“RZ” Sanitary Positive Displacement Flowmeter

Introduction

The RZ series positive displacement flowmeter is the solution to applications requiring precision flow measurement from a sanitary design. With an accuracy of ± 0.15% over the operational rate, the RZ is an excellent choice for beverage syrups, clear juices and other products which flow through process lines that are cleaned in place. Designed for use in food processing applications, the RZ is capable of measuring a wide range of products from water to viscous corn syrups. The RZ is comprised of a single moving part design, measurement is based on the principle of a chamber and rotating piston which create several internal chambers which are alternately filling and emptying as the piston moves in a circular path within the chamber. The electronic sensing of the piston's position and movement provides the information necessary to measure the exact volume of liquid which has passed through the flowmeter. Available in 2” and 3” sizes to fit a wide range of applications, and flow ranges, the RZ can provide the performance necessary to satisfy demanding food process applications.

Features

- ± 0.15% accuracy over flow range
- One moving part eliminates regular maintenance needs

Applications

- Water
- Corn Syrup
- High Fructose Corn Syrup
- Molasses
- Vegetable/Edible Oils
- Clear Juices

Complete specifications and ordering information are available on the reverse. For more information please visit our Web Site at www.anderson-negele.com, or contact your local Authorized Anderson-Negele Distributor.
Specifications

ENVIRONMENTAL SPECIFICATIONS
Power / Signal Voltage: 12-24 VDC, 0.8 Watts
Signal Output: Unscaled, Pulsed Output - 11-22 VDC
Max. Output Frequency: No greater than 61Hz at maximum flow rate

OPERATIONAL SPECIFICATIONS
Flow Range on Water: 20 - 120 GPM for RZ2A
20-315 GPM for RZ3A
Accuracy: +0.15% Over Entire Flow Range
Repeatability: +0.05%
Maximum Product Temp: 200°F / 93°C
Maximum Inlet Pressure: 85 psi/5.9 bar for RZ2A
65 psi/4.5 bar for RZ3A
Maximum Allowable Pressure Drop: 45 psi/ 3.1 bar

MATERIAL / CONSTRUCTION
Housing: 316L Stainless Steel
Piston: CIP-O-Plast (Food Grade Synthetic Polymer)
Wetted Parts: 316L Stainless Steel & CIP-O-Plast
Process Connection: 2" Tri-Clamp for RZ2A
3" Tri-Clamp for RZ3A

METER FLOW RANGES

<table>
<thead>
<tr>
<th>Model</th>
<th>Meter Size</th>
<th>Sanitary Clamp Connection</th>
<th>Water (1 cps)</th>
<th>Fluid Milk (10 cps)</th>
<th>Light Oils (100 cps)</th>
<th>HFCS-55 (450 cps)</th>
<th>Corn Syrup (5000 cps)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RZ-2A</td>
<td>2”</td>
<td>2”</td>
<td>20-120</td>
<td>10-110</td>
<td>5-100</td>
<td>5-90</td>
<td>2-25</td>
</tr>
<tr>
<td>RZ-3A</td>
<td>3”</td>
<td>3”</td>
<td>20-315</td>
<td>20-300</td>
<td>15-280</td>
<td>10-200</td>
<td>5-70</td>
</tr>
</tbody>
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Order Information

SIZE

2 2” Rotary Piston Flowmeter
3 3" Rotary Piston Flowmeter

OUTPUT

01 Transducer - 24 VDC
02 Transducer - Duty-Cycle Pulse Width - 24 VDC

CABLE

000 No cable
025 25’ cable
050 50’ cable
075 75’ cable
100 100’ cable

* Use for cable lengths over 100’

REPLACEMENT PARTS

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>RZ2-2</td>
<td>2&quot; CIP-O-Plast Piston</td>
</tr>
<tr>
<td>RZ3-2</td>
<td>3&quot; CIP-O-Plast Piston</td>
</tr>
<tr>
<td>RZ32-92-24V</td>
<td>2&quot; Transducer - 24VDC</td>
</tr>
<tr>
<td>RZ32-92-MPW-24V</td>
<td>2&quot; Transducer - Duty-Cycle Pulse Width 24VDC</td>
</tr>
<tr>
<td>RZ33-92-24V</td>
<td>3&quot; Transducer - 24VDC</td>
</tr>
<tr>
<td>RZ33-92-MPW-24V</td>
<td>3&quot; Transducer - Duty-Cycle Pulse Width 24VDC</td>
</tr>
<tr>
<td>0-265</td>
<td>2&quot; Face Plate O-Ring (Model 85 11 and O series)</td>
</tr>
<tr>
<td>RZ32-5</td>
<td>2&quot; Face Plate O-Ring (85 10 or before 1986)</td>
</tr>
<tr>
<td>RZ33-5</td>
<td>3&quot; Face Plate O-Ring (95 11 and O-Series)</td>
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