LINEAR POSITION SENSOR

ILPS-9.5Z SERIES LINEAR VARIABLE INDUCTIVE POSITION SENSOR

Miniature LVIT Linear Position Sensor

FEATURES

- Sensing element is wear-free
- Excellent stroke-to-length ratio
- Stroke lengths from 6.4 to 150 mm (0.25 to 6 inches)
- DC in / DC out operation with built-in electronics
- Proprietary SenSet[™] field adjustable range scaling

APPLICATONS

- Motorsport and Automotive R&D Testing
- Industrial Test Stands
- Factory Automation



OVERVIEW

The ILPS-9.5 Series of LVIT (Linear Variable Inductance Transducer) miniature position sensors are contactless, inductive devices for applications in factory automation or assembly machinery where space is a premium.

These DC in / DC out LVITs are offered in nominal full-scale ranges from 6.4 to 150 mm (0.25 to 6 inches) with excellent stroke-to-length ratios and a variety of I/Os. The ILPS-9.5 sensor has a 9.5 mm (0.375 inch) diameter stainless steel body and a 2.5 mm (0.096 inch) diameter SS moving rod with an M2.5 end thread and hex jam nut.

I/O connections are made via a 1 m (39 inch) axial cable and include ASG's proprietary SenSet™ field recalibration feature.

SPECIFICATIONS

Analog I/Os: 0.5 V or 0.5-4.5 VDC output; 8-30 VDC Input, 35 mA max

Measuring Ranges: 6.4-150 mm (.25 to 6 inches) Full scale

Linearity Error: $\pm 0.15\%$ of FSO, typical $\pm 0.25\%$

Resolution: 0.025% of FS

Update Rate: 300 Hz update rate (nominal)

Operating Temperature: -20 to +105°C (-40 to +220°F)

Temperature Coefficient: $\leq +/-0.015\%$ of FS / °C

Shock Rating: 1000g, 11 mS

Vibration Rating: 5 to 20 Hz, 0.5 inch p-p; 20 to 2000 Hz, 4.2 g p-p

IP Rating: IEC IP67

Humidity: 95% RH, non-condensing



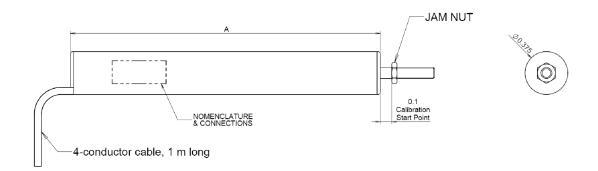


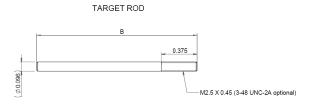




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LVIT Linear Position Sensor





WIRING PIN OUT

	Integral Cable	
DC Power In	Red	
Ground	Black	
Analog Output	Green	
SenSet (Calibration)	White	

DIMENSIONS

Nominal Range		Length 'A'	Length 'B'	
0.25 inch	[6.4 mm]	2.85 inches [72.4 mm]	1.75 inches [44.5 mm]	
0.50 inch	[12.7 mm]	2.85 inches [72.4 mm]	1.75 inches [44.5 mm]	
0.75 inch	[19 mm]	2.85 inches [72.4 mm]	1.75 inches [44.5 mm]	
1.0 inch	[25 mm]	2.85 inches [72.4 mm]	1.75 inches [44.5 mm]	
2.0 inch	[50 mm]	3.72 inches [94.5 mm]	2.68 inches [68.1 mm]	
3.0 inch	[75 mm]	4.72 inches [119.9 mm]	3.68 inches [93.5 mm]	
4.0 inch	[100 mm]	5.72 inches [145.3 mm]	4.68 inches [118.9 mm]	
6.0 inch	[150 mm]	7.72 inches [196.1 mm]	6.68 inches [169.7 mm]	

ORDERING INFORMATION

Model	Range	Cable Position	Cable Length	Output	Housing
ILPS-9.5Z	- 🗆 🗆 🗆	- A	- 00	- 🗆 🗆	- S
	6.4 0.25 inches 12.7 0.50 inches 019 0.75 inches 025 1.0 inch 050 2.0 inch 075 3.0 inch 100 4.0 inch 150 6.0 inch	A Axial	00 1m cable	05 0.5-4.5 VDC 06 4.5-0.5 VDC 10 0-10 VDC 11 10-0 VDC 50 0-5 VDC 51 5-0 VDC	S 300 Series SS

ORDERING EXAMPLE

ILPS-9.5Z-050-A-00-10-S: 0 to 50 mm Range, 1 meter Axial Cable, 0 to 10 VDC Output, Stainless Steel



