BELIMO

# Technical data sheet B250

2-way, Characterized Control Valve, Stainless Steel Ball and Stem



Picture may differ from product

5-year warranty

## Type overview

| Type | DN | Cv | Body Pressure Rating |
|---|---|---|---|
| B250 | 2" [50] | 57 | 400 psi |

## Technical data

| | | |
|---|---|---|
| **Functional data** | Valve size [mm] | 2" [50] |
| | Fluid | chilled or hot water, up to 60% glycol |
| | Fluid Temp Range (water) | 0...250°F [-18...120°C] |
| | Close-off pressure | Δps 200 psi |
| | Flow characteristic | equal percentage |
| | Leakage rate | 0% for A–AB |
| | Pipe connection | Internal thread<br>NPT (female) |
| | Servicing | maintenance-free |
| | Flow Pattern | 2-way |
| | Controllable flow range | 75° |
| | No Characterized Disc | TRUE |
| **Materials** | Valve body | nickel-plated brass body |
| | Stem | stainless steel |
| | Stem seal | EPDM (lubricated) |
| | Seat | PTFE |
| | Characterized disc | No Disc (full flow) |
| | O-ring | EPDM (lubricated) |
| | Ball | stainless steel |
| **Suitable actuators** | Non Fail-Safe | ARB(X)<br>ARQB(X)<br>ARB(X) N4 |
| | Spring | AFRB(X) |

## Safety notes

- This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and reproductive harm. For more information go to www.p65warnings.ca.gov

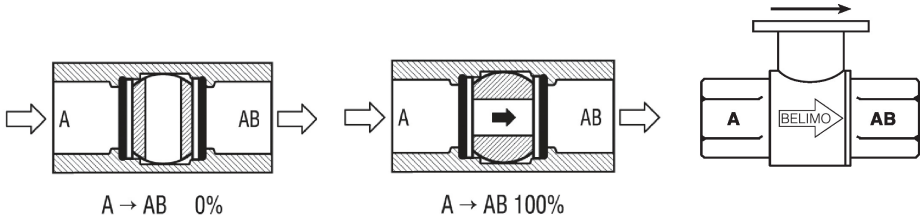
## Product features

**Application**

This valve is typically used in air handling units on heating or cooling coils, and fan coil unit heating or cooling coils. Some other common applications include Unit Ventilators, VAV box re-heat coils and bypass loops. This valve is suitable for use in a hydronic system with variable flow.

**Flow/Mounting details**

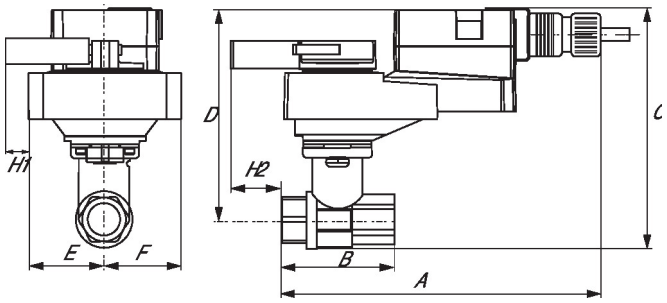
Two-way valves should be installed with the disc upstream.




## Dimensions

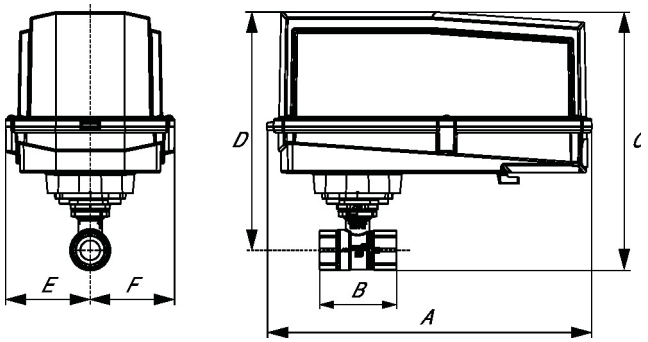
| Type | DN | Weight |
|---|---|---|
| B250 | 2" [50] | 2.8 lb [1.3 kg] |

ARCB, ARCX, ARB, ARX



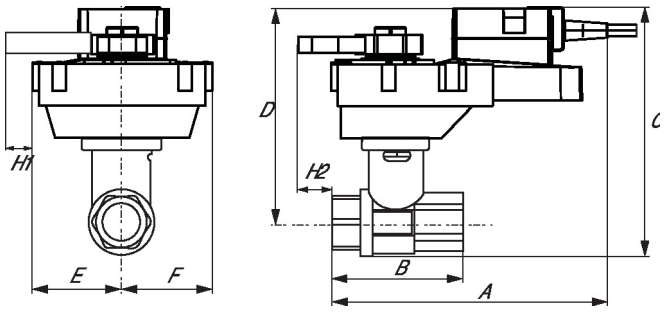

| A | B | C | D | E | F | H1 | H2 |
|---|---|---|---|---|---|---|---|
| 10.0" [254] | 4.2" [107] | 6.9" [175] | 5.5" [140] | 1.77" [44] | 1.7" [44] | 0.8" [20] | 1.2" [30] |

