



SHLT02 Diffusive Silicon Level Transmitter

Product Overview

SHLT02 Diffusive Silicon Series level transmitters are the extension and development of pressure transmitter technology. According to the principle that the liquid with different specific gravity are in linear relation to the pressure generating at different height to realize the accurate measurement and transmission of volume, level height and weight of water, oil and paste-state matters. They are widely used in the industries such as power, petroleum, chemical engineering, metallurgy, water utilization, running water and food, etc.

Features

- Simple installation, convenient use, strong interchange ability; hi-quality, high sensitivity, fast response rate, can accurately react the subtle change of moving or static level, and high measuring accuracy.
- Possess the ability of intrinsically safe explosion separation and explosion-proof; can be applied to all kinds of hazardous fields.
- Can be equipped with LCD digital display
- 4~20mA DC two-wire output, strong interference-resistant ability, long transmitting distance.
- Fine and unique zero, temperature shift and non-linearity compensation ensure the instrument in the range of using conditions to have a stable accuracy for a long time.

Technical Specification

Table 1

Measuring range	(0-0.5~200)m ($\rho=1\text{g/cm}^3$)
Over load	150%FS~200%FS
Accuracy	0.5 ,0.2
Medium	Compatible to stainless steel or PTFE
Working temperature	(-20~80) °C, medium should not be solid
Power supply	(12~45)VDC, normal 24VDC
Output	2 wire 4-20mA,4-20mA+HART, MODBUS
Ingress protection:	Sensor IP68, Transmitter IP65 (Std.) or IP67
Stability	0.2%FS/year
Working temperature	(-20~85) °C, medium should not be solid
Stability	$\leq \pm 0.2\%$ /URL (12 months)
Temperature compensation	0-50 °C
Response time	0.25s
Effect of power supply:	$\leq \pm 0.005\%$ /URL/V

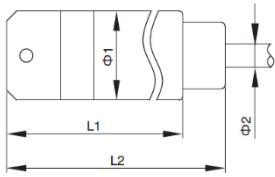
Model Selection

Table 2

Item	Code	Description
Type	A	4-20mA Output (0.5% accuracy)
	S	4-20mA & Hart Protocol (0.25% accuracy)
	R	Modbus RS485
Product	SHLT02	Diffusive Silicon Level Transmitter
Digital indicator	1	No indicator
	3	LCD indicator
Measuring range	1	0~1m (H ₂ O)
	2	0~5m (H ₂ O)
	3	0~3.5m (H ₂ O)
	4	0~7m (H ₂ O)
	5	0~10m (H ₂ O)
	6	0~20m (H ₂ O)
	7	0~35m (H ₂ O)
	8	0~70m (H ₂ O)
	9	0~100m (H ₂ O)
	X	X-Custom level range
Explosion Proof	N	Non explosion proof (Std.)
	1	Intrinsically safe, Exia II CT6
	E	Explosion proof, Exd II CT6
Installation	1	Thread M20*1.5
	2	Thread 1/2 NPT
	3	Flange connection (Specify flange standard)
	X	Custom
Probe material	A2	Stainless steel 304 (Std.)
	A3	Stainless steel 316L
	A4	PTFE material
	A5	Others
Cable sheath material	B1	Polyethylene
	B3	PTFE
	B2	Others
Power supply	V1	24V DC
	V2	Others
Cable length	L **	L range 1-200m, for example 5m is L005

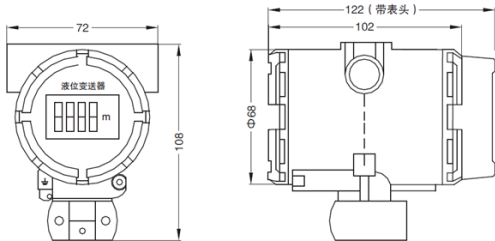
Note: Please provide density of liquid when ordering. Otherwise we will calibrate the instruments with water (4°C, density 1g/cm³).

Dimension



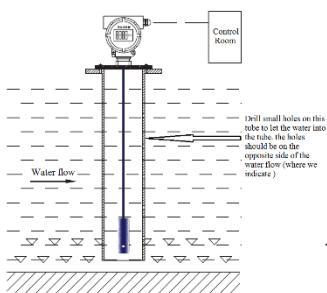
Type	L1	L2	φ1	φ2
Standard	92	105	27	7.2
Anti-thunder Type	112	125	27	7.2
Anti-corrosive Type	72	90	30	7.5

Sensor Dimensions

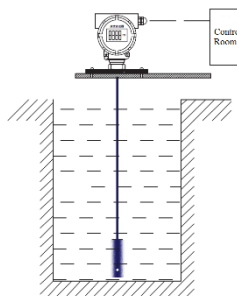


Transmitter Dimensions

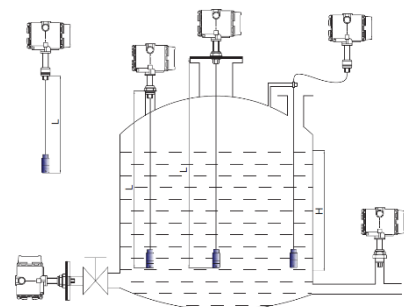
TYPICAL INSTALLATION



Water with Vibration



Static Water



Vessel Installation