- **Ultrasonic level measurement**
- **Range 0,25 ÷ 6 m / 0,4 ÷ 10 m**
- **IP67**
- **Suitable for liquids and solids**
- **Comm. Protocol MODBUS / HART**
- **ATEX**
- **Power supply 24 Vdc; 12 Vdc**
- **Output 4 ÷ 20 mA (2 wire version);**
  4 ÷ 20 mA + 2 relays set (4 wire version)

The ultrasonic level transmitters have 4 modes for configurationandcalibration:

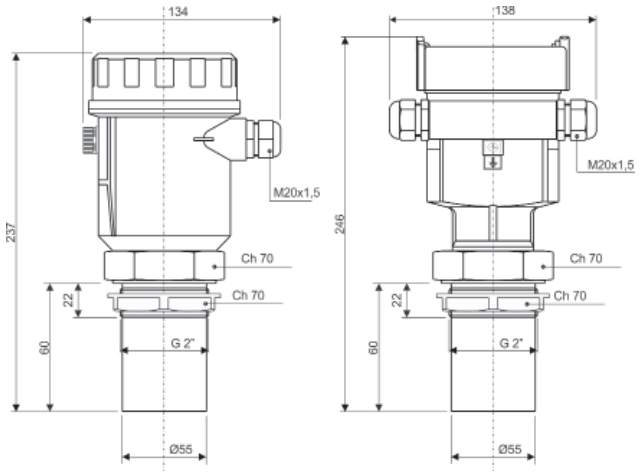
1. by means of the configuration module which can be switched on and off on transmitter (module is equipped with large LCD matrix display).
2. via MODBUS RTU by PC interface with USB/RS485 and communication software 010F105A
3. via HART, by Hand-Held, or by HART modem connected to a PC with s/w 010E105A.
4. via smartphone Android App (only 4 wires version)

The non-contact technology makes it ideal for installations where it is necessary to minimize the maintenance costs. The removable display module allows its use as a fixed display or calibration module.
Are available versions with 2-wire or 4-wire, 2-wire with communication HART and ATEX certification, 4-wire with communication MODBUS and 2 relays.

TECHNICAL FEATURES

Housing/sensor material
PC or Al / PP wetted part (only PVDF for ATEX certified vers.)
Mechanical installation
2” GAS M (PP flange DN80 opt.)
Protection degree
IP67/IP68 (Sensor)
Electrical connection
Internal push connectors
Working temperature
-30 ÷ +70°C; +80°C non-continuous
Pressure
from 0,5 to 1,5 bar (absolute)
Power supply
12Vdc / 20÷30Vdc (2-wires versions) - 24Vdc (4-wires versions)
Power consumption
0,6W (2-wires) - 1,5W (4-wires)
Analog output
4...20mA, max 750ohm
Relays output
(4-wire only) n°2 3A 230Vac (n.o.)
Digital communication
MUDBUS RTU for 4-wire vers. ; (opt.) HART for 2-wire vers.

Max measure range
max 0.25 ÷ 6m
max 0.40 ÷10m
In case of non perfectly reflecting surfaces, the maximum distance value will be reduced
Blind distance
0,25m (6m versions) / 0,40m (10m versions)
Temperature compensation
digital from -30 to 80°C
Accuracy
±0,2% (of the measured distance) not better than ±3mm.
Resolution
1mm.
Calibration
4 buttons or via HART / MODBUS RTU / BLUETOOTH
Warm-up
5 minutes typical
LCD Display
Plug-in display/keyboard 4 buttons matrix LCD
Ex-proof
ATEX II 1/2G Ex ia II C T6 Tamb -20 ÷ +60°C



Ultrasonic level transmitter

4÷20mA output.
Housing with anticondensation filter
G 2" / PP or PVDF threaded connection
+ nr. 1 2" BSP/PP fixing bolt (not for PVDF versions)
Setting by keyboard/display removable module (optional)
or via BLUETOOTH with Android APP
Working temperature: -30° ÷ +70°C (80° non continuous)

Version	
-	2-wire, range 6m, HART, ATEX II 1/2G Ex ia II C T6 (amb. temp. -20÷+60°C)
0	2-wire, range 10m, HART, ATEX II 1/2G Ex ia II C T6 (amb. temp. -20÷+60°C)
1	2-wire, range 6m
2	2-wire, range 6m, HART
3	2-wire, range 6m, ATEX II 1/2G Ex ia II C T6 (amb. temp. -20÷+60°C)
4	4-wire, range 6m, 2 relays, MODBUS
5	2-wire, range 10m
6	2-wire, range 10m, ATEX II 1/2G Ex ia II C T6 Tamb -20÷+60°C
7	2-wire, range 10m, HART
8	4-wire, range 10m, 2 realys, MODBUS
9	Special

Housing / Sensor materials	
F	PC with transparent cap, IP67 / PP
L	PC with blind cap, IP67 / PP
P	PC with transparent cap IP67 / PVDF
R	PC with blind cap IP67 / PVDF
S	Aluminum with transparent cap, IP67 / PP
U	Aluminum with transparent cap, IP67 / PVDF (compulsory for ATEX versions)
Z	Special

Power supply	
4	24Vdc (20÷30Vdc)
5	12Vdc (max 20Vdc) - only for version 1 and 5
9	Special

Accessories	
A	None
B	BLUETOOTH - only for 4-wire versions (vers. 4 and 8)
C	DN80 PN6 UNI 1092-1/PP flange (600J001T)
D	VL601 keyboard/display removable module (VL601SGM)
P	PP sensor extension for a total insertion of 250 mm (not available for PVDF sensors)
S	MODBUS communication software (010F105A)
T	HART communication software (010E105A)
Z	Special