



**P.A. – S.p.A. – EQUIPAGGIAMENTI TECNICI DEL LAVAGGIO**

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## VS 1200 FL Full opening discharge valve

Suitable for use as a drain valve in high pressure systems.

Technical manual: MPA0015EN



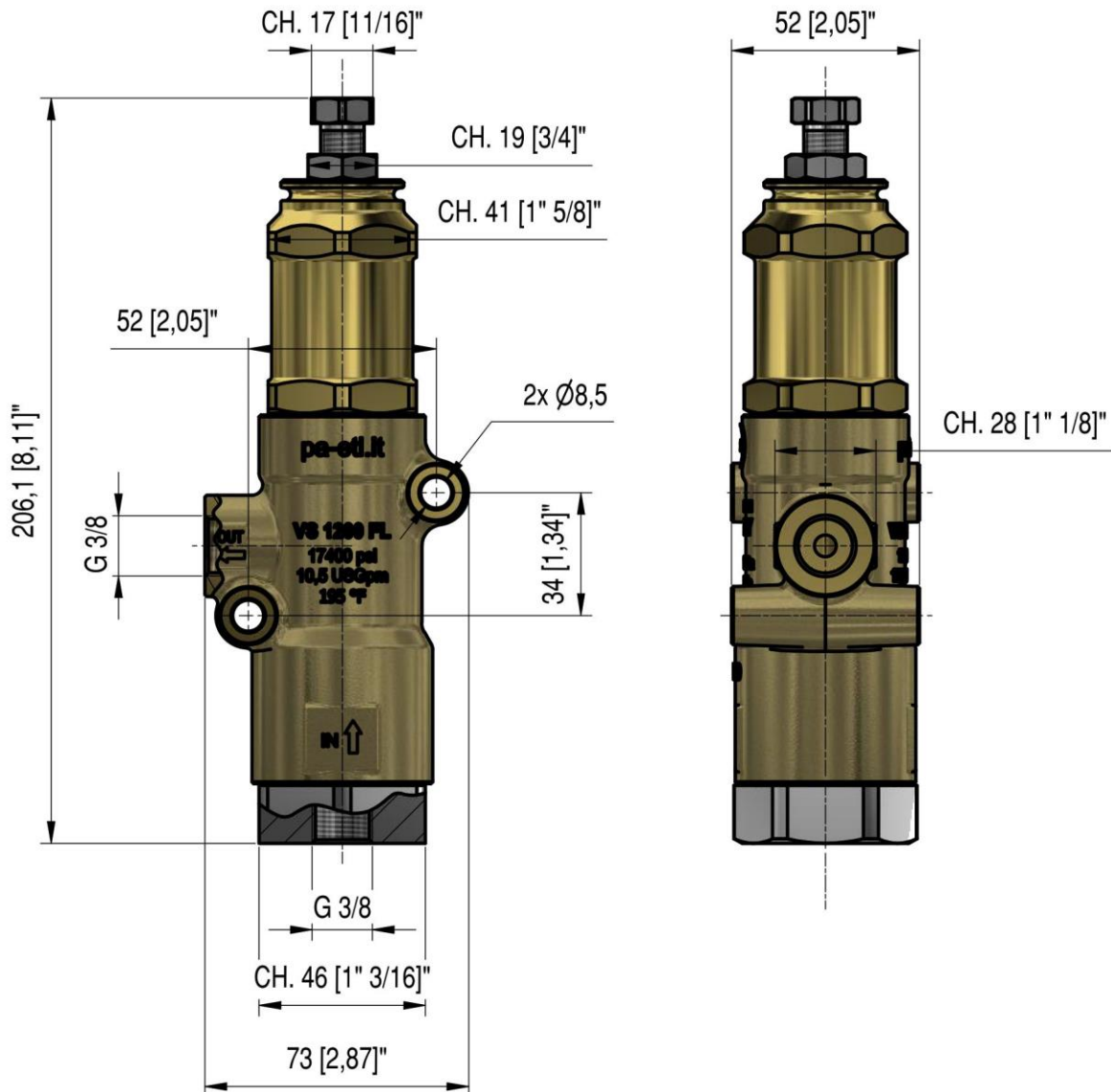
- **60.3000.00** G3/8" F
- Full opening in case of dangerous overpressure that could damage the system.
- Deactivation of the trigger only through the system shutdown for maximum safety.
- Ball valve for better sealing.
- High trigger accuracy.
- Tested to ensure maximum reliability.
- Seal seat available as a spare.
- Fixing studs.

