574 Backflow Preventer

Size: 3/4”

Fluid Category Protected: 4

Controllable reduced pressure zone backflow prevented (BA type)

Function

The backflow preventer is a plumbing protection device designed to prevent polluted water from flowing back into the mains supply. This type of backflow may occur when the pressure in the mains supply changes and causes a reversal of the flow. The backflow preventer is installed between the mains supply and the internal consumer circuit in water supply systems and creates a safety zone which prevents the water in the two circuits from coming into contact.

Use of backflow preventers (BA type) according to European standards EN 1717 and EN 12729.

Proper use of the BA type backflow preventer is regulated by the new Europlean standards on the prevention of pollution from backflow.
The relevant standard is EN 1717: 2000
“Protection against pollution of potable water in water installations and general requirements of devices to prevent pollution by backflow”.
The types of water contained in water systems are classified in this standard according tot eh degree of risk to health.

Fluid that present a significant health hazard due to concentrations of “toxic substances”.

Backflow

Potable water fed from the mains supply may suffer from hazardous pollution caused mainly by contaminated fluids from plumbing system flowing back directly into the mains supply.

The phenomenon, termed “backflow” occurs when:

- The pressure in the mains system is less than in the plumbing circuit receiving the supply (back syphonage). The situation may occur when there is a pipe breaking in the mains system or when demand on the mains supply from consumers is very heavy.
- The pressure in the plumbing circuit receiving the supply rises (back pressure) due, for example, to water being pumped from a well.

Risk Assessment

Given the potential dangers of the phenomenon and the requirements of current regulations, the risk of pollution from backflow must be assessed on the basis of the type of system and the characteristic of the fluid that flows in it. An appropriate backflow prevention device must be selected on the basis of that assessment performed by the system designed and the mains supplier. The device must be located along the supply line at those points at risk of backflow which would be hazardous to human health.
The protection can be provided by inserting a backflow preventer at critical points in the circuits at the inlet from the mains supply or in the internal plumbing system. This will prevent polluted water from flowing back in all systems for which direct connection to the mains or an internal supply is considered hazardous.

Materials:

Body and cover:	Dezincification resistant alloy CR EN 12165 CW602N (1/2” – 1 ¼”)
Check valve spindle:	Stainless steel
Discharge seat:	Dezincification resistant alloy CR EN 12164 CW602N (1/2” – 1 ¼”)
Springs:	Stainless steel
Diaphragm:	EPDM
Seals:	NBR
Shut-off valve body:	brass EN 12165 CW617N, Chrome plated
Strainer body:	Bronze EN 1982 CB491K
Strainer cartridge:	Stainless steel

Performance:

Medium:	Water
Max working pressure:	10 Bar
Max working temperature:	65 ^{o}C

Filter mesh:	0,8 mm
Connections	½” – 2” M with union
Pressure test port connections:	¼” F
Net weight:	2.9 kgs

Approvals: