Armaturen GmbH

# Product information

## M&S-Diaphragm pressure relief valve

M&S diaphragm pressure relief valves are spring-loaded valves for setting a system or line pressure. It protects pressure-sensitive components such as pumps, heat exchangers or fillers against an impermissible increase in pressure. When the set pressure is reached, the valve opens, thereby reducing the system pressure.

In addition, diaphragm pressure relief valves can also be used in systems with high hygienic requirements and for aseptic applications. The diaphragm sealing system ensures hermetic separation between the product area and the actuator technology.

### Diaphragm pressure relief valves

### Diaphragm spherical housing

**Usage** | **Features** | **Versions**

- For relief in case of impermissible pressure increase (not a component-tested safety valve !).
  - In piping systems, containers with normal and high demands on hygienic properties.
  - In systems for aseptic applications.

**Usage** | **Features** | **Versions**

- Simple and precise setting of the response pressure.
- Hygienic design with optimum cleanability.
- Flow-optimised spherical housing with diaphragm sealing system.
- Very good cleanability and sterilisability (CIP/SIP).
- Metallic stop for gasket.
- Leakage hole for monitoring.
- Easy gasket replacement while maintaining set pressure.
- Seat cleaning manually or optionally with pneumatic lifting unit.
- Conversion kit available for identical third-party products.

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## M&S-Diaphragm pressure relief valve

**Usage** | **Features** | **Versions**

- The M&S diaphragm sealing concept meets with its
  - dead-space free,
  - completely drainalble and cleanable valve housing

  all requirements of hygienic design.
- The full pressure resistance of the diaphragm is ensured by a support ring, regardless of the direction of flow (figure 1).
- With hole for leakage monitoring.

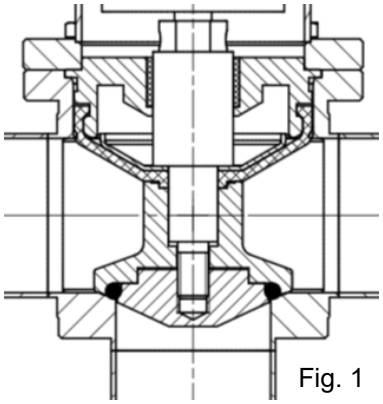

Fig. 1

**Possible installation**

- In the L-design (corner housing), the medium can be fed back into the system through a bypass.
- In the T-design (cross housing), e.g. a forced-delivery pump can be integrated into the system in such a way that circulation is forced when the valve responds. An additional piping is not required (figure 2).

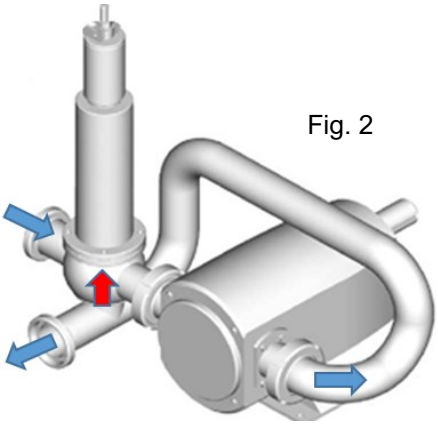

Fig. 2

**Usage** | **Features** | **Versions**

- Sizes
  - DN 25 - DN 80.
- Pressure/adjusting range
  - Up to 10 bar.
- Housing design
  - L-type corner housing (standard).
  - T-type cross housing (optionally).
- Process connection
  - Welding ends according to EN10357, series A.
  - Connecting elements from the M&S product range or on customers request.
- Seat lifting
  - Manual or manual/pneumatic.
- Materials
  - Housing: 1.4404/AISI 316L, other stainless steels, titanium or hastelloy.
  - Gaskets: EPDM, FKM (FDA compliant and USP Class VI), HNBR (FDA compliant).
- Surfaces
  - In contact with product *Ra* ≤ 0,8 µm, not in contact with product *Ra* ≤ 1,6 µm.
  - Other surfaces on request.

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