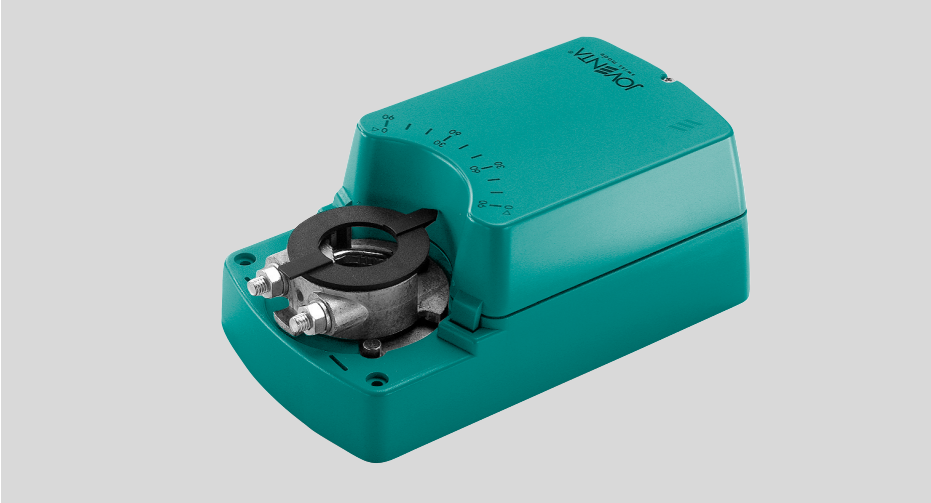
JOVENTA®
The Actuator Maker



S T A N D A R D

MODULATING Actuators 2.28

Application

The JOVENTA STANDARD electric damper-actuator series is designed to operate air dampers in ventilation and air conditioning systems.
The compact design and universal adapter fitted with limitation of rotation angle make this JOVENTA actuator highly versatile.

Key features

- DC0...10V and 0...20 mA control
- Load-independent running time
- Up to 5 actuators in parallel operation possible
- Plug-in terminal block connection
- Simple direct-mount with universal adapter on Ø 10 mm to 20 mm shaft or square shaft from 10 mm to 16 mm.
  48 mm minimum damper shaft length
- Selectable direction of rotation
- Limitation of rotation angle
- 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

- ZK damper linkage selection
- ZKG ball joints

(see product sheet 6.10)

Nomenclature/Specification/Technical data

DMG1.1	AC/DC24V	
DMG1.1S	AC/DC24V	with 2 auxiliary switches
. . . . . K		with 1 m halogen-free cable

Actuator		**DMG1.1(S)**	
Torque		32 Nm	
Damper area*		6.0 m²	
Running time		200 s	
Supply voltage		AC/DC24V	
Frequency		50-60 Hz	
Power consumption			
- Running		2.5 W	
- At end position		0.3 W	
Dimensioning		4.5VA / 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		5°...85° in 5° < steps	
Service lifetime		60,000 rotations	
Auxiliary switches		3(1.5)A, AC24V	
Setting range / adjustable		5°...85° < infinity	
Noise level		45 d B (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

* Caution: Please note damper manufacturer's information concerning the open/close torque.

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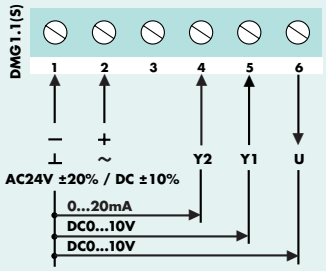
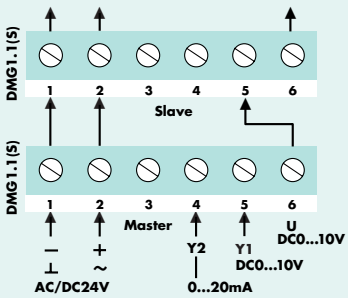
STANDARD

MODULATING Actuators 2.28

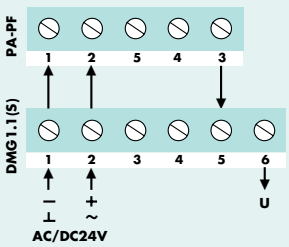
Wiring diagram



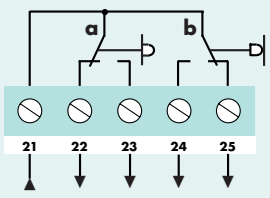
Parallel connections



Position transmitter

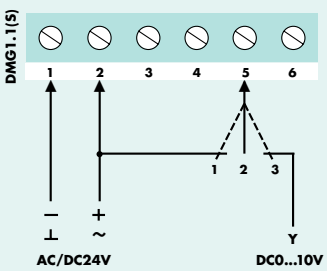


Auxiliary switches (S)



