



**V A L V E**

**MODULATING Mixing Actuators**

**4.16**

**Application**

The JOVENTA VALVE electric mixing-actuator series is intended for operating water valves such as mixing valves, butterfly valves, inter-flange dampers and ball valves. The mixing-actuator is designed so that it can be fitted, using the relevant fitting kit, to many different makes of valves.

The universal coupler between the actuator and valve make an uncomplicated application possible.

**Key features**

- DC0(2)...10V control
- Load-independent running time
- Plug-in terminal block connection
- Selectable direction of rotation
- Manual release button
- 2 adjustable auxiliary switches  
See back page for settings
- Automatic shut-off at end position (overload switch)
- Energy saving at end positions
- Actuators available with 1 m halogen-free cable
- Customized versions available
- Devices meet CE requirements

**Accessories**

**Mixer mounting kits**

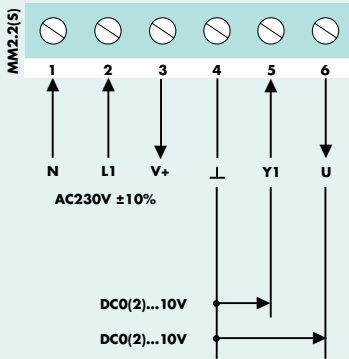
- ZMA001 for Esbe mixers
- ZMA002 for Centra-Duplex mixers
- ZMA003 for Holter mixers
- ZMA004 for GF ball valves

**Nomenclature/Specification/Technical data**

MM2.2	AC230V
MM2.2S	AC230V with 2 auxiliary switches
.....K	with 1 m halogen-free cable

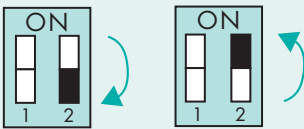
Actuator		MM2.2(S)
Torque		16 Nm
Running time		120 s
Supply voltage		AC230V
Frequency		50-60 Hz
Power consumption		
- Running		5.5 W
- At end position		0.6 W
Dimensioning		6.0VA / 0.1A @ 2 ms
Weight		1.1 kg
Control signal	Y1	DC0(2)...10V
Control signal	Y2	None
Position signal	U	DC0(2)...10V
Angle of rotation / working range		90° (93° mech.)
Angle of rotation / limitation		None
Service lifetime		60,000 rotations
Auxiliary switches		3(1.5)A, AC24V
Setting range / adjustable		5°...85° < infinity
Noise level		45 dB (A)
Protection class		II
Degree of protection		IP 54 (cable downwards)
Cable aperture connection		M16 x 1.5
Mode of action		Type 1
Ambient conditions		
- Operating temperature		-20...+50°C / IEC 721-3-3
- Storage temperature		-30...+60°C / IEC 721-3-2
- Humidity		5...95% r.F.
Service		Maintenance free
Standards		
	Mechanics	EN 60 529 / EN 60 730-2-14
	Electronics	EN 60 730-2-14
	EMC Emissions	EN 50 081-1:92 / IEC 61 000-6-3:96
	EMC Immunity	EN 50 082-2:95 / IEC 61 000-6-2:99

### Wiring diagram



### Changing the direction of rotation

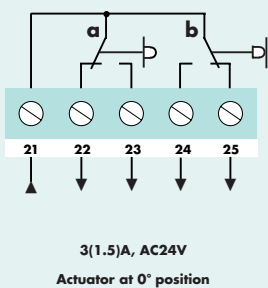
Microswitch **d2**



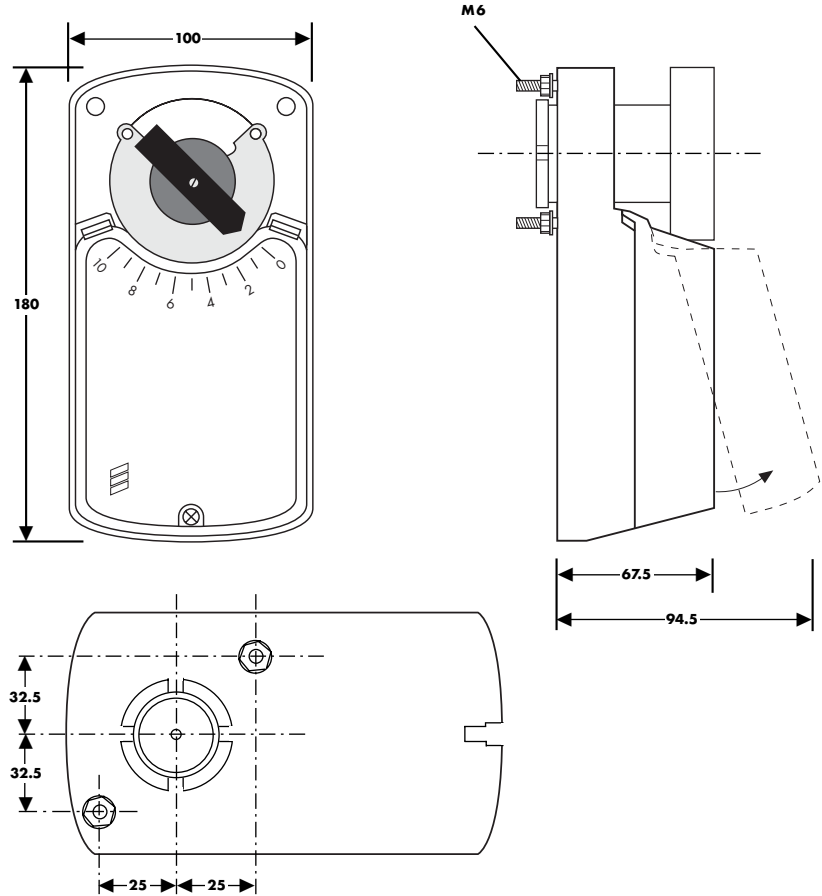
In order to reverse the direction of rotation, move microswitch **d2** to the ON position. The action of the output signal will also be changed in the process.

**Plug (c) must never be reversed. The motor will not function correctly if (c) is reversed.**

### Auxiliary switches (S)



### Dimensions in mm



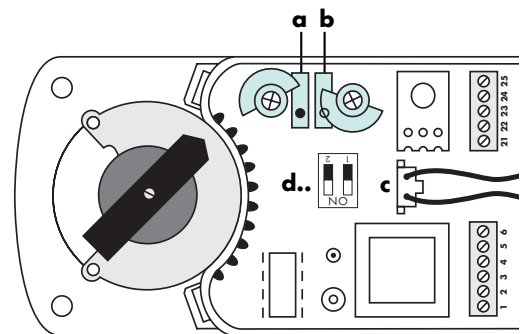
### Setting the auxiliary switches

Factory setting

Switch **a** at 10°

Switch **b** at 80°

The switching position can be manually changed to any required position by turning the ratchet.



### Setting the control signal

Control signal Y1

DC0...10V

Input resistance

Ri > 250 kΩ

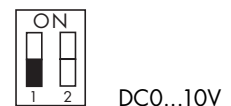
Control signal U

DC0...10V

Load resistance

> 10 kΩ

Microswitch **d1**



The control signal can be changed to DC2...10V by moving microswitch **d1** to the ON position.