

MasterSeries® Type II Bypass

Detector Backflow Preventers

What is a Detector Assembly and When Should It Be Used?

Detector assemblies are used on fire protection systems to prevent backflow and detect system leaks and or unauthorized water use which can compromise fire protection systems and be a revenue loss to the water purveyor.

Typically fire service lines are unmetered; a metered bypass assembly informs a water purveyor whether water service is only being used for its intended purpose of providing fire protection. The detector assembly meter will show movement created by downstream leaks or unauthorized usage.

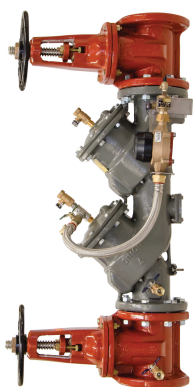
What is a Type II Bypass?

Type II detector assemblies were developed to respond to the fire protection industries' requests for lower overall pressure loss in a more compact, economical design.

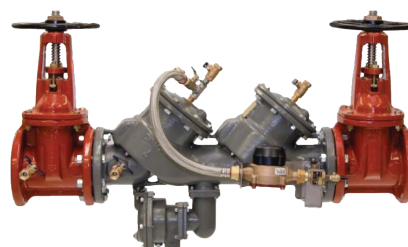
Type II detector assemblies provide the same level of protection as the Type I assemblies but with fewer functional components.

Type II bypasses are available for both Double Check Detector Backflow Assemblies and Reduced Pressure Detector Backflow Assemblies and include a water meter and single check valve on the bypass.

FEBCO Valves with Type II Bypasses



LF856 DCDA-II



LF866 RPDA-II



LF876V DCDA-II



LF886V RPDA-II

How Does a Type II Bypass Work?

The Type II bypass is configured to utilize the first check of the mainline assembly. In the case of the RPDA-II, the bypass also utilizes the reduced pressure zone and relief valve of the mainline assembly. It's important to note that the bypass on the Type II assemblies only bypasses the second check of the mainline assembly, so only a single check is required on the bypass. The Type II bypass features a water meter and a testable single check valve. Bypass piping for Type II assemblies include two shutoff valves and two test cocks.

- The static differential pressure across the bypass single check valve must be at least 1.0 psid.
- The bypass single check valve is marked with the model and serial number for recording on test forms and/or in backflow prevention software.

Are Type II Detector Assemblies Approved?

The Type II bypass assemblies are approved by The Foundation for Cross-Connection Control and Hydraulic Research at The University of Southern California (FCCCHR-USC) and all relevant agencies.



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Certified to NSF/ANSI 61-G

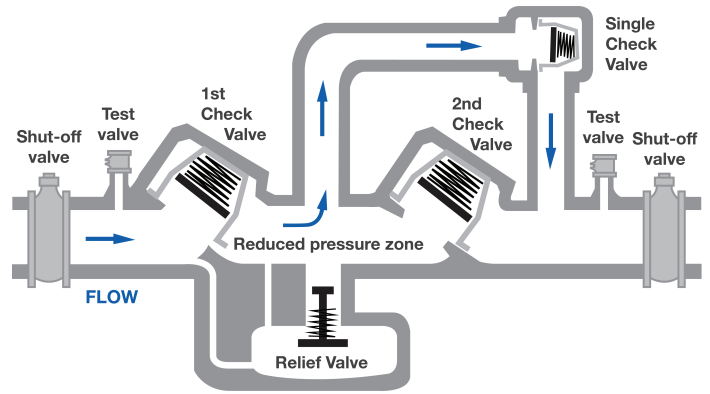


*Assembly configured with UL/FM Approved OS&Y Gate Valves. Less gate valve assemblies are not UL/FM approved configurations.



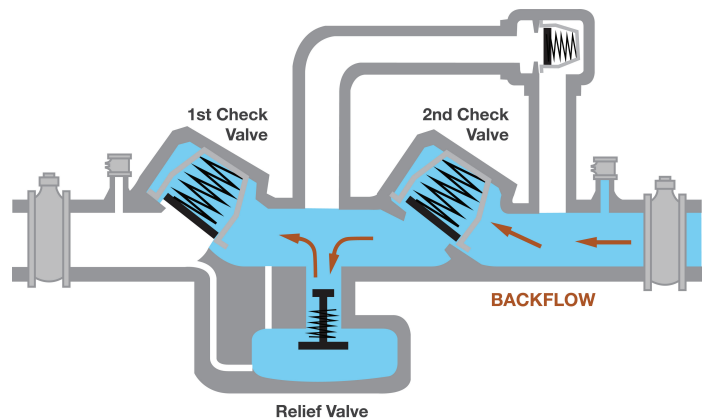
A WATTS Brand

Flow Through the Type II Bypass



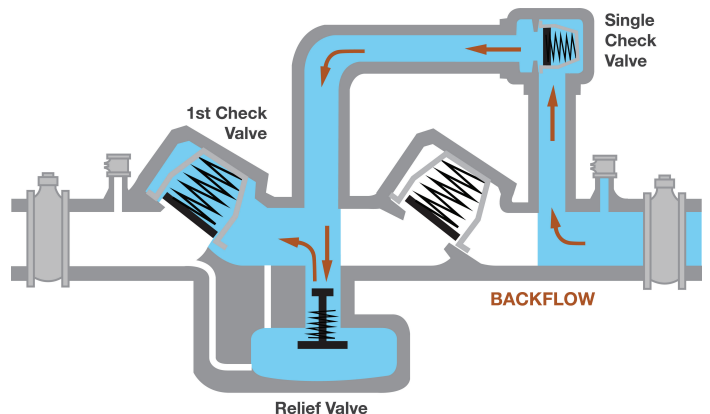
Type II Bypass – 3 Levels of Protection

Main Valve Protection



Backflow first encounters the main body second check valve, then the relief valve, and finally the first check valve. This provides three backflow control mechanisms.

Bypass Protection



Here, backflow first encounters the bypass single check valve, then the relief valve, and lastly the first check valve. This provides three backflow control mechanisms.