

pFlow

Ultrasonic Flowmeter

D114 (Wall mounted type)



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ABOUT D114

FEATURES AND CASES



Product Introduction

The D114 ultrasonic flowmeter is a state-of-the-art universal transit-time flowmeter designed using FPGA chip and low voltage broadband pulse transmission, available for measuring water. This flowmeter consists of a transmitter and a sensor. The sensor features a clamp-on installation design, eliminating the need for pipe disruption or production downtime, significantly minimizing the impact of installation on normal operations. Even first-time users can easily complete installation and quickly achieve accurate measurements.

Product Features

Compared to other conventional flowmeters or other ultrasonic flowmeters, this model offers not only high precision, high reliability, high performance, and low price, but also the following advantages:

- ◆ Ultra-low-power, interference-resistant IC design enables clamp-and-play operation like a multimeter.
- ◆ Fully windowed software allows one-click setup of pipe specs and units.
- ◆ Stores 64 days, 64 months, and 5 years of flow totals plus 64 power events with auto/manual power-off compensation.
- ◆ Touch keys in a slim, sealed panel offer easy cleaning and IP-rated moisture protection.

Agriculture



Aquaculture



HVAC



Power Plant



ABOUT D114 PRODUCT BUNDLE



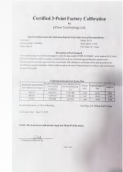
Transmitter



①



②



③



④



⑤



⑥

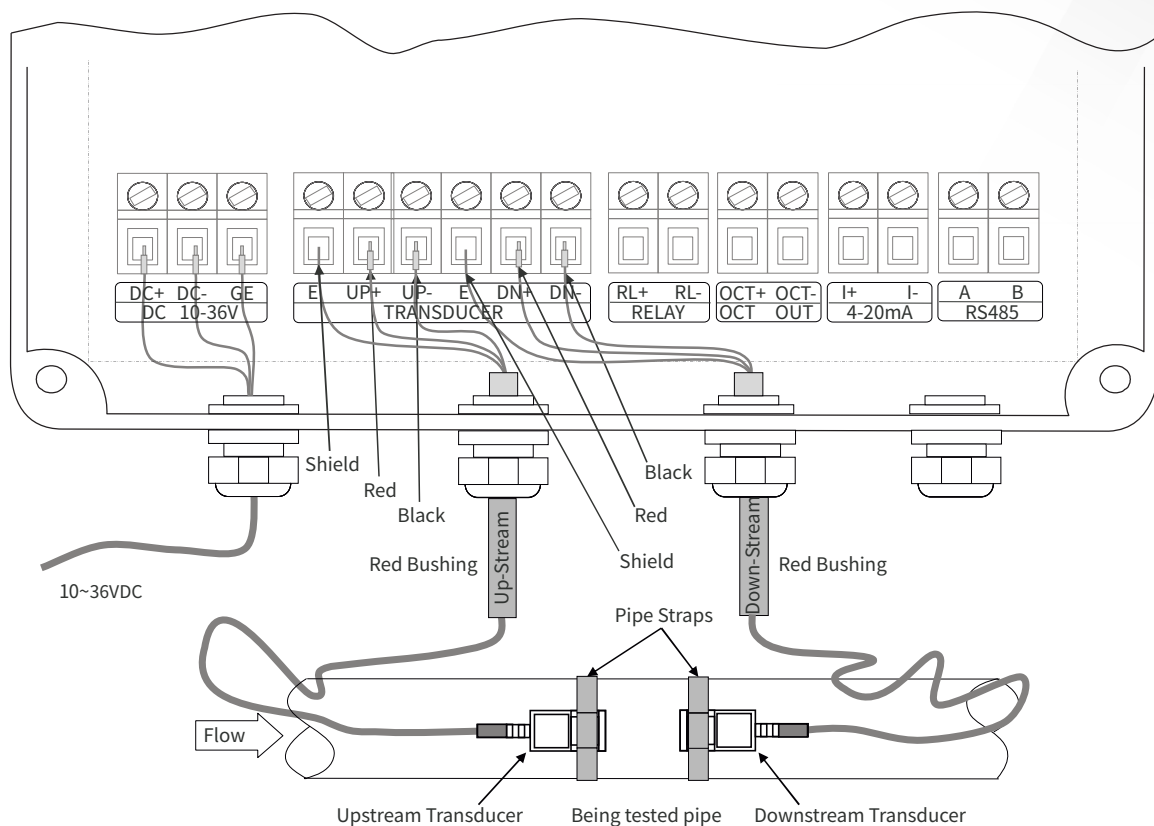
- ① **Pipe Straps**
- ② **Transducers**
- ③ **Certified 3-Point Factory Calibration**
- ④ **Screws**
- ⑤ **Coupling Compounds**
- ⑥ **Manual Instruction**

