



Level sensors  
Ultrasonic level sensor, UP56-211

UP56-211118



**Model Name** > **UP56-211118**  
**Part No.** > **6041658**



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, 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:  $\pm 10\%$   
Power consumption:  $\leq 80\text{ mA}$  <sup>2)</sup>  
Time delay before availability:  $\leq 300\text{ ms}$   
Output signal: 1 x PNP + 4 mA ... 20 mA / 0 V ... 10 V <sup>3) 4)</sup>  
Hysteresis: 3 mm  
Signal voltage HIGH:  $U_v - 3\text{ V}$   
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:  $RL \leq 100/$  at  $9\text{ V} \leq U_B \leq 20\text{ V}$ ;  $RL \leq 500/$  at  $U_B \geq 20\text{ V}$ ; 0 V ... 10 V:  $RL \geq 100\text{ k}$  at  $U_B \geq 15\text{ V}$ , short-circuit protected

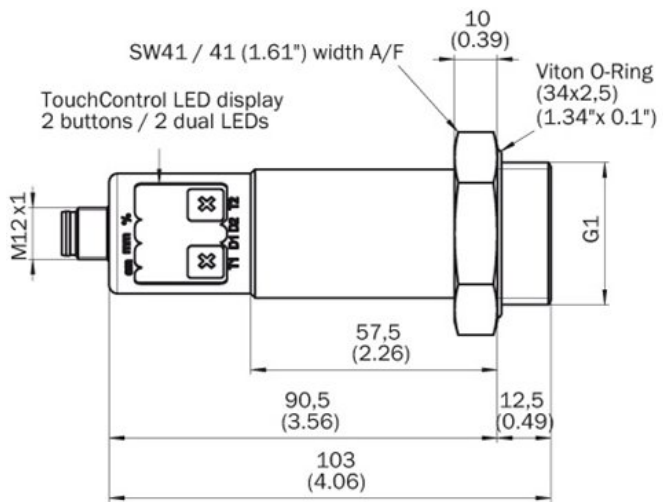
## Ambient data

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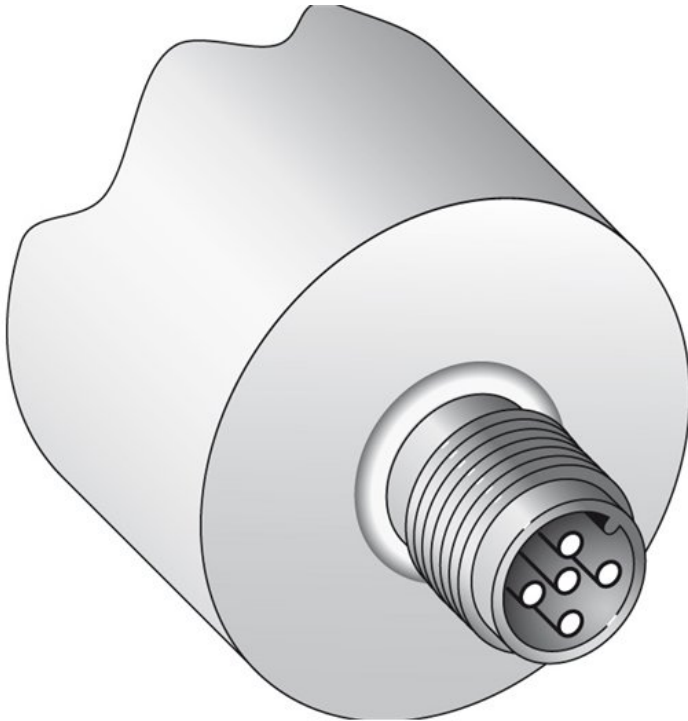
Ambient operating temperature:  $-25\text{ °C} \dots 70\text{ °C}$  <sup>1)</sup>  
Ambient storage temperature:  $-40\text{ °C} \dots 85\text{ °C}$

<sup>1)</sup> Temperature compensation at  $-25\text{ °C} \dots 50\text{ °C}$ , can be switched off

## Dimensional drawing

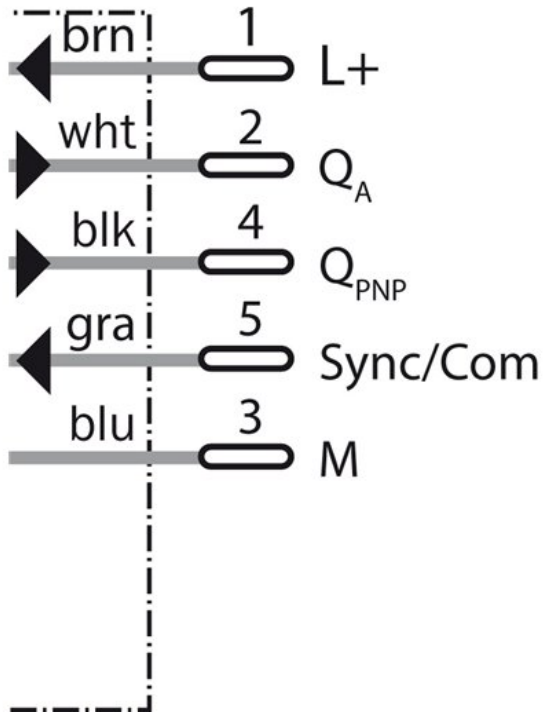


## Connection type



Connection diagram

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