

Automatic Hydrovalve Management Pressure - E3115-T / E4115-T



The automatic valve with hydraulic operation reduces and stabilizes the downstream pressure value based on flow rate variations, following specially created and modifiable curves, thanks to impulses provided by a programmer or an existing PLC, battery-powered or with remote control via the web using a special interface.

The valve is the ideal solution for pressure management and loss reduction, and can interface with any type of SCADA or remote control system, as well as with sensors installed at critical points of the system.

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

Certification and testing according to EN 1074.

Version	DN (mm)	PN 10		PN 16	
		Mass (kg)	References	Mass (kg)	References
E3115-T	80	28.00	E35A8016PT	28.00	E35A8016PT
E3115-T	100	35.00	E35B1016PT	35.00	E35B1016PT
E3115-T	125	51.00	E35B1216PT	51.00	E35B1216PT
E3115-T	150	58.00	E35B1516PT	58.00	E35B1516PT
E3115-T	200	100.00	E35B2010PT	100.00	E35B2016PT
E3115-T	250	174.00	E35B2510PT	174.00	E35B2516PT
E3115-T	300	290.00	E35B3010PT	290.00	E35B3016PT
E3115-T	400	499.00	E35B4010PT	499.00	E35B4016PT
E3115-T	500	862.00	E35B5010PT	862.00	E35B5016PT
E3115-T	600	1002.00	E35B6010PT	1002.00	E35B6016PT

		PN 10		PN 16	
Version	DN (mm)	Mass (kg)	References	Mass (kg)	References
E4115-T	40/50	22.00	E45A5016PT	22.00	E45A5016PT
E4115-T	65	24.00	E45A6516PT	24.00	E45A6516PT
E3115-T	80	28.00	E35A8016PT	28.00	E35A8016PT
E4115-T	80	29.00	E45A8016PT	29.00	E45A8016PT
E4115-T	100	43.00	E45B1016PT	43.00	E45B1016PT
E4115-T	150	87.00	E45B1516PT	87.00	E45B1516PT
E4115-T	200	140.00	E45B2010PT	140.00	E45B2016PT
E4115-T	250	250.00	E45B2510PT	250.00	E45B2516PT
E4115-T	300	424.00	E45B3010PT	424.00	E45B3016PT
E4115-T	400	784.00	E45B4010PT	784.00	E45B4016PT
E4115-T	600	2250.00	E45B6010PT	2250.00	E45B6016PT

Applications

The automatic hydraulic valve, controlled by a programmer or remotely, reduces the downstream pressure in real time based on the flow rate and pressure detected at critical points in the system. The settings can be changed from any mobile device via an intuitive and functional interface.

Accessories

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

Directions for use

To be connected to control units with mains power supply, capable of ensuring communication via a real-time web interface, or battery powered. The choice depends on the project needs and the amount of data exchanged.

Optional configurations

- Pressure management valve with anti-reflux system.
- Pressure management valve with high sensitivity pilot.
- Valve of management pressures with solenoid control valve

Operating conditions

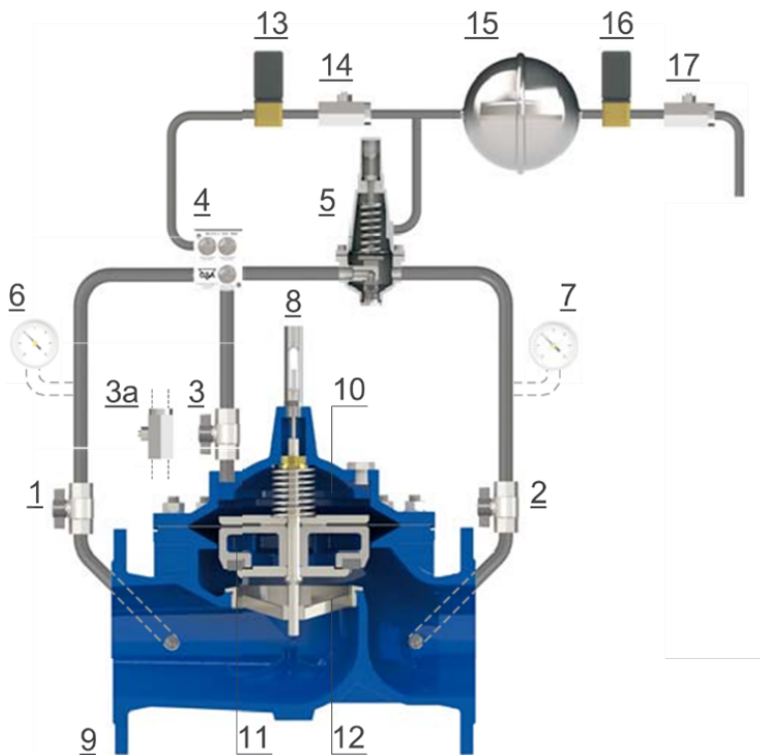
- Fluid: treated water.

- Minimum pressure: 1.5 bar.
- Maximum pressure: 16 bar.
- Maximum temperature: 70°C.

Reduction pilot adjustment range

- Blue spring: 0.7 to 7 bar.
- Red spring: 1.5 to 15 bar.
- Values lower than 0.7 bar available with high sensitivity pilots.

How it works



The hydraulic valve is controlled by a two-way pilot (5) connected, in the cap, to the secondary line of the circuit on which two solenoid valves (13-16) are installed that receive the signals from the control unit, in communication with the flow and pressure meters. The valve varies the value of the downstream pressure as a function of the flow rate, so that, when the system requires a higher downstream pressure value, the solenoid 13 opens, letting water into the pilot cap (5); this causes the pilot to open, a greater flow in the circuit and therefore the pressure to be reduced in the chamber 10, which causes the shutter (11) to rise. The solenoid 16, on the other hand, discharges water outside the circuit and from the pilot cap (5), with the effect of closing the pilot and the valve and reducing the flow rate.

The needle valves 14 and 17 and the barrel 15 increase the stability of the valve during regulation. The flow to

and from the main chamber (10) is controlled by the regulation unit (4), which makes the opening and closing speeds of the valve independent of each other.

Installation diagram



In the following recommended installation diagram, the hydraulic valve (1) receives signals from a control unit (2), powered by the mains or battery, and connected to flow meters (3) and pressure meters (4) (the latter can also be positioned at critical points of the system). The use of combined anti-water hammer vents (6, 7) and a direct-acting relief valve (5), downstream, as protection, is recommended, in addition to the creation of a bypass with a reduction hydraulic valve.

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