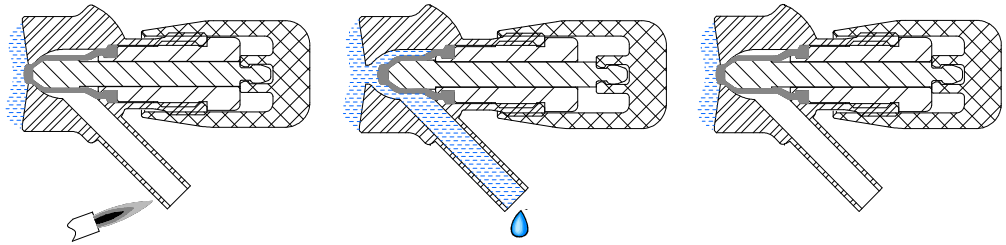
the category specified under article 3.3 do not bear the CE mark and are designed and manufactured in accordance with good engineering practice.

7.) *GUIDELINES FOR USE – SAMPLING/STERILISATION*



1 – Flame sterilisation *2 - Sampling* *3 – Closing the valve*

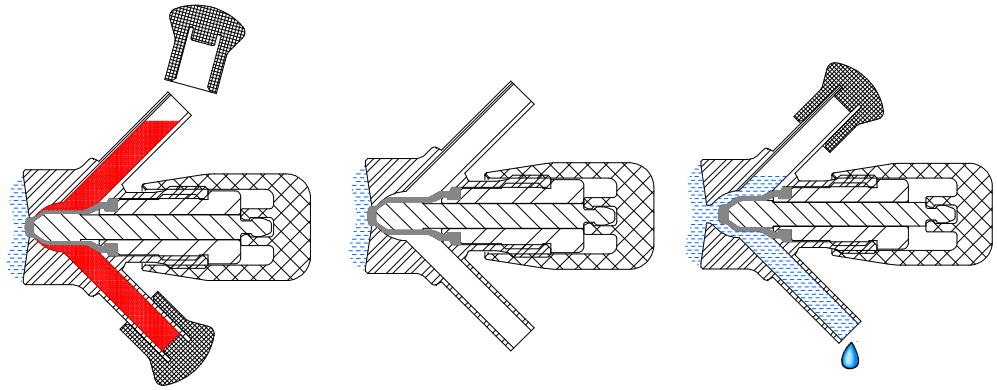
Model PEX1 (one-way)

Flame sterilisation may be carried out if necessary. A gas lighter with an adjustable flame may be sufficient to achieve this, although we recommend using a small handheld blowlamp.

After lighting the flame, bring it close to the outlet and hold it until you obtain a temperature high enough to transfer to the rest of the body by means of thermal conductivity. Caution: If the temperature or heating time is so low that the outlet changes colour (brown, or even red) this can damage the valve and prevent its proper function. If this occurs, use the 'stainless steel handle' option for the manual versions. For this type of sterilisation in manual version, to use the option "stainless steel handle".

Model PEX2 (two-way)

This model is normally submerged in sterilising solution. Each user can define their own procedure. However, we recommend the following operation mode:



