

# FlowShield™ RP

## Testable reduced pressure principle backflow preventer



### 5751 Series

Submittal Data 02180-25 NA — Issue Date 10/2025

#### Application

The 5751 FlowShield RP is a testable reduced pressure principle backflow preventer consisting of two independently acting check valves and a differential pressure relief valve. This device protects potable water supply systems from contamination due to backflow conditions caused by back siphonage or backpressure. The 5751 series can be used for both low and high hazard pollution protection applications. During backflow events, the valve assembly automatically discharges contaminated water through the relief valve located at the bottom of the body. The valve assembly is certified and listed by ASSE to Standard 1013. By CSA Group to CSA Standard B64.4. It meets the performance requirements of AWWA C511 and complies with American and Canadian plumbing codes. The device is constructed of low lead/ lead-free materials and meets NSF/ANSI/CAN 61 and NSF/ANSI/ CAN 372 requirements, certified and listed by ICC-ES.

#### Typical Specification

Furnish and install on the plans and described herein, a Caleffi 5751 FlowShield RP testable reduced pressure principle backflow preventer as provided by Caleffi. FlowShield RP backflow preventer shall protect potable water supply systems from contamination due to backflow conditions caused by backsiphonage or back pressure and shall be suitable for both low and high hazard pollution protection applications. Backflow preventer shall consist of two independently acting check valves and a differential pressure relief valve and shall automatically discharge contaminated water through the relief valve during backflow events. Device shall feature epoxy coated cast iron body and cover constructed to ASTM A536, low lead/lead-free bronze check valves constructed to CB499K, stainless steel obturator and springs constructed to AISI 304 and 302, and peroxide-cured EPDM diaphragms and seals. Backflow preventer shall operate at maximum working pressure of 175 psi (12 bar) and maximum working temperature of 150°F (65°C). Connections shall be 2", 2-1/2", 3", or 4" ANSI 150 flanged with 1/2" NPT test cocks. Device shall meet ASSE 1013, CSA B64.4, NSF/ANSI/CAN 61, NSF/ANSI/CAN 372 requirements and shall be certified and listed by ICC-ES and compliant with AWWA C511 standards. Each testable reduced pressure principle backflow preventer shall be a Caleffi model 5751 FlowShield RP or approved equal. (See product instructions for specific installation information.)

#### Certifications



NSF/ANSI/CAN 61  
NSF/ANSI/CAN 372

1. ASSE 1013, Reduced Pressure Principle Backflow Prevention Assemblies. Listed and certified by ASSE.
2. CSA B64.4, Backflow Prevention Devices-Reduced Pressure Principle (RP). Listed and certified by CSA Group.
3. AWWA C511, Reduced Pressure Principle Backflow Prevention Assembly. Listed and certified by ICC-ES, PMG File 1433.
4. NSF/ANSI/CAN 61, Drinking Water System Components for use in potable water systems. Listed and certified by ICC-ES.
5. NSF/ANSI /CAN 372, US and Canadian Low-Lead and Lead-Free materials contents laws for drinking water system components. Listed and certified by ICC-ES.

#### Technical specifications

##### Materials

Body: EN-GJS-400 cast iron with epoxy coating  
Cover: EN-GJS-400 cast iron with epoxy coating  
Check valves: PSU-POM-CW724R  
Check valve springs: AISI 302 stainless steel  
Diaphragms and seals: peroxide-cured EPDM

##### Isolation gate valves

Body: Ductile iron 65-45-12, epoxy coated  
Bonnet: Ductile iron 65-45-12, epoxy coated  
Disc: peroxide-cured EPDM  
Handle and nut: steel  
Seals and packing gland: PTFE  
Stem: AISI 420 stainless steel  
Stem nut: brass, C37000

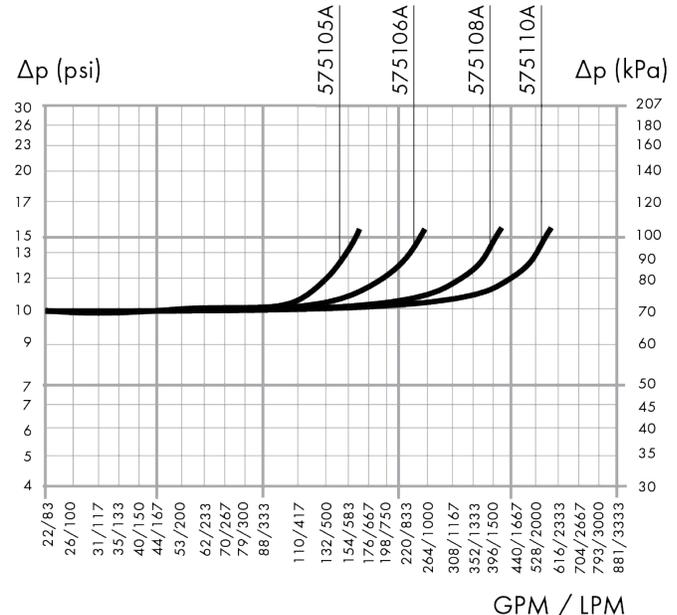
#### Performance

Suitable fluids: water  
Max. working pressure: 175 psi (12 bar)  
Max. working temperature: 150 °F (65 °C)

