

# Conducell 4USF Arc 120

Specification Sheet (Part/REF # 243590-1111)



Conducell 4UxF Arc conductivity sensors allow calibrations to be stored in the sensor and direct connection to the control system.

## Product Specifications

<b>a-length</b>	120 mm
<b>Electrical Connector</b>	VP8
<b>Measurement Principle</b>	4 pole contacting
<b>Measuring Range</b>	1 $\mu$ S/cm to 300 mS/cm
<b>Accuracy at 25 °C</b>	$\pm 3 \%$ at 1 $\mu$ S/cm to 100 mS/cm, $\pm 5 \%$ at 100 to 300 mS/cm
<b>Cell Constant</b>	0.36 /cm
<b>Temperature Sensor</b>	NTC 22 kOhm
<b>Configurable Values</b>	Conductivity: $\mu$ S/cm, mS/cm; Temperature: °C, °F, K
<b>Diameter</b>	12 mm
<b>Process Connection</b>	PG13,5
<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>	Ra < 0.4 $\mu$ 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>	Galvanically not isolated; pulse width modulation 3.5 kHz
<b>Digital Interface</b>	RS485 Modbus (max. 31 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>	Yes, max. Temperature 130 °C
<b>CIP</b>	Yes
<b>Steam Sterilizable</b>	Yes, max. Temperature 140 °C
<b>Operating Temperature Range</b>	Analog interface: 0 to 110 °C; Digital interface: 0 to 140 °C
<b>Pressure Range bar g</b>	0 to 20 bar (130 °C)

Specifications are subject to change without notice

**Spec. Version B**

<https://www.hamiltoncompany.com/process-analytics/sensors/243590-1111>