

SMART SHUT-OFF VALVE (WIRED M-Bus)

Model Series: BC- RSV-DNXX-MB/1



Product Overview

This intelligent shutoff valve is designed for cutting off chilled water flow in HVAC system. Equipped with wired M-Bus communication, it enables seamless integration into Tenant Billing Software for remote monitoring and control. The built-in battery ensures reliable operation even during power outages, enhancing system resilience.

Key Features and Benefits

- ▶ **Wired M-Bus Communication:** Ensures reliable and secure data transmission for remote monitoring and control via standard M-Bus protocol.
- ▶ **Durable Construction:** Copper alloy body and stainless-steel ball provide excellent corrosion resistance and long service life in water applications.
- ▶ **Powerful Actuation:** 5 Nm motor torque ensures positive and reliable shut-off under pressure.
- ▶ **Autonomous Operation:** High-capacity 4100 mAh battery enables operation even during power outages (lifespan dependent on usage).
- ▶ **High Environmental Protection:** IP67 rated enclosure offers robust protection against dust and water ingress, suitable for demanding environments.
- ▶ **High Pressure Rating:** PN25 rating allows for use in systems with operating pressures up to 25 bar.
- ▶ **Versatile Application:** Suitable for controlling flow in both chilled water and domestic water systems.
- ▶ **Easy Integration:** Compliant with the wired M-Bus standard for straightforward integration with compatible building management systems and data loggers.

Applications

- ▶ Chilled water distribution systems in HVAC applications.
- ▶ Domestic water supply networks in residential and commercial buildings.
- ▶ Zone control in heating and cooling systems.
- ▶ Leakage prevention and isolation.
- ▶ Remote monitoring and control of water flow.

Technical Specifications

<u>Feature</u>	<u>Specification</u>
Valve Body Material	Copper Alloy CW511L (Equivalent to C57)
Ball Material	Stainless Steel 304 (1.4301)
Actuator Type	Electric Motorized
Motor Torque	5 Nm
Power Supply	Integrated Battery
Battery Capacity	4100 mAh
Enclosure Rating	IP67
Maximum Pressure Rating	PN25
Nominal Pressure	25 bar
Communication Protocol	Wired M-Bus (EN 13757)
Application Media	Chilled Water, Domestic Water
Ambient Temperature	[Specify Operating Range]
Media Temperature	[Specify Operating Range]
Connection Type	[Specify Connection Type(s) & Size(s)]
Actuation Time	[Specify Opening/Closing Time]
Valve Size Range	[Specify Available Sizes]
Weight	[Specify Approximate Weight]
Durability	The valve has been opened and closed continuously for 100000 times without any malfunction
Nominal Diameter: DN15 [0.03 – 3] m3/h DN20 [0.05 – 5] m3/h DN25 [0.07 – 7] m3/h DN32 [0.12 -12] m3/h DN40 [0.2 -20] m3/h	Valve Body Length: 58mm to 60mm 68.5 mm 75.0 mm 84.0 mm 99.0 mm

Dimensions and Materials

Valve Body: Copper Alloy CW511L

Ball: Stainless Steel 304

Stem: [Specify Stem Material]

Seals: [Specify Seal Materials]

Actuator Housing: [Specify Housing Material]

(Detailed dimensional drawings available upon request)

Installation and Operation

- ▶ Installation should be performed by qualified personnel in accordance with relevant regulations and guidelines.
- ▶ Ensure proper alignment and sealing during installation.
- ▶ Refer to the product manual for detailed wiring and communication setup instructions.
- ▶ The valve is controlled via M-Bus commands for opening and closing.

Ordering Information

Please specify the following when ordering:

- ▶ Product Name: Wired M-Bus Smart Shut-off Valve
- ▶ Valve Size (DN)
- ▶ Connection Type and Size
- ▶ Any specific requirements

Notes

- ▶ Specifications are subject to change without notice.
- ▶ Refer to the latest product manual for the most up-to-date information.
- ▶ Contact our sales team for pricing and availability.

Safety Precautions

- ▶ Ensure the system is depressurized and cooled down before installing or maintaining the valve.
- ▶ Do not exceed the specified pressure and temperature limits.
- ▶ Follow all electrical safety guidelines when connecting external power (if applicable).
- ▶ Dispose of batteries according to local environmental regulations.



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