Put the actuator in the closed position and check that the piston is centered correctly through the lower connection. Centre if necessary by tapping the clamps. When using for the first time, check the lower connection in the down position then the top connection(s) and the lantern in the up position for leaks (leak at the operator).

NOTE:

- We recommend the use of a **medium threadlocker** to lock the piston during its reassembly to the automatic actuator.
- During sawing operations, avoid getting chips or filings in the pipes and rinse the pipes thoroughly with the valve open to avoid damaging the seals when the valve is put into service.

8) WORKING CONDITIONS

The actuator is supplied with dry, filtered air at a pressure of 4.5 to 8 bar. The operator air couplings are designed for a 4/6 diameter hose fitting. The valve has a max. working pressure of 6 bar, a max. temperature of 140°C and an acceptable vacuum of 0.4 bar.

9) EEC CONFORMITY

A - Our valves comply with European regulations (EEC) within the limits of use described in paragraph B.

The CE mark on the valve indicates conformity to the following regulations :

CE

- 89/336 "Electromagnetic compatibility"
- 97/23 "Pressurized equipment"
- 73/23 "Low pressure"

B - Use limits :

Usage pressure must be lower than 10 bar for all products.

In case of dangerous gas[(1)] valve diameter (line) must be below 100 mm.

For use outside these limits, please contact our technical service.

[(1)]dangerous gas : group 1 gas, identified by a letter on the label and on the security card of the product :

E (for detonating gas), O (for fuel), F+, F and R10 (inflammable), T+ and T (toxic).

For additional information, please see regulation 67/548/EC "Labeling of dangerous products".

SPARE PARTS AND ACCESSORIES

Please refer to the general documentation or consult us.

Please consult us in the event of a malfunction.

DEFINOX

INSTALLATION GUIDE

DCX3 & DCX4 AUTOMATIC STEAM LEVEL CHANGEOVER VALVES

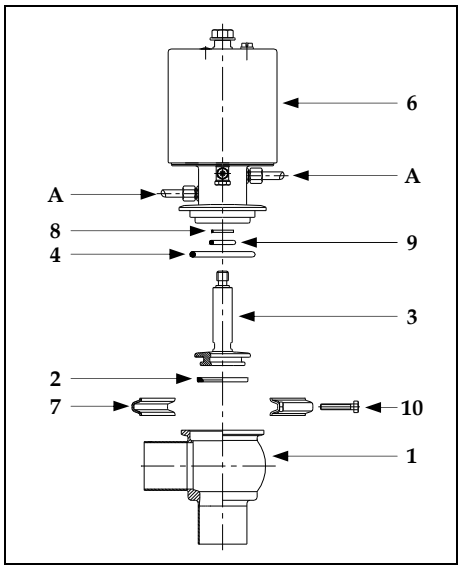
www.definox.com

DEFINOX SAS
3 Rue des Papetiers - Z.A.C. de Tabari 2
44190 Clisson - France
☎ : +33 (0)2 28 03 98 50
🗐 : +33 (0)2 28 03 88 00

