Technical data sheet

Type C221 / C221C RH

Control valve

Altitude valve pilot operated - top-fill version - pressure sustaining function

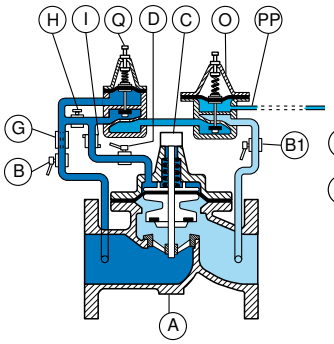
NB : Additional information is available on the data sheet listed as «Main valve».

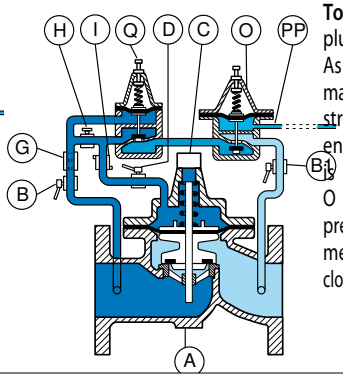
Applications and general characteristics

- A pressure plug between pilot and tank is required.
- It prevents from overflowing and maintains a constant level in the tank thanks to the pilot and guarantees a minimum upstream pressure.
- Openings and closings are very progressive, (a few centimeters from the required level).
- *This type of valve should be used when the supply pressure is much higher (1 bar) than the head of the full tank.*
- Equipped with check valves, it closes automatically in case of backflow (C221C).
- Approvals : ACS - WRAS

Working principle

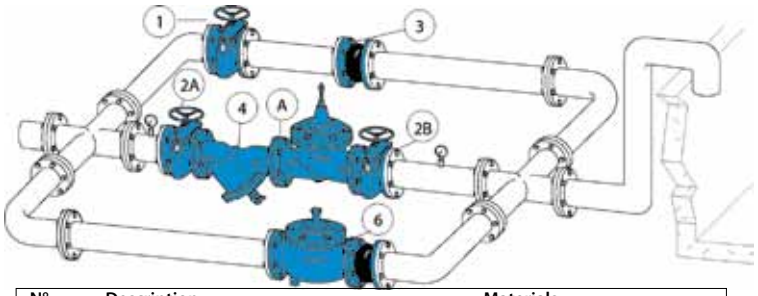
Top-fill version : Pressure plug from pilot to tank. As soon as the level in the tank goes down and if the upstream pressure is high enough, pilot valve Q is open and pilot valve O begins to open. The upper chamber empties partly, the valve A opens.





Top-fill version : Pressure plug from pilot to tank. As soon as the level is maximum, and if the upstream pressure is high enough, pilot valve Q is open and pilot valve O closes. The upstream pressure pushes on the membrane and valve A closes.

Installation example and spare parts list



N°	Description	Materials
A	Main valve	Cast iron
B	Upstream isolation valve	nickel-plated brass
B1	Downstream isolation valve	nickel-plated brass
C	Position indicator with drain	Stainless steel - brass
D	Chamber isolation valve	nickel-plated brass
G	Filter	Brass
H	Orifice-needle valve	Stainless steel or brass
I	Flow control	Brass
O	Pilot C201	Brass-stainless steel-bronze
Q	Pilot C301	Brass-stainless steel-bronze
PP	Pressure plug from tank to pilot	
1	Isolation valve of the by-pass	
2a	Upstream isolation valve of the main water pipe	
2b	Downstream isolation valve of the main water pipe	
3	Rubber expansion joint	
4	Filter	
6	Check valve of the by-pass	

Setting range :

Pilot C201
- 0,14 to 1,38 bar
- 1,38 to 2,75 bar
- 2,07 to 5,5 bar

Pilot C301
- 0,24 to 2,41 bar
- 13,72 to 27,7 bar

Installation :
- install a strainer upstream
- horizontal setting up : the cap of the valve should be oriented to the top and inclined at 45° maximum.
- vertical setting up : change the spring of the main valve (option 7).

Other types :
- C221S, C201, C201C, C201DS, C201S, C201M