

## BOWNT INTERNAL BACK FLUSHING SYSTEM SCHEMATIC DIAGRAM

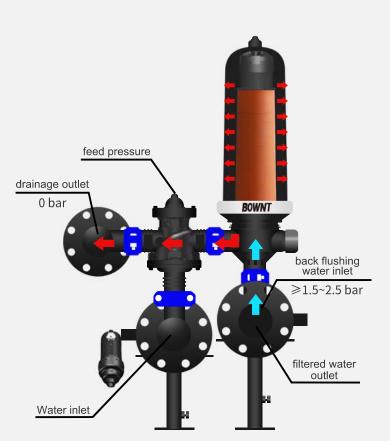
## Filtering:

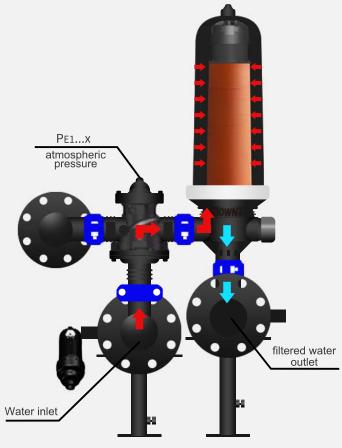
Filter discs are compressed tightly in the filter element frame by the top plunger.

Water fills into the filter unit through the inlet manifold.

Feed water flows through the centrifugal disk at a high speed, most particles in the water are thrown to the inner filter shell surface by centrifugal force, and concentrated on the top, the rest particles intercepted on the discs surface during filtering, which greatly reduces the fouling of the discs and prolongs filtration time, achieves the effect of water saving.

Water with less particles goes through the disc channels for a deep filtration, clean water through the inner disc passage flows to the outlet manifold.





## Back flushing:

The three-way valves of the feed water switch direction.

The check valve of the filtered water is closed, clean water is pumped to the filter unit from an external back flushing inlet manifold, flows through the 4 passages from the bottom to the top of filter element frame, lifts the top plunger and looses the discs.

Clean water sprays from the wholes in the filter element frame, spins and shakes the discs at a high speed for the purpose of rinse thoroughly, waste water after back flushing discharged from the drain line.

The top plunger returns to position to compress the discs once finished of a back flushing cycle, and filter unit begins filtration process.