

Series 909

909-EN-202012

Reduced Pressure Zone Device

Size: DN65-DN250

Series 909 Reduced Pressure Zone Assemblies are designed to provide cross-connection control protection of the potable water supply in accordance with national plumbing codes. This series can be utilized in a variety of installations, including health hazard cross connections in plumbing systems or for containment at the service line entrance. With its exclusive relief valve design incorporating the "air-in/water-out" principle, it provides substantially improved relief valve discharge performance during the emergency conditions of combined backsiphonage and backpressure with both checks fouled.

Features

- Replaceable seats
- No special tools required for servicing
- Captured spring check assemblies
- Fused epoxy coated & lined checks
- Industrial strength sensing hose
- Field reversible relief valve
- Air-in/water-out relief valve design provides maximum capacity during emergency conditions

Pressure - Temperature

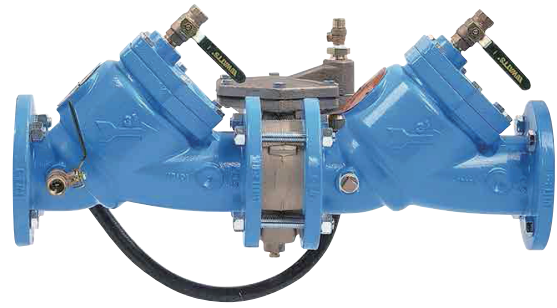
- Temperature Range: 0.5°C-43°C continuous, 60°C intermittent
- Maximum Working Pressure: 1206 kPa (12.06 bar)

Material

Component	Material
Body/Cover	FDA Epoxy Coated Cast Iron
Test Cock	Brass
Checks	Polymer
Check Seats (Replaceable)	Silicone Rubber Disc
Seats (Replaceable)	Stainless Steel
Trim	Stainless Steel

Installation Dimensions

SIZE	Dimensions (approx.)				
DN	D	L	U	R	T
mm	mm	mm	mm	mm	mm
65	133	663	279	102	230
80	133	663	279	127	230
100	152	940	356	152	365
150	152	1130	406	279	365
200	248	1403	533	286	489
250	248	1711	533	318	533



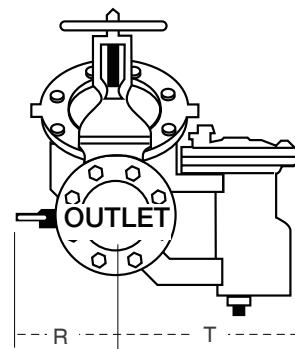
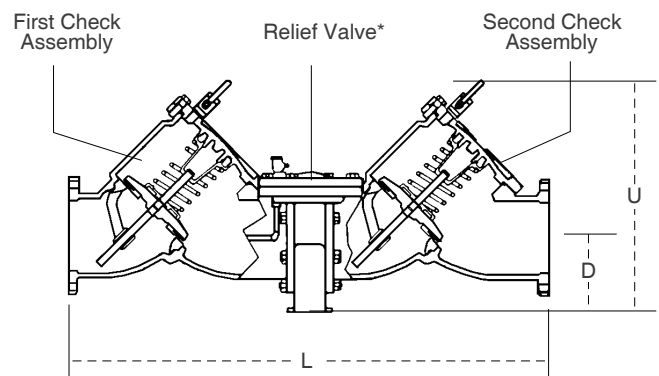
Specification

- Design Standard: AS/NZS 2845.1
- Connection Standard: AS 2129 Table E & Table C as option
- Working Medium: Non corrosive liquids

Approval



WMKA1355



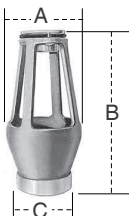
NOTE:

* Relief valve section is reversible, therefore, can be on either side and is furnished standardly as shown.

Air Gap Dimensions

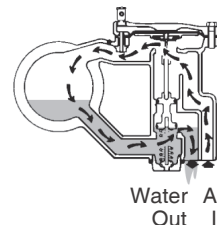
When installing a drain line on Series 909 backflow preventers that are installed horizontally, use 909 AG series air gaps.

