



For Use in:
 PV Solar Cell Positioner
 Wind Energy Systems
 Packaging Machinery
 Chute/gate Position
 Factory Automation
 Automotive Testing
 OEM Test Stands

LR-27

LR-27 Series Linear Position Sensors

Long Lasting Inductive Automation Sensors for Potentiometer Prices

Alliance Sensors Group's LR-27 series of inductive linear position sensors are heavy duty contactless devices designed for factory automation systems and a variety of industrial or 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 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 50 mm to 200 mm (2 to 8 inches). 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 products are available with axial cable or connector terminations, or with a radial exiting cable and two swivel rod eye ends for easy installation.

Technical data sheets and further information about other LR series position sensors can be found at: www.alliancesensors.com.

Features:

- Contactless operation prevents wearout from dither or cycling
- Excellent stroke-to-length ratio
- 27 mm (1.05 inch) OD aluminum housing sealed to IP-67 (stainless steel optional)
- Radial cable exit version comes with swivel rod eye ends
- Axial termination versions with either M-12 connector or cable
- 5/16-24 or M8 x 1.25 male or female thread on end of axial operating rod

Specifications:

Analog I/Os	0 - 3 V output with 5 V input, 35 mA max. 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.)
FS Measuring Ranges	50, 75, 100, 150, and 200 mm (2, 3, 4, 6, and 8 inches)
Linearity error	≤ ±0.15% of FSO
Resolution	0.025% of FS
Bandwidth	500 Hz update rate (nominal)
Operating temperature	-20 to 85 C (-40 to 105 C extended temperature range available)
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

LR-27



Ordering information:

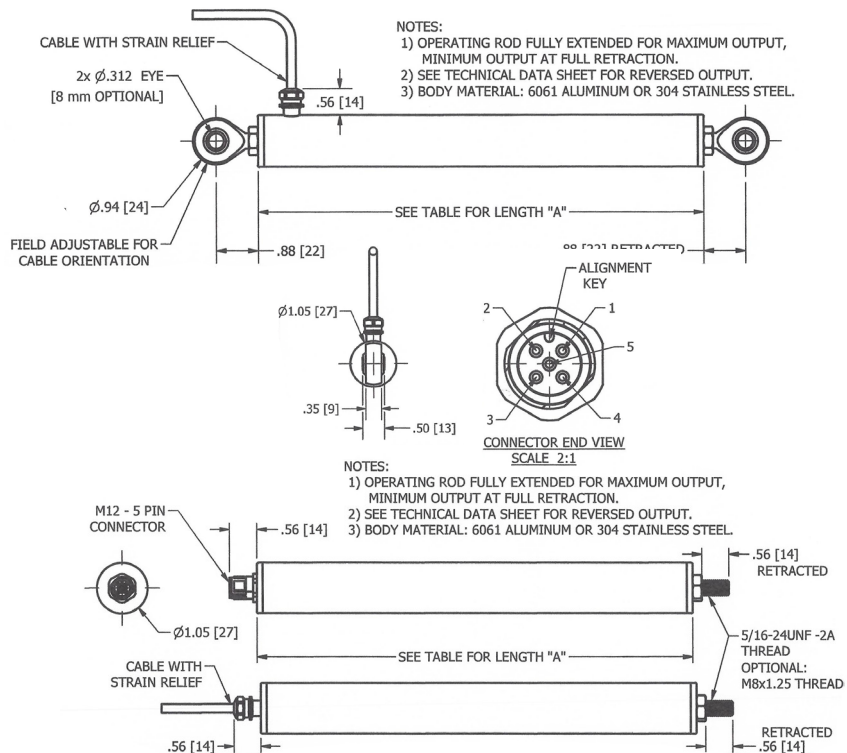
Series	Output Type	Body Diameter	Range, Metric	Electrical Terminal		Output	Housing Material
				Termination Direction	Termination		
LR	X-	XX-	XXX-	X-	XX-	XX-	X
	E - Voltage	27 - 27 mm	050 - 50mm	A - axial	00 - 1-m cable	03 - 0-3 VDC	A - Aluminum
	I - Current		075 - 75mm	R - radial	01 - 5-pin M12	04 - 3-0 VDC	S - Stainless Steel
			100 - 100mm			05 - 0.5-4.5 VDC	
			150 - 150mm			06 - 4.5-0.5 VDC	
			200 - 200mm			10 - 0-10 VDC	
						11 - 10-0 VDC	
						20 - 4-20 mA	
						21 - 20-4 mA	
						50 - 0-5 VDC	
						51 - 5-0 VDC	

Unit Length Table

Linear Range	Length "A"
1.0 inches [25 mm]	4.0 inches [101.6 mm]
2.0 inches [50 mm]	5.0 inches [127.0 mm]
3.0 inches [75 mm]	6.0 inches [152.4 mm]
4.0 inches [100 mm]	7.0 inches [177.8 mm]
6.0 inches [150 mm]	9.0 inches [228.6 mm]
8.0 inches [200 mm]	11.0 inches [279.4 mm]
10.0 inches [250 mm]	13.0 inches [330.2 mm]

Wiring Table

Function	Cable Color
+DC power input	Red
Ground	Black
LRE voltage output	Green
LRI current output	Green
SenSet™	White



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