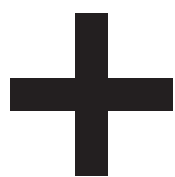


PN 10/16/25 Atm
DN 50/600 mm



Hydraulic Valves

HYDROMAF

500

Pressure sustaining/relief valve

It maintains a constant minimum pressure upstream. It can also be used as a relief valve shunt



mafusa

Avda dels Transports, Sector 13
Parcela 45A, 46394, Ribarroja del Turia
Valencia, España

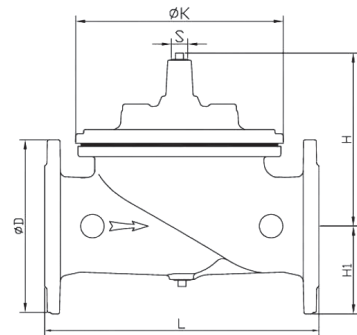
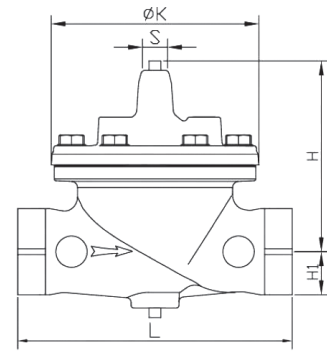
Phone: 96 166 70 35
Fax: 96 166 90 89

