

ILPS-9.5Z SERIES LINEAR VARIABLE INDUCTIVE POSITION SENSOR

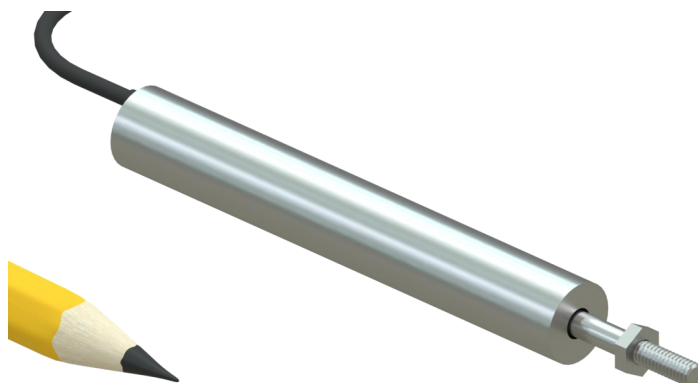
Miniature LVIT Linear Position Sensor

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

APPLICATIONS

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



OVERVIEW

Harold G. Schaevitz Industries (HGS) ILPS-9.5 series miniature Linear Variable Inductive Transducer (LVIT) Position Sensors are used to monitor and track the linear motion or position of a target. These miniature ruggedized sensors are ideal for use in industrial and laboratory applications including automotive R&D, motorsports, industrial, motion control, medical, military and aerospace.

The inductive coil and spoiler combination is a contactless solution, eliminating the wear and dithering issues commonly experienced with Potentiometer type sensors. The amplifier electronics are contained within the housing, no need for an external signal conditioner.

The ILPS-9.5 series sensor is made from industrial duty materials for resistance to dust, water, temperature, shock, and vibration.

SPECIFICATIONS

Analog I/Os: 0.5 to 4.5 VDC output (8 to 30 VDC power, ≤ 35 mA)
0 to 5 VDC output (8 to 30 VDC power, ≤ 35 mA)
0 to 10 VDC output (12 to 30 VDC power, ≤ 35 mA)

Linearity Error: $\pm 0.15\%$ of FSO, typical $\pm 0.25\%$
Resolution: 0.025% of FS
Repeatability: 0.025% of FS
Update Rate: 300 Hz update rate (nominal)

Operating Temperature: -20 to +105°C (-40 to +220°F)
Temperature Coefficient: $\leq \pm 0.015\%$ of FS / °C

Life Expectancy: > 100 million cycles
Integral Cable: 4 individual wires, 26 AWG, stranded, FEP insulated
Cable Temp Rating: -40 to +85°C (-40 to +185°F)
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

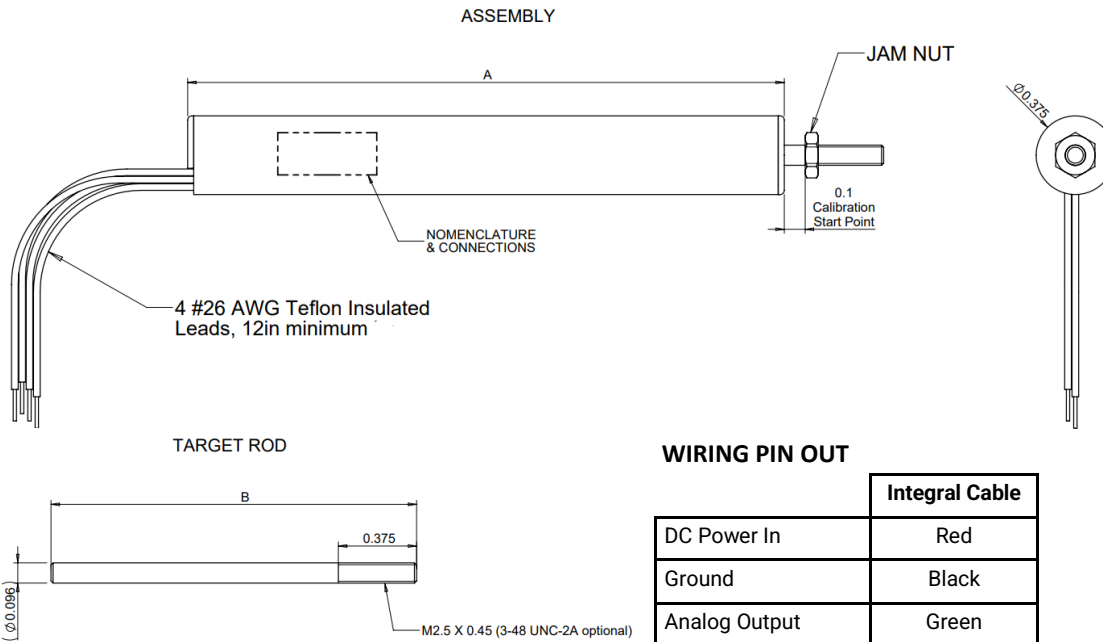
Country of Manufacture: Made in the USA



LINEAR POSITION SENSOR

ILPS-9.5Z SERIES LINEAR VARIABLE INDUCTIVE POSITION SENSOR

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 0.3 m 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, 0.3 meter Axial Cable, 0 to 10 VDC Output, Stainless Steel Housing

