

SCL-80/82

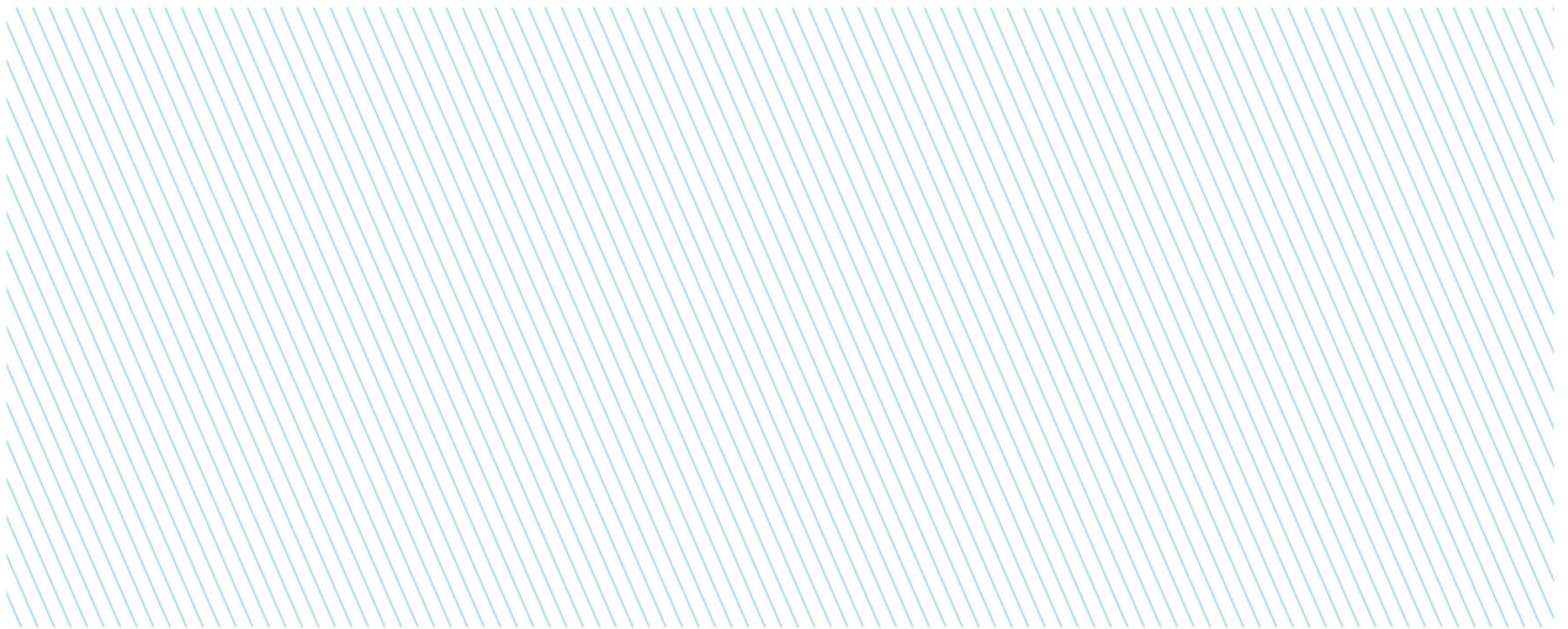
Ultrasonic Flowmeter

Scope of Application

It is applicable to the monitoring and measurement of urban water supply and drainage, domestic water, industrial circulating water and industrial wastewater in the process of production in the fields of mines, petroleum, chemistry industry, metallurgy, electric power, as well as water supply and drainage.



- ✓ High accuracy class
- ✓ Installation and maintenance without water cut-off
- ✓ Anti-interference
- ✓ Insertion-type/clamp-on type (selectable)
- ✓ No abrasion



Features

- ✓ Ultrasonic flow measurement technology with multiple-channel design and large diameter, improve the accuracy under complex flow regime.
- ✓ Use of advanced multi-pulse technology, DSP technology, with strong anti-interference ability.

Advantages

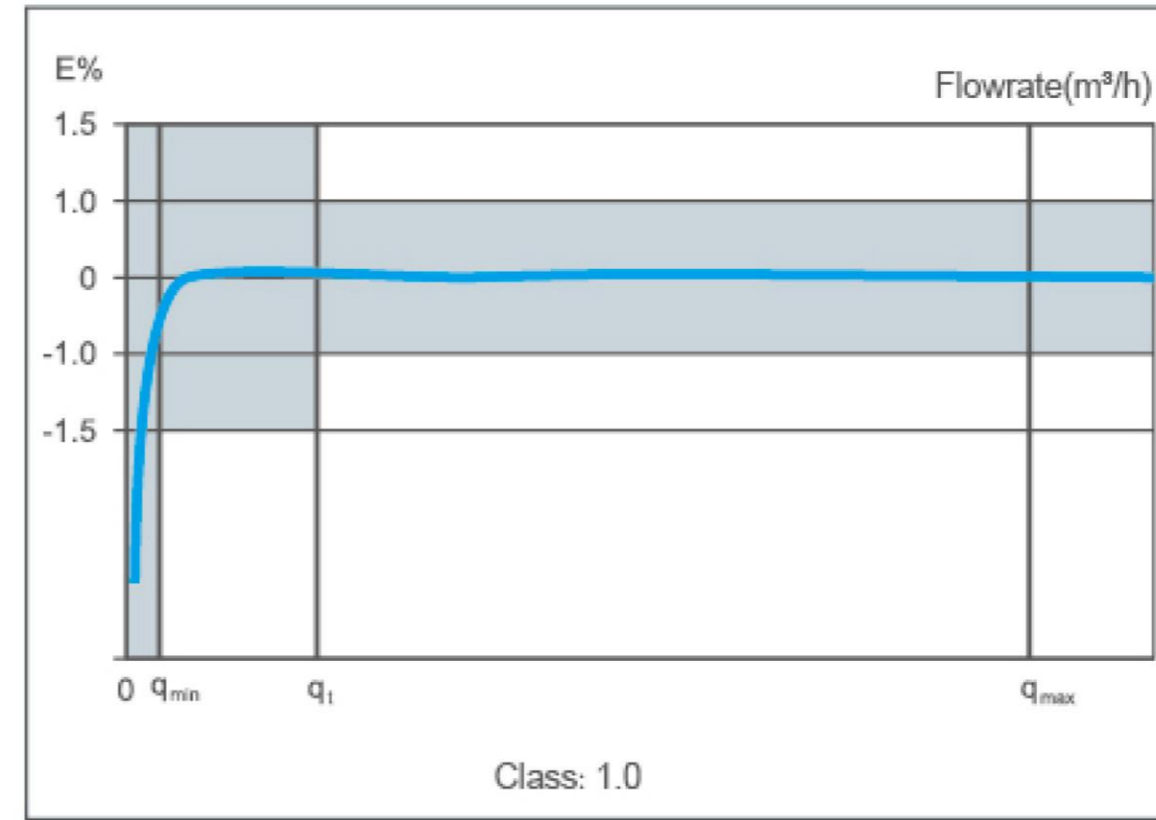
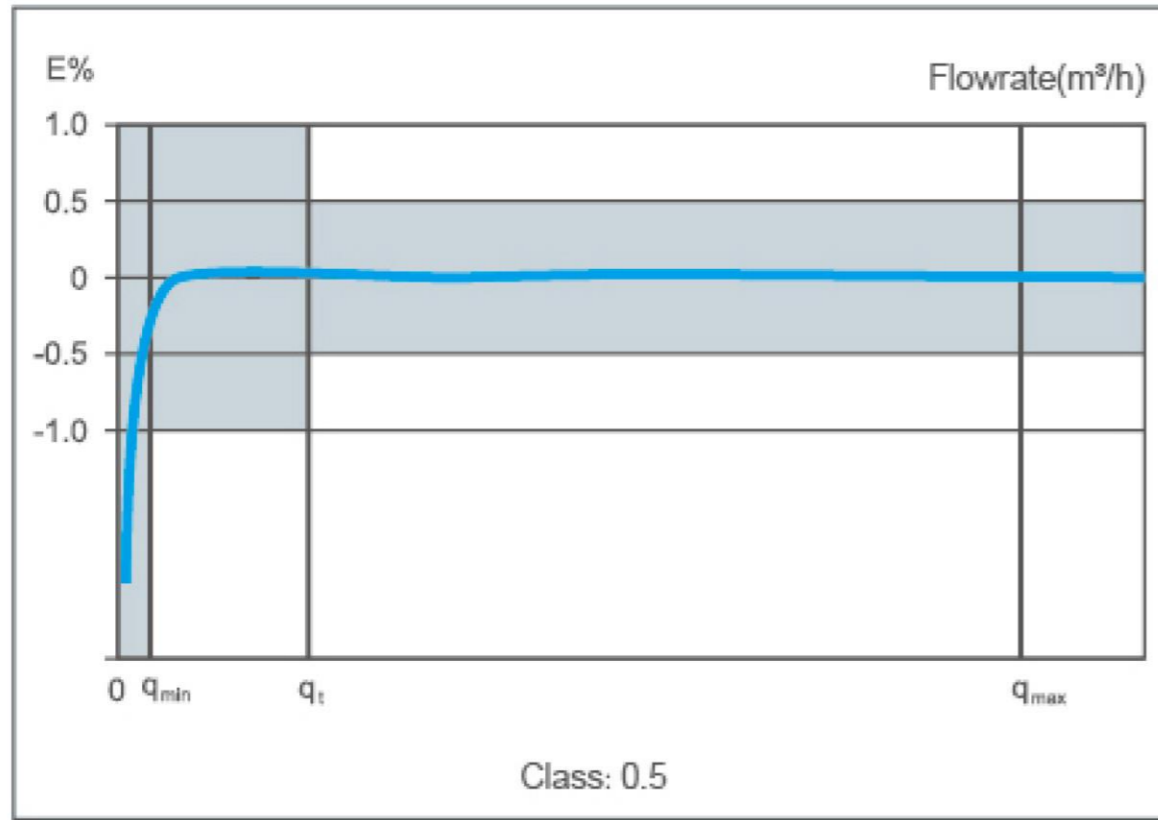
- ✓ High accuracy class (class 0.5).
- ✓ Small installation space, installation and maintenance without water cut-off.

Technical Parameters

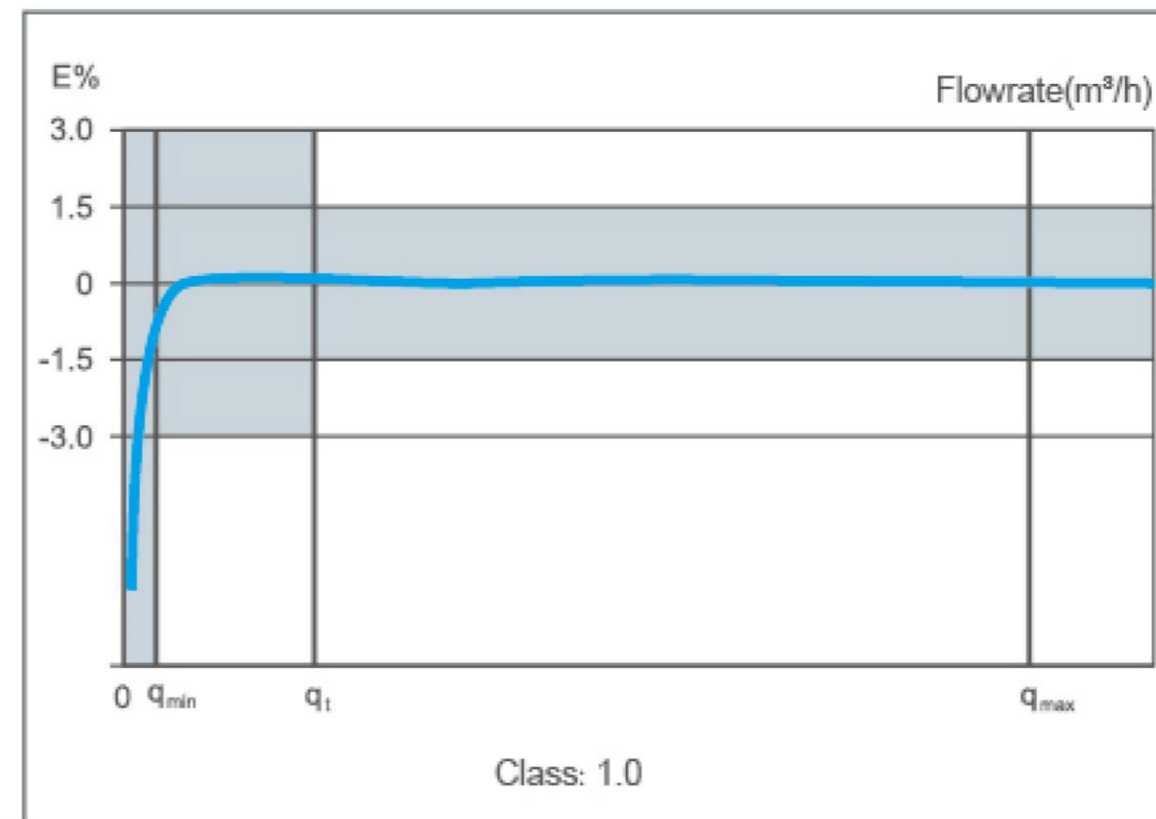
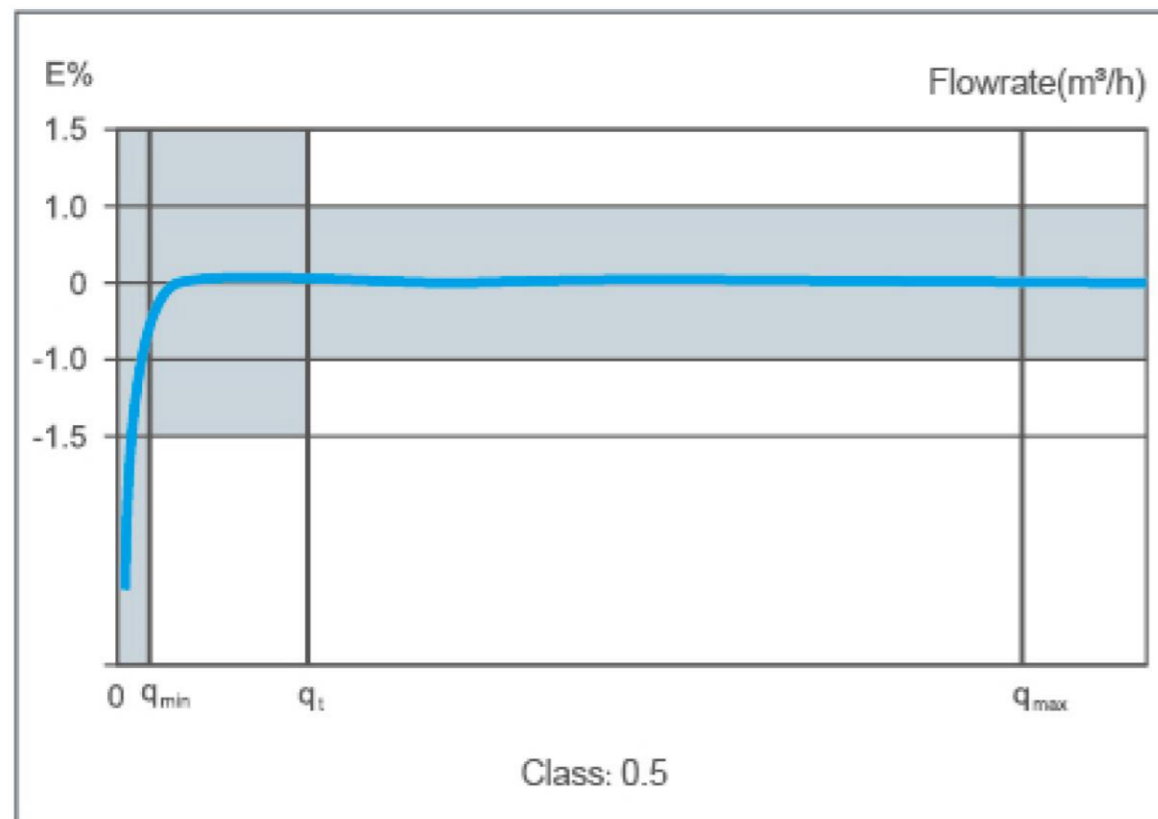
Item		Parameter		
Product Type		SCL-80 ultrasonic flowmeter	SCL-82 ultrasonic flowmeter	
Installation Method		Insertion-type	Clamp-on-type	
Adaptable Pipe Material		Material like steel, cast iron, cement, PE and PVC etc., which can be drilled for mounting	Material like steel, cast iron, PE and PVC etc., which can be mounted with transducer	
Nominal Diameter		DN80~DN2000		
Temperature of Fluid Measured		Normal-temperature version: 0°C~50°C High-temperature version: 0°C~130°C	Normal-temperature version: 0°C~50°C High-temperature version: 0°C~90°C	
Medium		Water, sewage or other homogeneous fluids in full pipe flow, suspended solid content < 10g		
Velocity Range		0m/s~12m/s (q = 0.3m/s)		
Accuracy Class		Class 0.5/Class 1.0	Class 1.0/Class 1.5	
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 AC110V±10%, 60Hz (Specify on ordering) DC12V~DC36V, 1A (Specify on ordering)		
Power Consumption		< 5W		
Operation		1×3 induction key		
Display Indication		240×64 LCD		
Values Displayed	Screen	Accumulated flowrate (m ³), Instantaneous flowrate (m ³ /h), Signal strength indication, Operating condition indication, Failure indication		
	Induction Key	Positive accumulated flowrate (m ³), Negative accumulated flowrate (m ³), Instantaneous flowrate (m ³ /h), Velocity (m/s), Running time (h), Version, Date (year/month/day), Time (hour/minute/second)		
Display Range		Accumulated flowrate: -99999999.9m ³ ~+99999999.9m ³ Instantaneous flowrate: -9999999.99m ³ /h~+9999999.99 m ³ /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		IP65		
Number of Sonic Channels		2-channels		

