

# Hydraulic Valves

HYDROMAF

**206**

**Pressure 2W reducing and  
solenoid valve**

Automatically reduces the existant pressure  
upstream to downstream needed, regardless  
of possible variations in pressure or flow.



**mafusa**

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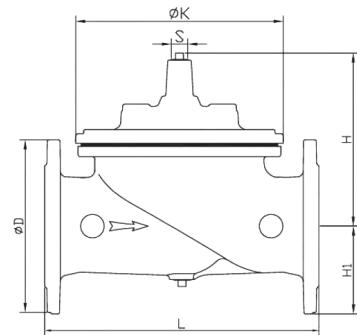
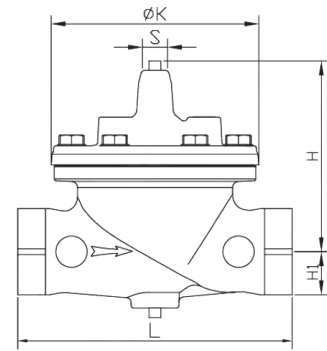
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# + Dimensions

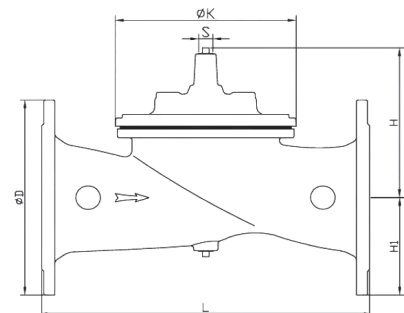
## Main Valve - Fully Bore Type

| DN         | L    | H    | H1* | K    | S      | Peso (Kg) |
|------------|------|------|-----|------|--------|-----------|
| 40S-1 1/2" | 230  | 139  | 55  | 173  | 3/8"   | 13        |
| 50S-2"     | 230  | 139  | 55  | 173  | 3/8"   | 13        |
| 50         | 230  | 139  | 85  | 173  | 3/8"   | 14        |
| 65         | 290  | 159  | 95  | 198  | 3/8"   | 19        |
| 80         | 310  | 179  | 102 | 226  | 3/8"   | 23        |
| 100        | 350  | 214  | 112 | 265  | 3/8"   | 32        |
| 150        | 480  | 333  | 145 | 351  | 1/2"   | 68        |
| 200        | 600  | 407  | 72  | 436  | 3/4"   | 125       |
| 250        | 730  | 476  | 205 | 524  | 1"     | 200       |
| 300        | 850  | 526  | 232 | 606  | 1"     | 260       |
| 400        | 1100 | 624  | 292 | 741  | 1 1/2" | 560       |
| 500        | 1250 | 720  | 360 | 1002 | 2"     | 880       |
| 600        | 1450 | 835  | 425 | 1308 | 2"     | 1300      |
| 800        | 1850 | 1110 | 515 | 1755 | 2"     | 1950      |
| 1000       | 2250 | 1350 | 630 | 2231 | 2"     | 2456      |



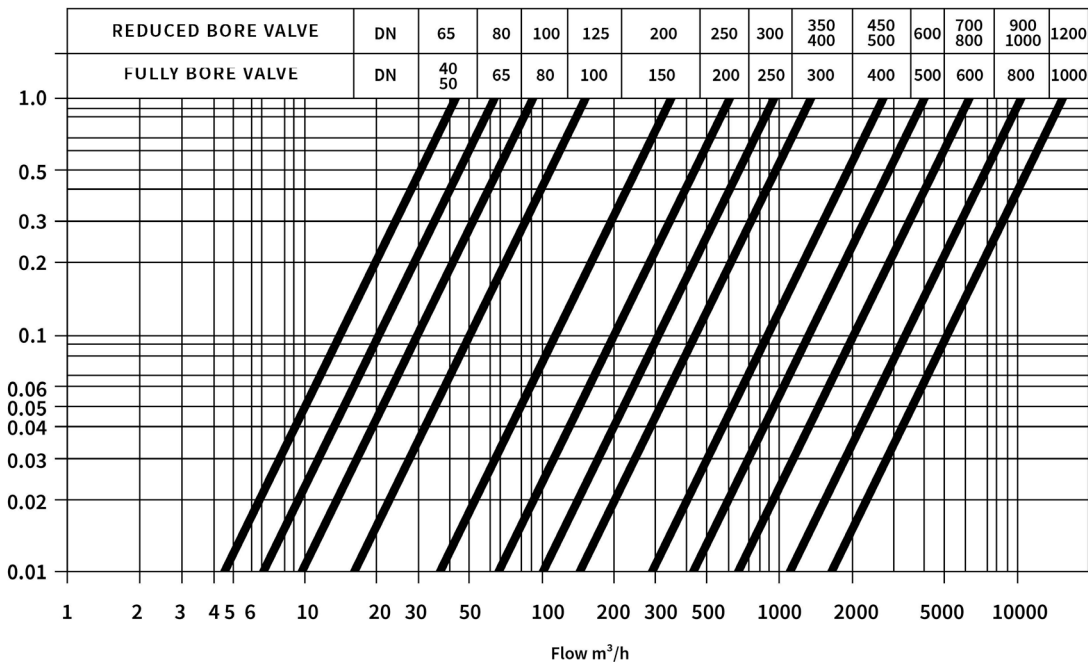
## Main Valve - Reduced Bore Type

| DN   | L    | H    | H1* | K    | S      | Peso (Kg) |
|------|------|------|-----|------|--------|-----------|
| 65   | 230  | 139  | 95  | 173  | 3/8"   | 21        |
| 80   | 290  | 159  | 102 | 198  | 3/8"   | 28        |
| 100  | 350  | 179  | 112 | 226  | 3/8"   | 39        |
| 125  | 350  | 214  | 127 | 265  | 3/8"   | 56        |
| 150  | 480  | 214  | 145 | 265  | 3/8"   | 96        |
| 200  | 600  | 333  | 172 | 351  | 1/2"   | 162       |
| 250  | 730  | 407  | 205 | 436  | 3/4"   | 230       |
| 300  | 850  | 476  | 232 | 524  | 1"     | 285       |
| 350  | 850  | 526  | 262 | 606  | 1"     | 435       |
| 400  | 1100 | 526  | 292 | 606  | 1"     | 590       |
| 450  | 1100 | 624  | 325 | 741  | 1 1/2" | 750       |
| 500  | 1100 | 624  | 360 | 741  | 1 1/2" | 1090      |
| 600  | 1250 | 720  | 425 | 1002 | 2"     | 1200      |
| 700  | 1450 | 835  | 460 | 1308 | 2"     | 1420      |
| 800  | 1450 | 835  | 515 | 1308 | 2"     | 1510      |
| 900  | 1850 | 1110 | 570 | 1755 | 2"     | 2185      |
| 1000 | 1850 | 1110 | 630 | 1755 | 2"     | 2268      |
| 1200 | 2250 | 1350 | 750 | 2231 | 2"     | 2855      |

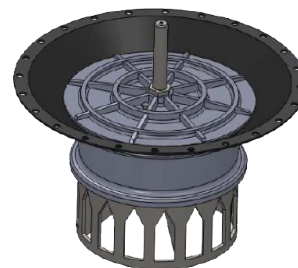
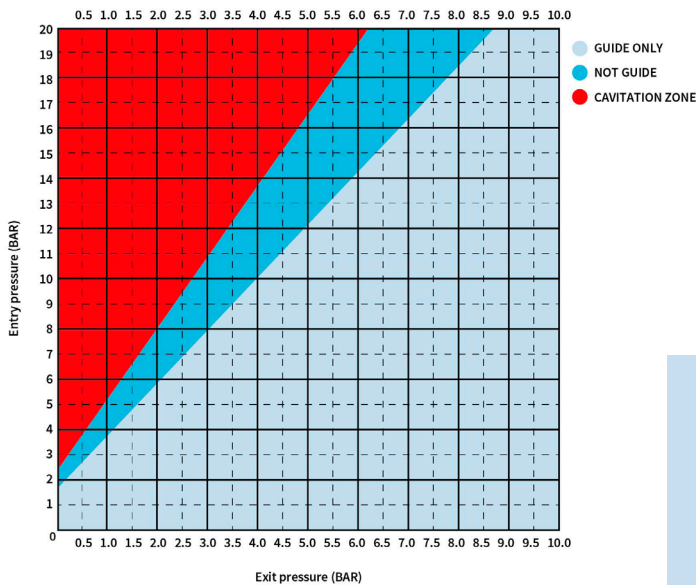




# Head losses



# Cavitation guide chart



## Anti-cavitation Kit

The anti-cavitation mold has been designed for applications where there is a high damage potential for damage from cavitation, providing an optimum internal pressure control through a unique anti-cavitation trim design and relieving the damage of cavitation with multi-stage pressure reducing.



# Standards and specifications

| USE   | STANDARD                                 | CONNEXION                                      |
|---|--|--|
| Use: Water<br>Temp: -41° - 220 °C   | Standard Designs<br>EN 1074-5 BS EN 1567 | Face to face<br>EN 558-1 / ISO 5752<br>Serie 1 |
| Pressure Range:<br>ISO EN PN10, PN16, PN25<br>ANSI CL125/150/300<br>JIS 10K/16K AS Table D, E | Standard Test<br>ISO 5208 / EN 12266-1   | Flange Drilling<br>EN 1092-2 ISO 7005-2        |



## Product Description

Basic valve, reducing pilot 2W stainless steel, stainless steel needle valve, 2 manometers.



## Operation

The Model 206 Pressure Reducing Valve automatically reduces a higher inlet pressure to a steady lower downstream pressure, regardless of changing flow rate and/or varying inlet pressure.

This valve has the same functions that the 200 models but adds a solenoid valve downstream pilot circuit, that allows to remote operate or by time/ volume controller.

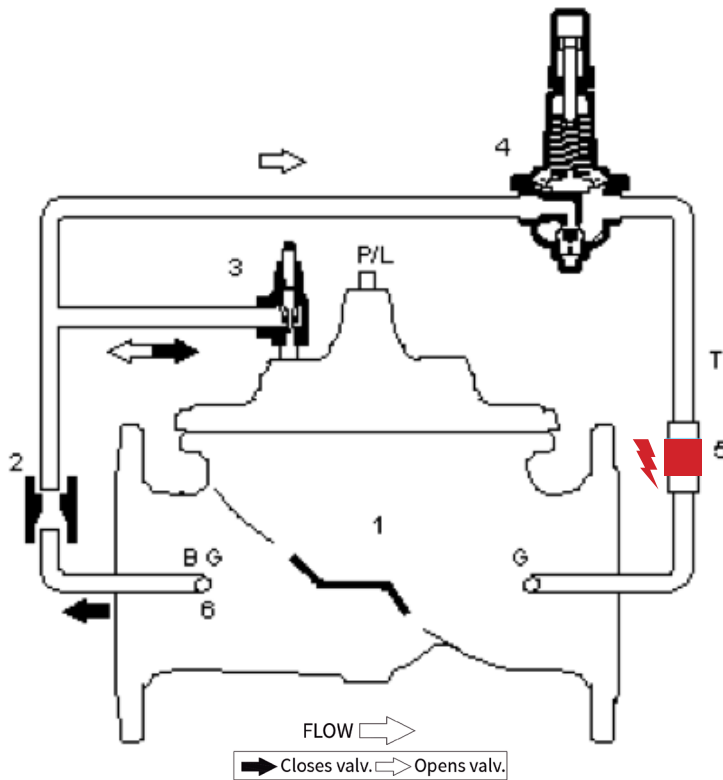


## Setting

- 1° Starting regulation with needle valve open three complete turns and the pilot screw completely loosened.
- 2° Start pushing the screw in the clockwise direction, until observe that begins to raise the pressure downstream and continue to the proper pressure, making brief stops at each turn and allowing the pipe gets filled smoothly.
- 3° Adjust opening or closing of the needle valve to regulate the switching speed, repeating if necessary 2nd step.
- 4° Tighten the lock nut to prevent des-setting pilot.

**Note:** In case of losing control of the valve, we can close it manually closing the ball valve. It is located downstream of the pilot.

# + Control diagram



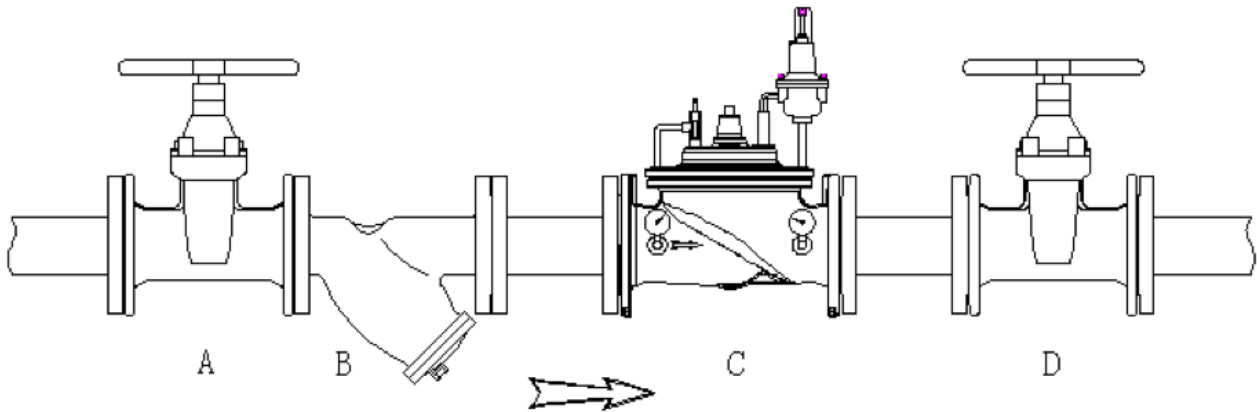
## + Standard configuration

- 1. Main valve
- 2. Restriction
- 3. Needle valve
- 4. Pressure reducing pilot
- 5. Ball valve
- 6. Strainer

## + Optional configuration

- B. Ball valve
- G. Pressure Gauge
- P. Position indicator
- L. Limit switch

# + Typical installation



For carrying out the setting and maintenance of hydraulic valve, it is essential the installation of the following items:

1. Shutoff valves before and after hydraulic, as shown in the graph. With them we can also simulate various flow conditions for regulation and attend the slow filling of the pipe.
2. The cast iron Y strainer prevents the penetration of any element in the hydraulic valve that difficult it's proper functioning. Much of the anomalies are given by the absence of this element.
3. Cast iron air valve. It is highly recommended installing a suction cup water under the outlet. This will allow air to escape during filling or getting in when the reducing pressure valve closes the flow.

It's very important to check that the diameter of the valve is adjusted to the ranges of actual flows and never oversizing the valve.

## Components List

- A. Inlet isolation valve
- B. Strainer
- C. Pressure reducing valve
- D. Outlet isolation valve

**Excluded from the guarantee all those valves are not installed in accordance with these recommendations.**