



For use in:

Medical and Automotive Test Stands
Packaging Equipment
Factory Automation
Material Testing



LHA-19-R Series

Hermetically Sealed AC-LVDT with Radial Connector

Reduced Length For Easier Fit

The LHA-19-R series AC-LVDT (Linear Variable Differential Transformer) linear position sensors by H.G.Schavitz LLC dba Alliance Sensors Group are hermetically sealed, contactless devices with a radial connector, designed for industrial and commercial applications such as factory automation, metal and paper mills, valve position, robotic assembly systems, pharmaceutical and food manufacturing, and wet environment applications. These ruggedized linear devices have excellent price vs performance and stroke-to-length ratio, making LHA-19-R AC-LVDT sensors ideal for use in power generation and industrial automation equipment, and many OEM positioning applications.

LHA-19-R series AC-LVDTs are offered in 12 ranges from ±.050 to 10.0 inches (±1.27 to ±254.0 mm) with excellent linearity and infinite resolution. LHA-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 SS housing and are offered with either an imperial or metric threaded 0.188 inch (4.8mm) diameter core, a radial 6-pin PTO2A-10-6P connector, and have a 0.235 inch (6.0 mm) ID for good price-to-bore clearance. It has a wide operating temperature range.

When mated with ASG’s industrial AC-LVDT DIN-rail-mountable signal conditioner, an LHA-19-R series AC-LVDT becomes part of a complete measurement solution especially when space comes at a premium. ASG AC-LVDTs are also offered in larger and smaller body and longer range versions, including the LA-9.5, LA-19, LA-20.6, LA-21, LA-25, and LA-27 series.

For more information, go to www.alliancesensors.com.

Features:

- Hermetically Sealed AC-LVDT
- Welded 3/4 inch OD housing with radial connector
- Sealed to IP68

Options:

- Metric Threaded Core

Electrical Specifications:

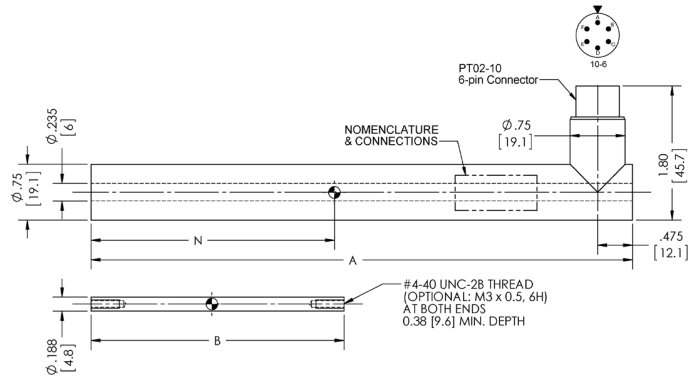
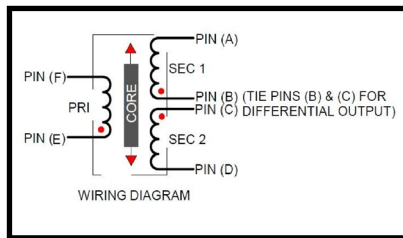
Available Ranges	±0.050", 0.125", 0.250", 0.500", 1.0", 2.0", 3.0", 4.0", 5.0", 6.0", 7.5", and 10.0"
Excitation Frequency	2.5 to 3.3 kHz
Excitation Voltage	3 V ACrms nominal
Linearity Error	< ±.25% of FSO (typical .15%)
Null Voltage	<.05% of FSO
Operating Temperature	-55 to 105 C (-65 to 220°F)
Temperature Coefficient	<-0.02% FSO/K
Humidity	90% R.H., 240 Hour
Shock	1000g, 11 msec
Vibration	20 g to 2kHz

LHA-19-R Series

Ordering Information:

Series	Body Diameter [mm]	Termination Topology [mm]	Bipolar Range, Inches [XXX]	I/O Connection [XX]	Options
LHA	19-19 mm (0.75 inch)	R- Radial	XXX-	XX-	
			0.05 - +/- .050 inches	02 - 6-pin PT02H-10-6P	06 - Metric Threaded Core
			0.125 - +/- .125 inches		
			0.25 - +/- .250 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		
			06 - +/- 6.0 inches		
			07.5 - +/- 7.5 inches		
			10 - +/- 10.0 inches		

PT02-10-6P Connector	
A	Secondary 1
B	Secondary 1*
C	Secondary 2*
D	Secondary 2
E	Primary
F	Primary
*	Connect pin B to pin C for differential secondary 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]	6.10 [240]	325	2.01 [51.1]	0.80 [20.3]	0.63 [16]	1.6 [45]	0.08 [2.4]
±0.12 [3.0]	3.90 [155]	735	2.64 [67.1]	1.25 [31.7]	0.94 [24]	2.1 [59]	0.12 [3.7]
±0.25 [6.3]	2.40 [96]	1400	3.35 [85.1]	1.65 [41.9]	1.32 [33]	2.5 [71]	0.18 [4.8]
±0.50 [12.5]	0.63 [25]	1200	5.92 [150.4]	3.45 [87.6]	2.57 [65]	3.3 [93]	0.40 [11.6]
±1.00 [25]	0.34 [13.4]	785	7.38 [167.5]	3.45 [87.6]	3.32 [84]	4.3 [122]	0.40 [11.6]
±2.00 [50]	0.20 [8.0]	575	10.91 [277.1]	5.30 [134.6]	5.07 [129]	6.2 [176]	0.65 [18.0]
±3.00 [75]	0.23 [9.0]	1200	13.85 [346.1]	6.20 [157.5]	6.29 [160]	8.2 [232]	0.80 [22.0]
±4.00 [100]	0.17 [6.7]	420	16.17 [410.7]	6.20 [157.5]	7.65 [194]	9.2 [260]	0.80 [22.0]
±5.00 [125]	0.12 [4.7]	600	18.65 [473.8]	6.20 [157.5]	8.94 [227]	10.0 [283]	0.80 [22.0]
±6.00 [150]	0.11 [4.3]	500	18.65 [473.8]	5.30 [134.6]	8.94 [227]	10.0 [283]	0.65 [18.0]
±7.50 [190]	0.11 [4.3]	775	23.85 [605.8]	7.00 [177.8]	11.52 [293]	14.2 [402]	0.90 [25.5]
±10.00 [250]	0.07 [2.8]	620	31.68 [804.7]	9.50 [241.3]	15.42 [392]	18.3 [519]	1.20 [34.0]

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