

**Zone valve, 2-way, Internal thread**

- For open and closed cold and warm water systems
- For fan coil and VAV boxes in heating, ventilation and air conditioning systems
- Deenergised closed (NC)


**Type overview**

Type	DN [ ]	Rp ["]	kvs [ m³/h]	PN [ ]	Δps [ kPa]
<b>Z215S-24</b>	15	1/2	1.7	20	414
<b>Z215S-120</b>	15	1/2	1.7	20	414
<b>Z215S-230</b>	15	1/2	1.7	20	414
<b>Z220S-24</b>	20	3/4	2.2	20	344
<b>Z220S-120</b>	20	3/4	2.2	20	344
<b>Z220S-230</b>	20	3/4	2.2	20	344
<b>Z225S-24</b>	25	1	2.6	20	303
<b>Z225S-230</b>	25	1	2.6	20	303
<b>Z225S-230-80B</b>	25	1	6.9	20	137

**Technical data**

<b>Electrical data</b>	Nominal voltage	AC 24 V AC 120 V AC 230 V
	Nominal voltage note	±10 %
	Nominal voltage frequency	50/60 Hz
	Power consumption in operation	6.5 W
	Power consumption for wire sizing	7 VA
<b>Functional data</b>	Connection	Cable 10 cm, 2 x 0.75 mm²
	Running time motor	13...18 s
	Running time spring-return	4...5 s
	Manual override	Manual operating lever
	Media	Cold and warm water, water with max. 50% volume of glycol
	Medium temperature	0...93 °C
	Medium temperature note	(non-freezing)
	Pipe connector	Internal thread BSP
	Maintenance	Maintenance-free
<b>Safety</b>	Ambient temperature	0...50 °C
	Ambient humidity	10...85% RH
	Storage temperature	-10...60 °C
	Storage humidity	10...90% RH
	Fire protection rating	UL94-V2
<b>Materials</b>	Actuator	Stainless steel base plate, Aluminum alloy cover
	Valve body	Forged Brass
	Valve flap	NBR

**Safety notes**


- This device has been designed for use in stationary heating, ventilation and air conditioning systems and must not be used outside the specified field of application, especially in aircraft or in any other airborne means of transport.
- Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied during installation.
- The device may only be opened at the manufacturer's site. It does not contain any parts that can be replaced or repaired by the user.
- The device contains electrical and electronic components and must not be disposed of as household refuse. All locally valid regulations and requirements must be observed.

## Product features

<b>Mode of operation</b>	The actuator consists of a synchronous motor with spring return function, which is available in most common used voltages. The valve is normally-closed. The valve body is made of forge brass. The actuator body consists of a stainless steel base plate with an ABS cover. The water is regulated with the use of a special rubber flap, which will close the valve bubble tight.
<b>Manual override</b>	Move the lever slowly and hold it in the retaining notch, then the valve is opened. The lever goes back to the automatic position when the valve is first powered on.
<b>Combination valve/actuator</b>	Valve actuator can be easily detached by push lever. Installation or maintenance can be more flexible.

## Electrical installation

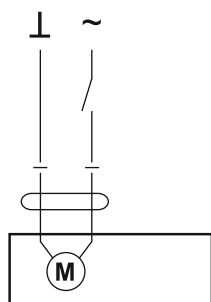


### Notes

- Caution: Power supply Voltage!
- Parallel connection of other actuators possible. Observe the performance data.
- To isolate from the main power supply, the system must incorporate a device which disconnects the phase conductors (with at least a 3mm contact gap).

## Wiring diagrams

AC 24, 120, 230V

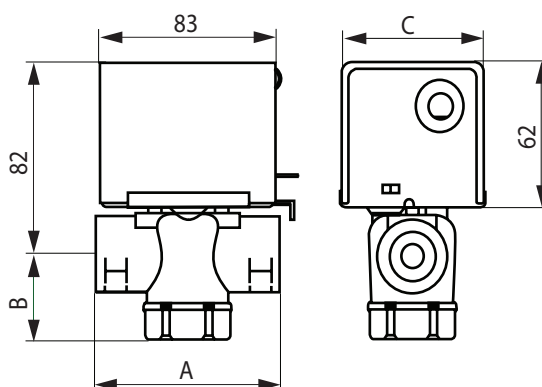


## Installation notes

<b>Recommended installation positions</b>	The valve should be mounted in a weather-protected area in a location that is within the ambient limits of the actuator. Allow sufficient room for actuator and service. The valve must be installed with the stem above the horizontal. The flow direction is indicated on the valve body. Do not reverse flow direction.
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## Dimensions / Weight

