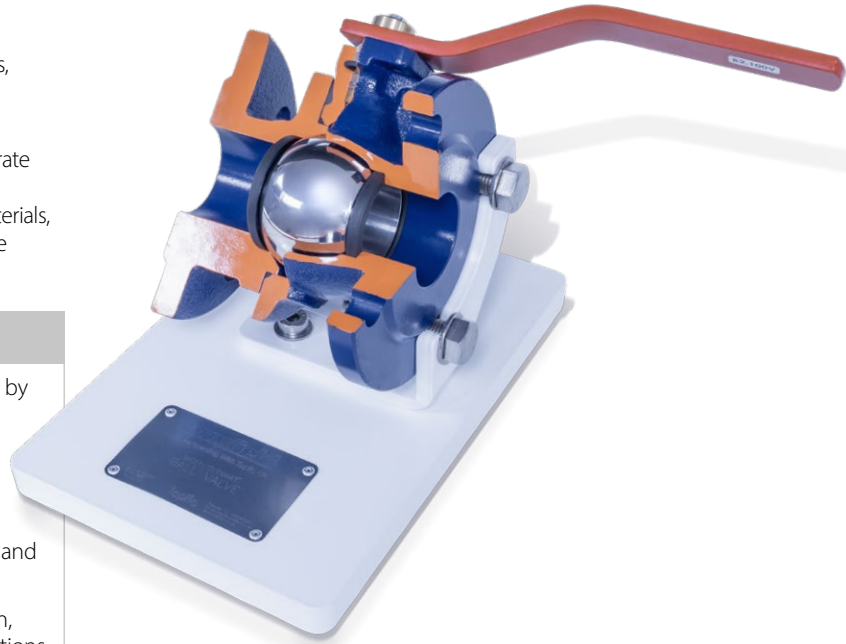


**ME  
SERIES**

**Cutaway Ball Valve – ME21**

The ME21 Ball Valve is a teaching unit designed for educational purposes, providing students and trainees with a hands-on understanding of fluid control systems.

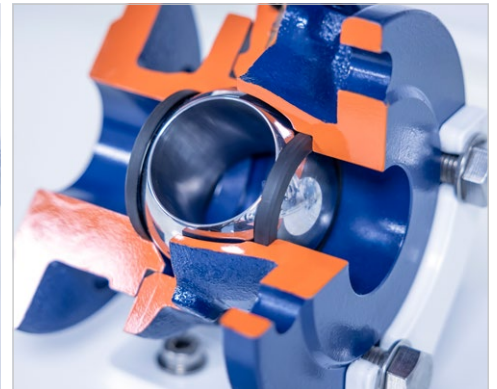
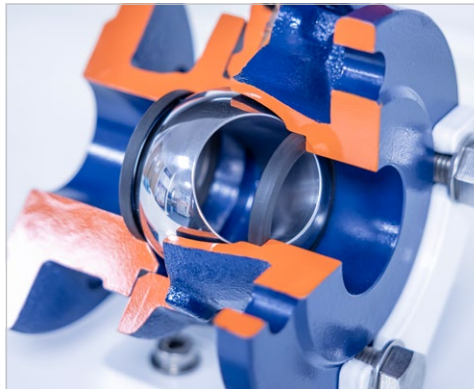
While suitable for a variety of applications, its primary role is to demonstrate the principles and operations of ball valves in a controlled learning environment. Engineered with precision and built from high-quality materials, the ME21 ensures durability, ease of operation, and optimal performance under varying conditions.



**Instructional capabilities**

The ME21 DN50 Ball Valve is designed to enhance student learning by combining visual and practical elements:

- ▶ **Operational Demonstration:** The valve utilises a quarter-turn mechanism for quick and efficient opening and closing, allowing students to easily observe its functionality.
- ▶ **Compact and Robust Design:** Ensures long-lasting performance and minimal maintenance, even during repeated instructional use.
- ▶ **Practical Training:** Helps students develop skills in valve operation, maintenance, and troubleshooting, essential for industrial applications.



**Operating Principle of a Ball Valve**

The globe valve operates by using a movable disc to regulate or block fluid flow:

- ▶ **Open Position:** The ball's perforation aligns with the flow direction, allowing fluid to pass through unimpeded.
- ▶ **Closed Position:** A 90-degree rotation of the lever moves the ball's perforation perpendicular to the flow direction, effectively blocking fluid passage.
- ▶ **Throttling Function:** By partially rotating the ball, the valve can control the flow rate, demonstrating adjustable fluid control in a teaching environment.

**Applications.** *The ME21 Ball Valve is ideal for:*

- ▶ **Educational Purposes:** Teaching fluid dynamics and control principles, demonstrating industrial and residential applications in classroom settings, and hands-on training for engineering and technical students.
- ▶ **Industrial Applications:** Used in water treatment plants, chemical processing facilities, HVAC systems, and oil and gas pipelines for its reliable fluid control.
- ▶ **Residential and Commercial Systems:** Effective in plumbing systems, heating networks, and other fluid distribution setups.

**Technical specifications**

Valve Size	DN50 2"
Body material	Epoxy-coated ductile iron
Disk material	Stainless steel
Operation	Lever operated, manual control
Connection	FLanged PN16
Temperature Range	-20°C to 100°C

**Overall dimensions**

Length	0.300m
Width	0.200m
Height	0.410m (Handle in on position)

**Packed and crated shipping specifications**

Volume	TBC m <sup>3</sup>
Gross Weight	TBC kg

**Ordering codes**

- ▶ ME21

**Armfield standard warranty applies with this product**