

## INSTALLATION, OPERATION AND MAINTENANCE MANUAL

### Sanitary Line Ball Valve



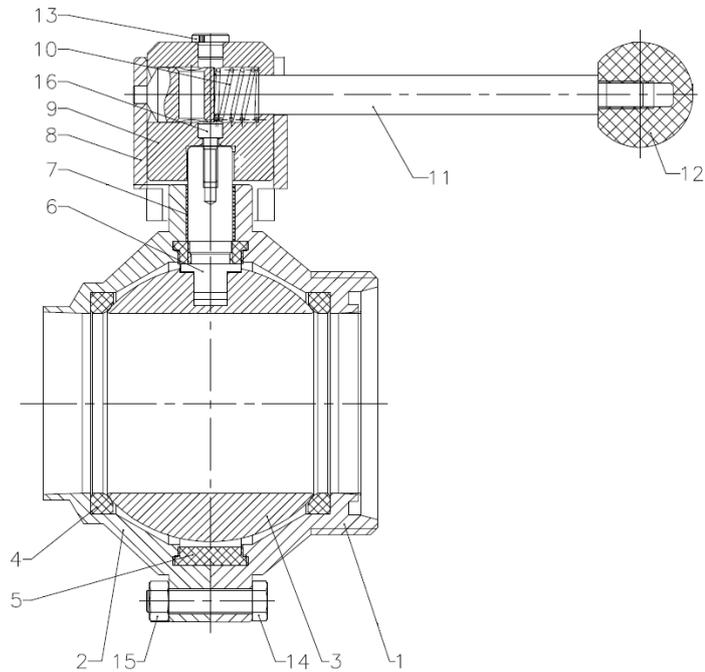
Ref. GENE BRE: 2932

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## Installation, operation and maintenance instructions

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## 1) Breakdown drawing.



### 1.1) List of components:

Nº	Name	Material	Surface Treatment	Spare Part Code
1	Body	Stainless Steel 304	Mechanical Polish	-----
2	Body	Stainless Steel 304	Mechanical Polish	-----
3	Ball	Stainless Steel 304	-----	-----
4*	Ball seat	PTFE	-----	R2932
5*	Gasket	NBR	-----	R2932
6	Stem	Stainless Steel 304	-----	-----
7*	Bushing	PTFE	-----	R2932
8 / 9	Handle center	Stainless Steel 304	-----	-----
10	Spring	Stainless Steel 304	-----	-----
11	Handle	Stainless Steel 304	-----	-----
12	Ball handle	Plastic	-----	-----
13	Cap	Plastic	-----	-----
14	Screw	Stainless Steel 304	-----	-----
15	Nut	Stainless Steel 304	-----	-----
16	Screw	Stainless Steel 304	-----	-----

\* Available spare parts

## 2) Storage

During storage it is recommended to keep the product in the included protective wrapping to avoid damages or dirt accumulation. The wrap must not be removed until element is to be installed. As much as possible, it must be stored in a dry and clean environment.



**Transport and storage of these devices must be done in their original wrapping.**

### VISUAL INSPECTION

Check whether during transport, unloading and placement, devices have suffered no damages.

### MECHANICAL INSPECTION

Check whether all mobile parts of the different devices, as well as the screws and other elements, are accomplishing their purpose.



**If you notice any kind of anomaly during reception of the goods, contact immediately with GENE BRE in order to determine the possible responsibilities on the issue and make the devices fully operational.**

### 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 devices, as established in present instructions for use and in the specific technical documentation of the device.**

## 3) Installation instructions

### 3.1) Preparation

Remove any remains of packaging from the actuator.

There might be serious problems caused by valves installed in a dirty pipe.

Make sure the pipe is free of dirt, welding particles, etc. before installation, since the valve might suffer irreparable damage when the equipment is turned on → *prepare a clean working area.*

Plan enough space for future maintenance operations.

It is recommended to perform this task under qualified professional surveillance.

### 3.2) Valve Installation

a) Before weld the valve disassembling it as indicated in the Section 6.1.

b) Weld the connection (pos.2) to the pipe. All components must be stored in a dry and clean environment.

c) When cold, clean the edges' locking surfaces and then assembly the valve as indicated in the Section 6.2.



¡The welding work must only be carried out by properly qualified personnel!

