

# Backwash Valves



## Backwash valve

The **Bermad** patented backwash valve has been especially designed for filter backwashing. The 3-2w principle has a unique diaphragm-actuated valve. Due the short valve stroke, the direction of flow changes gradually. The inlet port closes before the drain port opens and vice versa the drain port closes before the water inlet opens again. Thus, the flushing water is kept separate from the water to be purified. A simple operation saving both water and energy.

The special seat and valve ensure perfect backwash-valve closure, also at relatively low operating pressures.

The design of the valve makes it possible for it to be installed in different positions and provides for an optimal separation of flushing water and water to be filtered.

## Applications:

The backwash valve can be used for all filters that can be cleaned by backwashing, such as sand filters, high-bed (multi)media filters, S.K.-disc filters and CAF units.

Very simple automation is achieved by installing two or several filters in parallel. At the moment the backwash valve receives a control signal, the flow to the filter is shut off and the flushing line opens. The backwashing operation then uses the filtered water from the other filter(s). This way, the whole filter unit is cleaned in a step-by-step operation!

## Technical specifications:

Sizes: 2"x 2" (larger sizes on request)

Connections: flushing side: 2" BSP (thr.)

filter side: 2" (thr.)

Materials: body 2"x 2" fiberglass reinforced nylon

seats / internals: Stainless steel

Membrane: nylon fiber reinforced NR (natural rubber).

Seals: Nitrile and NR

Working pressure: 0.5 to 10 kg/cm<sup>2</sup> (10-145 psi)



Temperature: 65 °C water



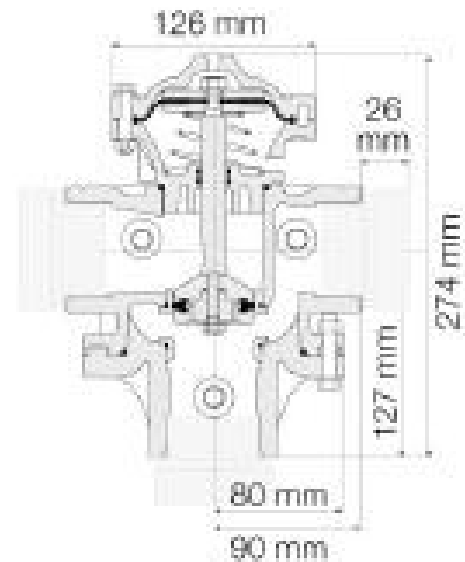


# Backwash valve Technical Data

## Hydraulic Data

	Filtration 1→C	Backwash C→2
Angle Flow		
	Kv=52	Kv=48
$\Delta P = \left(\frac{Q}{Kv}\right)^2$ Kv = m <sup>3</sup> /h @ ΔP of 1 bar Q = m <sup>3</sup> /h ΔP = bar		

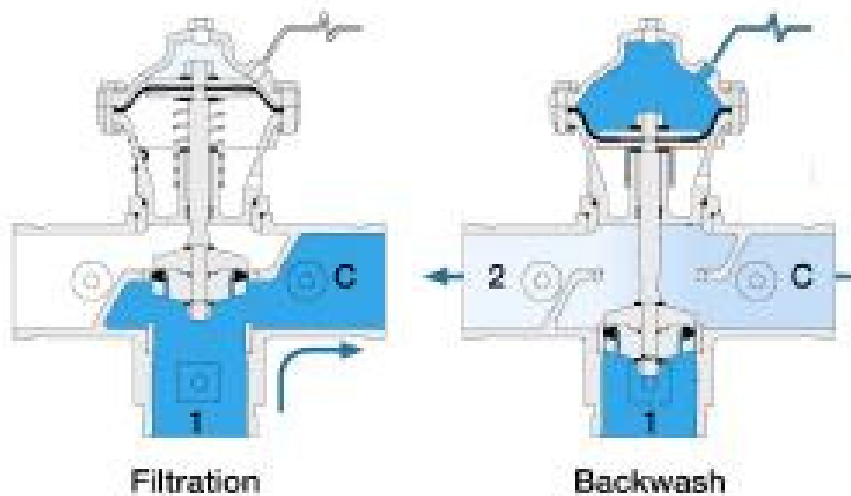
## Dimensions



Weight: 2.8 Kg

## Operation

### Angle Flow



UVAR

Subject to changes and/or misprints