The D114 Ultrasonic Flowmeter is an advanced transit-time device, engineered with an ARM kernel chip and low-voltage wide-pulse sending technology to deliver precise and reliable flow measurements across various applications. Key features include a user-friendly keypad interface, versatile support for Metric and British units, and seamless integration with MODBUS networks. Each flowmeter undergoes strict factory calibration with an included 3-Point Factory Calibration document, and supports static zero set calibration for improved accuracy at low flow rates. The D114 also offers self-diagnostic functions, displaying error codes for streamlined troubleshooting.

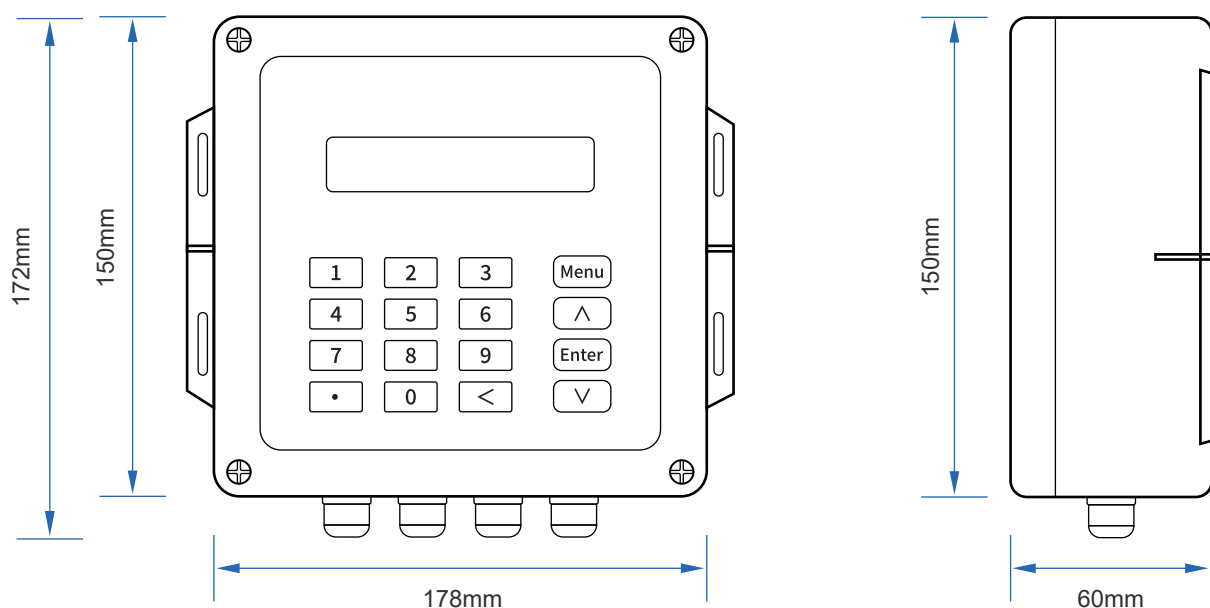
ABOUT D114

INTERFACE AND SIZE

WIRING DIAGRAM



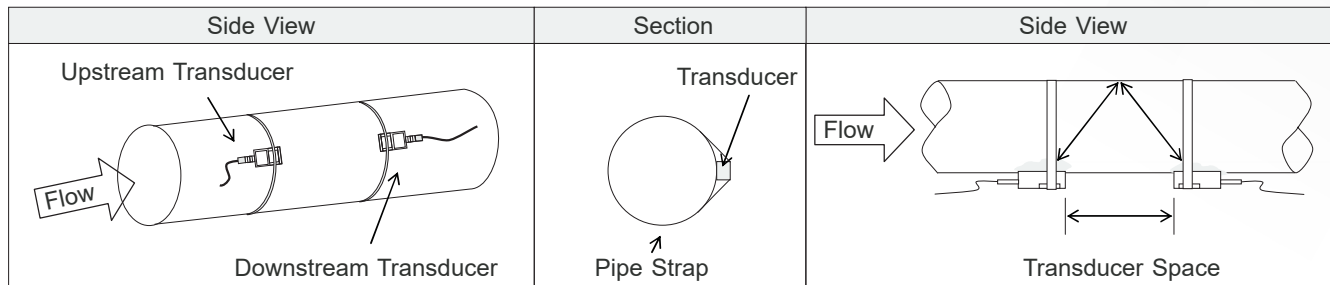
PRODUCT DIMENSIONS



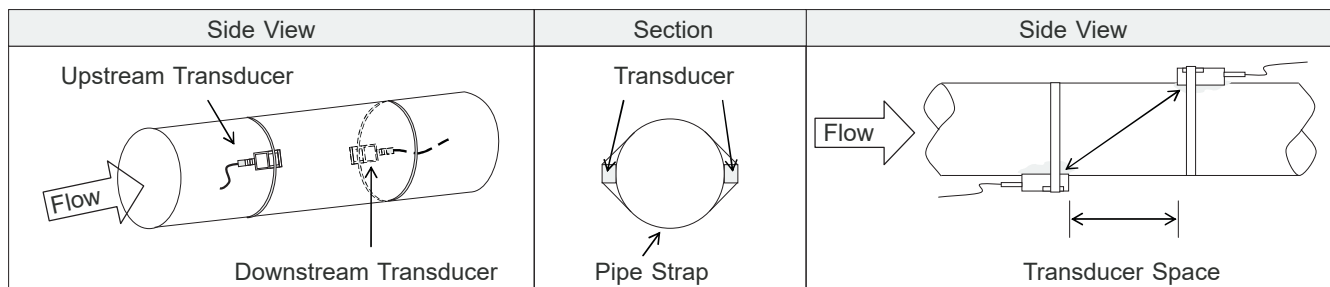
ABOUT D114

TRANSDUCER INSTALLATION METHODS

V METHOD MEASURING PIPE SIZE: 25MM-400MM



Z METHOD MEASURING PIPE SIZE: 100MM-600MM



ABOUT D114

INSTALLATION SITE SELECTION

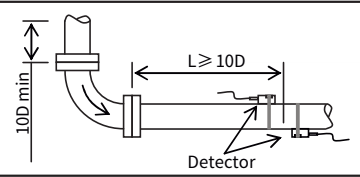
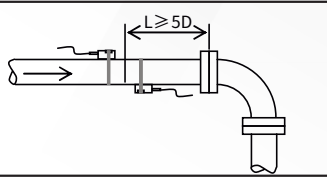
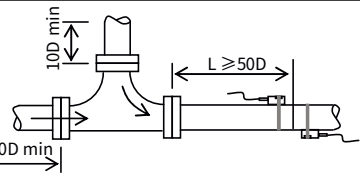
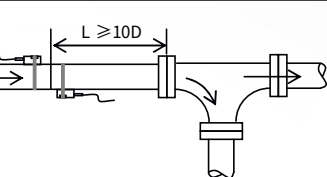
