

**For use in:**  
Roller Gap for Steel and Aluminum Mills  
Tool and Die Presses  
Power Turbine Valves  
Injection Molding Machines

# LA-21-A Series

## AC-LVDT

### Linear Position Feedback for Typical Industrial Applications and Environments

---

The LA-21-A series AC-LVDTs offers the robust designs for which Alliance Sensors Group is known in typical industrial packages, with full ranges from 3 inches (75 mm) to 15 inches (375 mm). They are supplied in a zinc-plated steel 0.805 inch (20.5 mm) diameter housing with 4-inch (100 mm) stripped-and-tinned axial leads. Each LVDT's core is enclosed in a 3/8 inch (9.5 mm) diameter extension rod from which it cannot break loose and has a 5/16-24 UNF or M8 X 1.25 male thread for easy attachment.

LA-21-A AC-LVDTs are ideal for stamping or drawing press die opening, injection molding machine platen position, process valve controls, and roller gap feedback in steel or aluminum mills. Mated with ASG's SC-200 industrial LVDT DIN-rail-mountable analog output signal conditioner, an LA-21-A LVDT becomes an ideal solution for typical industrial applications requiring rugged, accurate position sensors.

---

#### Features:

- Mildly Radiation Resistant
  - Stock ranges from 3 inches to 15 inches (75 mm to 375 mm) Full Scale
  - Core totally enclosed in 3/8 inch (9.5 mm) diameter core extension rod
  - Environmentally sealed to IP-68
- 

#### Specifications:

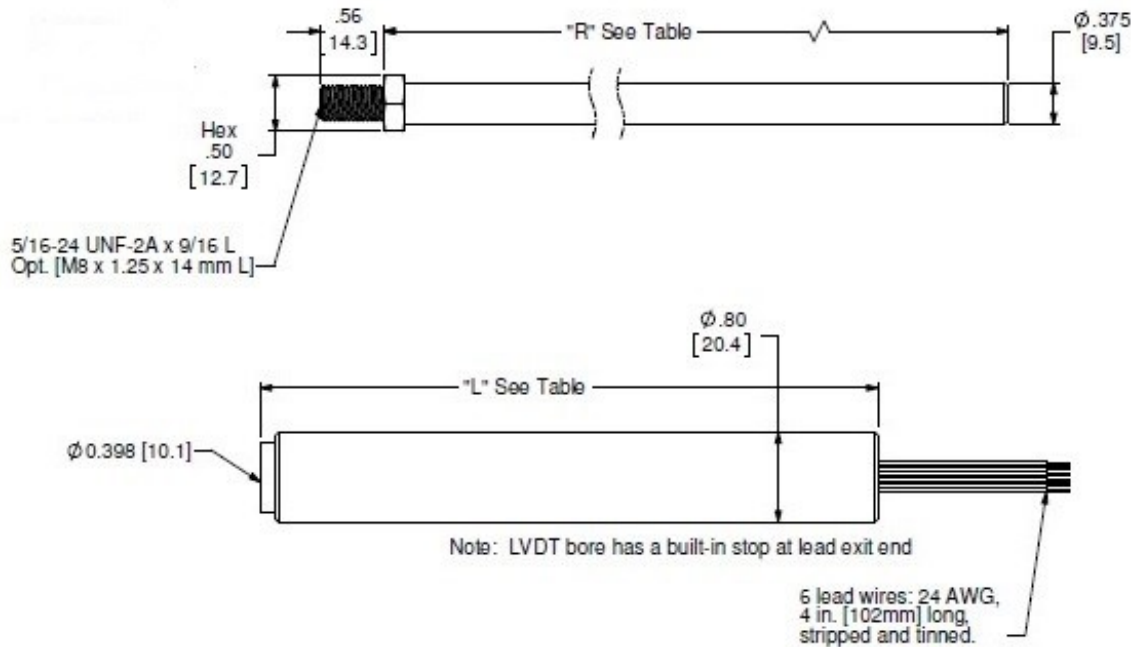
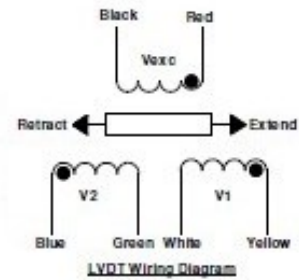
Available Ranges:	0 to 3, 6, 9, 12, or 15 inches (0 to 75, 150, 225, 300 and 375 mm)
Excitation Frequency:	3 kHz nominal
Excitation Voltage:	3 V ACrms nominal
Linearity Error:	$\leq \pm 0.5\%$ of FSO
Full Scale Output:	0.9 V ACrms output (nom.) from differentially connected (S1-S2) secondaries (ref: 3 Vrms excitation); sum of secondaries output is constant over range for ratiometric (S1-S2)/(S1+S2) operation
Operating Temperature:	-40 to 175 C
Temperature Coefficient:	$\leq \pm 0.025\%$ FSO/K
Humidity:	95% RH, non-condensing
Shock:	1000 g, 11 msec.
Vibration:	5-20 Hz 0.5 inch p-p; 20-2000 Hz 4.2 g p-p

**ALLIANCE SENSORS GROUP**  
A DIVISION OF H.G. SCHAEVITZ LLC

# LA-21-A Series

## Ordering Information:

Series Name	Range Inches	Termination
LA-21-A	XX-	XX-
	03 - 3"	04 - 4" leads
	06 - 6"	
	09 - 9"	
	12 - 12"	
	15 - 15"	



LVDT Model	Range Inches [mm]	Sensitivity		"L" (Body) inches [mm]	"R" (Core) inches [mm]
		mV/V/inch	mV/V/mm		
LA-21-03	±1.5 [±38]	200	7.87	5.50 [140]	8.25 [208]
LA-21-06	±3.0 [±76]	100	3.98	9.25 [235]	12.00 [303]
LA-21-09	±4.5 [±114]	67	2.64	12.25 [311]	15.00 [380]
LA-21-12	±6.0 [±152]	50	1.97	16.25 [413]	19.00 [481]
LA-21-15	±7.5 [±190]	40	1.57	20.25 [511]	23.00 [583]

**ALLIANCE SENSORS GROUP**  
A DIVISION OF H.G. SCHAEVITZ LLC

Alliance Sensors Group  
102 Commerce Drive, Unit 8  
Moorestown, New Jersey 08057 USA  
Ph: 856-727-0250  
www.alliancesensors.com  
info@alliancesensors.com