

## Pipeline ultrasonic flowmeter



National  
explosion-proof



Guarantee of  
authenticity



Environmentally  
friendly material



Factory  
direct sales

## FU-AS series

The world's first



Pipeline ultrasonic flowmeter

// Flow range

The pipe material (liquid contact part) is all PVC-U, which can meet the flow requirements of corrosive liquids such as acids and alkalis except water. The measuring instrument is connected in a double-threaded manner, which can be installed very conveniently. If the site is a metal pipe, it can also be converted into a threaded interface through a variety of pipe fittings. The corrosion resistance of PVC-U is shown in the table below

Model		-15	-20	-25	-32
A= metric system	mm	Φ20	Φ25	Φ32	Φ40
B= British system	mm	22	26	32	38
C= American-made	mm	21.54	26.87	33.66	42.25
Flow range	L/min	0.92-70	1.36-150	2.71-200	4.24-330
Flow range	m³/h	0.06-4	0.08-10	0.16-15	0.25-20

The above is the measurable flow range (0.1m/s-5.0m/s), while the accurate flow range is based on (0.3m/s-5.0m/s)

Chemical name	Concentration %	Chemical resistance		Chemical name	Concentration %	Chemical resistance		Chemical name	Concentration %	Chemical resistance	
		20°C	50°C			20°C	50°C			20°C	50°C
Ammonia (dry gas)	100	R	R	Methanol	100	R	C	Hydrofluoric acid	50	C	N
Ammonia water	Dil.sol	R	C	Formic acid	1-50	R	C	Potassium hydroxide	Sol.	N	R
benzene	100	N	N	Tartaric acid	Sol	R	R	Sodium hydroxide	Sat.sol	R	R
Glacial acetic acid	25	R	C	Phosphoric acid	30	R	C	Potassium cyanide	Sol.	R	R
Glacial acetic acid	60	R	C	Phosphoric acid	> 30	R	R	Lactic acid	10	R	C
Acetone	100	N	N	Potassium phosphate	40	R	R	Arsine acid	Dil.sol	R	
Propane	100	R		Hydrogen sulfide (gas)	100	R	R	Carbonic acid		R	R
Oxalic acid	Sat.sol	R	R	Sulfuric acid	40-90	R	C	Natural gas		R	R
Ozone	100	R	R	Sulfuric acid	96	C	N	Phase washing solution		R	R
Butanol	20	R	C	Ammonium sulfate	Sat.sol	R	R	Nitric acid	45	R	C
Butanol	100	R	C	Aluminium sulfate	Sat.sol	R	R	Calcium nitrate	20	R	R
Butadiene	100	R	R	Magnesium sulfate	Sat.sol	R	R	Potassium bromide	100	R	R
Sulfur dioxide (dry)	100	R	R	Ammonium chloride	Sat.sol	R	R	Bromine water	100	N	N
Carbon dioxide (moisture)		R	R	Hydrogen chloride	30	R	R	Bromic acid	10	R	
Soap	Sol.	R	C	Chlorine water	Sat.sol	C	N	Sulfurous acid	Sol	R	R
Hydrogen fluoride (gas)	100	C	N	Carminic acid	1-50	R	C	Nicotinic acid	Work sol	R	R
Glycerol	100	R	R	Milk		R	R	Hydrochloric acid	35	R	R
Perchloric acid	10	R	C	Boric acid	Dil.sol	R	C	Hydrochloric acid	> 35	R	C
Seawater		R	C	Gasoline		R	R	Acetic acid	95	R	C
Methanol	40	R	R	Hydrofluoric acid	4	R	R	Oleic acid	100	R	R

Code	Explanation	Work sol	Industrial aqueous solutions of common concentration
P	Applicable	Sol	Unsaturated aqueous solution with a concentration greater than 10%
N	Not applicable	Dil.sol	Diluted aqueous solution with a concentration of no more than 10%
C	Conditional application	Sat.sol	Saturated aqueous solution prepared at 20°C

// Performance index

Product name	Pipe section ultrasonic flowmeter
Measurement accuracy	+ / - 1.0% (0.3 m/s to 5.0 m/s)
Flow velocity range	0.1 m/s to 10.0 m/s
Linearity	+ / - 1.0% (0.3 m/s to 5.0 m/s)
Repeatability	0.4%
Response time	500ms
Screen display	1.54-inch 240*240 IPS LCD with four-way rotation (for easy reading)
Menu language	Simplified Chinese, Traditional Chinese, English
Display unit	Supports the selection of metric and imperial units, including m³/h, LPM, ml/min, GPM, and LPH. The default unit at the factory is LPM
Display data	Instantaneous flow rate, instantaneous velocity, net cumulative volume, single cumulative volume, daily maximum value, daily minimum value, daily, monthly and annual cumulative volume
Accumulator	7-bit flow accumulator
Cumulative data	Ten years, 64 months and 64 days
Operation keys	Four touch buttons
Calendar battery	CR1220
Power supply configuration	24VDC@3W
Analog output	4-20mA, maximum load 600Ω
Communication interface	RS485, supporting Modbus RTU communication protocol
Alarm output	OCT upper and lower limit alarm output, pulse output, etc
Relay output	(Optional)30VDC@1A, switching frequency less than 2Hz
Suitable medium for measurement	Water, solutions, chemical reagents (impurities ≤4%), etc
Waterproof grade	IP66
Installation method	The pipe section is integrated, and the PVC-U is connected by bolts (unions)
Pipe diameter specification	OD20(DN15-½"),OD25(DN20-¾"),OD32(DN25-1"),OD40(DN32-1½")
Liquid-contact material	UPVC
Medium temperature	0°C-60°
Working temperature	-10°C-50°C
Environmental humidity	Relative humidity: 0%-95%, no condensation
Measured viscosity	<300CST (mm²/s)
Cable length	2.0 meters (can be extended to 20 meters)

// Quality

Model	PVC-U-20	PVC-U-25	PVC-U-32	PVC-U-40
Packaging size (mm)	220*120*143	220*120*143	220*120*143	220*120*143
Weight (kg)	0.67	0.72	0.81	0.95