



MODEL	TORQUE [Nm]	OPENING/ CLOSING TIME	POWER SUPPLY	CONTROL	IP GRADE
MVS210	10	40 s	230 Vac	2p	42
MVS410	10	40 s	24 Vac	2p	42



APPLICATION AND USE

The actuator MVSx16 is used on ball valve installed on the heating or conditioning systems for hot or cool water.

OPERATION

The actuators are without spring return. At the decrease of the ambient temperature the controller with on-off output closes the control contact of the actuator by opening the valve. When it reaches the required temperature, the controller open the contact, closing the valve.

The end of stroke contact closes at fully open valve and opens as soon as the valve starts closing.

End of stroke contact:

Close = Open valve

Open = close valve

ACTUATOR	CONTROL	
	ON*	OFF
MVS210 MVS410		

* factory position without power suppl

POSSIBLE CONNECTIONS AND MATCHES

ACTUATORS	BALL VALVES	
MVS210 MVS410	2-way	VSS2 VSS3 VSS4 VSS5
	3-way	VSD3 VSD4

MANUFACTURING CHARACTERISTICS

The housing is in plastic. In the upper part there is a position reference of the valve. It is complete with a 5 wires connection cable (standard length 80 cm), with PG11 cable gland and auxiliary limit contact.

TECHNICAL CHARACTERISTICS

Power supply:	230 Vac (MVS210) 24 Vac (MVS410)
Anti-condensation resistance:	YES (only ON/OFF - open position)*
Unlock position:	NO
Rotation angle:	90°
Stroke time (90°):	40 s
Torque:	10 Nm
Temp. on work:	-5° C ÷ 50° C
Stock temp.:	-20° C ÷ 70° C
Max umidity:	95%
IP Grade:	IP42
:	CE
Dimension:	111x55x68 mm
Control:	ON-OFF
Micro aux:	max. 6 (1) A 230 V
Insulation class:	II
Electric motor:	bidirectional
Gear:	Plastic / steel sintered
Valve:	1/2" to 1 1/4" - 2/3 way (M/F)
Cable:	5 pole H05 800 mm crimped
Cover material:	Nylon light gray
Weight:	0,30 Kg

* the anti-condensation resistance is active only on the 230V model when there is a control signal on the black wire (open valve position)

POWER CONSUMPTION [VA]

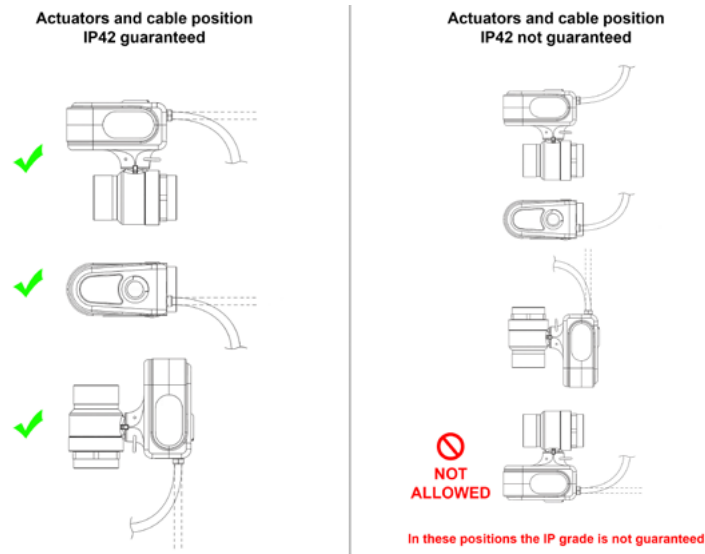
MODEL	RUNNING	CLOSING POSITION	OPENING POSITION
MVS210	~4	0	~1
MVS410	~4	0	0,5

The device contains electrical and electronic components and is not allowed to be disposed of as household refuse. All locally valid regulations and requirements must be observed.



ASSEMBLING

Any mounting position is allowed except the one with the actuator facing down.



To assemble the MVSx10 actuator on the valve:

- Set the valves with the slot in horizontal position (factory position). A punching on the stem indicates the outlet direction.



- Verify that the indicator on the actuator is in horizontal position (factory position)
- Couple the valve with the actuator and insert the safety pin.

