



Level sensors  
Ultrasonic level sensor, UP56-211

UP56-211128



**Model Name** > [UP56-211128](#)  
**Part No.** > [6048700](#)



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:	30 mm ... 990 mm <sup>1)</sup>
Operating distance:	30 mm ... 250 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:	≤ 68 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
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::	1 x PNP + 4 mA ... 20 mA / 0 V ... 10 V <sup>3) 4)</sup>
Hysteresis:	3 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 <sup>3)</sup> Short-circuit protected, reversible <sup>4)</sup> Automatic switching between voltage and current outputs

dependet on load 4 mA ... 20 mA: RL ≤ 100/ at 9 V ≤ U<sub>B</sub> ≤ 20 V; RL ≤ 500/ at U<sub>B</sub> ≥ 20 V; 0 V ... 10 V: RL ≥ 100 k/at U<sub>B</sub> ≥ 15 V, short-circuit protected

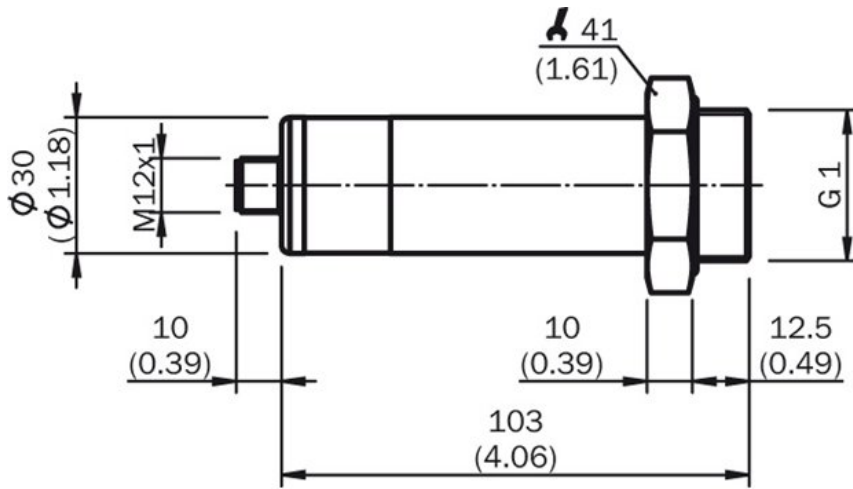
## Ambient data

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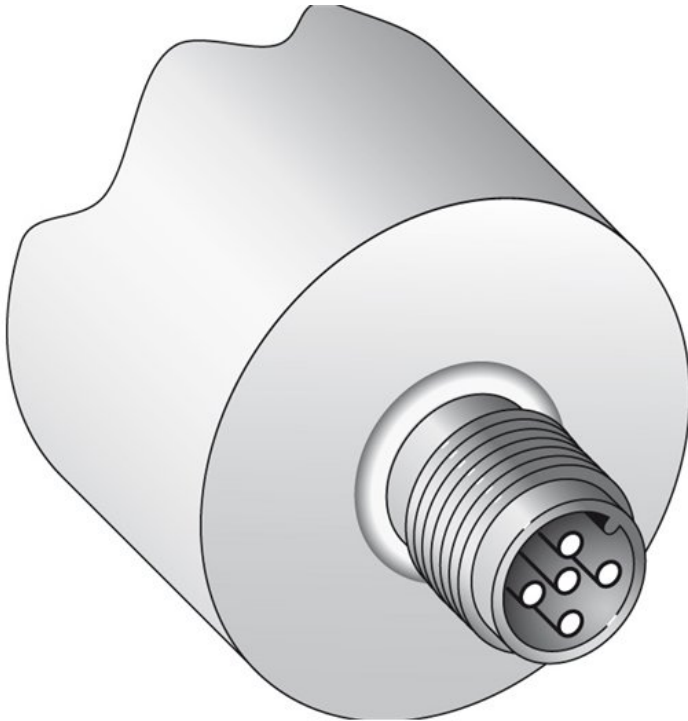
Ambient operating temperature:	-25 °C ... 70 °C <sup>1)</sup>
Ambient storage temperature:	-40 °C ... 85 °C

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

**Dimensional drawing**

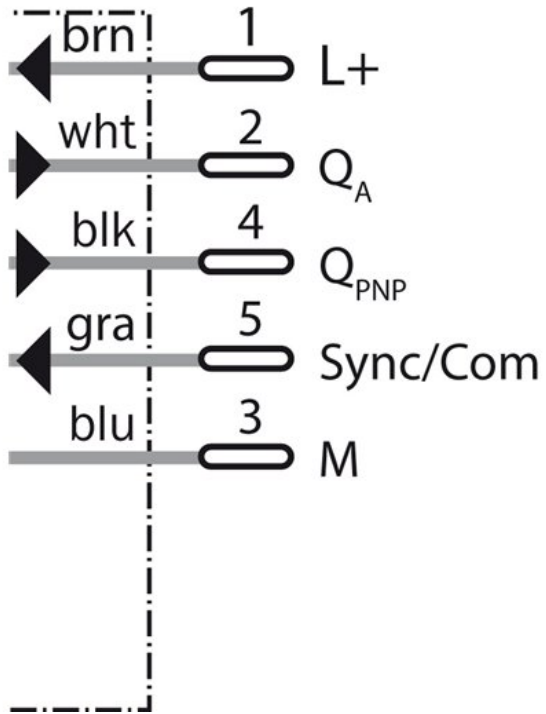


**Connection type**



Connection diagram

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