



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

LRL-27 Series

Linear Position Sensor for Extended Ranges

Long Lasting, Contactless, Inductive Sensors

Alliance Sensor Group's LRL-27 series LVIT (Linear Variable Inductance Transducers) contactless position sensors complement the LR series 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 with high-end performance and excellent stroke-to-length ratios make these sensors ideal choices for many industrial application.

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

Besides the LRL-27 series sensors, ASG also offers the LR-27 series for shorter stroke applications and the smaller size LR-19 series for lighter duty applications.

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: $\leq \pm 0.15\%$ of Full Scale Output (FSO) typical, $\pm 0.25\%$ 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: $\leq \pm 0.015\%$ 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

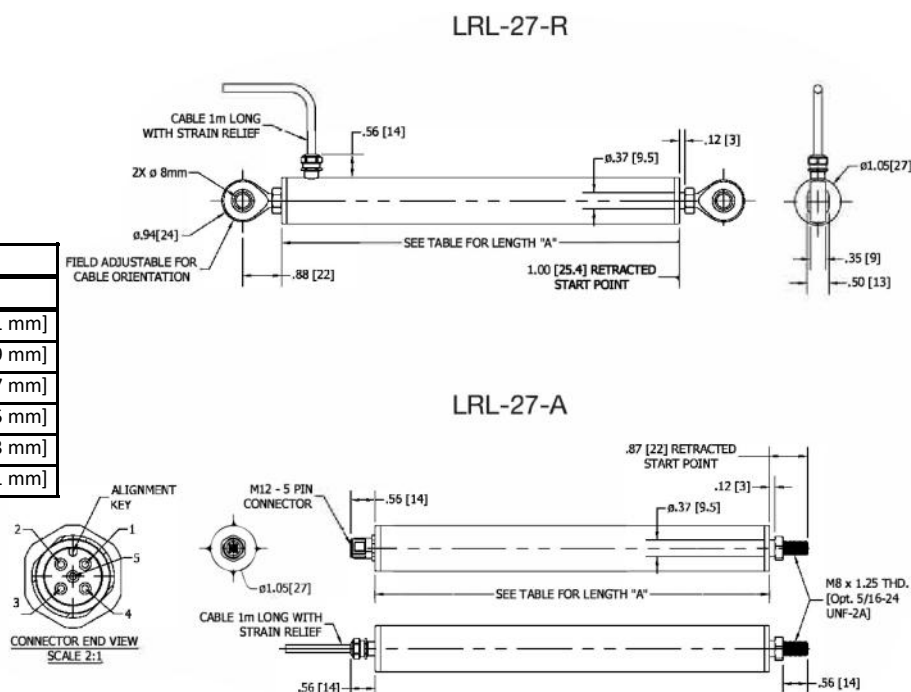
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LRL-27 Series



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-
	E- Voltage	27- 27 mm	200- 200 mm	A- Axial	00- 1 m cable	05- 0.5 to 4.5 VDC	A- Aluminum
	I- Current		250- 250 mm	R- Radial	01- 5-pin M12	06- 4.5 to 0.5 VDC	S- 300 Series SS
			300- 300 mm			10- 0 to 10 VDC	
			350- 350 mm			11- 10 to 0 VDC	
			400- 400 mm			20- 4 to 20 mA	
			450- 450 mm			21- 20 to 4 mA	
						50- 0 to 5 VDC	
						51- 5 to 0 VDC	

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All specifications are subject to change without notice.

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