

/ Function

ICMA pressure regulators are devices that reduce and stabilize the incoming pressure from the public network. Installed on the private water network, they allow a correct use on domestic systems, reducing malfunctions due to external pressure which is generally high and variable.

Characterized by reduced overall dimensions and noisiness, the 247 - 248 models are used in small users, mainly in apartments and as a protection device for the boiler.



/ Products

ARTICLE	CODE	SIZE	CONNECTIONS	DESCRIPTION
247	91247AD06	1/2"	Female	pressure regulators with pressure gauge connection
247	91247AE06	3/4"	Female	pressure regulators with pressure gauge connection
248	91248AD06	1/2"	Female	pressure regulators
248	91248AE06	3/4"	Female	pressure regulators

/ Technial features

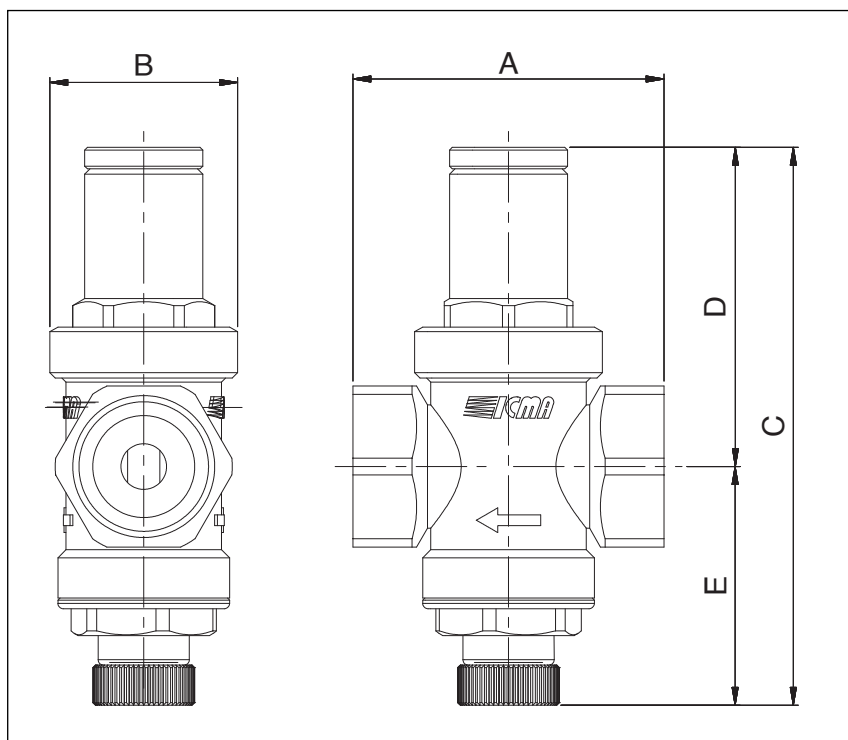
MATERIALS	
Body:	Brass CW617N UNI EN 12165, nickel-plated
Internal components:	Brass CW617N UNI EN 12165
Seals:	NBR
Spring:	AISI 302 stainless steel
Closing caps:	PA 66

Connections	
Size:	1/2" - 3/4"
Pressure gauge connection:	1/4" F

PERFORMANCE	
Max upstream pressure:	16 bar
Downstream pressure calibration range:	1 ÷ 4 bar
Factory setting:	3 bar
Max working temperature:	90 °C
Working fluids:	water

