

Upstream Pressure Sustain with Minimum-Maximum Level Control - **E3110-18 / E4110-18**



The hydraulically operated automatic valve supports the upstream pressure by maintaining it at a set value regardless of flow rate variations and, at the same time, regulates the minimum and maximum level of a tank.

If the upstream pressure drops below the calibration value, the valve reduces the degree of opening and therefore the flow in order to guarantee the supply of water to the users located upstream. The valve is extremely important for stabilizing, containing pressure changes and preventing excessive flow towards the tank.

Flange drilling according to EN 1092/2, different on request.

Certification and testing according to EN 1074.

		PN 10		PN 16	
Version	DN (mm)	Mass (kg)	References	Mass (kg)	References
E3110-18	80	31.00	E30A8016P18	31.00	E30A8016P18
E3110-18	100	36.00	E30B1016P18	36.00	E30B1016P18
E3110-18	125	51.00	E30B1216P18	51.00	E30B1216P18
E3110-18	150	58.00	E30B1516P18	58.00	E30B1516P18
E3110-18	200	102.00	E30B2010P18	102.00	E30B2016P18
E3110-18	250	176.00	E30B2510P18	176.00	E30B2516P18
E3110-18	300	293.00	E30B3010P18	293.00	E30B3016P18
E3110-18	400	500.00	E30B4010P18	500.00	E30B4016P18
E3110-18	500	862.00	E30B5010P18	862.00	E30B5016P18
E3110-18	600	1002.00	E30B6010P18	1002.00	E30B6016P18

		PN 10		PN 16	
Version	DN (mm)	Mass (kg)	References	Mass (kg)	References
E4110-18	40/50	25.00	E40A5016P18	25.00	E40A5016P18
E4110-18	65	25.00	E40A6516P18	25.00	E40A6516P18
E4110-18	80	30.00	E40A8016P18	30.00	E40A8016P18
E4110-18	100	43.00	E40B1016P18	43.00	E40B1016P18
E4110-18	150	89.00	E40B1516P18	89.00	E40B1516P18
E4110-18	200	142.00	E40B2010P18	142.00	E40B2016P18
E4110-18	250	253.00	E40B2510P18	253.00	E40B2516P18
E4110-18	300	425.00	E40B3010P18	425.00	E40B3016P18
E4110-18	400	784.00	E40B4010P18	784.00	E40B4016P18
E4110-18	600	2250.00	E40B6010P18	2250.00	E40B6016P18

Applications

- At the entrance to a tank of a gravity pipeline to ensure supply to upstream users during the filling phase.
- On the tank supply lines to regulate the flow rate, taking into account the level regulation and the utilities.
- In very tall buildings to control the tanks on the top, avoid possible excess flow and maintain the required upstream pressure.

Accessories

- Position indicator with 4-20 mA output.
- Opening/closing indicator.
- Manometers.
- Self-cleaning high capacity filter.

Directions for use

- Avoid high points and significant slope changes in the connecting pipes between the valve and the level control pilot.
- The anti-cavitation system is necessary for applications with static value above 7 bar.

Optional configurations

- Upstream pressure relief valve with anti-return system.
- Upstream pressure relief valve with solenoid control for operation with electronic float probe or remote pulse.
- Upstream pressure relief valve with quick relief pilot.

When the water drops to the minimum level, the valve, open, supports the upstream pressure keeping it above an adjustable set value.

The pressure entering and exiting the main chamber (10) is controlled by the exclusive regulation unit (4), equipped with a filter and three adjustable needle valves, necessary to ensure stability and make the opening and closing speeds of the valve independent of each other.

Installation diagram



In the installation diagram shown, the valve provides level regulation thanks to a tube external to the tank (2). It is recommended not to exceed 4 m of height difference between the valve and the maximum level of the tank.

Shut-off devices (1) are provided to allow maintenance and a filter (3), which retains any impurities.

It is also recommended to insert combined anti-water hammer vents upstream of the valve to ensure air degassing during operation and regulation.

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