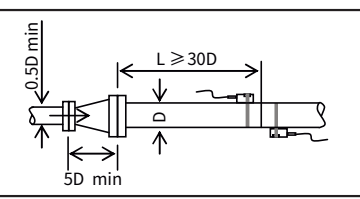
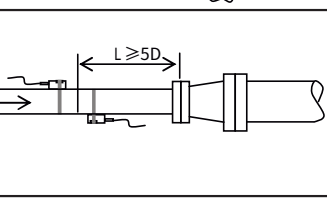
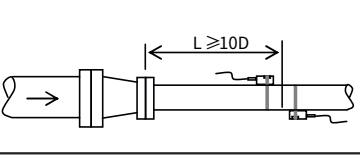
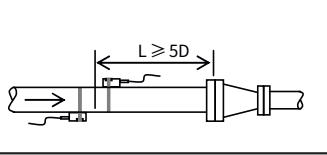
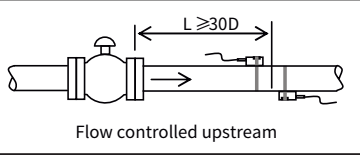
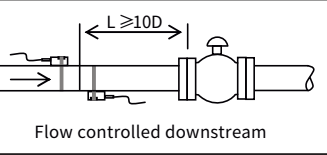
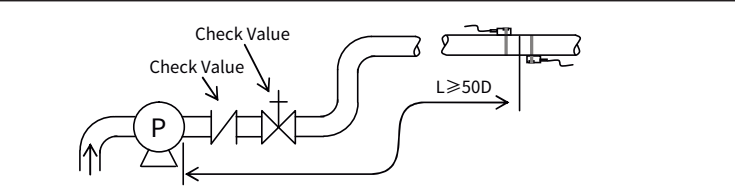
When selecting a measurement site, it is important to select an area where the fluid flow profile is fully developed to guarantee a highly accurate measurement. Use the following guidelines to select a proper installation site:

Choose a section of pipe that is always full of liquid, such as a vertical pipe with flow in the upward direction or a full horizontal pipe.

Ensure enough straight pipe length at least equal to the figure shown below for the upstream and downstream transducer installation.

Ensure that the pipe surface temperature at the measuring point is within the transducer temperature limits.

Consider the inside condition of the pipe carefully. If possible, select a section of pipe where the inside is free of excessive corrosion or scaling.

Name	Straight length of Upstream piping	Straight length of Downstream piping
90° bend		
Tee		
Diffuser		
Reducer		
Value		
Pump		

ABOUT D114

ORDERING INFORMATION

