

OxyGuard pH Probes

an overview

General Information

All OxyGuard pH probes consist of a body, an electrode, a preamplifier and cable. The heavy duty types also have an electrolyte container. The special design of the probes eliminates the problems of moisture sensitivity and electrical noise sensitivity that are frequently met with other designs of probe. OxyGuard pH probes work well in wet conditions, and will continue to do so until the electrode needs attention.

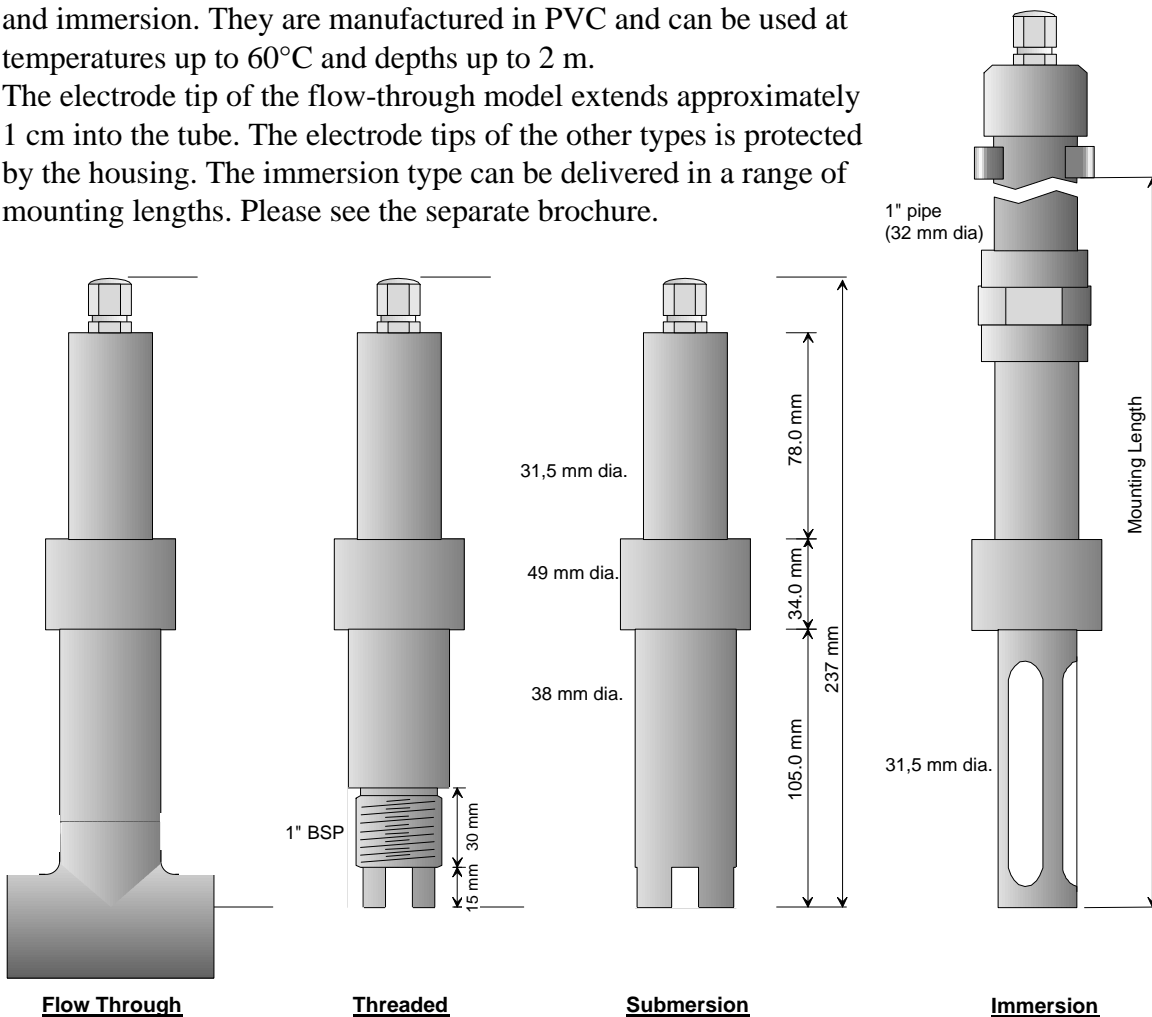
Two main types of probe are available, light-duty probes for lighter applications, and heavy-duty probes for applications where the process destroys normal pH electrodes in a short space of time. OxyGuard also manufacture a special pH probe for use on ultra-pure water, i.e. boiler feed water, condensate and district heating water.

This brochure lists the various types of probe available "off the shelf", but probes can on request be manufactured in other materials or to meet special needs.

Light-Duty pH Probes

Four designs are found - flow-through, thread mount, submersion and immersion. They are manufactured in PVC and can be used at temperatures up to 60°C and depths up to 2 m.

The electrode tip of the flow-through model extends approximately 1 cm into the tube. The electrode tips of the other types is protected by the housing. The immersion type can be delivered in a range of mounting lengths. Please see the separate brochure.



