

## Technical data sheet

# Type C104 / C104C

## Control valve

### Combined pressure reducing valve

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

### Applications and general characteristics

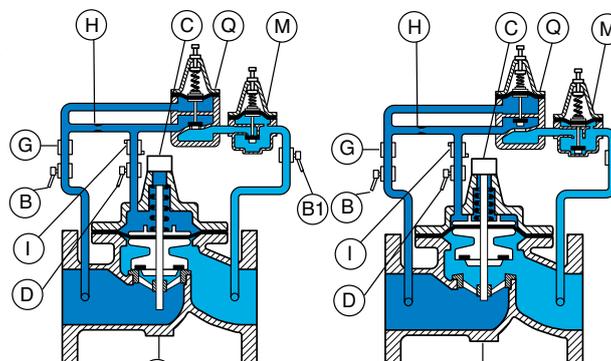


- This valve controls and maintains a preset reduced downstream pressure and guarantees a minimum upstream pressure regardless of variations in upstream pressure and in downstream demand. (the downstream setting pressure is always below the minimum upstream pressure).
- Equipped with check valves, (C104C), it closes automatically in case of backflow.
- This valve reduces the pressure in networks of water distribution, irrigation or pump outlet while maintaining minimum upstream pressure.
- Approvals : ACS - **WRAS** (except type C104c)

### Working principle

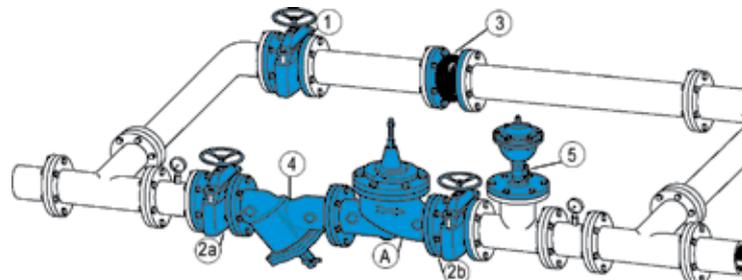
When upstream pressure is getting lower than the pressure required by the pilot Q, the pilot will close and limit the flow circulation.

The upstream pressure pushes on the membrane of the main valve B which closes. The upstream pressure increases and reaches the setting of pilot Q.



As soon as upstream pressure is getting higher than setting pressure of pilot Q, pilot keeps open and allows downstream regulation thanks to pilot M.

### Installation example and spare parts list



#### Setting range of upstream pilot :

- 1 - 4,13 bar
- 1,72 - 7,57
- 2,06 - 25 (standard)

#### Setting range of downstream pilot :

- 0,4 - 5,51 bar
- 1,72 - 8,5 bar (standard)
- 2,06 - 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 :

- C104M, C104S
- 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
M	Pilot C101	Brass-stainless steel-bronze
Q	Pilot C301	Brass-stainless steel-bronze
1	Isolation valve of the by-pass	
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.	