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DATA SHEET

LFP1000-G1CMB

LFP Inox
Level sensors

SICK Sensor Intelligence



Illustration may differ

LEVEL SENSORS

LFP1000-G1CMB

ORDERING INFORMATION

Type	part no.
LFP1000-G1CMB	1071122

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

DETAILED TECHNICAL DATA

FEATURES

Medium	Fluids
Measurement	Switch, Continuous
Design	Remote amplifier
Probe type	Rod probe in hygienic design
Probe length	1,000 mm
Process pressure	–1 bar ... 16 bar
Process temperature	–20 °C ... +180 °C

PERFORMANCE

Accuracy of sensor element	± 5 mm
Reproducibility	≤ 2 mm
Resolution	1 mm
Response time	400 ms [1]
Dielectricity constant	≥ 5 for rod probe ≥ 1.8 with coaxial tube
Conductivity	No limitation
Deactivated area at process connection	25 mm [2]
Deactivated area at end of probe	≥ 10 mm [3]
MTTF	194.3 years (EN ISO 13849-1)
Display	✓

[1] Dependent on measuring mode (high speed < 400 ms, high accuracy < 2,800 ms).

[2] With parameterized container with water under reference conditions, otherwise 40 mm.

[3] With water under reference conditions.

ELECTRONICS

Communication interface	IO-Link
Supply voltage	12 V DC ... 30 V DC [1]
Power consumption	≤ 75 mA at 24 V DC without output load
Initialization time	≤ 2 s
Protection class	III
Connection type	Round connector M12 x 1, 5-pin
Length of cable	2 m
Output signal	1 x PNP + 1 x PNP/NPN + 4 mA ... 20 mA / 0 V ... 10 V
Output load	4 mA ... 20 mA < 500 Ohm at Uv > 13,5 V, 4 mA ... 20 mA < 400 Ohm at Uv > 12 V, 0 V ... 10 V > 750 Ohm at Uv ≥ 14 V
Hysteresis	≥ 2 mm [2]
Output current	< 100 mA
Inductive load	< 1 H
Capacitive load	≤ 100 nF
Enclosure rating	IP67 (EN 60529) IP69 (EN 60529)
Temperature drift	< 0.1 mm/K
Lower signal level	3.8 mA ... 4 mA, 0 V
Upper signal level	20 mA ... 20.5 mA, 10.5 V
EMC	EN 61326-2-3, 2014/30/EU

[1] All connections are polarity protected. All outputs are overload and short-circuit protected.

[2] Freely adjustable.

MECHANICS

Wetted parts	Stainless steel 1.4404 / 316L PEEK
Surface roughness	Ra ≤ 0,8 µm
Process connection	G ¾ A
Housing material	Stainless steel 1,4305
Housing design	With viewing window made from PMMA (acrylic glass)
Max. probe load	≤ 6 Nm
Material coaxial cable	FEP

