

ULTRASONIC FLOW METER

TO WORK WITH INNOVATIVE SPIRIT
TO DEVELOP HIGH QUALITY PRODUCTS
FOR THE MEASUREMENTS OF FLUIDS



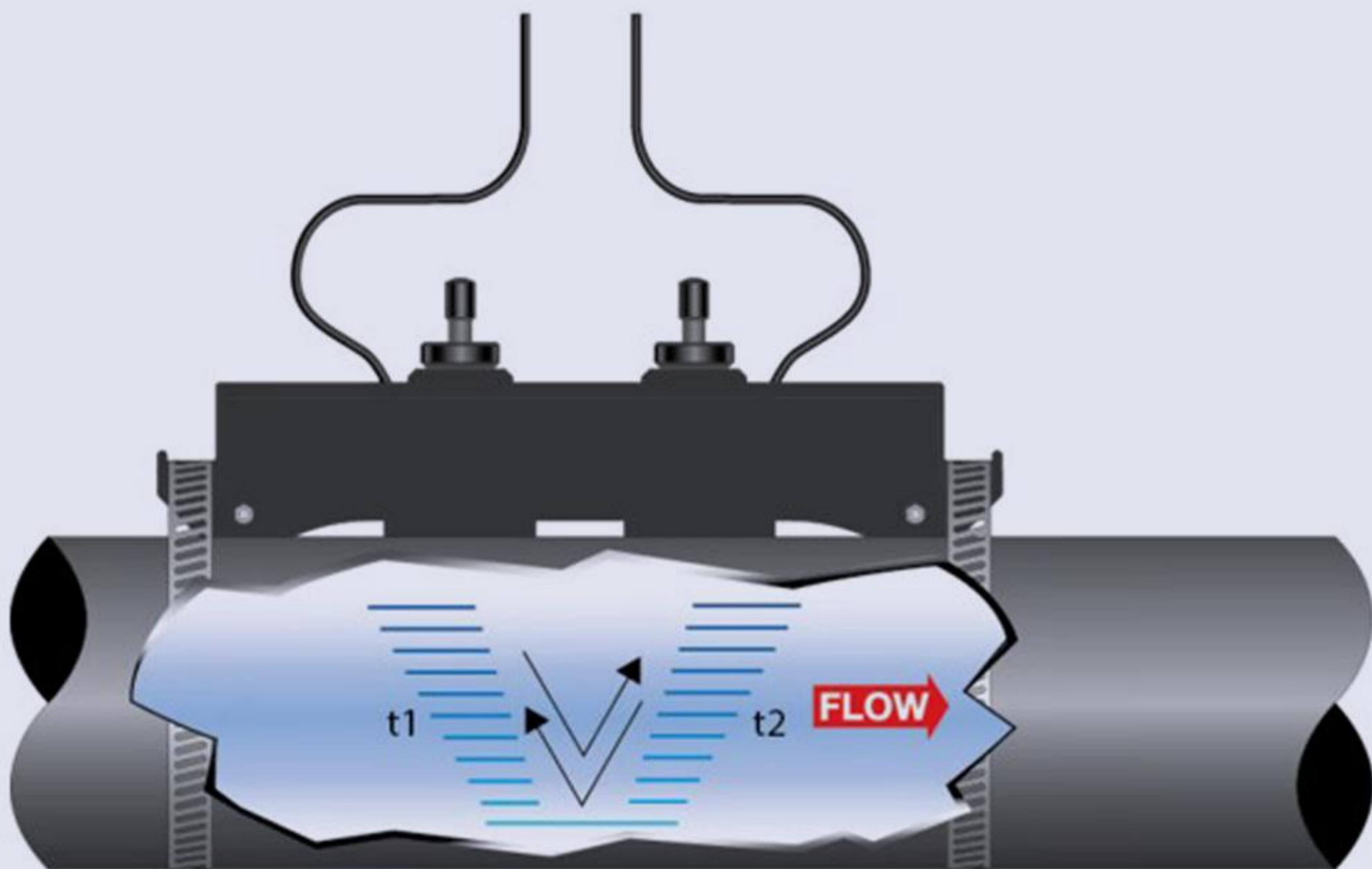
ULTRASONIC FLOW METER



01 ULTRASONIC FLOW METER WORKING PRINCIPLE

This Ultrasonic Flowmeter adopts the time-difference measurement principle. The ultrasonic waves emitted by the sensor in a fluid, the flowing in the propagation direction of acoustic wave propagation velocity downstream increases, decreases the upstream direction, have different propagation distance in the same transmission time, measure the flow rate according to the difference of the transmission time and the fluid flow velocity.

