



## Permalyte™ 12mm ProcessProbe®

### 1.1 FEATURES AND APPLICATIONS

This series of ProcessProbe® is a 12 mm diameter electrode supplied in the European standard Pg13.5 configuration. The 12mm x 120mm size fits a wide array of pre-existing housings found in both industrial & waste treatment applications. These include the paper and plastics industries, petrochemical, power plants, municipal water treatment, pool control, agricultural controls, cooling tower monitors, etc.

High temperature, high pressure glass body configuration. These clean and economical sensors are designed to fit into housings used by many pH electrode & instrument manufacturers. This standard design allows for great flexibility in stocking, as only one sensor can now serve as a replacement for numerous sensor installations. The glass body designs incorporate the Broadley-James Permalyte™ Reference system, a reliable method of preventing fouling of the reference by contaminants in the process stream.

A sealed reference design means no maintenance of electrolyte. This unique electrolyte allows the electrode to operate effectively at pressures up to 6 bar without problem, and in some cases it can operate up to 10 bar! This design is also temperature resistant, with an operating range of -5 to 110°C.

Our special HT-3 glass bulb is a full range high temperature formula. This glass formula allows for minimum Sodium Ion interference while retaining fast response.

Available in either pH or ORP(Oxidation-Reduction Potential). The ORP electrode utilizes a large surface area 99.99% pure Platinum band for a fast, stable response. Just like our other series of pH electrodes & sensors these are designed to work with most brands of existing pH instruments and cables.

▼  
DOUBLE  
JUNCTION  
REFERENCE

▼  
EURO-STANDARD  
PG13.5 CAP  
STYLE

▼  
FAST RESPONSE  
FULL RANGE  
pH GLASS FORMULA

▼  
IMPROVED  
REFERENCE  
JUNCTION

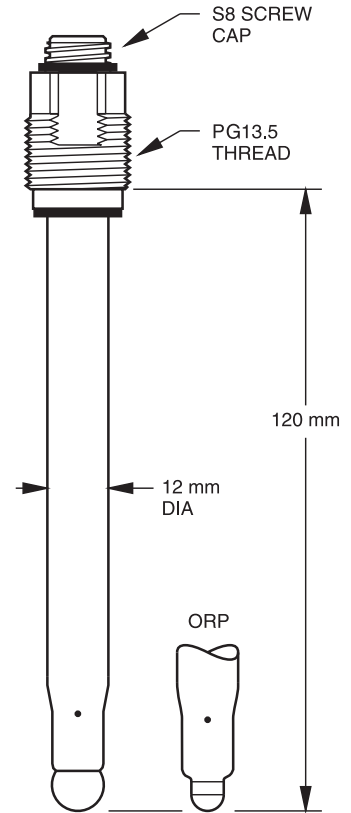
▼  
100% QUALITY  
ASSURANCE  
& QUALITY  
CONTROL

▼  
REDUCED  
DOWN-TIME  
& MAINTENANCE

## Permalyte™ ProcessProbe® pH Sensors SP300 SERIES

Measurement Principal:	Potentiometric
pH Bulb:	HT-3 Formula, Low Sodium Ion Error
Reference:	Silver / Silver Chloride (Ag/AgCl)
Reference Junction:	Open pore design resists fouling
Electrolyte:	Potassium Chloride (KCl) Solid Polymer
Isopotential Point:	pH 7
Output Signal per pH Unit @ 250 C:	Approximately 59 millivolts
*Assymetry Potential:	0mV ± 20mV
Temperature Range:	Operation: -5 to 110° C
*Stability:	Drift of less than 0.002 pH over 24 hours at constant temperature & pressure.
*Response Time at: 25 C 37 C	98% of readout in less than 15 seconds less than 10 seconds
Max Pressure:	10 bar (atm.), 150 psig
Connector:	Standard Pg13.5 threaded cap with - S8 cable attachment. O-ring sealed.
Wetted Materials:	Glass, Permalyte™ Solid Polymer Electrolyte

\*Under Laboratory Conditions



### STANDARD PARTS

#### SP300 Series Permalyte™ Sensors Glass Body

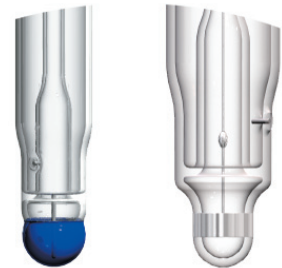
Part Number	Length	Type
SP300-2330-DH	120mm	pH
SP300-2PB0-DH	120mm	ORP

### Water Quality Problems?



### Get Back In Control

**Broadley James** ProcessProbe®  
pH & Dissolved Oxygen Sensors



Housings, cables, accessories are also available. Please contact us for additional information at the address and phone numbers below.

### Broadley-James Corporation

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