AMBIENT DATA

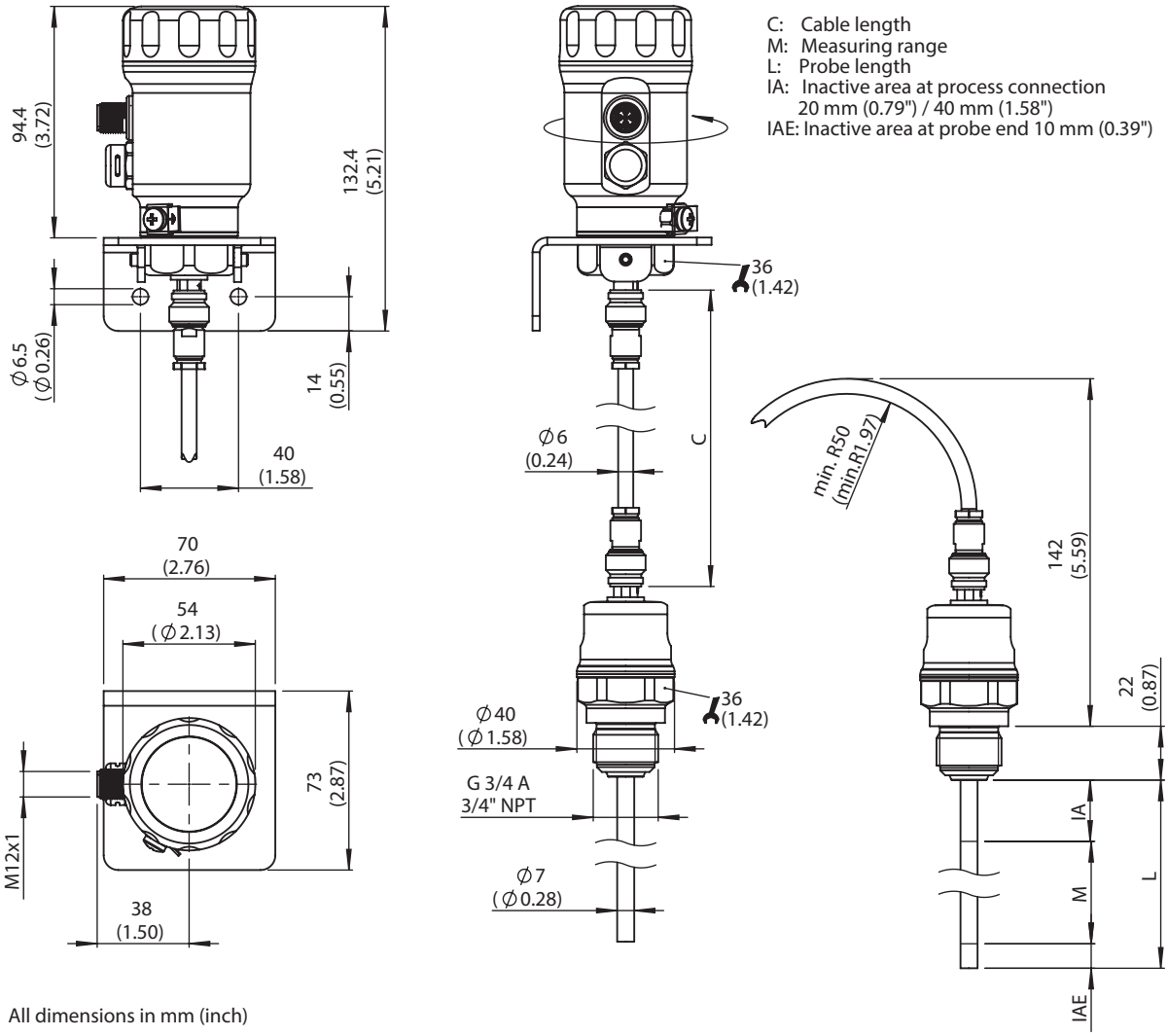
Ambient operating temperature	–20 °C ... +60 °C
Ambient temperature, storage	–40 °C ... +80 °C
Ambient temperature coaxial cable	–20 °C ... +60 °C
Outdoor use	Only with weather hood

CERTIFICATES

EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓
China Compulsory Product Certification (CCC) exempt	✓

FDA certificate	✓
cULus certificate	✓
IO-Link certificate	✓
Information according to Art. 3 of Data Act (Regulation EU 2023/2854)	✓

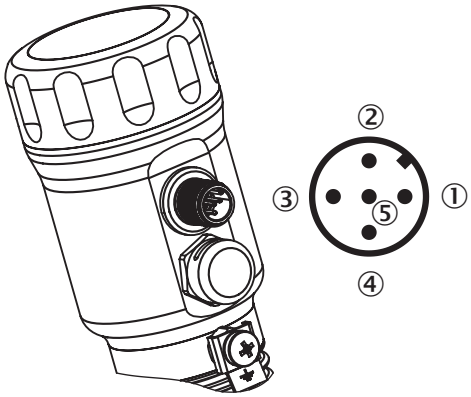
REMOTE AMPLIFIER



All dimensions in mm (inch)

Dimensions in mm (inch)

CONNECTION TYPE 5-POLE M12 CONNECTOR



① L^+: Supply voltage, brown
② Q_A: Analog current-/voltage output, white
③ M: Ground, reference ground for current-/voltage output, blue
④ C/Q_1: Switching output 1, PNP/IO-Link-communication, black
⑤ Q_2: Switching output 2, PNP/NPN, grey

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/1071122

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SICK AT A GLANCE

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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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