When the ultrasonic signal is transmitted through the flowing liquid, there will be a difference between the upstream and downstream transit time (travel time or time of flight), which is proportional to flow velocity, according to the formula below.



02 APPLICATIONS

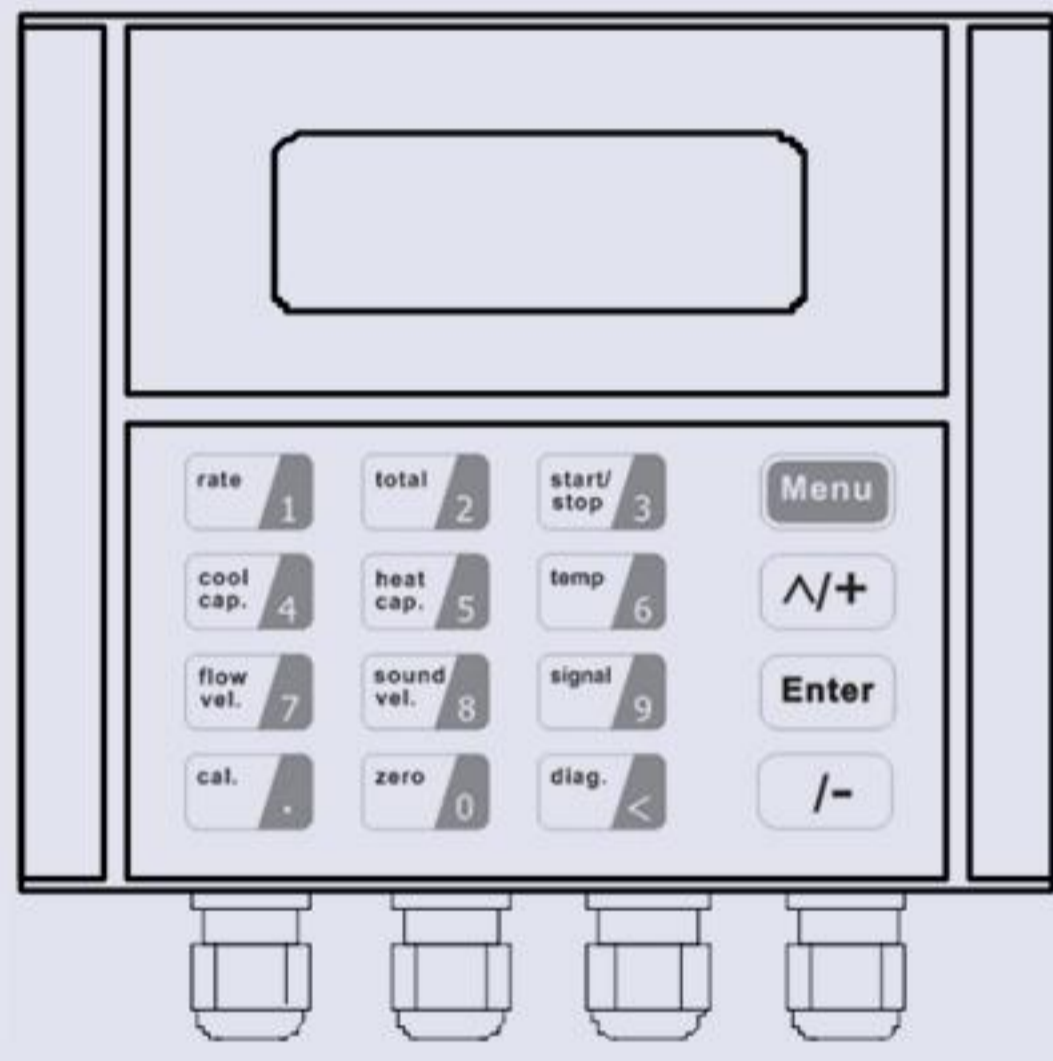
- Ultra-pure liquids
- Potable Water
- Raw Sewage
- Reclaimed Water
- Cooling Water
- River Water
- Plant Effluent

