



Overview

**VP-SERIES
VALVES**



AZIENDA CON SISTEMA QUALITÀ
CERTIFICATO DA DNV
=UNI EN ISO 9001/2000=

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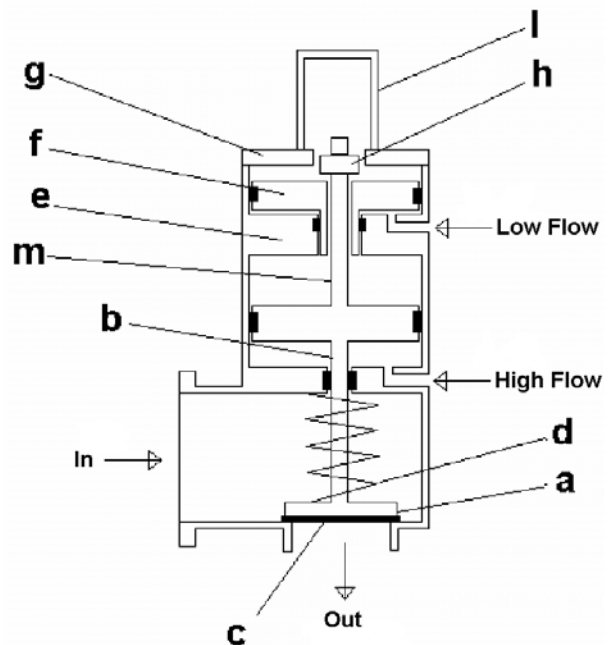
General Description

The pneumatic valves can be used to intercept hydrocarbons such as diesel, gasoline, kerosene, airplane fuel products and various solvents with the exception of special versions requested by clients for the specific use.

In standby (no L.F. and H.F. air supply) the shutter “a” attached to shaft “b” presses on gasket “c” thanks to the action of spring “d” preventing the “IN”-“OUT” passage. Once closed, the action of the spring is reinforced by the force due to the differential section defined by the construction diameters of the shutter and its inner guide (not shown in the figure) which contributes to the “seal” of the valve.

The valve can have the following operating states:

- *“Full flow” opening*
By supplying the H.F. and L.F. fitting, the piston “d” attached to shaft “b” lifts the shutter “a” until the piston mechanically comes into contact with head “e” while the piston “f” lifts until coming into contact with the head “g”. “Full flow” is created in this condition.
- *Reduced flow opening*
By supplying the L.F. fitting the piston “f” lifts until it comes into contact with the head “g” lifting the shutter “a” as well by a measurement which depends on the relative distance between the piston and stop nut “h”. In the two movements the spring “i” is further compressed which brings the valve into the closing position, when the supply pressure is intentionally shut of (or fails).



- *Change from full flow to reduced flow*
The supply is shut off to the H.F. fitting so that the spring “d” lowers shutter “a” and everything attached to it. Since the supply is NOT disconnected from the L.F. fitting, the descent is stopped when nut “h” comes into contact with the piston “f” (See the “Setting” paragraph).
- *Change from full flow to zero flow*
The supply is shut off simultaneously to the H.F. and L.F. fittings.
- *Change from reduced flow to zero flow*
The supply is shut off to the L.F. fitting.

Specifications

The VP valves have a “90° flow” with extractable shutter suitable for intercepting all the liquids of the classes 1-2-6.

The rated diameters DN are 2, 3, and 4 inches, respectively, while the rated pressure PN is 10 bar.

The reference flow rates are those of the counters which they are normally coupled with:

Valve Model	Flow Rate (l/min)
VP 7	500
VP 15	1000
VP30	1700

The VP7 model has a mandatory accessory part at the outlet (curve, elbow, air-check). The models VP15-30, are manufactured and sold without any coupling part at the outlet, however this DOES NOT MEAN that they can be tested and/or used, without first having fitted the relative flange, curve etc.

The valves are manufactured so that the full flow rate or reduced flow rate can be delivered; the latter can be adjusted mechanically in a non-continuous manner from 0 to approximately 15% (theoretical) of the full flow rate.

In all cases the intrinsic closing/opening speed of the valve can be modified by inserting simple flow regulators in the control line.