Typical Error Curve

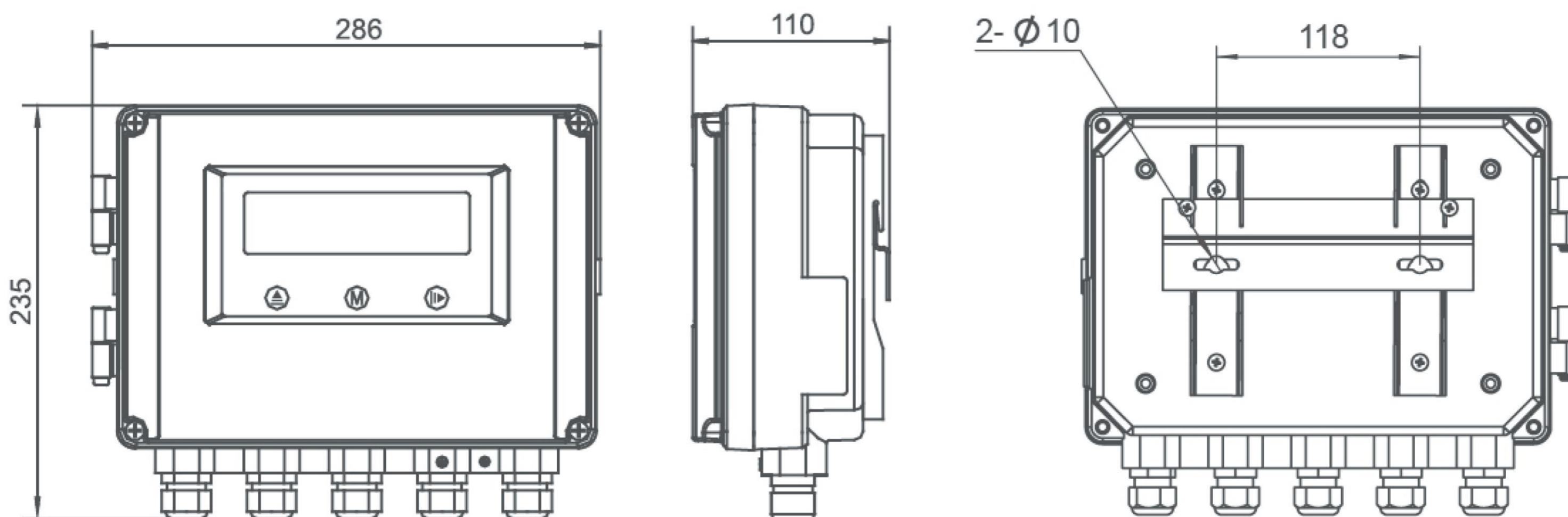
SCL-80



SCL-82

