

Technical data sheet

Type C101DS

Control valve

Pressure reducing valve with double direction flow

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

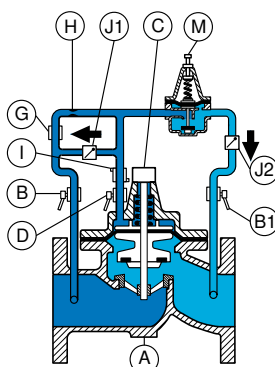
Applications and general characteristics



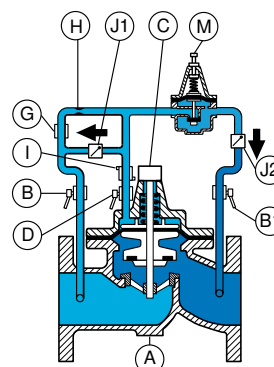
- This valve controls and maintains a preset reduced downstream pressure regardless of variations in demand and upstream pressure (the setting of downstream pressure is always below the upstream pressure).
- Equipped with 2 check valves, it opens fully when upstream pressure is lower than downstream pressure.
- It allows to decrease the pressure in a secondary network or in a tank. When the upstream pressure is getting lower than downstream pressure, the flow rate in the secondary network or in the tank reverses.
- Approvals : ACS

Working principle

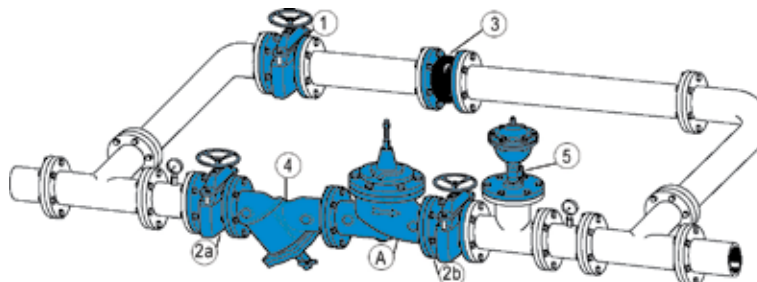
By standard working, the upstream pressure is higher than the downstream pressure, check valve J1 is closed and check valve J2 is open. The main valve A is working like a pressure reducing valve C101.



When the upstream pressure is getting lower than the downstream pressure, check valve J2 closes. Check valve J1 opens and allows the upper chamber to empty. The main valve A opens.



Installation example and spare parts list



Setting range :

- 0,4 up to 5,51 bar
- 1,72 to 8,5 bar (standard)
- 2,06 to 24,5 bar

Installation :

- install a strainer upstream
- install an air relief valve downstream or at the high point near the control valve.
- 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 :

- FKM seals in the main valve and in the pilot.
- 304 stainless steel pilot and 316Ti stainless steel fittings.

N°	Description	Materials
A	Main valve	Ductile iron (except DN 125 : 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
J1	Check valve	Brass
J2	Check valve	Brass-stainless steel-bronze
M	Pilot valve C101	Brass-stainless steel-bronze
1	Isolation valve of the by-pass	Brass-stainless steel-bronze
3	Rubber expansion joint	
2a	Upstream isolation valve of the main water pipe.	
2b	Downstream isolation valve of the main water pipe.	
4	Filter	
5	Single function air valve	