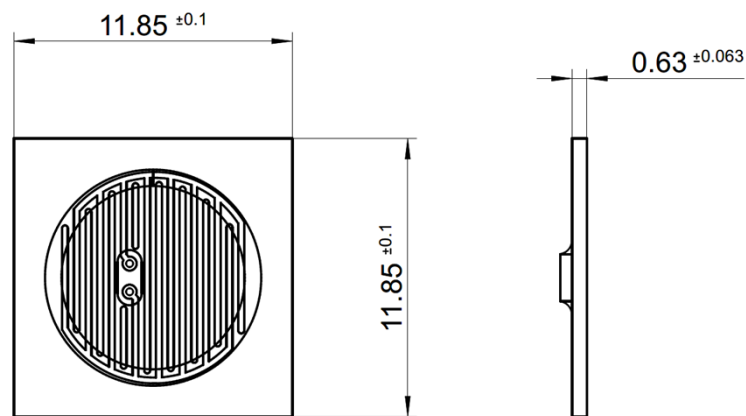




CONDUCTIVITY SENSOR

Order number	Product Name	Rev.	Release date	Document number
158919	LFS1K0.1212.1FC.B	1.1	05.02.2026	DBCC_0005_EN

Dimensions [mm]



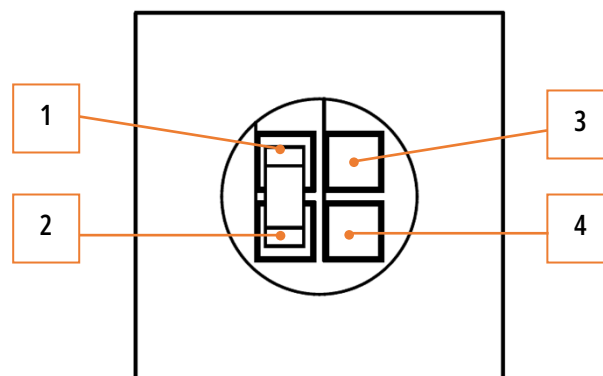
General Specifications

Conductivity range:	1 $\mu\text{S}/\text{cm}$ – 15 $\mu\text{S}/\text{cm}$ (can be increased by switching measurement frequency depending on the conductivity range)
Cell constant:	0.2 cm^{-1} (without assembly)
Measurement frequency range:	1 kHz – 3 kHz
Maximum excitation voltage:	< 0.7 Vpp (electrolysis of the analyte must be avoided)
Operating temperature range:	- 30°C – 100°C
Temperature sensor:	PT 1000, soldered on back-side
Tolerance of temperature sensor:	IEC 60751 F 0.3 (Temperature chip only)
Temperature coefficient:	According to IEC 60751: - 40 to + 0°C $R(T) = R_0 \cdot (1 + A \cdot T + B \cdot T^2 + C \cdot [T - 100]^3)$ 0 to +150°C $R(T) = R_0 \cdot (1 + A \cdot T + B \cdot T^2)$ A = $3.9083 \cdot 10^{-3} \cdot ^\circ\text{C}^{-1}$, B = $-5.775 \cdot 10^{-7} \cdot ^\circ\text{C}^{-2}$, C = $-4.183 \cdot 10^{-12} \cdot ^\circ\text{C}^{-4}$ R_0 = resistance value in Ohm at 0°C T = temperature in accordance with ITS90



Measuring current of temperature sensor:	0.3 mA (self-heating must be considered)
Electrical connection:	Solderable sliver pads on the backside, suggested connection spring contacts

Pin Assignment



Pin Assignment (C: conductivity sensor, T: temperature sensor)	1 T1	2 T2	3 C1	4 C2
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