



Level sensors
Ultrasonic level sensor

UP56-211156



Model Name > [UP56-211156](#)
Part No. > [6050441](#)



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:	30 mm ... 250 mm
Measuring range immersion tube:	30 mm ... 500 mm

Performance

Resolution:	0.025 mm
Accuracy of sensor element:	≤ 1 % ¹⁾
Repeatability:	± 0.15 % ²⁾
Response time:	≤ 68 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: 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 ¹⁾
Ripple: $\pm 10 \%$
Power consumption: $\leq 80 \text{ mA}$ ²⁾
Time delay before availability: $\leq 300 \text{ ms}$
Output signal: 4 mA ... 20 mA ^{3) 4)}
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

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

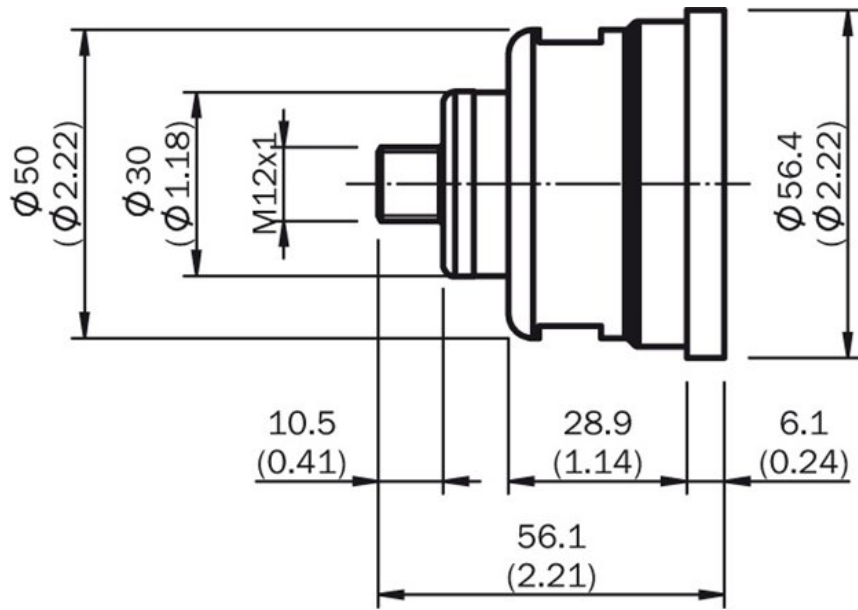
dependet on load 4 mA ... 20 mA: $RL \leq 100/$ at $9 \text{ V} \leq U_B \leq 20 \text{ V}$; $RL \leq 500/$ at $U_B \geq 20 \text{ V}$; 0 V ... 10 V: $RL \geq 100 \text{ k}/$ at $U_B \geq 15 \text{ V}$, short-circuit protected

Ambient data

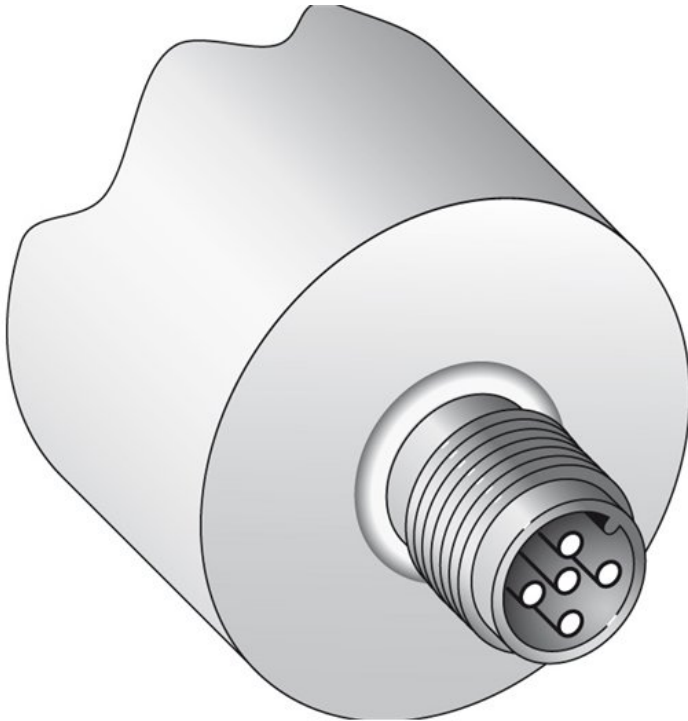
Ambient operating temperature: $-25 \text{ }^\circ\text{C} \dots 60 \text{ }^\circ\text{C}$ ¹⁾
Ambient storage temperature: $-40 \text{ }^\circ\text{C} \dots 85 \text{ }^\circ\text{C}$

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

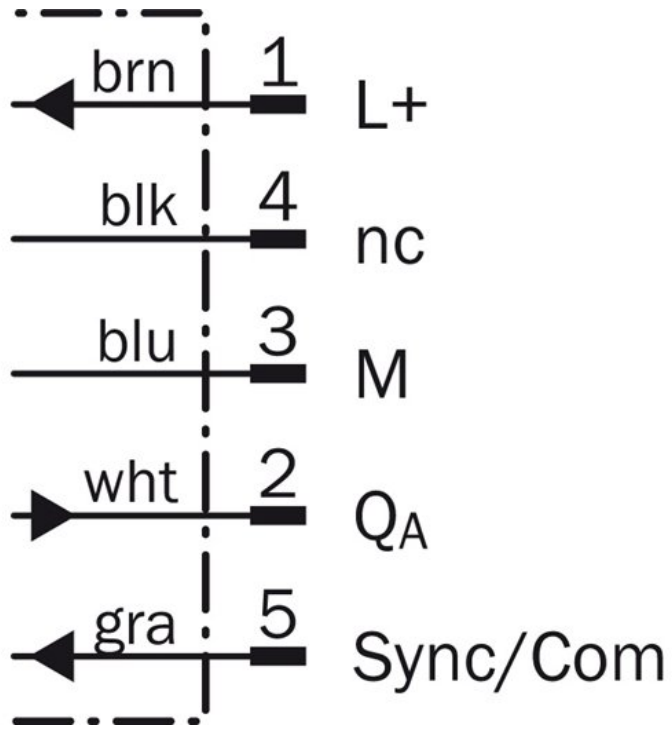
Dimensional drawing



Connection type



Connection diagram



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