



LXRH-1XXXMXXA7EXAB

LXRH

LEVEL SENSORS

SICK
Sensor Intelligence.



Ordering information

Type	part no.
LXRH-1XXXMXXA7EXAB	6085721

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

Illustration may differ



Detailed technical data

Features

Medium	Fluids, bulk solids
Measurement	Continuous, switch
Probe type	Thread with integrated horn antenna made from PEEK
Frequency band	W-band (within 75 ... 85 GHz)
Measuring range	0 m ... 15 m
Angle of dispersion	13° ¹⁾
Process pressure	-1 bar ... 16 bar
Process temperature	-40 °C ... +130 °C
Bluetooth	✓
CIP and SIP capable	✓ ²⁾

¹⁾ Outside the specified aperture angle, the level of the radar signal energy is lowered by 50% (-3 dB).

²⁾ Note the temperature derating in the operating instructions.

Performance

Accuracy of sensor element	± 2 mm ^{1) 2)}
Reproducibility	≤ 1 mm
Resolution	< 1 mm
Response time	1,000 ms

¹⁾ At reference conditions.

²⁾ If subjected to EMC interference, the measurement error can be larger.

Electronics

Communication interface	IO-Link
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¹⁾ All connections are polarity protected. All outputs are overload and short-circuit protected.

²⁾ UB = 35 V DC, output signal = 20 mA.

Supply voltage	12 V DC ... 35 V DC ¹⁾
Initialization time	≤ 5 s
Protection class	III
Connection type	M12 round connector x 1, 4-pin
Output signal	2 x PNP/NPN/PNP/NPN + 4 mA ... 20 mA
Power consumption	≤ 3.5 W ²⁾
Inductive load	≤ 0.5 H
Capacitive load	≤ 100 nF
Enclosure rating	IP66 IP67 IP69
Lower signal level	3.8 mA ... 4 mA
Upper signal level	20 mA ... 20.5 mA

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

²⁾ U_B = 35 V DC, output signal = 20 mA.

Mechanics

Wetted parts	Stainless steel 1.4404 / 316L PEEK EPDM
Process connection	G 1, PN16, ISO228-1
Housing material	Stainless steel 1.4404 / 316L
Male connector material	Stainless steel

Ambient data

Ambient operating temperature	-40 °C ... +70 °C
Ambient temperature, storage	-40 °C ... +80 °C

