

Sensor Description

The Model F-235 FermProbe® pH sensor is steam sterilizable and autoclavable for use in bioprocess applications. The sensor can be used as follows:

- Steam sterilized in-situ in steel bioreactors and fermentation tanks with 25 mm entry ports.
- Autoclaved with bellows assemblies for aseptic insertion into single-use bioprocess containers (BPCs).
- Autoclaved with benchtop vessels. Sensor lengths available for vessel sizes from 1 liter to 20 liters.

Design features include:

- Available with Integral RTD, either Pt-100 or Pt-1000.
- Low impedance HT3 glass bulb with low sodium ion error.
- USP grade cellulosic thickener used for reference gel.

Model	F-235
Short Description	FermProbe® pH Sensor with PG 13.5 threaded cap and V6 Connector
Part Number	See tables below for full part number of the available length and RTD options



F-235 FermProbe® pH Sensor
with V6 Connector, PG 13.5 Threaded Cap
(Shown here with 12 mm OD x 120 mm Length)

Sensor Specifications

Measurement Range	0–14 pH
Operational Temp. Range	-5°–135° C [23°–275° F]
Operational Pressure Range	0-7750 mmHg [0-150 psig]
Storage Temperature	5°–50° C [41°–122° F]
Shelf Life	12 months
Sensor Connector	V6 Variopin, Coaxially Shielded
Sensor Connector Cable	AX-2000-VP-XXXX series

Wetted Materials

O-ring	FDA Compliant Silicone
pH Glass Electrode	Lead-free Glass
Ceramic Junction	Alumina Silicate

F-235 with no RTD			
Part Number	Insertion Length ± (3 mm)	RTD	Conn
F-235-B120-VP	120 mm	N/A	V6
F-235-B225-VP	225 mm	N/A	V6
F-235-B325-VP	325 mm	N/A	V6
F-235-B420-VP	420 mm	N/A	V6

F-235 with Pt-100 RTD			
Part Number	Insertion Length ± (3 mm)	RTD	Conn
F-235-D120-VP	120 mm	Pt-100	V6
F-235-D225-VP	225 mm	Pt-100	V6
F-235-D325-VP	325 mm	Pt-100	V6
F-235-D420-VP	420 mm	Pt-100	V6

F-235 with Pt-1000 RTD			
Part Number	Insertion Length ± (3 mm)	RTD	Conn
F-235-H120-VP	120 mm	Pt-1000	V6
F-235-H225-VP	225 mm	Pt-1000	V6
F-235-H325-VP	325 mm	Pt-1000	V6
F-235-H420-VP	420 mm	Pt-1000	V6

Product Specification Sheet

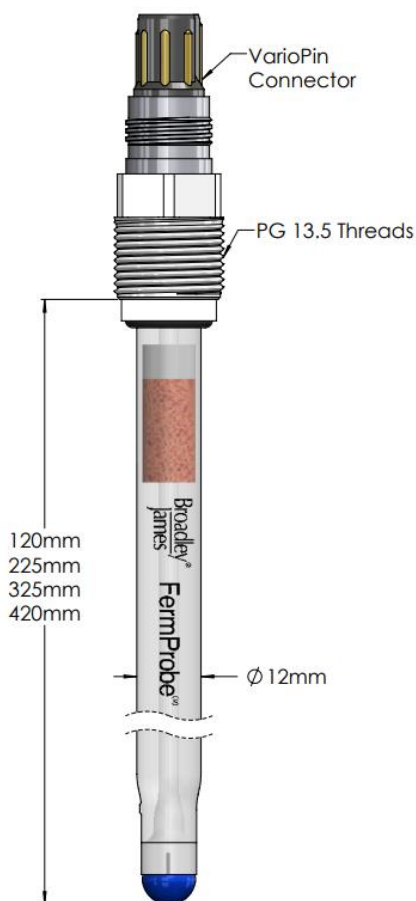
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Model F-235

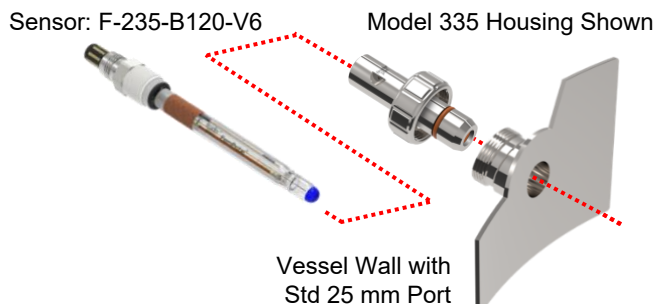
Steam Sterilizable and Autoclavable FermProbe® pH Sensor with Variopin Connector

Model F-235 Sensor Dimensions

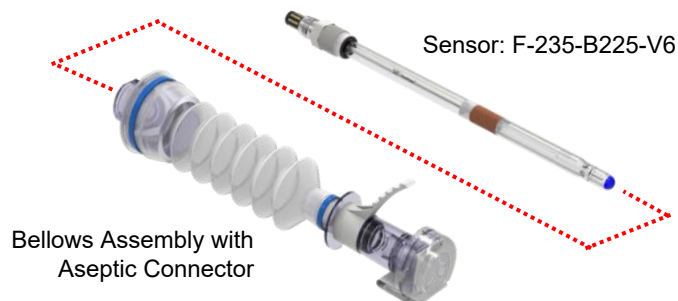


Length	Typical Application
120 mm	Side port insertion into stainless steel bioreactors and fermentation tanks
225 mm	Inserted into BPC by means of bellows insertion assembly
325 mm	Length suitable for 1 to 5 Liter benchtop vessels
420 mm	Length suitable for 7 and 15 liter benchtop vessels

Steam Sterilized In-Situ in Steel Bioreactors and Fermentation Tanks with 25 mm Entry Ports



Autoclaved with Bellows Assemblies for Aseptic Insertion into Single-Use Bioprocess Containers (BPCs)



Autoclaved with Benchtop Vessels. Sensor Lengths Available for Vessel Sizes from 1 Liter to 20 Liters



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