

SCL-76

Insertion

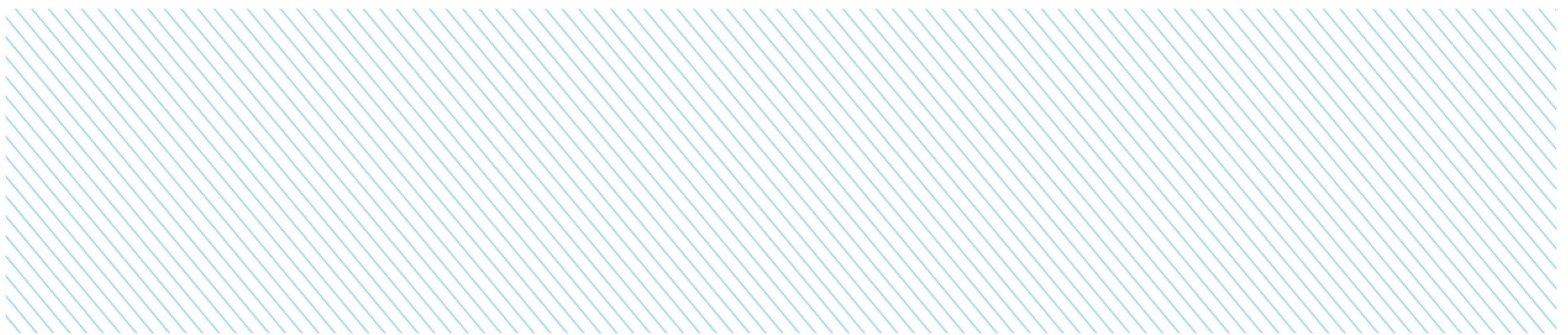
Ultrasonic Flowmeter

Scope of Application

Designed for DMA districting for urban water pipe network, it meets the demand of accurate measurement and settlement of water pipe network, which is conducive to the promotion of refined management for water utilities.



- ✓ High accuracy class
- ✓ IP68
- ✓ Installation and maintenance without water cut-off
- ✓ Anti-inference
- ✓ Low initial flowrate
- ✓ Pressure detection (selectable)
- ✓ Micro power consumption technology
- ✓ No abrasion



Features

- ✓ Ultrasonic flow measurement technology with multiple-channel design and large diameter, improve the accuracy under complex flow regime.
- ✓ Integrated mechanical design with protection class of IP68, able to work in long-term water immersion.
- ✓ Fine stability and no magnetic interference.
- ✓ Multiple transmission methods, NB-IoT, 4G, GPRS and GSM, forms monitoring system.

