



Special characteristics

- Suitable for single-phase liquids without particles or bubbles
- Supports heat totalizing with additional temperature sensors
- Heat measurement enabled by adding temperature sensors
- Widely used in oil, chemical, power, and food industries

Features

- Applicable for a wide measurements of all pipe flow
- Features low starting flow, high measurement accuracy, and no pressure loss
- Non-intrusive measurement unaffected by temperature, pressure, or fluid composition
- No pipe cutting, quick and non-damaging—an economical flow measurement solution

Measuring principle

Ultrasonic flow meters are based on the transit-time difference method, which indirectly determines flow velocity by measuring the difference in propagation time of ultrasonic waves traveling upstream and downstream in the fluid. Combined with the pipe's cross-sectional area, the volumetric flow rate can then be calculated.



Recorder



Flow



Temp



Analyzer



Level



Pressure

The wall-mounted ultrasonic flowmeter is widely used in petroleum, chemical, electric power, and food industries. It reliably measures clean single-phase liquids and supports heat energy totalizing when paired with temperature sensors.

Preferred areas of use are



Widely used in oil, chemical, power, and food industries

Material and test



Parameters

Measured variables	Directly measured variable: Flow rate Calculated measured variable: Volume flow	
Typical flow rate range	0.3m/s~10m/s	
Nominal diameter	Clamp-on type: DN50~DN700 Insertion type: DN50-DN6000	
Accuracy	±1 %	
Resolution	0.001m/s	
Repeatability	0.2 %	
Operating frequency	100Hz	
Response time	0.2s	
Transmitter output	Output Type	(4~20)mA
	Output accuracy	0.1% FS
	Output Load	<500Ω
Communication output	Output Type	RS485
	Communication	MODBUS
Frequency/pulse output	Pulse Width	Self-adaptive
	Pulse coefficient	Configurable
Power supply	AC: (85-265) V DC: (10~30) V	
Power consumption	2.5W	
Electrical interface	M20*1.5	
Medium temperature	-30℃-90℃	
Ambient temperature	-20℃-60℃	
Storage temperature	-40℃-80℃	
Protection level	IP65	

■ Dimension

Dimensions of Main Unit

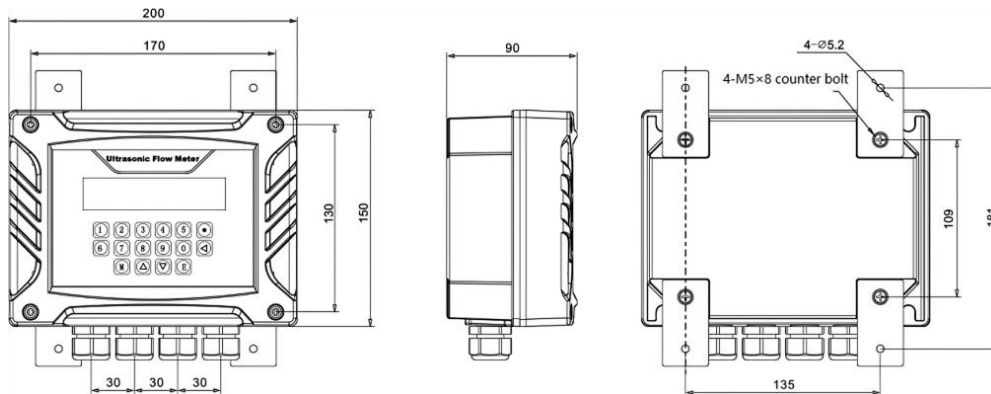


Fig. Main unit dimensions (unit: mm)

Clamp Type Dimensions

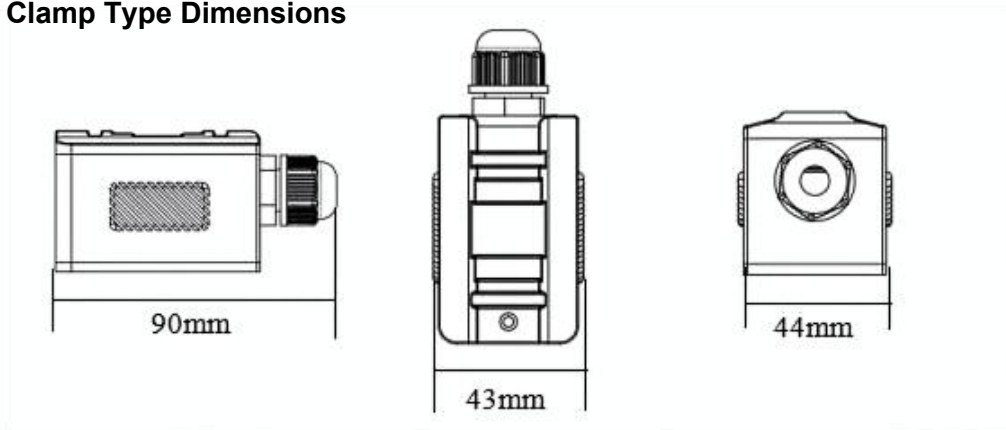


Fig. Dimensions

Insertion Type Dimensions

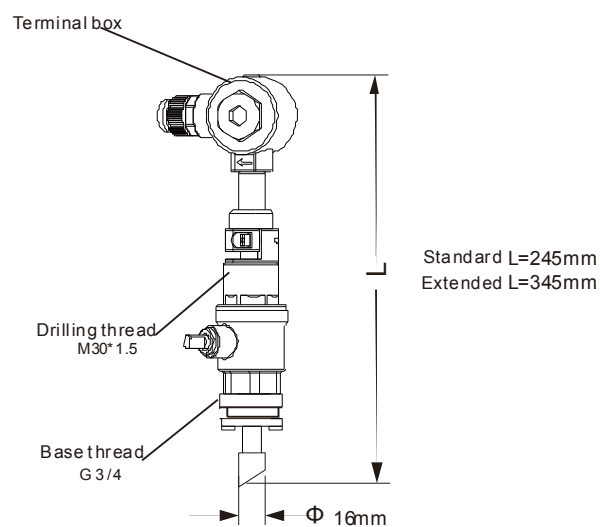


Fig. Dimensions

■ Ordering Code

FK-FSC400-W3-T7-L-AD-N-WY-05-PG													Description
FSC400	-	-	-	-	-	-	-	-	-	-	-	-	Wall-mounted ultrasonic flowmeter
Sensor Type	W3												Medium clamp type (DN50-DN700)
	C1												Standard insertion type (DN80-DN6000)
	C2												Extended insertion type (DN80-DN6000)
	XX												others
Heat resistant temperature	T7												-30-90°C
	XX												others
Accuracy		L											Level 1.0
Output and power supply			AD										Pulse + 4-20mA + RS485 + SPST, 24VDC/220VAC dual power supply
Electrical interface, housing material and protection level				WY									M20*1.5 cable gland, plastic ABS, IP65
				WZ									M20*1.5 cable gland, plastic ABS, IP68
Cable length					05								5m
					10								10m
					20								20m
					XX								others
Additional features (optional)													
Accessories							PG						Coupling agent 120g
							PH						Hole cutter + drill bit