www.mafusa.net
mafusa@mafusa.net

+ Dimensions

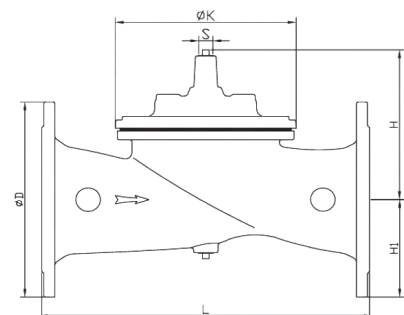
Main Valve - Fully Bore Type

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



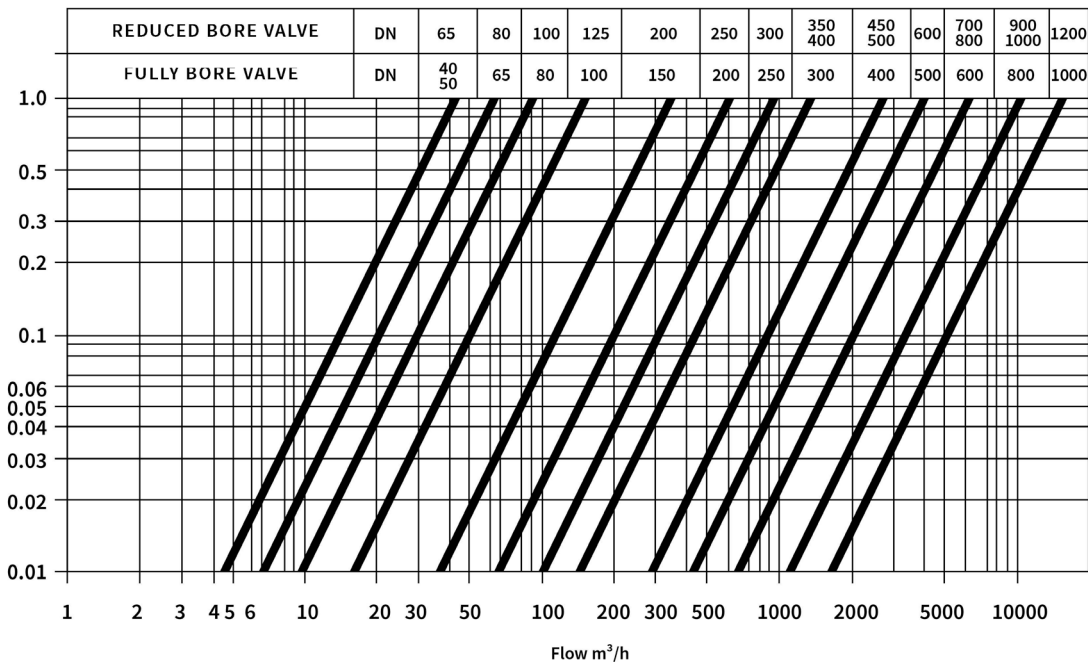
Main Valve - Reduced Bore Type

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

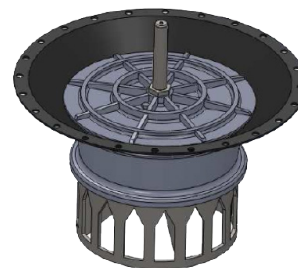
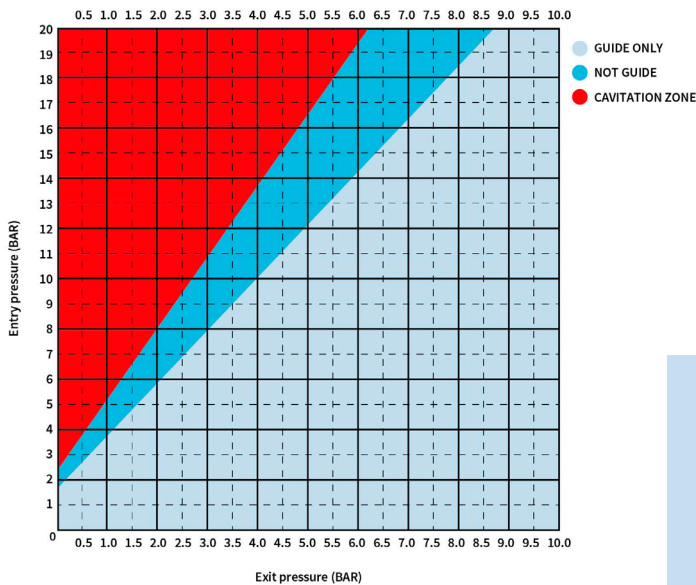




Head losses



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, reducing pilot 2W stainless steel, stainless steel needle valve, manometer, ball valve.



Operation

The Model 500 Pressure Sustaining/Relief Valve is a hydraulically operated, pilot-controlled, modulating valve designed to maintain constant upstream pressure.

This valve can be used for pressure relief, pressure sustaining, back pressure functions in a by-pass system. In operation, the valve is actuated by line pressure through a pilot control system, opening fast to maintain steady line pressure but closing gradually to prevent surges.

Operation is completely automatic and pressure settings may be easily changed by adjusting screw on top of the pilot.



Setting

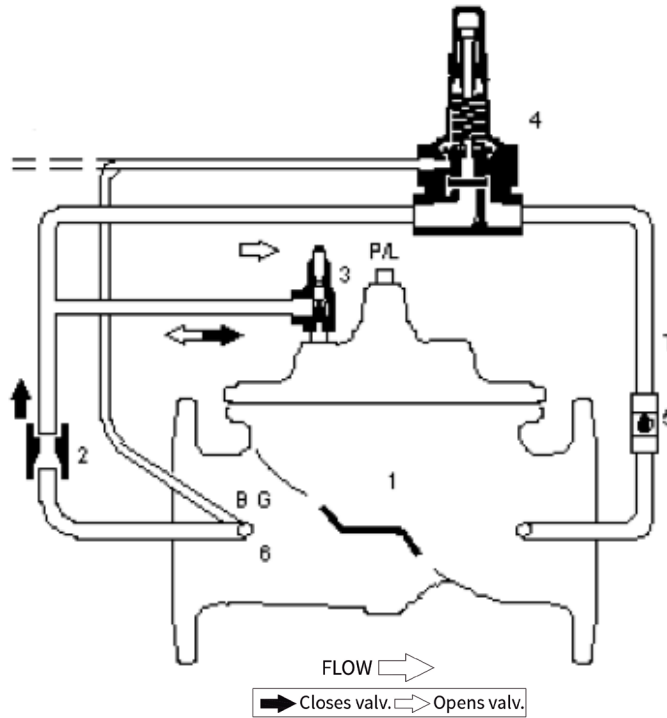
1° Starting regulation with needle valve open three complete turns and the pilot screw completely loosened.

