



Level sensors
Ultrasonic level sensor, UP56-214

UP56-214118



Model Name > **UP56-214118**
Part No. > **6041693**



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:	350 mm ... 8,000 mm ¹⁾
Operating distance:	350 mm ... 3,400 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:	≤ 240 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 2 A PN 6

Electrical data

Ultrasonic frequency: 120 kHz
Enclosure rating: IP 67
Supply voltage: 9 V DC ... 30 V DC ¹⁾
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: 50 mm
Signal voltage HIGH: $U_v - 3 \text{ V}$
Connection type: 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

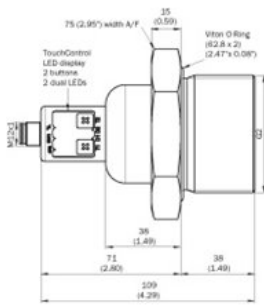
dependet on load 4 mA ... 20 mA: $RL \leq 100/$ at $9 \text{ V} \leq U_B \leq 20 \text{ V}$; $RL \leq 500/$ at $U_B \geq 20 \text{ V}$; 0 V ... 10 V: $RL \geq 100 \text{ k/}$ at $U_B \geq 15 \text{ V}$, short-circuit protected

Ambient data

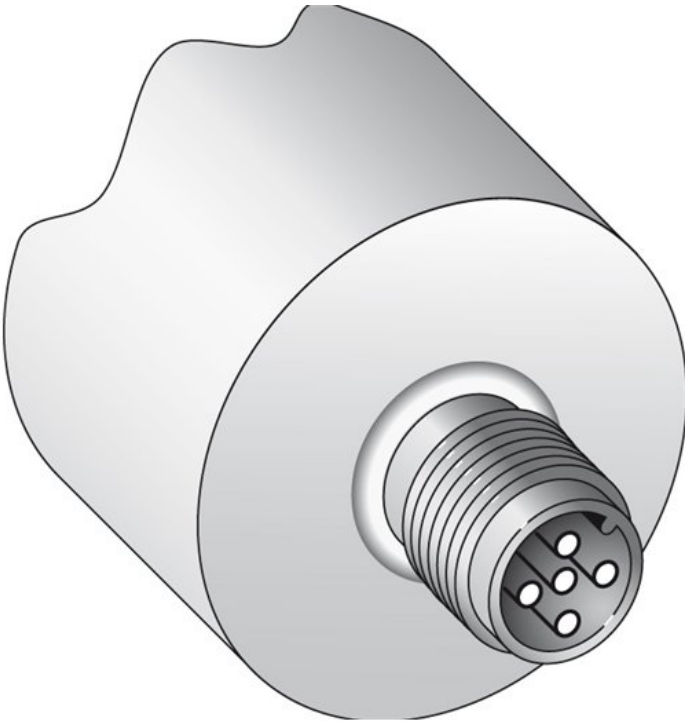
Ambient operating temperature: $-25 \text{ }^\circ\text{C} \dots 70 \text{ }^\circ\text{C}$ ¹⁾
Ambient storage temperature: $-40 \text{ }^\circ\text{C} \dots 85 \text{ }^\circ\text{C}$

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

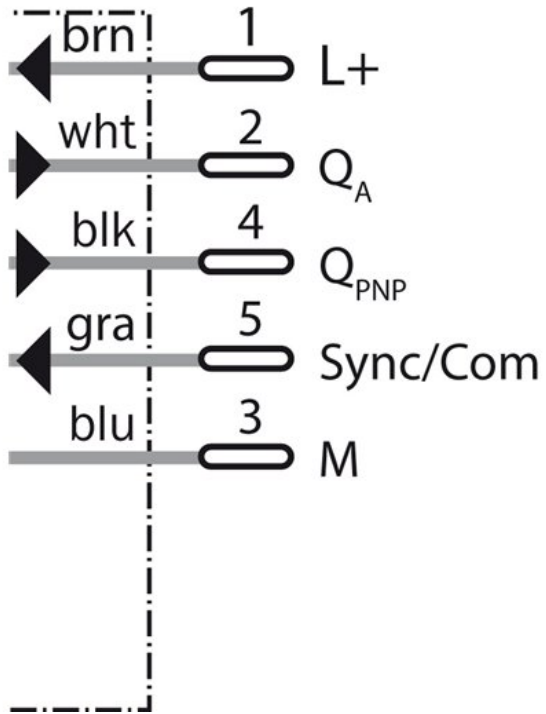
Dimensional drawing



Connection type



Connection diagram



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