### Dimensional drawings



Type	DN [ ]	Rp ["]	A [ mm]	B [ mm]	C [ mm]	Weight [ kg]
Z215S-24	15	1/2	70	23	66	0.70
Z215S-120	15	1/2	70	23	66	0.70
Z215S-230	15	1/2	70	23	66	0.70
Z220S-24	20	3/4	87	23	66	0.85
Z220S-120	20	3/4	87	23	66	0.85
Z220S-230	20	3/4	87	23	66	0.85
Z225S-24	25	1	96	26	66	1.0
Z225S-230	25	1	96	26	66	1.0
Z225S-230-80B	25	1	96	26	66	1.0

Zone valve, 3-way Diverting, Internal thread

- For open and closed cold and warm water systems
- For fan coil and VAV boxes in heating, ventilation and air conditioning systems



### Type overview

Type	DN [ ]	Rp ["]	kvs [ m³/h]	PN [ ]	Δps [ kPa]
<b>Z315S-24</b>	15	1/2	2.2	20	414
<b>Z315S-230</b>	15	1/2	2.2	20	414
<b>Z320S-24</b>	20	3/4	2.6	20	344
<b>Z320S-230</b>	20	3/4	2.6	20	344
<b>Z325S-24</b>	25	1	3.0	20	303
<b>Z325S-230</b>	25	1	3.0	20	303

### Technical data

<b>Electrical data</b>	Nominal voltage	AC 24 V AC 230 V
	Nominal voltage note	±10 %
	Nominal voltage frequency	50/60 Hz
	Power consumption in operation	6.5 W
	Power consumption for wire sizing	7 VA
	Connection	Cable 10 cm, 2 x 0.75 mm²
<b>Functional data</b>	Running time motor	13...18 s
	Running time spring-return	4...5 s
	Running time spring-return note	Spring return, port "A" open
	Manual override	Manual operating lever
	Media	Cold and warm water, water with max. 50% volume of glycol
	Medium temperature	0...93°C
	Medium temperature note	(non-freezing)
	Pipe connector	Internal thread BSP
	Maintenance	Maintenance-free
<b>Safety</b>	Ambient temperature	0...50°C
	Ambient humidity	10...85% RH
	Storage temperature	-10...60°C
	Storage humidity	10...90% RH
	Fire protection rating	UL94-V2
<b>Materials</b>	Actuator	Stainless steel base plate, Aluminum alloy cover Forged Brass NBR
	Valve body	
	Valve flap	

### Safety notes



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<b>Combination valve/actuator</b>	Valve actuator can be easily detached by push lever. Installation or maintenance can be more flexible.

## Electrical installation

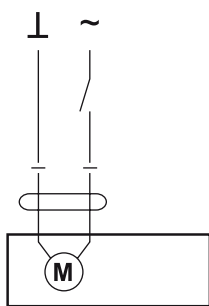


### Notes

- Caution: Power supply Voltage!
- Parallel connection of other actuators possible. Observe the performance data.
- To isolate from the main power supply, the system must incorporate a device which disconnects the phase conductors (with at least a 3mm contact gap).

## Wiring diagrams

AC 24, 230V

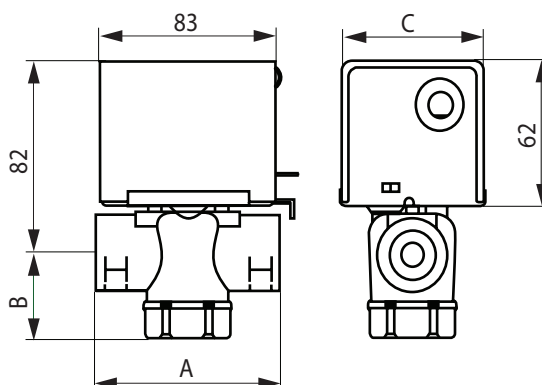


## Installation notes

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## Dimensions / Weight

### Dimensional drawings



Type	DN [ ]	Rp ["]	A [ mm]	B [ mm]	C [ mm]	Weight [ kg]
Z315S-24	15	1/2	70	31	66	0.75
Z315S-230	15	1/2	70	31	66	0.75
Z320S-24	20	3/4	87	37	66	0.9
Z320S-230	20	3/4	87	37	66	0.9
Z325S-24	25	1	96	42	66	1.05
Z325S-230	25	1	96	42	66	1.05