ABOUT D118i
FEATURES AND CASES

The Model D118i Ultrasonic Flowmeter is a state-of-the-art universal transit-time flowmeter designed using ARM COMA technology and low-voltage broadband pulse transmission.

While principally designed for clean liquid applications, the instrument is tolerant of liquids with the small amounts of air bubbles or suspended solids found in most industrial environments.

Comparing With other traditional flowmeter or ultrasonic flowmeter, it has distinctive features such as high precision, high reliability, high capability and low cost, the Flowmeter features other advantages:

4.7” graphic LCD CNC machined enclosure with hardened aluminium Unique technology for dynamic flow, PICOFLY With the TF Card, 512 files can b

ABOUT D118i SPECIFICATION

PERFORMANCE SPECIFICATIONS

Flow range	±0.03ft/s ~ ±40ft/s (±0.01m/s ~ ±12m/s)
Accuracy	±0.5% of measured value (for ±1.5ft/s~±40ft/s)
Repeatability	0.1% of measured value
Pipe size	1" to 200"(25mm to 5000mm)

FUNCTION SPECIFICATIONS

Outputs	Analog output: 4~20mA, maximum 750Ω. Pulse output: 0~9999Hz, OCT output, (adjustable) Realy output: the highest 1Hz,(1A@125VAC or 2A@30VDC)
Communication	RS232&RS485 Communication Interface, Support Modbus Protocol
TF Card	Max record:4GB, working 1200 days (sample frequency 5 second) Storage time interval:1~13000s
Power supply	90 to 250 VAC, 48 to 63 Hz. Or 10 to 36VDC
Keypad	24 light tactile keys
Display	4.7 inch TFT color screen
Temperature	Transmitter:14℉~140℉(-10℃~60℃) Transducer:-40℉~176℉(-40℃~80℃,standard)
Humidity	Up to 99% RH,non-condensing

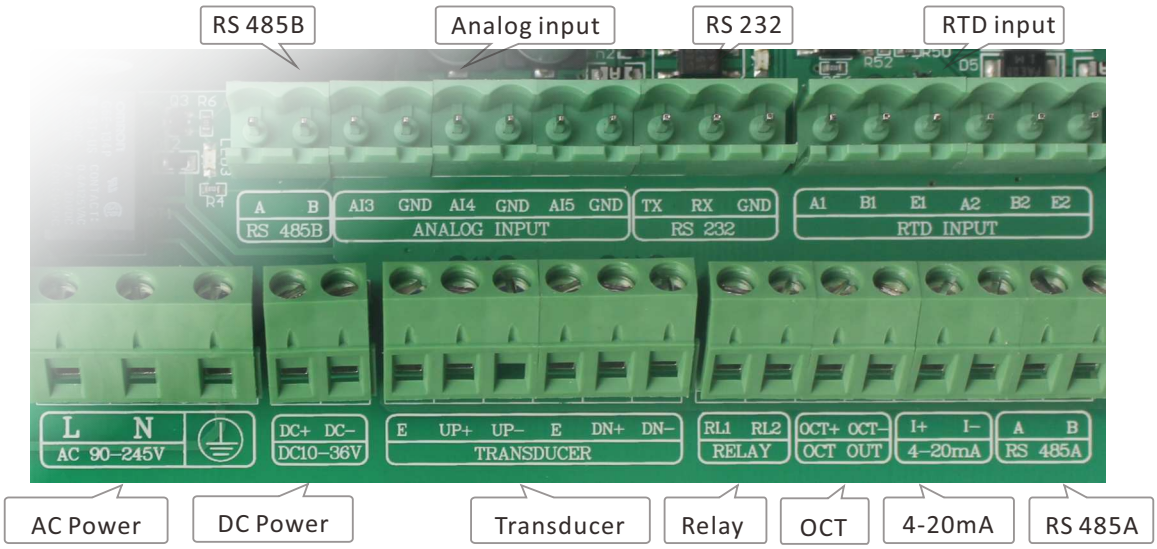
PHYSICAL SPECIFICATIONS

Transmitter	Die-cast aluminum,IP65,CNC machined
Transducer	Encapsulated design, protection grade IP68 The standard length of cable: 9m Material: 304 stainless steel
Weight	Transmitter: 1kg

