

# SCL-9

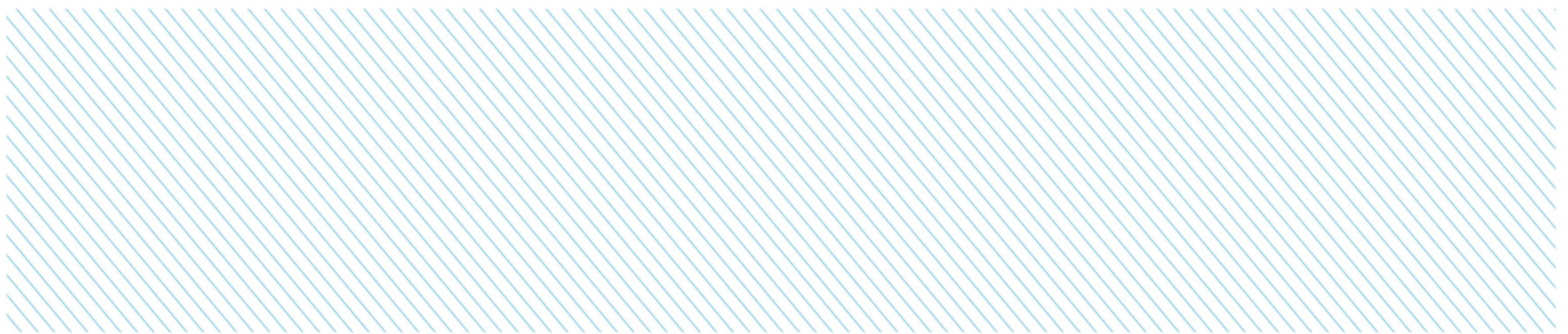
## Multiple-channel Ultrasonic Flowmeter

### Scope of Application

Mainly applied to high-precision metering of large-scale water transmission and supply projects, and also suitable for pressure pipes and culverts in various shapes.



- ✓ 4/8-channels
- ✓ High accuracy class
- ✓ Installation and maintenance without water cut-off
- ✓ Anti-interference
- ✓ No pressure loss
- ✓ Cost-effective
- ✓ High matching degree
- ✓ Strong adaptability



## Features

- ✓ High resolution time measurement technology, ultrasonic DSP technology, ensuring data reliability.
- ✓ Metal pipes, concrete pipes, culverts and other pipes with pressure can be measured.
- ✓ According to pipe conditions and requirements of measurement accuracy, 4-channel and 8-channel can be arbitrarily combined without damage and pressure loss.
- ✓ Comprehensive functions, with intelligent diagnosis function and multiple transmission interfaces (RS-485, 4-20mA, pulse, etc.).
- ✓ Cost-effective, be selectable according to users' demand.

