



ISOFLUX™

IFX-M1-F3 FLOW



ULTRASONIC FLOW METER

ISOIL

I N D U S T R I A



APPLICATION

Ultrasonic water meter ISOFLUX FLOW3 is designed for measurement of cold and hot water consumption in households and block of flat, as well for industrial applications.

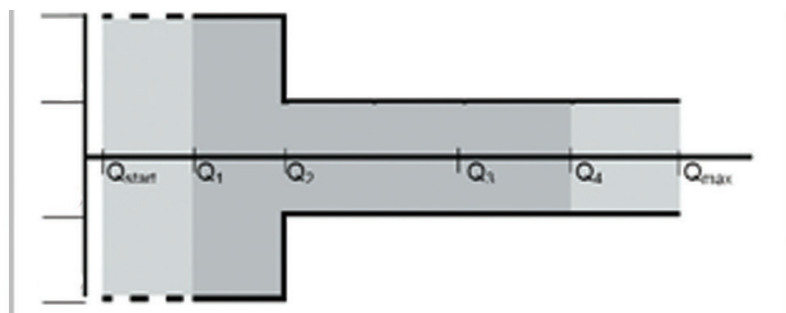
- Static water meter using ultrasonic technology
- High accuracy
- For residential and commercial use
- Hot and cold water

SPECIAL FEATURES

- Temperature class T30; T30/T90; T90
- Nominal flow 1,6 / 2,5 / 4,0 / 6,3 / 10 / 16 / 25 m³/h
- Dynamic range up to Q₃/Q₁ = R 250/400
- No straight sections required
- No measurement of air
- Ambient class B
- Protection class IP65/67
- Nominal pressure PN16/25
- Pressure ΔP25/63
- Temperature measurement Pt500, 0°C ... 180°C
- Metering archive
- Battery lifetime > 12 years
- Power supply options: Battery/External
- Optional communications modules
- Mounting in any installation position



MEASURING ACCURACY CLASS 2



APPROVAL

MID
OIML R49
EN14154

AMR Interfaces

Optical
Radio 868 MHz
M-Bus/CL
LON
MiniBus
Pulse output

OPTICAL INTERFACE

Integrated into the front panel of calculator. It is designed for data reading via M-bus protocol and parametrization of the meter.

RADIO INTERFACE

The internal radio provides data reading via WBUS telegram:

- Current total volume
- Current flow
- Current data and time
- Accounting date information
- Error date

WIRED M-BUS INTERFACE

The internal M-Bus module provides data reading possibility via M-Bus protocol

ERROR CODES

ERROR code indication in case of error

UNIVERSAL PULSE INPUTS/OUTPUTS

- Pulse cable (Option)
- Two configurable pulse outputs/inputs
- Flow direction indication

DATA REGISTRATION

Hourly, daily and monthly parameters values

- Integral volume of liquid
- Integrated pulse value in pulse input1
- integrated pulse value in pulse input2
- Maximum flow rate value and date
- Operating time without an error
- Total error code
- Time when the flow rate exceeded 1,2 Q4
- Time when the flow rate was less than Q1

DATA LOGGER - HISTORY VALUES

- Every hour, day and month values of the measured parameters are stored in internal memory
- All data from archive can be read by means of the remote reading
- In addition data logger records of monthly parameters can be seen on the display

LCD INDICATOR

- The device is equipped with 8-digits LCD with special symbols to display parameters, measurement units and operation modes
- The following information can be displayed:
 - integral and instantaneous measured parameters,
 - archive data and set day data,
 - device configuration information,
- Programmable LCD displaying parameters



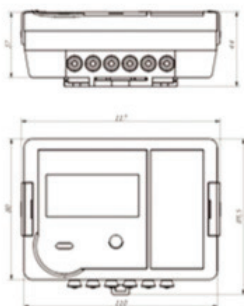
TECHNICAL DATA

| | | |
|-------------------------|--|--|
| FLOW RATE SENSOR | Q3 (m³/h) | 1,6/2,5/4,0/6,3/10/16/25 |
| | R Q3/Q1 (m³/h) | Q3 1,6 ... 250 Q3 2,5 ... 250/400 Q3 4,0/6,3/10/16/25 ... 250/400 |
| | Medium Temp. (operating temperature) | 0,1 ... 90°C |
| TECHNICAL DATA | LCD-Display | 8-digit |
| | Protection class (IP) | IP65/67 |
| | Ambient class | CLASS B / EN14154 |
| | Ambient temperature | +5°C ... +65°C |
| | Installation place | indoor, outdoor in a pit or inst. box |
| | Installation position | all installation position (vertical, horizontal, rising pipe, down pipe) |
| | Nominal pressure | PN16/25 bar |
| | Pressure loss | 0,63/0,25 bar |
| | Flow sensor cable length | 1,2m (2,5m or 5m - special order) |
| | Temperature sensor, two-wired connection cable length (optional) | Up to 5m |
| | Battery lifetime | 10-12years |
| Mounting of calculator | Mounting on standard DIN-rail | |

