General Specifications

PC Flow Block For Small Sample Volumes
pH/Conductivity Measurements

GS 1223466-89-10

Many botech and pharmaceutical applications for determining the purity and quality of the finished product, require the measurement of pH and conductivity in very low volume samples. This is necessary due to the high cost of the process material which cannot be returned to the process after measurement and must be sent to drain.

The PC Flow Block assemblies were specifically designed to achieve accurate pH and conductivity measurements in such low volume applications. They are constructed from FDA grade Polypropylene material and can be fitted with a variety of 316 SS Tri-Clamp connections. The Flow Block also serves as a part of the conductivity sensor assembly. This all inclusive design provides an exceptionally small process footprint of only 3.0 inches and an entrained volume of 9 ml or less, depending on the process connections selected.

The PC Flow Block is equipped with dual PT1000 RTD’s for temperature compensation. One is used for the conductivity measurement and the second can be used for the pH or just as an independent temperature input.

Yokogawa’s basic design for the PC Flow Block, accommodates Hamilton 12mm style pharmaceutical electrodes.

APPLICATIONS

• Chromatograph skids
• Biotechnology and pharmaceutical applications
• Any application where measurement of pH and conductivity in a low sample volume is required.

FEATURES

• Rugged 316 SS Tri-Clamp fittings with a 20 RA or better finish
• Integral junction box for installation and maintenance ease
• A Polypropylene Flow Block which is FDA USP VI approved
• Equipped with O-Rings which are FDA USP VI approved
• Titanium conductivity cells with a 0-200,000 mS measuring range (compatible with SC202 & SC450 Analyzers only)
PC FLOW BLOCK DIMENSIONS

PC FLOW BLOCK SPECIFICATIONS

Wetted materials:
- Flow Block: Polypropylene
- O-Rings: EDPM
- Conductivity Cells: Titanium
- Connectors: 316 SS

Certification:
- FDA Approved, USP Class VI
- FDA Compliant

Operation:
- Cell Constant: 0.55 cm nominal
- Range: 0-200,00 µS
- Temperature Compensation: Pt. 1000 (RTD)
- Maximum Temperature: 100°C continuous; 130°C intermittent
- Maximum Pressure: 6 Bar continuous; 7 intermittent

pH:
- Range: 0-14pH
- Temperature Compensation: Pt. 1000 (integral to Flow Block)
- Maximum Temperature: 0-130°C

Model M1234VG-A PC Flow Block

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<thead>
<tr>
<th>Material</th>
<th>Electrode</th>
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<tbody>
<tr>
<td>Polypropylene</td>
<td>Hamilton</td>
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* pH electrode must be ordered separately; other fitting sizes available