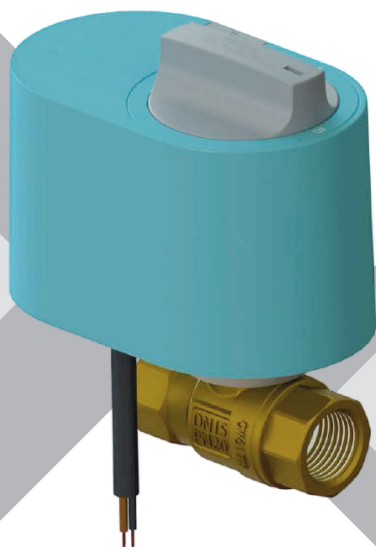




Operating manual



Shut-off valve with actuator IBO MIX 1 UNI CONTROL

CAUTION! Read the operating manual before use.
For safety reasons, only persons thoroughly familiar
with the operating manual are permitted
to operate the device.

Description

The MIX 1 Uni Control zone valve is used to shut off the flow of the medium and is applied in water, heating, air-conditioning and ventilation systems, as well as in heat pump systems and water leak control systems.

The valve is supplied with an electric actuator that enables automatic operation according to the demand of the device or controller to which it has been connected. Depending on the model, the valve may be available in the NO version – normally open, or NC – normally closed.

The actuator can also be operated manually – simply press the switch button to release the knob for rotation. Releasing the button automatically restores automatic mode. The ergonomic shape of the knob ensures convenient and easy operation.

The control signal is available in a combined 2-wire / 3-wire configuration (2p/3p), which increases compatibility with various automation systems.

The maximum differential pressure for the MIX1 valve is 600 kPa (6 bar).

Actuator technical data

STER Z 1 UNI	
Voltage	230 V / 50 Hz
Degree of protection	IP54
Ambient temperature range	0-60°C
Power cable	3 × 0.75 mm / 100 cm
Rotation time Rotation angle	20 s 90°
Housing material	PC+10%GF
Motor torque	6 Nm

Available models

The control signal of the IBO MIX 1 Uni Control valve is 2P/3P in one, and the installer can select the type of control suitable for their application or control system. The actuator recognises the wiring method by itself.

For 2P control, two versions are available: NO (normally open) and NC (normally closed). The NO/NC designations indicate the valve position when there is no control signal; during normal operation the valve always requires a power supply.

NO versions – normally open (valve open when there is no control signal)

IBO MIX 1 UNI CONTROL DN15 230 V AC, 2-point NO / 3-point

IBO MIX 1 UNI CONTROL DN20 230 V AC, 2-point NO / 3-point

IBO MIX 1 UNI CONTROL DN25 230 V AC, 2-point NO / 3-point

Valve technical data

MIX 1 UNI			
Max. working pressure:	32 bar / 3.2 MPa		
KVS	DN15 (½")	DN20 (¾")	DN25 (1")
	20 m³/h	45 m³/h	60 m³/h
Max. operating temperature	120°C		
Max. glycol concentration	up to 50%		
Max. differential pressure	6 bar / 0.6 MPa		
Material, valve body	Brass EN 12165, CW617N		
Material, ball / shaft	Brass EN 12165, CW617N		
Valve thread	female thread (Rp)		

NC versions – normally closed (valve closed when there is no control signal)

IBO MIX 1 UNI CONTROL DN15 230 V AC, 2-point NC / 3-point

IBO MIX 1 UNI CONTROL DN20 230 V AC, 2-point NC / 3-point

IBO MIX 1 UNI CONTROL DN25 230 V AC, 2-point NC / 3-point

Installation and electrical connection



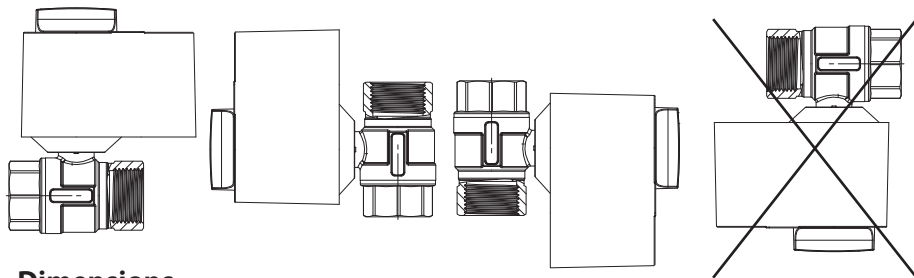
CAUTION:

The electrical connection may be made solely by authorised persons and in accordance with the regulations currently in force.

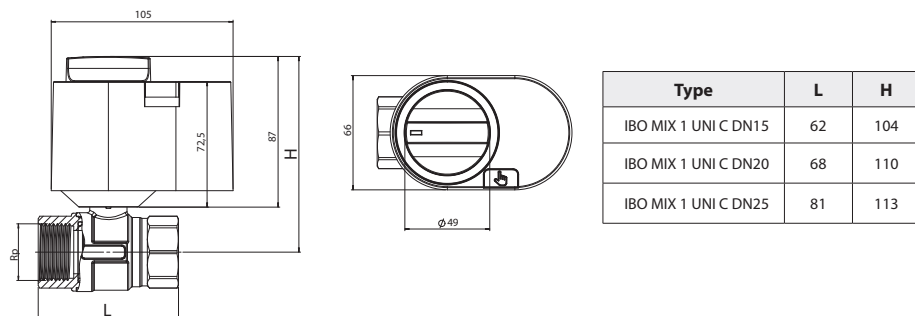
The valve operates at 230 V. Improper use may result in injury or death.

