

DN Series 220V Electric Ball Valve Switch Type

Self-diagnostic motorized on/off ball valve for HVAC and fan-coil water control



Product Overview

The HOMIPNEU DN Series is a switch-type electric ball valve for automatic on/off control in heating, cooling and fan-coil water circuits. Its motorized actuator rotates the ball valve between fully open and fully closed positions. Red and green LED indicators provide a simple self-diagnostic status display, helping maintenance personnel identify complete or incomplete valve travel in confined or difficult-to-access locations.

Key Features

- Electric on/off control for hot-water, cold-water and compatible glycol-water circuits.
- Red and green LED indicators show fully open, fully closed or incomplete travel status.
- Power is consumed only while the actuator is opening or closing the valve.
- Available in DN15 through DN50 connection sizes.
- Suitable for HVAC terminals, fan-coil units and confined installation locations.

Applications

- Heating and cooling water-control systems.
- Fan-coil unit water circuits and central air-conditioning terminals.
- Hot-water pipelines, temperature-control loops and building water distribution.
- OEM HVAC equipment, maintenance replacement and distributor stock.

Product Function

The actuator drives the valve through a 90-degree quarter turn for normal open/close service. Depending on the selected configuration, the actuator can also use forward/reverse operation or continuous 360-degree rotation.

Technical Specifications

Parameter	Specification
Power Supply	AC 220 V, 50/60 Hz; AC 24 V, 50/60 Hz
Operating Power	6 W or 9 W; consumed only while opening or closing
Opening / Closing Time	15 seconds
Protection Rating	IP54
Operating Mode	90-degree quarter turn with forward/reverse rotation, or 360-degree rotation
Ambient Temperature	2-60 deg C
Applicable Media	Hot and cold water; ethylene glycol aqueous solution up to 60%
Medium Temperature	2-95 deg C
Maximum Closing Pressure Differential	0.6 MPa for 2-way valves; 0.3 MPa for 3-way valves
Cable Length	50 cm; customizable
Actuator Dimensions	63 x 80 x 83.5 mm

LED Status and Switching Logic

Operating Status	Indicator / Control Response
Valve Fully Open	Red indicator off; green indicator on
Valve Fully Closed	Green indicator off; red indicator on
Travel Incomplete	Red and green indicators both on
Switch-Type Control	Command the actuator to move between fully open and fully closed positions

Operating Notes

- Confirm the ordered supply voltage before wiring or installation.
- The actuator consumes power during travel and stops after the commanded end position is reached.
- Use the indicator status to identify incomplete opening or closing during inspection.
- Verify the required 2-way or 3-way structure and permissible pressure differential before ordering.

Model Selection and Dimensions

Model	Connection	PPR Pipe	Metal Pipe	Ball Bore	Length L	Height H	Thread Dia.	Weight kg
DN15	1/2 in	PPR20	DN15	12	50	122	20	0.415
DN20	3/4 in	PPR25	DN20	17	59	129	25	0.463
DN25	1 in	PPR32	DN25	20	65	133	32	0.581
DN32	1 1/4 in	PPR40	DN32	25	74	145	40	0.800
DN40	1 1/2 in	PPR50	DN40	30	82	150	50	0.850
DN50	2 in	PPR63	DN50	37	96	165	57	1.200

Dimensions are in millimetres unless otherwise stated. Weight values are in kilograms.

Selection and Installation Guidance

- Confirm valve size, connection standard, power supply, cable length and control wiring before ordering.
- Confirm whether the application requires a 2-way or 3-way valve structure.
- Install the valve where the actuator and LED indicators remain accessible for inspection.
- Verify medium temperature, ambient temperature and closing pressure differential against the system conditions.
- Depressurize and electrically isolate the system before installation, wiring or maintenance.

Ordering Information

Specify the DN model, connection size, voltage, control type, 2-way or 3-way structure, cable length, applicable medium and required quantity. OEM support is available for cable customization, export packaging and private-label supply, subject to production confirmation.

Contact Information

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