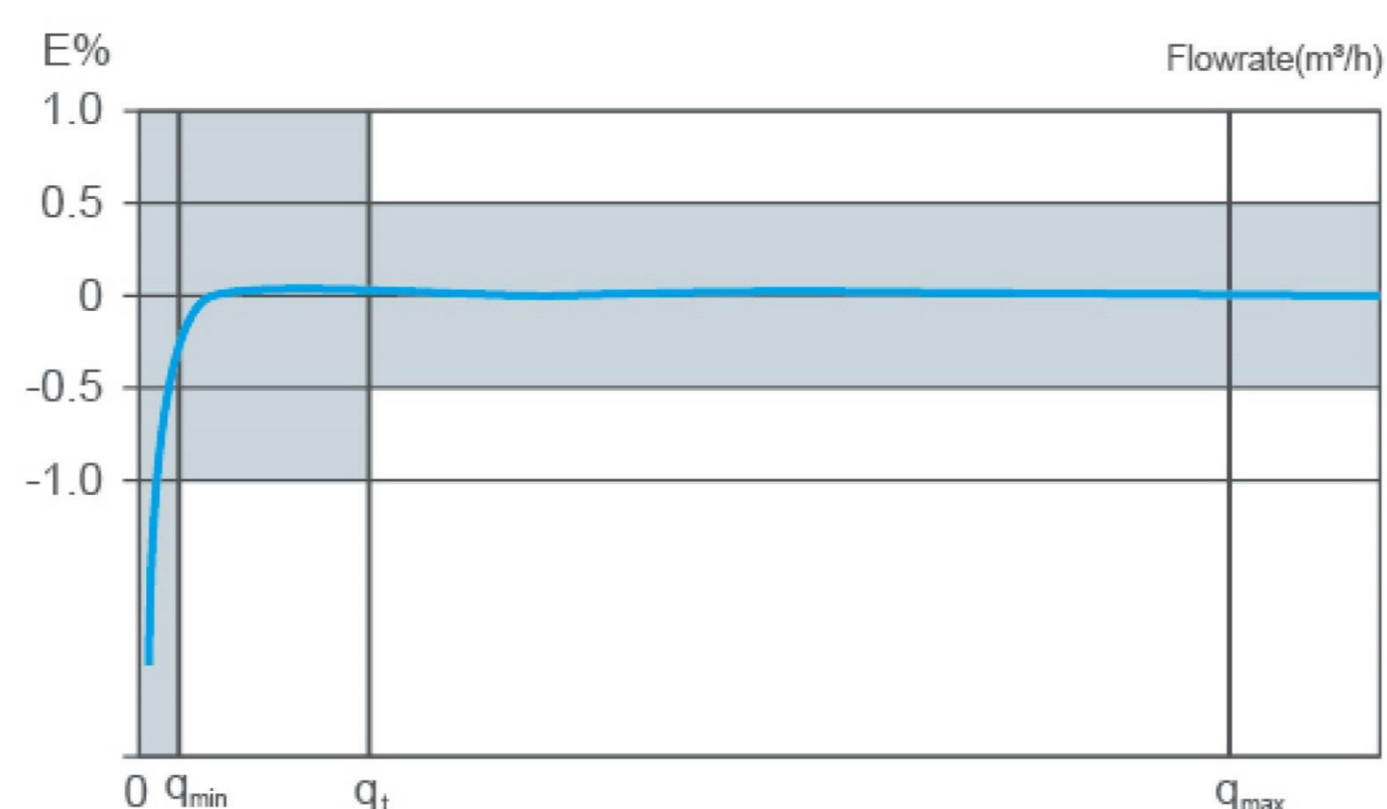
Advantages

- ✓ Low initial flowrate, high accuracy class (class 0.5), bidirectional measurement.
- ✓ Inserted installation, small installation space, installation and maintenance without water cut-off.
- ✓ Micro power consumption technology, battery-powered with lifetime over 10 years.

