

Upstream Pressure Support Hydrovalve with remote Electric Control - E3116-31 / E4116-31



The automatic valve supports the upstream pressure regardless of flow rate variations; the calibration value is adjustable.

With the aid of a solenoid valve, it is also possible to open or close by means of a control unit or remote impulses.

If the upstream pressure should fall below the calibration value, the valve will move to the fully closed position, ensuring operation even in static conditions.

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
E3116-31	80	31.00	E36A8016P31	31.00	E36A8016P31
E3116-31	100	36.00	E36B1016P31	36.00	E36B1016P31
E3116-31	125	51.00	E36B1216P31	51.00	E36B1216P31
E3116-31	150	58.00	E36B1516P31	58.00	E36B1516P31
E3116-31	200	102.00	E36B2010P31	102.00	E36B2016P31
E3116-31	250	176.00	E36B2510P31	176.00	E36B2516P31
E3116-31	300	293.00	E36B3010P31	293.00	E36B3016P31
E3116-31	400	500.00	E36B4010P31	500.00	E36B4016P31
E3116-31	500	862.00	E36B5010P31	862.00	E36B5016P31

		PN 10		PN 16	
Version	DN (mm)	Mass (kg)	References	Mass (kg)	References
E3116-31	600	1002.00	E36B6010P31	1002.00	E36B6016P31

		PN 10		PN 16	
Version	DN (mm)	Mass (kg)	References	Mass (kg)	References
E4116-31	40/50	25.00	E46A5016P31	25.00	E46A5016P31
E4116-31	65	25.00	E46A6516P31	25.00	E46A6516P31
E4116-31	80	30.00	E46A8016P31	30.00	E46A8016P31
E4116-31	100	43.00	E46B1016P31	43.00	E46B1016P31
E4116-31	150	89.00	E46B1516P31	89.00	E46B1516P31
E4116-31	200	142.00	E46B2010P31	142.00	E46B2016P31
E4116-31	250	253.00	E46B2510P31	253.00	E46B2516P31
E4116-31	300	425.00	E46B3010P31	425.00	E46B3016P31
E4116-31	400	784.00	E46B4010P31	784.00	E46B4016P31
E4116-31	600	2250.00	E46B6010P31	2250.00	E46B6016P31

Applications

- On the supply lines of the tanks to regulate, connected to an electronic float probe, flow rate and level.
- In gravity pipelines to ensure supply to users located in the highest areas together with the possibility of closing and opening in response to control or alarm signals.

Accessories

- Open-close indicator.
- Manometers.
- Self-cleaning high capacity filter.
- Limiter of opening manual

Directions for use

- Inlet and outlet pressure, flow rate and application are required for cavitation sizing and analysis.
- In the support function a distance of 3 diameters upstream of the valve is recommended for best operation

Optional configurations

- Upstream pressure sustaining valve with solenoid control valve and anti-backflow system.

- Upstream pressure relief valve with quick-acting solenoid and pilot control valve.
- Upstream pressure sustaining valve with high sensitivity solenoid and pilot control valve.

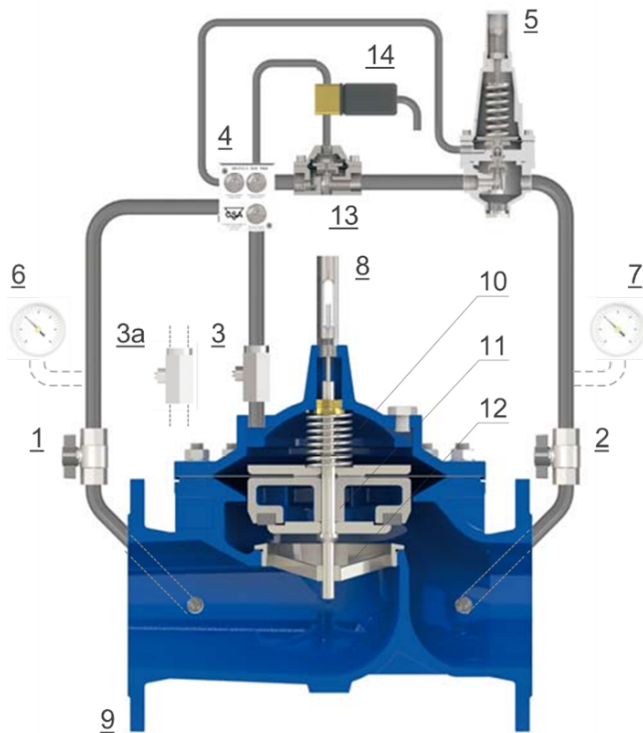
Operating conditions

- Fluid: treated water.
- Minimum pressure: 0,7 bar.
- Maximum pressure: 16 bar. Higher on request.
- Maximum temperature: 70 °C.