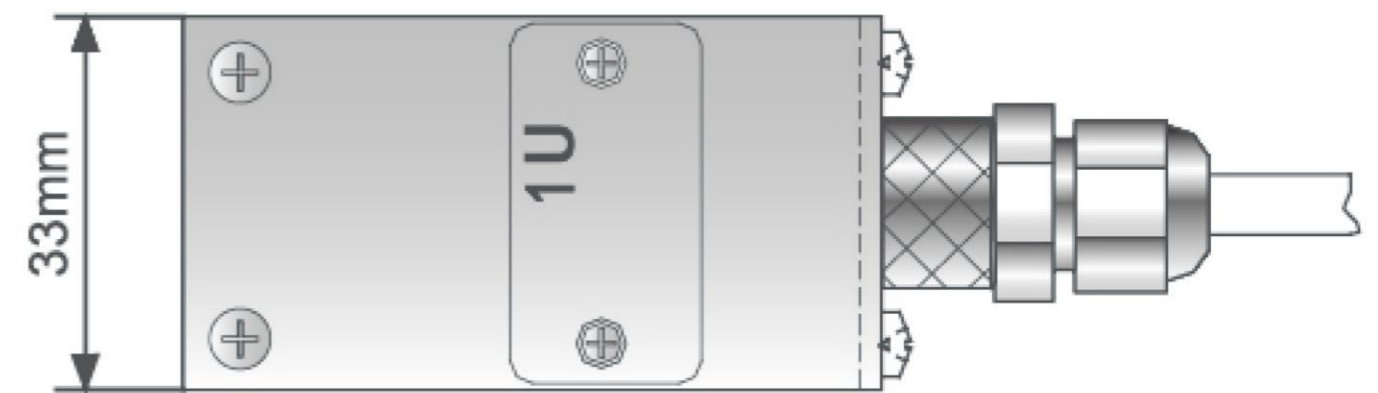
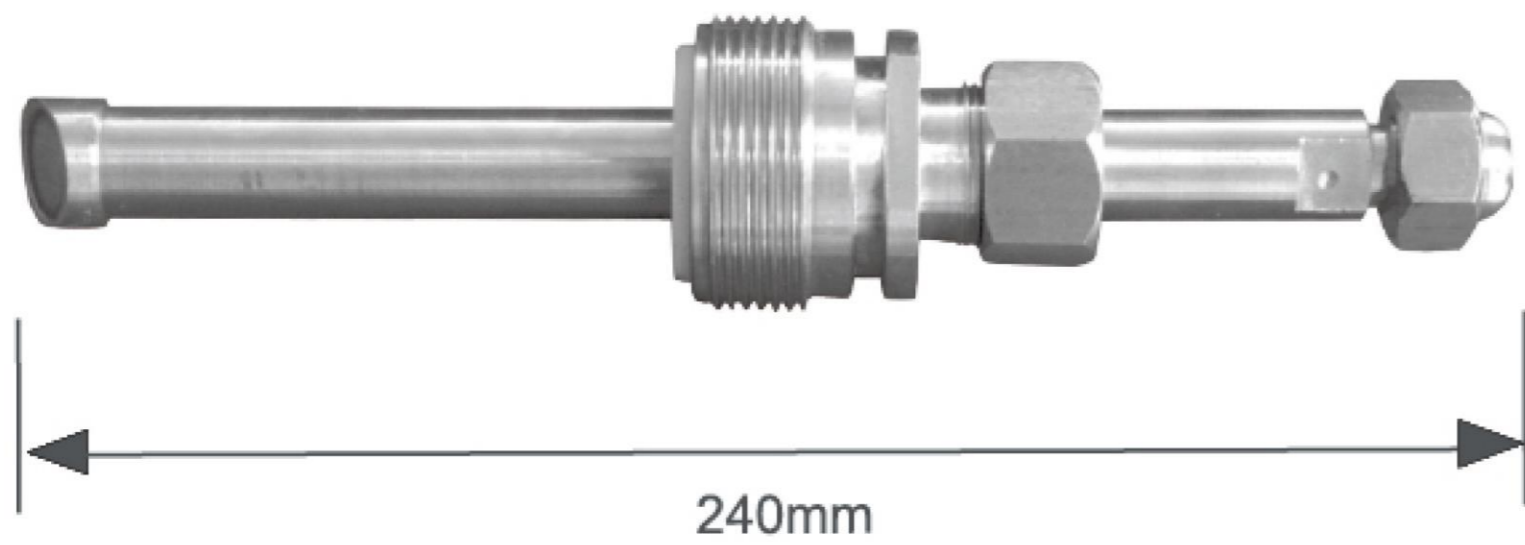


