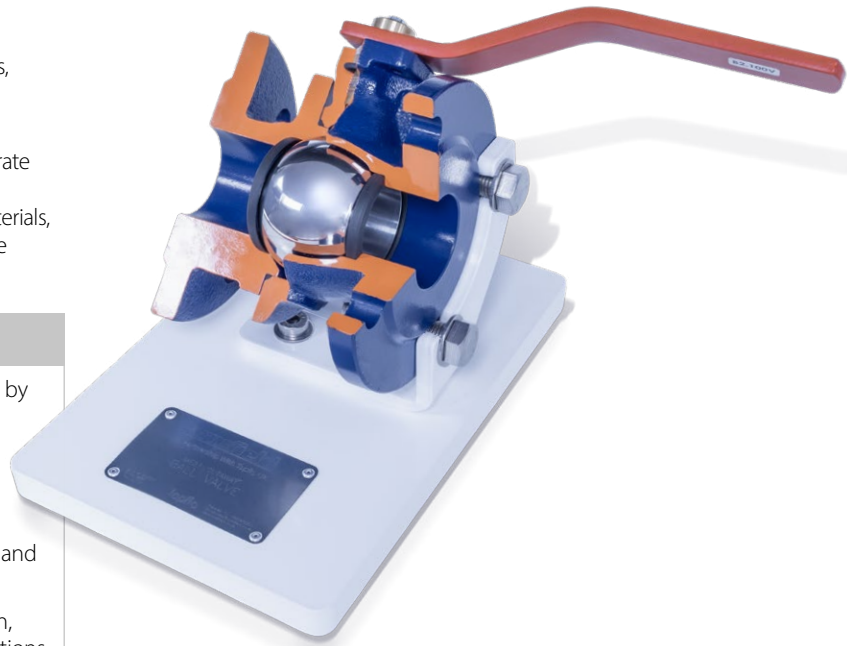


**ME
SERIES**

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.

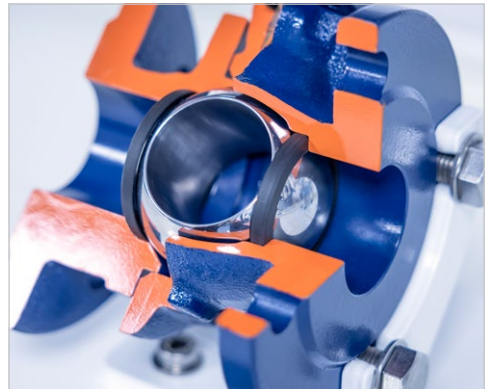
While suitable for a variety of applications, its primary role is to demonstrate the principles and operations of ball valves in a controlled learning environment. Engineered with precision and built from high-quality materials, the ME21 ensures durability, ease of operation, and optimal performance 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 ball valve operates by using a rotating spherical ball with a bore to control, 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 ³
Gross Weight	TBC kg

Ordering codes

- ▶ ME21

Armfield standard warranty applies with this product