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DATA SHEET

# UP56-214114

UP56
Level sensors

SICK
Sensor Intelligence



## LEVEL SENSORS

# UP56-214114

### ORDERING INFORMATION

| Type | part no. |
|---|---|
| UP56-214114 | 6041694 |

Further device versions and accessories at www.sick.com/UP56

## DETAILED TECHNICAL DATA

### FEATURES

| | |
|---|---|
| Medium | Fluids, bulk solids |
| Measurement | Switch, Continuous |
| Measuring range in tank | 350 mm ... 3,400 mm |
| Measuring range immersion tube | 350 mm ... 8,000 mm |
| Process pressure | 0 bar ... 6 bar [1] |
| Process temperature | –25 °C ... +70 °C |
| Display | With display |

[1] Gauge pressure.

### PERFORMANCE

| | |
|---|---|
| Accuracy of sensor element | ≤ 2 % From the full scale value |
| Reproducibility | ± 0.15 % [1] |
| Resolution | 0.18 mm |
| Response time | 240 ms [2] |
| MTTF | > 100 years |
| Display | ✓ |

[1] From the full scale value.

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

### ELECTRONICS

| | |
|---|---|
| Communication interface | - |
| Supply voltage | 9 V DC ... 30 V DC [1] |

[1] Reverse polarity protected.

[2] At 24 V DC without output load.

| | |
|---|---|
| Residual ripple | ± 10 % |
| Power consumption | ≤ 80 mA [2] |
| Protection class | III |
| Connection type | Round connector M12 x 1, 5-pin |
| Output signal | 2 x NPN |
| Hysteresis | 50 mm |
| Output current | 200 mA |
| Time delay before availability | ≤ 300 ms |
| Enclosure rating | IP67 |
| Ultrasonic frequency | 120 kHz |
| Ultrasonic transducer | PTFE coating, FFKM |

[1] Reverse polarity protected.

[2] At 24 V DC without output load.

## MECHANICS

| | |
|---|---|
| Wetted parts | Stainless steel 1.4571<br>FFKM |
| Process connection | G 2 A PN 6 |
| Housing material | Stainless steel 1.4571, PBT, TPU |
| Housing design | Standard |

## AMBIENT DATA

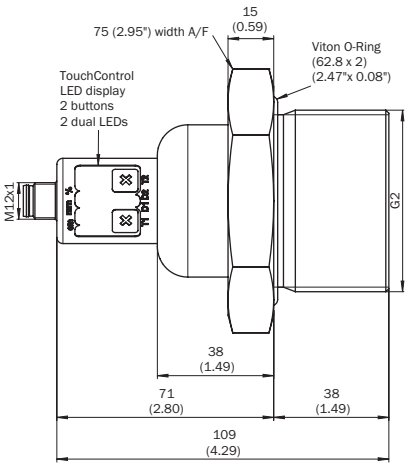
| | |
|---|---|
| Ambient operating temperature | –25 °C ... +70 °C [1] |
| Ambient temperature, storage | –40 °C ... +85 °C |

[1] Temperature compensation at –25 °C ... +50 °C, can be switched off.

## CERTIFICATES

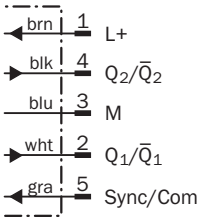
| | |
|---|---|
| EU declaration of conformity | ✓ |
| UK declaration of conformity | ✓ |
| ACMA declaration of conformity | ✓ |
| China RoHS | ✓ |
| China Compulsory Product Certification (CCC) exempt | ✓ |
| cULus certificate | ✓ |
| Information according to Art. 3 of Data Act (Regulation EU 2023/2854) | ✓ |

## DIMENSIONAL DRAWING UP56-214




Dimensions in mm (inch)

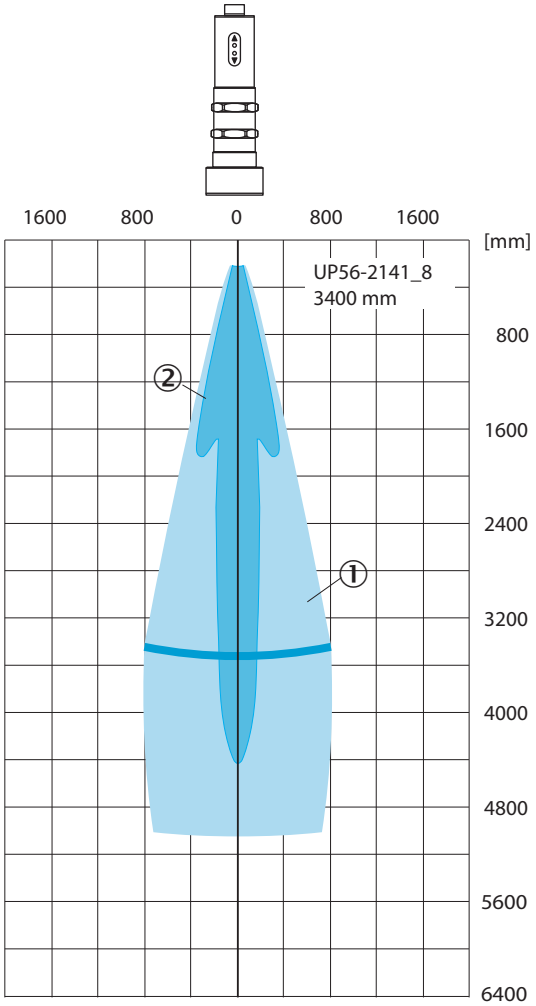
## CONNECTION DIAGRAM 2 X TRANSISTOR SWITCHING OUTPUT




## CONNECTION TYPE PLUG, M12, 5-PIN



**SCANNING RANGE IF THE FOLLOWING DESTINATIONS ARE LOCATED IN THE RADIATION CONE, RELIABLE DETECTION IS GUARANTEED.**




① example object: aligned plate 500 mm x 500 mm
② pipe diameter 10 mm

Further information as well as suitable accessories, example applications and downloads such as CAD dimensional models, operating instructions and software can be found at www.sick.com/6041694

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SICK combines sensor intelligence with industry expertise and certified consulting services. We provide the ideal foundation for scalable as well as tailor-made automation solutions and create added value along the entire value chain. Our close partnerships with our customers are more than just a promise: Together, we optimize productivity, improve quality, protect health and safety, and help build a sustainable future. All with empathy and trust.

Since 1946, we have been developing innovative technologies with passion and a pioneering spirit. With a global network in around 40 countries, SICK has a global presence and is always close by. The company's headquarters are located in Waldkirch near Freiburg, Germany. Our customers benefit from our understanding of both local and global requirements, which enables us to deliver tailor-made solutions

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