



For use in:
 Packaging Machinery
 Chute/Gate Position
 Factory Automation
 Automotive Testing

LRL-27 Series Linear Position Sensor

Long Lasting, Contactless, Inductive Sensors

Alliance Sensor Group's LRL-27 series LVIT (Linear Variable Inductance Transducer) contactless position sensors complement the LR series devices with extended ranges up to 18 inches (450 mm) in a compact package. These sensors are designed for use in factory automation systems and a wide variety of industrial and commercial applications. Cost effective high-end performance and excellent stroke-to-length ratios make these sensors ideal choices for practically any industrial application

LRL-27 sensors are offered in 6 nominal ranges from 200 to 450 mm (8 to 18 inches). Operated from a variety of DC voltages, these sensors offer a user a choice of four analog outputs and include ASG's proprietary SenSet™ field adjustable range scaling feature. LRL-27 products are available with either a radial exiting cable and two spherical rod eye ends with axial cable or connector terminations.

The LR series also includes a smaller body version, the LR-19, for applications where a reduced body envelope is required or the LR-27 for shorter stroke lengths from 50 to 150 mm. Additional information can be found at www.alliancesensors.com

Features:

- LVIT Technology™ (Linear Variable Inductance Transducer)
- Contactless operation
- Excellent stroke-to-length ratio
- Proprietary SenSet™ field adjustable range scaling

Specifications:

Analog I/Os	0-5 V or 0.5—4.5 V output with 8-30 V input, 35 mA max. 0-10 V output with 12-30 V input, 35 mA max. 4-20 mA (3-wire) output with 18-30 V input, 60 mA max (75 C max).
Measuring Ranges	200 mm to 450 mm (8 to 18 inches) full scale (nominal)
Linearity Error	<± 0.15% of Full Scale Output (FSO) typical, ±0.25% max
Resolution	0.025% of FSO
Update Rate	300 Hz nominal
Operating Temperature	-20 to 85 C (-40 to 105 C extended temperature range)
Temperature Coefficient	<±0.015% of FS/deg C
Vibration	5-20 Hz, 0.5 inch p-p; 20-2000 Hz, 4.2 g p-p
Shock	1000 g, 11 msec
Environmental Sealing	IEC IP-67
Humidity	95% RH, non-condensing

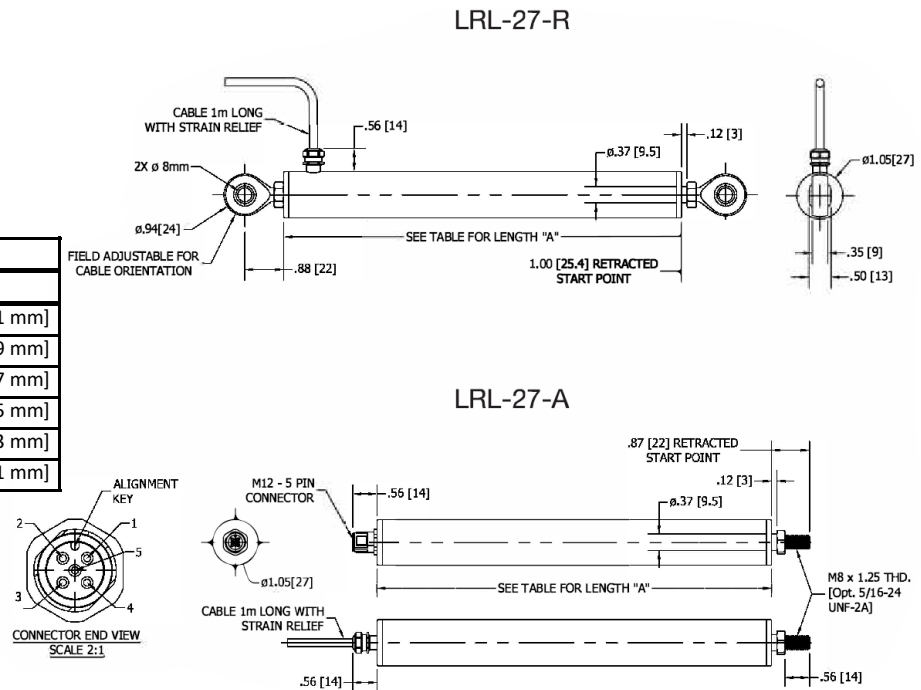
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LRL-27 Series



Wiring Table		
Function	Pin	Cable Color
DC power input	1	Red
Ground	2	Black
Voltage output	3	Green
Current output	4	Green
SenSet™	5	White

Unit Length Table	
Linear Range	Length "A"
8.0 inch [200 mm]	11.50 inches [292.1 mm]
10.0 inches [250 mm]	13.50 inches [342.9 mm]
12.0 inches [300 mm]	15.50 inches [393.7 mm]
14.0 inches [350 mm]	17.50 inches [444.5 mm]
16.0 inches [400 mm]	19.50 inches [495.3 mm]
18.0 inches [450 mm]	21.50 inches [546.1 mm]



Ordering Information:

Series	Output Type	Body Diameter	Range, Metric	Termination Direction	Termination	Output	Housing Material
LRL	X-	XX-	XXX-	X-	XX-	XX-	X-
LRL	E- Voltage	27- 27 mm	200- 200 mm	A- Axial	00- 1-m cable	05- 0.5-4.5 VDC	A- Aluminum
	I- Current		250- 250 mm	R- Radial	01- 5-pin M12	06- 4.5-0.5 VDC	S- Stainless Steel
			300- 300 mm			10- 0-10 VDC	
			350- 350 mm			11- 10-0 VDC	
			400- 400 mm			20- 4-20 mA	
			450- 450 mm			21- 20-4 mA	
						50- 0-5 VDC	
						51- 5-0 VDC	

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