03 FEATURES

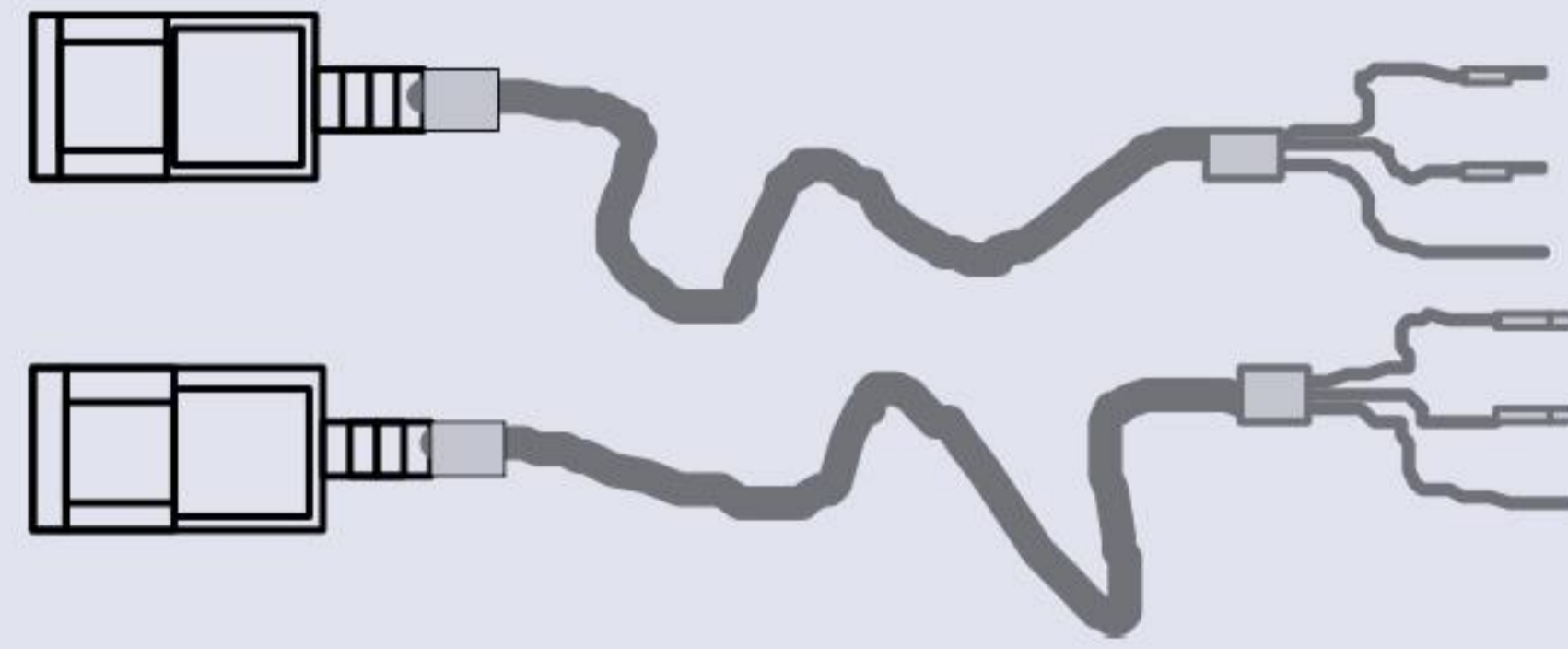
- The design is compact, lightweight, and easy to carry.
- Calculate positive and negative flow and cumulative measurement.
- Add SD card data automatic storage function, data will never be lost again.
- Rechargeable battery and universal power supply design.
- Advanced modular integrated design, independent menu operation, large-screen LCD backlight 4 lines display.
- Particularly suitable for on-site flow detection for various pressure requirements
- Transmitter protection level :IP54
- Sensor protection: IP68

