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Instruction Manual MOTORIZED ZONE BALL VALVE VZK 2xx - 230 - 1P - 001

EN

## 1 - INSTALLATION INSTRUCTIONS

This valve is intended as a closing element in heating systems, in solar and cooling applications, for pools heating, in petrochemical industry, agriculture etc.

#### 2 - FEATURES

- Its compact design enables easy installation and electric wiring without detaching the lid
- Simple assembly of the actuator with clip
- When fully opened, el. phase appears on the red lead (L) that can be used to energize a circulation pump.
- Open/close indicator on the cover of the actuator
- Moderate velocity of ball rotation prevents hydraulic shocks in installation
- Disassembly of installation is not required for the replacement of shaft seals.
- If solid particles enter the valve, the actuator turns the ball valve in the opposite direction causing removal of the impurities through self-cleaning effect

# 3 - TECHNICAL DATA

#### **Actuator**

Power supply: 230 V, 50 Hz

Microswitch rating: 1 (1) A, 250 V, 50 Hz Power consumption: 7 VA during operation

3 VA in standby mode

Protection class: II by EN 60335-1 Electrical protection: IP44 by IEC 529

Rotation time: 30 s/90 ° Ambient temperature: 0 °C to 55 °C

Humidity: 0 to 80% RH, non-condensing

Max. torque: 8 Nm

Connection cable: 4 x 0.5 mm, 0.3 m long

Note: Actuator is controlled by single

phase only, so a simple switch is sufficient (\_\_\_\_\_).

Valve

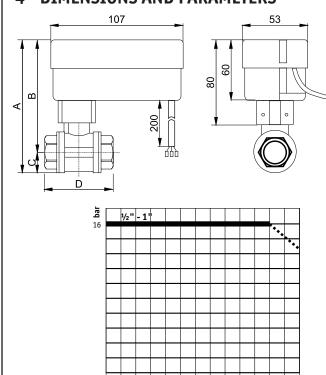
Medium temperature: 5 °C to 110 °C

Max. working pressure: PN16

Medium: Sanitary/drinking water and

non-aggressive fluids

# 4 - DIMENSIONS AND PARAMETERS



120 °**C** 

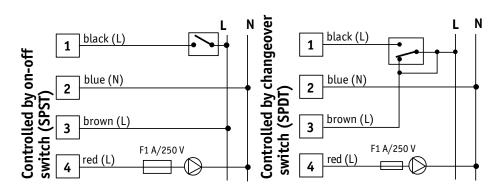
Model	Code	G	DN	Α	В	C [mm]	D	Kvs	Weight
			[mm]	[mm]	[mm]		[mm]	[m³/h]	[kg]
VZK 215 - 230 - 1P - 001	11288	1/2"	15	126	108.5	17.5	63	8.5	0.86
VZK 220 - 230 - 1P - 001	10344	3/4"	20	129	109.5	19.5	57	20	0.82
VZK 225 - 230 - 1P - 001	11289	1"	25	137	113.5	23.5	68	34	0.98

## 5 - EL. WIRING

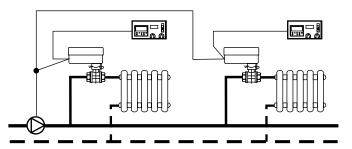
A circulation pump can be wired to the red cable (L). The pump starts running only when the valve is fully open. This can be used for induction load up to 1A. For higher loads use an auxiliary contactor.

# ! IMPORTANT!

El. wiring for the actuator power supply, its wiring to a thermostat etc. shall be done in such a way that a user cannot touch components under tension and any tampering is prevented. Prior to any repair, the device must be disconnected from power supply.

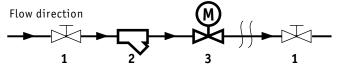


# 6 - WIRING EXAMPLE



# 7 - HYDRAULIC CONNECTION

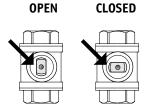
Recommended installation

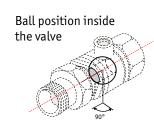


- 1 manual shut-off valve
- 2 strainer with 0,65 mm mesh
- 3 ZONE BALL VALVE WITH ACTUATOR VZK 2xx - 230 - 1P - 001

**IMPORTANT!** The lifetime of a ball valve can be extended by mounting a strainer upstream. When the permanent line (brown, L) is energized, the valve shifts to the CLOSED position. It shifts to OPEN by energizing the control line (black, L).

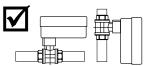
# Valve position:

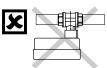


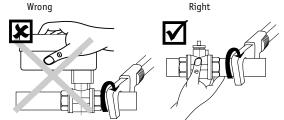


# Installing a motorized valve:

This may be installed by a qualified person only! Permissible position Forbidden position



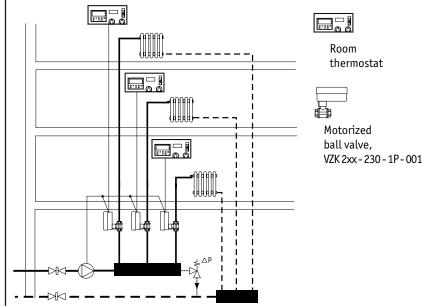


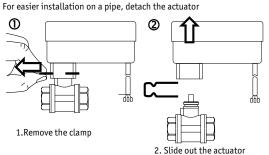


8 - APPLICATION EXAMPLE

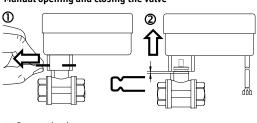
# Application example:

Heating control for separate apartments. A room thermostat in each apartments controls the respective ball valve with actuator.

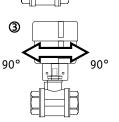


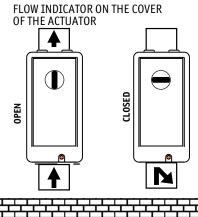


# Manual opening and closing the valve



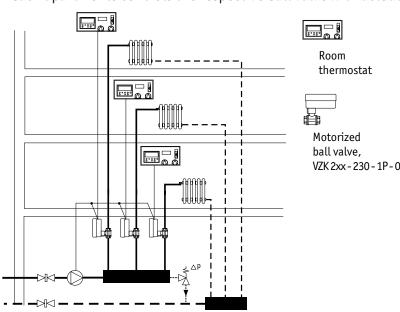
- 1. Remove the clamp
- 2. Partially slide out the actuator
- 3. Turn the actuator left or right





min. 100 mm

min. 100 mm



# **WARRANTY CERTIFICATE**

# Motorized Zone Ball Valve VZK - 2xx - 230 - 1P - 001

Seller:	Date of Purchase:

# **WARRANTY CONDITIONS**

- 1. The Seller grants the Buyer a Guarantee period of 24 months from the date of purchase.
- 2. The product will be installed and commissioned by a competent company or a person trained by the manufacturer.
- 3. When claiming warranty, this Warranty Certificate must be submitted together with the purchase receipt.
- 4. The warranty is valid only when the technical conditions set by the Manufacturer, installation manual and instructions in the documentation and on the product itself are maintained.
- 5. The warranty does not cover defects caused by external conditions or improper working conditions, defects caused by normal wear and tear, further when the product is not used in compliance with its purpose and when the defect was caused by mechanical damage to the product, improper handling, tampering by a third person, improper installation, improper stocking, natural disaster etc.

#### **COMMISSIONED BY**

Company name:
Date:
Rubber stamp print and signature of the installer:

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