

Submersible Level Transmitter **HSL200**

Introduction

Based the principle that hydrostatic pressure increases with the liquid depth, HSL200 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%

On-site calibration

Suitable for corrosive liquid

4...20mA / 1...5V output selectable

Applications

Tank, vessel level measurement

Overfilling monitoring

Water treatment

Drainage system

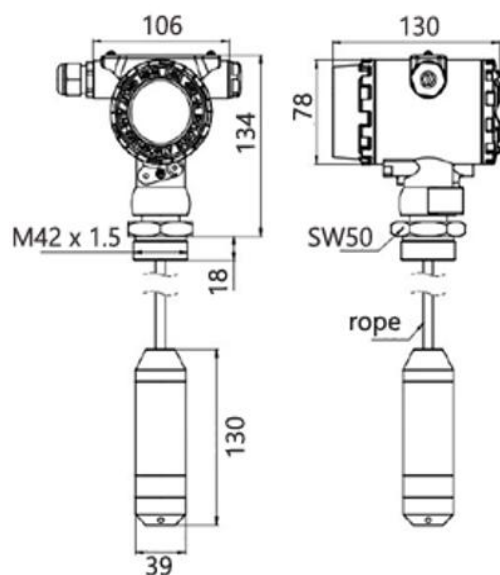
Chemical processing

Specifications

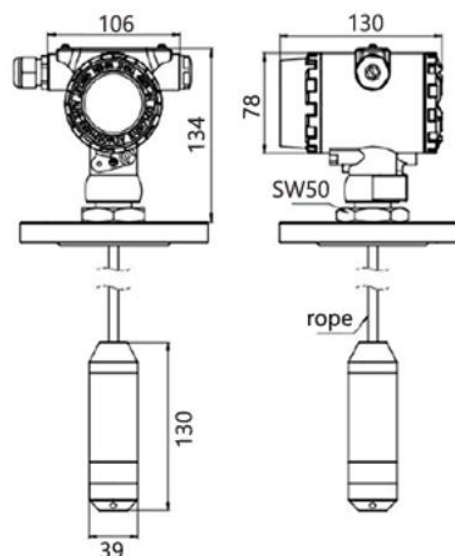
Measuring range	Up to 5 bar (50m / 164ft water column)
Accuracy	0.5%, 0.2%
Output	4...20mA / 1...5V
Linearity	0.50%
Hysteresis	≤ 0.01% FS
Stability	<0.1% FS / year
Temperature effect	Tk>0.02%FS/K
Operating voltage	24VDC±20%
Load resistance	≤100Ω
Temperature	Operating temperature: -22...185°F / -30...85°C Medium temperature: -22...176°F / -30...80°C Storage temperature: -22...185°F / -30...85°C
Process connection	Thread: M42 x 1.5 Flange: DN50 / DN80 (EN 1092-1) Flange: 2" / 3" ANSI Flange (ASME B16.5)
Protection class	Sensor: IP68
Material	Transmitter housing: Aluminum Sensor: Stainless steel 316L / PTFE Rope: PVC / PTFE

Dimension in mm

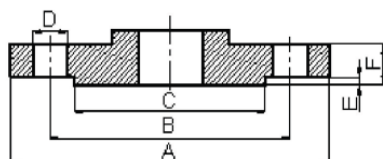
Thread connection



Flange connection

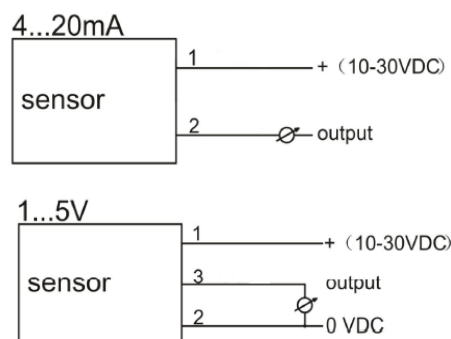


Flange connection



DN	A	B	C	D	E	F	Bolt	Bolts number
50	165	125	99	18	2	20	M16	4
80	200	160	132	18	2	20	M16	8

Wiring



PIN	Polarity	4...20mA	1...5V
1	+	24VDC power supply	24VDC power supply
2	-	4...20 output +	Grounding (0VDC)
3	/	/	1...5V output +

Order Code

Example: HSL200-AR025E5M4ASM42

1. Model

HSL200- Submersible Level Transmitter

2. Sensor diameter

A	39mm
B	46mm
C	28mm (only apply to SS 316L sensor)

3. Measuring range

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

Please choose from 0...5 bar.

HSL200 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. Display

N	None
E	LCD display

5. Accuracy

2	0.2%
5	0.5%

6. Output

M4	4...20mA
V1	1...5V

7. Rope material

A	PVC
B	PTFE

8. Sensor material

S	Stainless steel 316L
P	PTFE

5. Process connection

FU50	Flange: DN50 (EN 1092-1)
FU80	Flange: DN80 (EN 1092-1)
FA2	Flange: 2" ANSI Class 150 (ASME B16.5)
FA3	Flange 3" ANSI Class 150(ASME B16.5)
M42	Thread M42 x 1.5
S	other connection on request