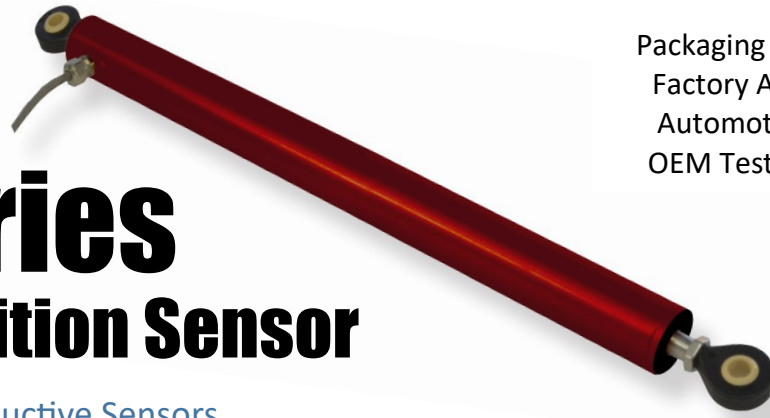


For use in:
Packaging Machinery
Factory Automation
Automotive Testing
OEM Test Standards



LR-27 Series

LVIT Linear Position Sensor

Long Lasting, Contactless, Inductive Sensors

Alliance Sensor Group's LR-27 series LVIT (Linear Variable Inductance Transducer) contactless position sensors are heavy-duty devices designed for factory automation systems and a variety of industrial and commercial applications, such as: solar cell positioners, wind turbine prop pitch and brakes, chute or gate positioners, on/off road or agri-vehicles, and packaging machinery. The modular design, high-end performance, and excellent stroke-to-length ratio make the LR-27 sensors an ideal choice for in-plant or mobile equipment OEMs.

LR-27 series sensors are currently offered in 5 full scale ranges from 1 to 6 inches (25 mm to 150 mm). Operated from a variety of DC voltages, these sensors offer a choice of four analog outputs and include ASG's proprietary SenSet™ field recalibration feature. LR-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.

The LR series also has a smaller body version, the LR-19, for applications not requiring a heavy-duty unit.

Features:

- LVIT Technology™ (Linear Variable Inductance Transducer)
- Contactless operation prevents wearout from dithering or cycling
- 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:	25 mm to 150 mm (1 to 6 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:	<± 0.15% 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.
Terminations:	IEC IP-67
Humidity:	95% RH, non-condensing

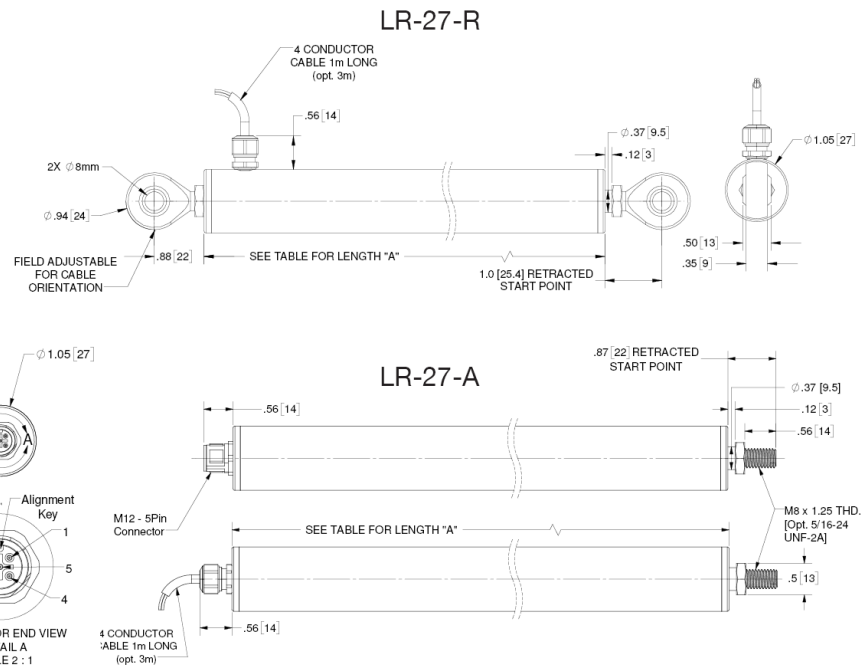
LR-27 Series



Unit Length Table	
Nominal Range	Length "A"
1.0 inch [25 mm]	4.50 inches [114.3 mm]
2.0 inches [50 mm]	5.50 inches [139.7 mm]
3.0 inches [75 mm]	6..50 inches [165.1 mm]
4.0 inches [100 mm]	7.50 inches [190.5 mm]
6.0 inches [150 mm]	9.50 inches [241.3 mm]

Wiring Table—LR-27-A		
Function	M12 Pin	Cable Color
+ Power input	1	Red
Ground	2	Black
Voltage output	3	Green
Current output	4	Green
SenSet™	5	White

Wiring Table—LR-27-R	
Function	Cable Color
+ Power input	Red
Ground	Black
Analog output	Green
SenSet™	White



Ordering Information:

Series	Output	Housing Diameter	Range (mm)	Electrical Terminal		Output	Housing Material
				Axial or Radial	Termination		
LR	X-	XX-	XXX-	X-	XX-	XX-	X-
	E- Voltage	27– 27 mm	025	A- Axial	00- 1 m cable	05- 0.5 to 4.5 V	A- Aluminum
	I- Current		050	R- Radial	01- 5-pin M12	06– 4.5 to 0.5 V	S– 300 Series SS
			075			10- 0 to 10.0 V	
			100			11– 10.0 to 0 V	
			150			20– 4 to 20 mA	
						21– 20 to 4 mA	
						50– 0 to 5 V	
						51– 5 to 0 V	

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All specifications are subject to change without notice.

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