IFX ENERGY

ISOFLUX

IFX-M4-E3
SN:03007256
Year: 2019
Θ: 0.1...90°C
ΔΘ: 3...70 K
q_s: 3.0 m³/h
q_p: 1.5 m³/h
q_i: 0.015 m³/h

Accur. class: 2
Envir. class: C, M1, E2
PS/PN 16 IP 65

CE M19 1621
LT-1621-MI004-039

TYPE: SN:

ISOIL
INDUSTRIA

MID
MI-004

Building Automation – Heating and Cooling

ISOFLUX®

The ultrasonic meter

ISOFLUX® E3: KEY FEATURES

IP68	PN16 and PN25
3 protocols	Class 2
Function "ONE"	Different power sources
R100 and R250	T90 and T130

IFX E3 - FLEXIBLE & COMPACT

IoT

INDUSTRY 4.0

EN1434

HVAC & R

- Energy measurement and distribution
- Energy efficiency
- Custody Transfer
- Co and Tri-generation
- Hot and chilled water
- Data Center
- District heating
- Building Automation

Application

Designed for domestic and service sector applications, the IFX-E3 **energy meter** links the flexibility of the "**ONE**" function with the opportunity to have two protocols simultaneously.

Its precision features make it the perfect instrument for shopping malls, **offices** and **light industries** applications, in addition to the classic **residential** applications.

ISOFLUX® PROTOCOLS AND CERTIFICATIONS
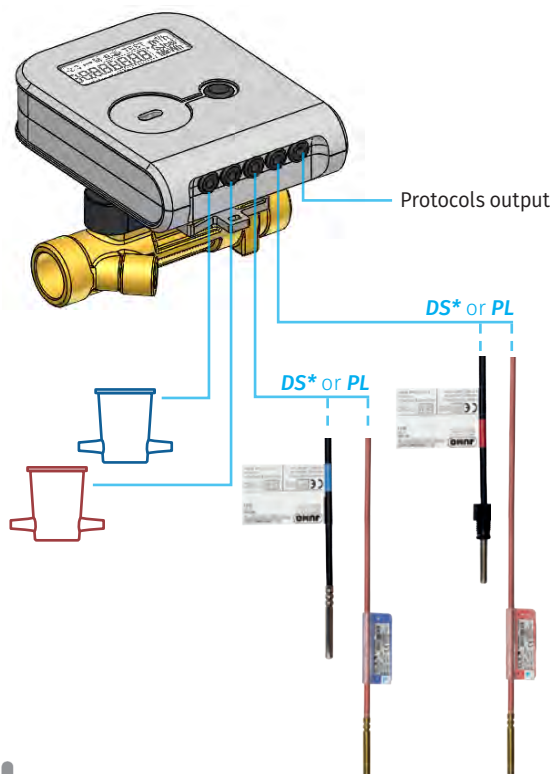
PROTOCOLS	BACnet	LoRaWAN®	M-Bus
	Modbus	RF	PULSES	4-20mA

CERTIFICATIONS	MID MI-004

IFX E3 - THE EVOLUTION

Connections and dedicated temperature probes

Protocols output

DS* or PL

DS* or PL

Memorization
The thermal energy meter IFX-E3 is equipped with an **internal memory** that allows the recording with **hourly** frequency (1480 values), **daily** frequency (1130 values) and **monthly** frequency (36 values) of the measured values for subsequence **processing**.

Protocols
The presence of two slots for the protocols makes easy **instrument integration** with both existing and the new networks. The available wired protocols are **Mbus, Modbus** and **BACnet**, the wireless protocols are **WMbus** and **LoRaWan**.

Pulses
Two pulse outputs are available under request and are settable through the "ONE" function. The two outputs can be transformed in two imputs.

Nominal pressure
The heat meter is **PN16** as a standard and **PN25** as an option **for all the available diameters**.

"ONE" FUNCTION

The "**ONE**" (Optimized & Nimble Editing) function allows the modification of some metrological parameter even when the instrument is MID approved.
This change must be done before the first liter of water has passed.

The editable parameters are:
- *Vector fluid measurement side*
- *Energy measure unit*
- *Activation and value of the input/output additional pulses*

TECHNICAL FEATURES	
Power supply	12-24Vac/dc; 230Vac; Battery (1 or 2)
Class	2 as per EN1434
Protocols	Up to 3 simultaneously
Protection rate	IP65 (IP67 or IP68 optional)
Sizes	from 3/4" up to DN100
Qp values	From 0,6 m³/h up to 60 m³/h
Nominal pressure	PN16 or PN25
Connection	Treaded or flanged

TEMPERATURE PROBES

DS - for series 01, 03 and E3
Typically used for DN≤32, ball-valve needed.

TECHNICAL FEATURES	
Class	B
Approval	MID MI004
Particularity	Pairing selection
Max cable length	10 m

Ball valve (1" and 1"1/2)

PL - for series 01, 03 and E3
Used for DN>32, pockets are required.

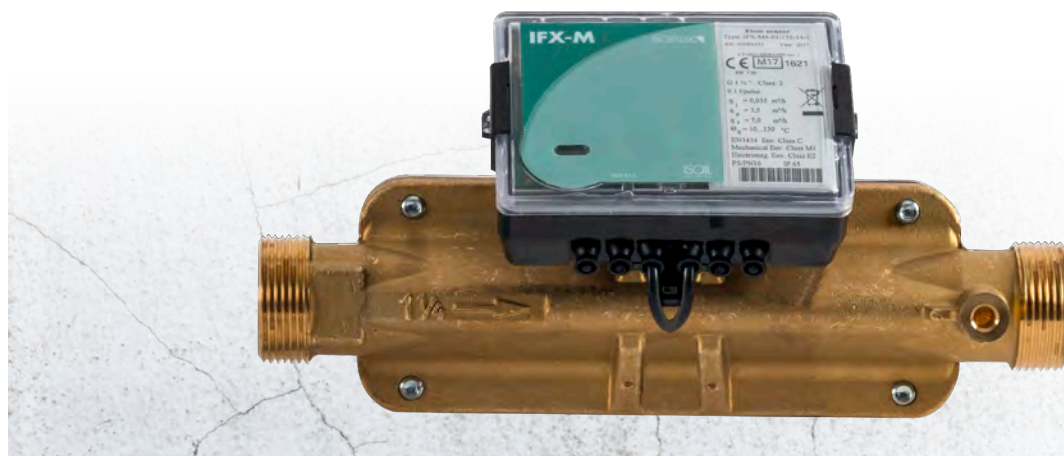| TECHNICAL FEATURES	
Class	B
Approval	MID MI004
Particularity	Pairing selection
Max cable length	10 m

Pocket
(85 mm - 120 mm - 210 mm)

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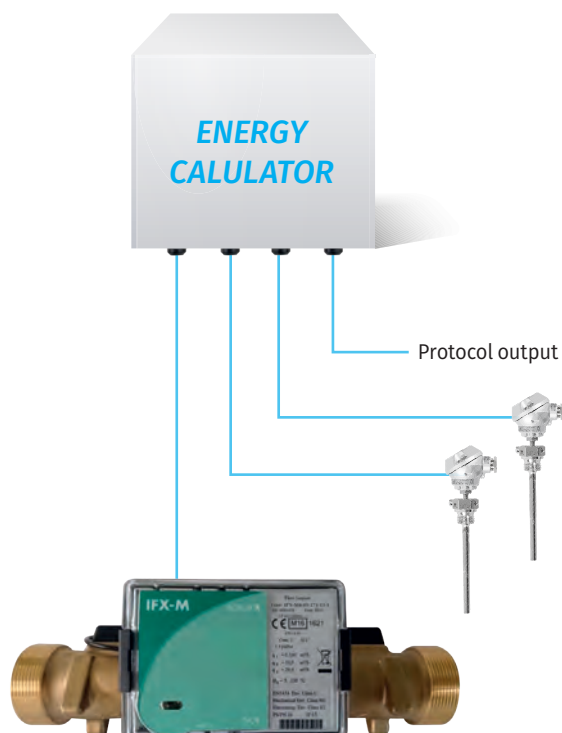# IFX 01 FLOW SENSOR

Class 2 - MI004

EN1434

MID MI-004

Application

The IFX-M4-01 **ultrasonic flow sensors** are developed as a **Thermal Energy System** component, in conformity to **EN1434** and approved MI004 if required:

• The **flow sensor** satisfies the requirement of the 2014/32/EU;

• The **flow sensor** can be installed either vertically or horizontally and no straight diameters are required untill DN50;

• The **flow sensor** can be connected to ISONRG series (tech information in a separate brochure) or other compatible energy calculators.

TECHINCAL FEATURES	
Power supply	12-24Vac-dc, 230Vac, battery (1 or 2)
Classe	2 as for EN1434
Output	Burst pulses
Protection rate	IP65 (IP67 as option for the pipe)
Sizes	From 3/4" up to DN100
Qp values	From 0,6 m^3/h up to 60 m^3/h
Rangeability	R100 (R250 as option)
Nominal pressure	PN16 or PN25
Connection	Treaded or flanged

ENERGY CALULATOR

Protocol output

TEMPERATURE PROBES

PLH - *for series 01*

Head temperature probes, can be 2 or 4 wires connection.

TECHINCAL FEATURES	
Class	A
Approval	MID MI004
Particularity	Pairing selection
Pocket	Included

ISOIL INDUSTRIA
The solutions that count