## V A L $\quad$ -

## 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

- 2- or 3-point control
- Load-independent running time
- Plug-in terminal block connection
- Selectable direction of rotation
- Manual adjustment by pushing the release button and turning the handle with position indicator (The release button does not automatically spring back into position)
- 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


| Nomenclature/Specification/Technical data |  |  |
| :--- | :--- | :--- |
| MA1 | AC/DC24V |  |
| MA1.S | AC/DC24V | with 2 auxiliary switches |
|  |  |  |
| MA2 | AC230V |  |
| MA2.S | AC230V | with 2 auxiliary switches |
|  |  |  |
| $\ldots \mathrm{K}$ |  | with 1 m halogen-free cable |


| Actuator | MA1.(S) | MA2.(S) |
| :---: | :---: | :---: |
| Torque | 16 Nm | 16 Nm |
| Running time | 120 s | 120 s |
| Supply voltage | AC/DC24V | AC230V |
| Frequency | $50-60 \mathrm{~Hz}$ | $50-60 \mathrm{~Hz}$ |
| Power consumption |  |  |
| - Running | 2.0 W | 2.0 W |
| - At end position | 0.4 W | 0.4 W |
| Dimensioning | 2.1VA/ 3.4A @ 2 ms | 2.0VA / 0.25A @ 2 ms |
| Weight | 1.4 kg | 1.4 kg |
| Control signal | 2-point or 3-point |  |
| Position signal | None |  |
| Angle of rotation / working range | $90^{\circ}$ (93 ${ }^{\circ}$ mech.) |  |
| Angle of rotation / limitation | None |  |
| Service lifetime | 60,000 rotations |  |
| Auxiliary switches | 3(1.5)A, AC230V |  |
| Setting range / adjustable | $5^{\circ} . .85^{\circ}<$ infinity |  |
| Noise level | $45 \mathrm{~dB}(\mathrm{~A})$ |  |
| Protection class | 11 |  |
| Degree of protection | IP 54 (cable downwar |  |
| Cable aperture connection | M16 1.5 |  |
| Mode of action | Type 1 |  |
| Ambient conditions |  |  |
| - Operating temperature | $-20 \ldots+50^{\circ} \mathrm{C} /$ IEC 721 |  |
| - Storage temperature | $-30 \ldots+60^{\circ} \mathrm{C} /$ IEC 721 |  |
| - Humidity | 5...95\% r.F. |  |
| Service | Maintenance free |  |
| Standards | Mechanics | EN 60529 / 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 |

## The Actuator Maker

Wiring diagram

Changing the direction of rotation

The direction of rotation can be changed by reversing plug $\mathbf{c}$.

Factory setting


Auxiliary switches (S)


## Accessories

Mixer mounting kits

ZMA001 for Esbe mixers
ZMA002 for Centra-Duplex mixers

ZMA003 for Holter mixers
ZMA004 for GF ball valves

## Dimensions in mm



## Setting the auxiliary switches

Factory setting
Switch a at $10^{\circ}$
Switch bat $80^{\circ}$

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


## Mounting instruction