ULTRASONIC FLOW METER

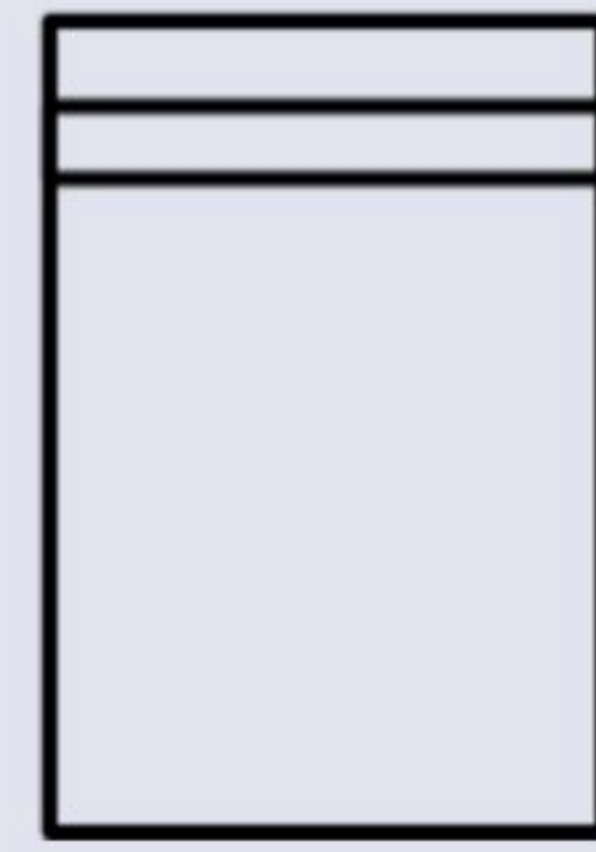
04 PRODUCT COMPONENTS



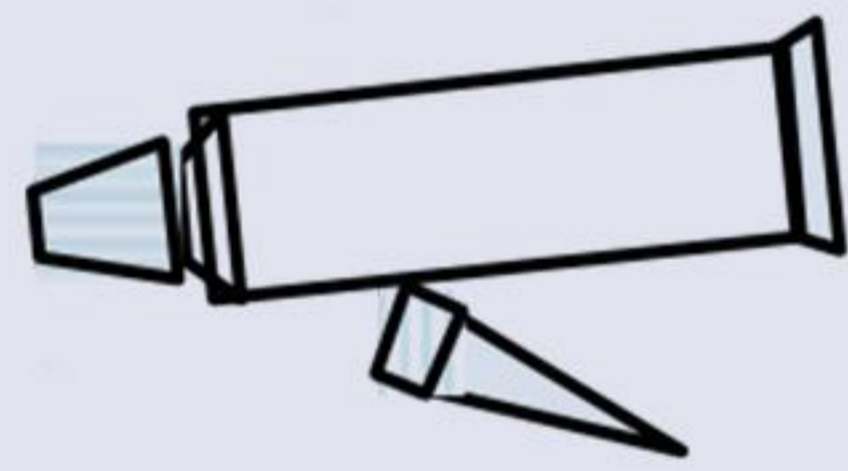
Transmitter



Transducers



Install Accessory

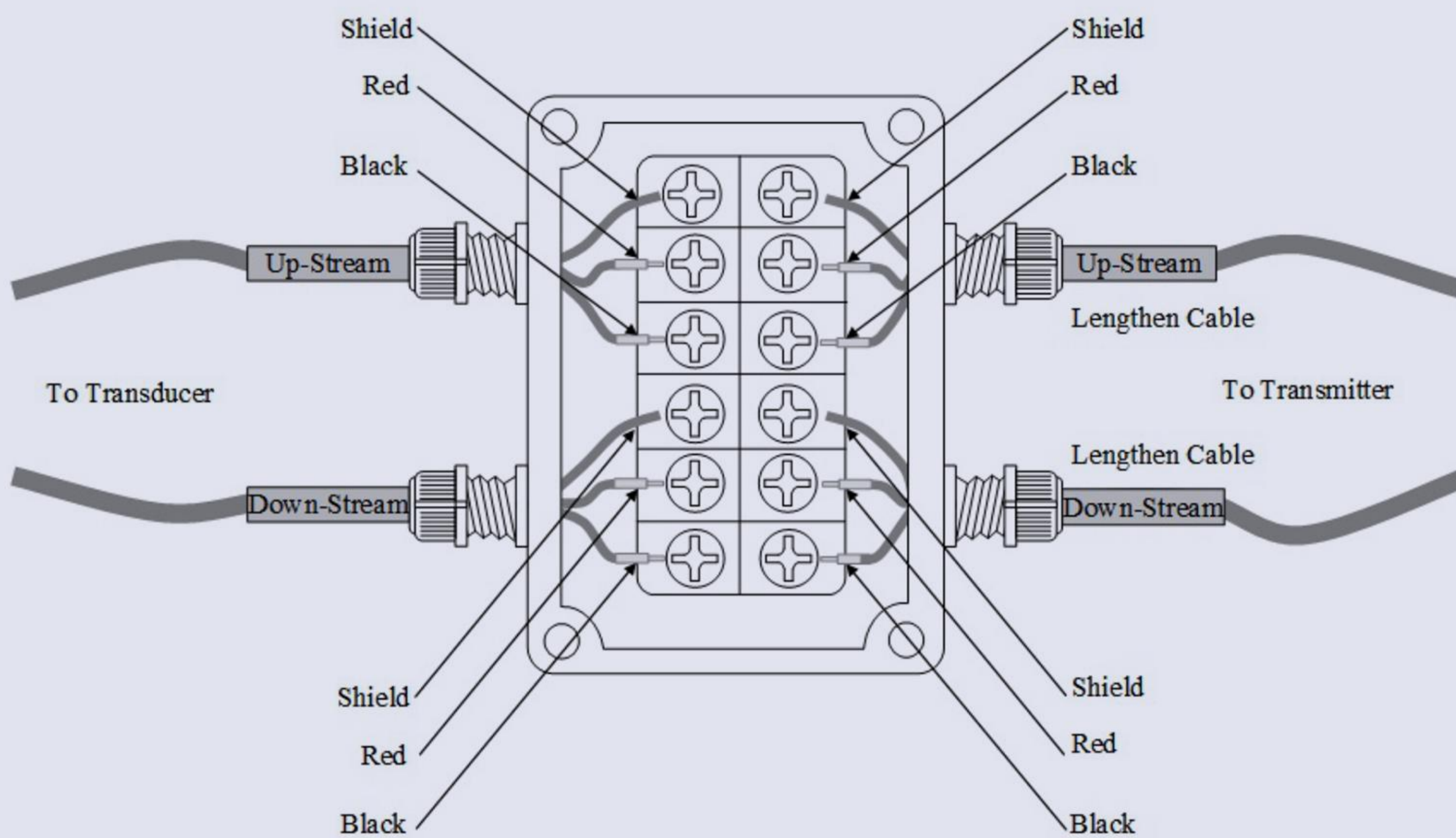


Coupling Compound



Pipe Straps

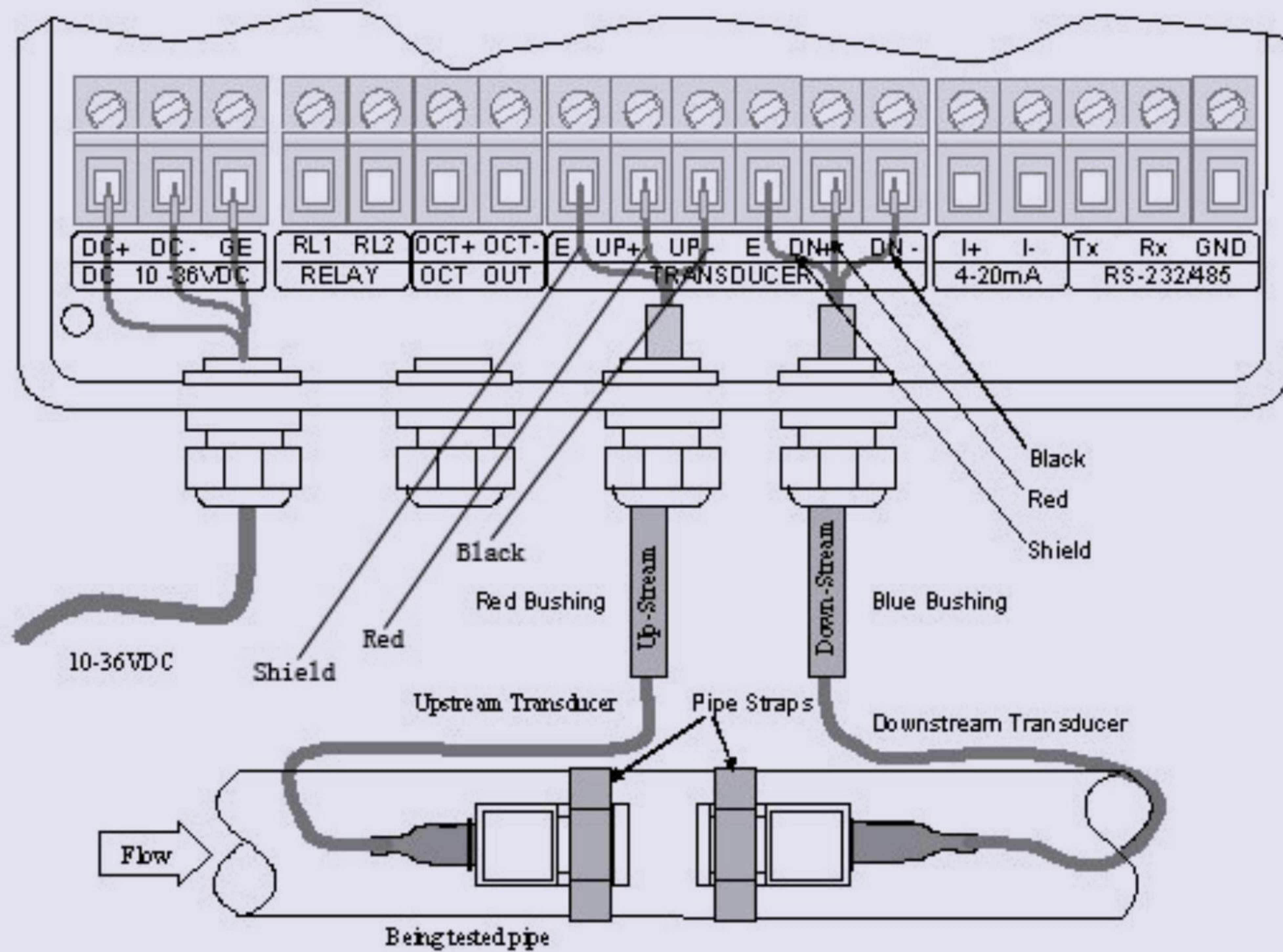
05 SKETCH OF LENGTHENED CABLE



ULTRASONIC FLOW METER

06 WIRING

Once the electronics enclosure has been installed, the Flowmeter wiring can be connected. Open the case, you will find the transmitter interfaces labels from left to right as follows: Power supply, Relay output, OCT Output, Upstream transducer, Downstream transducer, 4-20mA, RS485 interface. Refer to the below diagram for specific connection:



ELECTROMAGNETIC FLOW METER

07 TECHNICAL DATA

Flow Range	±0.03ft/s- ±20ft/s (±0.01 m/s- ±6 m/s)
Accuracy	±1% of measured value
Pipe Size	Clamp- on: (25mm- 1200mm)
Pipe material	Carbon steel, stainless steel, PVC
Output	OCT Pulse output: 0- 5000Hz. Analog output: 4- 20mA, max load 750Ω
Communication Interface	RS485; Modbus
Power Supply	10-36V DC/ 1A
Keypad	16(4×4)key with tactile action
Display	20×2 lattice alphanumeric, back lit LCD
Temperature	Transmitter: 14°F...122°F (+10°C...+50°C) Transducer: 32°F...176°F(-10°C...+80°C)
Humidity	Up to 99% RH, non- condensing
Protection	Transmitter: PC/ ABS, IP65
	Transducer: Encapsulated design, IP68
Transducer cable	Standard cable length:30ft(9m)
Weight	Transmitter: approximately 0.7kg Transducer: approximately 0.4kg (One set weight is 7kg after package)