



LXRC-1XXXKXXABEXAB

LXRC

LEVEL SENSORS

SICK
Sensor Intelligence.

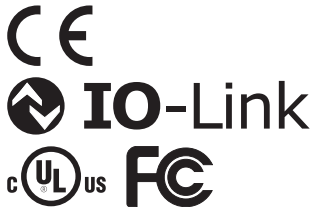


Ordering information

Type	part no.
LXRC-1XXXKXXABEXAB	6085702

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

Illustration may differ



Detailed technical data

Features

Medium	Fluids, bulk solids
Measurement	Continuous, switch
Probe type	Thread with integrated horn antenna made from PTFE
Frequency band	W-band (within 75 ... 85 GHz)
Measuring range	0 m ... 15 m
Angle of dispersion	12° ¹⁾
Process pressure	-1 bar ... 16 bar
Process temperature	-40 °C ... +130 °C
Bluetooth	✓

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

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
Supply voltage	12 V DC ... 35 V DC ¹⁾
Initialization time	≤ 5 s

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

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

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

Mechanics

Wetted parts	Stainless steel 1.4404 / 316L PTFE FKM
Process connection	1" NPT, PN16, ASME B1.20.1
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

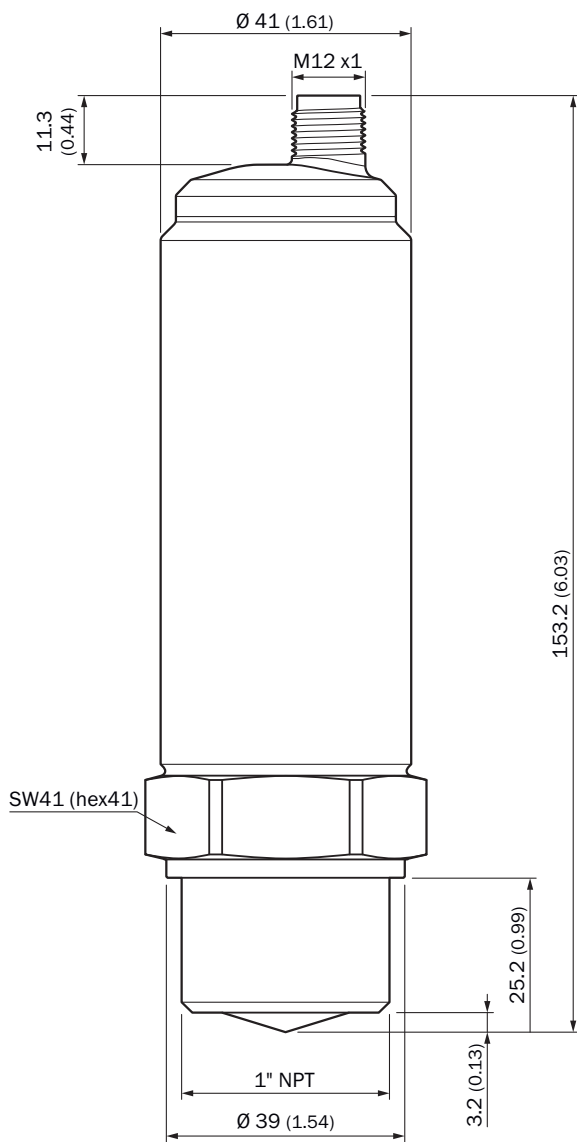
ECLASS 5.0	27200505
ECLASS 5.1.4	27200505
ECLASS 6.0	27200505
ECLASS 6.2	27200505
ECLASS 7.0	27200505
ECLASS 8.0	27200505
ECLASS 8.1	27200505
ECLASS 9.0	27200505
ECLASS 10.0	27270807
ECLASS 11.0	27270807
ECLASS 12.0	27274501
ETIM 5.0	EC001447
ETIM 6.0	EC001447
ETIM 7.0	EC001447
ETIM 8.0	EC001447
UNSPSC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

Certificates

EU declaration of conformity	✓
-------------------------------------	---

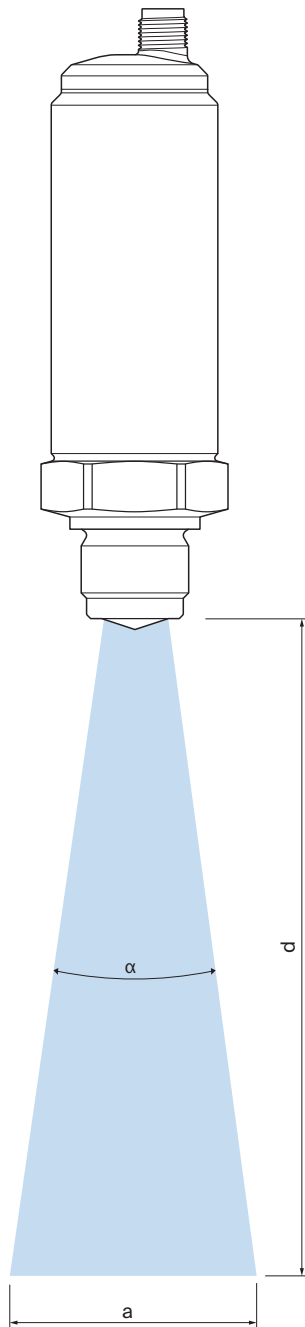
China RoHS	✓
cULus certificate	✓
FCC certificate	✓
IO-Link certificate	✓
Radio Approval certificate Australia	✓
Radio Approval certificate Canada	✓
Radio Approval certificate New Zealand	✓
Information according to Art. 3 of Data Act (Regulation EU 2023/2854)	✓

Dimensional drawing



Dimensions in mm (inch)

Functional principle



Aperture angle (α) 12°

Distance to antenna (d)	Diameter signal cone (a)
0.5 m	0.09 m
1.0 m	0.20 m
1.5 m	0.30 m
2.0 m	0.41 m
2.5 m	0.52 m
3.0 m	0.62 m
3.5 m	0.73 m
4.0 m	0.83 m
4.5 m	0.94 m
5.0 m	1.04 m
5.5 m	1.15 m
6.0 m	1.25 m
6.5 m	1.36 m
7.0 m	1.46 m
7.5 m	1.57 m
8.0 m	1.67 m
8.5 m	1.78 m
9.0 m	1.88 m
9.5 m	1.99 m
10.0 m	2.09 m
10.5 m	2.20 m
11.0 m	2.30 m
11.5 m	2.41 m
12.0 m	2.51 m
12.5 m	2.62 m
13.0 m	2.72 m
13.5 m	2.83 m
14.0 m	2.93 m
14.5 m	3.04 m
15.0 m	3.14 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:

Contacts and other locations –www.sick.com