



DESCRIPTION

**500**

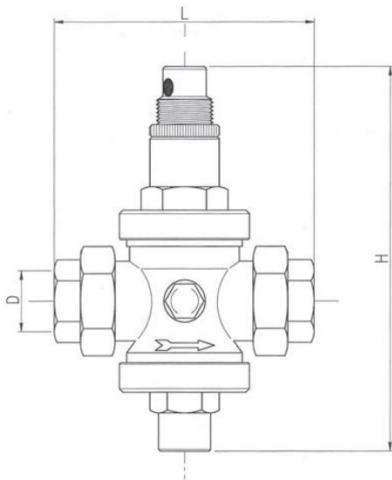
F x F union end pressure reducer with pressure compensation system. For cold water (max 50°C). Yellow finish.

Thanks to compensation chamber and the membrane-free design (no wear and tear on it), the system is stable to pressure damping and water hammer.

It is suggested to install a strainer (168/O – 170 or 51F Filterball®) upstream in order to avoid any damage to internal components of the reducer caused by impurities.

The pressure reducer has 3/8" pressure gauge on both sides which can fit a monometer **M500P** (not included) in order to measure the pressure downstream.

DIMENSIONS



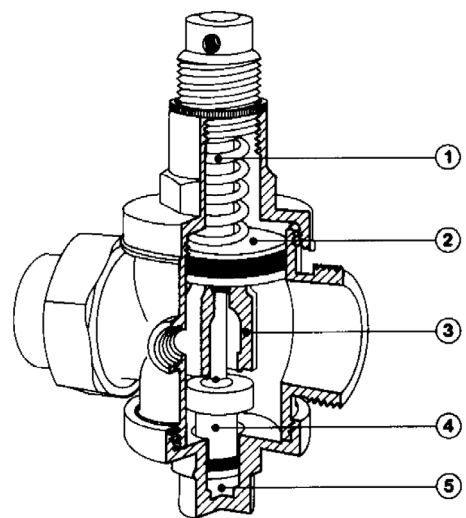
D	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
H	120	160	166	220	220	250
I	12	15	16	18	18	22
L	112	135	140	170	175	200
Weight [g]	930	1600	1850	2950	3400	5300

Dimensions in mm

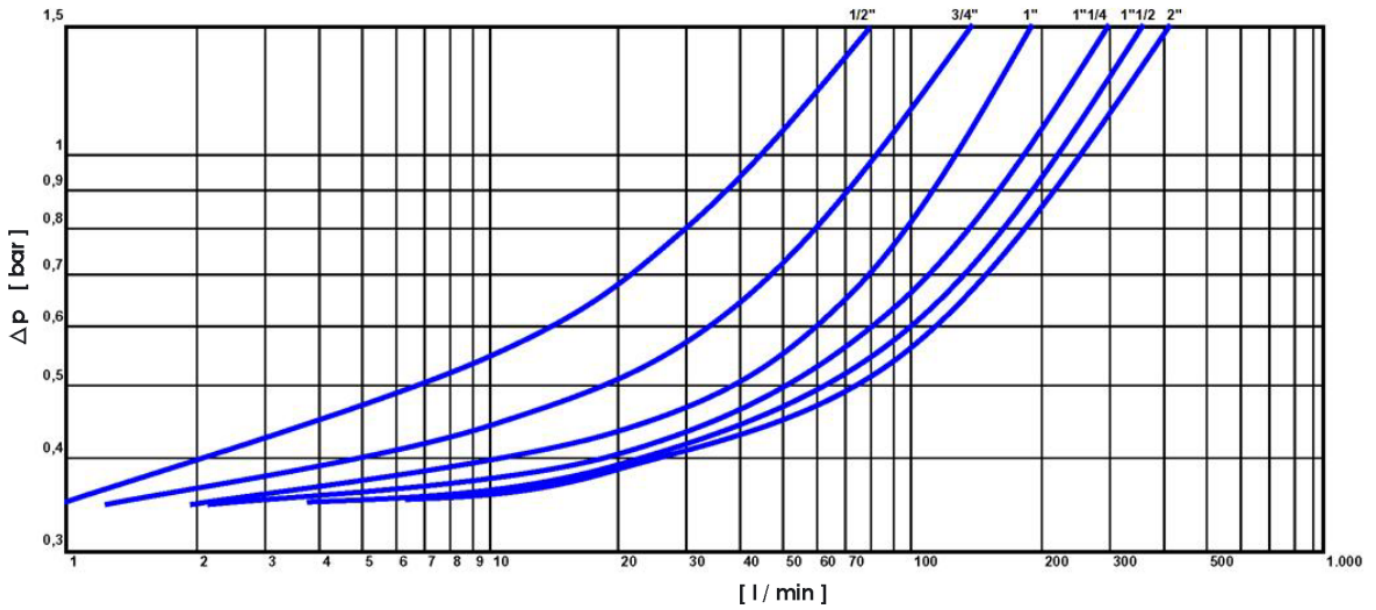
All threads are conform to ISO 228 standard

MATERIALS

- Body** CW617N (EN 12165) CuZn40Pb2
- Spring (1)** Steel, cadmium plated
- Diaphragm (2)** CW614N (EN 12164) CuZn39Pb3
- Seat (3)** Stainless steel AISI 303
- Stem with shutter (4)** CW614N (EN 12164) CuZn39Pb3  
Stainless steel AISI 303 (1 1/4" – 2")
- Spring Holder** CW614N (EN 12164) CuZn39Pb3
- Compensation chamber (5)** CW614N (EN 12164) CuZn39Pb3
- Nut** CW617N (EN 12165) CuZn40Pb2
- Union** CW617N (EN 12165) CuZn40Pb2
- O-Ring** NBR
- Gasket** Fiber