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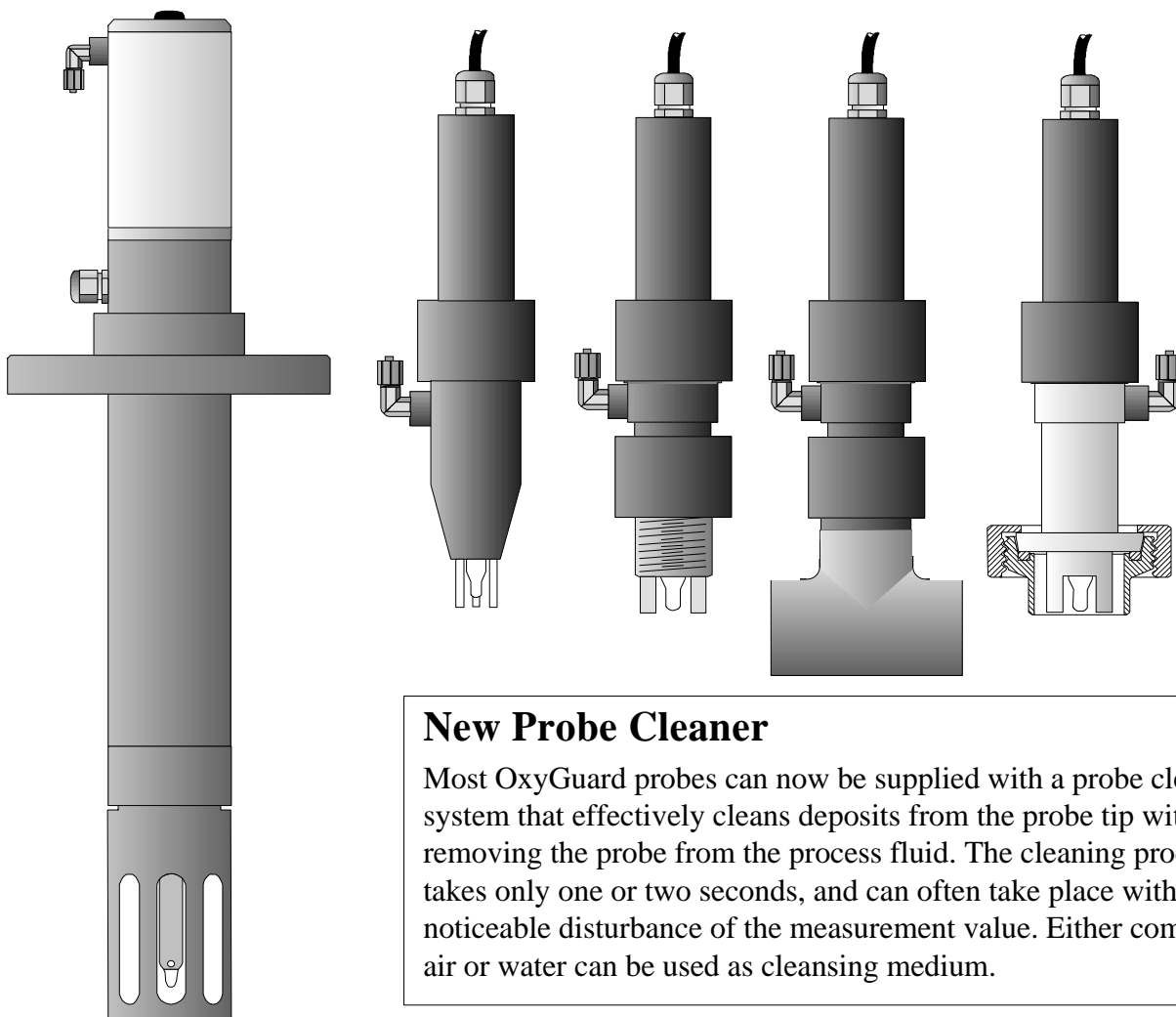
Heavy Duty pH Probes

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All OxyGuard heavy-duty pH probes utilize the tried-and-tested principle of feeding a small, continuous supply of liquid electrolyte to the reference electrode part of the system. This ensures an outflow of electrolyte at all times through the small ceramic inserts by means of which the electrode maintains electrical contact with the process fluid. The inserts thus remain open, and the electrical connection is preserved. Formerly separate reference and measurement electrodes were common, but the OxyGuard probes use a special design of combination electrode that can be fed with electrolyte, either from a container at the top of the probe or from a separate container. The design permits the pressurization of the container and reference electrolyte chamber with compressed air.

Immersion probes can be delivered with flange, screw-on pipe clamp or clip-on pipe clamp fixtures, and with immersion lengths up to 2000 mm. This type of probe can also be fitted with a temperature sensor. Submersion, threaded and flow-through probes can be specially made to suit the actual application for little or no extra cost. These probes are delivered with a separate electrolyte container that can be pressurized. Heavy-duty probes can be made from PVC (max. 60°C), PP (max. 100°C) or PVDF (max. 130°C, on request). A version is available for fitting to an ND40 dairy flange. Please see the separate brochures.

Immersion, Submersion, Threaded, Flow Through and Hygienic Probes



New Probe Cleaner

Most OxyGuard probes can now be supplied with a probe cleaning system that effectively cleans deposits from the probe tip without removing the probe from the process fluid. The cleaning process takes only one or two seconds, and can often take place without noticeable disturbance of the measurement value. Either compressed air or water can be used as cleansing medium.