

## 6.) SUPPLYING THE TOP / LOWER LIFT-OFFS

Feeding air through coupling (rep A) makes it possible to lift the lower piston in order to wash the seal and the bottom seal-bearing surface of the body. Feeding air through coupling (rep B) allows you to lift the upper piston in order to wash the seal and the top seal-bearing surface of the body.

## 7.) WORKING CONDITIONS

The actuator is supplied with dry, filtered air at a pressure of 5 bar (minimum) to 8 bar (maximum). The maximum working fluid pressure is 9 bar irrespective of the direction of flow. The operator air couplings are designed for a 4/6 diameter hose fitting (6/8 on large models). The valve accepts a maximum temperature of 140 °C and a vacuum of 0.7 bar.

## 8.) CLEANING PROCEDURE

To provide a correct cleaning of this valve, procedures have to take into account seat lifts for each cycle. During implementation, you have to be sure that the procedures that have been established clean and rinse the valve correctly, in order to avoid bacteriological development or corrosion (from aggressive or sensitive products under the valve seats).

## 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	"Equipment under Pressure"
	-	73/23	"Low pressure"

B - Use limits :

- Usage pressure must be lower than 10 bar for all products.
- In case of dangerous gas<sup>(1)</sup> valve diameter (line) must be below 100 mm.
- For use outside these limits, please contact our technical service.  
<sup>(1)</sup> 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".

## 10.) SPARE PARTS AND ACTUATOR DISASSEMBLY

For removed parts and assembly / disassembly, please consult the product maintenance sheet. In the event of a malfunction, please contact us.

Please contact us for these instructions or to request maintenance operations at our premises or on site.



**N.B:** The valve must be out of service prior to any intervention.  
Disassembly of the parts with the pretensioned spring must be carried out in accordance with the instructions on the maintenance sheet.