2° Open the main valve upstream to let the hydraulic load enter, and check the pressure on the gauge.

3° Then, start loosening slowly the screw of the pilot making small pauses in every movement and controlling the smooth filling of the installation. As we loosen, the valve will open, bringing the pressure up going down. You may need to open a drain downstream to facilitate the flow.

4° When we reach the desired point, fix the locknut of the screw and adjust the needle valve if it is convenient.

+ Control diagram



+ Standard configuration

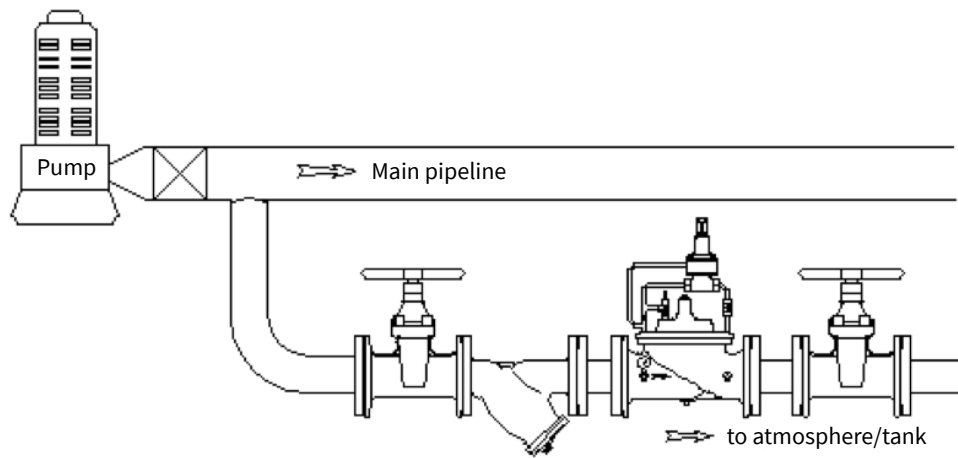
- 1. Main valve
- 2. Restriction
- 3. Needle valve
- 4. Pressure relief pilot
- 5. Ball valve
- 6. Strainer

+ Optional configuration

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

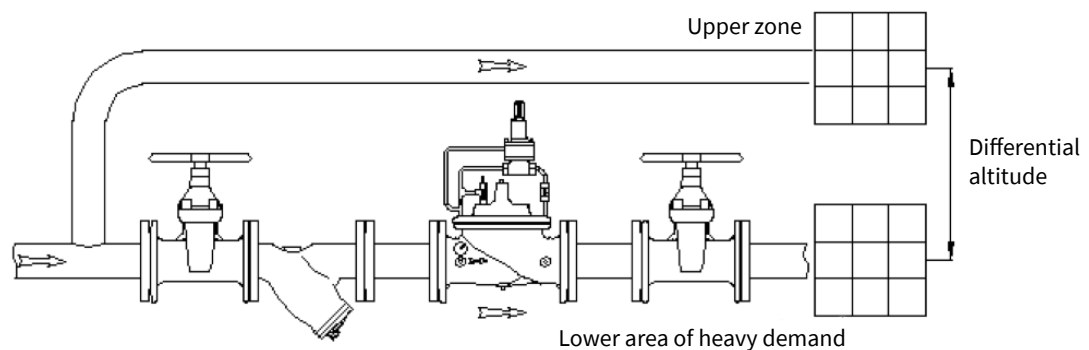
+ Typical installation

+ Pressure relief service



This fast opening, slow closing relief valve provides system protection against high pressure surges on pump start up and pump shut down by dissipating the excess pressure to a safe location.

+ Pressure sustaining service



When installed in a line between an upper zone and a lower area of heavy demand, the valve acts to maintain desired upstream pressure to prevent “robbing” of the upper zone. Water in excess of pressure setting is allowed to flow to an area of heavy demand.

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