



## Level sensors

### Ultrasonic level sensor, UP56-212

UP56-212114



**Model Name** > [UP56-212114](#)  
**Part No.** > [6041665](#)



*Illustration may differ*

#### At a glance

- Non-contact level measurement up to 3.4 m operating distance / 8.0 m limit scanning distance
- Pressure resistant up to 6 bar (87 psi)
- Transducer protected by PVDF cover for increased resistance
- 3 in 1: continuous level measurement, level switch and display
- Analog output switchable between 4 mA ... 20 mA and 0 V ... 10 V
- Process connector thread G 1 and G 2
- IP 67 enclosure rating
- Easy to set parameters, also via connect+

#### Your benefits

- Non-contact measurement in pressurized containers - no wear over time
- Easy to set parameters, saving time
- Flexible measurement system for different container sizes - standardization and stock reduction
- One product for point level and continuous applications, reduces the number of sensors required



#### Features

|                             |                                  |
|-----------------------------|----------------------------------|
| Medium:                     | Fluids                           |
| Measurement:                | Switch, Continuous               |
| Limiting scanning distance: | 85 mm ... 1,500 mm <sup>1)</sup> |
| Operating distance:         | 85 mm ... 350 mm                 |
| Process pressure:           | 0 bar ... 6 bar, gauge pressure  |
| Process temperature:        | -25 °C ... 70 °C                 |

<sup>1)</sup> At 6 bar gauge

#### Performance

|                             |                        |
|-----------------------------|------------------------|
| Resolution:                 | 0.18 mm                |
| Accuracy of sensor element: | ≤ 2 % <sup>1)</sup>    |
| Repeatability:              | ± 0.15 % <sup>2)</sup> |
| Response time:              | ≤ 84 ms <sup>3)</sup>  |

<sup>1) 2)</sup> Of final value <sup>3)</sup> Recovery time 32 ms ... 180 ms according to EMC EN 60947-5-7

### Mechanical data

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|                     |                                  |
|---------------------|----------------------------------|
| Housing material:   | Stainless steel 1.4571, PBT, TPU |
| Process connection: | G 1 A PN 6                       |

### Electrical data

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|                                 |                                  |
|---------------------------------|----------------------------------|
| Ultrasonic frequency:           | 320 kHz                          |
| Enclosure rating:               | IP 67                            |
| Supply voltage:                 | 9 V DC ... 30 V DC <sup>1)</sup> |
| Ripple:                         | ± 10 %                           |
| Power consumption:              | ≤ 80 mA <sup>2)</sup>            |
| Time delay before availability: | ≤ 300 ms                         |
| Output signal:                  | 2x NPN                           |
| Hysteresis:                     | 5 mm                             |
| Signal voltage HIGH:            | U <sub>v</sub> - 3 V             |
| Connection type:                | Round connector M12 x 1, 5-pin   |
| Ultrasonic transducer:          | PTFE coating, FFKM               |

<sup>1)</sup> Reverse-polarity protected    <sup>2)</sup> At 24 V DC without output load

