

Ceramic Pressure Sensor

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Media-resistant
 Ceramic membrane, withstands aggressive water chemistry.
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Long-term stable
 Low drift even under continuous load in leachate and wastewater.
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SDI-12 + Bluetooth 5
 Directly compatible with Aquatos, local diagnostics via Bluetooth.
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IP68
 Permanently submersible, ultra-low-power < 10 µA.

DESCRIPTION

The **Ceramic Pressure Sensor Type 0420** is a rugged submersible probe with a ceramic diaphragm for the measurement of water levels and gauges in demanding environments. The ceramic diaphragm is particularly resistant to aggressive media and offers excellent long-term stability — even over many years of continuous service.

The stainless steel housing protects the electronics, the ceramic diaphragm handles the actual pressure measurement. This combination makes the sensor ideal for **leachate, industrial wastewater, treatment plants, stormwater overflow basins** and generally for waters with chemically loaded content, where conventional stainless diaphragms would degrade over time.

Communication via **SDI-12 V1.3** and in parallel via **Bluetooth 5** for on-site configuration — no app required, directly from the browser using Bluetooth-App. Based on the TerraTransfer sensor platform (, < 10 µA sleep current). **IP68** for permanent immersion. Standard cable length 10 m.

APPLICATIONS

- Leachate monitoring at landfills and legacy contaminated sites
- Stormwater overflow basins and combined sewer overflows
- Wastewater treatment plants and sewer infrastructure
- Waters with aggressive content (industry, agriculture)
- Groundwater and gauging measurement with unfavorable water chemistry
- Official monitoring stations with long-term monitoring mandate
- Shallow gauges up to approx. 10 mWC, water-level supervision

TYPE 0420 · CERAMIC



KEY FEATURES

- **Ceramic diaphragm** · media-resistant
- Range **0–1 bar** (approx. 10 mWC)
- Resistant to **aggressive media**
- Excellent **long-term stability**
- Housing in **stainless steel** · pressure + temperature
- Gauge pressure with capillary · **10 m cable** standard
- **SDI-12 V1.3 + Bluetooth 5 · IP68**
- **Ultra-low-power** · < 10 µA sleep current

Technical data

Ceramic Pressure Sensor · Type 0420

PARAMETER	VALUE
Measuring principle	Capacitive · ceramic diaphragm · media-resistant
Measuring range	0–1 bar (approx. 10 mWC)
Pressure diaphragm	Ceramic – resistant to aggressive media
Housing	Stainless steel
Temperature measurement	Integrated · pressure + temperature at the same measuring point
Long-term stability	Excellent · low drift even under continuous load
Pressure type	Gauge pressure with capillary (integrated in cable)
Cable length	Standard 10 m · longer on request
Interface	SDI-12 V1.3 (3-wire: VCC · signal · GND) + Bluetooth 5 (BLE) · in parallel
Supply	2.8 V–14 V · up to 24 channels on the Aquatos bus · cable length > 500 m
Sleep current	<10 µA (ultra-low-power) · BLE link ~ 20–30 µA
Configuration	Bluetooth-App in browser (Chrome / Edge) · BlueShell (Windows)
Protection class	IP68 · permanent immersion
Operating conditions	Aggressive-media resistant · suitable for leachate, wastewater, industrial waters
Compliance	CE (RED 2014/53/EU, EMC 2014/30/EU) · RoHS-compliant



IP68

Permanently submersible



AISI 316

Stainless steel construction



SDI-12 V1.3

Connects to Aquatos



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