

INSTALLATION AND MAINTENANCE INSTRUCTIONS STAINLESS STEEL NEEDLE VALVES NV400 – NV400H

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.



- 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



- The valves and equipment's 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



- 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.
- Before installing, all valves shall be examined on possible damages. In case of doubt, the valves should not be mounted in the system.
- 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 pipes themselves must be clean and free of foreign particles. An eventual blow-down or cleansing of the pipes shall be done before installation of the valve.
- Globe valves are installed under strict observation of the flow arrow marked on the body.
- The valve pipework should be properly supported and free from strain and it should not be subjected to undue surges of pressure.
- Normally, manual operated globe valves can be installed in any desired position however the mounting with vertically aligned spindle and operation element on top should be preferred.

START UP



ATTENTION

- Current regional safety regulations should be take in to 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.**

Operation is done by turning the handwheel by hand. If it is turned in a clockwise direction, the valve is closed. Do not tighten it further than is necessary to achieve tightness. Ancillaries may not be used for this purpose. Isolating globe valves shall be either totally open or closed.

Periodical checking:

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

MAINTENANCE

All valves are nearly maintenance free as far as design and assembling is concerned. Movable parts like spindles, couplings or similar items shall be greased with suitable long-term greasing agents to guarantee their function. Valves which are not regularly operated shall be tested in defined interval periods on their functional efficiency to guarantee their operational safety. The checking intervals are a function of the operating conditions (pressure, temperature, frequency of operation).

The maintenance of the valves entails adjusting the packing. To avoid losses by leaks, the stuffing box nut or union nut must be tightened if necessary. The packing may not be tightened further than necessary to seal the spindle. Tightening it too much results in unnecessary wear on the packing and makes operation more difficult.

Therefore, we recommend loosening the gland cap nut set to nominal pressure in the commissioning of new valves and resetting it to the existing operating pressure.

For further information refer to the relevant IS brochure or consult the factory or distributor.

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.