Solenoid valve data

- Voltage: 24V DC, 24V/50Hz, 230V/50Hz. Other voltage on request.
- Electrical consumption: inrush AC (VA) 24, hold AC (VA) 17 (8 W), DC hot/ cold coil 8/9 W.

How it works



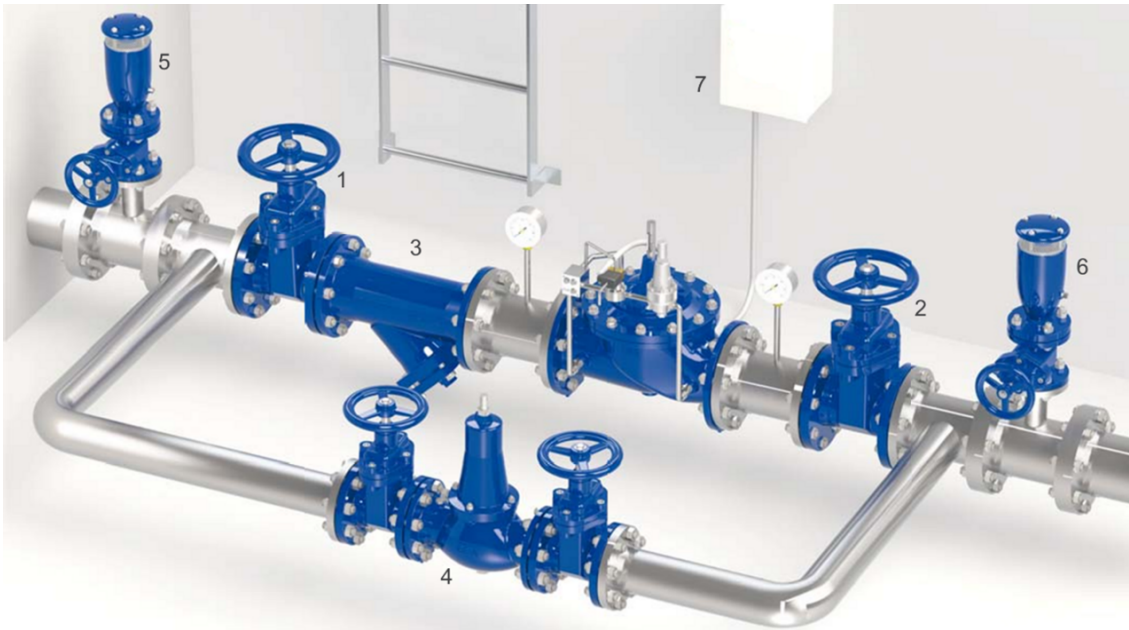
The automatic valve is controlled by an adjustable two-way pilot (5) which receives, through the regulation unit (4), the upstream pressure value.

When the latter rises above the set-point, the pilot (5) opens; the pressure in the valve chamber (10) consequently decreases, causing the shutter (11) to rise.

When the pressure is lower than the set value, the pilot reduces the degree of opening by modulating; the pressure in the chamber (10) increases and the shutter (11) descends towards the seat (12), reducing or interrupting the flow through the main valve.

Furthermore, a solenoid (14), which acts on a two-way auxiliary valve (13), interrupts the flow of the circuit, causing the main valve to close in response to remote impulses. Upon request, it is also possible to force the total opening of the hydrovalve.

Installation diagram



In the installation diagram of the valve, connected to an electronic control unit (7) which sends pulses to the circuit solenoid, shut-off devices (1, 2) and bypass allow maintenance,

And a filter (3) holds back possible impurity. There valve Of support to action live (4), reliable even after long periods of inactivity, represents the best solution for the bypass. The insertion of anti-water hammer vents (5, 6) upstream and downstream is also recommended.

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