

7794 DVP Sanitary Durafet® III pH Electrodes with Vario Pin Connector

Specification

Description

Honeywell introduces the Sanitary Durafet® III pH electrode, a non-glass, unbreakable, ISFET (Ion Sensitive Field Effect Transistor) technology based pH sensor. The Sanitary Durafet® III electrode is designed to meet 3-A Sanitary Standards. Solid state ISFET technology eliminates the conventional, fragile glass pH sensor. The unbreakable pH sensor can be inserted directly into the process without the fear of product contamination. pH measurement can be online and continuous—no time-consuming grab sampling is necessary. This pH electrode, with over 9 years of industry-proven application experience, provides fast, accurate and dependable pH measurement in the most demanding food and dairy applications.

The Sanitary Durafet® III pH electrode has an integral, tri-clamp flange for easy mounting in the process. Cable options available for remote mounting to the innovative Honeywell DirectLine® Sensor Module. It is also available with the Cap Adapter cable for connection to Honeywell instrumentation (APT and 9782 Series), as well as selected competitors' instrumentation. All cable options use the Vario Pin connector that provides an IP68, waterproof connection to the electrode.

Features

- Designed to meet rigorous environmental requirements of the Food and Dairy industries.
- Authorized to use the 3-A symbol.
- Rugged – does not employ conventional glass membrane. Uses ISFET, solid state sensor.
- New Vario Pin quick disconnect, IP68 waterproof cable for easy electrode installation/replacement.

- New “no epoxy” packaging design for greater reliability
- Reference electrode and compensating temperature sensor integral with electrode.
- Remote mounting option for DirectLine® sensor.
- Connection capability to standard tri-clamp fittings.
- Choice of cable lengths: 20' or 50'.
- Six (6) models available with varying flange size and immersion lengths.

Cap Adapter

The Cap Adapter cable option is essentially a preamplifier that is an integral part of the electrode cable. It does not require separate mounting. The output from the Cap Adapter can be connected directly to a pH instrument (9782 or APT2000). It is available in lengths of 20' and 50'.

