

## **LAS-19-R Series**

### **Spring-Loaded AC-LVDTs**

Ideal for Heavy Duty Industrial Applications



Dimensional Gaging and Metrology Medical & Automotive Test Strands Surface/Web Profiling Factory Automation Material Testing

For use in:

The LAS-19-R 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 device has excellent price-to-performance and stroke-to-length ratios, making LAS-19-R AC-LVDT sensors ideal for use in power generation and industrial automation equipment, and in many OEM positioning applications.

LAS-19-R series AC-LVDTs are offered in 6 ranges from ±0.050 to ±2.00 inches (±1.27 to ±50 mm) with excellent linearity and infinite resolution. LAS-19-R 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 hermeticallysealed stainless steel housing with a 1/2-20 UNF mounting thread and two hex jam nuts, a 0.210 inch diam-eter (5.3 mm) probe with an AGD No 9 contact tip, and a 6-pin PTO2A-10-6P radial 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, got to www.alliancesensors.com.

#### Features:

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

### Specifications:

Available Bipolar Ranges ± 0.050, 0.125, 0.250, 0.500, 1.00, and 2.00 inches

2.5 to 3.3 kHz Excitation Frequency

**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 -65 to 220°F (-55 to 105° C)



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#### Specifications Con't:

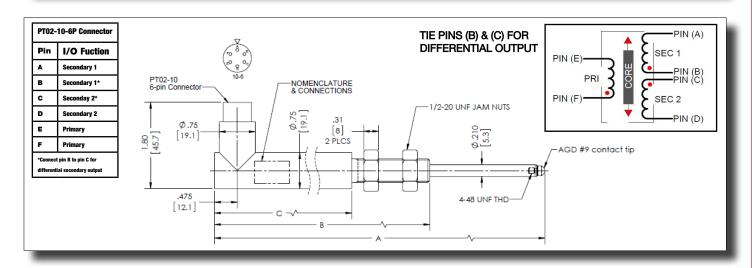
Temperature Coefficient ≤-0.02% FSO/K

> 90% R.H., 240 Hours Humidity

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-	
	<b>19</b> - 19 mm (0.75 inch)	R - radial	<b>0.05</b> - +/050 inches	<b>02</b> - PT02-10-6P	
			<b>0.125</b> - +/125 inches		
			<b>0.25</b> - +/250 inches		
			<b>0.5</b> - +/500 inches		
			<b>01</b> - +/-1.0 inches		
			<b>02</b> - +/-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]	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]