

Installation Instructions for HOmatic Pinch Valves

Introduction

The installation instructions must be followed carefully in order to take fullest advantage of the HOmatic pinch valve's outstanding characteristics. The valve must be installed by qualified personnel in accordance with the recognized technical regulations. HO-Matic AG accepts no liability for any faults arising from improper installation. We would also refer you to the data sheets «Installation and operating conditions for HOmatic pinch valves» and «Installation instructions for HOmatic QSV pinch valves Series 41», which contain additional general information on the installation of pinch valves. The dimensions, materials and areas of application for these valves can be found on the «HOmatic pinch valves» documentation.

Storage / Aging

All rubber sleeves are subject to a natural aging process, which starts after approx. 2-4 years (depending on the rubber quality). This can change the properties of the rubber. The sleeves must therefore be stored in a cool and dark place.

Preventive measure before installation

Please ensure that the pinch valve you intend to install is appropriate for the existing operating conditions. The plant operator is responsible for the media used (corrosion resistance, pressure, temperature, etc.). If you require any assistance, please contact your supplier or HO-Matic AG directly.

Preparations for installation:

Mounting position: any, with bulk goods preferably vertical. If mounted horizontally, the control connection should face upwards.

Flanged seals: standard flat seals are usually only required between the valve and the mounting flanges for Series 21 pinch valves with flanges. Flanged seals should never be used for Series 41 HOmatic QSV pinch valves with flanges. The required seals are supplied with the valve and must be covered with appropriate mounting flanges. Please refer to the special «Installation instructions for HOmatic QSV pinch valves Series 41».

Threaded seal: the screw connection parts for HOmatic pinch valves designed for screw connections are made of POM plastic and must therefore be handled appropriately. Screw connections with connection pipes and fittings should be sealed with Teflon sealing tape. Fluid chemical sealants can attack and destroy the plastic.

Installation

Any rough patches (e.g. rust, welding beads, dirt, paint residues, etc.) must be removed from the mounting flanges in the area of the seal. The relevant flange's sealing surface must be clean, flat and have no nicks. Under no circumstances must the pinch valve be installed between flanges that are not parallel to each other. The axes of the pipes and the pinch valves must be fully aligned. It is also completely forbidden to weld the pipe with the pinch valve still in the circuit. This would destroy the sleeve and the screw connector parts made of POM. For pinch valves with screw connections made of plastic, excessive stress on the plastic parts by conical screw connections, errors in the angle of the connection pipes and the use of excessive force must be strictly avoided.

Tightening the flange screws

When connecting two parallel metal flanges, the flange screws should be tightened with the correct torque. POM plastic has a tendency towards cold flow and it is therefore important, when using plastic flange connections, to adjust the torque correctly. Non-parallel pairs of flanges must never be aligned by means of the flange screws.

Checking the operation

Before commissioning, we recommend that you check the operation of the pinch valve. For this, the valve should be opened and closed at least once to check whether it is fluid tight both externally and when under flow conditions. If the pipe is being pressure tested, care must be taken to ensure that the test pressure is not higher than the maximum permissible operating pressure (PS). Too high pressure can destroy the valve.

Cleaning the pipes

Whenever you clean the pipes, you must ensure that the cleaning materials and equipment used are suitable for the pinch valve installed. Unsuitable cleaning materials and equipment, and also the use of too high a temperature when sterilizing, could attack and destroy the elastomeric sleeve and also the plastic exposed to the flow.

Dismantling

Before dismantling the pinch valve, care must be taken to ensure that no dangerous materials can escape. Appropriate preventive measures should therefore be taken in advance.

Servicing

Only original HOmatic sleeves must be used on the pinch valves. Please refer to the data sheets «Service instructions for HOmatic pinch valves» for the series 00, 10, 20, 21, 30, 40, 41, 48, 60, 70, 78, 80, 88.

Disposal

Consideration should be given to the fact that residues in the pinch valve may be harmful to humans and the environment and the valve must therefore be handled appropriately. It should be sealed and then disposed of in the appropriate environmentally friendly manner.