

## INSTALLATION, OPERATION AND MAINTENANCE MANUAL

### Sampling Valve



Ref. GENE BRE: 2947 – 2950 – 2951

## **Installation, Operation and Maintenance Instructions**

<b>1. Product description</b>	<b>3</b>
<b>2. Exploded view</b>	<b>3</b>
<b>3. Storage</b>	<b>4</b>
<b>4. Installation Instructions</b>	<b>5</b>
4.1 Preparation	5
4.2 Assembly	5
<b>5. Operating Instructions</b>	<b>6</b>
5.1 Use	6
5.2 Operation	6
<b>6. Maintenance Instructions</b>	<b>6</b>
<b>7. Repair Instructions</b>	<b>6</b>
7.1 Disassembly	6
7.2 Reassembly	7
<b>8. Health and Safety</b>	<b>8</b>

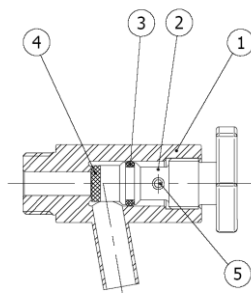
## 1) Product description

**Genebre, S.A.** offers a wide range of valves designed and assembled to handle and drive fluids in industrial procedures.

The compatibility of materials used to build the valves (see technical specifications) and the application of valves to the different industrial processes is at user's risk. Valves will have an optimal behaviour when working conditions do not exceed pressure and temperature limits for which they have been designed. Please, refer to the product datasheet.

## 2) Exploded view

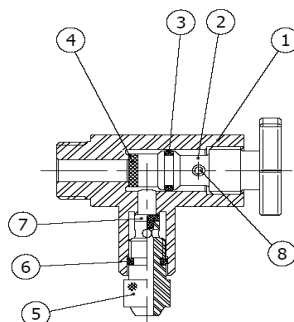
Art. 2947 (Sampling valve smooth pipe):



Nº	Name	Material	Surface Treatment	Spare Part Code
1	Body	Stainless Steel 1.4308	External polished	-----
2	Stem	Stainless Steel 1.4308	External polished	-----
3*	O ' ring	NBR	-----	K2947 04
4*	Seat	PTFE	-----	K2947 04
5	Pin	Stainless Steel 304	-----	-----

\* Available spare parts

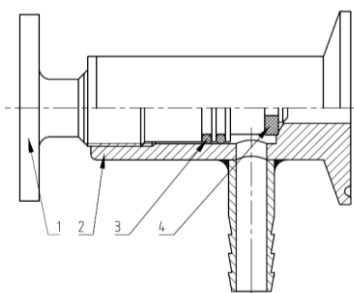
Art. 2950 (Sampling valve with lower valve):



Nº	Name	Material	Surface Treatment	Spare Part Code
1	Body	Stainless Steel 1.4308	External polished	-----
2	Stem	Stainless Steel 1.4308	External polished	-----
3*	O' ring	NBR	-----	K2922 04
4*	Seat	PTFE	-----	K2922 04
5	Lower valve	Stainless Steel 1.4308	External polished	-----
6*	O' ring	NBR	-----	K2922 04
7*	Seat	PTFE	-----	K2922 04
8	Pin	Stainless Steel 304	-----	-----

\* Available spare parts

## Art. 2951 (Clamp end Sampling valve):



Nº	Name	Material	Surface Treatment	Spare Part Code
1	Stem	Stainless Steel 1.4404	Mechanical Polish	-----
2	Body	Stainless Steel 1.4404	Mechanical Polish	-----
3*	O' ring	NBR	-----	K2951
4*	Seat	Silicone	-----	K2951

\* Available spare parts

## 3) Storage

If the valve is not installed immediately, it is recommended that the protective packaging not be removed to prevent any blows or the accumulation of dirt. This packaging should not be removed unless the valve is going to be installed. Where possible, the valves must be stored in a dry clean place.



Transport and storage of this kind of products must be done keeping them in their original package!

## 4) Installation Instructions

### IMPORTANT NOTE:

**Before installing and/or manipulating these elements, READ CAREFULLY these instructions for use and OBSERVE all contained information. If you fail to understand any of their content, please contact GENE BRE, S.A.**



**User is responsible for the safe use of these products, according to present instructions for use and specific technical documentation of the device.**

### 4.1) Preparation

Remove any remains of packing material from the valve.

Significant problems may arise with any valve installed onto dirty piping.