Main Unit Dimensions (mm)

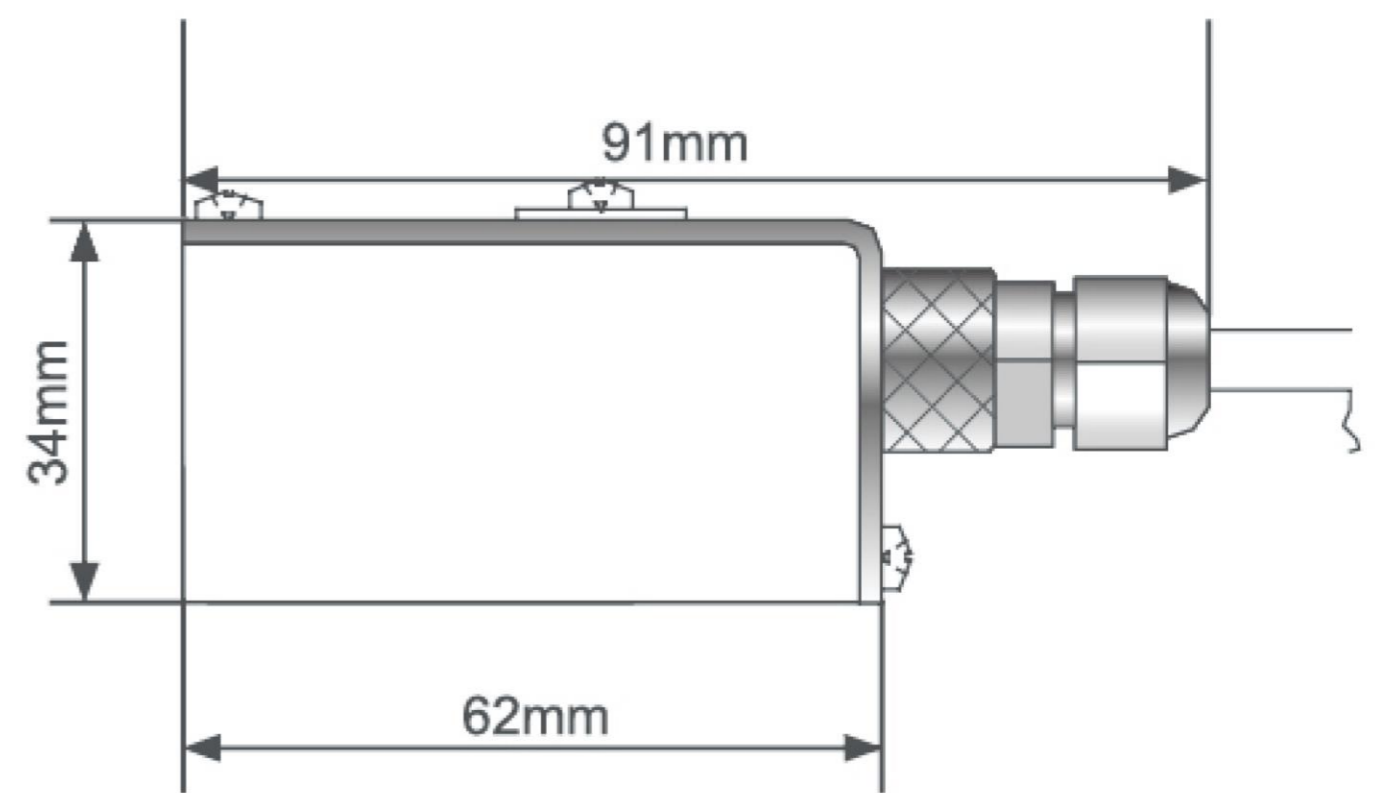
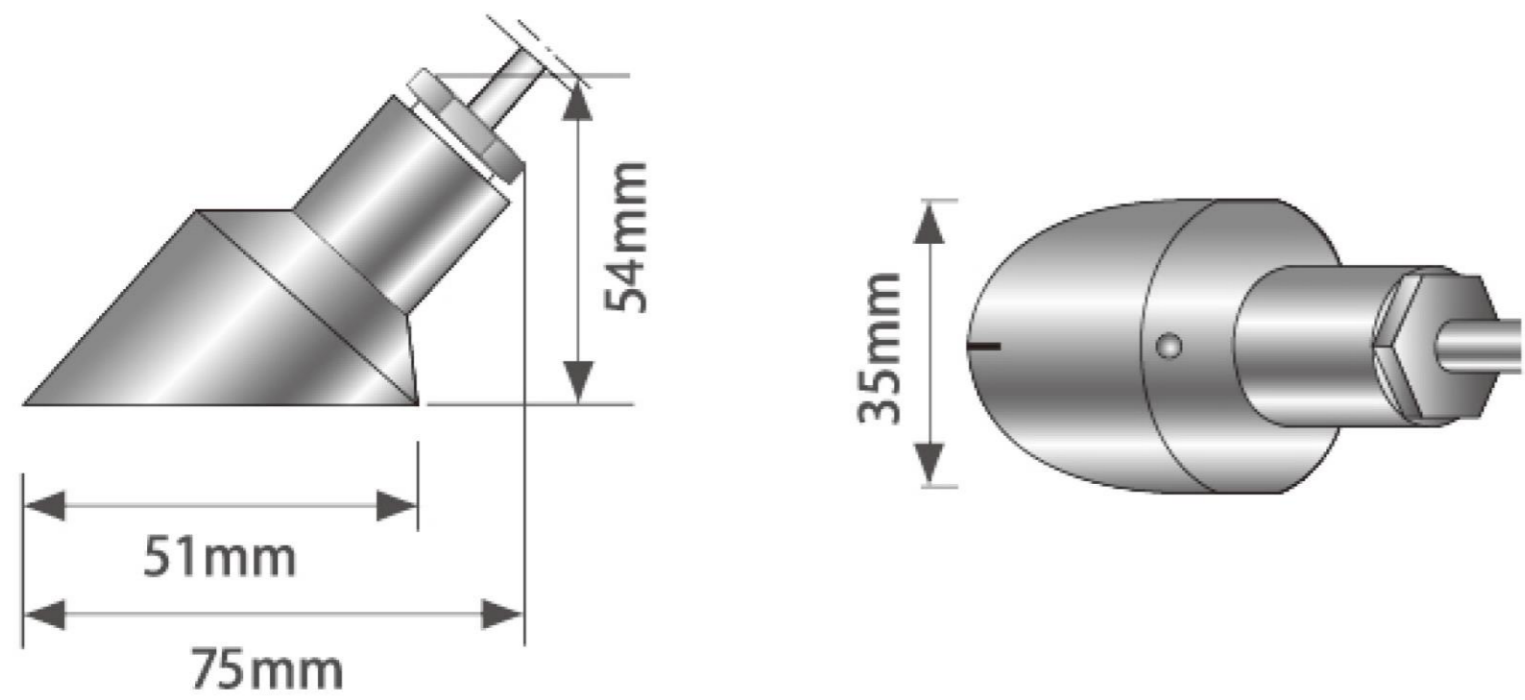


Main Unit Dimensions (mm)

SCL-80



SCL-82



Room temperature type

High temperature type

Applicable Range of Wall Thickness of Inserted Transducer (Unit: mm)

Type	Wall Thickness (mm)
Standard Length	≤30
Lengthened by 40	<70
Lengthened by 80	<110
Lengthened by 120	<150