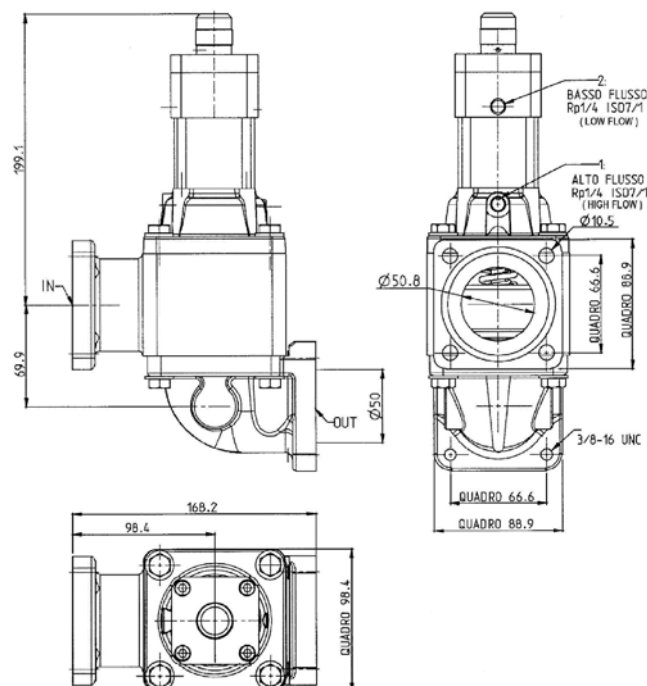
Materials

The main components of the VP valve are as follows:

- Body, cover, shutter and guide (main pressurized parts and in contact with the fluid to intercept): aluminium EN1706 AC-42100ST6.
- Drive parts (cylinders, pistons, heads): aluminium UNI EN12392 AW- 6082T6.
- Shafts: stainless steel AISI 316.
- Springs: stainless steel AISI 302.
- Gaskets: viton, Teflon.
- Screws: carbon steel cl. 8.8, stainless steel cl. A70.

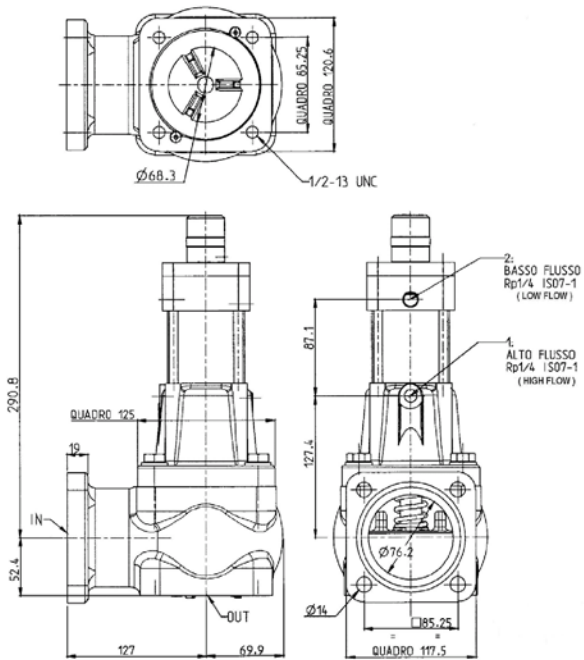
Dimensions

VP 7 Valve

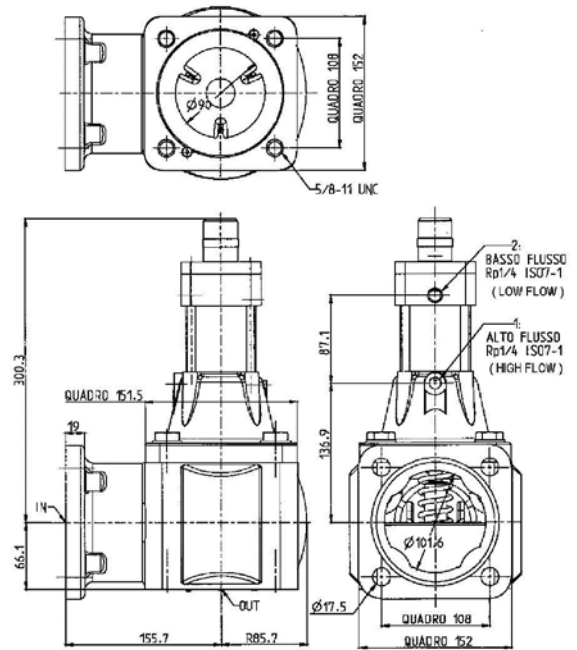


Dimensions

VP 15 Valve



VP 30 Valve



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