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

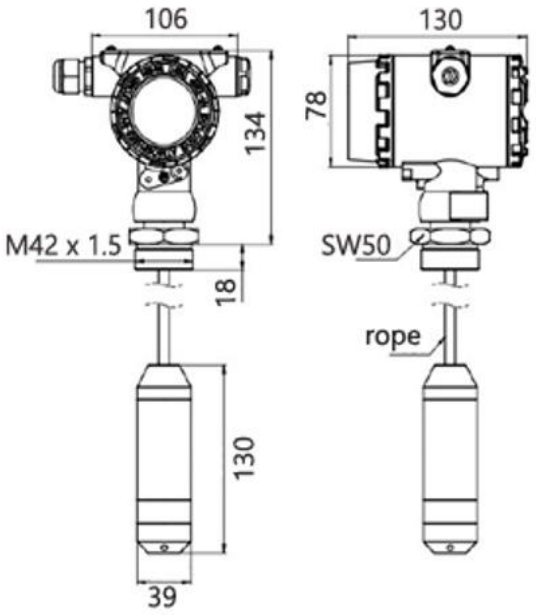
Chemical processing

Specifications

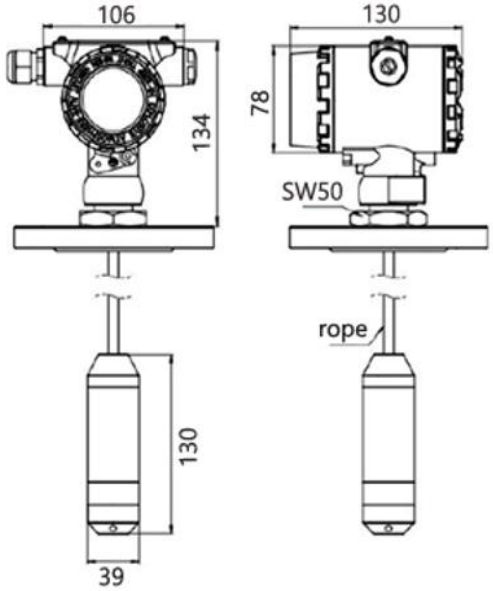
Measuring range	Up to 5 bar (50m / 164ft water column)
Accuracy	0.5%, 0.2%
Output	4…20mA / 1…5V
Linearity	0.50%
Hysteresis	<= 0.01% FS
Stability	<0.1% FS / year
Temperature effect	Tk>0.02%FS/K
Operating voltage	24VDC±20%
Load resistance	<=100Ω
Temperature	Operating temperature: -30…85°C / -22…185°F
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

Dimension in mm

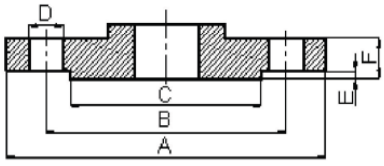
Thread connection



Flange connection

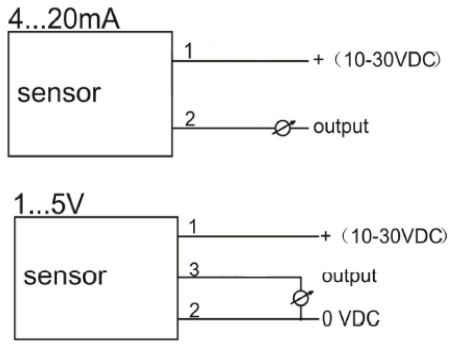


Flange connection



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-A1E5M4ASF50

1. Model

HSL200-	Submersible Level Transmitter

2. Sensor diameter

A	39mm
B	46mm (with PTFE probe, up to 100m)
C	28mm (only for stainless steel 316L)

3. Measuring range

1	0…5 bar (0…50m H_2O 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

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

F50	Flange DN50
F80	Flange DN80
M42	Thread M42 x 1.5
S	Customerization