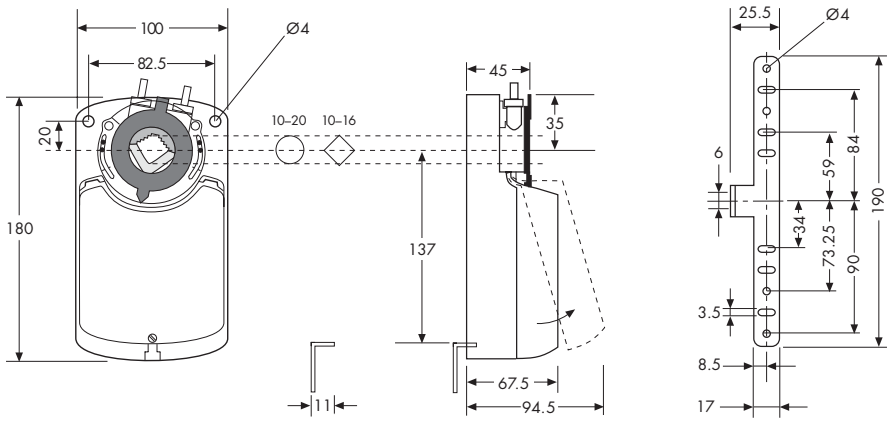
3(1.5)A, AC24V
Actuator at 0° position

Override control



For details of installation and commissioning see Manual 2.28

Dimensions in mm

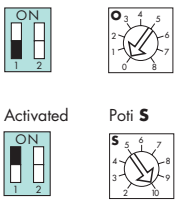


Setting the control signal

Control signal Y1 Input resistance	DC0...10V Ri 250 kΩ
Control signal Y2 Input resistance	0...20 mA Ri 388 Ω
Position signal U Load resistance	DC0...10V > 50 kΩ

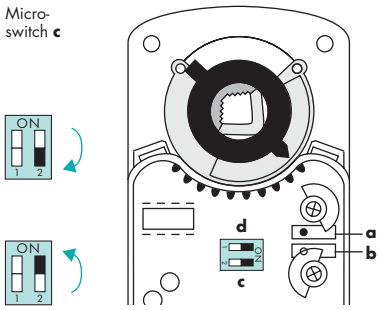
By switching microswitch **d1** to ON position, the control signal Y1 or Y2 will be adapted to the chosen angle of rotation.

Micro-switch **d** Self-adapting — Poti **p** for Y signals
De-activated — Poti **O**
Activated — Poti **S**



Changing the direction of rotation

Micro-switch **c**



For more information see data sheet 5.50

Position transmitter

The DMG1.1(S) can also be controlled using the JOVENTA Positioner (PA/PF) with control signal of DC0...10V.
For further information concerning the PA and PF positioner please refer to data sheet 6.20.

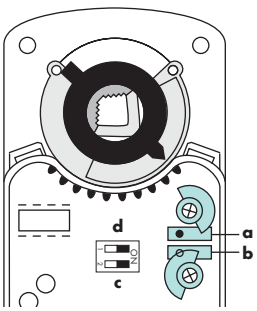
Caution: A maximum of 5 actuators can be controlled in parallel operation.

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.



Override control

The actuator DMG1.1(S) can be forced to override control when wired in accordance with the relevant diagram on the left.

Switch position:

1 = Actuator runs at 10V

2 = Actuator runs at 0(2)V

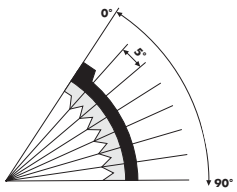
3 = Automatic control

Rotation angle

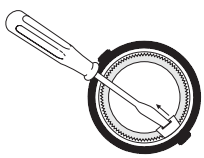
The limitation or rotation angle can be set in 5° steps by moving the adapter.

The adapter can be removed simply by pressing the adapter clip on the underside of the actuator.

Limitation of rotation angle



Adapter release



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