

EasyFerm Bio HB Arc 160

Specification Sheet (Part/REF # 243632-2323)



Arc intelligent sensor technology securely stores your sensor data and outputs your measurement information directly to the control system.

Product Specifications

Sensor Family	EasyFerm Bio
Parameter	pH
Sensor Output	Arc: Modbus, 4 to 20 mA
a-length	160 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	Hamilton type HB glass
pH Glass Resistance	Moderate
Membrane Shape	Spherical
Diaphragm	HP-Coatramic
Number of Diaphragms	1
Electrolyte	Pressurized Foodlyte
Reference System	Hamilton Everef-F, Silver ion barrier included
Liquid Earth	Yes
Temperature Sensor	NTC 22 kOhm
Configurable Values	pH: pH, mV; Temperature: °C, K, °F
Diameter	12 mm
Process Connection	PG13,5
Wetted Parts	Glass VMQ (Silicone elastomer)
O-ring Material	FDA 21 CFR 177.2600; EG 1935/2004; USP <87>; USP <88> Class VI (121 °C)
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
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
Sample min Conductivity	100 µS/cm
Pressure Range bar g	0 to 6 bar

Specifications are subject to change without notice

Spec. Version B

<https://www.hamiltoncompany.com/process-analytics/sensors/243632-2323>