



- Industrial Inductive Linear Sensor
- Non-Contact technology
- 0-4" Travel
- -20-85°C Operating Temperature
- Differential Output
- +/-0.5% Repeatability FS
- Analog Output (0-4.2V)
- IP67
- Customizable Metallic
- +/-2% accuracy

DESCRIPTION

The PSIL15 is a non-contact linear sensor manufactured for industrial applications requiring long term stability in a harsh environment. This patented inductive technology allows customization for specific applications that may require small objects to measure. The potted plastic design is made for higher temperature applications where dust, humidity, and/or grease might be an issue.

The PSIL15 sensor is easy to use, install, and flexible in the use of various sensing cores to meet customers requirements.

The design is simple, cost effective, and proves reliable for OEM customers. Please contact us for Custom design availability.

APPLICATIONS

- Industrial Automation
- Money Dispensing Equipment
- Automotive
- Medical Device
- Aerospace

Maximum Environmental Ratings

Operating Temperature -25°C to 85°C
 Storage Temperature Range -40°C to 90°C

Supply Voltage..... 8-30VDC
 Dimensions 19 X 25.5 X 64mm

PSIL15 Operational Characteristics

$V_+ = 5V$, $V_- = 0V$, Temperature = 25°C

PARAMETER	SYMBOL	MIN	TYP	MAX	UNITS
Supply Voltage	V_{DD}	8	12	30	V
Supply Current	I_{DD}	12	15	25	mA
Upper Output Voltage (Note 1)	V_{OUT}		4.2	5	V
Lower Output Voltage	V_{OUT}	.42	.5		V
Linearity (Note 2)		-0.25		0.25	%FS
Temperature Error (Null and Span) (Note 3)		-2		+2	%FS
Response Time	t_R		1	10	ms
Total Error Band (Note 4)		-2		2	%FS
Compensated Temperature Range	C	0		50	C
Operating Temperature Range	C	-25		85	C

Notes:

1) Measured with Supply Voltage at 12V. 2) Defined as best straight line 3) Measured from 0°C to 70°C 4) Measured over compensated temperature range 0-70C

Application Information

Package

The one piece body design is made of a high temperature plastic, which allows for easy manufacturability and long term stability. Automotive grade vibration proof design was made for 5 year+ life.

Stability

The inductive sensing element is mounted to a ceramic base and sealed into the high temperature plastic housing. The selection of thermally capability materials reduce the mechanical stress on the sensor resulting in greater stability over time and temperature.

Electrical Connections

Wire Color	Connection
Red	V+
Blue	GND
Yellow	Output

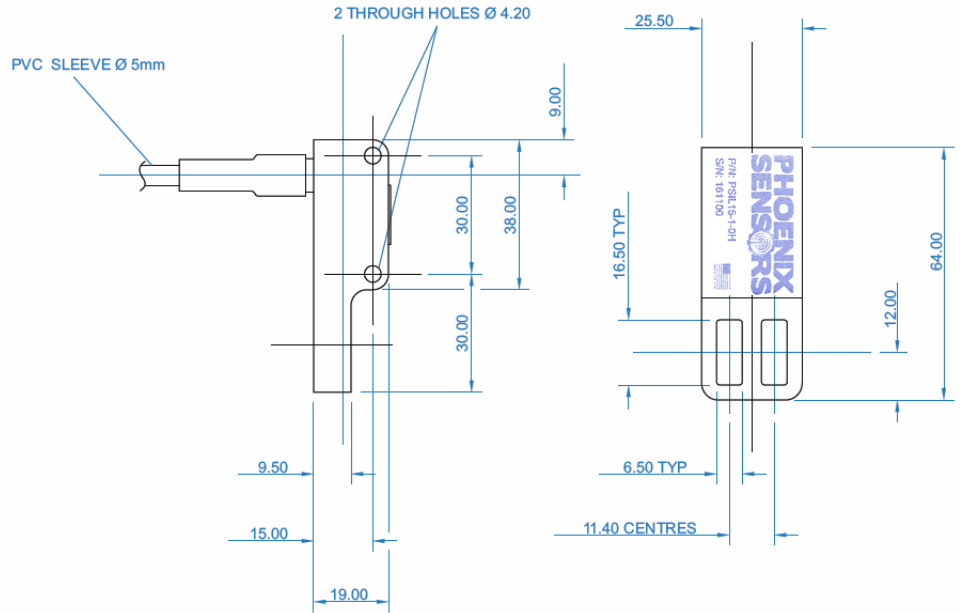
Media

The plastic material is tolerant to the following media but not limited to oil, air, gas, some corrosive media, and salt water. The sensor can be affected by large ferrous objects within 6" of the sensor.

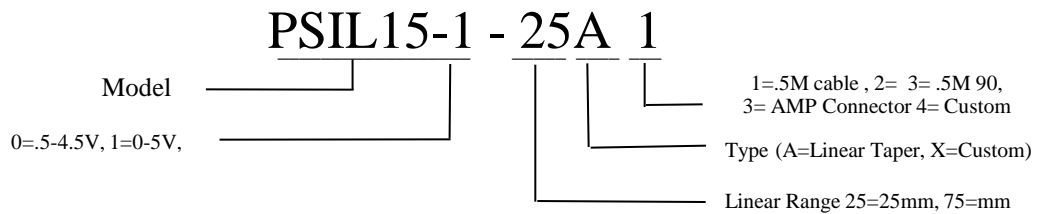
Linear ranges

Standard pressure ranges are 15, 25, 50, 75, 100, and 150mm. Custom linear displacement ranges are available for OEM customers.

Mechanical Dimensions (inches)



Part Number Configuration



Standard Part Numbers

Model	Linear Range (mm)	Type
PSIL15-0-50A1	50	.5M Cable
PSIL15-0-75A1	75	.5M Cable
PSIL15-0-25A1	25	.5M 90

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