

Ultrasonic Level Transmitter for liquids and solids up to 40 m

The level meters are RIL350 ultrasonic measurement systems consist of an electronic module with a large 14-digit display and a remote sensor. The level meters transmit a series of ultrasonic pulses that spread towards the flat surface. The transmitter retrieves the acoustic waves reflected that subsequently are treated in electronic form and displayed in the integrated display.

The level meters are suitable for the level of the non-contact measurement of liquids (aqueous solutions, sewage water, etc.), thick or solid material, in closed or open vessels, wells, reservoirs and open channels. In measuring the level of bulk-solid material, the measurement range is reduced.

The setting is done via three buttons located inside the remote enclosure.

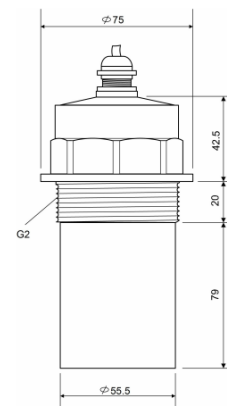
Characteristics of ultrasonic level transmitter;

- Suitable for continuous measurement of liquids (even if polluted), dense material, glues or solids.
- Installation in open or closed tanks, wells, open channels, etc.
- Current output 4 to 20 mA, HART, Modbus RS485 and up to 6 relay alarm contacts
- Maximum cable length tra central unit and sensor 100 m.

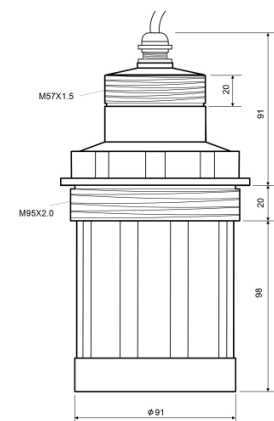


| Technical specifications | Features |
|---|--|
| Measuring range liquids | 0.2-4 / 0.25-6 / 0.3-8 / 0.5-12 / 0.8-20 / 1.2-30 / 1.6-40 m |
| Measuring range solids | 0.2-4 / 0.25-6 / 0.3-8 / 0.5-12 / 0.8-20 m |
| Sensor beam angle | 4, 6, 8m beam angle is 10° (3dB) 12, 20, 30, 40m beam angle is 5° (3dB) |
| Power supply | 24DCV ±5% 0.2A 220ACV ±20% 0.1A |
| Display Mode/ Display Resolution Ratio | Two lines 14 digit LCD display / 1 mm |
| Output Signal | 4-20mA/24VDC/2 wire 4÷20mA/24V DC /HART® 2 wire 4÷20mA/24VDC/RS485 Modbus 4 wire |
| Relay Output | Max 6 (If with RS485.max 5 relay) Normally open or Normally closed (can be set) |
| Load Resistance | 0-500Ω |
| Operating Temperature | -40+85°C |
| Operating pressure | ±0.1MPa |
| Accuracy | +/- 0,2% (full scale) |
| Temperature compensation | Automatic |
| Measurement Circle | 1 second (adjustable) |
| Housing Material | ABS |
| Sensor material | PVC (on request PTFE) |
| Process connections | Threaded or flanged |
| Cable Entry | PG9 / PG11 / PG13.5 |
| Cable diameter | 6-12 mm |
| Installation Mode | Wall Mounted Main Unit - Dimension 186x183x126 mm |
| Protection sensor | IP68 |
| Protection electronic | IP67 |
| 1) In the case in which is measured a level of bulk-solid material, the measurement range is reduced. | |

For tanks up to 4/6/8 m



For tanks up to 12/20/30/40 m



Selector RIL350

Measuring ranges

| | |
|---|----------|
| 1 | 0,2÷4 m |
| 2 | 0,25÷6 m |
| 3 | 0,3÷8 m |
| 4 | 0,5÷12 m |
| 5 | 0,8÷20 m |
| 6 | 1,2÷30 m |
| 7 | 1,6÷40 m |

License

| | |
|---|-----------------------------|
| P | Standard Type(Non ex-proof) |
|---|-----------------------------|

Sensor material /Process Temp./Protection Grade

| | |
|---|----------------------|
| A | ABS (-40-75°C) IP67 |
| B | PVC (-40-75°C) IP67 |
| C | PTFE (-40-75°C) IP67 |

Process Connection/Material

| | |
|----|-----------------|
| G1 | Thread G 1" 1/2 |
| G2 | Thread G 2" |
| D | Flange PP |

Electronic Unit

| | |
|---|--|
| 2 | (4~20) mA / 24V DC / 2 wire |
| 3 | (4~20) mA / 24V DC / RS485 Modbus 4 wire |
| 4 | (4~20) mA / 24V DC / 2 wire HART |

Shell / Protection Grade

| | |
|---|------------|
| L | ABS / IP67 |
|---|------------|

Relay Output

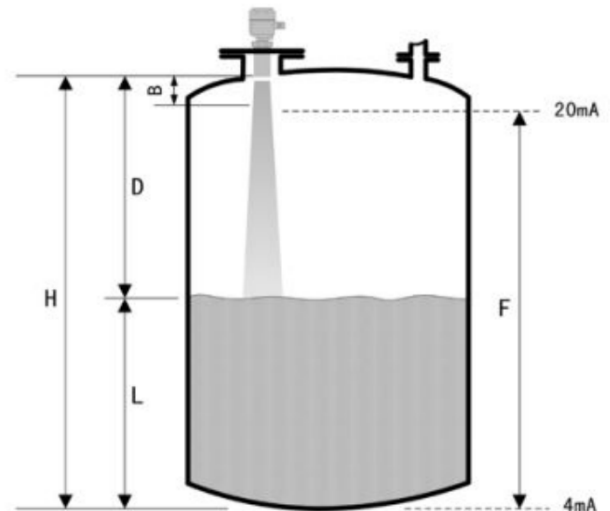
| | |
|---|--------|
| N | None |
| 2 | 2 Relè |
| 4 | 4 Relè |
| 6 | 6 Relè |

Supply voltage

| | |
|---|--------|
| D | 24VDC |
| A | 220VAC |

Example: RIL350-1-P-B-G1-2-L-4-D

H Installation height
L Level value
D Distanza dal liquido
B Blanking distance
F Level span



Control Panel Dimensions