ARB N4, ARX N4, NRB N4, NRX N4




| A | B | C | D | E | F |
|---|---|---|---|---|---|
| 11.4" [289] | 4.2" [107] | 9.8" [249] | 7.6" [194] | 3.1" [80] | 3.1" [80] |

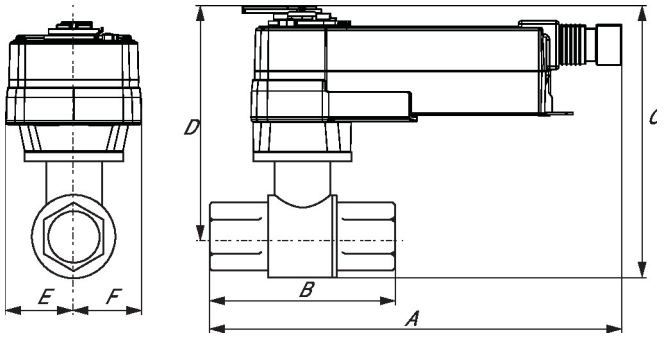
ARQB, ARQX




| A | B | C | D | E | F | H1 | H2 |
|---|---|---|---|---|---|---|---|
| 9.9" [251] | 4.2" [107] | 7.5" [191] | 6.1" [155] | 2.3" [58] | 2.3" [58] | 0.8" [20] | 0.6" [15] |

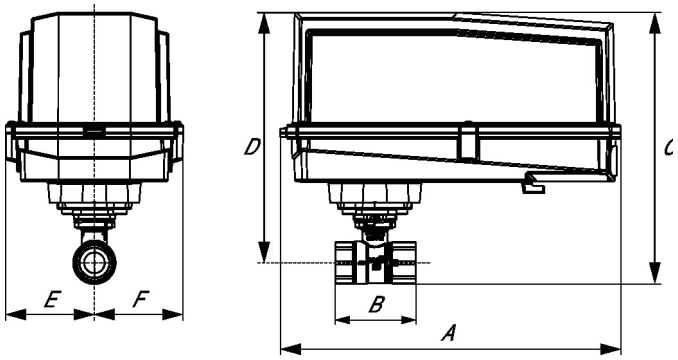
## Dimensions

AFRB, AFRX




| A | B | C | D | E | F |
|---|---|---|---|---|---|
| 10.8" [275] | 4.2" [107] | 7.5" [191] | 6.1" [155] | 2.0" [51] | 2.0" [51] |

AFRB N4, AFRX N4




| A | B | C | D | E | F |
|---|---|---|---|---|---|
| 13.0" [330] | 4.2" [107] | 10.3" [262] | 9.3" [235] | 3.4" [86] | 3.4" [86] |

# Technical data sheet ARX24-3-T N4

On/Off, Floating point, Non fail-safe, 24 V



5-year warranty

Please note: Due to a supplier issue, certain NEMA 4 actuator covers will be supplied in gray instead of orange until further notice. This change ensures uninterrupted shipping and the same protective properties and product specifications.

## Technical data

| | | |
|---|---|---|
| **Electrical data** | Nominal voltage | AC/DC 24 V |
| | Nominal voltage frequency | 50/60 Hz |
| | Nominal voltage range | AC 19.2...28.8 V / DC 21.6...28.8 V |
| | Power consumption in operation | 2.5 W |
| | Power consumption in rest position | 0.5 W |
| | Transformer sizing | 5.5 VA |
| | Overload Protection | electronic thoughout 0...90° rotation |
| **Functional data** | Direction of motion motor | selectable with switch 0/1 |
| | Manual override | under cover |
| | Angle of rotation | 90° |
| | Angle of rotation note | adjustable with mechanical stop |
| | Running Time (Motor) | 90 s / 90° |
| | Running time motor variable | 90 or 150 s |
| | Sound power level motor | 45 dB(A) |
| | Position indication | pointer |
| **Safety data** | Power source UL | Class 2 Supply |
| | Degree of protection IEC/EN | IP66/67 |
| | Degree of protection NEMA/UL | NEMA 4X |
| | Housing | UL Enclosure Type 4X |
| | Agency Listing | cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02, CE acc. to 2014/30/EU and 2014/35/EU |
| | Quality Standard | ISO 9001 |
| | Ambient humidity | Max. 100% RH |
| | Ambient temperature | -22...122°F [-30...50°C] |
| | Ambient temperature note | -40...122°F [-40...50°C] for actuator with integrated heating |
| | Storage temperature | -40...176°F [-40...80°C] |
| | Servicing | maintenance-free |
| **Weight** | Weight | 2.0 lb [0.91 kg] |
| **Materials** | Housing material | Die cast aluminium and plastic casing |

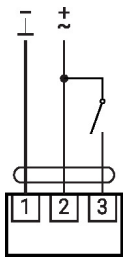
**Footnotes** †Rated Impulse Voltage 800V, Type of action 1, Control Pollution Degree 4.

## Accessories

| Factory add-on option only | Description | Type |
|---|---|---|
| | Heater, with adjustable thermostat | ACT_PACK_H |

## Electrical installation

AC/DC 24 V, on/off




AC/DC 24 V, 3-point