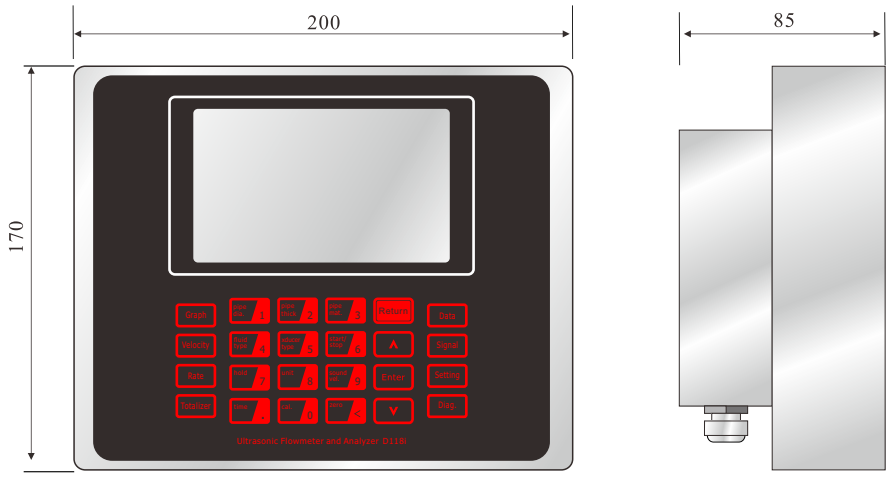
Transmitter	Transducer	Pipe strips	Coupling compound	SD card

ABOUT D118i
INTERFACE AND SIZE

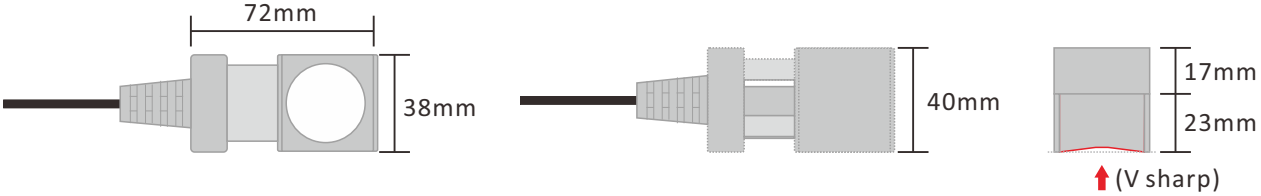
WIRING DIAGRAM



TRANSMITTER DIMENSIONS



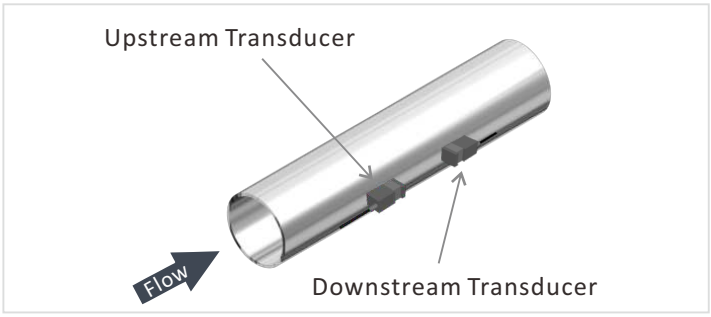
TRANSDUCER



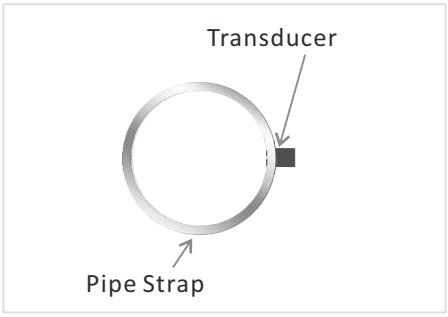
ABOUT D118i TRANSDUCER INSTALLATION METHODS