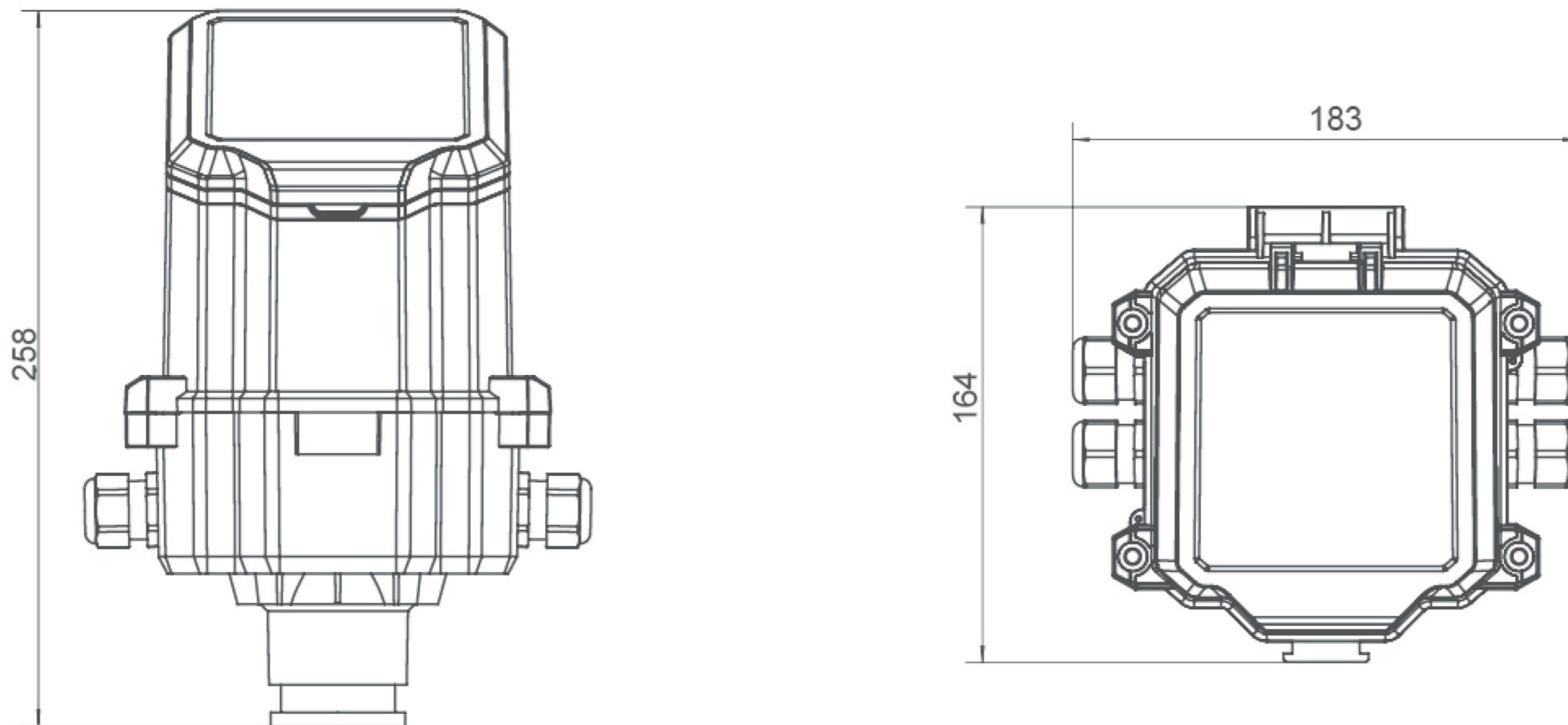
Technical Parameters

Item	Parameter	
Number of Sonic Channels	2/4-channels	
Accuracy Class	Class 0.5	
Adaptable Pipe Material	Material like steel, cast iron, cement and plastic etc.	
Medium	Water or other homogeneous fluids in full pipe flow	
Adaptable Flowrate	0m/s~12m/s (Vt=0.3m/s)	
Installation Method	Insertion-type	
Ambient Environment	-10°C~45°C, relatively humidity≤85% (If the range is exceeded, please specify on ordering)	
Protection Class	IP68	
Operation	Magnetic induction key	
Display Indication	LCD, 10-digital+prompting character (word height: 12mm)	
Values Displayed	Accumulated flowrate (m ³), Instantaneous flowrate (m ³ /h), Accumulated effective running time (h), Date (year/month/day), Time (hour/minute/second), Signal strength indication Battery power, Flow direction, etc.	
Display range	Accumulated flowrate: -199999999m ³ ~+199999999m ³ Instantaneous flowrate: -9999999.9m ³ /h~+9999999.9 m ³ /h	
Data Communication	Photoelectronic interface	Baud rate: 2400bps, EN13757 protocol
	RS-485	Baud rate: 2400bps, 4800bps, 9600bps (selectable), default: 2400bps, Transmission distance≤1200m, EN13757 protocol, Huizhong protocol, Modbus protocol (selectable), default: Huizhong protocol
	(4-20) mA+HART	Output: passive output, supply voltage: DC (18~30)V, electrical load: (250-500)Ω
	Notes: RS-485 and (4-20) mA+HART cannot be used at the same time	
Data Storage	BStorage by EEPROM of cumulative flowrate and effective running time; Data can be saved for a period of 100 years after power failure; Automatic storage of historic monthly accumulated flowrate and effective running pf past 24 months	
Measuring Cycle	1s	
Power Supply	3.6V lithium battery-powered (One battery can continuously work for over 10 years)	
Power Consumption	<0.4mW	

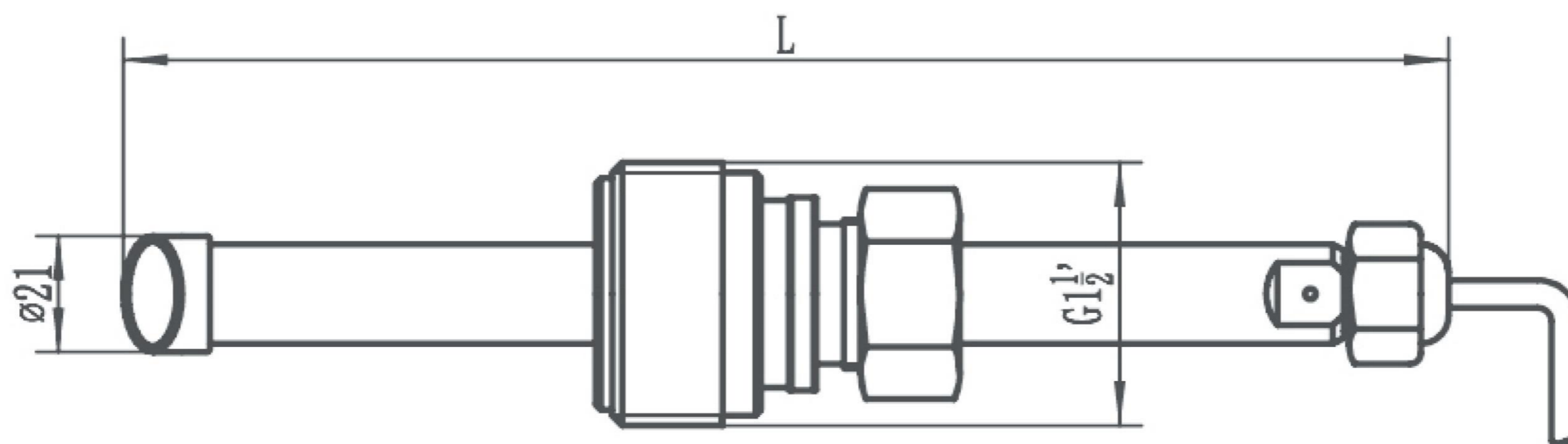
Typical Error Curve



Main Unit Dimensions (mm)



Transducer Dimensions (mm)



Applicable Range of Wall Thickness of Inserted Transducer

Type	L	Wall Thickness (mm)
Standard Length	240	≤ 30
Lengthened Type I	280	< 70
Lengthened Type II	320	< 110
Lengthened Type III	360	< 150

Note: Scale deposit on the pipeline is considered as wall thickness.