

SLH-DOW Series Wall Mount Doppler Ultrasonic Flow Meter



Principle

Doppler flow meter is a type of ultrasonic flow meter. It uses Doppler Effect to measure the liquid volumetric flow through a pipe. The Doppler Effect flowmeter converts the measured frequency shift into a fluid volumetric flow rate. In order for a Doppler flowmeter to work properly, the liquid must contain particles or bubbles, so it works well for dirty liquids, such as waste water, but not so well for clean water. The flow meter emits an ultrasonic signal, which is reflected by particles and bubbles, resulting in a shift in signal frequency. This frequency shift is measured by the flowmeter.

Feature

- Non-contact flow meter, compact design, small size and portable carry;
- Clamp on flow sensors, no need to cut down the pipelines;
- Measurement is independent of fluid conductivity;
- Non-invasive, clamp on transducers is easy to install and cost efficient. Since the transducers do not contact with the fluids, fouling and maintenance are eliminated.
- Built-in data logger can store 65,072 data records;
- RS-232 or RS 485 for connection with PC and display wave shape of ultrasonic signals received by flow meters;

Applications

Sewage, mud slurries ,wastewater, raw water, circulating water, pulp, ore pulp, crude oil and acid-base liquid, chemical raw materials, seawater, etc. On-site flow verification; on-site verification of other flow meters

Technical Specifications

Item	Specifications	
Transmitter	Display	Total flow, flow rate
	Output	4-20mA,load capacity 600 Ω; Relay outputs; RS-232 or RS485 series port;
	Function	Built-in data logger, can store 65,072 data; display wave shape of flow information
Transducer	Install	Clamp on Transducers or Insertion transducers
	Cable length	Standard 6m between sensor and host
	Explosion	Explosion proof Exib IIB T4

Temperature	Transmitter	-20~ 50 °c
	Transducer	-40~ 82 °c or -40~ 150 °c for fluids temperature
Pipe	Pipe material	Suitable for carbon steel, stainless steel, cast iron, copper, PVC, aluminum, glass steel, hard metal, plastic.,etc
	Straight pipe	Upstream over 10D,downstream over 5D,30D from pump;
Size	50mm~3000mm	
Velocity	0.3 m/s ~6.0 m/s	
Accuracy	±1% or ±2%	
Repeatability	±0.5%	
Power supply	Battery,220VAC,110VAC or 24V DC	
Protection Rating	IP67	
Size	Transmitter size 240 × 185 × 120 mm	
Net Weight	1.88 kg	

Transducers Type



Clamp on Transducers



Insertion Transducers

Model Selection

Item	Code	Description
Type	DOP-G	Wall mount Doppler ultrasonic flow meter
Pipe size	xx	xx mm, such as 100mm, 200mm
Fluids Temperature	T1	-40~ 82 °c
	T2	-40~ 150 °c
Output & Communication	S0	4-20mA
	S1	RS485
	S2	RS232
	S4	Relay
Transducer Type	C	Clamp Type
	T	Insertion type
Power supply	G0	220V AC
	G1	24V DC
	G2	110V AC
Cable length	x	X meters, standard 6m.