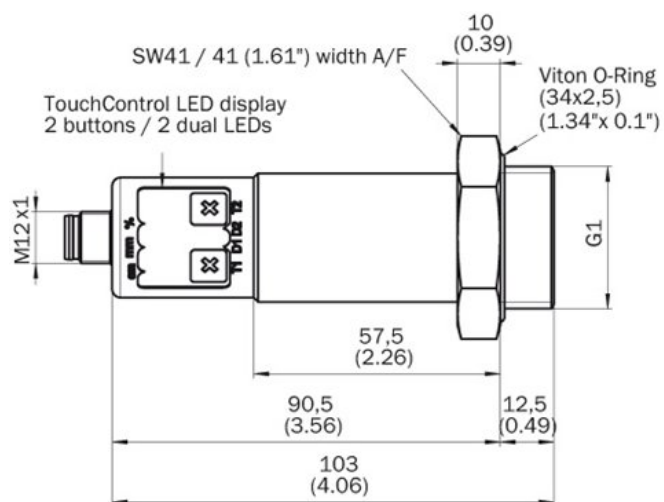
### Ambient data

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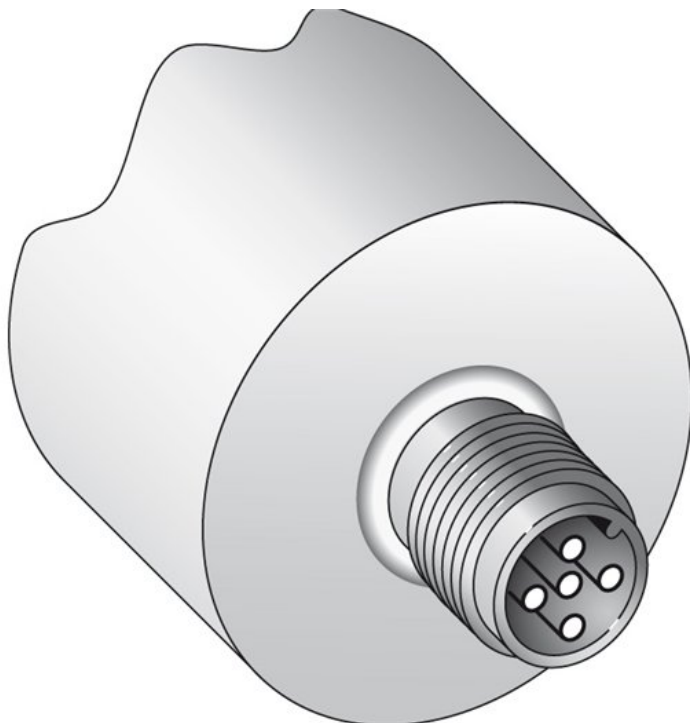
|                                |                                |
|--------------------------------|--------------------------------|
| Ambient operating temperature: | -25 °C ... 70 °C <sup>1)</sup> |
| Ambient storage temperature:   | -40 °C ... 85 °C               |

<sup>1)</sup> Temperature compensation at -25 °C ... 50 °C, can be switched off

## Dimensional drawing

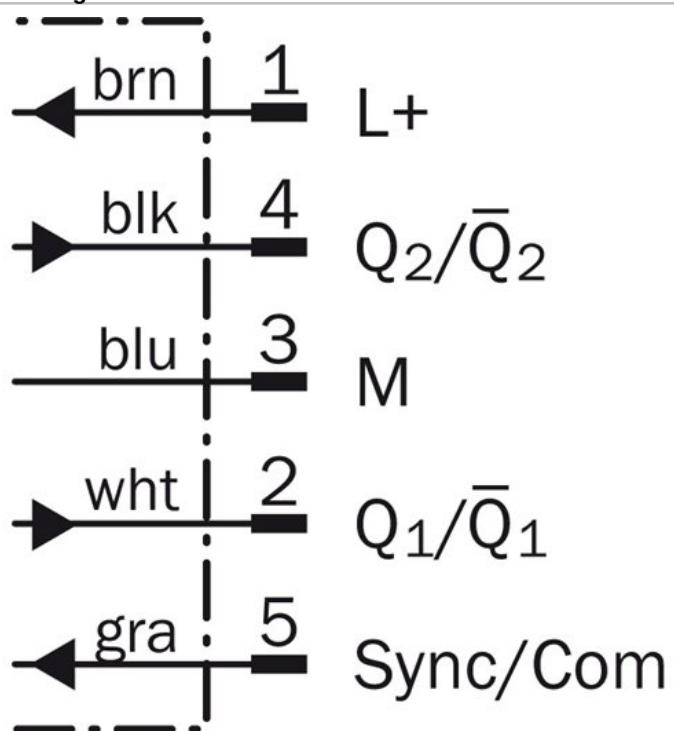


## Connection type



## Connection diagram

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