## Advantages

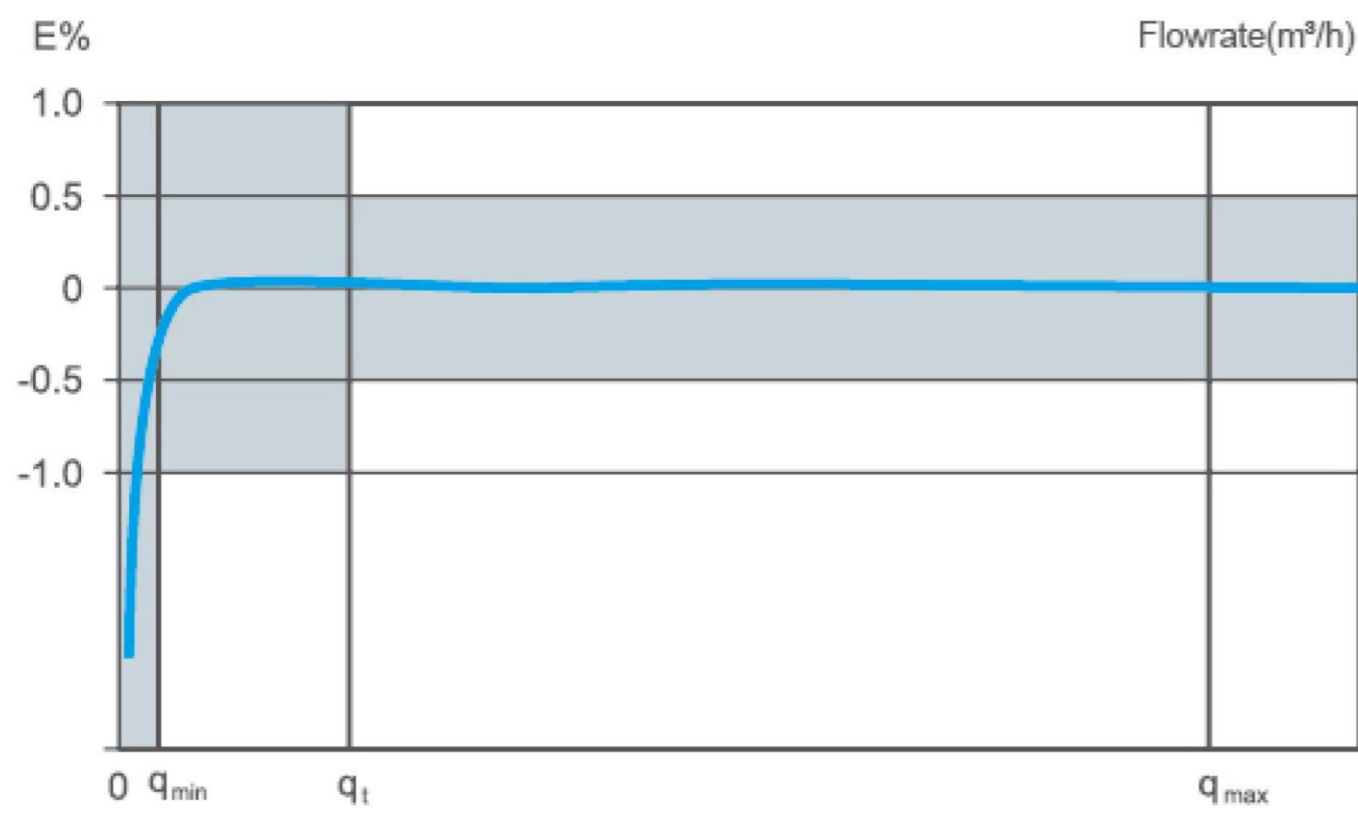
- ✓ Ultrasonic flow measurement technology with multiple-channel design and large diameter, improve the accuracy under complex flow regime.
- ✓ High accuracy class (class 0.5).
- ✓ Small installation space, installation and maintenance with flow and pressure.

