



UP56-212148

UP56 Pure

LEVEL SENSORS

SICK
Sensor Intelligence.



Illustration may differ



Ordering information

Type	Part no.
UP56-212148	6048943

Other models and accessories → www.sick.com/UP56_Pure

Detailed technical data

Features

Medium	Fluids
Measurement	Switch, Continuous
Measuring range in tank	85 mm ... 350 mm
Measuring range immersion tube	85 mm ... 1,500 mm
Process pressure	0 bar ... 6 bar
Process temperature	-25 °C ... +85 °C

Performance

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

¹⁾ From the full scale value.

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

Electronics

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

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 ≤ 100 / at 9 V ≤ U_B ≤ 20 V; RL ≤ 500/ at U_B ≥ 20 V; 0 V ... 10 V: RL ≥ 100 k / at U_B ≥ 15 V, short-circuit protected.

⁵⁾ Free adjustable in 1 mm steps via Connect+ Adapter (CPA)

Hysteresis	5 mm5 mm ⁵⁾
Signal voltage HIGH	U _v -3 V
Output current	200 mA
Time delay before availability	≤ 300 ms
Enclosure rating	IP 67
Ultrasonic frequency	320 kHz
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 dependent on load 4 mA ... 20 mA: RL ≤ 100 / at 9 V ≤ U_B ≤ 20 V; RL ≤ 500 / at U_B ≥ 20 V; 0 V ... 10 V: RL ≥ 100 k / at U_B ≥ 15 V, short-circuit protected.

⁵⁾ Free adjustable in 1 mm steps via Connect+ Adapter (CPA)

Mechanics

Process connection	GF connection D40
Housing material	PTFE, PP
Housing design	Standard
Weight	210 g

Ambient data

Ambient operating temperature	-25 °C ... +70 °C ¹⁾
Ambient storage temperature	-40 °C ... +85 °C

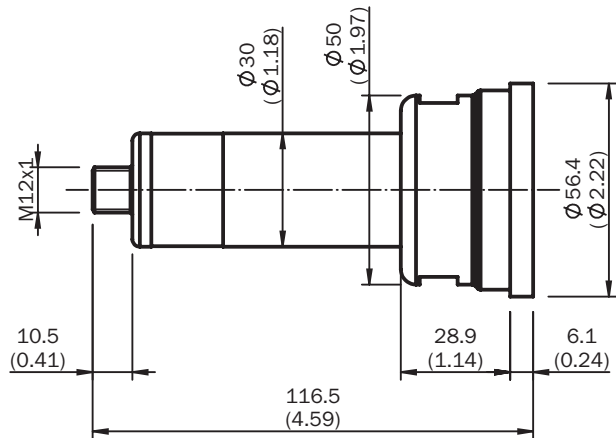
¹⁾ Temperature compensation at -25 °C ... +50 °C, can be switched off.

Classifications

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

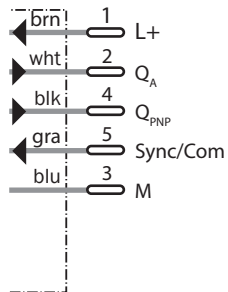
Dimensional drawing (Dimensions in mm (inch))

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