



ILSEU series

External Mount Hydrostatic Level Transmitter



- **Piezo-resistive sensor**
- **Accuracy $\leq \pm 0.25\%$ FS BFSL**
- **Various outputs including Volts and mA.**
- **Level ranges from 0-48" (0-4ft) to 0-480" (0-40ft) water gauge (Custom ranges available on request)**

Input Pressure Ranges

Nominal level, Gauge,	inchWG	40	100	200	280	400
Permissible Overpressure	inchWG	800	800	800	2000	2000

The external mount hydrostatic level transmitter, ILSEU, has a piezo-resistive silicon pressure sensor which is an oil-filled isolated diaphragm. The sensor and housing are made from stainless steel with a choice of internal O-ring seals to ensure the product is suitable for a wide range of applications.

The electronics incorporate a microprocessor based amplifier, requiring no adjusting and giving stable electronics, especially in high vibration/shock applications.

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

Suitable applications

Environmental engineering	Container or chamber level
Rainwater harvesting	Automotive testing
Static tank level	Vehicle tank level
Laboratory testing	IBC, IBC Tote or pallet tank

Performance

Accuracy (Non-Linearity & Hysteresis)	$\leq \pm 0.25\%$ / FS (BFSL)	
Setting Errors (offsets)	2-wire	Zero & Full Scale, $\leq \pm 0.5\%$ / FS
	3-wire	Zero & Full Scale, $\leq \pm 0.5\%$ / FS
Permissible Load	2-wire	$R_{max} = [(VS-VSmin)/0.02]\Omega$
	3-wire	$R_{min} = 10k\Omega$
Influence Effects	Supply	$< 0.005\%$ FS / 1V
	Load	0.05% FSO / $k\Omega$

Material Specifications

Housing	303 Stainless Steel
"O" ring seals	Viton
Diaphragm	316L Stainless Steel
Media wetted parts	Housing & process connection, "O" ring seal, diaphragm

Miscellaneous

Current consumption	2 -wire - limits at 28mA 3-wire - typical 6mA
Weight	Approx 3.5oz (100g)
Installation position	Any, small zero shift when tilted through 90°
Operational Life	$> 100 \times 10^6$ cycles
Insulation resistance	$> 50M\Omega$ at 50Vdc

Electrical Protection

Supply reverse polarity	No damage but also no function
Electromagnetic compatibility	CE Compliant

Mechanical Stability

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

Temperatures & Thermal Effects

Media Temperature	-40°C to +125°C
Ambient Temperature	-20°C to +80°C
Storage temperature	-40°C to +125°C
Compensated temperature range	+20°C to +80°C
Thermal Zero Shift (TZS)	$\leq \pm 0.04\%$ /FS/°C
Thermal Span Shift (TSS)	$\leq -0.015\%$ /°C

Cynergy3 Components Ltd.
7 Cobham Road
Ferndown Industrial Estate
Wimborne, Dorset BH21 7PE
Telephone +44 (0) 1202 897969
Email:sales@cynergy3.com

ISO9001 CERTIFIED

www.cynergy3.com



ILSEU series

External Mount Hydrostatic Level Transmitter

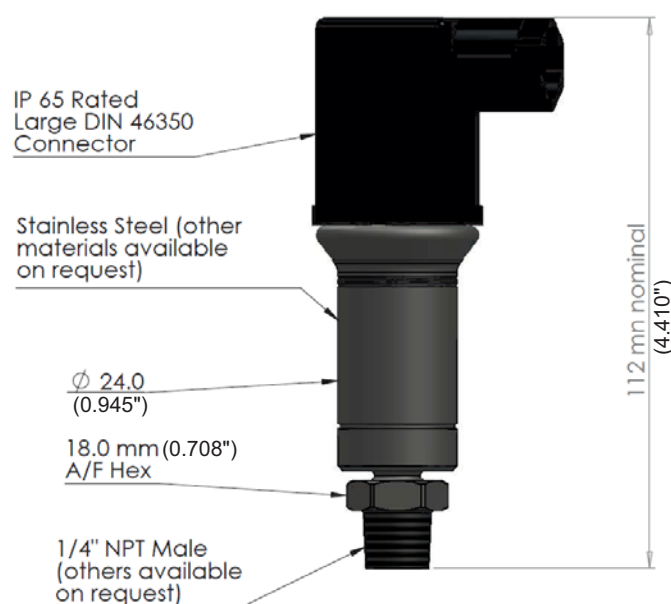
Output Signal and Supply Voltage

Wire system	Output	Supply Volts	Connection	Pin No. (Large plug and socket)
2-wire	4-20mA	9-32Vdc	+ve Supply -ve Supply Ground	Pin 1 Pin 2 Earth pin
3-wire	0.5 - 4.5Vdc (non-ratiometric)	9-32 Vdc	+ve Supply -ve Supply +ve Output Ground	Pin 1 Pin 2 Pin 3 Earth Pin

Part No	Pressure Range	Output
ILSEU-Gi048-5	0-48" WG	4-20mA
ILSEU-Gi120-5	0-120" WG	4-20mA
ILSEU-Gi240-5	0-240" WG	4-20mA
ILSEU-Gi360-5	0-360" WG	4-20mA
ILSEU-Gi480-5	0-480" WG	4-20mA
ILSEU-Gi048-D	0-48" WG	0.5 to 4.5V 3Wire
ILSEU-Gi120-D	0-120" WG	0.5 to 4.5V 3Wire
ILSEU-Gi240-D	0-240" WG	0.5 to 4.5V 3Wire
ILSEU-Gi360-D	0-360" WG	0.5 to 4.5V 3Wire
ILSEU-Gi480-D	0-480" WG	0.5 to 4.5V 3Wire

Part No	Pressure Range	Output
ILSEU-G0100-5	0 - 1mWG	4-20mA
ILSEU-G0250-5	0 - 2.5mWG	4-20mA
ILSEU-G0500-5	0 - 5mWG	4-20mA
ILSEU-G0700-5	0 - 7mWG	4-20mA
ILSEU-G1000-5	0 - 10mWG	4-20mA
ILSEU-G0100-D	0 - 1mWG	0.5 to 4.5V 3Wire
ILSEU-G0250-D	0 - 2.5mWG	0.5 to 4.5V 3Wire
ILSEU-G0500-D	0 - 5mWG	0.5 to 4.5V 3Wire
ILSEU-G0700-D	0 - 7mWG	0.5 to 4.5V 3Wire
ILSEU-G1000-D	0 - 10mWG	0.5 to 4.5V 3Wire

(Custom ranges and outputs available on request)



ISO9001 CERTIFIED

ILSEU 2015

www.cynergy3.com

© 2015 Cynergy3 Components, All Rights Reserved. Specifications are subject to change without prior notice. Cynergy3 Components and the Cynergy3 Components logo are trademarks of Cynergy3 Components Limited.