- The actuator must not be allowed to come into contact with water.
- During maintenance work, the actuator must always be disconnected from the mains.
- Any interference with the device voids the warranty.

Mounting positions



Dimensions



Mounting and removal

Quick mounting without tools.

To mount the actuator, press it onto the valve.

To remove the actuator, pull it firmly away from the valve.

The actuator is secured against accidental detachment from the valve.

Note: the actuator can be mounted in one position only!

Problems and their solutions

1. Actuator failure / no power supply

The valve remains in its last position. If the valve needs to be opened or closed, use manual mode to change the position of the valve ball.

2. The actuator overheats

After removing the actuator, check whether the valve stem rotates freely. If rotation is difficult, move the stem gently using an adjustable spanner. If resistance is high, the valve must be removed and contaminants or scale must be cleaned off.

3. Unusual or incorrect actuator operation

Disconnect the power supply immediately. Check that the connections are correct, as well as the voltage and the compliance of the wiring with the manual.

4. Maintenance of the valve ball

If the valve does not change position for more than 3 months, close and open it manually to remove any possible deposits on the valve ball.

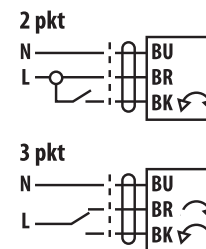


CAUTION:

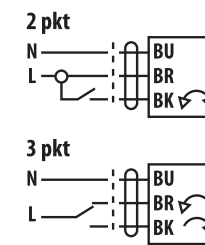
All installation and servicing work may be carried out only by persons holding the appropriate electrical and plumbing qualifications. When the live wire is connected to terminal BK and the permanent neutral wire to terminal N, the valve starts to open. After the live wire is disconnected from terminal BK, the actuator returns to its original position (normally closed).

Wiring diagram

2 pkt NC / 3 pkt



2 pkt NO / 3 pkt



3-point control (3P)

When the live wire is connected to terminal L1 (BR) and the permanent neutral wire to terminal N, the NC actuator moves clockwise / the NO actuator anticlockwise.

When the live wire is connected to terminal L2 (BK) and the permanent neutral wire to terminal N, the NC actuator moves anticlockwise / the NO actuator moves clockwise

Note: in 3-point control mode (3P), do not allow line voltage to be applied to terminals BR (L1) and BK (L2) at the same time.

2-point control (2P) – NC/NO version

NC – when the live wire is connected to terminal BK and the permanent neutral wire to terminal N, the valve starts to open.

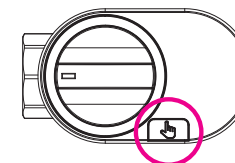
After the live wire is disconnected from terminal BK, the actuator returns to its original position (normally closed).

NO – when the live wire is connected to terminal BK and the permanent neutral wire to terminal N, the valve starts to close.

After the live wire is disconnected from terminal BK, the actuator returns to its original position (normally open).

Control mode button

To switch the control option to manual mode, press and hold the mode button. To return to automatic control, release the button.



EU/EC DECLARATION OF CONFORMITY (Module A)

1. Shut-off valve with actuator: IBO MIX 1 UNI CONTROL
2. Dambat Jastrzębski S.K.A, Grodzisk Mazowiecki 05-825, Adamów 50, POLAND, e-mail: biuro@dambat.pl
3. This declaration of conformity is issued under the sole responsibility of the manufacturer.
4. The valve described in point 1.
5. We declare under our sole responsibility that the actuators to which this declaration relates are manufactured in accordance with the following Directives and with the references to harmonised standards contained therein: LVD Directive No. 2014/35/EU | EMC Directive No. 2014/30/EU | RoHS Directive No. 2011/65/EU

Standards applied: EN 61010-1:2010+A1:2019, EN 61010-2-201:2018, EN IEC 61326-1:2021, IEC 62321-1:2013, IEC 62321-2:2021, IEC 62321-3-1:2013, IEC 62321-4:2013+AMD1:2017, IEC 62321-5:2013, IEC 62321-6: 2015, IEC 62321-7-2: 2015, IEC 62321-7-1: 2015, IEC 62321-8: 2017

Adam Jastrzębski
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16.12.2025

For safety reasons, before starting installation it is essential to read the full version of the device manual, available at www.dambat.pl under the "download" tab.



The devices are marked with the crossed-out wheeled bin symbol. In accordance with European Directive 2002/96/EC and the Act on waste electrical and electronic equipment, this marking indicates that, at the end of its service life, such equipment must not be disposed of together with other household waste. The user is obliged to return it to a collection point for waste electrical and electronic equipment.