ILSU series

Submersible Level Transmitter



- ***Stainless steel, piezo-resistive sensor***
- ***Accuracy: <0.1% FS BFSL***
- ***Depth ranges from 0-48" (0-4ft) to 0-3600" (0-300ft) WG***
- ***Various cable lengths***

The ILSU is designed for use in continuous submersion in liquids such as water, oil and other non-aggressive chemicals. The submersible uses the latest piezo-resistive media-isolated silicon sensing technology and a stainless steel diaphragm within a 316L stainless steel housing.

It offers excellent stability, repeatability and resolution, as required for use in rivers and reservoirs. This submersible level transmitter is the ideal product for reliable and repeatable hydrostatic level measurement.

The electronics incorporate a microprocessor based amplifier, requiring no adjusting and giving stable electronics.

Each device is temperature compensated, calibrated and supplied with a traceable serial number and calibration certificate.

Suitable applications

River level
Reservoir level
Tank level
Borehole level
Aquifer level
Environmental monitoring
V-notch weir flow measurement

Performance

Accuracy (Non-Linearity & Hysteresis)	<±0.1% / FS (BFSL)
Setting Errors (offsets)	Zero & Full Scale, <±0.5% / FS
Permissible Load	R_{max} = [(Voltage Supply-9)/0.02]Ohms
Influence Effects	Supply <0.005% FS / 1V
	Load 0.05% FSO / kOhm

Input Pressure Range

Nominal Pressure, Gauge	inchWG	40	100	200	400	800	1000	4000
Permissible Overpressure	inchWG	800	800	1000	1000	1000	2000	2000

Output Signals and Supply Voltages

PUR sheath

Wire system	Output	Supply Voltage	Connection	Wire Colours
2-wire	4-20mA	9-32Vdc	+ve Supply	Red
			-ve Supply	Blue
			Ground	White
			Cable Screen	Green

**Calibration data is supplied as a sticker affixed to the product packaging - do not discard*

Custom versions can be made for particular applications.

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ISO9001 CERTIFIED

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Made in the UK

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Electrical Protection

Supply reverse polarity protection	No damage/no function
Lightning protection	Internally fitted
Electromagnetic compatibility	CE Compliant

Mechanical Stability

Shock	100g / 11ms
Vibration	10g RMS (20 - 2000Hz)

Temperature & Thermal Effects

Media temperature	-20ºC (Non-freezing) to +60ºC
Storage temperature	-20ºC to +70ºC
Compensated temperature range	20ºC±25ºC
Thermal zero shift (TZS)	<±0.02%/FS/ºC
Thermal span shift (TSS)	<±0.01%/ºC

Material Specifications

Housing	316L Stainless Steel
"O" ring seals	Viton
Diaphragm	316L Stainless Steel
Cable sheath material	PUR
Media wetted parts	Housing, "O" ring seal, diaphragm & cable sheath

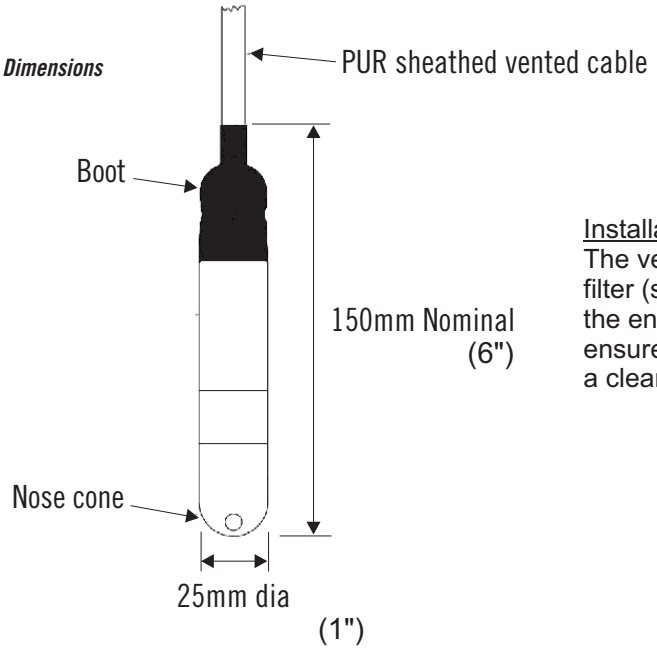
Miscellaneous

Weight	Transmitter: approx 9oz (250g) Cable: 1.7oz (48g) per yard (metre)
Current consumption	Limits at 28mA
Installation position	Any, small zero shift when tilted through 90º
Operational life	> 100x 10^6 cycles

Part No	Pressure Range	Cable Length	Output
ILSU-Gi048-003	0-48" WG	10ft	4-20mA
ILSU-Gi120-005	0-120" WG	16ft	4-20mA
ILSU-Gi240-008	0-240" WG	26ft	4-20mA
ILSU-Gi360-016	0-360" WG	52ft	4-20mA
ILSU-Gi720-025	0-720" WG	82ft	4-20mA
ILSU-Gi1K8-060	0-1800" WG	196ft	4-20mA
ILSU-Gi3K6-110	0-3600" WG	360ft	4-20mA

(Custom ranges and outputs available on request)

Mechanical Dimensions



Installation Note.
The vented cable is fitted with a filter (shown below) to prevent the entry of moisture. If removed, ensure vent tube is positioned in a clean, dry area.



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Sensata:

ILSU-Gi048-003 ILSU-Gi120-005 ILSU-Gi1K8-060 ILSU-Gi240-008 ILSU-Gi360-016 ILSU-Gi3K6-110 ILSU-Gi720-025