ATTENTION

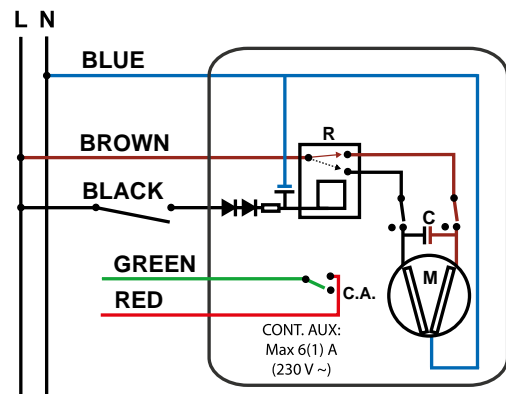
For **2-way valves**, by supplying the actuator without control signal, the valve move to the closed position. The actuator indicator will go in vertical position.

For **3-way valves**, by supplying the actuator without control signal, the valve move to the open position of the A and B ways. The actuator indicator will go in vertical position.

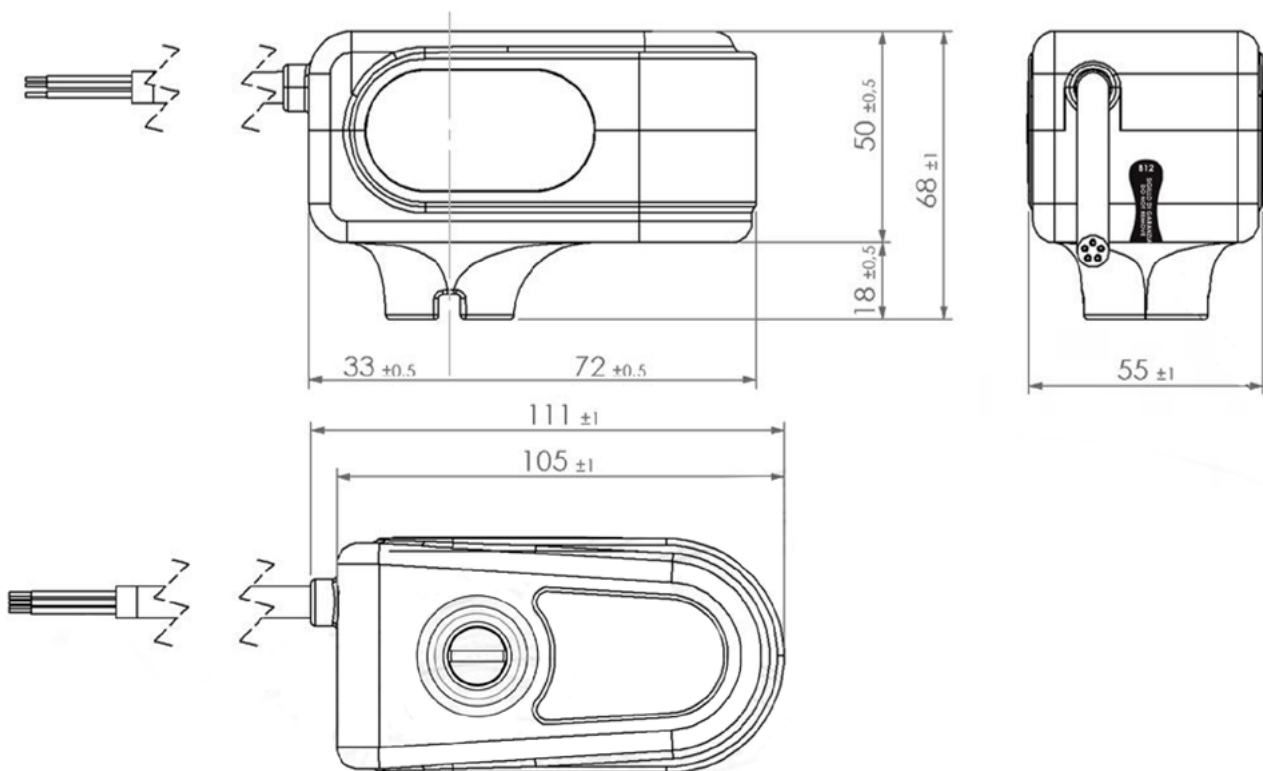
ELECTRIC CONNECTIONS

The actuators must be electrically connected in accordance with local regulations and with the connection diagrams.

Connection diagram 3 micro with relè



DIMENSIONS [mm]



The performances stated in this sheet can be modified without any prior notice