

# EasyFerm Plus HB Arc 120

Specification Sheet (Part/REF # 238633-2313)



The EasyFerm Plus pH sensor is Hamilton's most popular product for pharmaceutical applications where autoclave and SIP are frequently performed.

## Product Specifications

<b>Sensor Family</b>	EasyFerm Plus
<b>Parameter</b>	pH
<b>a-length</b>	120 mm
<b>Electrical Connector</b>	VP8
<b>Sensor Output</b>	Arc: Modbus, 4 to 20 mA
<b>Measurement Principle</b>	Combination electrode; pH potential measured against reference
<b>Measuring Range</b>	pH 0 to 14
<b>Sensitivity</b>	57 to 59 mV / pH at 25 °C
<b>Zero Point</b>	0 ± 20 mV
<b>pH Glass</b>	Hamilton type HB glass
<b>pH Glass Resistance</b>	Moderate
<b>Membrane Shape</b>	Spherical
<b>Diaphragm</b>	HP-Coatramic
<b>Number of Diaphragms</b>	1
<b>Electrolyte</b>	Pressurized Phermlyte
<b>Reference System</b>	Hamilton Everef-F, Silver ion barrier included
<b>Liquid Earth</b>	Yes
<b>Temperature Sensor</b>	NTC 22 kOhm
<b>Configurable Values</b>	pH: pH, mV; Temperature: °C, K, °F
<b>Diameter</b>	12 mm
<b>Process Connection</b>	PG13,5
<b>Wetted Parts</b>	Glass EPDM (Ethylene propylene elastomer)
<b>Analog Interface 1</b>	4 to 20 mA for pH, 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>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>Recommended Storage</b>	Hamilton Storage Solution or 3 M KCl

<b>Certificate</b>	Yes, with measured values in Buffer pH 4.01 and pH 7.00
<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>Sample min Conductivity</b>	100 µS/cm
<b>Pressure Range bar g</b>	0 to 6 bar

Specifications are subject to change without notice

**Spec. Version B**

<https://www.hamiltoncompany.com/process-analytics/sensors/238633-2313>