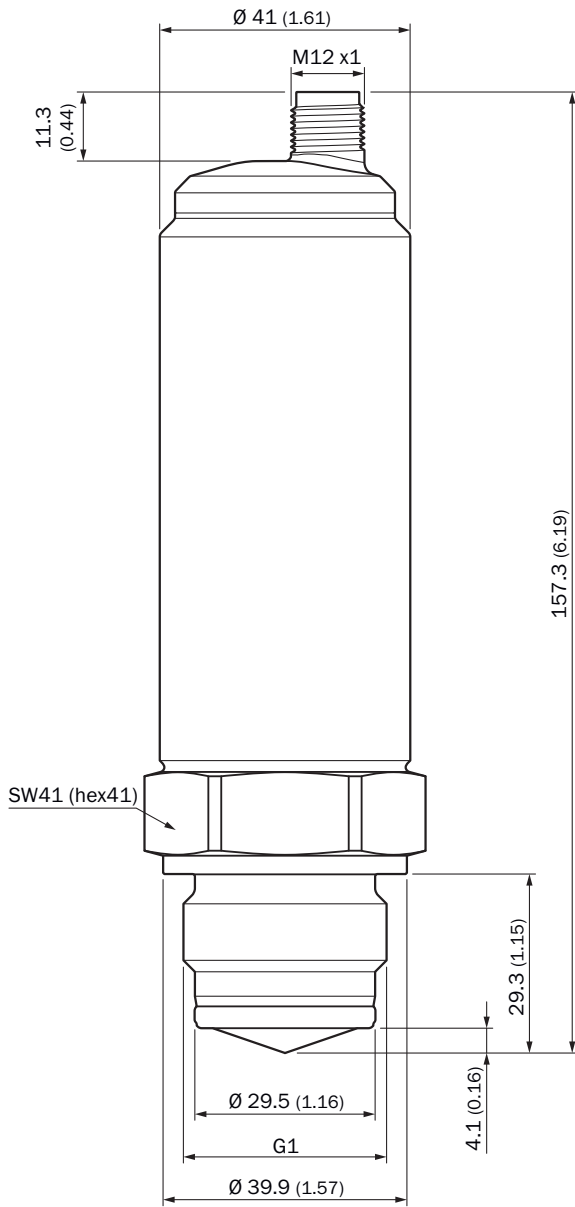
Classifications

ECLASS 5.0	27200505
ECLASS 5.1.4	27200505
ECLASS 6.0	27200505
ECLASS 6.2	27200505
ECLASS 7.0	27200505
ECLASS 8.0	27200505
ECLASS 8.1	27200505
ECLASS 9.0	27200505
ECLASS 10.0	27270807
ECLASS 11.0	27270807
ECLASS 12.0	27274501
ETIM 5.0	EC001447
ETIM 6.0	EC001447
ETIM 7.0	EC001447
ETIM 8.0	EC001447
UNSPSC 16.0901	41111950

Certificates

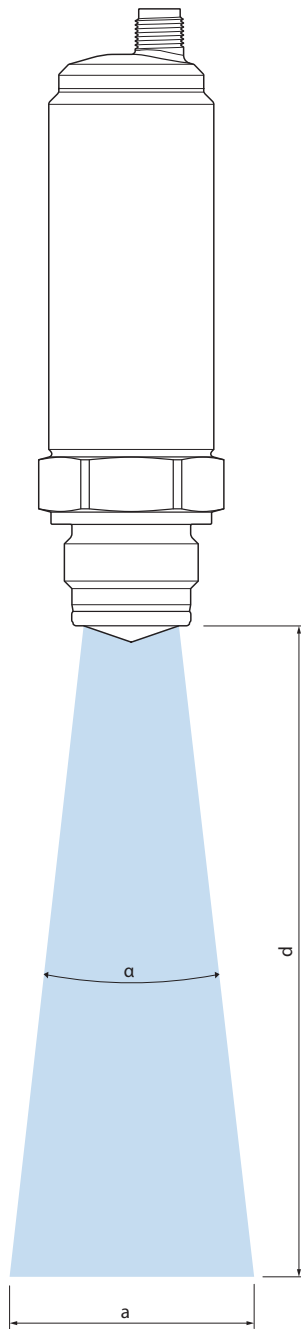
EU declaration of conformity	✓
China RoHS	✓
FDA certificate	✓
cULus certificate	✓
FCC certificate	✓
IO-Link certificate	✓
Radio Approval certificate Australia	✓
Radio Approval certificate Canada	✓
Radio Approval certificate New Zealand	✓
Food contact material manufacturer declaration	✓
Information according to Art. 3 of Data Act (Regulation EU 2023/2854)	✓

Dimensional drawing



Dimensions in mm (inch)

Functional principle



Aperture angle (a) 13°

Distance to antenna (d)	Diameter signal cone (a)
0.5 m	0.10 m
1.0 m	0.22 m
1.5 m	0.33 m
2.0 m	0.44 m
2.5 m	0.56 m
3.0 m	0.67 m
3.5 m	0.79 m
4.0 m	0.90 m
4.5 m	1.01 m
5.0 m	1.13 m
5.5 m	1.24 m
6.0 m	1.36 m
6.5 m	1.47 m
7.0 m	1.58 m
7.5 m	1.70 m
8.0 m	1.81 m
8.5 m	1.93 m
9.0 m	2.04 m
9.5 m	2.15 m
10.0 m	2.27 m
10.5 m	2.38 m
11.0 m	2.50 m
11.5 m	2.61 m
12.0 m	2.72 m
12.5 m	2.84 m
13.0 m	2.95 m
13.5 m	3.06 m
14.0 m	3.18 m
14.5 m	3.29 m
15.0 m	3.41 m

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:

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