



MZ20B is an electro-mechanical actuator designed to provide floating increase/decrease control together with fan coil valves VZ29/VZ39/VZ49 models.

TECHNICAL DATA

Actuator Zone MZ20B-24.....845-5001-000
 Input voltage 24 VAC 50/60 Hz
 Power consumption 0,5 VA
 Speed 18 s/mm (50 Hz) - 15 s/mm (60 Hz)

All:

Temperature

working -5T55°C (23T131°F)

storage -25T65 °C (-13T149°F)

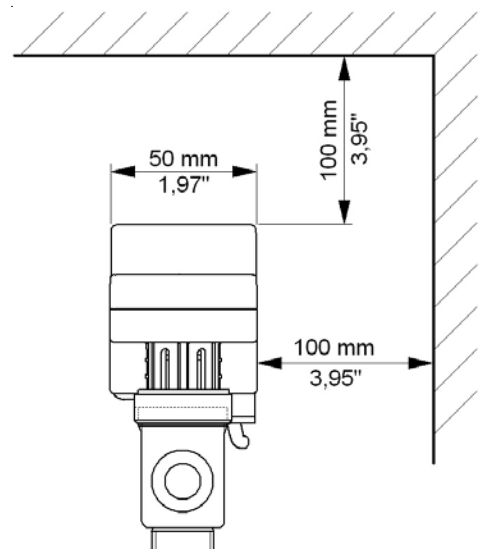
Stem force 200 N (45 lbf)

Max stroke 8,5 mm (0.33 in.)

Connection cable 3 wires 1,5 m (5 ft)

Protection class IP 43 (for vertical mounting)

Suitable for valves see table on next page



FUNCTION

MZ actuator is electric bidirectional. The valve stem movement is produced by rotation of a screw spindle connected, through a gear train, to a synchronous bidirectional motor. An internal magnetic hysteresis coupling limits the torque on the valve stem, avoiding the usage of microswitches and protecting the actuator from overload. The actuator consists of a base and a housing made of syntetic materials which contain motor, gear box, magnetic coupling, valve driving screw spindle.

The actuator-valve assembly is easily made thanks to its threaded ring nut, which allows a comfortable cable positioning. The actuator is equipped with a cable for 3-wire electrical connection. It requires no maintenance.

All models are provided with a stroke indicator.

Due to the presence of the magnetic clutch, the actuator could be continuously powered up without damages but, for life increase and energy saving, it is highly recommended to use a controller equipped with a cut-off function (suggested timing 120% of stroke time). All MZ models allow manual override by means of a socket head key (3 mm). **It is necessary to power off the actuator before starting the manual control.**

MOUNTING

Before mounting to the valve, make sure pipes are clean, free from weld slag, perfectly aligned with the valve body and not subjected to vibrations.

The protection degree declared (IP43) is granted if the valve is mounted with the actuator upwards.

The actuator is able to operate in any mounting position, but it is advisable not to install it downwards.

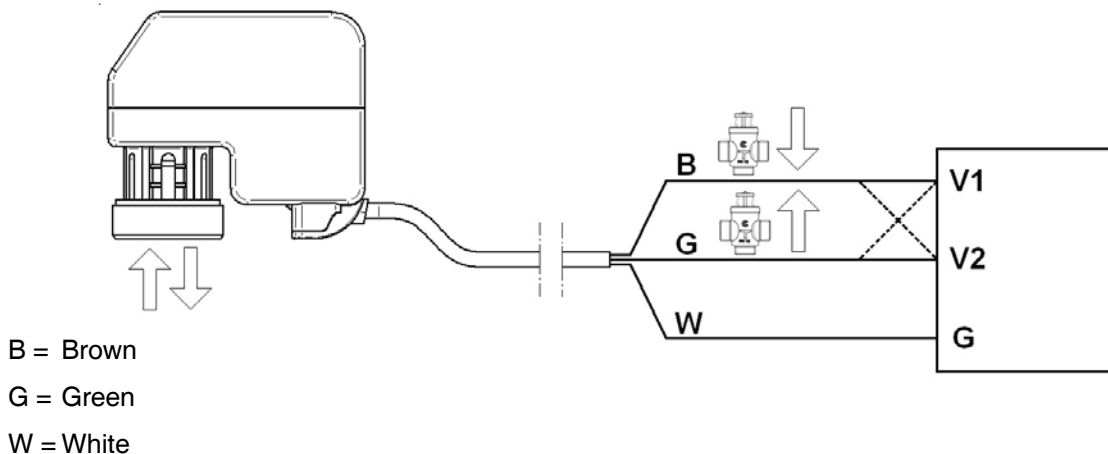
Three-way valves should be preferably used as mixing valves.

