JOVENTA®
The Actuator Maker

V A L V E

MODULATING Mixing Actuators 4.15

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...10V or 0...20 mA 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

MM1.1	AC/DC24V	
MM1.1S	AC/DC24V	with 2 auxiliary switches
. . . . . K		with 1 m halogen-free cable

Actuator		**MM1.1(S)**	
Torque		16 Nm	
Running time		120 s	
Supply voltage		AC/DC24V	
Frequency		50-60 Hz	
Power consumption			
- Running		3.0 W	
- At end position		0.7 W	
Dimensioning		6.0VA / 3.6A @ 2 ms	
Weight		1.1 kg	
Control signal	Y1	DC0...10V	
Control signal	Y2	0...20 mA	
Position signal	U	DC0...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

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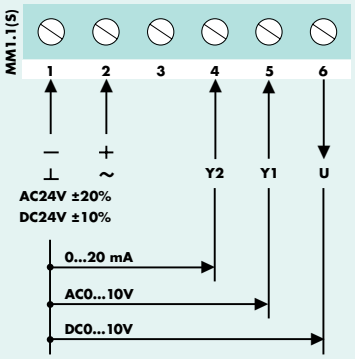
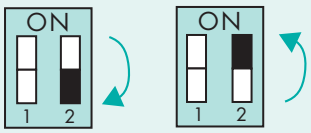
Wiring diagram



Changing the direction of rotation

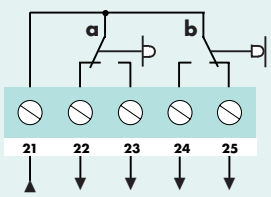
Microswitch **d2**



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.

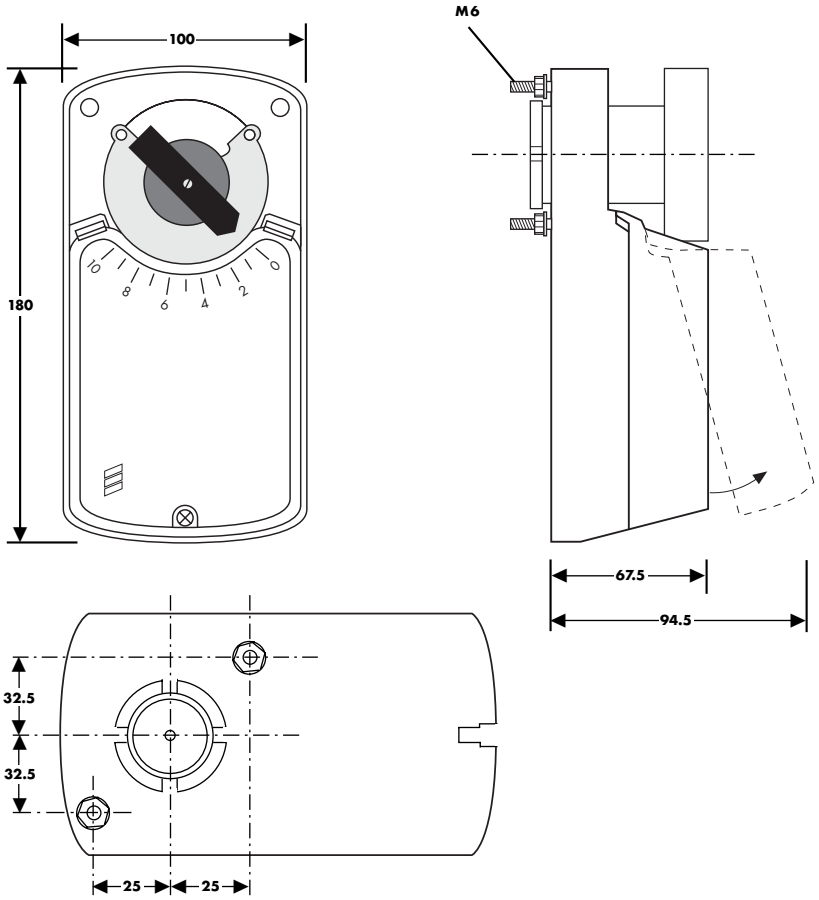
Auxiliary switches (S)



3(1.5)A, AC24V

Actuator at 0° position

Dimensions in mm

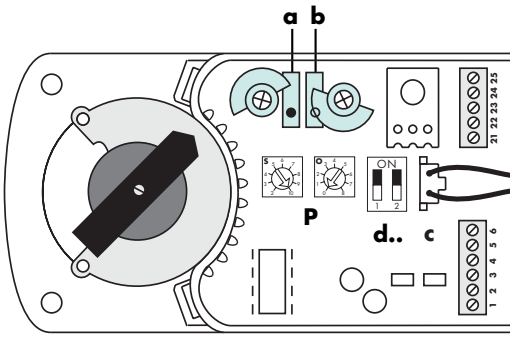


Setting the auxiliary switches

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 Y2	0...20 mA
Input resistance	Ri 388 Ω
Position signal U	DC0...10V
Load resistance	> 10 kΩ

Leave microswitch **d1** in OFF position.

Microswitch **d1**
Self-adapting

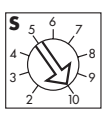
De-activated

activated

Poti **p**
for Y signals

Poti **O**

Poti **S**



For details of installation and commissioning see Manual 4.15

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