

DELTA CPV Constant Pressure Valve



The DELTA CPV constant pressure membrane valve is designed to ensure constant product pressures in the hygienic process technology and aseptic plants. It is suitable for use in the dairy, food, brewing, and beverage as well as personal care and pharmaceutical industries.

METHOD OF OPERATION

The effective principle of the pressure maintaining is based on the reduction and enlargement of the free flow section at the valve seat by the valve cone. This cone is connected to the regulating membrane via the valve shaft. The regulating membrane is backed up with air at a set pressure. Thus, if any product pressure changes occur, the valve membrane immediately reacts and changes the position of the cone, ensuring that the pre-set product pressure is maintained.

APPLICATION RANGE

The DELTA CPV is available for two generic functions:

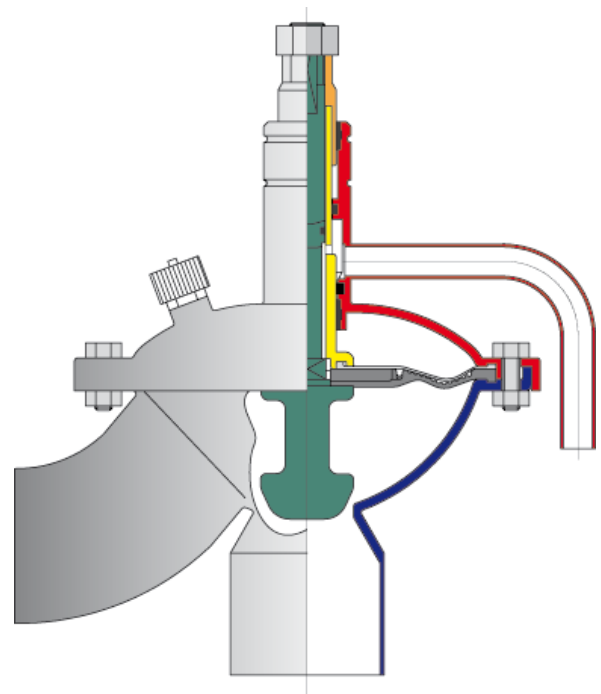
- DELTA CPV-o: to keep pressure constant upstream of the valve
- DELTA CPV-c: to keep pressure constant downstream of the valve

The DELTA CPV-o is typically used:

- In UHT systems to prevent boiling in heat exchangers
- In pasteurizers to ensure a positive pressure difference between the pasteurized and unpasteurized sections
- In a re-circulation loop upstream of a filling machine to ensure a constant pressure to the filler
- To maintain a constant pressure in a separator

The DELTA CPV-c is typically used:

- Upstream of a packaging machine
- In a water supply system



FEATURES AND BENEFITS

Maximum Product Protection / Product Care

- The round surfaces in the housing and on the modulating cone ensure minimum shear forces applied onto the product
- Stable and excellent modulating quality - precise control of the valve cone by the multi-layer flat membrane system
- Minimized product volume in the valve housing ensures a quick response time and excellent modulating accuracy. The housing can be welded in-line - no additional seals required

Extended Operating Time

- The rubber-supported TFM membrane system is provided for a long operating lifetime

Excellent Cleanability

- Flat TFM membrane - smooth housing surface - no dead areas and no crevices
- The large Cv/Kv value within the fully open valve provides for sufficient CIP throughput during pipe cleaning - no additional by-pass required

Ease of Use

- Flat membrane system with integrated leak detection for quick indication of any leakage from the product side or air side
- The large Cv/Kv value combined with the modulating quality ensures a broad field of applications
- Optional booster available to support insufficient air supply pressure

SIZES	DN50 - DIN 11850, 2" - ISO 2037
WORKING PRODUCT PRESSURE	Up to 101 psi (7 bar)
MAX. OPERATING PRODUCT PRESSURE	145 psi (10 bar)
MAX. SUPPLY AIR PRESSURE (INCL. BOOSTER)	87 psi (6 bar)
TEMPERATURE	Max. operating: 275 °F/ 135°C Short term: 284 °F/ 140°C
AIR CONNECTION	G 1/8"
HOUSING MATERIAL	1.4404
MEMBRANE MATERIAL	Product wetted side: TFM Rear side: EPDM covered

Based in Charlotte, North Carolina, SPX FLOW, Inc. (NYSE: FLOW) is a multi-industry manufacturing leader. For more information, please visit www.spxflow.com

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