ILSU series

Submersible Level Transmitter



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.

- 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

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)

 $\begin{array}{lll} \text{Setting Errors (offsets)} & \text{Zero \& Full Scale, $<\pm0.5\%$ / FS} \\ \text{Permissible Load} & \text{R}_{\text{max}} = \text{[(Voltage Supply-9)/0.02]0hms} \\ \text{Influence Effects} & \text{Supply} & <0.005\% \text{ FS / 1V} \\ \text{Load} & 0.05\% \text{ FSO / k0hm} \\ \end{array}$

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 Si	gnals and Supply Voltage	S		PUR sheath
Wire syste	em Output	Supply Voltage	Connection	Wire Colours
2-wire	4-20mA	9-32Vdc	+ve Supply	Red
			-ve Supply	Blue
			Ground	White
			Cable Screen	Green

Custom versions can be made for particular applications.

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ILSU series



Submersible Level Transmitter

No damage/no function
Internally fitted
CE Compliant

Mechanical Stability

 Shock
 100g / 11ms

 Vibration
 10g RMS (20 - 2000Hz)

Temperature & Thermal Effects

Media temperature -20°C (Non-freezing) to +60°C

 $\begin{array}{lll} \mbox{Storage temperature} & -20^{\circ}\mbox{C to } +70^{\circ}\mbox{C} \\ \mbox{Compensated temperature range} & 20^{\circ}\mbox{C} \pm 25^{\circ}\mbox{C} \\ \mbox{Thermal zero shift (TZS)} & <\pm 0.02\%/FS/^{\circ}\mbox{C} \\ \mbox{Thermal span shift (TSS)} & <\pm 0.01\%/^{\circ}\mbox{C} \\ \end{array}$

material Specifications	
Housing	316L Stainless Steel
"0" 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)

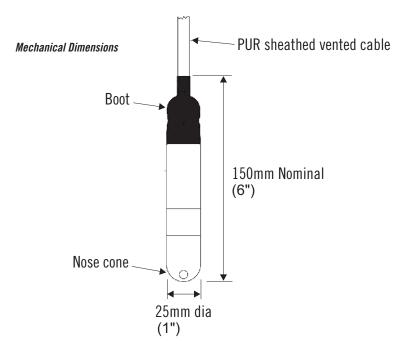
Current consumption Limits at 28mA

Installation position Any, small zero shift when tilted through 90°

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)



ISO9001 CERTIFIED