*Ensure that the pipe is free from dirt, welding particles, etc. prior to installation as the valve may suffer irreparable damage during the start-up of the equipment → prepare a clean working area.*

Make sure there is enough space for future maintenance operations.

Check the correct functioning of the valve by turning the stem. The valve must open/close.

### 4.2) Assembly

- Do not disassemble the valves when installing them.
- Ensure that the pipe and valve thread are clean and that they are compatible (thread type).
- Apply a suitable sealer on the pipe threads and fasten the valve to the pipe taking care not to over tighten the tapered threads.
- Do not perform any welding when the valve has been assembled as it could be damaged by overheating and the seat area may deform.
- We recommend fastening the valve to the pipe using an open-ended or adjustable spanner and by only applying force on the flat body part.

## 5) Operating Instructions

### 5.1) Use

GENEBRE valves provide a leakproof lock when used adjusted to the pressure and temperature values for which they have been designed.

Valve materials have to be fully compatible with the fluid circulating through the valve. Otherwise, valve could be seriously damaged.

### 5.2) Operation

When operating the valve you must avoid excessive lateral efforts with the handwheel. To close, the operation consists in turning the handwheel clockwise and anticlockwise if you want to open the valve.

## 6) Maintenance Instructions

Frequency, place and process of maintenance will be determined by the user by taking into account usage of the product.

## 7) Repair Instructions

If the fluid continues to circulate when the valve is completely closed, the leak is due to either the seal surface being damaged.

### 7.1) Disassembly

In order to carry out repair work, it is necessary to remove the valve from the installation.

*Ensure that the piping is cold, drained and depressurised.*

*Prepare a clean work area and the appropriate tools for the mechanical tasks.*

Art. 2947 (Sampling valve smooth pipe):

Remove the pin (part.5), loosen and remove the stem (part.2).  
Remove the o´ring (part.3) and seat (part.4) from the stem (part.2).

Art. 2950 (Sampling valve with lower valve):

Remove the pin (part.8), loosen and remove the stem (part.2).  
Remove the o´ring (part.3) and seat (part.4) from the stem (part.2).  
Loosen and remove the drain valve (part.5)  
Remove the o´ring (part.6) and seat (part.7) from the drain valve (part.5).

Art. 2951 (Clamp end Sampling valve):

Loosen and remove the stem (part.1).  
Remove the o´rings (part.3) and seat (part.4) from the stem (part.1).

## 7.2) Reassembly

Before reassembling the valve, ensure that the repair kit and/or the parts to be used are appropriate and are the originals from the factory.

When the valve is reset, cleaning is essential for a long useful life of the valve.

Art. 2947 (Sampling valve smooth pipe):

Clean the sealing area inside the *body* (part.1)  
Install a new *Seat* (part. 4) and the o´ring (part.3) in the stem (part.2).  
Introduce the *stem* (part. 2) in the *body* (part. 1) and put the pin (part.5).  
Check the function carefully and install the valve again.

Art. 2950 (Sampling valve with lower valve):

Clean the sealing area inside the *body* (part.1)  
Install a new *Seat* (part. 4) and the o´ring (part.3) in the stem (part.2).  
Introduce the *stem* (part. 2) in the *body* (part. 1) and put the pin (part.8).  
Install a new *Seat* (part. 7) and the o´ring (part.6) in the drain valve (part.5).  
Introduce the drain valve (part. 5) in the *body* (part. 1).  
Check the function carefully and install the valve again.

Art. 2951 (Clamp end Sampling valve):

Clean the sealing area inside the *body* (part.2)  
Install a new *Seat* (part. 4) and the o´rings (part.3) in the stem (part.1).  
Introduce the *stem* (part.1) in the *body* (part.2).  
Check the function carefully and install the valve again.

## **8) Health and Safety**

**8.1)** The fluids that pass through a valve can be corrosive, toxic, flammable or of a contaminating nature. They can also be found at very high or low temperature. When handling the valves, take the necessary safety measures, and it is advisable to use personal protective equipment:

- 1) Wear eye protection
- 2) Wear appropriate gloves and work clothes
- 3) Wear safety shoes
- 4) Wear a helmet
- 5) Check the availability of running water
- 6) In the case of flammable fluids, ensure that the appropriate extinguisher is available

**8.2) Before removing a valve from any piping, always ensure that the line is completely cold, drained and depressurised.**

**8.3)** Any valve that has been used in toxic services must have a certificate of cleaning before it is handled.

**8.4)** Any type of repair or maintenance should be performed in ventilated places.