Operating Manual
for thermo-controlled capsule steam trap

Type : Minibody 10201 / 10201-R, PN 40

Connections : Threaded ports G½“ (standard)
Threaded ports G¼“, G⅜“, G¾“, NPT-thread (special)

1.0 Safety instructions

1.1 Proper use

Any improper use, intervention in the design and deviation from the design data automatically lead to termination of the warranty. The float-controlled condensate trap type 1064 is designed for the discharge of condensate from steam, compressed air and pressure gas systems. The automatic vent valve type 8064 is designed for the discharge of air and gas at the high points of liquid-filled systems. Any other use is not permissible. The manufacturer is not liable for damage resulting from any other use. The user or operator bears the risk in this case. This also applies analogously to incorrect assembly, startup, use and maintenance.

1.2 Warnings and symbols

- There is a risk of personal injury due to escaping operating medium as well as because of pressure and temperature. Failure to comply with these warnings may lead to accidents.
- Follow the instructions in this operating manual.
- The operator must ensure that this operating manual and, if necessary, other relevant documents are available on site.
- Only properly qualified personnel may be assigned to handling this equipment.
- Any mode of operation that may impair safety must be avoided.

2.0 General description and use

2.1 Design of condensate trap

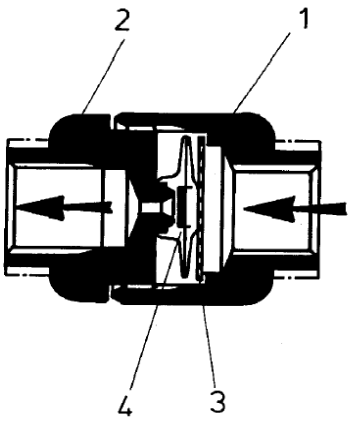

Fig. 1: Minibody 10201

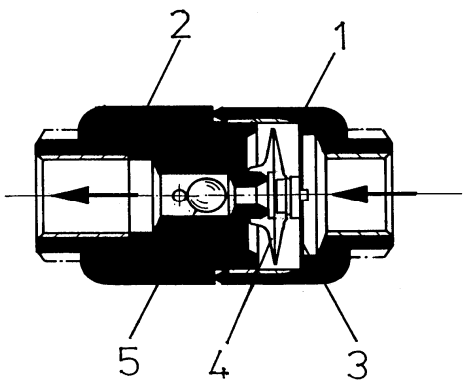

Fig 2: Minibody 10201-R

Pos. 1 Inlet housing port, SS 1.4104, DIN 17440
Pos. 2 Outlet housing port, SS 1.4104, DIN 17440
Pos. 3 Strainer, SS 1.4301, 1.4571, DIN 17440
Pos. 4 Capsule, Hastelloy / SS
Pos. 5 Installed shut-off valve

2.2 Identification and operating limits: max. operating pressure = 28 bar
max. operating temperature = 300 °C

2.3 Functional limit of capsule: permissible differential pressure (p1-p2) = 22 bar

2.4 Function / Installation

The condensate trap is to be installed (don’t use as vent valve) at the deepest point of the steam vessel. Due to its gravity, the condensate flows down to the deepest point, i.e. into the inlet housing (1).
A special liquid contained within the capsule (4) evaporates or condenses due to changes in temperature. The operating temperature is only a few degrees below the boiling point of water. When the temperature rises, the liquid evaporates and the valve closes; when the temperature drops, the liquid condenses and the valve opens.

3.0 Assembly

3.1 Installation

- Remove protective caps from condensate inlet and outlet
- The flow direction is as indicated by the arrow

- The fitting position is vertical or horizontal (***Attention:*** The flow direction is only from top to the bottom, the reversed direction is not allowed).
- To avoid down times, it is recommended that a shut-off valve be installed in front of and, if necessary, behind the condensate trap.

4.0 Startup

The pressure build-up and heating-up of the housing should not take place abruptly. If leaks occur due to so-called settling after the first startup, the housing parts (items 1 und 2) can be retightened taking into account the indicated torque (160 Nm). Retightening may only be carried out when the housing is depressurized and at most warm to the touch.

5.0 Monitoring and checking

Malfunctions arise either as condensate backup (use as a condensate trap) or as steam entry.

Condensate backup	can be determined through measurement of the surface temperature on the inlet housing. . At a temperature over 20°C damming up of condensate is to be accepted.
Steam entry	can be determined after the condensate outlet by means of an ultrasonic measuring device.

5.1 Checking steam tight

You can hear the way of working open/close of the working capsule or it can be determined by means of an ultrasonic measuring device. In case of constant currant sound a steam entry is probably.

6.0 Maintenance / inspection

6.1 Opening the trap and dismantling the capsule

- The condensate trap must be depressurized. Shut off the system securely in front of and behind the condensate trap.
- The housing cool down until it is warm to the touch.
- Loosen housing parts (pos. 1 and 2).
- Remove the inlet housing (1).
- Pull off the capsule (4) from the outlet housing (2).

6.2 Installing the capsule and assembly of the trap

- Examine the capsule seat part of the valve on the outlet housing (2) for wear or wear marks (not tight).
- Put the capsule with the type identifications S on the seat part of the valve from the outlet housing (2).
- Coat the threat of the outlet housing (2) with temperature-resistant lubricant (Rifox uses installing paste M1-Molypaul).
- Put the strainer (3) in the inlet housing (1).
- Screw and lock the outlet housing (2) and inlet housing (1):Tightening torque 160 Nm.

6.3 Draining and cleaning the strainer

- The condensate trap must be depressurized. Shut off the system securely in front of and behind the condensate trap.
- The housing cool down until it is warm to the touch.
- Loosen housing parts (pos. 1 and 2).
- Take out the strainer (3) and clean with compressed air.

7.0 Conformity assessment

The described pressure bears no CE mark in accordance with Art. 3, par. 3 of the Pressure Equipment Directive.

Management

Quality Assurance

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