## Technical Parameters

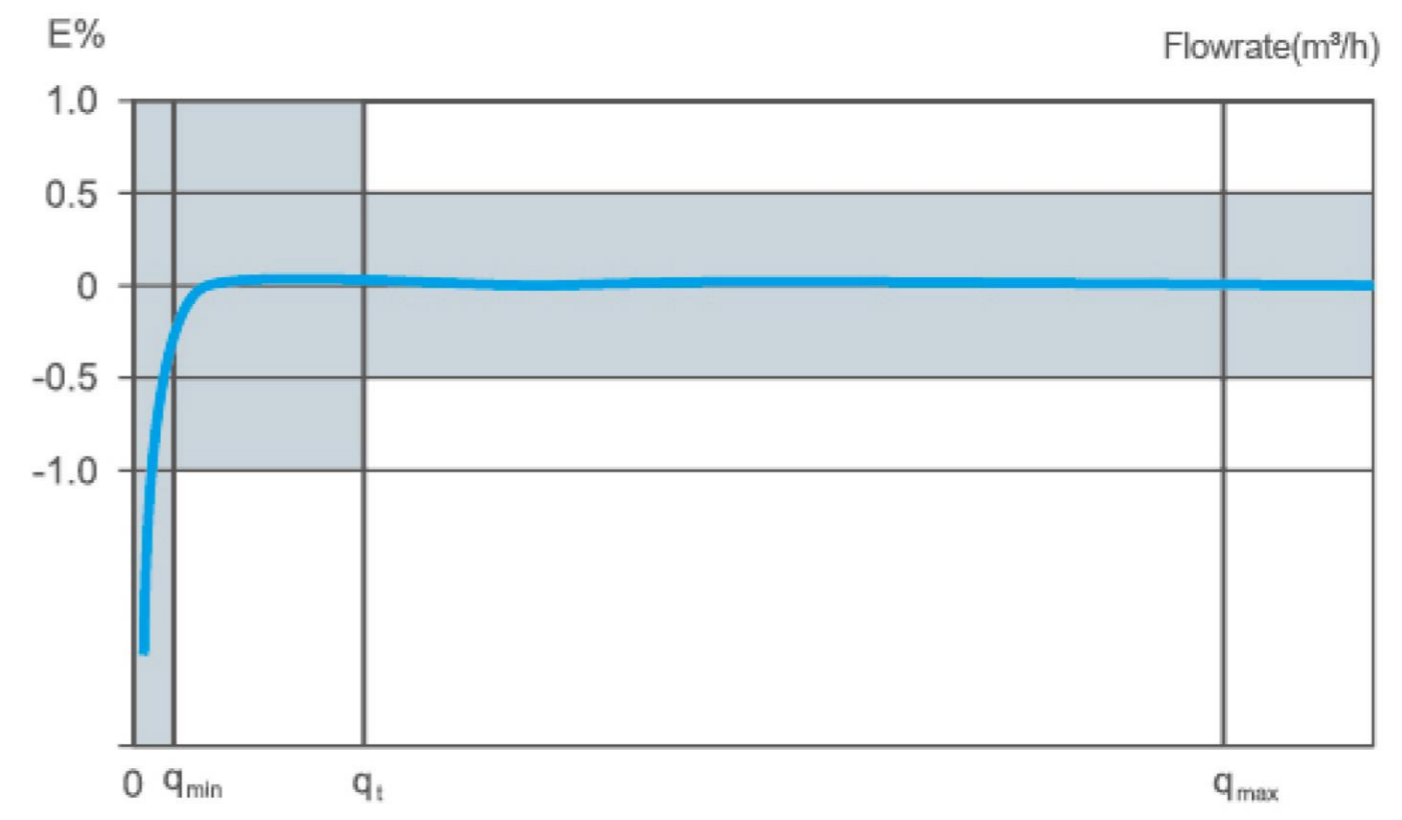
Item		Parameter		
Product Type		SCL-9 multiple-channel ultrasonic flowmeter		
Installation Method		SCL-90 (Insertion-type)	SCL-92 (Internal mounted-type)	
Adaptable Pipe Material		Material like steel, cast iron, cement, PE and PVC etc., which can be drilled for mounting	Material like steel, cast iron, PE and PVC etc., which can be mounted with transducer	
Nominal Diameter		DN300~DN15000	DN1500~DN15000	
Temperature of Fluid Measured		Normal-temperature version: 0°C~50°C, High-temperature version: 0°C~130°C		
Medium		Water, sewage or other homogeneous fluids in full pipe flow, suspended solid content < 10g		
Velocity Range		0m/s~12m/s ( $q_v=0.3\text{m}^3/\text{s}$ )		
Accuracy Class		Class 0.5		
Environment Temperature		-10°C~+45°C (If the range is exceeded, please specify on ordering)		
Environment Humidity		≤85%RH (If the range is exceeded, please specify on ordering)		
Power Supply		AC220V±10%, 50Hz		
Power Consumption		<5W		
Operation		1×3 induction key		
Display Indication		240×64 LCD		
Values Displayed	Screen	Accumulated flowrate (m <sup>3</sup> ), Instantaneous flowrate (m <sup>3</sup> /h), Signal strength indication, Operating condition indication, Failure indication		
