



M&S ball valves are used to shut off media flows. They have a full passage when open. Therefore, they are particularly suitable for viscous products and pigging pipelines.

The PTFE/PEEK seal ensures high resistance to aggressive media or high temperatures. In addition, the ball provides a shearing effect during the switching process, which is advantageous for lumpy or fibrous products.

### Standard version



### Standard version with cleaning connection

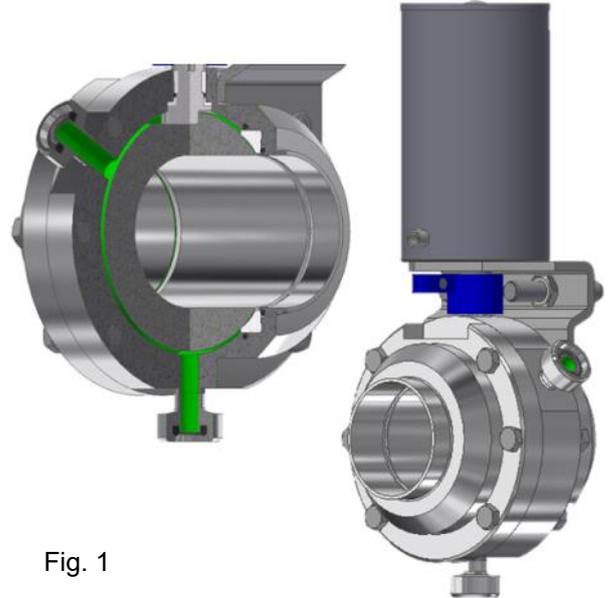


Fig. 1

#### Usage

#### Features

#### Versions

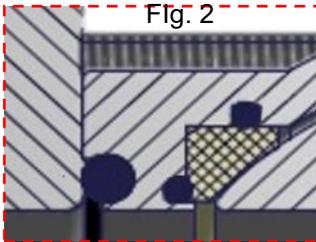
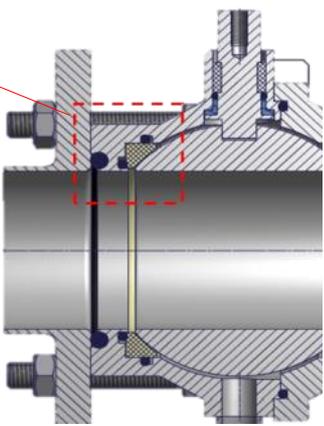
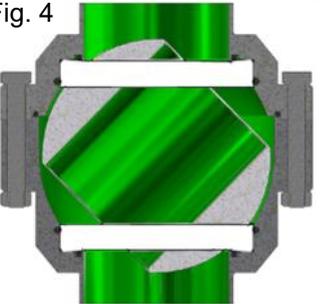
- For shutting off liquid, viscous and lumpy media flows.
- In pigging piping systems and pigging stations.
- Also for regulating flow rates in conjunction with a positioner.
- For chemically aggressive media or high temperatures.

#### Usage

#### Features

#### Versions

- Pipe level full passage.
- Pigging.
- Modular system, can be combined with many attachments of the butterfly valve programme.
- Stable, reliable and maintenance-friendly design.
- Can be fully automated with TOP control and feedback head and positioner.
- Optionally with flushing connections (figure 1) or heating jacket.
- Dimensionally stable PTFE/PEEK sealing shells.
- Gap-free centring and sealing of the flanges in accordance with DIN11864.
- Pre-stressed sealing shells to reduce product carry-over.
- Low torque.
- Optionally conductive sealing shells to dissipate electrostatic charge in accordance to ATEX.

Usage	Features	Versions
<p>Special features</p> <ul style="list-style-type: none"> <li>• Dynamic sealing of the ball against product carry-over. The PTFE/PEEK sealing shells are pre-stressed by FEP-covered O-rings and pressed against the ball. During switching operations under flow, the sealing shells are thus held in position and product carry-over is minimised (figures 2+3).</li> <li>• The installation geometry prevents the PTFE/PEEK sealing shells from expanding into the product space (figure 2). This is advantageous for systems with pigging applications.</li> <li>• The backwash of the ball rear chamber can be achieved by repeated actuation (cycling) of the valve during cleaning.</li> </ul> <p>A fixed 45-degree position of the ball is also suitable for rinsing the back space of the ball. This position can be achieved by a stepless handle or by a positioner (figure 4).</p>	 <p>Fig. 2</p>  <p>Fig. 3</p>	 <p>Fig. 4</p> 

Usage	Features	Versions
<ul style="list-style-type: none"> <li>• Sizes <ul style="list-style-type: none"> <li>* DN 25 - DN 100</li> </ul> </li> <li>• Process connections <ul style="list-style-type: none"> <li>* Weld ends</li> <li>* Connecting elements from the M&amp;S portfolio</li> </ul> </li> <li>• Operation <ul style="list-style-type: none"> <li>* Manual, pneumatic or electrical</li> </ul> </li> <li>• Automation <ul style="list-style-type: none"> <li>* Different control heads (FIELD BUS-systems) or position controllers</li> </ul> </li> <li>• Operating pressure <ul style="list-style-type: none"> <li>* 10 bar (DN 15 - DN 100)</li> </ul> </li> <li>• Material <ul style="list-style-type: none"> <li>* Housing: AISI316L/1.4404; special stainless steel, Titanium oder Hastelloy on request</li> <li>* Gaskets: PTFE/PEEK, O-rings FEP-covered, FDA-compliant</li> </ul> </li> <li>• Surfaces <ul style="list-style-type: none"> <li>* In contact with product <math>Ra \leq 0,8 \mu\text{m}</math></li> <li>* Not in contact with product <math>Ra \leq 1,6 \mu\text{m}</math></li> </ul> </li> <li>• Optionally with flushing connections for cleaning the ball rear chamber (figure 1) or with heating jacket</li> <li>• Optionally conductive sealing shells (ATEX)</li> </ul>		