V METHOD MEASURING PIPE SIZE : 25MM-400MM

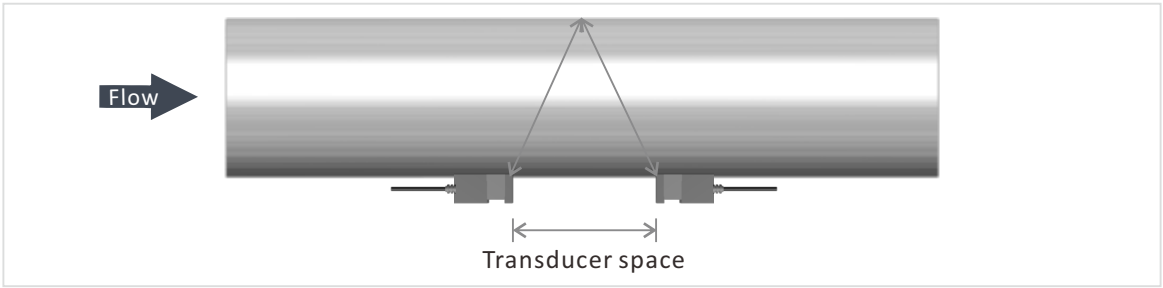
SIDE VIEW



SECTION

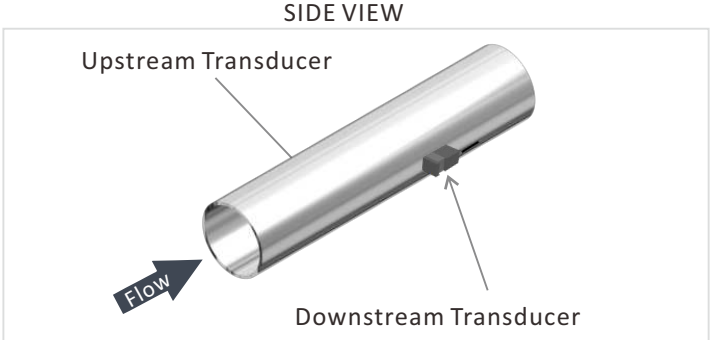


Top View



Z METHOD MEASURING PIPE SIZE: 100MM-3000MM

SIDE VIEW



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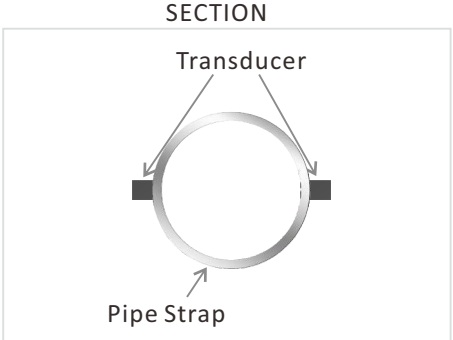
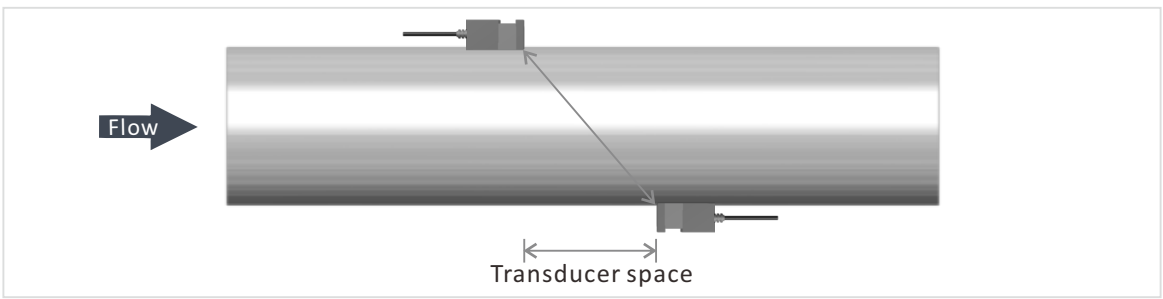