	Induction Key	Positive accumulated flowrate (m <sup>3</sup> ), Negative accumulated flowrate (m <sup>3</sup> ), Instantaneous flowrate (m <sup>3</sup> /h), Velocity (m/s), Running time (h), Date (year/month/day), Time (hour/minute/second), Water temperature (°C)		
Display Range		Accumulated flowrate: -99999999.9m <sup>3</sup> ~+99999999.9m <sup>3</sup> Instantaneous flowrate: -9999999.99m <sup>3</sup> /h~+9999999.99 m <sup>3</sup> /h		
Unit Output	Digit Value	RS-485	Baud rate: 2400bps, 4800bps, 9600bps (selectable), default: 4800bps, Transmission distance≤1200m, Huizhong protocol, Modbus RTU protocol (selectable)	
	Analog Value	Optical isolator 4~20mA, 0~10mA or 0~20mA; Electrical load≤600Ω		
	Accumulated Switching Value	Active output	Output voltage: max. DC24V; Output current: max. 20mA (default)	
		Positive output	Load voltage: max. DC30V; Load current: max. 20mA (please specify on ordering)	
Transmission distance		≤500m		
Data Storage		Cumulative flowrate, cumulative running time and parameters can be stored; Current 150-day daily historical data and current 60-month monthly historical data can be automatically stored; Data can be stored for 100 years after power failure; Daily and monthly historical data include date, positive cumulative flowrate, negative cumulative flowrate, cumulative flowrate algebra and corresponding running time		
Protection Class	Unit	IP65		
	Transducer	IP68		
Number of Sonic Channels		4/8-channels		

