

# LAS-19-A Series

## Spring-Loaded AC-LVDTs

Ideal for Heavy Duty Industrial Applications

The LAS-19-A series AC-LVDT (Linear Variable Differential Transformer) linear position sensors by H.G. Schaevitz LLC dba Alliance Sensors Group are spring-loaded, hermetically-sealed, contactless devices designed for industrial and commercial applications such as factory automation, metal and paper mills, valve position, robotic assembly systems, pharmaceutical and food processing, and outdoor or wet environment applications. This ruggedized linear sensing device has excellent price-to-performance and stroke-to-length ratios, making LAS-19-A AC-LVDT sensors ideal for use in power generation and industrial automation equipment, and in many OEM positioning applications.

LAS-19-A series AC-LVDTs are offered in 6 ranges from  $\pm 0.050$  to  $\pm 2.00$  inches ( $\pm 1.27$  to  $\pm 50$  mm) with excellent linearity and infinite resolution. LAS-19-A series AC-LVDTs operate from a nominal 3 Vrms, 2.5 - 3.3 kHz excitation source. They are packaged in a 0.750 inch (19.0 mm) OD hermetically-sealed stainless steel housing with a 1/2-20 UNF mounting thread and two hex jam nuts, a 0.210 inch diameter (5.3 mm) probe with an AGD No 9 contact tip, and a 6-pin PTO2A-10-6P axial connector.

When mated with ASG's industrial AC-LVDT DIN-rail-mountable signal conditioner, an LAS-19 series AC-LVDT becomes part of a complete measurement solution.

ASG AC-LVDTs are also offered in other body and range series, including the LA-9.5, LA-19, LA-20.6, LA-21, LA-25, and LA-27. For more information, go to [www.alliancesensors.com](http://www.alliancesensors.com).

### Features:

- Spring-loaded AC-LVDT
- Hermetically sealed 0.750 inch OD stainless steel housing
- 1/2-20 UNF mounting threads with nuts
- Axial PTO2A-10-6P Connector

### Specifications:

Available Bipolar Ranges	$\pm 0.050$ , 0.125, 0.250, 0.500, 1.00, and 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 220°F (-55 to 105° C)

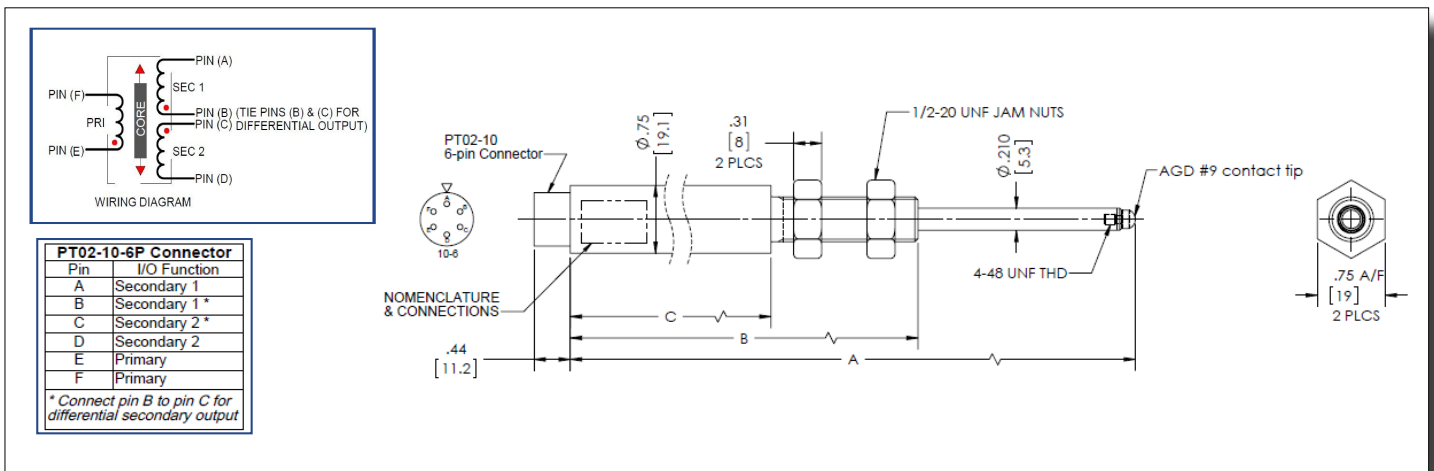
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## Specifications Con't:

Temperature Coefficient	≤-0.02% FSO/K
Humidity	90% R.H., 240 Hours
Shock	1000 gs, 11 msec.
Vibration	20 gs to 2 kHz

## Ordering Information:

Series	Body Diameter, mm	Termination Topology	Bipolar Range, Inches	I/O Connection
LAS	XX-	X-	XX-	XX-
	19 - 19 mm (0.75 inch)	A - Axial	0.05 - +/- .050 inches	12 - 12-inch leads
			0.125 - +/- .125 inches	
			0.25 - +/- .250 inches	
			0.5 - +/- .500 inches	
			01 - +/- 1.0 inches	
			02 - +/- 2.0 inches	



Nominal Range	Sensitivity	Primary Z	Length A	Length B	Length C	Pretravel	Overtravel	Weight
inches [mm]	mV/V/.001in [mm]	Ohms	inches [mm]	inches [mm]	inches [mm]	inches [mm]	inches [mm]	oz. [grams]
±0.050 [1.3]	6.10 [240]	325	4.61 [117]	3.51 [89]	1.97 [50]	0.12 [3.0]	0.12 [3.0]	2.89 [82]
±0.125 [3.0]	3.90 [153]	735	5.26 [134]	4.15 [105]	2.60 [66]	0.13 [3.3]	0.13 [3.3]	3.39 [96]
±0.250 [6.3]	2.50 [98]	1400	6.02 [153]	4.91 [125]	3.35 [85]	0.10 [2.5]	0.10 [2.5]	4.00 [113]
±0.500 [12.7]	0.65 [26]	1200	10.54 [268]	9.05 [230]	5.88 [149]	0.10 [2.5]	0.10 [2.5]	6.00 [170]
±1.000 [25]	0.61 [24]	1250	12.81 [322]	10.51 [267]	7.34 [186]	0.05 [1.3]	0.05 [1.3]	6.31 [179]
±2.000 [50]	0.37 [14]	2150	20.91 [531]	16.35 [415]	10.87 [276]	0.02 [0.5]	0.02 [0.5]	10.23 [290]