Uf-841



FIXED ULTRASONIC FLOWMETER - ATEX



media measured liquids & gases



models single pipe multi-pipe



explosion-proof enclosure For use in explosive atmospheres ce 0081 ii 2 g d exd iic t6 gb ex tb iiic t85°c db ip 66/67 ineris 13 atex 0054 x lecex ine 13.0068 x -20°c ≤ tamb ≤ +50°c

HIGH PERFORMING

- , Graphic screen
- Echo, gain and quality index displayed
- Up to 4 speed chords
- Optional pression/temperature compensation

ADAPTIVE

- Multi-variable data logger
- Mathematical functions generator
- Optional input/output modules
- Optional HART protocol

RELIABLE

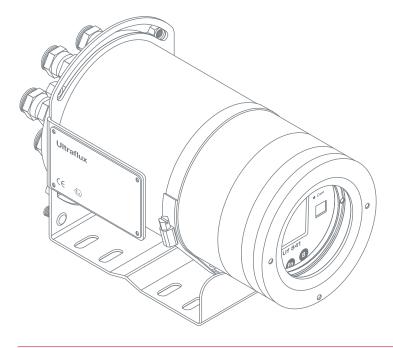
- Automatic calibration of the zero point on site
- Auto-diagnostic

COMPATIBLE

, all ultraflux probes or probes already installed*

ROBUST

316 stainless steel enclosure



TYPICAL APPLICATIONS

HYDROCARBONS:

High pressure gas flow measurement, injected water flow measurement, crude oil flow measurement, condensate flow measurement, injection media flow measurement...

OFFSHORE:

Gas flow measurement, monophasic liquids flow measurement, refined products and crude oil flow measurement...

* pleaseenquire





Uf 841

model	SINGLE PIPE	MULTI-PIPE
Nature of equipment	Fixed - for use in explosive atmospheres	
Measurement on pipe under load	Yes	
Flow measurement on open channel	no	
Internal diameter of pipe	from 8mm to 9 900mm approximately (depending on wall thickness)	
External diameter of pipe	from 10mm to 10 000mm*	
STANDARD mounted inputs/outputs	2 static relay outputs (50 V - 10 mA) usable as frequency outputs (up to 1KHz) - Module 2 (Single)	
IN OPTION, single input/output modules	up to 4 single modules (or 2 dual) to choose from:	
	 1 isolated, active analog output: current 4-20mA, 0-20mA, 0-24mA • Module 1 (Single) 2 static relay outputs usable as frequency outputs (up to 1kHz) • Module 2 (Single) 2 isolated current inputs 4-20mA, 0-20mA, 0-24mA • Module 3 (Single) 2 isolated, passive analogue 0-10V inputs: 0 to 15V voltage • Module 4 (Single) 2 PT100/PT1000 temperature inputs - taking up the physical space of 2 modules • Module 5 (Dual) 2 contact 5V inputs (pulse or state) • Module 6 (Single) 	
Use	Flow measurement in a pipe with the ability to incorporate up to 4 speed chords	flow measurement on 1 to 4 pipes with the ability to incorporate up to 4 speed chords
In option	 Pressure and temperature compensation Interface detection Hart protocol Stainless steel gland connectors 	
Display	Graphical lcd screen (14 lines x 20 characters) Backlit screen with time delay feature	
Troubleshooting help	Oscilloscope function (echo displayed) • Gain • Quality index	
Set-up	Quick and simple - by 7 - key touchpad with 2 dynamically allocated - or - via dedicated software supplied Possible to build in an access code	
Information storage	8mB data logger: time stamping - 1to 30 variables - up to 536,886 lines logging frequency from 1second to 24 hours	
Operating system	Windows for transfer of content and operation of logger using common software (excel, etc.)	
7 languages	French • English • German • Portuguese • Spanish • Italian • Russian	
Serial link	Serial link RS232 or RS485 to JBUS/MODBUS protocol • 115,200 Bauds USB port	
Power supply	DC power supply: 10-32V dc • Peak consumption < 12W • Average consumption < 6W AC power supply: 110-240V ac • Peak consumption < 15W • Average consumption < 7,5W	
Enclosure	> Robust and compact • 316 Stainless Steel • ISO M20 gland connectors > Weight: < 12kg • Dimensions: 267mm x 166mm	
Protection	IP 66 & ip 67	
Temperature range	For use from - 20°c to + 50°c	

technologY performances

ULTRASONIC TRANSIT TIME

> continuous bidirectional measurement

SIGNAL ANALYSIS

, digital signal process (real time echo shape control, digital filtering and gain control on each firing)

ACCURACY > up to 0,5%

REPEATABILITY

, up to 0,1%

LINEARITY

, up to 0,1%

TEMPORAL RESOLUTION

> 0,1ns

TIME BETWEEN EACH FLOW CALCULATION

> 100ms

UNITS OF MEASUREMENT

, from litres per second to cubic metres per day

VOLUME METERING

 $^{\flat}$ from a millilitre up to 1,000 cubic metres, gallon...

MULTI-LAYER PIPE

, up to three materials taken into consideration

MEMORY CAPACITY

· up to 11configurations

OTHER IMPORTANT INFORMATION

- , laminar and turbulent transitions considered (calculation of the reynolds number) except for parallel chords
- , freedom to mount probes: modes /, v, n and w



^{*} for gas, please enquire