

Control the Pressure of your System

CPM Constant-Pressure Modulating Valve

2.4

Concept

CPMI-2, CPMI-D60 and CPMO-2 are sanitary constant-pressure valves. CPMI-2 and CPMI-D60 (Constant-Pressure Modulating Inlet) maintain a constant pressure in the process line at the inlet side of the valve. Typical applications are after separators, heat exchangers or overflow valves. CPMO-2 (Constant-Pressure Modulating Outlet) maintains a constant pressure in the process line at the outlet side of the valve. Typical applications are before filling/bottling machines etc.

Working principle

The valves are remote-controlled by means of compressed air. A diaphragm/valve plug system reacts immediately to any alteration of the product pressure and changes position so that the preset pressure is maintained.

Standard design

The CPMI-2 and CPMO-2 consist of a valve body with valve seat, cover, a valve plug with a diaphragm unit and a clamp. The cover and the valve body are clamped together. The valve body and the seat are welded together. The CPM-I-D60 consists of upper and lower valve bodies, an inlet tube, a cover, a valve plug with diaphragm unit and clamps. The cover and the valve bodies are clamped together.



TECHNICAL DATA

Max. product pressure: 1000 kPa (10 bar).
 Min. product pressure: 0 kPa (0 bar).
 Temperature range: -10°C to 95°C (EPDM).
 Temperature range with upper diaphragm
 in PTFE/EPDM: -10° C to +140° C.
 (Higher on request).
 Air pressure (CPMI-2/CPMO-2): 0 to 800 kPa (0 to 8 bar).
 Air pressure (CPM-I-D60): 0 to 600 kPa (0 to 6 bar).
 Flow Kv 23, fully open (Dp = 1 bar): Approx 23 m³/h.
 Flow Kv 7 (Δp = 1 bar): Approx 7 m³/h.
 Flow Kv 9 (Δp = 1 bar): Approx 9 m³/h.
 Flow Kv2/15, low capacity (Δp = 1 bar): Approx 2 m³/h.
 (Alternative size) (regulating area). Approx. 15
 m³/h. (CIP area).
 Flow range Kv60, fully open (Δp = 1 bar)
 (CPM-I-D60) Approx 60 m³/h.

PHYSICAL DATA

Materials

Product wetted steel parts: 1.4404 (316L).
 Other steel parts: 1.4301(304).
 Lower diaphragm: PTFE covered EPDM rubber
 Upper diaphragm NBR

Air Connections

R 1/4" (BSP), internal thread.