| $Q_{3'}$ m ³ /h | R Q_3/Q_1 | $Q_{4'}$ m ³ /h | $Q_{1'}$ m ³ /h | $Q_{2'}$ m ³ /h | Threshold value of flow rate, m ³ /h | Joining to the pipeline (Thread – G, flange– DN) | Overall length L, mm | ΔP (bar x 100) |
|-------------------------------|----------------|-------------------------------|-------------------------------|-------------------------------|---|--|-------------------------|------------------------------|
| 1,6 | R250 | 2 | 0,0064 | 0,01 | 0,003 | G3/4" | 110, 165 | ΔP 63, ΔP 25 |
| | | | | | | G1" or DN20 | 190 | ΔP 25 |
| | | | | | | G3/4" | 110, 165 | ΔP 63 |
| 2,5 | R250 | 3,125 | 0,01 | 0,016 | 0,005 | G1" or DN20 | 190 | ΔP 63, ΔP 25 |
| | | | | | | G1" | 130 | ΔP 25 |
| 2,5 | R400 | 3,125 | 0,0063 | 0,01 | 0,003 | G3/4" | 110, 165 | ΔP 63 |
| | | | | | | G1" or DN20 | 190 | ΔP 63, ΔP 25 |
| 4 | R250 | 5 | 0,016 | 0,026 | 0,008 | G1" or DN20 | 190 | ΔP 63, ΔP 25 |
| | | | | | | G1" | 130 | ΔP 63 |
| 4 | R400 | 5 | 0,01 | 0,016 | 0,005 | G1" | 130 | ΔP 63 |
| | | | | | | G1" or DN20 | 190 | ΔP 63, ΔP 25 |
| 6,3 | R250 | 7,875 | 0,0252 | 0,04 | 0,012 | G1" or DN20 | 190 | ΔP 63 |
| | | | | | | G1 1/4" or DN25 | 260 | ΔP 25 |
| 6,3 | R400 | 7,875 | 0,016 | 0,026 | 0,008 | G1" or DN20 | 190 | ΔP 63 |
| 10 | R250 | 12,5 | 0,04 | 0,064 | 0,02 | G1 1/4" or DN25 | 260 | ΔP 63 |
| | | | | | | G2" or DN40 | 300 | ΔP 25 |
| 10 | R400 | 12,5 | 0,025 | 0,04 | 0,012 | G1 1/4" or DN25 | 260 | ΔP 63 |
| 16 | R250 | 20 | 0,064 | 0,1 | 0,03 | G2" or DN40 | 300 | ΔP 63 |
| | | | | | | DN50 | 270 | ΔP 25 |
| 16 | R400 | 20 | 0,04 | 0,064 | 0,02 | G2" or DN40 | 300 | ΔP 63 |
| 25 | R250 | 31,25 | 0,1 | 0,16 | 0,05 | DN50 | 270 | ΔP 63 |
| 25 | R400 | 31,25 | 0,063 | 0,1 | 0,03 | DN50 | 270 | ΔP 63 |

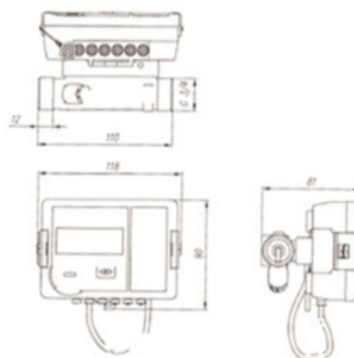
Dimensions of calculator

117 mm x 44 mm x 89,5 mm,



Sizes and dimensions of water meter

Example – flow sensor Q3= 1,6/2,5m³/h, Threaded end connections G3/4", mounting length L=110 mm.



| | | | | | |
|--------------|-----------|-------------|-----------------|-------------|------|
| DN [mm] | 15 | 20 | 25 | 40 | 50 |
| L [mm] | 110 / 165 | 130/ 190 | 260 | 300 | 270 |
| H [mm] | 81 | 85 | 123/134 | 141/163 | 167 |
| G/ Flange DN | G3/4" | G1" or DN20 | G1 1/4" or DN25 | G2" or DN40 | DN50 |