



CFP0200-XPANNBX

CFP Cubic

LEVEL SENSORS

SICK
Sensor Intelligence.



Illustration may differ



Ordering information

Type	Part no.
CFP0200-XPANNBX	1082626

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

Detailed technical data

Features

Medium	Water and oil-based liquids
Measurement	Switch, Continuous
Probe length	200 mm
Process pressure	Atmospheric
Process temperature	-20 °C ... +80 °C
UL approval	✓
RoHS certificate	✓
IO-Link	✓

Performance

Accuracy of sensor element	± 15 mm (With water or oil under reference conditions)
Reproducibility	< 5 mm
Resolution	< 2 mm
Response time	< 300 ms
Dielectricity constant	≥ 2
Conductivity	No limitation
Deactivated area at end of probe	7 mm ... 15 mm, Depending on probe length

Electronics

Supply voltage	10 V DC ... 30 V DC ¹⁾
Power consumption	≤ 100 mA at 24 V DC without output load
Initialization time	≤ 4 s
Protection class	III
Connection type	Round connector M12 x 1, 5-pin

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

Output signal	2 x PNP/NPN/push-pull transistor outputs switchable and 1 x analog output 4 mA ... 20 mA / 0 V ... 10 V automatically switchable depending on output load or output voltage depending on the load 2 x PNP/NPN/Push-Pull + 4 mA ... 20 mA / 0 V ... 10 V
Output load	4 mA ... 20 mA < 500 Ohm at $U_v > 15\text{ V}$, 4 mA ... 20 mA < 350 Ohm at $U_v > 12\text{ V}$, 0 V ... 10 V > 750 Ohm at $U_v 14 \geq \text{V}$
Hysteresis	Min. 3 mm, min. 2 °C, free adjustable
Signal voltage HIGH	$U_v - 3\text{ V}$
Signal voltage LOW	< 3 V
Output current	< 100 mA
Inductive load	< 1 H
Capacitive load	100 nF
Enclosure rating	IP65 / IP67
Temperature drift	< 0.1 mm/K
Lower signal level	3.8 mA ... 4 mA
Upper signal level	20 mA ... 20.5 mA
Resolution of analog output	12 bit

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

Mechanics

Wetted parts	Outer tube: polypropylene (PP-H), G 3/4" and 3/4" NPT: PBT, Easy Clamp Bracket: PP
Process connection	G 3/4 A
Housing material	PBT / PC
Max. probe load	≤ 4 Nm
Probe diameter	16 mm

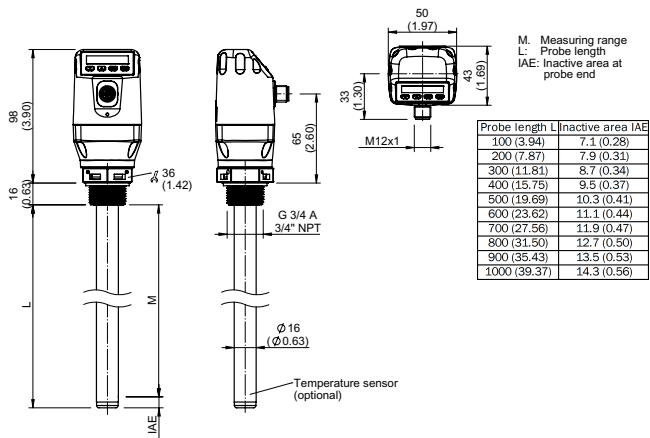
Ambient data

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

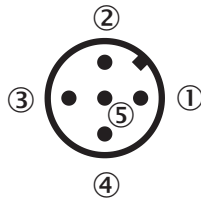
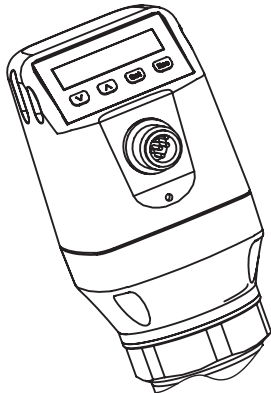
Classifications

ECl@ss 5.0	27371813
ECl@ss 5.1.4	27371813
ECl@ss 6.0	27371813
ECl@ss 6.2	27371813
ECl@ss 7.0	27371813
ECl@ss 8.0	27371813
ECl@ss 8.1	27371813
ECl@ss 9.0	27371813
ETIM 5.0	EC001447
ETIM 6.0	EC001447
UNSPSC 16.0901	41113710

Dimensional drawing (Dimensions in mm (inch))





Connection type



- ① L⁺: Supply voltage
- ② Q_A: Analog current-/voltage output
- ③ M: Ground, reference ground for current-/voltage output
- ④ C/Q1: Switching output 2, PNP/NPN/DRV (Push-Pull) / IO-Link
- ⑤ Q₂: Switching output 2, PNP/NPN/DRV (Push-Pull)

Recommended accessories

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

	Brief description	Type	Part no.
Plug connectors and cables			
	Head A: female connector, M12, 5-pin, straight Head B: Flying leads Cable: PVC, unshielded, 2 m	DOL-1205-G02M	6008899
	Head A: female connector, M12, 5-pin, straight Head B: Flying leads Cable: Power, I/O, PUR, halogen-free, unshielded, 2 m	DOL-1205-G02MC	6025906

	Brief description	Type	Part no.
	Head A: female connector, M12, 5-pin, straight Head B: Flying leads Cable: PVC, unshielded, 5 m	DOL-1205-G05M	6009868
	Head A: female connector, M12, 5-pin, straight Head B: Flying leads Cable: PUR, halogen-free, unshielded, 5 m	DOL-1205-G05MC	6025907
	Head A: female connector, M12, 5-pin, straight Head B: Flying leads Cable: PVC, unshielded, 10 m	DOL-1205-G10M	6010544
	Head A: female connector, M12, 5-pin, straight Head B: Flying leads Cable: PUR, halogen-free, unshielded, 10 m	DOL-1205-G10MC	6025908
	Head A: female connector, M12, 5-pin, angled Head B: Flying leads Cable: PVC, unshielded, 2 m	DOL-1205-W02M	6008900
	Head A: female connector, M12, 5-pin, angled Head B: Flying leads Cable: Power, I/O, PUR, halogen-free, unshielded, 2 m	DOL-1205-W02MC	6025909
	Head A: female connector, M12, 5-pin, angled Head B: Flying leads Cable: PVC, unshielded, 5 m	DOL-1205-W05M	6009869
	Head A: female connector, M12, 5-pin, angled Head B: Flying leads Cable: PUR, halogen-free, unshielded, 5 m	DOL-1205-W05MC	6025910
	Head A: female connector, M12, 5-pin, angled Head B: Flying leads Cable: PVC, unshielded, 10 m	DOL-1205-W10M	6010542
	Head A: female connector, M12, 5-pin, angled Head B: Flying leads Cable: PUR, halogen-free, unshielded, 10 m	DOL-1205-W10MC	6025911

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