

Hydraulic Valves

HYDROMAF

512

**Pressure sustaining valve and
level control**

It performs the tank filling function,
maintaining the level between a maximum
and a minimum, preventing an excessive
pressure drop and speed upstream.



mafusa

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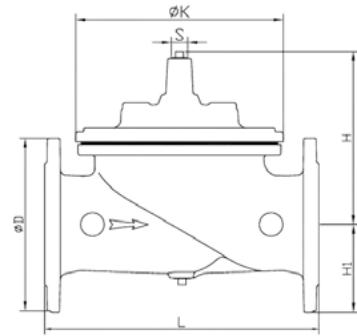
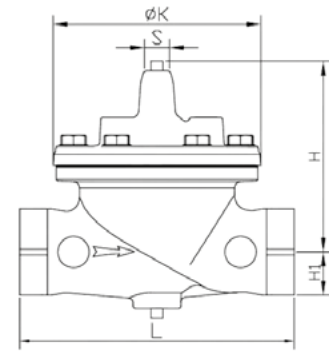
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+ Dimensions

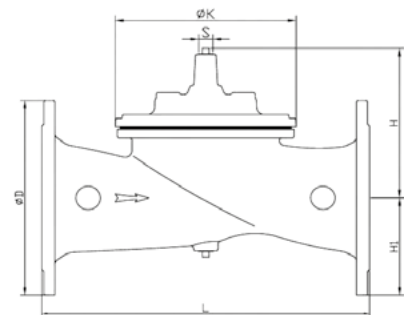
Main Valve - Fully Bore Type

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



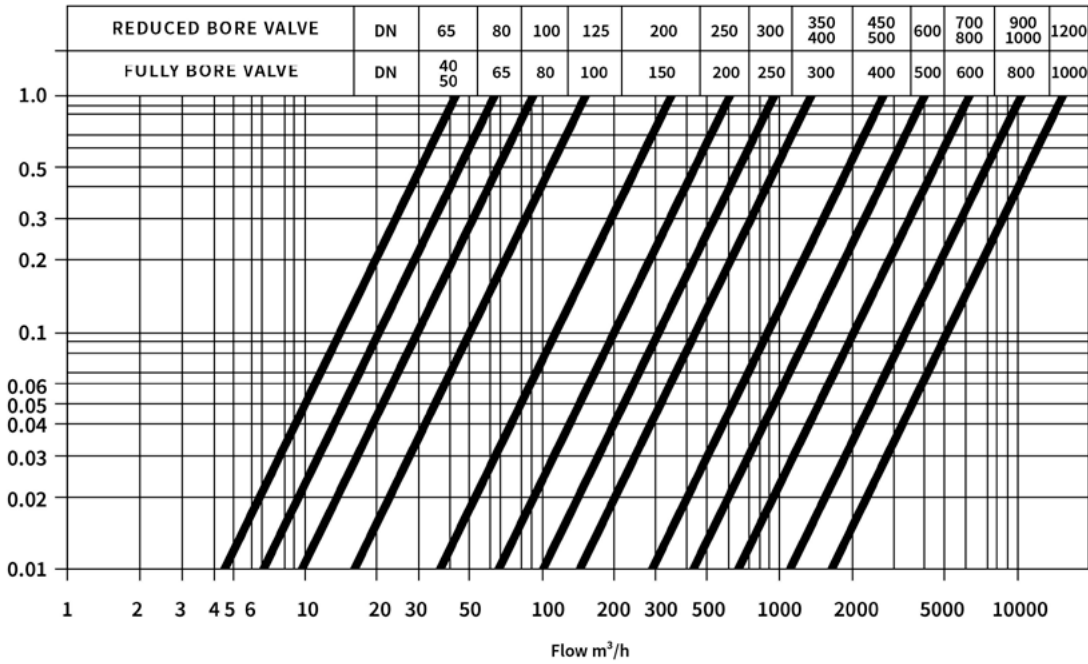
Main Valve - Reduced Bore Type

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

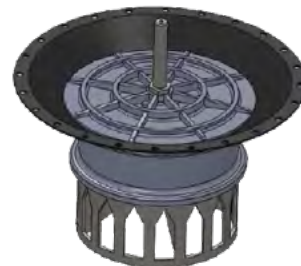
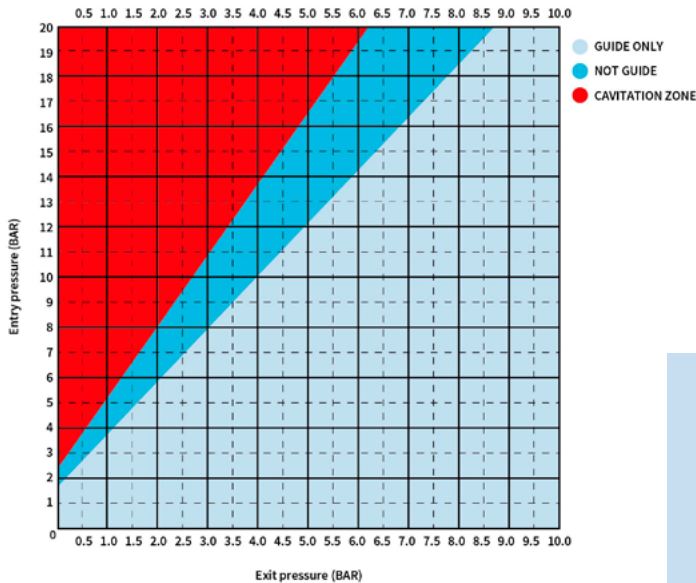




Head losses



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



Product description

Basic valve, 2W stainless steel support pilot, stainless steel needle valve, 2/3W double level float pilot, pressure gauge.



Operation

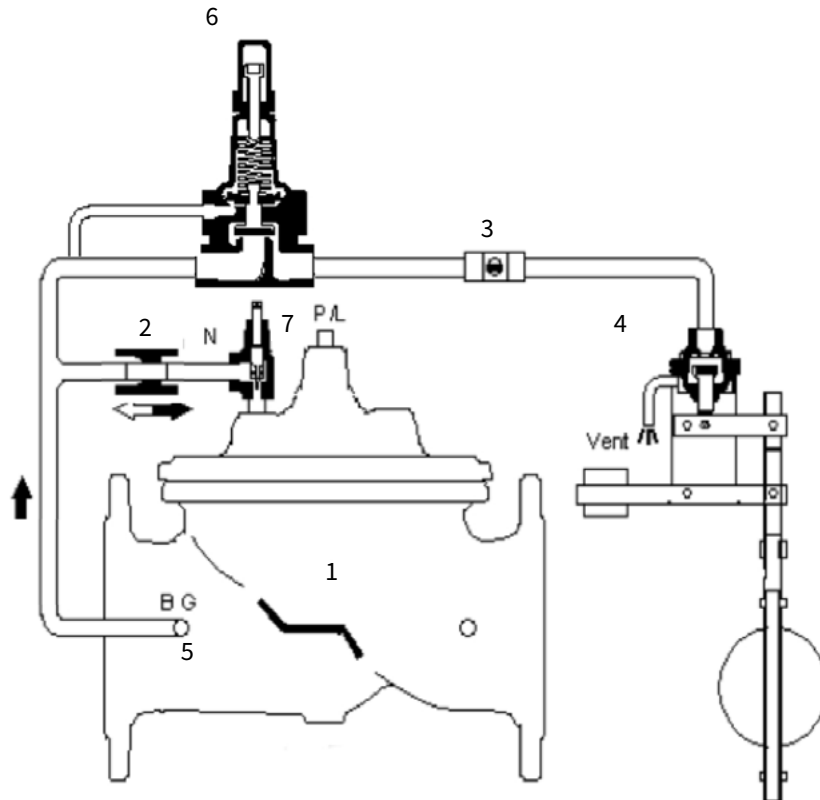
The valve guarantees that despite the drop in the level of the tank, the valve will not open fully, but will maintain a moderate pressure drop and flow velocity in the network in order to avoid damage to the valve, high pressure fluctuations in the net and possible water hammer on the closure. This scheme is also applicable to the modulating float valve, although as it is a progressive closure, it is not usually necessary.



