Module Din Rail Ultrasonic Flow Meter

Overview

EDM Ultrasonic flow meters operate by alternately transmitting and receiving a frequency between two transducers and measuring the time that it takes for sound to travel between the two. The difference in the transit time is directly and accurately related to the velocity of the liquid in the pipe. This din rail ultrasonic flow meter is designed for use in a closed conduit. The transducers are clamp-on types, which in turn makes for easy installation and operation.

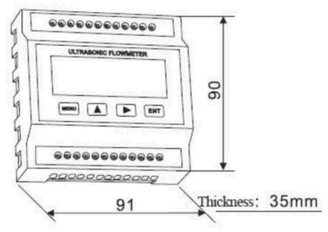
Ultrasonic flow meter, can be used for nearly any liquid from pure water, sewer water, petrol chemicals, metallurgy, electric power plant coolant flow, irrigation, city water, energy monitoring, the meter can indicate flow velocity, flow rate, total flow for nearly any fluid.

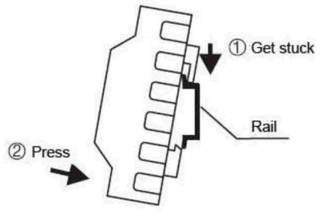
Din Rail type ultrasonic flow meter is high reliability of flow meter, widely used in petroleum, chemical industry, food ,electricity, water supply and drainage, etc.

Features

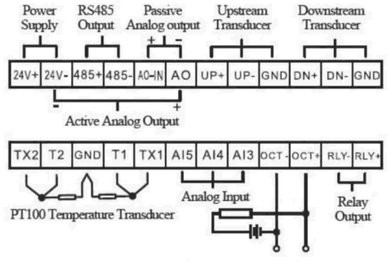
- Pipelines from DN15mm up-to Dn6000mm
- Flow speeds as low as 0.01 m/s and as high as 32 m/s
- Ambient temperatures as low as -65 deg C and as high as +70 deg C and at 100% humidity
- Liquid temperatures in the range of -30 deg up-to 160 deg C
- Accuracy: ±1% of reading at rates >0.2 mps
- Non-contact and low-maintenance sensor
- Highest precision on the basis of individually calibrated ultrasonic transducers and transmitters

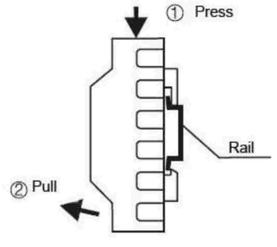
Dimensions





Wiring

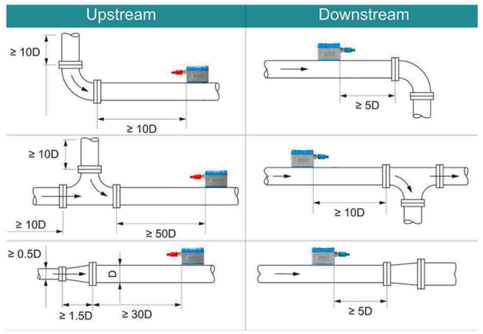


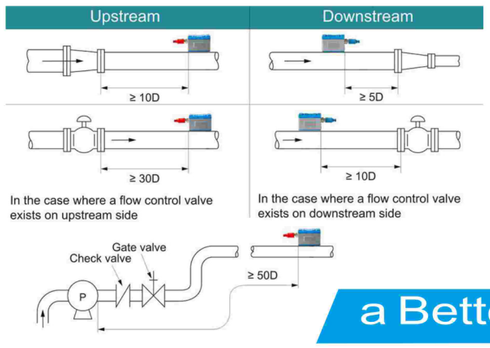


TECHNICALDATA altered can be change without prior notice.
Perubahan DATA TEKNIS dapat dilakukan tanpa pemberitahuan.

Parameters

Measuring Principle	Transit time ultrasonic
Pipe Size	S2 transducer: DN15~DN100 (½" ~ 4") M2 transducer: DN50~DN700 (2"~ 28") L2 transducer: DN300~DN6000 (12"~ 240")
Pipe Material	Carbon Steel, Stainless Steel, Cast Iron, Ductile Iron, Copper, PVC, Aluminum, etc
Display	2 line LCD with green backlight
Engineering Units	Flow Unit: cubic Meter, Liter, US Gallon, Million US Gallon, Cubic feet, US liquid barrel, Imperial liquid barrel, Oil barrel Heat Unit: GJ, KC, KWh, BTU
Time units	Second, Minute, Hour, Day
Accuracy	±1 of reading (0.5 ~ 5 m/s)
Data logger	SD card optional
Repeatability	±1% of reading
Communication	RS485 - Modbus RTU / ASCII
Keypad	16 key with tactile action
Response Time	0-999 seconds,user chose
Flow Velocity	0.5-10 m/s
Temperature	Transmitter: -30°C~60°C Transducer: -30°C~90°C standard, -30°C~160°C optional
Max.Cable Length	100 meter
Power Consumption	Less than 5W
Power Supply	24VDC and -85 ~264VAC 50/60HZ
Data Storage	Operation parameters,totalization
Output	One way 4-20mA analog, electric resistance: 0~1k, accuracy: 0.1% One way OCT pulse One way Relay
Input	3 ways 4~20 mA analog, accuracy: 0.1%
Protection	Converter and Sensor: IP65; Sensor: IP68 optional





Note:
D: Inside diameter of pipe (mm)

a Better Way