.0 mm) OD stainless steel housing, come with either a unified or metric threaded 0.25 inch (6.35 mm) diameter core, have an 0.313 inch (8.0 mm) ID bore for good core-to-bore clearance, feature 12 inch (300 mm) long lead wires, and operate over a wide temperature range.

When mated with ASG's industrial AC-LVDT DIN-Rail-Mountable Signal Conditioner, an LA-19-A 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-9.5, LHA-19, LA-21, LA-25, and LA-27.

Features:

- General Purpose AC-LVDT
- 0.750 inch OD Stainless Steel Housing

Options:

- Metric Threaded Core

Specifications:

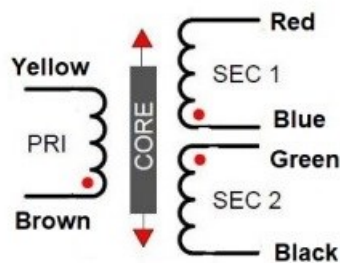
Available Ranges: $\pm 0.050"$, $0.100"$, $0.200"$, $0.500"$, 1.00 , $2.00"$, $3.00"$, $4.00"$, $5.00"$, $7.50"$, and $10.0"$
Excitation Frequency: 2.5 to 3.3 kHz
Excitation Voltage: 3 V ACrms nominal
Linearity Error: $\leq \pm 0.25\%$ of FSO (typical 0.15%)
Null Voltage: $< 0.05\%$ of FSO
Operating 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-19-A Series

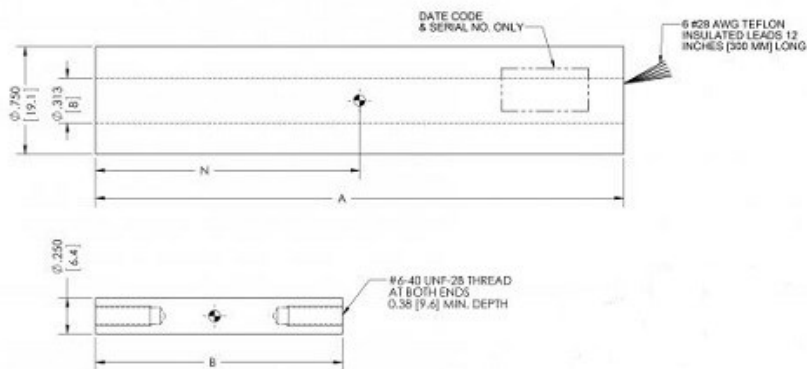
Ordering Information:

Series Name	Body Diameter, mm (XX)	Termination Topology (X)	Bipolar Range, Inches (XX)	I/O Connection (XX)	Options (XX)
LA	19- 19 mm (0.750 inch)	A - Axial	0.05 - ±.050 inches	12 - 12 Inch Leads	06—Metric Threaded Core
			0.1 - ±.100 inches		
			0.2 - ±.200 inches		
			0.5 - ±.500 inches		
			01 - ±1.0 inches		
			02 - ±2.0 inches		
			03- ±3.0 inches		
			04 - ±4.0 inches		
			05 - ±5.0 inches		
			07.5- ±7.5 inches		
			10- ±10.0 inches		



WIRING DIAGRAM

Connect Blue to Green for Differential Output



Nominal Range	Sensitivity	Primary Z	Body Length A	Core Length B	Null Point N	Body Weight	Core Weight
inches [mm]	mV/V/.001in [mm]	Ohms	inches [mm]	inches [mm]	inches [mm]	oz. [grams]	oz. [grams]
±0.05 [1.3]	6.50 [255]	400	1.13 [28.7]	0.80 [20.3]	0.56 [14.3]	1.02 [29]	0.14 [4.0]
±0.12 [2.5]	4.00 [155]	1000	1.75 [44.5]	1.25 [31.7]	0.88 [22.2]	1.41 [40]	0.22 [6.2]
±0.25 [5.0]	2.40 [95]	1900	2.50 [63.5]	1.65 [41.9]	1.25 [31.7]	1.73 [48]	0.30 [8.5]
±0.50 [12.5]	0.65 [25]	1400	5.02 [127.5]	3.45 [87.6]	2.51 [63.7]	2.82 [80]	0.72 [20.4]
±1.00 [25]	0.65 [25]	1650	6.51 [165.4]	3.45 [87.6]	3.25 [82.5]	3.81 [108]	0.72 [20.4]
±2.00 [50]	0.39 [15]	1875	10.02 [254.5]	5.30 [134.6]	5.01 [127.2]	5.00 [142]	1.20 [34.0]
±3.00 [75]	0.26 [10]	1950	12.75 [323.9]	6.20 [157.5]	6.38 [161.0]	7.69 [218]	1.47 [41.7]
±4.00 [100]	0.18 [7.1]	425	15.20 [386.1]	6.20 [157.5]	7.60 [193.0]	9.80 [278]	1.47 [41.7]
±5.00 [125]	0.13 [5.1]	1050	17.75 [450.9]	6.20 [157.5]	8.88 [225.4]	11.71 [332]	1.47 [41.7]
±7.50 [190]	0.12 [4.3]	1380	22.85 [580.4]	7.00 [177.8]	11.43 [290.2]	16.93 [480]	1.51 [42.8]
±10.00 [250]	0.08 [3.1]	1050	30.64 [778.3]	9.50 [241.3]	15.32 [389.1]	20.53 [582]	2.20 [62.4]

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