

transit time ultrasonic flowmeter

For conductive and non-conductive liquids

Measure range $<0,2\text{m}^3/\text{h} \div >400000\text{ m}^3/\text{h}$

Accuracy $\pm 1\%$

Clamp on IP68 sensors also for high temperatures

Pipe dimension range:
DN20 \div DN4000

Datalogger via SD card or via MODBUS

Heat meter



These flowmeters operate on the ultrasonic pulses transit time difference principle. The great advantage is the mechanical installation, because it is not necessary to cut the pipe. The sensors are simply clamped on the outer pipe surface, for this reason the pressure and the liquid aggressiveness to be measured are not a problem for the flowmeter. The system measures in a bidirectional way and is suitable for clean or slightly dirty liquids.

TECHNICAL FEATURES

Pipe dimension range

DN20 \div DN4000

Transmitter protection class

IP66

Transducer protection class

IP68

Display

backlighted 2x20 alphanumeric digit

Keypad

4 keys

Housing material

aluminium

Displayed data

instantaneous flowrate; flow totalizer

Installation

wall mounting

Analog Output

Sel. 4 \div 20mA o 0 \div 20mA

Accuracy

$\pm 1\%$

Repeatability

$\pm 0,2\%$

Linearity

$\pm 0,5\%$

Basic measurement period

500ms

Serial port

RS485

Communication protocol

MODBUS RTU or ASCII+ (opt.)

Data logger

on SD card (opt.) or via MODBUS

Programmable frequency output

0 \div 5000Hz

Relay output

n.1 for pulse totalizer or alarm

Medium speed range

$\pm 12\text{m/s}$

Unit working temperature

-20 \div 60°C

Instrument humidity

non condensing 85% RH (40°C)

Transducer working temperature

TS-2 / TM-1 / TL-1 -30 \div +90°C; TS2H / TM1H -30 \div +160°C; TC-1 / TLC2 -40 \div +160°C

PT100 sensors working temperature

-40°C +160°C

Transducer cable std. length

5mt

PT100 sensor cable std. length

15mt

Power Supply

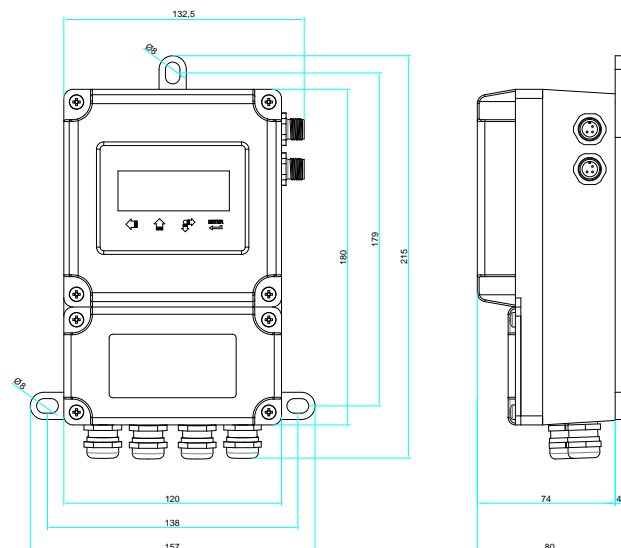
230Vac o 10 \div 30Vdc (depending on model)

Dimensions

200x120x77mm

Weight without sensors

1Kg



Transit time ultrasonic flow meter

For conductive and non-conductive fluids. Wall mounting - Speed range: max $\pm 12\text{m/s}$ -
 Simultaneous display of flowrate and cumulative volume data
 Available with heat meter option
 Output: 4 \times 20mA + 1 open collector + 1 relay
 Accuracy not better $\pm 1\%$
 Transducers standard connection cable 5 mt
 Protection degree: transmitter IP66 - transducers IP68
 Supplied with grease and steel hose clamps for transducers
 fixing up to DN900

Version	
C	Heat meter - with couple of cables L= 15 m (540Z084A)
D	Heat meter with couple of cables L= 15 m (540Z084A) + datalogger on 8GB SD card
U	Datalogger on 8GB SD card
W	Standard
Z	Special
Power supply	
A	230Vac
B	115Vac
C	24Vac
D	10 \pm 30 Vdc
Z	Special
Flow transducers	
A0--	None
TS-2	Clamp-on type for pipes DN 20 \times 100 / -40 \pm 90°C (additional cable eur 8,00 each mt - max 200 mt)
TM-1	Clamp-on type for pipes DN 50 \times 700 / -40 \pm 90°C (additional cable eur 8,00 each mt - max 200 mt)
TL-1	Clamp-on type for pipes DN 300 \times 4000 / -40 \pm 90°C (additional cable eur 8,00 each mt - max 200 mt)
TS2H	Clamp-on type for pipes DN 20 \times 100 - high temperature -40 \pm 160°C (additional cable eur 8,00 each mt - max 200 mt)
TM1H	Clamp-on type for pipes DN 50 \times 700 - high temperature -40 \pm 160°C (additional cable eur 8,00 each mt - max 200 mt)
TL1H	Clamp-on type for pipes DN 300 \times 4000 - high temperature -40 \pm 160°C (additional cable eur 8,00 each mt - max 200 mt)
TC-1	Insertion type for pipes with max thickness 20mm -40 \pm 160°C (additional cable eur 8,00 each mt - max 200 mt)
TLC2	Insertion type for pipes with max thickness 80mm -40 \pm 160°C (additional cable eur 8,00 each mt - max 200 mt)
TCCP	Insertion type for CCP pipes with max thickness 80mm -40 \pm 160°C (additional cable eur 8,00 each mt - max 200 mt)
Z999	Special
Additional output	
4	RS485 - MODBUS
N	None
Z	Special
Accessories	
A	None
B	MODBUS communication software(010F109A)
E	Couple of PT100 class A in MGO with SS316 sheat \varnothing 3mm. M12 connector - L= 150 mm
H	Couple of SS316 wells for PT100 class A in MGO with sliding fitting. Process connection G $\frac{1}{4}$ M - L= 50 mm
L	Couple of SS316 wells for PT100 class A in MGO with sliding fitting. Process connection G $\frac{1}{4}$ M - L= 100 mm
P	Couple of surface mounting brass plates for PT100 class A in MGO \varnothing 3mm
Q	Couple of metallic hose clamps for PT100 for up to DN900 pipes (590A010A)
Z	Special