www.MEASOL.com

480-897-0300

For use in: Industrial Fluid Power Equipment Steel, Aluminum, and Paper Mills Steam and Hydro Power Plants Factory Automation Systems

LRS-18 Series

Spring Loaded LVIT Linear Position Sensor

Long Lasting, Contactless, Inductive Sensors

The LRS-18 series of LVIT (Linear Variable Inductance Transducer) spring loaded position sensors by Alliance Sensors Group are contactless devices designed for dimension or position measuring applications in factory automation and in various industrial and commercial applications such as automotive testing, mil/aero test stands, robotic arms, and packaging equipment, where the sensing element cannot be attached to the object being measured. LRS-18s are offered in full scale ranges from 12.5 to 100 mm (0.5 to 4.0 inches) with excellent resolution and high stroke-to-body-length ratios. The maximum tip force on the item being measured is 1 pound.

LRS-18 sensors have a 19 mm (0.75 inch) diameter aluminum or stainless steel body with an M18 x 1 thread and come with two hex jam nuts for easy installation in place of an 18 mm analog prox sensor. These sensors use a 0.25 inch diameter probe equipped with an AGD No. 9 contact tip, and are offered with either an axial cable or a connector. Operating from a variety of DC voltages, the sensors are available with a choice of four analog outputs and they all include ASG's proprietary SenSet[™] field calibration feature.

Additional information can be found at www.alliancesensors.com.

Features:

- Spring loaded LVIT Technology[™] (Linear Variable Inductance Transducer)
- Ranges from 0.5 to 4.0 inches (12.5 to100 mm)
- · Contactless operation prevents internal wearout from dithering or rapid cycling
- Excellent stroke-to-body-length ratio
- Proprietary SenSet[™] field adjustable range scaling

Specifications:

Analog I/Os	0 - 5 V or 0.5 - 4.5 V DC output with 8 - 30 V input, 35 mA max. 0 - 10 V DC 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	12.5 mm to 100 mm (0.5 to 4.0 inches) full scale
Linearity Error	±0.15% of Full Scale Output (FSO) typical, ±0.25% max.
Resolution	0.025% of FS
Operating Temperature	-20 to 85 C (-40 to 105 C Extended Range)
Temperature Coefficient	≤±0.015% of FS/K
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

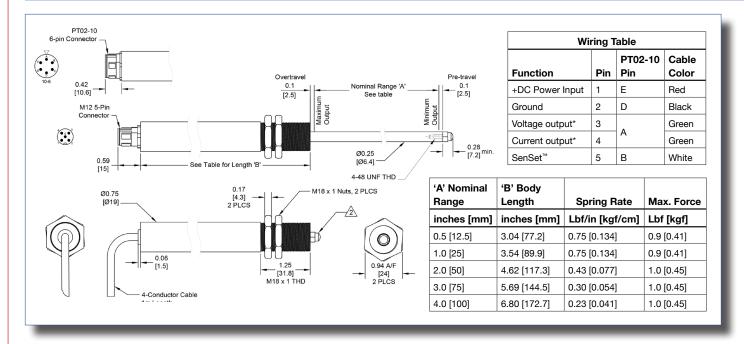
Measurement Solutions www.MEASOL.com ALLIANCE SENSORS GROUP A DIVISION OF H.G. SCHAEVITZ LLC

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LRS-18 Series



Ordering Information

				Electrical Termination			
Series	Output	Housing Thread	Range (mm)	Axial or Radial	Termination	Output	Housing Material
LRS	X-	XX-	XXX-	X-	XX-	XX	X-
	E- Voltage	18 - M18	013 (12.7 mm)	A - Axial	00- 1 m cable	05 - 0.5-4.5 VDC	A- Aluminum
	I- Current		025		01 - 5-pin M12	06 - 4.5-0.5 VDC	S- 300 Series SS
			050		02- 6-pin PT02	10 - 0-10 VDC	
			075		03 - 3 m cable	11 - 10-0 VDC	
			100			20 - 4-20 mA	
						21 - 20-4 mA	
						50 - 0-5 VDC	
						51 - 5-0 VDC	

Off The Shelf Connection Solutions





Standard ADG Contact Tip

Industry Standard M18 x 1 Threads

6042 E. Vermillion Cir.

Mesa, AZ 85215-7716

Industry Standard Connectors and Cable Options

Measurement Solutions

www.MEASOL.com

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