

Specifications

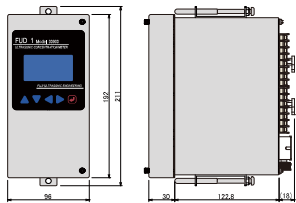
Model name	FUD-1 Model-13 FUD-1 Model-23 (explosion proof model)
Measurement parameters	Ultrasonic propagation speed · temperature
Display	LCD (Conc. Temp. Velocity/Various parameters) Analog DC4 to 20mA (adjustable for conc. value)
Output	Digital RS232C (Conc. Temp. Velocity Error code) Alarm High & Low limit Error
Power	AC100 to 240V 50/60Hz 30VA
Transmitter	Panel mount type (DIN size) Wall mount type (Rain proof case available)
Environment	0 to 50 Celsius RH85% or less
Fluid temperature	0 to 100 Celsius (Optional -10 to 160 Celsius : 100 Celsius span)
Function	Output setting, Alarm output setting, Average setting Offset and Gain setting, Self-diagnosis check Auto error cancelation setting, Fail safe mode setting
Option	RS485 output (Alternative choice with RS232C) Temperature output (DC4 to 20mA)
Channel	Maximum 10 Ch
Cable	10m (standard) Repeater required for over 10m Max., 300m
Explosion proof	Repeater Exd (ia) IIBT4 Transducer Ex (ia) IICT4
Transducer material	SUS316(L) SUS304(L) PFA coating Hastelloy Titanium Nickel Tantalum PFA PTFE PVC PVDF etc

*Specification may change without notice

Transmitter

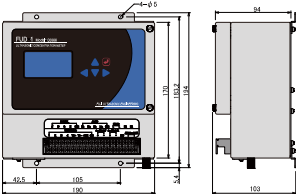
Panel mount type

Weight 2kg approx.



Wall mount type

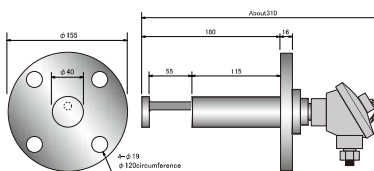
Weight 5kg approx.



Transducer

Flange JIS 10K 50A

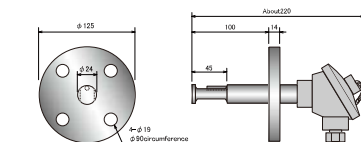
Weight 3.5kg approx.



The above flange size refers to JIS V2210 10K 50A FF.

Flange JIS 10K 25A

Weight 1.6kg approx.



The above flange size refers to JIS V2210 10K 50A FF.

▶The other sizes are available.



Ultrasonic Concentration Meter

FUD-1

Model-13

Model-23 (Explosion proof)



FUJI ULTRASONIC ENGINEERING CO.,LTD.

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FUJI ULTRASONIC ENGINEERING CO.,LTD.



WHY ULTRASONIC?

Ultrasonic principle is available for almost every kind of liquid. Moreover, it does not require any periodical calibration because of no long time degradation of piezoelectric element.



In-line/Real time measurement

This product can measure concentration with outstanding tight accuracy and long term stability since the principle of this product is independent of color (transparency), flow rate, and din (sound noise).



User-friendly maintenance

This product does not require any periodical parts replacement due to no moving parts that can wear out or age. In addition, it is possible to check the product condition with water with its self-diagnostic function.



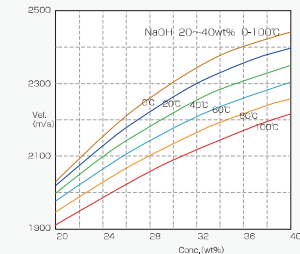
Superior customer service based on over 40 years sales experience

Together with our worldwide sales representatives who pride themselves in superior customer support, we always strive for complete customer's satisfaction.

Measurement principle

The ultrasonic velocity is determined by density, bulk module & temperature of the liquid. This product can measure velocity & temperature of the liquid accurately, and can calculate the concentration with the characteristic curve of the liquid.

Ex. NaOH characteristic curve



Binary type

Ultrasonic Concentration Meter

FUD-1 series

We strive to be flexible, reliable & honest for the customer needs based on our over 40 years sales experience. Available for variety applications such as acid, alkali, and organic fluids with minimum effort for installation and operation

Flexible choice of transmitter & transducer for adapting to the specific application

FUD-1 Model-13



Transmitter : Panel mount type
Transducer : SUS316/JIS10K25A

FUD-1 Model-13



Transmitter : With rain-proof case
Transducer : PFA coating/JIS10K50A

FUD-1 Model-23 Explosion proof

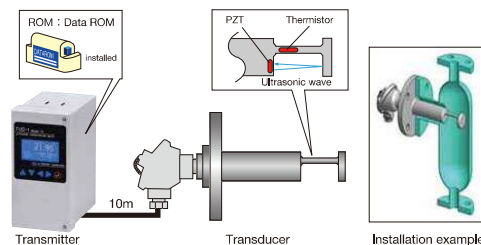


Transmitter : Wall mount type
Transducer : PFA/JIS10K50A Explosion proof repeater

Complete system : No struggle with system integration

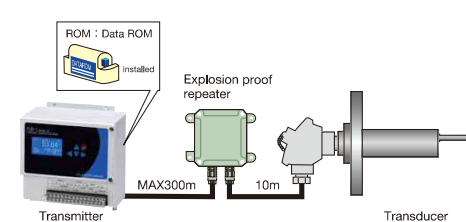
System configuration

FUD-1 Model-13



Repeater & extension cable are required for over 10m distance

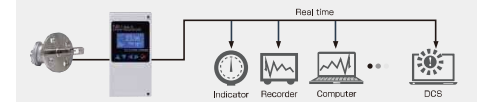
FUD-1 Model-23



Explosion proof repeater & extension cable are required for explosion proof model

Advantages

This product enables real time controlling system easily with DCS as well as monitoring system with a standard PC.



Various transducer materials are available for protection against chemical corrosion. Besides, flange type is selective among JIS, ANSI, DIN e.g.
*SUS316(L) *SUS304(L) *PFA coating *Hastelloy *Titanium
*Tantalum *PFA *PVC *PVDF

Applications

Chemical plant: H₂SO₄, HF, TMAH, HNO₃, NH₄OH etc.
Steel plate plant: Coolant oil, Oil remover etc.
Synthetic fiber plant: Primary material, Oiling agent etc.
Food/Beverage plant: Sugar (BX), Ingredients, etc.
Other industries: Cleaner, Etchant, etc.