1 - Sterilisation *2 – Discharge of sterilising solution* *3 - Sampling*

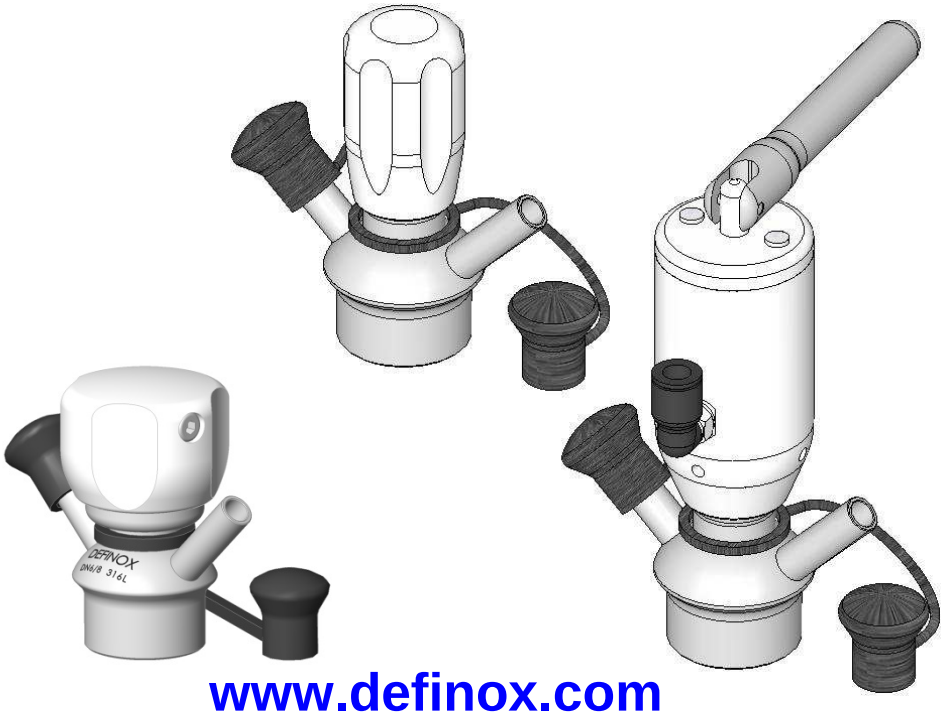
With closed valve, place the lower stopper to entirely fill the valve of sterilising solution (Fig. 1). Replace the upper stopper once complete. Before sampling, empty the body by removing the lower stopper (Fig. 2). Then perform sampling by opening the valve. It is **essential** to close the upper outlet to prevent any risk of spraying (Fig. 3). Close the valve again once the desired quantity of product has been released. Sterilisation is performed in the same manner as above.

For steam sterilisation, remove both stoppers (valve closed). Sterilise with the steam from the upper outlet for approx. 1 minute, then cut off the steam supply and reinsert the stopper into the upper outlet. Then perform sampling by opening the valve. It is **essential** to close the upper outlet with the appropriate stopper to prevent any risk of spraying (Fig. 3).

DEFINOX

INSTALLATION GUIDE

SAMPLING VALVE
PEX – PEAX – PEX EVO



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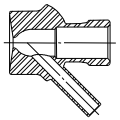
Observe the assembly and installation guide. Take account of your actual conditions of use and observe the valve specifications stated in the DEFINOX catalogue.

1.) *DESCRIPTIVE SUMMARY*

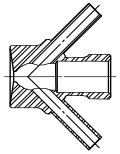
The PEX-PEAX is designed for sampling at high or low temperatures, either in tanks or pipes, by integrating an independent cleaning and sterilisation process into the ongoing production run.
Sampling is performed by opening the valve. The through-flow is either gravity-controlled in a tank or pressurised in a pipe.
The only parts to contact the product are made of 316L stainless steel or an elastomer suitable for the intended use.

Configurations:

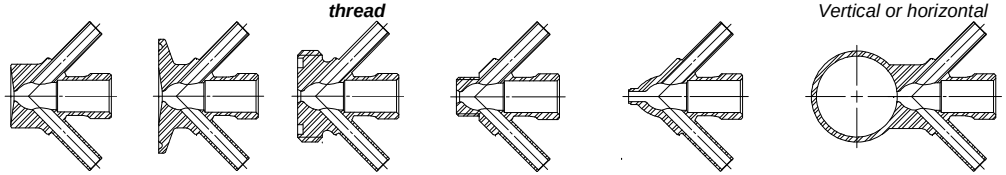
One-way body *for flame sterilisation for PEX1 and PEAX1:*



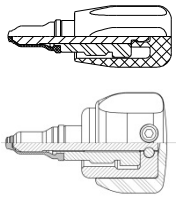
Two-way body *for steam sterilisation or cleaning solution for PEX2 and PEAX2:*



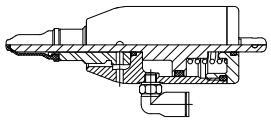
Weld | ***Clamp*** | ***SMS or DIN thread*** | ***Pipe thread*** | ***End weld*** | ***Pre-welded on tube*** *Vertical or horizontal*



