Installation and Maintenance Instructions for V02 Monoflange





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1 DESCRIPTION

1.1 Intended use

Monoflanges are used for connecting measuring devices and to equalize or shut off differential pressure in chemical plants, power plants and similar facilities. The allowable operating pressure depends on the temperature of the medium and on the materials and sealing used. Refer to the respective pressure-temperature diagrams for this pressure. Use beyond these limits and any unauthorized modifications can result in catastrophic valve assembly failure, causing damage or injury. Any use of this product outside of the recommendations provided by Ashcroft Inc. will void the warranty and relieve the manufacturer and/or Ashcroft Inc. of all liability.

Material Suitability

Ensure that the materials used for the wetted parts of the monoflange are suitable for the media used. The manufacturer cannot be held responsible for damage to the monoflange caused by corrosive or reactive media. Failure to comply with these precautions can endanger the user and cause damage to the piping system

1.2 Information on the pressure equipment

The allowable operating pressure depends on the temperature of the medium and on the materials and sealings used. This can be found in the corresponding catalog sheet or drawing. Note: It is possible that the stem sealing, packing and O-ring occur on a combined basis with the different valve seats.

1.3 Monoflange types

Process-Monoflanges: have one "OS&Y-Needle Valve" as primary isolation and - depending on the type - one "Needle Valve" for venting and one "Needle Valve" as secondary isolation valve.



1	Needle
2	Valve stem
3	Bonnet
4	Packing
5	Gland
6	Stem nut
7	Lock nut
8	T handle
9	Set screw
10	Yoke
11	Hex. bolt
12	Seal ring
13	Dust cap
14	Plate bearing
15	Bonnet bolting



OS&Y Needle Valve

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Needle	Valve

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Instrument-Monoflanges: All valves are needle valve type. Process-and Instrument-Monoflanges are available in three different types BLOCK, BLOCK & BLEED and DOUBLE BLOCK & BLEED.

2 TRANSPORTATION AND STORAGE

The monoflange must be depressurized before removal from system and before storage or transportation. It should be stored in its original packaging to avoid contamination or damage. Upon receipt, anti-tamper keys are unattached to the valve head unit.

3 ASSEMBLY

3.1 Installation requirements

The following installation conditions apply to the monoflanges: Monoflanges are to be installed in such a way that employees or third parties are not endangered.

The safety distances required by the relevant national statutory provisions applicable in the country

of installation are to be observed.

Monoflanges must be installed or mounted in such a way:

- they are accessible for any necessary inspection and are clearly visible;
- the labeling is clearly legible;
- operation of the monoflanges is possible from a safe distance.

Monoflange must be protected from outside mechanical influences to protect it from damage. Monoflange must be protected from tampering by unauthorized persons.

3.2 Connecting the monoflange

Monoflanges must be connected via the inlets and outlets provided. Additional introduction of forces or bending moments applied to the connection pieces via piping connections can damage the assembly and connection fittings and must be avoided. Both form and cleanliness of threads must be checked before assembly. Piping or fitting connections must be made up tight. A thread tape or sealant should be used for threaded pipe joints.

Weld seams on connections must be welded and tested in compliance with valid approved welding methods. Steel welded connections must be painted after welding in order to avoid corrosion. Mating flanges should be checked to ensure correct size and rating for flanged connection. Flanges should be assembled using correct gasket or seal ring and bolted as specified in ASME B16.5.

4 PRIOR TO OPERATION

Commissioning should not be carried out until the monoflanges - have been correctly installed in the system and

- have been checked for correct assembly, installation conditions and safe function.

The test before commissioning is provided by the system operator to arrange. In the list countries applicable national regulations are to be observed.

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5 OPERATION

5.1 General information



Monoflanges with OS&Y Needle Valve and Needle Valve are used to shut off media that can be poisonous, explosive, irritating, very hot or very cold. Any assembly and maintenance work must be carried out by experienced and trained personal.

The generally valid regulations on health and safety as well as accident prevention must be observed in addition to this operating manual and the operating instructions for the system and measuring instruments that are used. For example oxygen operation.

The valve must only be operated by competent and authorized personal.

5.2 Operating conditions

Refer to the monoflange drawing for the permissible operating conditions.

5.3 Operation



Valves on the monoflange are actuated with T-handle or socket wrench. Valves are closed clockwise. The closing torque is approximately 3 Nm (2.2 foot-pounds).

Valves are fitted with a metal back seal between the needle and the bonnet. This means that the valve head units must always be completely open. This back seal is pressuresupported. The higher the system pressure, the greater the force with which the needle is pressed into the back seat. Do not apply any increased closing torque when the needle is in the back seat position. This is unnecessary and could cause damage to the stem-needle connection.