# Backflow Prevention Devices I-7

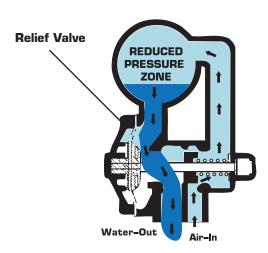
# Reduced Pressure Zone Backflow Preventers

# Watts "High Capacity Relief" Series 909 (RPZ) Backflow Preventer

## "Series 909 protects against back-siphonage and backpressure with both checks fouled."

The principle is simple, but it's used to solve a complex safety problem. The Series 909 is the only backflow preventer available that provides protection against simultaneous back-siphonage and back pressure backflows.

A patented built-in vacuum relief is designed around the air-in/water-out principle. The valve has two channels: one for air, one for water. When the relief valve opens, one channel admits air to the top of the reduced pressure zone. The other channel then drains to atmosphere. Therefore, if both check valves foul and simultaneous negative and positive backpressures develop, the relief valve will stop potential backflow by providing "high capacity" relief.



### **Standards**

Tested and certified under the following standards for reduced pressure principle backflow preventers: ASSE No. 1013, AWWA C511-92, CSA B64.5, FCCC-HR of USC Manual 8th Edition Section 10, U.L. Classified File No. EX3185 (sizes 2½" thru 10"). Listed by IAPMO PS-31-(UPC), SBCCI (Standard Plumbing Code). Check local codes for approval of vertical installations.

**IMPORTANT NOTE:** Inquire with governing authorities for local installation requirements.

Refer to MBS, Section T for Backflow Installation and Testing Services

# Series 909 RPZ 3/4" - 2"



No. 909QT-S

Use 3/4" - 2" 909s for backflow protection in both cross-connection control and containment at the service entrance. The 909 "high capacity" relief incorporates the "air-in/water-out" principle and substantially improves the relief valves discharge performance. The emergency condition of combined back-siphonage and back-pressure with both checks fouled can defeat the effectiveness of a standard RPZ backflow preventer. This device may be installed in a verticle position in accordance with ASSE 1013 standard.

## Series 909 RPZ 21/2" - 10"



909 Shown with Optional OS&Y RW Valves

2½" -10" sizes provide backflow protection for both cross-connection control and containment with their unique patented design incorporating the "air-in/water-out" principle. Normally furnished with non-rising stem (NRS) resilient wedge gate valves.

**NOTE:** RPZ compact assembly is now available in 4" and 6" sizes. Contact your nearest Team EJP Sales office.

# Backflow Prevention Devices I-8

# Reduced Pressure Zone Backflow Preventers

# Watts Standard Series 009 RPZ Backflow Preventer



### 009M2QT

Designed for the protection of potable water supplies in accordance with national plumbing code and water authority requirements. Used for high hazard cross-connections in plumbing systems or for containment at the service line entrance.

Two in-line, independent check valves with an intermediate relief valve, NPT body connections and ball type test cocks. Series 009QT has quarter-turn, full port, resilient seated bronze ball valve shut-offs (½"-2"). ¾" and 1" shut-offs have tee handles. Sizes ½" and 3" have NRS-RW gate valve shut-offs.

# MasterSeries 860 Reduced Pressure Assembly



For use in all health hazard (toxic) connections including: irrigation systems, hospitals, morgues, medical/dental facilities, industrial/chemical plants and boiler feeds.

| BACKFLOW<br>SIZE | PRODUCT NUMBERS |         |         |         |           |             |         |
|------------------|-----------------|---------|---------|---------|-----------|-------------|---------|
|                  | 009QT           | 009QT-S | 909QT   | 909QT-S | 909NRS RW | 909 OS&Y RW | 860RP   |
| 1/2"             | 51235           | 51237   | NA      | NA      | NA        | NA          | 51236   |
| 3/4"             | 51252 3         | 51252 4 | 51252   | 51252 2 | NA        | NA          | 51241 1 |
| 1"               | 51257           | 51257 1 | 51256   | 51256 2 | NA        | NA          | 51253 2 |
| 11/4"            | 51263           | 51263 1 | 51262   | 51262 2 | NA        | NA          | 51285   |
| 11/2"            | 51268           | 51268 1 | 51267   | 51267 2 | 51267 1   | NA          | 51289 1 |
| 2"               | 51292 3         | 51292 4 | 51292 1 | 51292 2 | 51292     | NA          | NA      |
| 21/2"            | 51305 4         | 51305 5 | 51304   | 51304 1 | 51305     | 51305 1     | NA      |
| 3"               | 51318 4         | 51318 5 | 51321   | 51321 1 | 51318     | 51318 1     | NA      |
| 4"               | NA              | NA      | NA      | NA      | 51325     | 51325 1     | NA      |
| 6"               | NA              | NA      | NA      | NA      | 51330     | 51330 1     | NA      |
| 8"               | NA              | NA      | NA      | NA      | 51335     | 51335 1     | NA      |
| 10"              | NA              | NA      | NA      | NA      | 51340     | 51340 1     | NA      |

### **NOTES:**

- UL/FM approved backflow preventers must include UL/FM approved OS&Y valves.
- See page I-5 for information on strainers supplied with 909 Backflow Preventers.
- See back of Table of Contents for abbreviations used in this section.

Refer to MBS, Section T for Backflow Installation and Testing Services