



For use in:
PV Solar Cell Positioner
Wind Energy Systems
Packaging Machinery
Motorsport Vehicles
Automotive Testing
Factory Automation
OEM Test Standards

LR-19 Series

Linear Position Sensor

More Sensor for Less

The LR-19 series inductive linear position sensors by Alliance Sensors Group are contactless devices designed for factory automation and a variety of industrial or commercial applications such as motorsport vehicles, automotive testing, solar cell positioners, wind turbine prop pitch and brake position, and packaging equipment. With their compact design, superior performance, and excellent stroke-to-length ratio, LR-19 sensors are ideal for both industrial testing laboratories and OEM applications.

LR-19 series sensors are offered in 6 full scale ranges from 25 to 200 mm (1 to 8 inches). Operating from a variety of DC voltages, these sensors offer a choice of four analog outputs and all include ASG's proprietary SenSet™ field recalibration feature. LR-19 series products are available with axial cable or connector terminations, or with a radial exiting cable and two swivel rod eye ends for easy installation.

The LR series also includes a larger body version, the LR-27 for those applications needing a heavier duty unit. Technical data sheets and additional information can be found at www.alliancesensors.com.

Features:

- Contactless operation prevents wearout from dither or cycling
- Excellent stroke-to-length ratio
- 19mm (0.75 inch) diameter anodized aluminum housing sealed to IP-67
- Radial cable exit version comes with swivel rod eye ends
- Axial termination versions with either M-12 connector or 1 m cable
- 10-32 or M5 X 0.8 male or female thread on end of axial operating rod

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).
FS Measuring Ranges	25, 50, 75, 100, 150, and 200 mm (1, 2, 3, 4, 6, and 8 inches)
Linearity Error	<± 0.15% of FSO
Resolution	0.025% of FSO
Bandwidth	300 Hz
Operating Temperature	-20 to 85 C (-40 to 105 C extended temperature range)
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

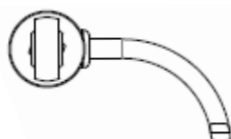
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LR-19 Series

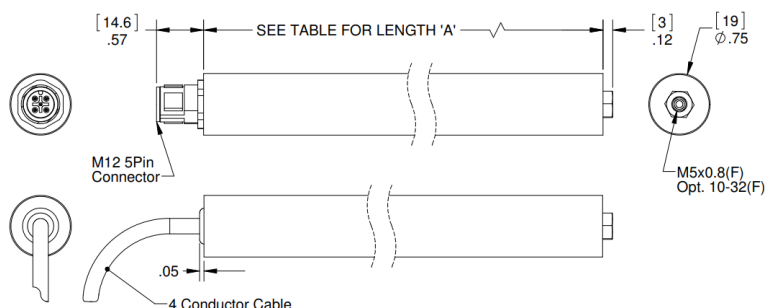


Wiring Table		
Function	Pin	Cable Color
DC power input	1	Red
Ground	2	Black
LRE voltage output	3	Green
LRI current output	4	Green
SenSet™	5	White

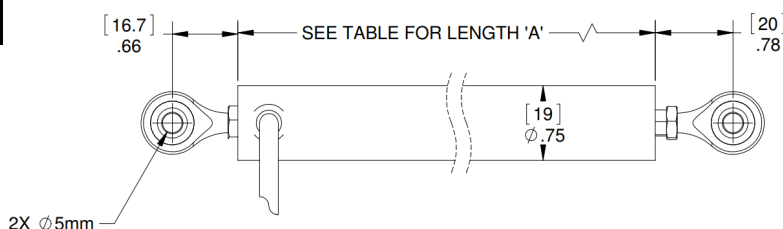
Unit Length Table	
Linear Range	Length "A"
1.0 inch [25 mm]	3.74 inches [95.0 mm]
2.0 inches [50 mm]	4.74 inches [120.4 mm]
3.0 inches [75 mm]	5.74 inches [145.8 mm]
4.0 inches [100 mm]	6.74 inches [171.2 mm]
6.0 inches [150 mm]	8.74 inches [222.0 mm]
8.0 inches [200 mm]	10.74 inches [272.8 mm]



LR-19-A



LR-19-R



Ordering Information:

Series	Output Type	Body Diameter	Range, Metric	Termination Direction	Termination	Output	Housing Material
LR	X-	XX-	XXX-	X-	XX-	XX-	X-
LR	E- Voltage	19- 19 mm	025- 25 mm	A- Axial	00- 1 m cable	05- 0.5 to 4.5 V	A- Aluminum
	I- Current		050- 50 mm	R- Radial (cable only)	01- 5-pin M12	06- 4.5 to 0.5 V	S- Stainless Steel
			075- 75 mm			10- 0 to 10 V	
			100- 100 mm			11- 10 to 0 V	
			150- 150 mm			20- 4 to 20 mA	
			200- 200 mm			21- 20 to 4 mA	
						50- 0 to 5 V	
						51- 5 to 0 V	

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