

## INSTALLATION AND MAINTENANCE INSTRUCTIONS BALL VALVES (M3S1 – MWS1)

### GENERAL

- These instructions must be carefully read before any work involving products supplied by VALSTEAM ADCA ENGINEERING S.A. is undertaken.
- The installation procedure is a critical stage in a life of a valve and care should be taken to avoid damage to the valve or equipment.
- They give their maximum performance only when the equipment associated with them is correctly sized and installed in accordance with our recommendations.

### Note:

- Current regional safety regulations should be take in to account and followed, while doing the installation and maintenance work.
- Handling, installation and maintenance work must be carried out by trained personnel. A supervisor must follow and check all activities.
- For the problems that cannot be solve with the help of this instructions, please contact the supplier or the manufacturer.
- The manufacturer reserves the right to change the design and material of this product without notice.

#### M3S1

CE MARKING - GROUP 2 GASES (PED - European Directive)	
PN100	Category
DN 1/2" to 1 1/4"	SEP
DN 1 1/2" -2"	1 (CE Marked)

#### MWS1

CE MARKING - GROUP 2 GASES (PED - European Directive)	
PN 16	Category
DN15 to DN50	SEP
DN65 to DN150	1 (CE Marked)



ATTENTION

- If malfunction of any other equipment or system operation failure may result in a dangerous overpressure, over temperature or even vacuum condition, a safety device must be included in the system to prevent such situations.
- At start up, the presence of small particles in the fluid (dirt, scale, weld splatters, etc) may cause an imperfect closure of the seat. If this occurs, proceed to an accurate cleaning.
- Do not touch the equipment without appropriate protection during working operation because it may conduct heat if the used fluid is at high temperature.
- Before starting maintenance be sure that the equipment is not pressurized or hot.
- The equipments must be used within the working temperature and pressure limits laid down for them, otherwise they may fail (refer to nameplate and/or IS- Information Sheet).

- Manual handling of products may present a risk of injury. You are advised to assess the risks taking into account the task, the individual, the load and the working environment.
- Before starting work ensure that you have suitable tools and/or consumables available. Use only genuine ADCA replacement parts.
- Do not remove the marking in the equipment. Serial number and other useful information is there.
- During the assembly work, apply protective measures against dirt and all kinds of contamination.
- Correct installation of the equipment is full responsibility of the contractor

## TRANSPORT AND STORAGE



ATTENTION

- Handling and lifting of materials should be made with adequate equipments.
- The valves and equipments should be protected from impacts and forces during transportation and storage.
- We advice that all the protective packing in the valves, is kept during storage to avoid damage and contamination. The environment should be as clean and dry as possible.
- The valve should be in fully open or closed position to prevent the ball edges to cause damage to the seats.
- The manufacturer doesn't assume the responsibility of damaged equipments due to inappropriate handling during the transportation and storage.

## INSTALLATION



ATTENTION

- Account for over pressure conditions, according with the local laws or standards.
- For the problems that cannot be solve with the help of this instructions, please contact the supplier or the manufacturer.

### Installation area requirements:

- The installation area should have easy access and provide enough space for maintenance and removing operations.
- The installation area should have the necessary firing system to prevent damage of the equipment due to over temperature/pressure cause by fire.

### Procedure:

- Prior to install check that the product is suitable for the intended application: materials and pressure/temperature ratings.
- Before installing remove plastic covers placed on flanges or connection ends.
- Take care with jointing material to ensure that none may be permitted to block or enter the valve.
- External stresses that may be induced by the system due to pipe expansion, etc, can affect this product. The necessary precautions are recommended during the systems design and equipment assembly.
- The valve pipework should be properly supported and free from strain and it should not be subjected to undue surges of pressure.

## START UP



### ATTENTION

- Current regional safety regulations should be taken into account and followed.
- Protective insulation and warning notice may be required.
- Until the start up of an existing or a new plant, the following must be checked:
  - All works are completed;
  - The valve is correctly installed;
  - All the necessary safety devices have been installed;
- **At start up, the presence of small particles in the fluid may cause an imperfect closure of the seat. If this occurs, proceed to an accurate cleaning.**

### Periodical checking:

- 24 hours after the start up, it is recommended to check pipe connections for leaks and retighten the connections if necessary.

