



Level sensors
Ultrasonic level sensor, UP56-213

UP56-213118



Model Name > **UP56-213118**
Part No. > **6041660**



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:	200 mm ... 5,000 mm ¹⁾
Operating distance:	200 mm ... 1,300 mm
Process pressure:	0 bar ... 6 bar, gauge pressure
Process temperature:	-25 °C ... 70 °C

¹⁾ At 6 bar gauge

Performance

Resolution:	0.18 mm
Accuracy of sensor element:	≤ 2 % ¹⁾
Repeatability:	± 0.15 % ²⁾
Response time:	≤ 180 ms ³⁾

^{1) 2)} Of final value ³⁾ Recovery time 32 ms ... 180 ms according to EMC EN 60947-5-7

Mechanical data

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

Electrical data

Ultrasonic frequency: 180 kHz
Enclosure rating: IP 67
Supply voltage: 9 V DC ... 30 V DC ¹⁾
Residual ripple: $\pm 10\%$
Power consumption: $\leq 80\text{ mA}$ ²⁾
Time delay before availability: $\leq 300\text{ ms}$
Output signal: 1 x PNP + 4 mA ... 20 mA / 0 V ... 10 V ^{3) 4)}
Hysteresis: 20 mm
Signal voltage HIGH: $U_v - 3\text{ V}$
Electrical connection: Round connector M12 x 1, 5-pin
Ultrasonic transducer: PTFE coating, FFKM

¹⁾ Reverse-polarity protected ²⁾ At 24 V DC without output load ³⁾ Short-circuit protected, reversible ⁴⁾ Automatic switching between voltage and current outputs

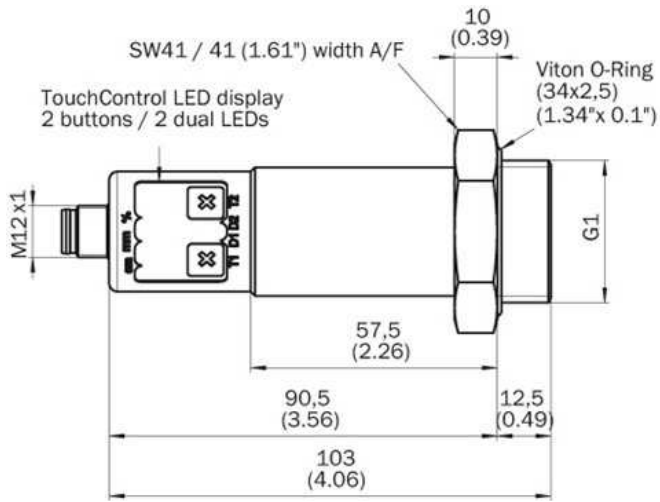
dependet on load 4 mA ... 20 mA: $RL \leq 100/$ at $9\text{ V} \leq U_B \leq 20\text{ V}$; $RL \leq 500/$ at $U_B \geq 20\text{ V}$; 0 V ... 10 V: $RL \geq 100\text{ k}$ /at $U_B \geq 15\text{ V}$, short-circuit protected

Ambient data

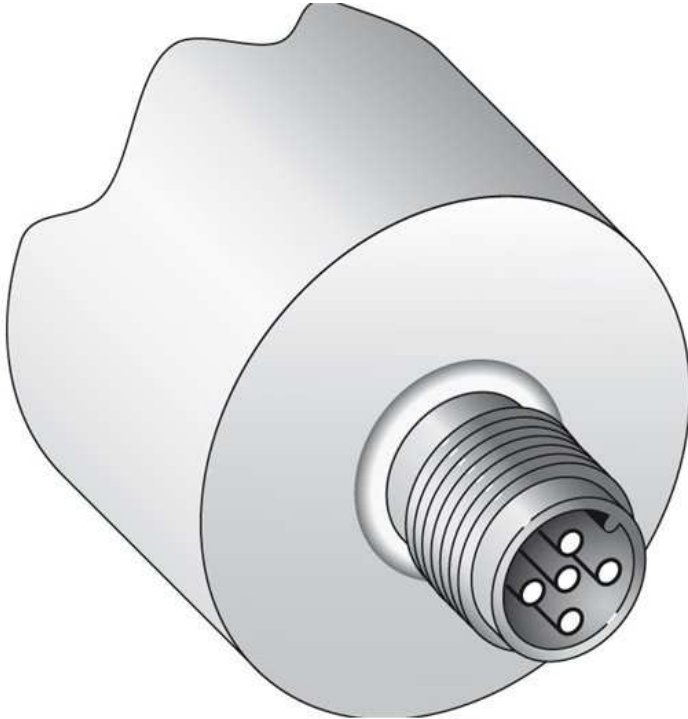
Ambient temperature operation: $-25\text{ °C} \dots 70\text{ °C}$ ¹⁾
Ambient storage temperature: $-40\text{ °C} \dots 85\text{ °C}$

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

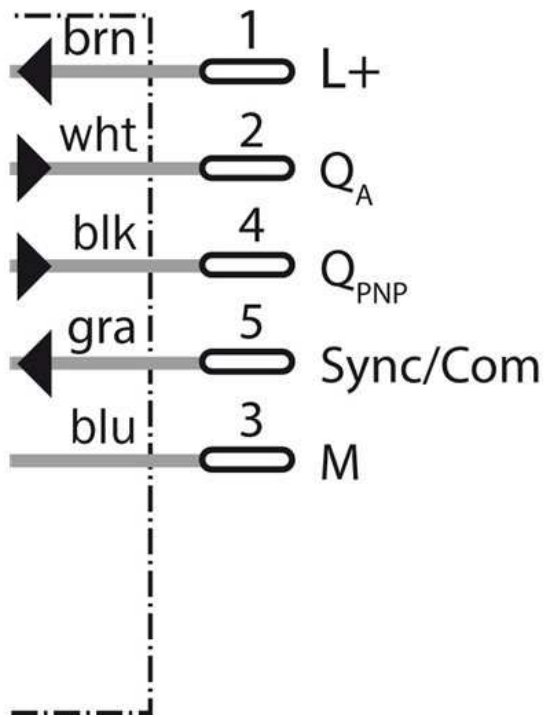
Dimensional drawing



Connection type



Connection diagram



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