# INSTALLATION GUIDE

## VDCI MC SP AND SP-C DOUBLE BLOCK AND BLEED VALVE

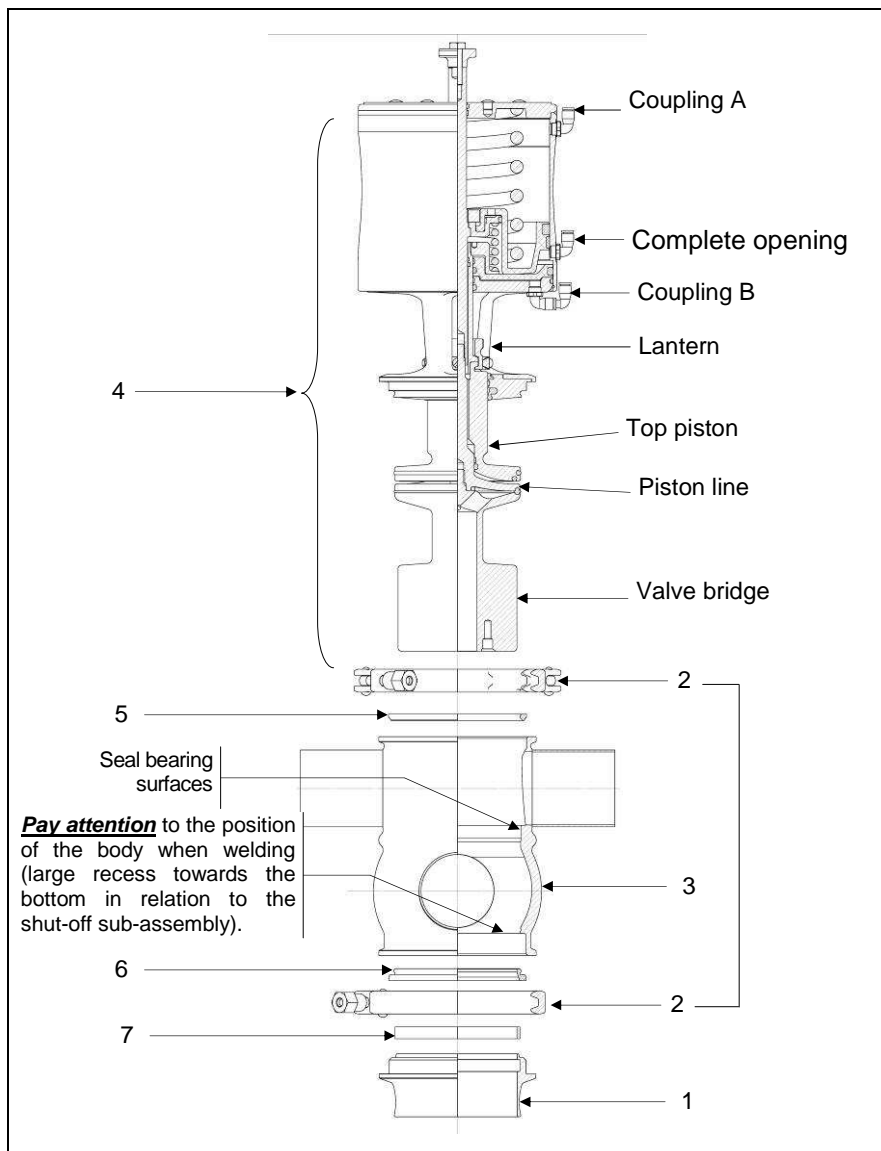


[www.definox.com](http://www.definox.com)

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](mailto:info@definox.com)

**Sample layout diagram**



- 1 : Protector
- 2 : Clamp (Qty 2)
- 3 : VDCI valve body
- 4 : Shut-off sub-assembly
- 5 : Seal
- 6 : Seal
- 7 : Ring
- 8 : Take-off actuator

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

**1.) SAFETY**



Failure to observe these instructions can result in serious bodily injury or loss of life.



This can also result in minor injuries or damage to equipment.



The following advice is given to ensure optimum use of the equipment.

**2.) VALVE IDENTIFICATION**

DEFINOX VDCI MC SP double block and bleed valves have an identification number. You will need this number in order to identify the spare parts you may request.

**3.) INSTALLING VDCI MC SP AND SP-C VALVES**

Store your valve in its original packaging to prevent damage. Disassemble the valve before welding it to your process line. Supply air to the operator (rep 4) to put it in the "valve open" position. Remove the clamps (rep 2). Cut off the air supply and from the body (rep 3), remove the shut-off sub-assembly and the protection (rep 1). Check that the seals (rep 5 and 6) are correctly in place. Connect the body to your process line, taking care to direct the large recesses towards the base in relation to the shut-off sub-assembly (See drawing on left-hand page). Never block or reduce the leakage chamber. Ensure that the grease used is compatible with elastomere seals, especially EPDM.

**4.) PRECAUTIONS TO BE TAKEN**



Adjust the pipes : check the straightness, the out-of-roundness and the offset (play < 0.5 mm). 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).

**5.) ASSEMBLING VDCI MC SP AND SP-C VALVES**

Check that the seal bearing surfaces inside the body are clean (no stainless steel chips, no remains of welding filler, etc.). Check that the seals (rep 5 and 6) and ring (rep 7) are positioned correctly. Mount the protector on the body with the lower clamp (rep 2) "LOOSELY" (we can turn the guide and the collar), then thread the shut-off sub-assembly and align the air outlets.



**Beware:** The shut-off assembly must be lowered vertically into the line of the valve body to prevent damaging the seals and counterbalance.

Supply air to the operator to open the valve. Place the upper clamp collar. Check the correct positioning of the clamp collars and if necessary use a mallet to reposition them to ensure a proper grip on the upper clamp. Shut off air to close the valve and tighten the lower clamp with the same precautions as for the upper clamp. When using for the first time, first check the top connection(s) for leaks at low pressure, then at a higher pressure. Next check the lower connection(s) for leaks. To facilitate assembly and disassembly of the valve, we can supply a lifting ring, which screws onto top of the rod. Special tools are required to completely disassemble the valve.



**N.B:** 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.