## Typical Error Curve

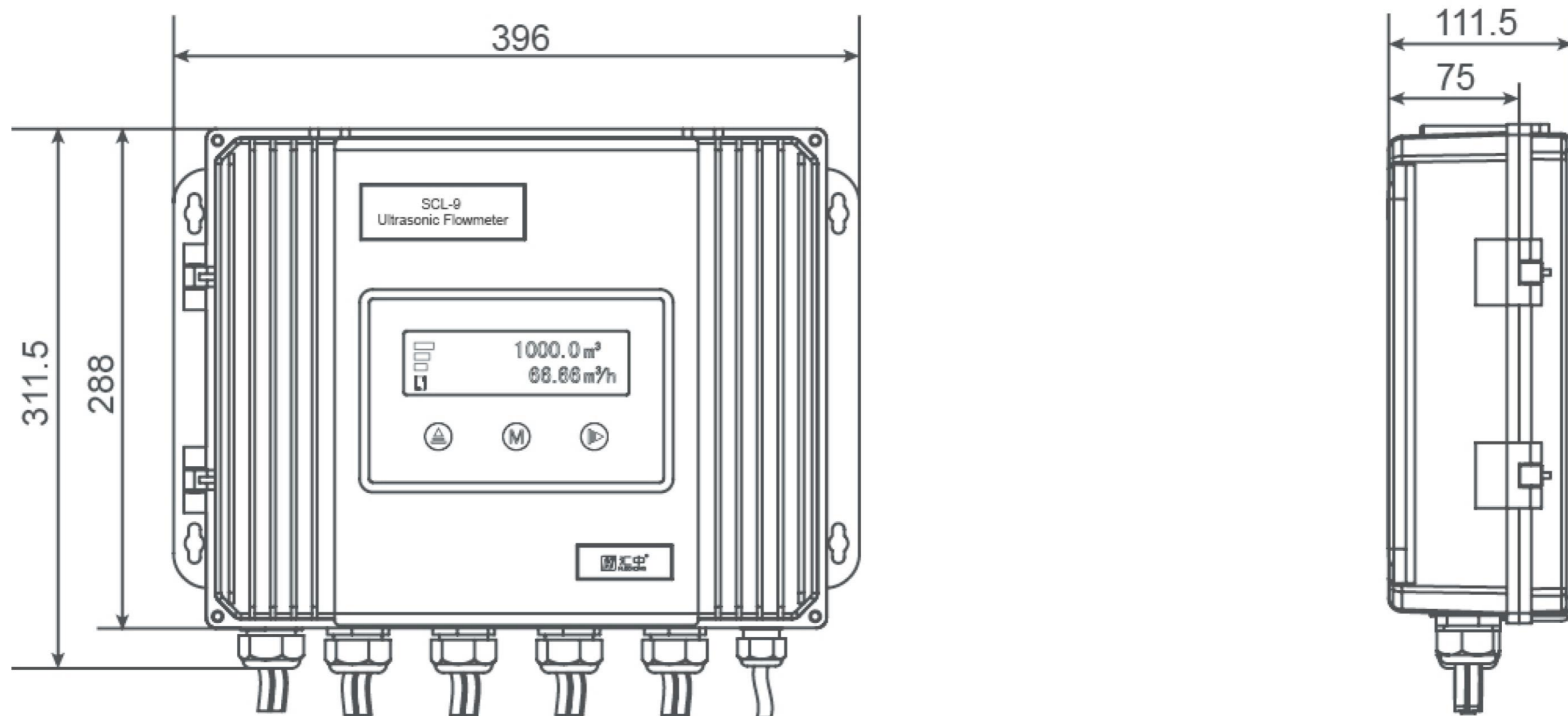
SCL-90



SCL-92

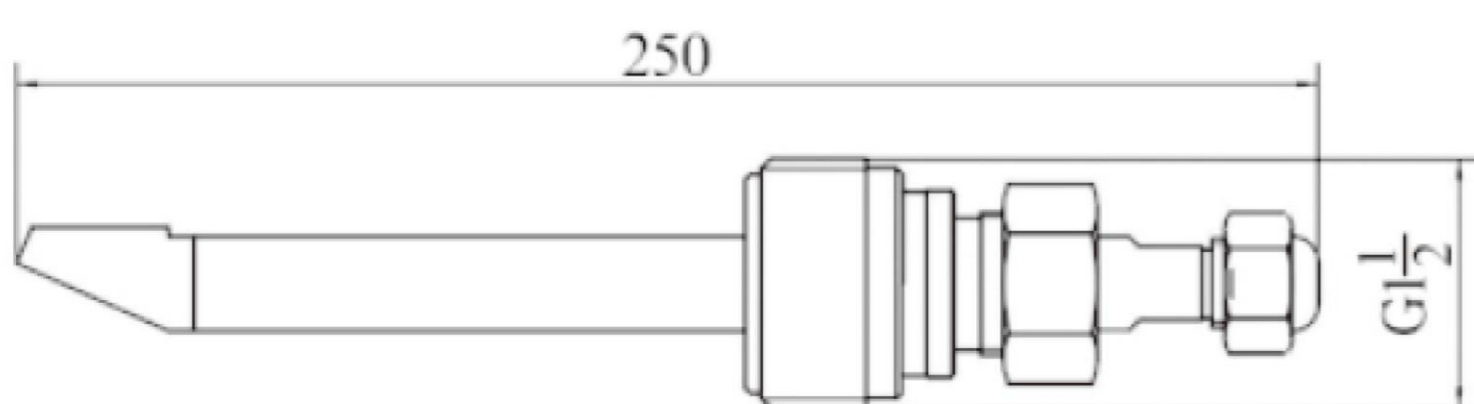


## Main Unit Dimensions (mm)



## Transducer Dimensions (mm)

SCL-90



SCL-92