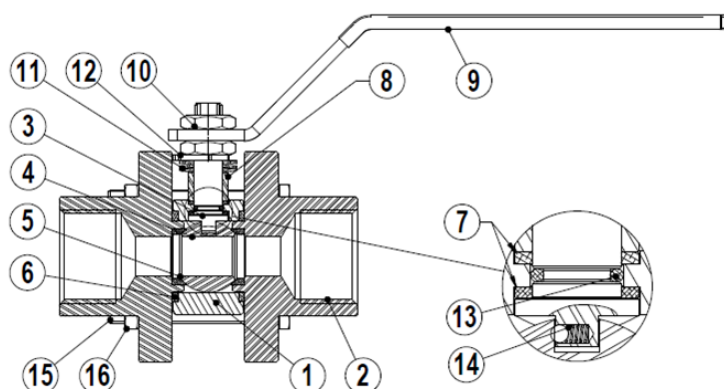
## MAINTENANCE

- We recommend the ball valves to be serviced as necessary. Ball valves should be checked periodically (at least yearly), to verify if they are operating correctly, if they have any leakages and to clean the internal parts if necessary.
- When reassembling make sure that all gasket faces are clean and use a new gasket if required.
- For further information refer to the relevant IS brochure or consult the factory or distributor.

## SPARE PARTS

### M3S1

MATERIALS		
POS.	DESIGNATION	MATERIAL M3S1
1	Body	ASTM A-105 / 1.0432
2	Body cap	ASTM A-105 / 1.0432
3	Stem	AISI 316 / 1.4401
4	Ball	AISI 304 / 1.4301
5	*Seat	** PTFE /GR
6	*Body gasket	PTFE/GR
7	*Stem gasket	PTFE/GR
8	Gland	AISI 304 / 1.4301
9	Lever	Zinc plated carbon st.
10	Gland nut	Steel 8.8 zinc plated
11	Washer springs	Spring steel
12	Stop plate	Zinc plated carbon st.
13	Stem o-ring	Viton
14	Anti-static device	AISI 304 / 1.4301
15	Bolts	Steel 8.8 Zinc plated
16	Nuts	Steel Cl.8 Zinc plated



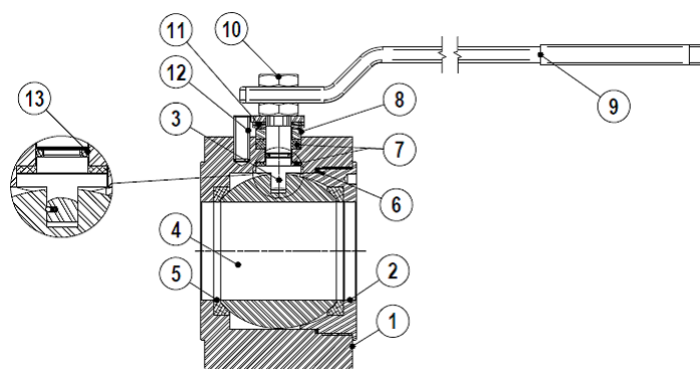
\* Available spare parts.

\*\* PTFE/GR - Carbon graphite reinforced PTFE

**MWS1**

MATERIALS		
POS.	DESIGNATION	MATERIAL MW1S
1	Body	ASTM A-105 / 1.0432
2	Body cap	ASTM A-105 / 1.0432
3	Stem	AISI 316 / 1.4401
4	Ball	AISI 304 / 1.4301
5	*Seat	PTFE /GR
6	*Body gasket	PTFE/GR
7	*Stem gasket	PTFE/GR
8	Gland	AISI 304 / 1.4301
9	Lever	Zinc plated carbon st.
10	Gland nut	Steel 8.8 zinc plated
11	Washer springs	Spring steel
12	Stop pin	Zinc plated carbon st.
13	Stem o-ring	Viton

\* Available spare parts.


**PRODUCTS RETURNING**


**ATTENTION**

- Information regarding any hazards and precautions to be considered because of contaminating fluids and residues or mechanical damage that may represent a health, safety or environmental risk, must be provided in writing by the distributors and costumers when returning products to Valsteam ADCA engineering.
- Health and safety data sheets regarding substances identified as hazardous or potentially hazardous must be provided with the information mention above.



**ATTENTION**

- **LOSS OF GUARANTEE:** Total or partial disregard of above instructions involves loss of any right to guarantee.