In case they are mounted as diverting (i.e. an inlet and two outlets) the max differential pressure for normal operation must be reduced to one third of the specified value.

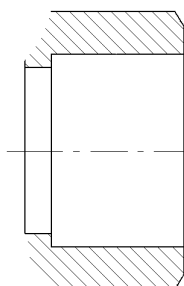
While mounting, respect the fluid directions indicated by the arrows on the valve body.

A ring nut M30x1.5 is placed on the lower part; it allows an easy coupling to the valve without special tools.

CONNECTIONS



Flat tight connections



Valve models	Part number	Connections	A-AB		B-AB		Close-off MZ20 actuator
			Kv	Cv	Kv	Cv	
Two-way valves - VZ29							
VZ29-15-0,25	721-0531-000	G1/2	0.25	0.29	--	--	350 (50)
VZ29-15-0,4	721-0532-000		0.4	0.47			
VZ29-15-0,6	721-0533-000		0.6	0.7			
VZ29-15-1,0	721-0534-000		1	1.17			
VZ29-15-1,6	721-0535-000		1.6	1.9			
VZ29-15-2,0	721-0536-000		2	2.34			
VZ29-20-2,5	721-0537-000	G3/4	2.5	2.9			250 (35.7)
VZ29-20-4,0	721-0538-000		4	4.68			150 (21.4)
VZ29-20-6,0	721-0539-000		6	7			
Three-way valves - VZ39							
VZ39-15-0,25	731-0531-000	G1/2	0.25	0.29	0.25	0.29	350 (50)
VZ39-15-0,4	731-0532-000		0.4	0.47	0.25	0.29	
VZ39-15-0,6	731-0533-000		0.6	0.7	0.4	0.47	
VZ39-15-0,1	731-0534-000		1	1.17	0.6	0.7	
VZ39-15-1,6	731-0535-000		1.6	1.9	1	1.17	
VZ39-15-2,0	731-0536-000		2	2.34	1.6	1.9	
VZ39-20-2,5	731-0537-000	G3/4	2.5	2.9	1.6	1.9	250 (35.7)
VZ39-20-4,0	731-0538-000		4	4.68	2.5	2.9	100 (14.3) A-AB
VZ39-20-6,0	731-0539-000		6	7	4	4.68	40 (5.7) B-AB
Three-way valves with built-in by-pass (4 ports) - VZ49							
VZ49-15-0,25	741-0531-010	G1/2	0.25	0.29	0.25	0.29	350 (50)
VZ49-15-0,4	741-0532-010		0.4	0.47	0.25	0.29	
VZ49-15-0,6	741-0533-010		0.6	0.7	0.4	0.47	
VZ49-15-0,1	741-0534-010		1	1.17	0.6	0.7	
VZ49-15-1,6	741-0535-010		1.6	1.9	1	1.17	
VZ49-15-2,0	741-0536-010		2	2.34	1.6	1.9	
VZ49-20-2,5	741-0537-000	G3/4	2.5	2.9	1.6	1.9	250 (35.7)
	741-0537-010*						
VZ49-20-4,0	741-0538-000		4	4.68	2.5	2.9	100 (14.3) A-AB
VZ49-20-6,0	741-0539-000	6	7	4	4.68	40 (5.7) B-AB	

741-0537-000: 50 mm between centres

* 741-0537-010: 44 mm between centres