



# UP56-216148

UP56 Pure

LEVEL SENSORS

**SICK**  
Sensor Intelligence.



Illustration may differ



### Ordering information

Type	Part no.
UP56-216148	6049450

Other models and accessories → [www.sick.com/UP56\\_Pure](http://www.sick.com/UP56_Pure)

### Detailed technical data

#### Features

<b>Medium</b>	Fluids
<b>Measurement</b>	Switch, Continuous
<b>Measuring range in tank</b>	65 mm ... 700 mm
<b>Measuring range immersion tube</b>	65 mm ... 1,500 mm
<b>Process pressure</b>	0 bar ... 6 bar
<b>Process temperature</b>	-25 °C ... +85 °C

#### Performance

<b>Accuracy of sensor element</b>	≤ 1 % <sup>1)</sup>
<b>Repeatability</b>	± 0.15 % <sup>1)</sup>
<b>Resolution</b>	≤ 0.18 mm
<b>Response time</b>	≤ 84 ms <sup>2)</sup>
<b>Display</b>	Without design specifics

<sup>1)</sup> From the full scale value.

<sup>2)</sup> Recovery time 32 ms ... 180 ms according to EMC EN 60947-5-7.

#### Electronics

<b>Supply voltage</b>	9 V DC ... 30 V DC <sup>1)</sup>
<b>Residual ripple</b>	± 10 %
<b>Power consumption</b>	≤ 80 mA <sup>2)</sup>
<b>Protection class</b>	III
<b>Electrical connection</b>	Round connector M12 x 1, 5-pin
<b>Output signal</b>	1 x PNP + 4 mA ... 20 mA / 0 V ... 10 V <sup>3) 4)</sup>

<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 ≤ 100 / at 9 V ≤ U<sub>B</sub> ≤ 20 V; RL ≤ 500/ at U<sub>B</sub> ≥ 20 V; 0 V ... 10 V: RL ≥ 100 k / at U<sub>B</sub> ≥ 15 V, short-circuit protected.

<sup>5)</sup> Free adjustable in 1 mm steps via Connect+ Adapter (CPA)

<b>Hysteresis</b>	5 mm5 mm <sup>5)</sup>
<b>Signal voltage HIGH</b>	U <sub>v</sub> -3 V
<b>Output current</b>	200 mA
<b>Time delay before availability</b>	≤ 300 ms
<b>Enclosure rating</b>	IP 67
<b>Ultrasonic frequency</b>	200 kHz
<b>Ultrasonic transducer</b>	PTFE coating, FFKM

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<sup>5)</sup> Free adjustable in 1 mm steps via Connect+ Adapter (CPA)

## Mechanics

<b>Process connection</b>	GF connection D40
<b>Housing material</b>	PTFE, PP
<b>Housing design</b>	Standard
<b>Weight</b>	210 g

## Ambient data

<b>Ambient operating temperature</b>	-25 °C ... +70 °C <sup>1)</sup>
<b>Ambient storage temperature</b>	-40 °C ... +85 °C

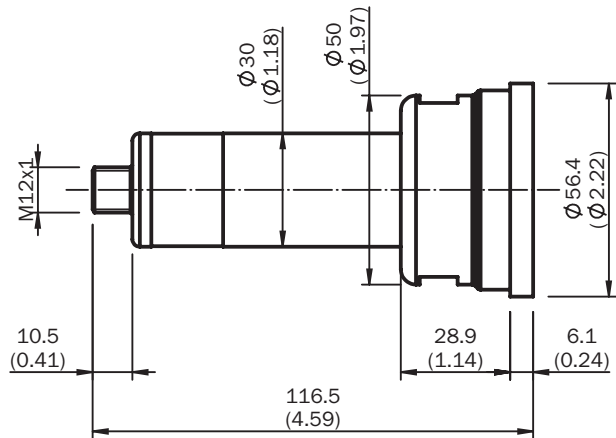
<sup>1)</sup> Temperature compensation at -25 °C ... +50 °C, can be switched off.

## Classifications

<b>ECl@ss 5.0</b>	27200506
<b>ECl@ss 5.1.4</b>	27200506
<b>ECl@ss 6.0</b>	27200506
<b>ECl@ss 6.2</b>	27200506
<b>ECl@ss 7.0</b>	27200506
<b>ECl@ss 8.0</b>	27200506
<b>ECl@ss 8.1</b>	27200506
<b>ECl@ss 9.0</b>	27200506
<b>ETIM 5.0</b>	EC002654
<b>ETIM 6.0</b>	EC002654
<b>UNSPSC 16.0901</b>	41111950

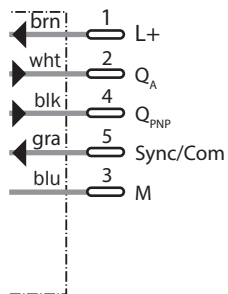
### Dimensional drawing (Dimensions in mm (inch))

UP56 Pure



### Connection diagram

1 x PNP + 4 mA ... 20 mA / 0 V ... 10 V



### Connection type

Male connector M12, 5-pin



## SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

**For us, that is “Sensor Intelligence.”**

## WORLDWIDE PRESENCE:

Contacts and other locations –[www.sick.com](http://www.sick.com)