Honeywell Durafet® III pH Electrodes

Improved Durability and Reliability Increase pH Electrode Performance

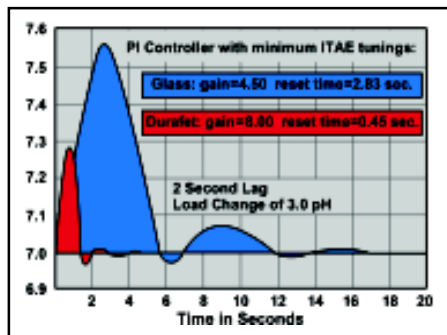### Durafet III Non-Glass pH Electrodes with Watertight Vario Pin Connectors

Honeywell introduces the Durafet III pH electrode, a non-glass, unbreakable, ISFET-based pH sensor. This industry-proven pH electrode, with over 11 years of application experience, provides fast, accurate and dependable pH measurement in the most demanding applications. A sanitary version is available to meet 3A standards for food and dairy, pharmaceutical and biotech applications. The *NEW* IP68-Rated Vario Pin connector assures a watertight cable connection to the electrode, enabling easy and reliable electrode replacement without twisting of cables.

Durafet III Eliminates Common Problems of Glass Electrodes – Say Goodbye to:

- Grab samples
- Frequent replacement due to breakage
- Slow responce due to aging
- Frequent calibration
- Limited temperature and pH range

Improved Control – Increased Savings

If you are using reagents like sodium hydroxide or sulfuric acid to control pH in your process, Honeywell can help you realize significant savings. The rapid response time and reduced hysterisis of Durafet III electrodes allow real-time pH control. Real-time control improves productivity and product quality while reducing costly chemical reagent consumption.

Superior Reliability in Submersion Applications

The Vario Pin, IP68 rated connector eliminates moisture or process intrusion when the electrode is submersed directly into a process. This cable option is available in 20 and 50 foot lengths. You gain improved reliability in high-moisture environments, reducing man hours spent troubleshooting, maintaining and calibrating moisture-related corrosion problems.

Features and Benefits:

- Non-glass pH measurement
  - *Eliminate grab samples. Use in applications where glass is prohibited*
- Response rate is 10x faster than glass
  - *Tighter process control*
- High sensor stability
  - *Less frequent calibrations*
- IP68 watertight cables
  - *High reliability in harsh environments*
- One electrode covers wide temperature range
  - *Reduce electrode inventory*
- Integral temperature compensation
  - *Higher accuracy*
- Vario pin electrode connection & optional Twist Lock fitting
  - *Reduced replacement costs*

Durafet III Electrodes are available for Industrial or Sanitary applications:

- Wastewater influent/effluent monitoring
- Neutralization
- Food & Dairy Quality Control
- Reagent Addition Control
- Plating
- Pharmaceutical

Industrial Measurement and Control

Honeywell Durafet® III pH Electrodes

Specifications	*Industrial pH Electrode*	*Sanitary pH Electrode*
Operating Range	0 to 14 pH	0 to 14 pH
Temp. Rating	-10 to 110° C (+14 to 230° F)	-10 to 110° C (+14 to 230° F), up to 130° C for non-operating sterilization
Wetted Materials	Ryton body, silicon ISFET die, Ceramic reference junction, Viton media seal, EPM reference frit seals	Polysulfane and Fortron body, silicon ISFET die, Ceramic reference junction, Viton media seal
Pressure Rating	345 kPa (50 psig) @ 100° C (212° F), 690 kPa (100 psig) @ 50° C (122° F)	345 kPa (50 psig) @ 100° C (212° F), 690 kPa (100 psig) @ 50° C (122° F)
Mounting, In-Line	3/4 inch NPT male process connection, fits into standard 3/4 inch sch. 40 metal pipe tee or special dimension plastic tee (see accessories in Model Selection Guide)	1.5, 2 or 3 inch Tri flange
Mounting, Immersion	3/4 inch NPT male to support pipe	None
Electrical Connection	Vario Pin, 11 conductor connector, IP68 rated	Vario Pin, 11 conductor connector, IP68 rated
DirectLine Remote Cable	20 and 50 feet	20 and 50 feet
Cap Adapter (9782P & APT Series)	20 and 50 feet	20 and 50 feet
Dimensions	220 x 27 mm dia. (8.65 x 1.05 inches)	Depends on the flang size and immersion depth (see Sanitary Durafet III specification sheet)
Weight	Approximately 0.23 kg (0.5 lb)	Depends on the flang size and immersion depth (see Sanitary Durafet III specification sheet)

Honeywell Industrial Measurement and Control offers a complete portfolio of products and solutions for process and machine control applications, including controllers, recorders, transmitters, actuators, smart sensors, and analytical instruments. To learn more about these offerings and how they can help your organization achieve breakthrough results, contact your local Honeywell representative, or contact us at the following telephone number: US: **1-800-784-3011**

For other locations, visit our website: **http://www.acs.honeywell.com**

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