



Level sensors  
Ultrasonic level sensor

UP56-212156



**Model Name** > [UP56-212156](#)  
**Part No.** > [6049945](#)



*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:	85 mm ... 350 mm
Measuring range immersion tube:	85 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

---

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

### Electrical data

---

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::	4 mA ... 20 mA <sup>3) 4)</sup>
Hysteresis:	5 mm
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  $9 V \leq U_B \leq 20 V$ ;  $RL \leq 500/$  at  $U_B \geq 20 V$ ; 0 V ... 10 V:  $RL \geq 100 k/$  at  $U_B \geq 15 V$ , short-circuit protected

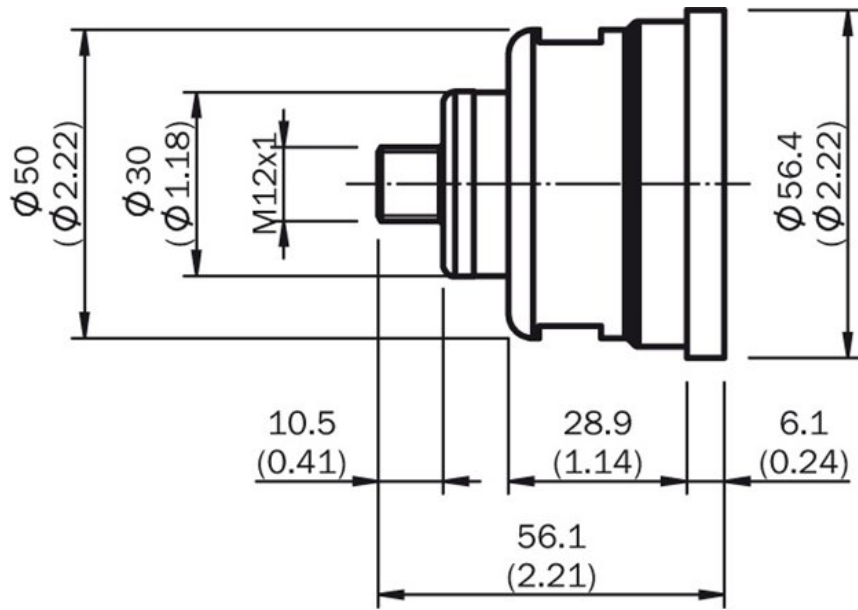
### Ambient data

---

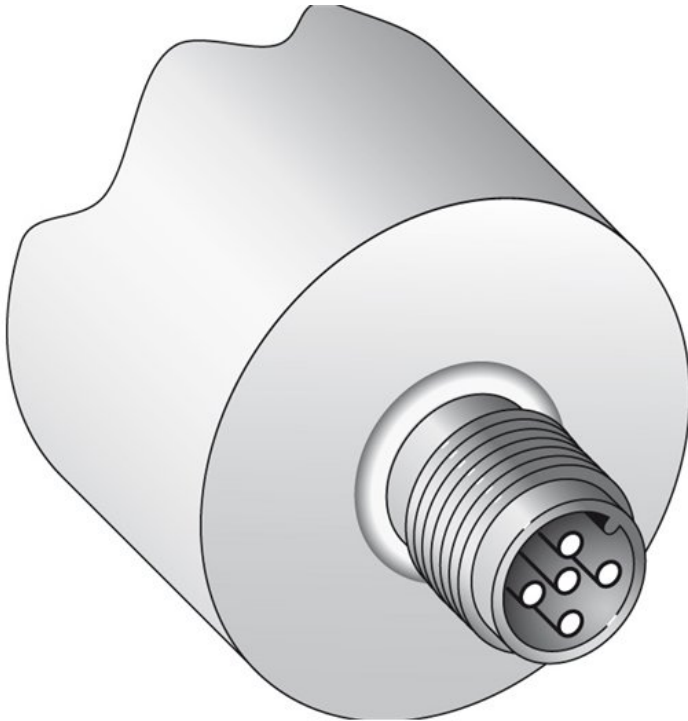
Ambient operating temperature:	-25 °C ... 60 °C <sup>1)</sup>
Ambient storage temperature:	-40 °C ... 85 °C

