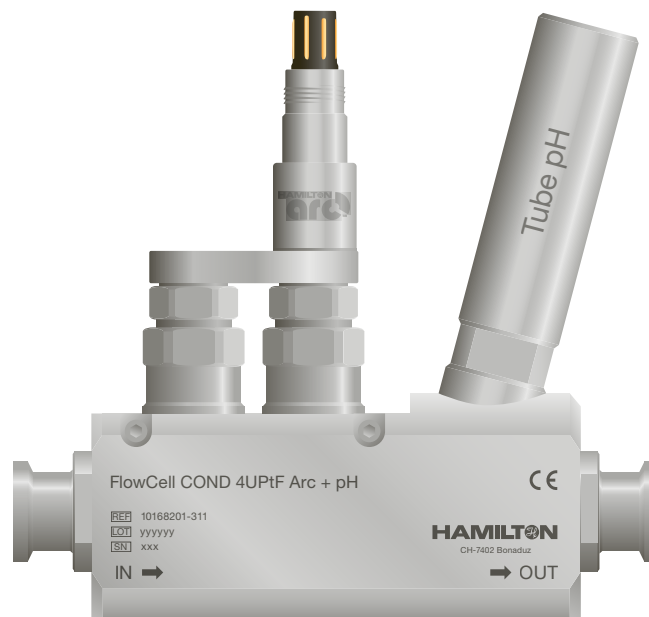


## FlowCell COND 4UPtF Arc + pH Specification Sheet

Part/REF # 10168201-311



FlowCell COND 4UPtF Arc + pH allow information to be stored in the sensor and direct connection to the control system.

### Product Specifications

Sensor Family	FlowCell COND
Parameter	Conductivity (4-Pole) and pH**
Electrodes	Platinum
Sensor Output	Arc: Modbus, 4 to 20 mA
Electrical Connector	VP8
Measurement Principle	4 pole contacting
Conductivity Measuring Range	1 $\mu$ S/cm to 300 mS/cm
Conductivity Accuracy at 25 °C	$\pm$ 3% or better from 1 $\mu$ S/cm - 100 mS/cm $\pm$ 5% or better from 100 mS/cm - 300 mS/cm
Cell Constant	0.415/cm
Temperature Sensor	NTC 22 kOhm
Temperature response	$\leq$ 30 sec (Note: Temperature response is highly dependent on the process conditions including flow rate, environment temperature)

<b>Configurable Values</b>	Conductivity: $\mu\text{S}/\text{cm}$ , $\text{mS}/\text{cm}$ ; Temperature: $^{\circ}\text{C}$ , $^{\circ}\text{F}$ , $\text{K}$ and pH: pH, mV
<b>O-ring Material</b>	EPDM (FDA approved, USP Class VI)
<b>Internal Diameter of FlowCell</b>	20 mm
<b>Internal Volume</b>	Approx. 37 mL
<b>Mounting</b>	2 Hex screws: M4*50 mm
<b>Weight</b>	1'854 g
<b>Process Connection</b>	$\frac{1}{4}$ " TC25 (ID 4.5 mm)
<b>Wetted Parts</b>	Stainless Steel 1.4435 PEEK (Polyetheretherketone) EPDM (Ethylene propylene elastomer) See compliance details in Material Specification document
<b>Surface Quality of Steel</b>	$R_a < 0.4 \mu\text{m}$ (N5, electropolished)
<b>Analog Interface 1</b>	4 to 20 mA for conductivity, programmable
<b>Analog Interface 2</b>	4 to 20 mA for Temp., programmable
<b>Analog Interface 1 and 2</b>	2 Galvanically not isolated; pulse width modulation 3.5 kHz
<b>Digital Interface</b>	RS485 Modbus (max. 32 addresses)
<b>Baud Rate</b>	4800, 9600, 19200, 38400, 57600, 115200 Bd
<b>Operating Voltage</b>	7 to 30 VDC max. 150 mW
<b>Serial Number</b>	Yes
<b>Certificate</b>	Yes, with calibrated cell constant
<b>ATEX Approval</b>	No
<b>IECEX Approval</b>	No
<b>Autoclavable</b>	No
<b>CIP</b>	Yes
<b>SIP</b>	Yes, max. Temperature 140 $^{\circ}\text{C}$
<b>Operating Temperature Range</b>	Analog interface: 0 to 110 $^{\circ}\text{C}$ ; Digital interface: 0 to 140 $^{\circ}\text{C}$
<b>Pressure Range bar g</b>	0 to 16 bar (140 $^{\circ}\text{C}$ )

Specifications are subject to change without notice

\*\* For pH sensor specifications, please consult the product datasheet for the respective sensor (12 mm diameter, 120 mm length).

For low-temperature downstream processes, Hamilton recommends the EasyFerm Bio HB Arc 120 (REF 243632-2313).

If you require assistance in selecting the most suitable sensor for your specific application, please contact our Application Support team.