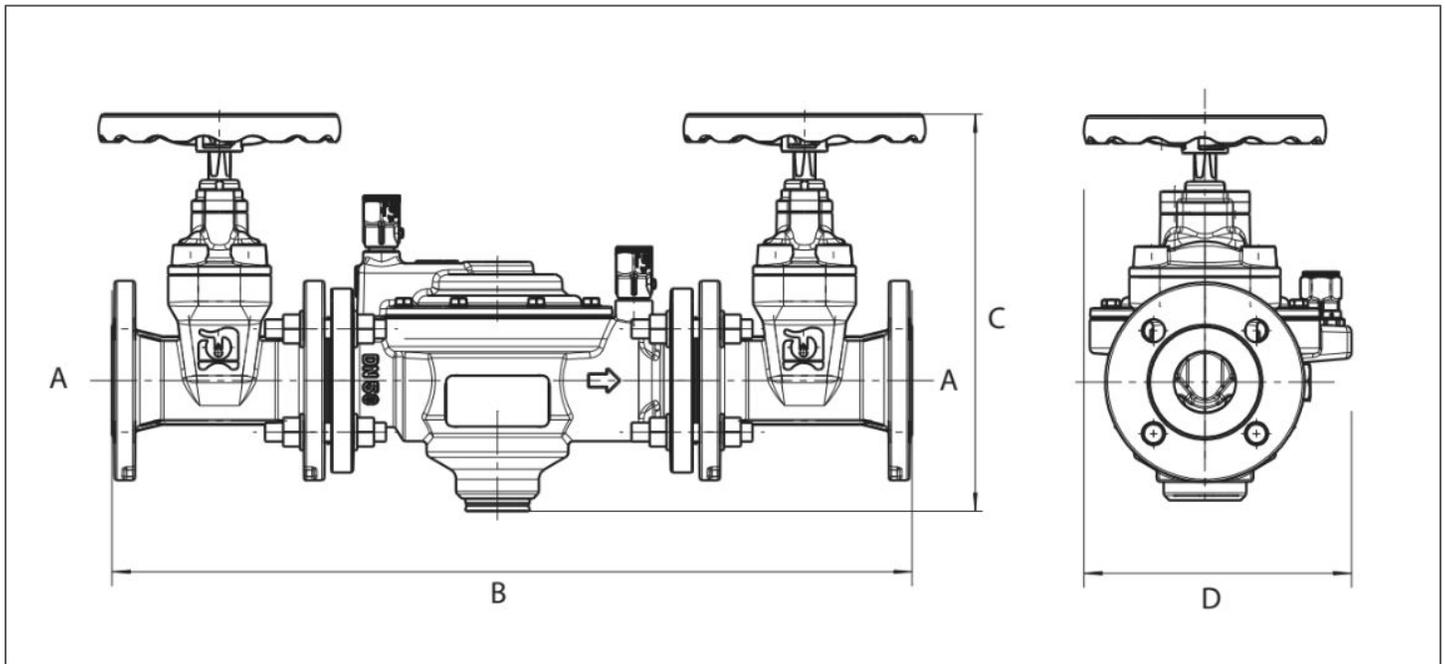
#### Connections:

Valve body: 2", 2½", 3", 4" ANSI 150 Flange  
Test cocks: ½" NPT

#### Hydraulic Characteristics:



**Dimensions**



Code	A	B	C	D	Wt (lb)
575105A	2" ANSI 150 FLANGE	24 $\frac{1}{16}$ "	13"	8 $\frac{3}{4}$ "	80
575106A	2 $\frac{1}{2}$ " ANSI 150 FLANGE	27 $\frac{3}{8}$ "	14 $\frac{3}{8}$ "	8 $\frac{3}{4}$ "	104
575108A	3" ANSI 150 FLANGE	35"	16 $\frac{13}{16}$ "	10"	170
575110A	4" ANSI 150 FLANGE	37 $\frac{1}{16}$ "	18 $\frac{3}{16}$ "	10"	208

We reserve the right to change our products and their relevant technical data, contained in this publication, at any time and without prior notice. Contractors should request production drawings if prefabricating the system

Job name _____	Size _____
Job location _____	Quantity _____
Engineer _____	Approval _____
Mechanical contractor _____	Service _____
Contractor's P.O. No. _____	Tag No. _____
Representative _____	Notes _____