

DUS-TT-FC

Compact stationary ultrasonic flowmeter



Caractéristiques

- **High measurement accuracy**

Accuracy: 1%

- **Wide measurement range**

DN15 to DN6000 ~ depending on type of transducers

- **Energy meter option**

Measurement of thermal and cooling energy

- **Varied communication interface**

Inputs: RS-485 Modbus RTU ~ 1x 4-20 mA ~ 1x Pulse ~ 1x Relay

Outputs: 3x 4-20mA

- **Integrated data logger**

2GB SD card slot

- **IP67 flow meter ~ IP68 transducers**

Does not fear splashing water or humid environments

- **Compact & Robust**

Dimensions: 13cm x 15cm x 8cm ~ Weight: 1 kg



IP67



DUS-TT-Ex Atex

Présentation

Our new DUS-TT-FC ultrasonic thermal energy meter & flowmeter is designed for minimum size and ease of use.

It uses the Transit Time principle and MultiPulse technology.

It allows reliable measurements on a wide variety of liquids: ultra-pure liquids, drinking water, chemical effluents, waste water, irrigation, cooling water, industrial effluents etc.

The DUS-TT-FC is easy to use and the installation is done hot without any modification necessary on your process.

Thanks to its non-intrusive transducers and temperature probes, which can be used on pipes ranging from 15 mm to 6000 mm and recorder integrated, and its varied communication interface, the DUS-TT-FC flowmeter is the ideal tool for your flow rate measurements and of energy on any type of pipeline.

Application

- Water (hot water, cooling water, drinking water, sea water, etc.)
- Petroleum products
- Chemicals, alcohol, detergents, acids...
- HVAC, energy measurement system
- Food and pharmaceutical beverages
- Pretreated wastewater...
- Power plants (nuclear, thermal and hydroelectric)
- Thermal energy water
- Applications in metallurgy and mining
- Pipeline leak detection, inspection, tracking and collection

Modèles de montage



Non-intrusive transducers



Intrusive transducers



Flanged Cuff Transducer



Non-intrusive energy meter

Spécification

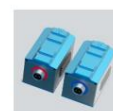
Reference: DUS-TT-FC

Models	Standard ~ ATEX option (Ex II 2G Ex d IIB T6)
Principle	Transit Time Ultrasonic Flowmeter
Precision	±1%
Repeatability	±0.2%
Exits	1x 4-20 mA ~ 1x pulse ~ 1x relay
Starters	3x 4-20 mA, accuracy 0.1 % (temperature, pressure or level signal acquisition)
Communication	RS485 Modbus RTU serial interface
Built-in recorder	SD card
Display	2x 20 character backlit LCD display
Orders	16 keys
Environment	-20°C ~ 50°C
Material	Cast aluminum IP67
Fluid	Any single, clear liquid capable of transmitting ultrasound (2% max. of suspended particles)
type of pipe	Any uniform and uni-material pipeline
pipe diameter	15-6000mm
Blowjob length	10D upstream , 5D downstream, 30D from the pump
Temperature	Environment -20-60°C
Turbidity	Not more than 10000ppm
Speed	0-±12m/s
Humidity	85% RH; transducers can measure underwater, depth 2m
Feed	DC8-36V or AC85-264V
Consumption	1.5W
Dimensions	Standard: 138*150*85mm ~ 1Kg

TRANSDUCERS 2x

5m of cables as standard (other lengths on request)

	Ref.	DN	mm	Temperatures	Types	Precision
Non-intrusive	TS	DN15-100		-40°C-90°C		1%
	TM	DN50-1000		-40°C-90°C		
	TL	DN300-6000		-40°C-90°C		
Non-intrusive high temperature	TS-HT	DN15-100		-40°C-160°C		1%
	TM-HT	DN50-700		-40°C-160°C		
Insertion	IT		DN80-6000	-40°C-160°C		1%
	IT					
Headlines	G3		DN15-25	-40°C-160°C		0.5%
	G2		DN32-40			
	G1		DN50-6000			



TRANSDUCER ON MOUNTING RAILS

RS DN15-DN100mm ~ Temperature -30°C-90°C
RM DN50-DN300 mm ~ Temperature -30°C-90°C
RL DN300-DN700mm ~ Temperature -30°C-90°C
RS-HT DN15-DN100 mm ~ Temperature -30°C-160°C
RM-HT DN50-DN300 mm ~ Temperature -30°C-160°C



Rail with ruler

Option compteur d'énergie

PT100 TEMPERATURE PROBES					
Kinds	DN references		Shutdown Temperatures water		Precision
Non-intrusive	NIS	ÿDN40 -40~160°C		NOPE	ÿ 0.1°C
Non-intrusive	SNI2	ÿDN15 -40~160°C		NOPE	ÿ 0.1°C
Insertion	SI-1	ÿDN50 -40~160°C		YES	ÿ 0.1°C
Low DN insert	SI-2	< DN50 -40~160°C		YES	ÿ 0.1°C
Loaded insertion	SI-3	ÿDN50 -40~160°C		NOPE	ÿ 0.1°C



Kit de montage



mounting bracket

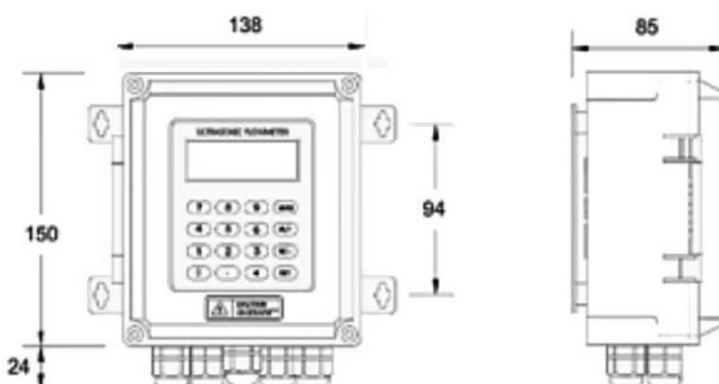


Wall mounting



Rail mounting

Dimensions



Codification

Reference : **DUS-TT-FC** **XXXX**

Model

- 1 - Standard
- 2 - Ex ATEX (Ex II 2G Ex d IIB T6)

Types Transducers

- TS** DN15~DN100mm
- TM** DN50~DN1000mm
- TL** DN300~DN6000mm
- TS-HT** DN15~DN100mm
- TM-HT** DN50~DN700mm
- IT** DN80~DN6000mm
- IT** DN80~DN6000mm
- G3** DN15~DN25mm
- G2** DN32~DN40mm
- G1** DN50~DN6000mm
- Ex-M** DN50~DN4000 mm Atex

Transducer mounting rail

- RS**
- RM**
- RL**
- RS-HT**
- RM-HT**
- RL-HT**

Energy meter option

Pt100 temperature sensors

- SI1** yDN40
- SI2** yDN15
- SI-1** yDN50
- SI-2** < DN50
- SI-3** yDN50