

RPZ RELIEF VALVE DISCHARGE

HOW TO TROUBLESHOOT



There are multiple scenarios where the relief valve may emit water naturally as part of the function of the RPZ. This may be caused by:

Decrease of inlet pressure

As the inlet pressure drops, a backflow condition approaches, so the relief valve will discharge trying to re-establish a differential in order to make backflow not occur.

Increase of downstream pressure

As the downstream pressure rises, it pushes against the check valve #2, causing the pressure in the zone to rise, and that can give relief valve discharge.

In both of these cases, the discharge can range from a drip to full discharge. The RPZ is designed to do this.

What if water continually comes out of the relief valve?

This can be troubleshooted using the steps below – no matter what size or brand the RPZ is!

Step 1: Shut off the water

It's important to notify those affected that the water service will be temporarily shut off.

Step 2: Shut off the outlet to the backflow preventor

If the relief valve discharge stops or slows considerably, it means it's under a back pressure condition and check valve #2 is leaking.

If the relief valve discharge doesn't stop, we need to induce water flow to the assembly.

Step 3: Open up test cock #3

If the relief valve discharge stops or slows considerably, check valve #1 is leaking.

If the relief valve discharge doesn't stop, there is an issue with the relief valve, most likely caused by debris.

Step 3: Shut off and open up check valve #2

Repair check valve and clean or replace the rubber

Step 4: Shut off and open up check valve #1

Repair check valve and clean or replace the rubber

Step 4: Shut off and open up relief valve

Repair relief valve and clean or replace the rubber

please note: service, repair and testing of backflow devices must only be carried out by a qualified & licenced backflow plumber