E-mail : info@definox.com

NI-023 Rev. 5 ⇒ December 2006

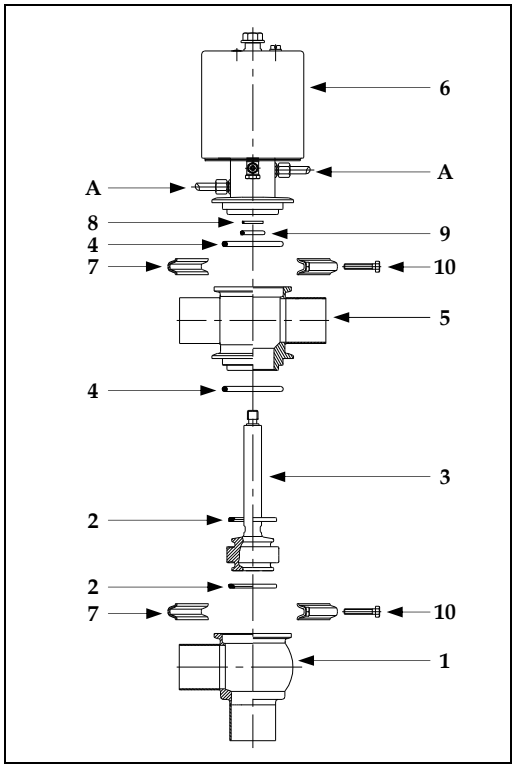
DCX3 STEAM LEVEL VALVE



1 : DCX3 valve body
2 : PFA seal (Qty 2 on DCX4)
3 : Piston
4 : Seal (Qty 2 on DCX4)
5 : DCX4 valve body
6 : Operator (actuator)
7 : Clamp (Qty 2 on DCX4)
8 : Rings
9 : Seals
10 : Clamp screws (Qty 4 for DCX4)
A : Steam level couplings

PFA seals are supplied as standard for the piston seals (2), but elastomer seals may be fitted instead. If elastomer seals are used, the piston (3) must be replaced by two or three-part piston.

DCX4 STEAM LEVEL VALVE



Follow the fitting and operating instructions carefully. Take account of the actual working conditions and comply with the valve specifications indicated in the DEFINOX catalogue.

1) VALVE IDENTIFICATION

DEFINOX changeover valves have an identification number. You will need this number in order to identify the spare parts you may request.

2) USUABLE SEALS

The following seal types can be mounted on your valve :
NEOPRENE EPDM
SILICONE FOOD GRADE VITON
ACID-RESISTANT VITON
The technical department is at your disposal to help you choose the seal types best suited to your process. Ensure that the grease used is compatible with elastomer seals, particularly EPDM.

3) INSTALLING DCX3 VALVES

Store your valve in its original packaging to prevent damage. Supply air to the operator (6) or not to put it into the valve open position. Disassemble the clamp (7). Shut-off the air supply and separate the body (1) from the rest of the valve. Fit the body to the pipes.

4) INSTALLING DCX4 VALVES

Store your valve in its original packaging to prevent damage. Supply air to the operator (6) or not to put it into the valve open position. Disassemble the lower clamp (7). Shut-off the air supply and separate the body (1) from the rest of the valve. Unscrew the piston (3) using the flat areas on the operator rod and piston rod for assistance. Disassemble the top clamp (7) and separate the body (5) from the operator. Fit the bodies (1-5) to the pipes. Attention: it must be possible to disassemble one of the bodies on the process line, thus it must cannot be welded.

5) PRECAUTIONS TO BE TAKEN WHEN ASSEMBLING THE BODIES

Adjust the pipes : check the straightness, the out-of-roundness and the offset (play<0.5 mm), to limit the restrictions created by welding.
Any modification to the valve body for the purpose of welding must be carried out with the agreement of Definox.
Support the pipes at least 10D from the valve (valve nominal diameter).

6) ASSEMBLING DCX3 STEAM LEVEL VALVES

Make sure the seal bearing surface inside the body (1) is clean. Check the position of the seal (4) on the operator lantern (6). Supply air to the operator or not (depending on the NO/NC configuration) and fit the shut-off assembly (2-3-4-6-8-9) in the body (1) making sure the seals are not damaged around the edges of the parts. Refit the clamp (7). When using for the first time, check the valve top connection and the valve bottom connection(s) as well as the operator for leaks (leak at operator).

7) ASSEMBLING DCX4 STEAM LEVEL VALVES

Make sure the seal bearing surfaces in body (1) and body (5) are clean. Check the position of top seal (4) on the operator lantern (6) and the position of bottom seal (4) on body (5). Position body (5) on the operator and tighten the top clamp (7). Fit piston (3) in the operator rod, making sure seals (9) and ring (8) are not damaged and tighten the piston using the flat areas on the piston and the flat area on the operator rod (use the threadlocker). Depending on the configuration (NO NC DE), supply air to the operator to put the valve into the open position. Position the body (1), paying attention to the seal and tighten the lower clamp (7).

…/…