

# MODEL RC-100 Refillable Ion Exchange Resin Column

Gain Efficient and Responsive Cation Conductivity Results



# FILLABLE ION EXCHANGE COLUMN

# **Features**

- Refillable, clear plastic column makes resin replacement easy and economical
- Provides optimum fluid velocity with increased resin efficiency
- Designed especially for flow rates common to water chemistry analyzers
- Minimizes lag time required to detect chemical upset
- No PVC used; wetted materials will not leach chlorides or plasticizers
- End fittings are <sup>1</sup>/<sub>8</sub>" quick disconnects

# Description

The Sentry Model RC-100 minimizes channeling and achieves a higher resin efficiency than competitive columns with inefficient column diameters.

Sentry's refillable ion exchange resin column is especially designed to minimize the column's dead volume, assuring highly representative sampling. After a chemical upset, Sentry's column can produce a representative sample within 4 minutes (at a flow rate of 200 cc/min) while others can take as long as 16 minutes.

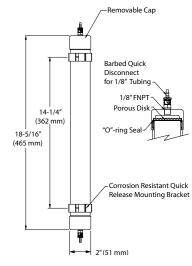
In addition to reducing dead volume, the Sentry refillable ion exchange column's design also produces better flow distribution. Poor flow distribution and velocity can skew cation conductivity results by up to 0.1 uS/cm.

### 70 60 Time (minutes) 50 40 30 20 10 0 50 75 100 125 150 175 200 Flow Rate (ml/min) Column A Column B ——Sentry Model RC-100

### Time Response vs. Flow rate

See bulletin 6.1.2 for additional sizes.

# **RESIN COLUMN TECHNICAL DATA**



## **SPECIFICATIONS**

Operating Temperature	180°F (82°C) maximum
Operating Pressure	100 psig @ 100°F (7 barg @ 38°C) 60 psig @ 180°F (4 barg @ 82°C)*
Cation Capacity	1000 grains as CaCO <sub>3</sub>
Resin Volume	0.020 ft <sup>3</sup> (565 cc)
Flow	200 cc/min recommended; 500 cc/min maximum
Resin	Cation resin with color-indicating dye
Shipping Weight	column + resin: 2.4 lbs. (1.1 kg)
Wetted Materials	Polycarbonate, Polypropylene, Acetal

\*Design safety factor is 2-1/2 times this rate.

# **PART NUMBERS**

Model RC-100 Resin Column with initial charge of resin, mounting brackets and two sets of quick disconnects	7-00816B
Spare Part: Cation Resin Refill Bag	2-03972A
Corrosion Proof, Quick Disconnect Mounting Bracket	4-04869A
Porous Disk	2-03892A
O-Ring Seal	4-04820C
Acetal Barbed Quick Disconnects (includes two each male and female coupling) Stainless Steel fittings available on request	6-02503B

### AWARNING

It is solely the responsibility of the end-user, through its own analysis and testing, to select products and materials suitable for their specific application requirements, ensure they are properly installed, safely applied, properly maintained, and limit their use to their intended purpose. Improper selection, installation, or use may result in personal injury or property damage.



# SENTRY EQUIPMENT CORP

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