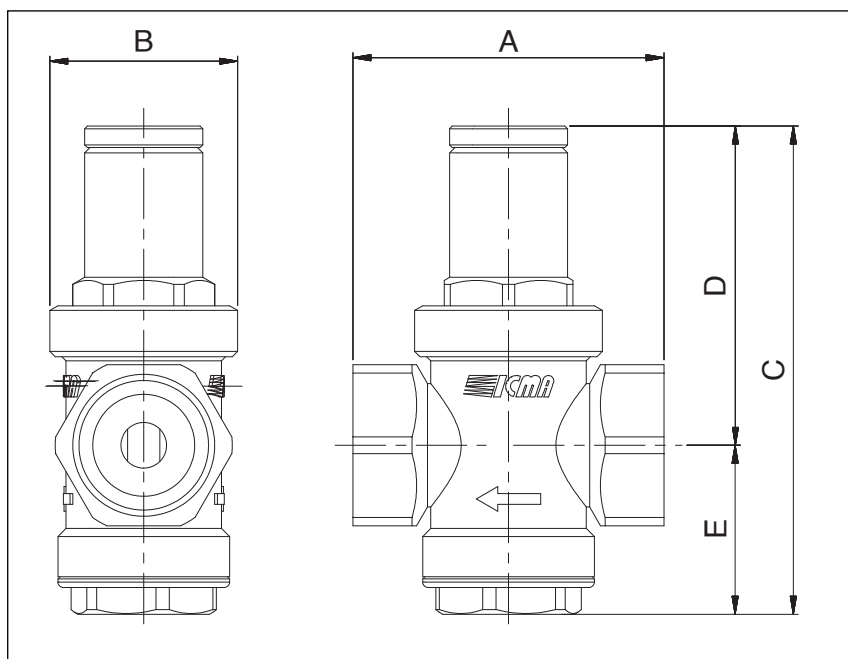
/ Dimensions

Art. 247



Code	91247AD06	91247AE06
Size	1/2"	3/4"
A	56	58
B	35	35
C	104	104
D	60	60
E	44	44
Weight (kg)	0,34	0,36

Art. 248



Code	91248AD06	91248AE06
Size	1/2"	3/4"
A	56	58
B	35	35
C	91	91
D	60	60
E	31	31
Weight (kg)	0,33	0,35

/ Operating principle

The gearbox operation is based on the balance of two opposing forces that develop inside it. The spring produces a thrust towards the opening of the fluid passage section as opposed to the spring which produces a thrust towards closing (Fig.1).

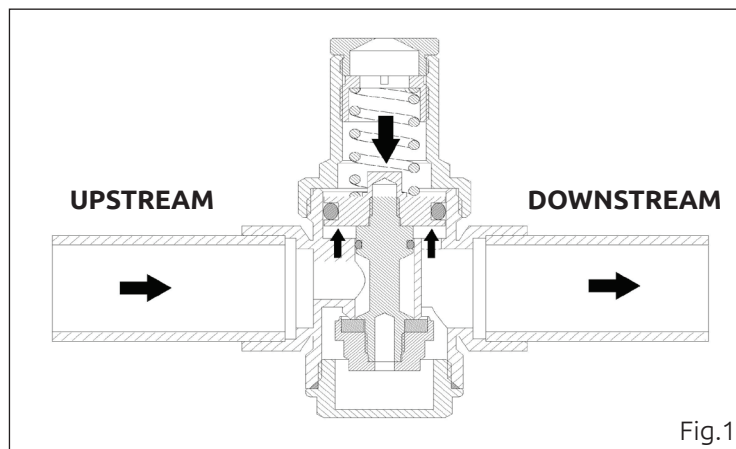


Fig.1

/ Supply opening

When opening a water utility, the valve (1) moves downwards, opening the passage of water, this is due to the force exerted by the spring which, in these conditions, becomes prevalent with respect to the force exerted by the water.

Increasing the demand for water causes an increase in the passage of the fluid through the passage section caused by the decrease in pressure to which the valve is normally subjected. The opening of several users causes a pressure drop (Δp) downstream and a consequent increase in the flow rate (Q) as shown in graph N° 2.

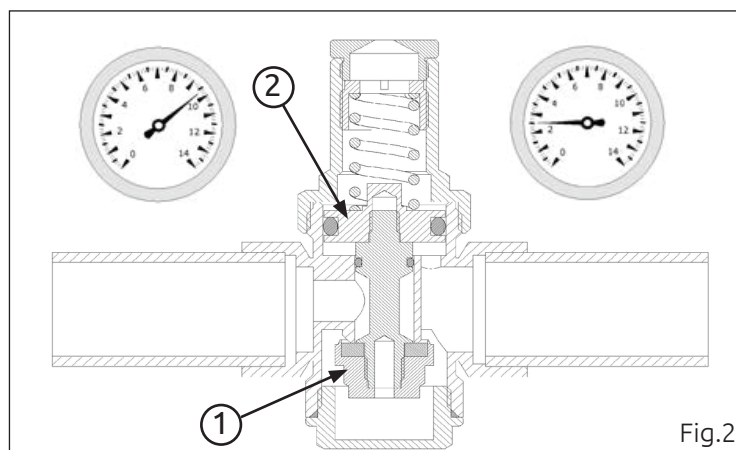


Fig.2

/ No-supply operating

When the loads are closed, the downstream pressure increases until it reaches the value set during the calibration phase.

