HERZ Flow Controller

with Integrated Control Valve

- Flow control and limitation
- Used in cooling and district heating systems
- Constant, presettable flow rate
- Flow rate adjustment by electric actuator for precise temperature control
- Energy saving through accurate regulation
Order Nr. | Order Nr. | DN | Stroke [mm] | kvs | min. Flowrate [m³/h] | max. Flowrate [m³/h] | H | h1 | L | kg
---|---|---|---|---|---|---|---|---|---|---
F 4006 71 | F 4006 90 | 15 | 10 | 2.5 | 0.25 | 1.3 | 275 | 175 | 130 | 7
F 4006 72 | F 4006 91 | 15 | 10 | 4.0 | 0.4 | 2 | 275 | 175 | 130 | 7
F 4006 73 | F 4006 92 | 25 | 14 | 6.3 | 0.6 | 3 | 300 | 205 | 160 | 10
F 4006 93 | F 4006 53 | 25 | 14 | 8.0 | 0.8 | 4 | 300 | 205 | 160 | 10
F 4006 74 | F 4006 94 | 32 | 14 | 12.0 | 1.3 | 6.5 | 295 | 220 | 180 | 13
F 4006 75 | F 4006 95 | 40 | 14 | 20.0 | 2.6 | 11 | 320 | 225 | 200 | 15
F 4006 80 | F 4006 96 | 50 | 14 | 32.0 | 3.2 | 16 | 425 | 240 | 230 | 20
F 4006 81 | F 4006 97 | 65 | 16 | 50.0 | 6 | 28 | 435 | 355 | 290 | 44
F 4006 82 | F 4006 98 | 80 | 18 | 80.0 | 8 | 40 | 450 | 395 | 310 | 56
F 4006 83 | F 4006 99 | 100 | 21 | 125.0 | 12.6 | 63 | 455 | 435 | 350 | 73
F 4006 84 | F 4006 10 | 125 | 21 | 180.0 | 16 | 80 | 480 | 480 | 400 | 95

Technical Data

Max. operating pressure | 16 bar (PN 16)
Max. differential pressure | 25 bar (PN 25)
Diff. pressure across the restrictor | 0,2 bar
Min. operating pressure | 10 bar (PN 16)
Diff. pressure across the restrictor | 15 bar (PN 25)
Min. operating pressure | 2 °C (pure water)
Max. operating pressure | - 20 °C (frost protection)
Max. operating pressure | 190 °C

Type of connection | Flanged (EN 1092-2)
Valve body material | GG 25 (PN16)
Gasket material | GGG 40.3 (PN 25)
Cones, stem, seat material | FPM (ISO1629)
Impulse tube | WN1.4301
Diaphragm material | WN1.4404,

Water purity in accordance with the ÖNORM H 5195 and VDI 2035 standards. Ethylene and propylene glycol can be mixed to a ratio of 25 - 50 vol. [%].

Description

The combi-valve is primarily designed to control the flow of circulation water in district heating and HVAC systems. The flow controller is operated by an electric actuator F 7712 81-98 which is controlled by a microprocessor controller.

The limitation and flow regulation is realized by means of the pressure actuator with a diaphragm and integrated control valve. The control valve cone is controlled by the electric actuator and limited by the adjustable nut. Changing the position of the adjustable nut increases or decreases the maximum flow through the valve. The pressure difference acts through the impulse tube on the control diaphragm and flow controller cone. Each pressure change on the valve upstream port, causes the movement of the control diaphragm and flow controller cone and causes increase or decrease of the valve orifice. The set point for the valve flow limitation can be adjusted by using the diagrams with adjustment curves.

Installation

The installation in the return flow pipe of the system is recommended. Electric actuator should be placed in upward position, at ±45° angle to the vertical pipe axis. The valves must be installed for the correct application using clean fittings. A HERZ strainer (4111) should be fitted to prevent impurities.

For installation, the local and international rules and standards have to be followed.