



SGM-101F 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

The SGM-101F 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 Feature

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. $4\div 20\text{mA}$ or $0\div 20\text{mA}$

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

$0\div 5000\text{Hz}$

Output

n.1 relay; n.1 digital output

Medium speed range

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

Unit working temperature

$-20\div 60^\circ\text{C}$

Instrument humidity

non condensing 85% RH (40°C)

Transducer working temperature

TS-2 / TM-1 / TL-1 $-30 \div +90^\circ\text{C}$; TS2H / TM1H $-30 \div +160^\circ\text{C}$; TC-1/ TLC2 $-40 \div +160^\circ\text{C}$

PT100 sensors working temperature

$-40^\circ\text{C} \div +160^\circ\text{C}$

Transducer cable std. length

5mt

PT100 sensor cable std. length

15mt

Power Supply

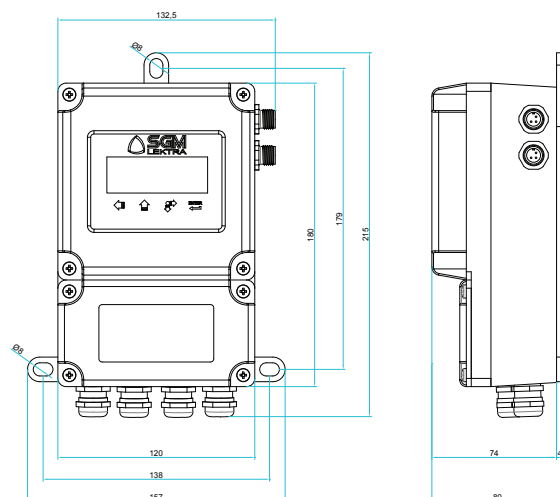
24,115,230Vac; $10\div 30\text{Vdc}$

Dimensions

200x120x77mm

Weight without sensors

1Kg

**SGM-101F**

Transit time ultrasonic flow meter

For conductive and non-conductive fluids. Wall mounting - Speed range: max ± 12 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 $\pm 1\%$
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 $\times$ 30 Vdc
Z	Special
Transducers	
A0--	None
TS-2	Clamp-on type for pipes DN 20+100 / -40+90°C - std cable 5m (additional cable eur 8,90 each mt - max 200 mt)
TM-1	Clamp-on type for pipes DN 50+700 / -40+90°C - std cable 5m (additional cable eur 8,90 each mt - max 200 mt)
TL-1	Clamp-on type for pipes DN 300+4000 / -40+90°C - std cable 5m (additional cable eur 8,90 each mt - max 200 mt)
TS2H	Clamp-on type for pipes DN 20+100 - high temperature -40+160°C - std cable 5m (additional cable eur 8,90 each mt - max 200 mt)
TM1H	Clamp-on type for pipes DN 50+700 - high temperature -40+160°C - std cable 5m (additional cable eur 8,90 each mt - max 200 mt)
TL1H	Clamp-on type for pipes DN 300+4000 - high temperature -40+160°C - std cable 5m (additional cable eur 8,90 each mt - max 200 mt)
TC-1	Insertion type for pipes with max thickness 20mm -40+160°C - std cable 5m (additional cable eur 8,90 each mt - max 200 mt)
TLC2	Insertion type for pipes with max thickness 80mm -40+160°C - std cable 5m (additional cable eur 8,90 each mt - max 200 mt)
TCCP	Insertion type for CCP pipes with max thickness 160mm -40+160°C - std cable 5m (additional cable eur 8,90 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	Pair of PT100 class A in MGO with SS316 sheat $\varnothing$ 3mm. M12 connector - L= 150 mm
H	Pair of SS316 wells for PT100 class A in MGO with sliding fitting. Process connection G 1/4 M - L= 50 mm
L	Pair of SS316 wells for PT100 class A in MGO with sliding fitting. Process connection G 1/4 M - L= 100 mm
P	Pair of surface mounting brass plates for PT100 class A in MGO $\varnothing$ 3mm
Q	Pair of metallic hose clamps for PT100 for up to DN900 pipes (590A010A)
Z	Special