

Application

The PEMS IV valve is a process line accessory to be used for clear or viscous liquid products from group 2. It is designed for taking samples from liquid process installations in the food, chemical, pharmaceutical, cosmetics and biotechnology industries and all other sectors requiring sanitary type equipment.

Operating principle

The PEMS IV valve is highly reliable. The wide aperture body allows samples to be taken directly from the tank or the pipe on which it is welded, thus avoiding any retention area between the membrane and the installation.

The sample is easily obtained by turning the control screw to detach the membrane from its seat, allowing the fluid to enter the outlet pipe. The head opening operation can either be carried out by pulling it which provides the immediate complete opening of the valve with closing obtained automatically by the incorporated spring return, or by turning it which provides a controlled flow up to fully opened position. The shape of the sampling chamber also allows simple and efficient sterilisation by either injecting a cleaning solution completed by the retention of a sterilising solution, by steam injection (standard model with double outlet pipe), or by flame sterilisation (option with single outlet pipe).

No tool is needed to maintain the PEMS IV; manually unscrewing the head gives direct access to the membrane.

Standard definition

The PEMS IV valve is a process line accessory in accordance with European pressure equipment directive 97/23/CE paragraph 3.3. It comprises a stainless steel body to be welded on to a pipe or a tank. It also has a stainless steel head to which the membrane is attached. The standard valve is delivered with a body to be welded on the inlet side and two outlets shut by caps.

Materials

Components in contact with the product being conveyed:
1.4404 (316L) stainless steel.

Membrane: silicone.

Finish: semi-bright.

Sizes

Standard NW 6 and NW 10 for highly viscous liquids.

Technical characteristics

Max. operating pressure: 600 kPa (6 bar).

Min. operating pressure: vacuum.

Operational temperature range: 0°C to + 100°C.

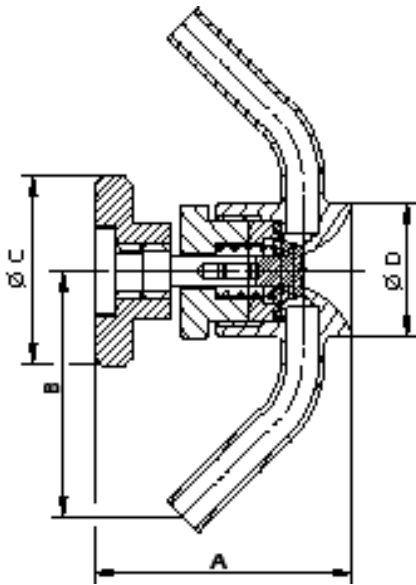


Table of dimensions (mm)

Sizes	NW6	NW10
A	48	69
B	45	68
C	35	50
D	24,5	34,5

Options

- A) Threaded outlets: 1/4", 3/8", 1/2" or other connections on request.
- B) Membrane in EPDM, FPM (VITON equivalent), Perbunan (nitrile).
- C) Single smooth or threaded outlet (1/4", 3/8", 1/2") for flame sterilization.
- D) Single action pneumatic actuator NC).
- E) Lockable valve.

* NW 6 only.

When ordering, please provide the following information :

- Size.
- Type of inlet connection.
- Number and type of outlet(s).
- Membrane quality.
- Manual or pneumatic version.

Note :

For further details, refer to the PEMS IV sample valve spare parts catalogue and installation manual.