### TECHNICAL SPECIFICATIONS

CONSTRUCTION MATERIAL			BRASS BODY AND INTERNAL PARTS IN SST							
Nominal temperature (1)			90°C							
Nominal diameter			DN10							
Part nr.	Rated pressure		Permissible pressure		Minimum adjustable pressure		Minimum flow rate	Maximum flow rate	Weight	Inlet outlet BYPASS
	bar	MPa	bar	MPa	bar	MPa	l/min	l/min		
60.3000.00	1000	100	1200	120	200	20	9	40	2220	G 3/8" F

(1) The valve has been designed for a continuous use at a water temperature of 60°C. It can resist for short periods at a maximum temperature of 90°C

## DIMENSIONAL DRAWING



## INSTRUCTIONS

### SELECTION

This product is suitable for use with fresh and clean water, even slightly additive, with normal detergents. For the use of different or corrosive fluids, please consult our Technical office. Using non-pure fluids, adopt adequate filtration. Choose the valve based on the operating data of the machine on which it is to be installed (allowed pressure, maximum flow rate and maximum system temperature). In any case, no overpressure of the machine can exceed the allowed pressure stamped on the valve.

### FUNCTION

The valve limits the maximum pressure in the circuit. In the event of overpressure, the valve completely discharges the pump flow. To reset the valve and put the circuit back under pressure, the system must be turned off. During normal operation of the system, a shutter, pushed by a spring, closes the exhaust port. The setting pressure of the valve is determined by varying the thrust of the spring by means of the appropriate adjustment screw.

### INSTALLATION

This product is intended to be incorporated into the finished machine. This appliance, in a machine that produces hot water, must be installed upstream from the boiler. In any case, even in cold water applications, since accidental over-

heating cannot be excluded, provide for the installation of thermal protection equipment that maintains the water temperature at a value below the maximum allowed.  
 It is recommended to install the valve with drainage in a tank. It is advisable that the tank is equipped with separating baffles to reduce any turbulence and air bubbles, generated by the introduction of the exhaust flow, which could be harmful to the pump. If the discharge takes place in the atmosphere, orient the valve so that the water jet does not cause damage to people or property.

In case of assembly with Zero PA series control valves, the VS1200 FL must be installed exclusively downstream (at the outlet) of the control valve.

**CALIBRATION**

The valve is supplied uncalibrated. Calibration is performed with the system running and the pressure inside the circuit. The valve calibration pressure is determined by acting on the adjustment screw (pos. X): screwing the screw increases the calibration pressure. Once the desired setting pressure has been determined, lock the screw by tightening the nut (pos. X). It is possible to protect the calibration with the tamper evident cap and the relative pin by applying a seal. The kit is available only on request.

it is advisable to calibrate the discharge valve at a pressure that is at least 10-15% higher than the system working pressure, if the valve is properly calibrated it must neither leak nor trigger. When you are close to the desired setting, the valve will start to lose a few drops or will have a slight leakage, at which point screw the adjustment screw just enough to eliminate the leak. Once the calibration has been carried out, test the system with a few operating cycles, if during this test the valve loses a few drops or leaks, repeat the calibration or check that the calibration pressure is higher than 10-15% of the working pressure, as mentioned earlier.

**MAINTENANCE**

Once a year, check the calibration of the drain valve, directly on the system or on a special test bench.

After each operation to drain the drain valve, check that there are no deposits of debris between the seat and the shutter that could compromise the seal of the valve.

In any case, even in the absence of drainage interventions, it is recommended to revise the valve every two years. Check the state of wear of the gaskets and internal components, and if necessary, replace them with original PA spare parts, taking care during assembly, to lubricate with water-resistant grease.

Maintenance must be performed by specialized technicians.

The manufacturer is not to be considered responsible for damage resulting from incorrect installation and / or maintenance.

**TROUBLESHOOTING: CAUSES AND REMEDIES**

PROBLEM	PROBABLE CAUSE	REMEDY
The valve leaks from the exhaust during normal operation of the plant.	<ul style="list-style-type: none"> <li>- Seat or shutter damaged</li> <li>- Presence of impurities between seat and shutter</li> <li>- Wrong calibration</li> </ul>	<ul style="list-style-type: none"> <li>- To change</li> <li>- To clean</li> <li>- Calibrate</li> </ul>

**REGULATIONS**

See *Norm manual*

For correct use, follow the instructions contained in this manual and report them on the Use and Maintenance booklet of the machine on which the drain valve will be installed.

This manual is valid for all types of valves named **VS 1200 FL**.

Technical data, descriptions and illustrations are indicative and can be modified without notice.

<b>Instructions, maintenance, installation, spare parts manual.</b>	n. MPA.0015.EN
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