Setting

- 1° Check the flow direction with the arrow on the valve.
- 2° Open the needle valve two turns (if necessary) and open the ball valves
- 3° Tighten the pilot screw to the maximum, so that the valve remains closed.
- 4° Open the upstream gates (before the valve) to check that the valve closes completely.
- 5° We now check the static pressure of the network and begin to loosen the screw of the support pilot until achieving the desired dynamic pressure in the network
- * Warning: "check that the pressure drop from upstream to downstream of the valve is within the admissible parameters on the cavitation graph.
- 6° Carry out several times, carefully, by means of the buoy to check that the closures take place within the acceptable parameters. If they were very abrupt, we can soften them by choking the needle valve a little so that the closing is slower.

+ Control diagram



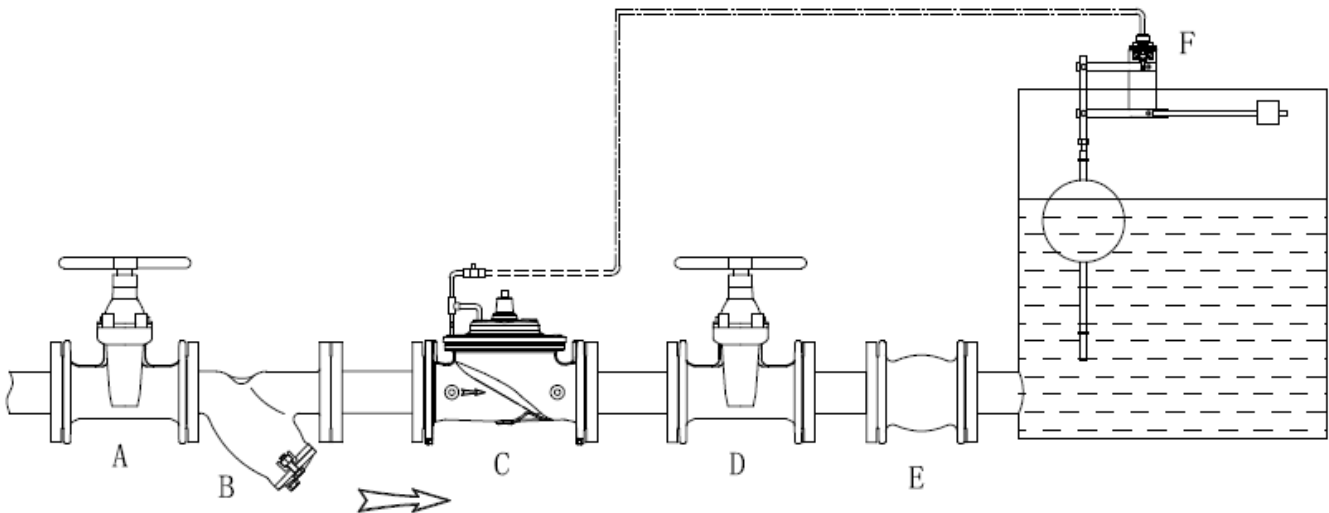
+ Standard configuration

1. Main valve
2. Restriction
3. Ball valve
4. 2/3 W Float pilot
5. Derivation filter and tee
6. Sustainer pilot
7. Needle valve

+ Optional configuration

- B. Discharge ball valve
- G. Manometer
- N. Needle valve
- P. Position indicator
- L. End of career

+ 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. Cut valve
- B. Filter
- C. Control valve
- D. Cut valve
- E. Anti-vibration sleeve
- F. Double level float pilot

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