

Polilyte Plus PHI Arc 425

Specification Sheet (Part/REF # 242428-4353)



Looking for an intelligent pH sensor that can survive in difficult industrial processes? The Polilyte Plus with Arc intelligent sensor technology can make it.

Product Specifications

Sensor Family	Polilyte Plus
Parameter	pH
Sensor Output	Arc: Modbus, 4 to 20 mA
a-length	425 mm
Electrical Connector	VP8
Measurement Principle	Combination electrode; pH potential measured against reference
Measuring Range	pH 0 to 14
Sensitivity	57 to 59 mV / pH at 25 °C
Zero Point	0 ± 20 mV
pH Glass Resistance	Moderate
Membrane Shape	Spherical
Diaphragm	Single Pore
Number of Diaphragms	2
Electrolyte	Polisolve Plus
Reference System	Hamilton Everef-L
Liquid Earth	No
Temperature Sensor	NTC 22 kOhm
Configurable Values	pH: pH, mV; Temperature: °C, K, °F
Diameter	12 mm
Process Connection	PG13,5
Wetted Parts	Glass EPDM (Ethylene propylene elastomer)
Analog Interface 1	4 to 20 mA for pH, 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. 31 addresses)
Baud Rate	4800, 9600, 19200, 38400, 57600,115200 Bd
Operating Voltage	7 to 30 VDC max. 150 mW
Serial Number	Yes
Recommended Storage	Hamilton Storage Solution or 3 M KCl

Certificate	Yes, with measured values in Buffer pH 4.01 and pH 7.00
ATEX Approval	No
IECEX Approval	No
Autoclavable	Yes, max. Temperature 130 °C
CIP	Yes
Steam Sterilizable	Yes, max. Temperature 130 °C
Operating Temperature Range	Analog interface: 0 to 110 °C; Digital interface: 0 to 130 °C
Sample min Conductivity	2 µS/cm
Pressure Range bar g	0 to 16 bar (100 °C), 0 to 10 bar (130 °C)

Specifications are subject to change without notice

Spec. Version B

<https://www.hamiltoncompany.com/process-analytics/sensors/242428-4353>