

Economy Submersible Level Transmitter

HSL100

Introduction

Based the principle that hydrostatic pressure increases with the liquid depth, HSL100 uses a submersible pressure sensor to measure the static pressure of the liquid column above the sensor, which is proportional to the liquid level, allowing for accurate determination of the liquid height in a tank or vessel.



Characteristics

High stability, high reliability

Accuracy 0.5%, 0.2%

Long life time for continuous level measurement

Suitable for corrosive liquid

4...20mA output

Protection class IP68

Applications

Tank, vessel level measurement

Overfilling monitoring

Water treatment

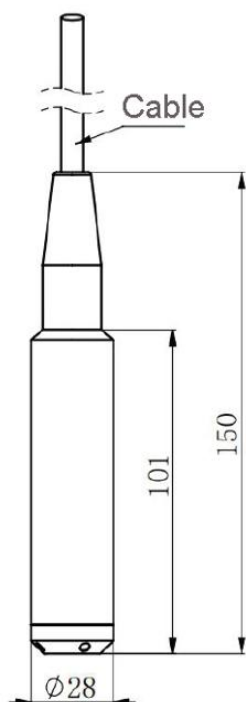
Drainage system

Chemical processing

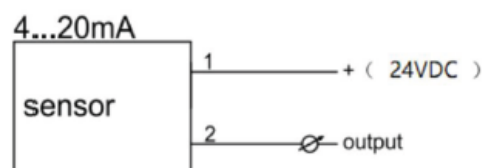
Specifications

Measuring range	Up to 5 bar / 72 psi (50m / 164ft water column)
Accuracy	0.5%, 0.2%
Output	4...20mA
Linearity	0.5%
Repetability	<=0.05%
Stability	<0.1% FS / year
Temperature effect	Tk>0.02%FS/K
Reponse time	>1ms (10%...90% FS)
Operating voltage	24VDC±20%
Current consumption	Same as singal current
Wiring protection	Reverse polarity, Overvoltage and Short-circuit
Ambient temperature	-4...176°F / -20...80°C
Medium temperature	14...122°F / -10...50°C
Protection class	IP68
Material	Housing: stainless steel 316L / PTFE
	Rope: PUR / PTFE
Weight	Sensor: 0.18kg
	Weight: 0.5kg

Dimension in mm



Wiring



PIN	Polarity	4...20mA
1	+	24VDC power supply
2	-	4...20 output +

Order Code

Example: HSL100-AR0402M4AS

1. Model

HSL100- Economy Submersible Level Transmitter

2. Sensor diameter

A 28mm

B 39mm

3. Measuring range

R025 0...0.25 bar (0...2.5m H₂O column)R035 0...0.35 bar (0...3.5m H₂O column)R040 0...0.4 bar (0...4m H₂O column)R060 0...0.6 bar (0...6m H₂O column)R100 0...1 bar (0...10m H₂O column)R200 0...2 bar (0...20m H₂O column)R500 0...5 bar (0...50m H₂O column)

Please choose from 0...5 bar.

HSL100 works based on the principle that hydrostatic pressure increases with the liquid depth, the pressure is proportional to the liquid level. For water, 1 bar is 10m water column.

4. Accuracy

2 0.2%

5 0.5%

5. Output

M4 4...20mA

6. Rope material

A PUR

B PTFE

7. Sensor material

S Stainless steel 316L

P PTFE