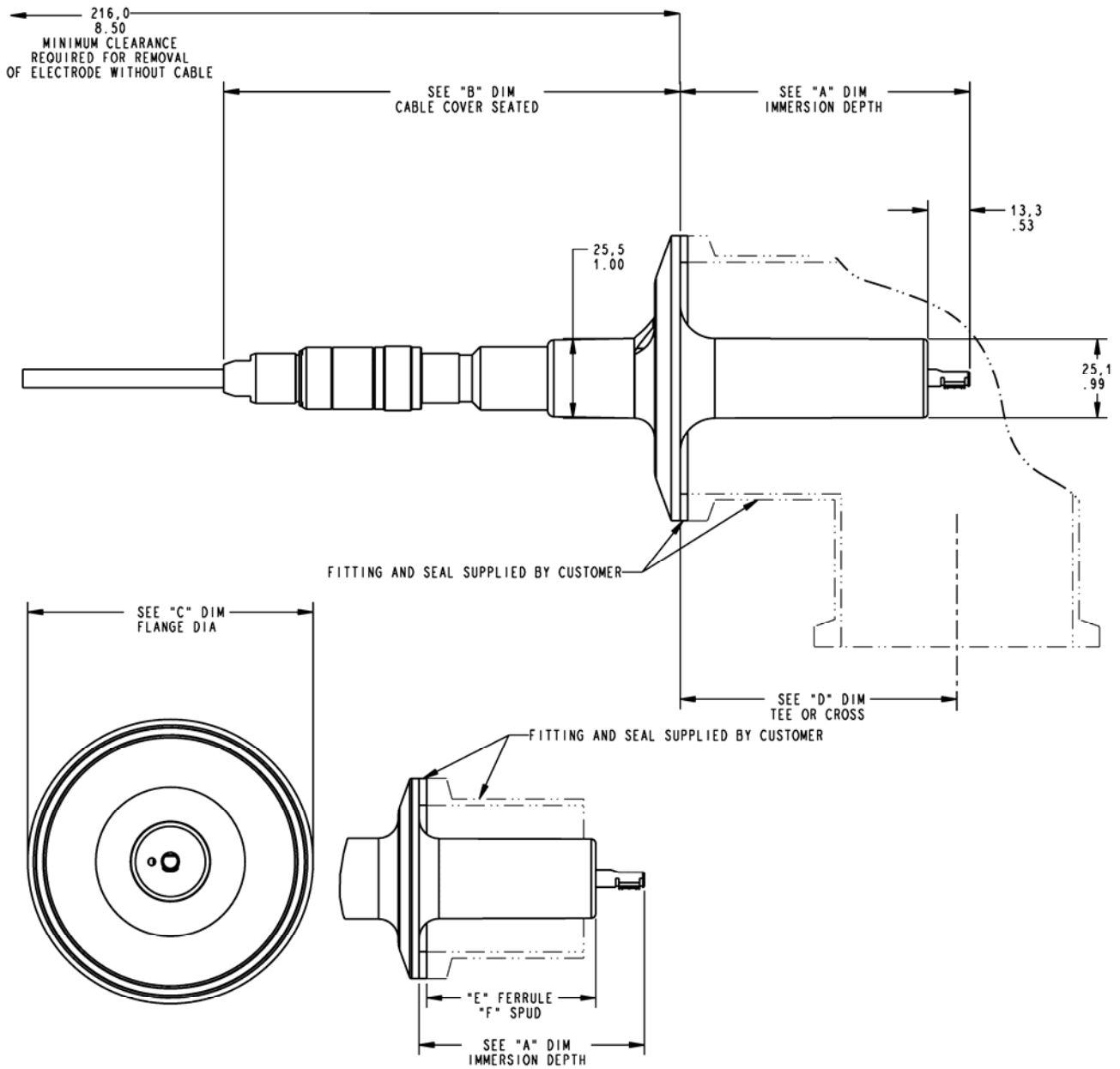


7794 Sanitary Durafet® III Electrode



Optional Cap Adapter

Dimensions



PART NO	CIP FLANGE	A DIM	B DIM	C DIM	D DIM	E DIM	F DIM
51453535-001	38,1 1.50	58,2 2.29	179,4 7.06	50,3 1.98	69,9 2.75	41,4 1.63	76,2 3.00
51453535-002		73,9 2.91	163,6 6.44				
51453535-003	50,8 2.00	71,9 2.83	165,6 6.52	64,0 2.52	88,9 3.50	44,5 1.75	76,2 3.00
51453535-004		94,5 3.72	143,0 5.63				
51453535-005	76,2 3.00	64,3 2.53	173,3 6.82	90,9 3.58	95,3 3.75	49,2 1.94	101,6 4.00
51453535-006		94,5 3.72	140,0 5.51				

Specifications

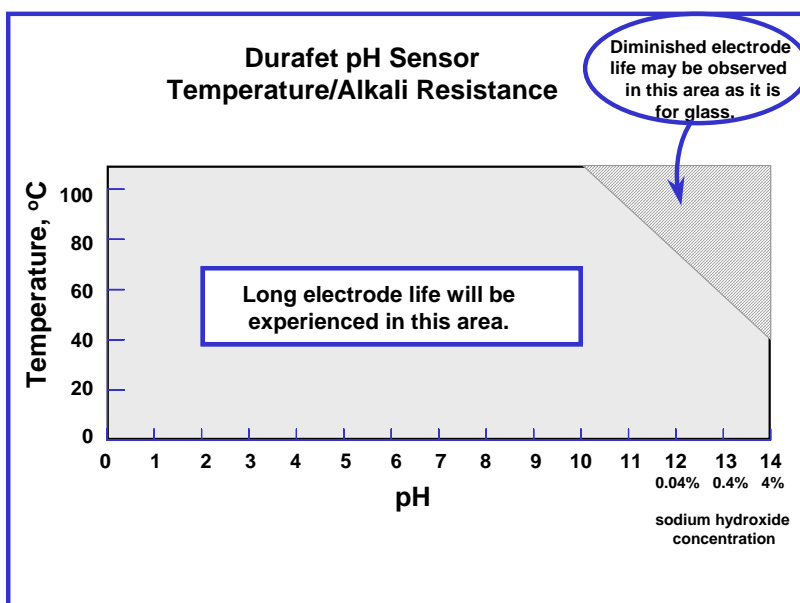
Sanitary Durafet® III Electrode	
Operating Range	0-14 pH
Operating Temperature Range	-10 °C to 110 °C [14 °F to 230 °F]
Sterilization Conditions (non-operating)	121 °C maximum at 50 psig
Maximum Ratings	121°C @ 50 psig 100 °C @ 100 psig
Operating Process Pressure	0 to 690 kPa from -10 °C to 100 °C 0 to 345 kPa @ >100 °C 0 to 100 psig from 14 °F to 212 °F 0 to 50 psig @ >212 °F
Electrode Body	Fortron®, FDA-compliant Polysulfone, FDA-compliant Ceramic reference junction Silicon ISFET measuring sensor Viton® sensor seal
Electrode Mounting	Connects to standard CIP fittings, Tri-Clamp® or equivalent
Cables	DirectLine Remote Cable: 20 feet and 50 feet length Cap Adapter (for 9782P and APT Series): 20 feet and 50 feet length
Electrical Connection	Vario Pin, IP68 rated
Weight	1-1/2": 181.7 g [6.4 oz.] 2": 190.3 g [6.7 oz.] 3": 229.9 g [8.1 oz.]

System Pressure Below Atmospheric

If the user's processing system is not designed to automatically shut down if the system pressure becomes less than that of the atmosphere with a restart only if the system is re-sterilized, then it shall have a steam or other sterilizing medium chamber surrounding the joint between the pH sensor and the process. The joint shall be constructed so that the steam chamber or other sterilizing medium chamber can be exposed for inspection.

The Sanitary Durafet® III ISFET

Sensor lifetime is affected by exposure to hot caustic solutions that can be present in CIP cycles of Food and Dairy applications. The following graph can be used as a guideline to determine if the Sanitary Durafet® III pH electrode should be taken out of the process during the cleaning cycle. For expected lifetime at specific temperatures and caustic concentrations based on exposure time contact your local Honeywell Sales representative.



Warranty/Remedy

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Contact your local sales office for warranty information. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace without charge those items it finds defective. The foregoing is Buyer's sole remedy and is **in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose**. Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this printing. However, we assume no responsibility for its use.

While we provide application assistance personally, through our literature and the Honeywell web site, it is up to the customer to determine the suitability of the product in the application.

Distributor :



For more information, contact Honeywell sales at 1-800-343-0228.

Honeywell

Honeywell Process Solutions

Honeywell
1100 Virginia Drive
Fort Washington, PA 19034