MODEL

DESCRIPTION

D114	Digital Correlation Transit Time Flowmeter Installation Method: Wall mount Flow Range: 0.16 ft/s ~ 16 ft/s (0.5 m/s ~ 5.0 m/s) Accuracy: $\pm 2.0\%$ of measured value Repeatability: 0.4% Pipe Size Range: 1" ~ 24" (25mm ~ 600mm) Keyboard: 16 (4×4) touch keys Display: 20×2, alphanumeric, backlit LCD Power Supply: 10-36V DC@1Amax Transmitter Enclosure: Engineering Plastic (ABS), IP Rating IP65 Outputs: RS485/4-20mA Communication Interface: RS485 Modbus Transmitter Ambient Temperature: 14°F ~ 122°F (-10°C ~ 50°C) CP025 Operating Temperature: 32°F to 140°F (0°C ~ 60°C)
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CODE

OUTPUT MODE

1	RS485, 4-20mA output
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CODE

TYPE OF TRANSDUCERS

CP025	Operating Temperature: 32°F to 140°F (0°C ~ 60°C)
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CODE

TRANSDUCER CABLE LENGTH

016	Standard 16ft (5m)
xxx	Maximum lengthen to 50m (166ft), per 5m is a lengthen unit.

Standard Model: D114 - 1 - CP025 - 016

Description: D114 transmitter with CP025 clamp on transducers, RS485/4-20mA outputs, Standard 16 ft (5m).

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