Dimensions		
A mm	B mm	C mm
111	171	51
162	244	76
187	286	102



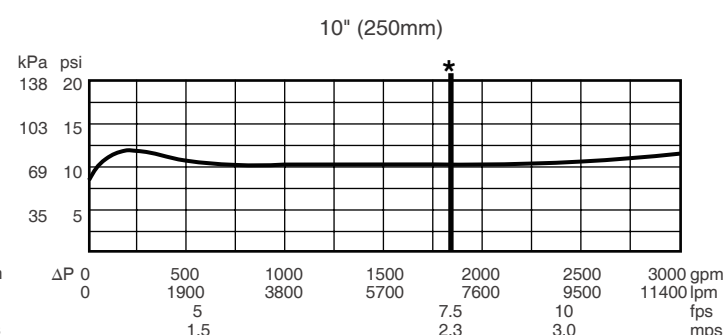
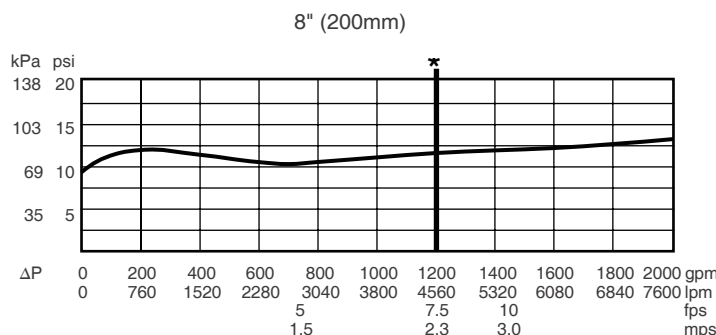
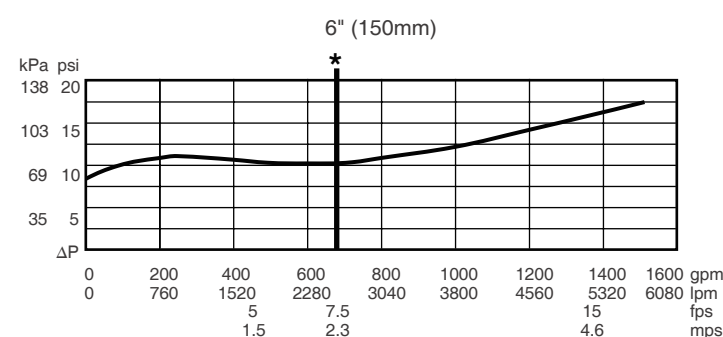
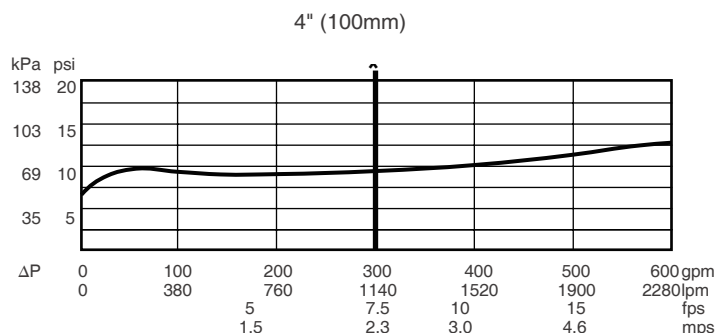
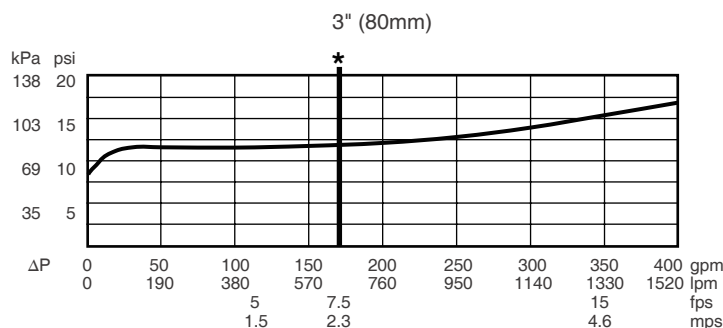
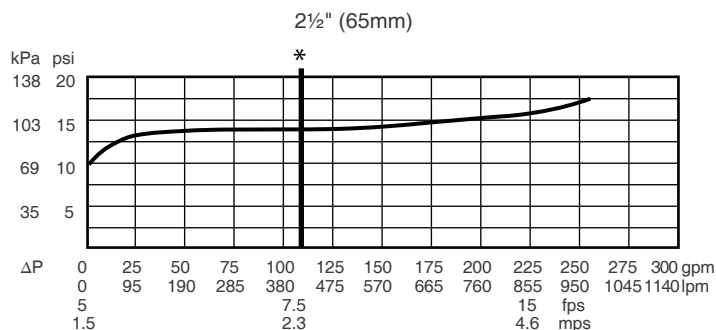
Relief Valve Operation

The unique relief valve construction incorporates two channels: one for air, one for water. When the relief valve opens, as in the accompanying air-in/water-out diagram, the right hand channel admits air to the top of the reduced pressure zone, relieving the zone vacuum. The channel on the left then drains the zone to atmosphere. Therefore, if both check valves foul, and simultaneous negative supply and positive backpressure develops, the relief valve uses the air-in/water-out principle to stop potential backflow.



Characteristic Curves

* Typical maximum flow rate (2.3 m/s)



Note: US gpm