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

**Dimensional drawing**

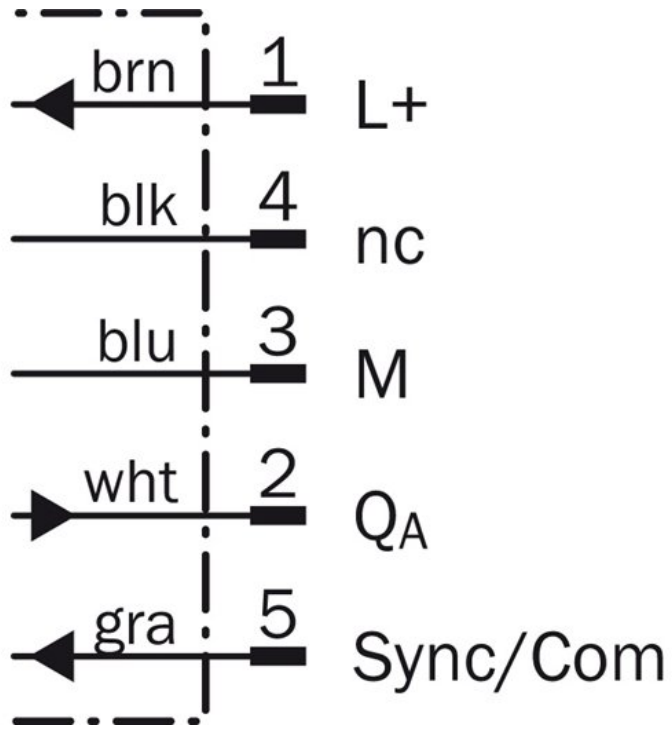


**Connection type**



Connection diagram

---



**Australia**

Phone +61 3 9457 0600  
1800 334 802 – tollfree  
E-Mail sales@sick.com.au

**Belgium/Luxembourg**

Phone +32 (0)2 466 55 66  
E-Mail info@sick.be

**Brasil**

Phone +55 11 3215-4900  
E-Mail sac@sick.com.br

**Canada**

Phone +1 905 771 14 44  
E-Mail information@sick.com

**Ceská Republika**

Phone +420 2 57 91 18 50  
E-Mail sick@sick.cz

**China**

Phone +86 4000 121 000  
E-Mail info.china@sick.net.cn  
Phone +852-2153 6300  
E-Mail ghk@sick.com.hk

**Danmark**

Phone +45 45 82 64 00  
E-Mail sick@sick.dk

**Deutschland**

Phone +49 211 5301-301  
E-Mail kundenservice@sick.de

**España**

Phone +34 93 480 31 00  
E-Mail info@sick.es

**France**

Phone +33 1 64 62 35 00  
E-Mail info@sick.fr

**Great Britain**

Phone +44 (0)1727 831121  
E-Mail info@sick.co.uk

**India**

Phone +91-22-4033 8333  
E-Mail info@sick-india.com

**Israel**

Phone +972-4-6801000  
E-Mail info@sick-sensors.com

**Italia**

Phone +39 02 27 43 41  
E-Mail info@sick.it

**Japan**

Phone +81 (0)3 3358 1341  
E-Mail support@sick.jp

**Magyarország**

Phone +36 1 371 2680  
E-Mail office@sick.hu

**Nederlands**

Phone +31 (0)30 229 25 44  
E-Mail info@sick.nl

**Norge**

Phone +47 67 81 50 00  
E-Mail austefjord@sick.no

**Österreich**

Phone +43 (0)22 36 62 28 8-0  
E-Mail office@sick.at

**Polska**

Phone +48 22 837 40 50  
E-Mail info@sick.pl

**România**

Phone +40 356 171 120  
E-Mail office@sick.ro

**Russia**

Phone +7-495-775-05-30  
E-Mail info@sick.ru

**Schweiz**

Phone +41 41 619 29 39  
E-Mail contact@sick.ch

**Singapore**

Phone +65 6744 3732  
E-Mail admin@sicksgp.com.sg

**Slovenija**

Phone +386 (0)1-47 69 990  
E-Mail office@sick.si

**South Africa**

Phone +27 11 472 3733  
E-Mail info@sickautomation.co.za

**South Korea**

Phone +82 2 786 6321/4  
E-Mail info@sickkorea.net

**Suomi**

Phone +358-9-25 15 800  
E-Mail sick@sick.fi

**Sverige**

Phone +46 10 110 10 00  
E-Mail info@sick.se

**Taiwan**

Phone +886-2-2375-6288  
E-Mail sales@sick.com.tw

**Türkiye**

Phone +90 (216) 528 50 00  
E-Mail info@sick.com.tr

**United Arab Emirates**

Phone +971 (0) 4 8865 878  
E-Mail info@sick.ae

**USA/México**

Phone +1(952) 941-6780  
1 800-325-7425 – tollfree  
E-Mail info@sickusa.com

More representatives and agencies  
at [www.sick.com](http://www.sick.com)