

# Z..S-.. Series Motorised Fan Coil Valves

## **Application**

The Z..S-.. zone valves are intended for the use in control terminal units such as fan-coil and VAV boxes in heating, ventilation and air conditioning systems. The valves can be used with hot and cold water within the temperature range from 0°C (non-freezing) to 93°C.

## Design features

The actuator consists of a synchronous motor with spring return function, which is available in most common used voltages. The valve body is made of forged brass. The actuator body consists of a stainless steel base plate with an aluminum cover. The water is regulated with the use of a special rubber flap, which will close the valve bubble tight.

#### Installation

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.

#### Manual operation

Manual operating lever: 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.

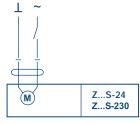
#### Detachable actuator

Valve actuator can be easily detached by push lever. Installation or maintenance can be more flexible.

Technical data	ZS					
Nominal Voltage Range	ZS-24 = 24V±10%					
	$ZS-230 = 230V \pm 10\%$					
Power consumption	6.5 Watts, 7VA					
Connecting cable	10cm long; 2x0.75mm <sup>2</sup>					
Operating time	- motor 13 to 18 sec					
	- Spring 4 to 5 sec					
Ambient temperature range	0 to 40°C					
Action	- spring return					
	- 2-way: normally closed / 3-way: port "A" normally open					
Medium	Chilled or hot water, up to 50% glycol					
Size	1/2", 3/4", 1"					
Type of end fitting	Internal thread BSP					
Materials	Actuator: Stainless Steel Base Plate, Aluminum Cover					
	Valve body: Forged Brass					
Children and an	Valve flap: NBR					
Pressure rating	2100kPa (PN20-300PSI)					
Close-off pressure	137 to 414kPa (20 to 60PSI)					
Media temperature range	0 to 93°C (non-freezing)					
Maintenance	Maintenance free					
Weight	1/2" 2-way: 700g 3-way: 750g					
6.0	3/4" 2-way: 850g 3-way: 900g					
5	1" 2-way: 1000g 3-way: 1050g					

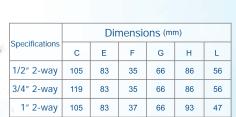
### Wiring diagram





2-way	Description	Size	Cv	Kv	Close-Off Pressure kPa(PSI)	
Z215S-24/230	Nomally Closed	1/2"	2.0	1.7	414 (60)	
Z220S-24/230	Nomally Closed	3/4"	2.5	2.2	344 (50)	
Z225S-24/230	Nomally Closed	1″	3.0	2.6	303 (44)	
Z225S-230-80B	Nomally Closed	1"	8.0	6.9	137 (20)	

3-way	Description	Size	Cv	Kv	Close-Off Pressure kPa(PSI)
Z315S-24/230	Diverting 3-way	1/2"	2.5	2.2	414 (60)
Z320S-24/230	Diverting 3-way	3/4"	3.0	2.6	344 (50)
Z325S-24/230	Diverting 3-way	1"	3.5	3.0	303 (44)



Specifications	Dimensions (mm)						
	D	Е	F	G	Н	L	
1/2" 3-way	119	83	35.5	66	93	56	
3/4" 3-way	107	83	35.5	66	93	50	
1" 3-way	124	83	37	66	95	47	

