



LFP0025-A4CMB

LFP Cubic

LEVEL SENSORS

SICK
Sensor Intelligence.



Ordering information

Type	part no.
LFP0025-A4CMB	1131679

Illustration may differ

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

Detailed technical data

Features

Medium	Fluids
Measurement	Switch, Continuous
Design	Remote amplifier
Probe type	Without probe
Process pressure	-1 bar ... 10 bar
Process temperature	-20 °C ... +100 °C

Performance

Accuracy of sensor element	± 5 mm ¹⁾
Reproducibility	≤ 2 mm
Resolution	< 2 mm
Response time	400 ms
Dielectricity constant	≥ 5 for rod probe / cable probe ≥ 1.8 with coaxial tube
Conductivity	No limitation
Maximum level change	≤ 500 mm/s
Deactivated area at process connection	25 mm ²⁾
Deactivated area at end of probe	≥ 10 mm ¹⁾
MTTF	194.3 years (EN ISO 13849-1)
Display	✓

¹⁾ With water under reference conditions.²⁾ With parameterized container with water under reference conditions, otherwise 40 mm.

Electronics

Communication interface	IO-Link
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¹⁾ All connections are polarity protected. All outputs are overload and short-circuit protected.²⁾ Freely adjustable.

Supply voltage	12 V DC ... 30 V DC ¹⁾
Power consumption	≤ 100 mA at 24 V DC without output load
Initialization time	≤ 5 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 < 350 Ohm at $U_v > 12$ V, 0 V ... 10 V > 750 Ohm at $U_v 14 \geq V$
Hysteresis	≥ 2 mm ²⁾
Output current	< 100 mA
Inductive load	< 1 H
Capacitive load	100 nF
Enclosure rating	IP67 (EN 60529)
Temperature drift	< 0.1 mm/K
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⁾ Freely adjustable.

Mechanics

Wetted parts	Stainless steel 1.4404 / 316L PTFE FKM
Process connection	G ¾ A
Housing material	Plastic PBT
Max. probe load	≤ 6 Nm
Material coaxial cable	PVC

Ambient data

Ambient operating temperature	-20 °C ... +60 °C
Ambient temperature, storage	-40 °C ... +80 °C
Ambient temperature coaxial cable	-20 °C ... +60 °C

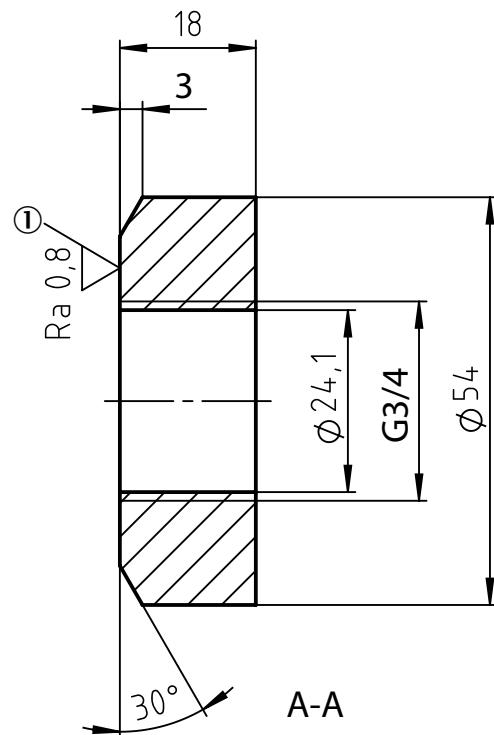
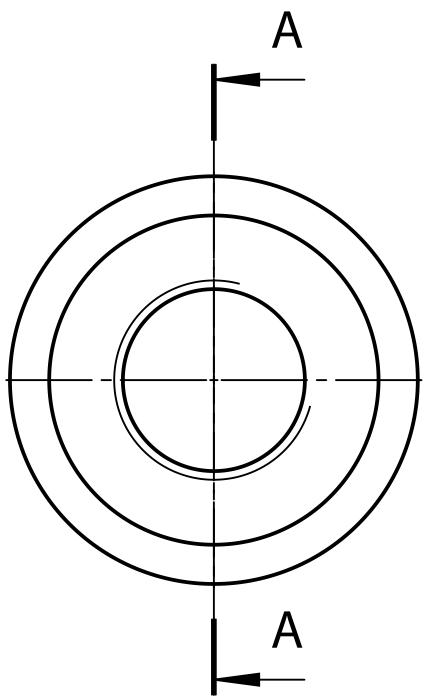
Certificates

EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓
cULus certificate	✓
IO-Link certificate	✓
Information according to Art. 3 of Data Act (Regulation EU 2023/2854)	✓

Classifications

ECLASS 5.0	27200513
ECLASS 5.1.4	27200513
ECLASS 6.0	27200513
ECLASS 6.2	27200513
ECLASS 7.0	27200513
ECLASS 8.0	27200513
ECLASS 8.1	27200513
ECLASS 9.0	27200513
ECLASS 10.0	27200513
ECLASS 11.0	27200513
ECLASS 12.0	27200513
ETIM 5.0	EC001447
ETIM 6.0	EC001447
ETIM 7.0	EC001447
ETIM 8.0	EC001447
UNSPSC 16.0901	41113710

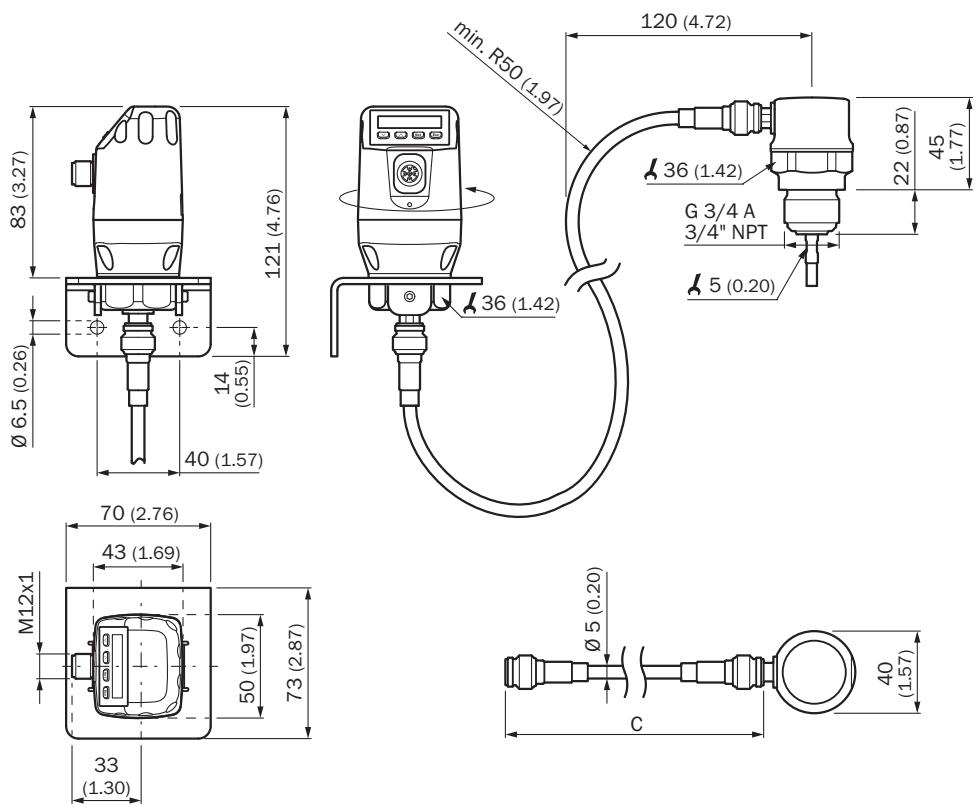
Dimensional drawing



Dimensions in mm (inch)

