

Conducell 4UTF Arc 425

Specification Sheet (Part/REF # 243590-4141)



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

Product Specifications

Sensor Family	Conducell 4UxF
Parameter	Conductivity (4-Pole)
Sensor Output	Arc: Modbus, 4 to 20 mA
a-length	425 mm
Electrical Connector	VP8
Measurement Principle	4 pole contacting
Measuring Range	1 $\mu\text{S/cm}$ to 300 mS/cm
Accuracy at 25 °C	$\pm 3\%$ at 1 $\mu\text{S/cm}$ to 100 mS/cm, $\pm 5\%$ at 100 to 300 mS/cm
Cell Constant	0.36 /cm
Temperature Sensor	NTC 22 kOhm
Configurable Values	Conductivity: $\mu\text{S/cm}$, mS/cm; Temperature: °C, °F, K
Diameter	12 mm
Process Connection	PG13,5
Wetted Parts	Titanium PEEK (Polyetheretherketone) EPDM (Ethylene propylene elastomer) See compliance details in Material Specification document Stainless steel 1.4435 (for a-length >120 mm)
Surface Quality of Steel	Electrodes: Ra < 0.4 μm (N5, electropolished); Shaft: Ra < 0.8 μm (N6)
Analog Interface 1	4 to 20 mA for conductivity, programmable
Analog Interface 2	4 to 20 mA for Temp., programmable
Analog Interface 1 and 2	Galvanically not isolated; pulse width modulation 3.5 kHz
Digital Interface	RS485 Modbus (max. 32 addresses)
Baud Rate	4800, 9600, 19200, 38400, 57600, 115200 Bd
Operating Voltage	7 to 30 VDC max. 150 mW
Serial Number	Yes
Certificate	Yes, with calibrated cell constant
ATEX Approval	No
IECEX Approval	No
Autoclavable	Yes, max. Temperature 130 °C
CIP	Yes
Steam Sterilizable	Yes, max. Temperature 140 °C

Operating Temperature Range

Analog interface: 0 to 110 °C; Digital interface: 0 to 140 °C

Pressure Range bar g

0 to 20 bar (130 °C)

Specifications are subject to change without notice

Spec. Version B<https://www.hamiltoncompany.com/process-analytics/sensors/243590-4141>