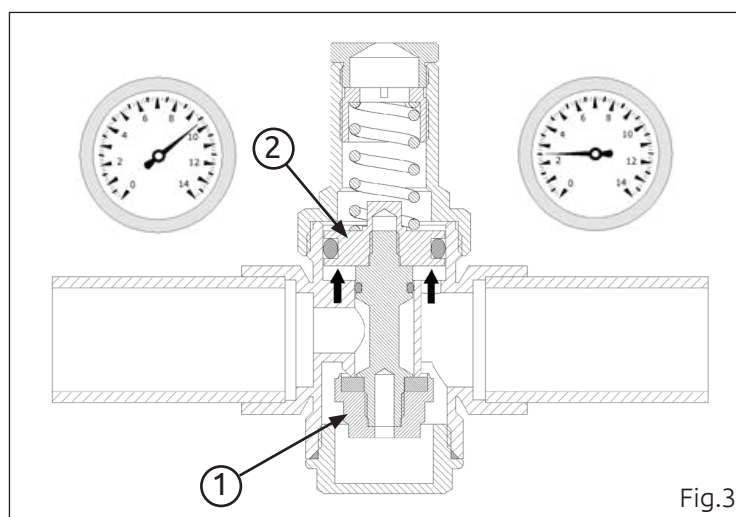
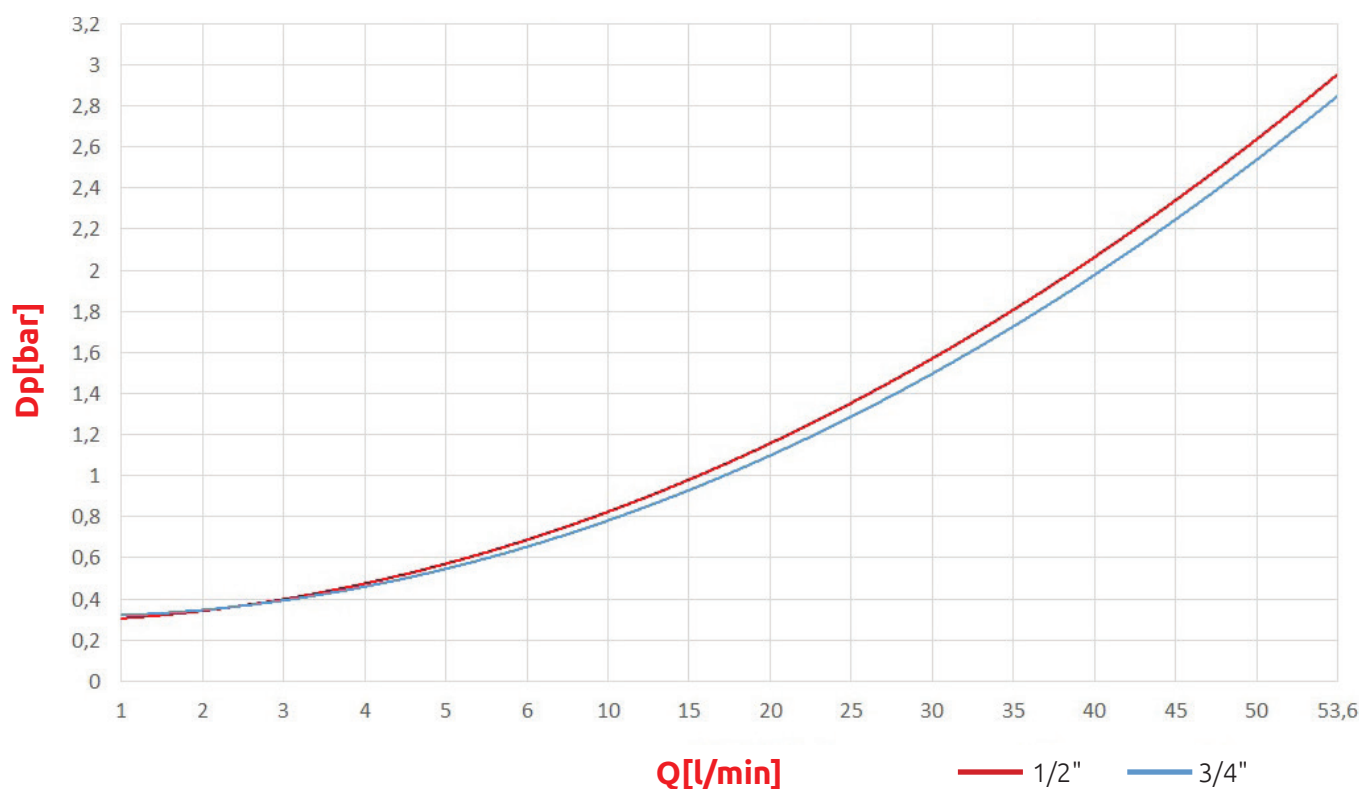


Fig.3

/ Hydraulic features

Mignon pressure regulators Art. 247-248 - 1/2" - 3/4"

PRESSURE DROP DIAGRAM



/ Reduced dimensioning

The limited dimensions of the pressure regulators allow an easy installation especially in domestic systems.

/ Quietness

The decrease in the passage that occurs during the pressure reduction produces a noise factor. This problem can be solved by the presence of a large chamber located in the valve outlet which gives rise to a low fluid velocity zone.