

# "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  $\pm 0.15\%$  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 pistons 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.

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

## Features

- $\pm 0.15\%$  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



**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

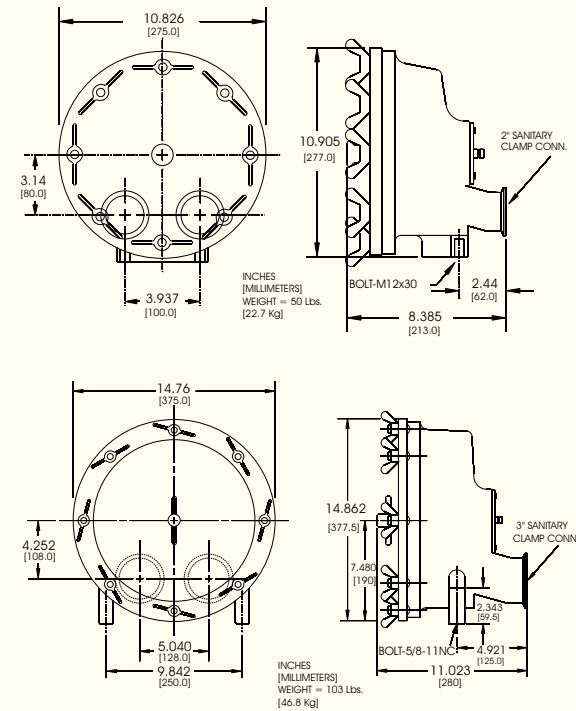
**OPERATIONAL SPECIFICATIONS**

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

**DIMENSIONS**



**METER FLOW RANGES**

Model	Meter Size	Sanitary Clamp Connection	Typical Flow Ranges in GPM				
			Water (1 cps)	Fluid Milk (10 cps)	Light Oils (100 cps)	HFCS-55 (450 cps)	Corn Syrup (5000 cps)
RZ-2A	2"	2"	20-120	10-110	5-100	5-90	2-25
RZ-3A	3"	3"	20-315	20-300	15-280	10-200	5-70

**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**

Part Number	Description
RZ32-2	2" CIP-O-Plast Piston
RZ33-2	3" CIP-O-Plast Piston
RZ32-92-24V	2" Transducer - 24VDC
RZ32-92-MPW-24V	2" Transducer - Duty-Cycle Pulse Width 24VDC
RZ33-92-24V	3" Transducer - 24VDC
RZ33-92-MPW-24V	3" Transducer - Duty-Cycle Pulse Width 24VDC
0-265	2" Face Plate O-Ring (Model 85 11 and O series)
RZ32-5	2" Face Plate O-Ring (85 10 or before 1986)
RZ33-5	3" Face Plate O-Ring (95 11 and O-Series)