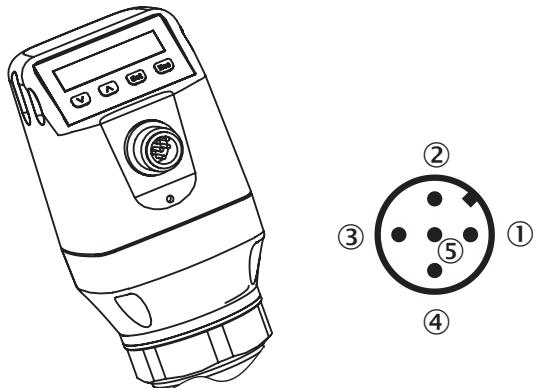
① Sealing surface

Dimensional drawing



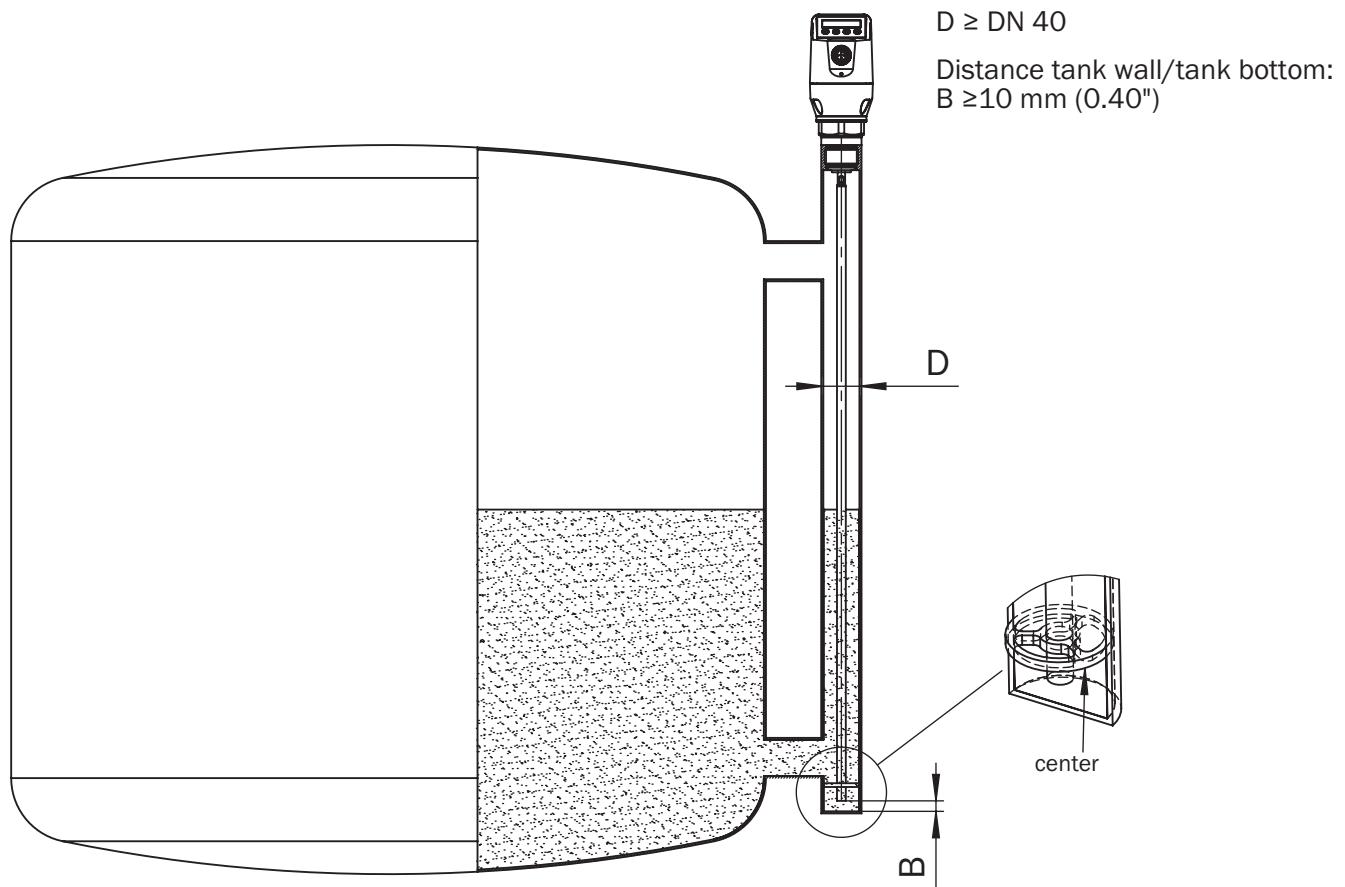
Dimensions in mm (inch)