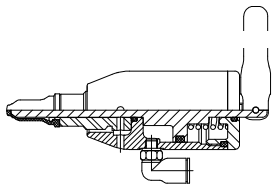
Manual control - EVO*(plastic or stainless steel handle)*



Automatic control



Combined automatic/manual control



2.) *GUIDELINES FOR USE*

Caution: When handling this valve, which is designed to transport dangerous products (high temperature, spraying of corrosive products, etc.), it is recommended that the necessary precautions are taken and that adequate safety equipment is used, for example: safety glasses, safety gloves, non-slip boots, clothing to protect against spray liquids, etc.
Caution: Never dismantle a valve without checking that the tank or pipe on which it is installed is empty and depressurised.
Caution: Stoppers are provided for a maximum pressure of 300 kPa (3 bar) and will be ejected above this value, or even below this pressure if they are not installed correctly.

Usage restrictions:
This type of valve is not designed for transporting steam on a permanent basis.
The valve must not be used for vacuums, as this risks causing the valve to malfunction and the membrane to deteriorate.
Certain products, or faulty installation, can also result in deterioration of the membrane. If this occurs, contact us with precise details of the usage conditions (temperature, products, pressure, sterilisation time, etc.).

The use of connecting pipes or nozzles generating large flexural or torsional forces is to be avoided.
Where this type of connection is required, Definox can weld the joints for you and strengthen the pipes upon request.

3.) *SERVICE CONDITIONS*

Maximum operating pressure: 1000 kPa (10 bar)
Maximum pressure during sampling phases: 500 kPa (5 bar)
Temperature: 0°C - 120°C
Cylinder air supply: 500 kPa - 600 kPa (5 bar - 6 bar)
Air connection: Ø4/6
*The diaphragm versions must not be used for dynamic flow sampling (product circulation continues during sampling). Risk of leakage when closing.

4.) *OPERATING CONDITIONS*

Surface and end weld models
The first step consists of dismantling the valve, which is supplied assembled. Refer to the maintenance guide IT-TDFX-161. If the body is isolated, place in position and weld onto the installation.
Mark the exact position of the valve on the surface, tank or pipe. Use a needle and a hammer to mark the centre of the hole.

Surface weld model	*End weld model*
Prepare a pilot hole using a hole saw or any other suitable tool. Next, make a hole with a diameter sufficient for the diameter of the valve (Ø28 for DN6, Ø36 for DN10 and Ø52 for DN15). Insert the valve into the hole, observing the direction of the valve(s) and the flushing of the body base with the internal surface.	Make a hole on the surface (Ø6 for DN6, Ø10 for DN10 and Ø17 for DN15). Centre the body over the hole, whilst observing the direction of the valve(s).

Spot weld into position. If necessary, adjust the position of the body. Carefully perform all of the necessary welding steps. This must be carried out under a flow of colourless gas (argon, nitrogen, etc.).

- Weld from the outside on the 'end weld' model, or on the 'surface weld' model if the surface or pipe thickness does not exceed 2 mm – 3 mm. The weld must be made by applying metal and must be sufficiently penetrating to ensure effective melting inside the tank.
- Weld from the inside (preferable) for the 'surface weld' model, irrespective of the surface thickness. The weld can only be made by applying metal to the tank or large pipe and must be sufficiently penetrating to ensure effective melting up to 2 mm on the joint plane. As soon as possible after access, level and polish this weld to obtain perfect continuity with the interior surface. During this delicate operation, **take great care not to damage the feed opening of Ø4.5, which serves as a seat for the valve seal.**

Before reassembling, clean/passivate both inside and outside, and carefully clean the valve to remove all traces of filings, shavings or other foreign bodies.
For reassembly, refer to maintenance guide IT-TDFX-161.

Other models
For screw-on or male/female connection models, the assembled valve can be mounted directly onto the installation.

5.) *MAINTENANCE*

This equipment does not require any special maintenance. However, we recommend that you change the membrane at least twice a year, or more frequently in the case of more demanding use (depending on sampling and cleaning frequency, products, temperature, etc.).

6.) *EEC COMPLIANCE*

All of our valves comply with European Regulations (EEC). In addition, our valves do not bear the CE mark in accordance with Directive **2014/68/EU** "Pressurized equipment", article 3.3: '…products compliant with