

**MM1.1(S)**

**Modulating Mixer Actuator AC/DC 24 V**

**Application**

The **JOVENTA VALVE** electric mixer-actuator series is designed for operating water valves such as mixing valves, butterfly valves 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.

**Features**

- DC 0(2)...10 V or 0(4)...20 mA control signal
- Working area adjustable
- Load-independent running time
- Up to 5 actuators in parallel operation possible
- Plug-in terminal block connection
- Simple mount with ball valves adapter ZMA...
- Selectable direction of rotation
- Manual release button
- 2 adjustable auxiliary switches
- Automatic shut-off at end position (overload switch)
- Actuators available with 1m halogen-free cable
- Customized versions available
- Devices meet CE requirements

**Accessories**

- ZMA 001 for ESBE mixers
- ZMA 002 for Centra Duplex mixers
- ZMA 003 for Holter mixers
- ZMA 004 for GF Ball valves



**Technical Specifications**

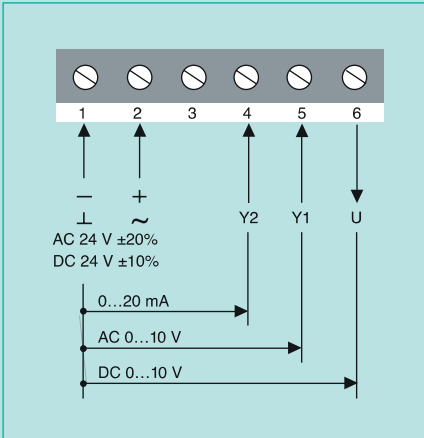
Actuator	MM1.1(S)
Torque	16 Nm
Running Time OPEN	120 s
Running Time CLOSE	120 s
Supply Voltage	AC/DC 24 V
Frequency	50-60 Hz
Power Consumption	
- Running	3.0 W
- At end position	0.7 W
Dimensioning	6.0 VA / 3.6 A @ 2 ms
Working area Y	not adjustment
Control Signal Y1	DC 0(2)...10 V
Input resistance Y1	Ri 250 Ω
Control signal Y2	0...20 mA
Input resistance Y2	Ri 388 Ω
Position signal U	DC 0...10 V
Load resistance	>50 k Ω
Angle of rotation/Working range	90° (93°mech.)
Angle of rotation/Limitation	None
Auxiliary Switches	3(1.5) A, AC 230 V
- S1 setting range	5°...85° < adjustable
- S2 setting range	
Cable	1.0 m halogen-free
- Motor	5-Wire 1-2-4-5-6
- Switches	5-Wire 21-22-23-24-25
Life time	60.000 rotations
Noise level	45 dB (A)
Protection Class	II
Degree of Protection	IP 54
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. no condensed
Weight	1.1 Kg
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 61000-6-3:96
- EMC Immunity	EN 50 082-2:95 / IEC 61000-6-2:99

**Ordering Codes**

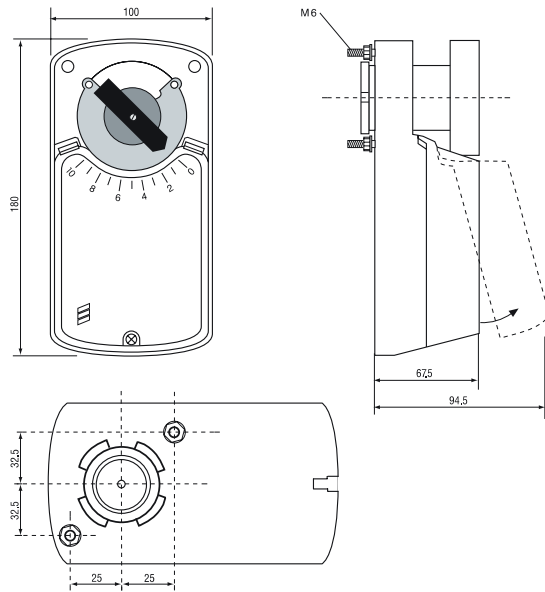
Codes	Descriptions
MM1.1	AC/DC 24 V
MM1.1S	AC/DC 24 V, with 2 auxiliary switches

MM1.1(S)  
Modulating Mixer Actuator AC/DC 24 V

Wiring Diagram

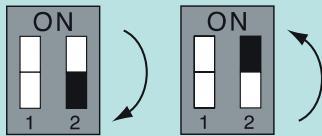


Dimensions in mm



Changing the direction of rotation

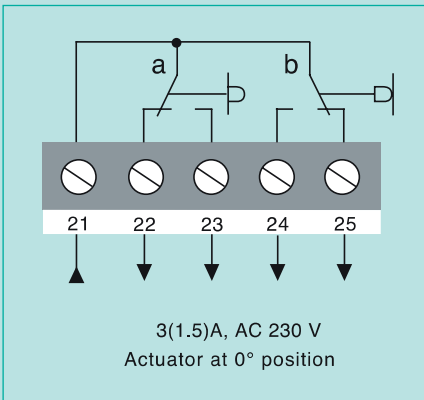
Microswitch d2



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.

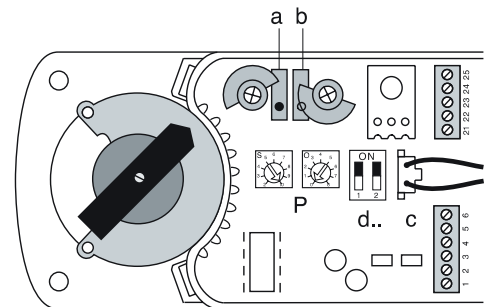
Auxiliary Switches (S)



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	DC 0...10 V
Input Resistance	Ri > 250 kΩ
Control signal Y2	0...20 mA
Input Resistance	Ri > 388 Ω
Position signal U	DC 0...10 V
Load resistance	> 10 kΩ

Microswitch **d1**  
Self adapting

Deactivated



Activated



Leave microswitch **d1** in OFF position