### IMPORTANT INFORMATION:

***Design of this type of valves allows us to install them in any position as they are bidirectional, so the direction of fluid flow does not matter.***

***If possible, it is recommended to install the valve in horizontal position and the stem (handle) upwards.***

***Valves do not have to support pipe's efforts so it is advisable to anticipate a good alignment and parallelism of such pipe.***

***Once installed, it is recommended to open and close it a couple of times to verify its good performance and to check if there is any obstruction in the disc that prevents it from closing.***

## 4) Operational instructions

### 4.1) Usage

Before starting the equipment, you have to read the Technical Specifications and never exceed the limit values.

Never touch the valve and/or pipes in contact with surrounding fluid when the process is started; you can suffer from injuries such as burns.

The ball valves provide a leak proof lock when used adjusted to the pressure and temperature values for which they have been designed.

### 4.2) Manual operation

Actuator and valve are composed by mobile parts, either rotary or sliding; do not approach your fingers to these areas as you can get seriously injured.

When operating the valve you must avoid excessive lateral efforts with the handle.

To close it, you must turn the handle 90 degrees clockwise. When the handle is inline with the pipe, valve is open.

In case you need to remove the handle to automate the valve, the *stem* (pos.6) has a mechanized linear mark at the front part that allows us to know its current position (opened or closed).

### 4.3) Remote operation

When automation valves are required, GENE BRE S.A. can provide a great variety of pneumatic actuators, electric actuators, electropneumatic and electronic positioners to cover a large range of operations.

- The operation in extreme temperature conditions exceeding the design limits may damage internal and external parts, and it might be potentially hazardous for the operating or maintenance personnel.
- The operation in extreme pressure conditions exceeding the design limits may cause a malfunction and the spontaneous breakage of parts and, therefore, might be potentially hazardous for the operating or maintenance personnel.

## 5) Maintenance instructions

Frequency, location and process of maintenance will be determined by the user by taking into account usage of the product. However, periodical checks explained below will be useful to extend the service life of the valve and reduce installation problems:

Valves must not remain in open or closed position for a long period of time. It is recommended, if the process allows for it, to proceed to an operational task for the valve every six months.

## 6) Reparation instructions

Genebre, S.A. will not be held responsible for an inappropriate operation of the element or its components.



**Use only components/spare parts original or recommended by GENE BRE, S.A!**

### 6.1) Disassembling

*Prepare a clean working area and adequate tools to perform mechanical tasks.*



**Before removing the valve from the pipe for cleaning or substitution, make sure the line has been closed and depressurized, since the wrong handling might cause a serious accident as well as serious damage to the equipment**

- a) Remove the plugs (part.13).
- b) Loosen the screw (part.16) and remove the entire handle (part.8 / 9).
- c) Loosen and remove the screws and nuts (part.14 y 15)
- d) Separate the bodies (part.1 and part.2).
- e) Remove the ball (part.3) with the stem (part.6), the bushing (part.7) and the gasket (part.5).
- f) Remove the ball seat (part.4) from the bodies (part.1 and 2).

## 6.2) Assembly

Before proceeding to reassemble the valve, make sure that reparation kit and/or pieces to be used are appropriate and original from the factory.

When it is assembled again, cleaning is essential for a long life for the valve.

- a) Put the ball seat (part.4) in the body (part.1 and 2).
- b) Put the ball (part.3) with the stem (part.6), the bushing (part.7) and the gasket (part.5).
- c) Assembly the bodies (part.1 and 2).
- d) Put the screws (part.14) and the nuts (part.15) adjusting slowly and alternating diagonal, check that the gasket (part.5) is positioned correctly (see the recommended tightening torque in *Section 6.3*).
- e) Put the entire handle (part.8 / 9) in open position and put the screw (part.16).
- f) Put the plastic plug (part.13).

***Once installed, it is recommended to open and close it a couple of times to verify its good performance and to check if there is any obstruction in the disc that prevents it from closing.***

## 6.3) Tightening torque Screws/ Nuts for joining the valve's two parts:

Screw / Nut	Torque de (N.m)
M6	8 - 11
M8	13.5 - 16
M10	22 - 25

## 7) Hygiene and Safety Instructions:

When operating any kind of element, you must follow the security instructions and it is recommended to use personal protection gadgets:

- 1) Protect your eyes.
- 2) Wear gloves and appropriate working clothes.
- 3) Wear safety footwear.
- 4) Wear a helmet.
- 5) Have running water at hand.