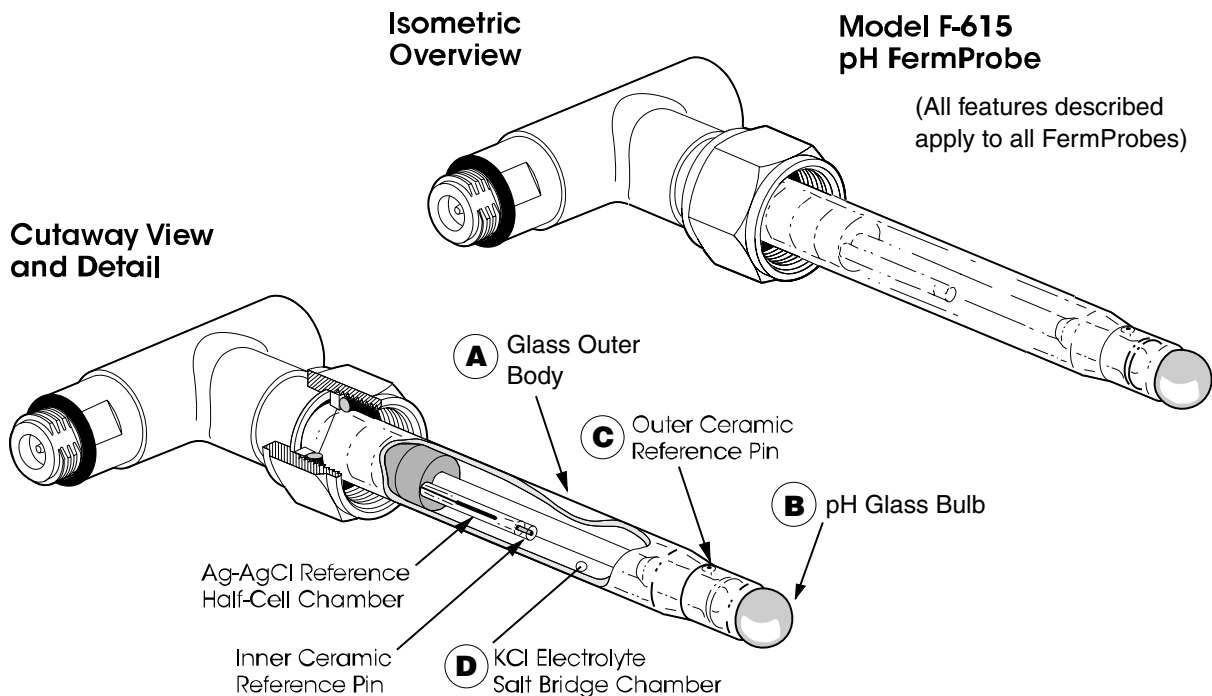


FermProbe® Wetted Materials



**Model F-615
pH FermProbe**

(All features described
apply to all FermProbes)

The FermProbe Double Junction Reference System

All FermProbes have two built-in electrolyte chambers that act to protect and isolate the sensitive inner AgCl reference half-cell. This "double junction", dual-chamber design effectively prevents the most common failure modes of pH electrodes in biopharmaceutical applications.

Only the inner, smaller chamber contains silver ions in the electrolyte. The larger chamber is free of silver ions. This design prevents silver ions from coming into contact with proteins or sulfide ions in the sample media. Reactions between proteins or sulfide ions and the silver ions will cause the formation of substances that will clog the outer ceramic reference pin junction.

All pH and Redox FermProbes have this double junction reference system as a standard feature to insure maximum service life over the widest range of operating conditions.

Wetted Material List for all FermProbes

- (A) Glass Outer Body: Potash soda lead glass
- (B) Glass Bulb: Silica glass made with small percentages of alkali elements. The exact formulation is proprietary and confidential.
- (C) Porous Ceramic Liquid Junction: Silica plus complex mineral compounds fired at high temperature to form an inert, porous ceramic matrix. The exact formulation is considered proprietary and confidential.
- (D) Internal Electrolyte Gel:
 1. Potassium Chloride, 3.8 M
 2. Cellulose thickening agent, USP Grade
- (E) All wetted materials are compliant with applicable FDA regulations.