



Level sensors  
Ultrasonic level sensor

UP56-216156



**Model Name** > [UP56-216156](#)  
**Part No.** > [6049617](#)



*Illustration may differ*

**At a glance**

- Ultrasonic level sensor with very high chemical resistance
- Non-contact measurement in immersion pipe of up to 1500 mm
- PTFE-coated membrane and GF D40 process connection made of PTFE
- Pressure resistant up to 6 bar, temperature resistant up to 85°C
- Different sizes available
- Analog output selectable between 4 mA to 20 mA and 0 V to 10 V
- Switching output for monitoring the maximum and minimum limit

**Your benefits**

- Non-contact and non-wearing measurement reduces maintenance and service cost
- Sensor replacement possible even with chemicals present, thus saving time and increasing availability
- Universally applicable with acidic and alkaline processes
- Flexible measurement system for different container sizes provides cost reductions
- High precision measurements, even in liquids with density fluctuations
- Faultless operation with very limited installation space in the container
- Switching and analog output in one sensor reduces amount of wiring, I/O and stocking costs
- Simple and time-saving configuration with Connect+



**Features**

Medium:	Fluids
Measurement:	Switch, Continuous
Process pressure:	0 bar ... 2 bar, gauge pressure for mini
Process temperature:	-25 °C ... 85 °C
Measuring range in tank:	65 mm ... 700 mm
Measuring range immersion tube:	65 mm ... 1,500 mm

**Performance**

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

1) 2) Of final value

### Mechanical data

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Housing material:	PP, PTFE
Process connection:	D40 GF connection
Housing design:	Mini

### Electrical data

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Ultrasonic frequency:	200 kHz
Enclosure rating:	IP 67
Supply voltage:	9 V DC ... 30 V DC <sup>1)</sup>
Residual ripple:	± 10 %
Power consumption:	≤ 80 mA <sup>2)</sup>
Time delay before availability:	≤ 300 ms
Output signal::	4 mA ... 20 mA <sup>3) 4)</sup>
Hysteresis:	5 mm
Electrical connection:	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  $9 V \leq U_B \leq 20 V$ ;  $RL \leq 500/$  at  $U_B \geq 20 V$ ; 0 V ... 10 V:  $RL \geq 100 k/$  at  $U_B \geq 15 V$ , short-circuit protected

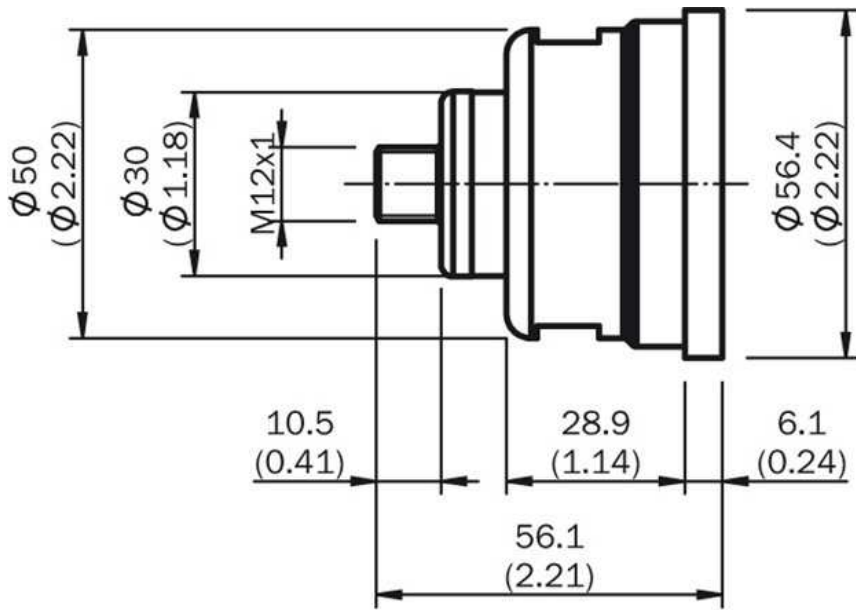
### Ambient data

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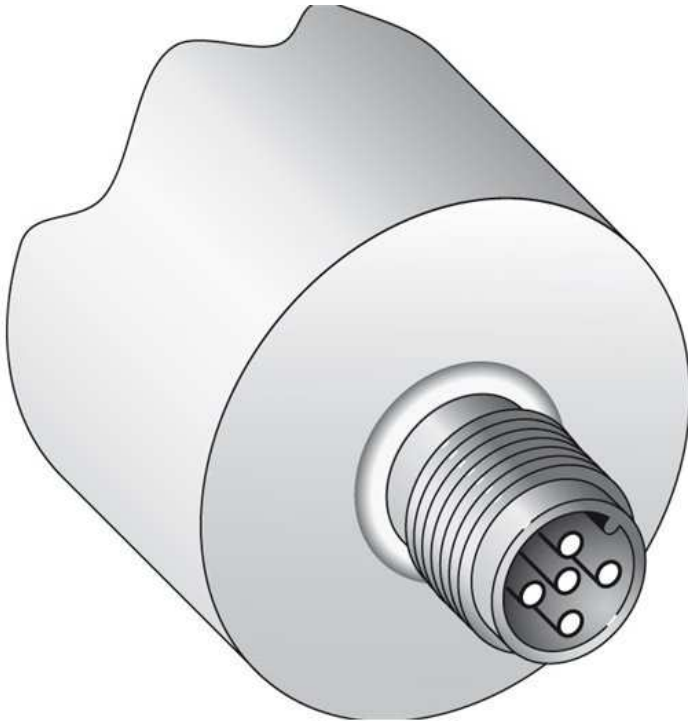
Ambient temperature operation:	-25 °C ... 60 °C <sup>1)</sup>
Ambient storage temperature:	-40 °C ... 85 °C

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

**Dimensional drawing**

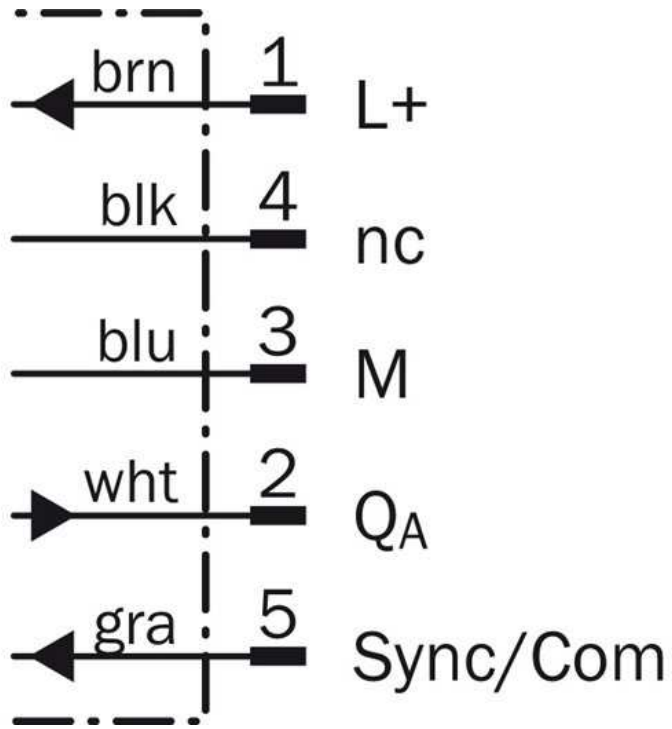


**Connection type**



Connection diagram

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