TOP VIEW



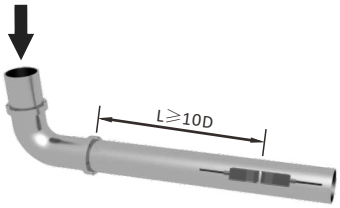
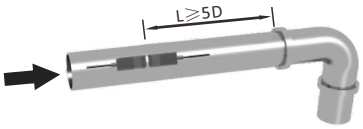
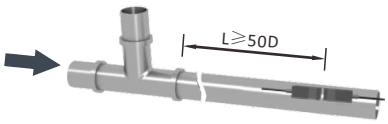
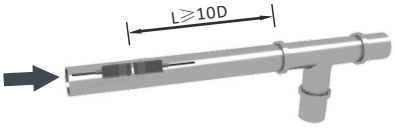
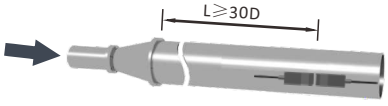
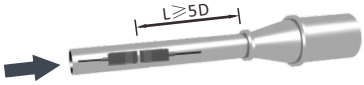
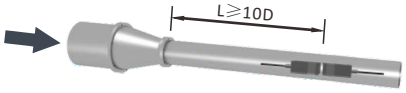
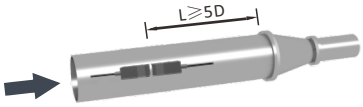
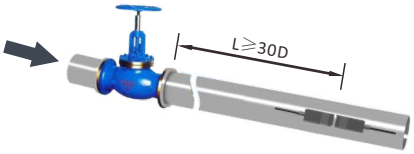
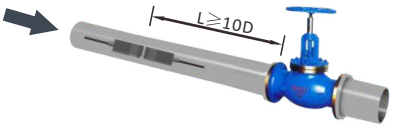
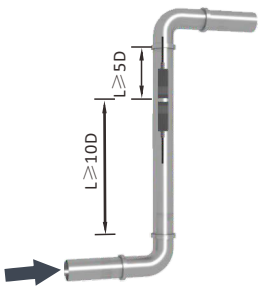
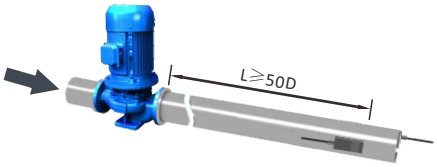
ABOUT D118i INSTALLATION SITE SELECTION

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 transducers 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.

STRAIGHT LENGTH OF UPSTREAM PIPING	STRAIGHT LENGTH OF DOWNSTREAM PIPING
90° Bend	
	
Tee	
	
Diffuser	
	
Reduce	
	
Valve	
	
Vertical	
	

ABOUT D118i
ORDERING INFORMATION

MODEL	DESCRIPTION
D118i	Flow Range: 0.03 ~ ±40ft/s (0.01~ ±12 m/s) Installation method: Wall mount Accuracy: ±0.5% of measured value Repeatability: 0.15% Pipe Size Range: 1"~200"(25mm ~ 5000mm) 4.7 inch TFT LCD, touch button, humanized design 1A@125VAC or 2A@30VDC Transducer: IP68, 30ft cable(9m)

CODE	OUTPUT
1	4-20mA, OCT pulse output, relay output, RS-232 / RS-485

CODE	TRANSMITTER ENCLOSURE AREA CLASSIFICATION
1	IP65, die-cast aluminum machined enclosure
2	Explosion-proof enclosure , Ex dia II BT4

CODE	TYPE OF SENSOR
C020	Clamp on transducer, Operating temperature:-40℉ ~ +176℉(-40℃ ~ +80℃)
CH020	High temperature Clamp on transducer:32℉ ~ +302℉(0℃ ~ +150℃)
W110	Insertion transducer, Operating temperature:-40℉ ~ +176℉(-40℃ ~ +80℃)
WH101	High temperature Insertion transducer:32℉ ~ +302℉(0℃ ~ +150℃)

CODE	TRANSDUCER CABLE LENGTH
030	Standard 30ft (9m)
xxx	Maximum lengthen to 305m(1000ft), per 5m is a lengthen unit.

Standard Model: D118i-1-1-C020-030
Description: Standard enclosure with Clamp-on transducers, RS232/RS485, 9m cable.