Connection type

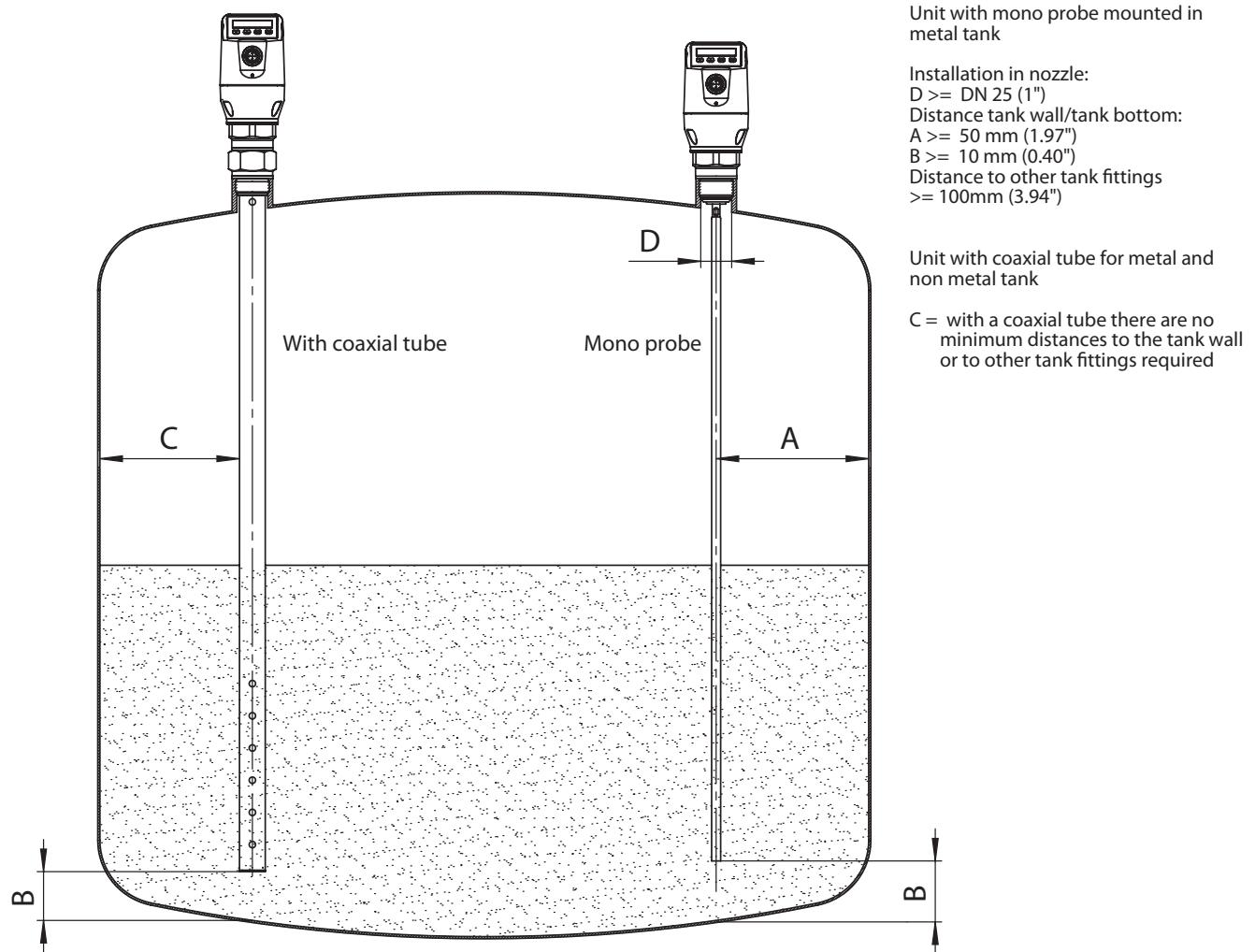


- ① L⁺: Supply voltage, brown
- ② Q_A: Analog current-/voltage output, white
- ③ M: Ground, reference ground for current-/voltage output, blue
- ④ C/Q₁: Switching output 1, PNP/IO-Link-communication, black
- ⑤ Q₂: Switching output 2, PNP/NPN, grey