**PRESSURE DROP DIAGRAM**



D	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
Suggested flow rate [m3/h]	1.2 – 3	3 – 4.5	4.5 – 6	6 – 8	7 – 8.5	7.5 - 10
Suggested flow rate [l/min]	20 – 50	50 – 75	75 – 100	100 – 130	117 – 142	125 - 167

Max upstream pressure: 25 bar

Downstream pressure: 0.5 bar to 6 bar

**RECOMMENDED WORKING TEMPERATURE/PRESSURE LIMITS**

Max suggested operative upstream pressure: 25 bar

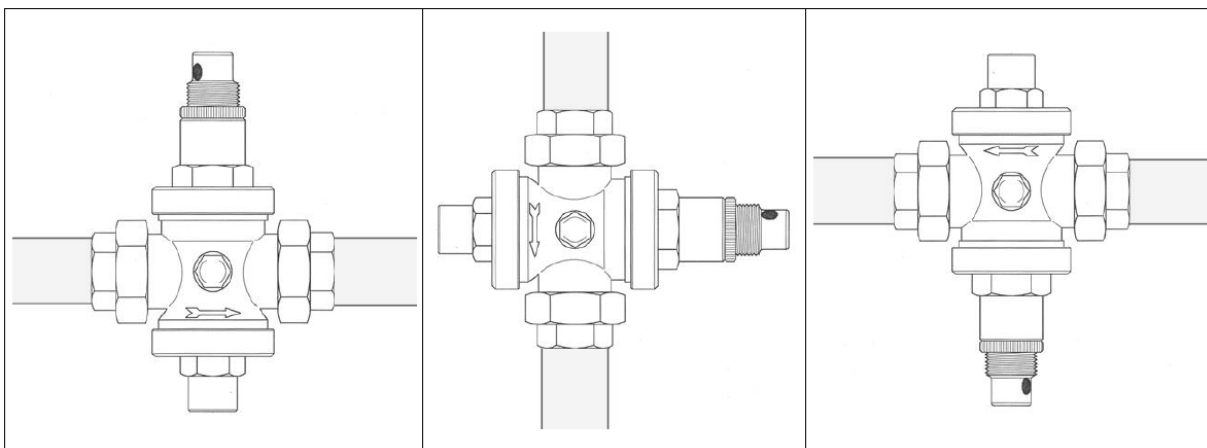
Max suggested operative downstream pressure: 6 bar

Pressure reduction ratio: 10 : 1

Max working temperature: 50°C

**INSTALLATION AND COMMISSIONING**

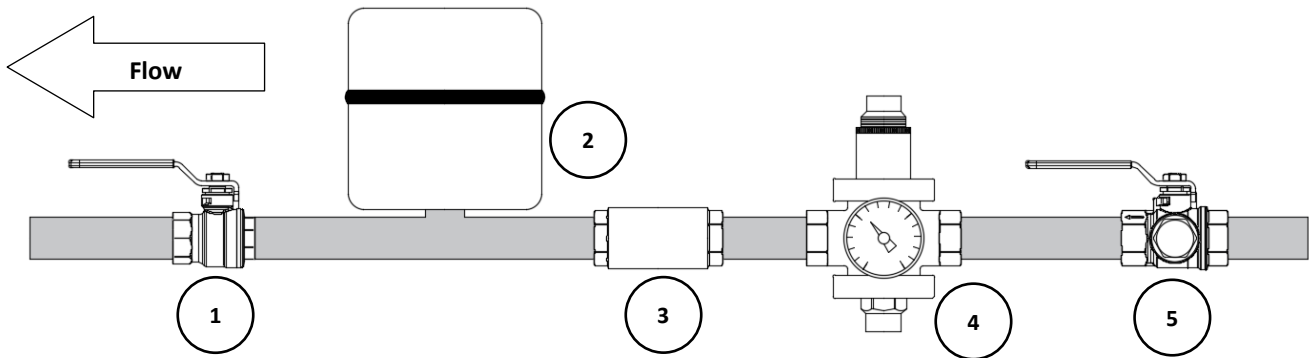
The pressure reducer **500** can be installed in every orientation (horizontal, vertical, upside down, oblique).



Please check that the flow direction is concurrent to the arrow on the reducer body. Commissioning and pressure set-up is done by rotating the brass spring holder on the top; to do it (see pictures below), loosen the plastic lock ring, turn the spring holder using a screwdriver (clockwise to increase outlet pressure, counter clockwise to decrease outlet pressure), tighten the plastic ring.



In order to set the reducer correctly, the system has to be closed and a manometer **M500P** (not included) has to be installed. To avoid over-pressure (opening of the safety valve), water hammer and water return due to volume increase of hot water (it can occur when an electric boiler, a mixer or hot water tank is installed downstream the reducer) please install a check valve and a little expansion vessel between the heat source and the pressure reducer as shown below.



1 – Isolating ballvalve ( <b>51CE</b> )
2 – Expansion vessel
3 – Check valve ( <b>188</b> )
4 - Pressure reducer ( <b>500</b> )
5 – Strainer and isolating valve ( <b>51F</b> )