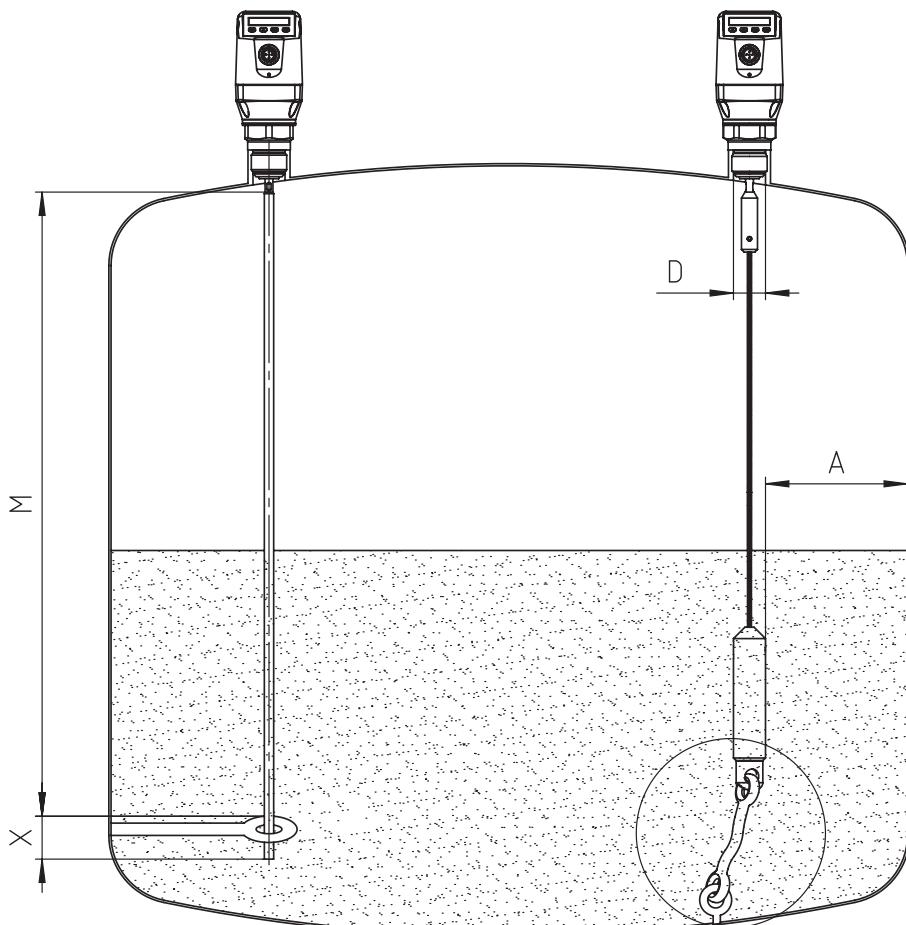
Instruction for installation Installation in a metal immersion tube or metal bypass



Instruction for installation Installation in a metal tank



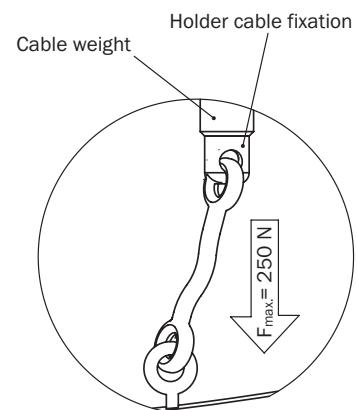
Instruction for installation

**Mono rod probe mounted in metal tank**

M = Measuring range
 X = Inactive area at probe end
 No measurement possible

Rope probe mounted in metal tank

Installation in nozzle:
 $D \geq \text{DN } 25 (1")$
 Distance tank wall/tank bottom:
 $A \geq 50 \text{ mm (1.97")}$
 Distance to other tank fittings:
 $\geq 100\text{mm (3.94")}$



Recommended accessories

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

	Brief description	Type	part no.
Mounting systems			
	<ul style="list-style-type: none"> Description: Mounting bracket Material: Stainless steel Details: Stainless steel 1.4301 (AISI 304) Items supplied: Mounting hardware included 	BEF-FL-304LFP-HLDR	2077391
	<ul style="list-style-type: none"> Description: Spare titan probe for LFP Cubic, length 1 m Description: Spare titan probe for LFP Cubic, length 2 m Description: Process connection adapter G 3/4 to G1 	BEF-ER-TS1000-LFPC BEF-ER-TS2000-LFPC BEF-HA-G1BSP1-LFP1	2081042 2081043 2067603
	<ul style="list-style-type: none"> Description: Weld-in flange G 3/4" 	BEF-FL-GEWG34-LFP1	2082150

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