



**SECURITY FIRE**

**2-POINT Spring-return actuator for Fire Dampers**

**3.20**

**Application**

The JOVENTA SECURITY FIRE electric, spring return damper-actuator series has been specially developed for the motorized operation of safety dampers e.g. fire and smoke protection dampers. When the control signal is applied the actuator drives the damper to the operational position, while evenly tensioning the integrated spring. After a power failure the stored energy in the spring immediately brings the damper to the safety position. Manual operation is automatically cancelled when the actuator is in electrical operation.

**Key features**

- 2-point control
- 2 auxiliary switches  
See back page for settings
- 10/11/12/14 mm steel adapter for square shaft
- Plug in terminal block connection
- Direct connection of ST1.72N or ST1.90N temperature sensor to monitor shaft internal temp. Switch point of temperature sensor ca. 72°C or ca. 90°C
- Actuator temperature sensor to monitor ambient temperature, switch point of temperature sensor ca. 72°C
- Low noise level
- Manual operation with crank handle
- Energy saving at end positions
- Actuators available with 1m halogen-free cable
- Customized versions available
- Devices meet CE requirements

**Nomenclature/Specification/Technical data**

S F L 1 . 90 T / 10	2-Point actuator with 2 auxiliary switches
10/11/12/14	10/11/12/14 mm square shaft adapter
T	T = with actuator thermosensor
90/180	90/180 = Angle of rotation 90° < or 180° <
1	1 = AC/DC24V or 2 = AC230V supply voltage
L	L = Left or R = Right for spring return direction
F	F = Spring return model
S	S = Safety actuator

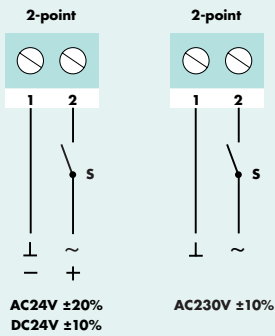
Actuator	SF..1.90..	SF..1.180..	SF..2.90..	SF..2.180..
Torque	16 Nm	10 Nm	16 Nm	10 Nm
Damper area*	(m²) Per manufacturer's information			
Running time Motor	90...120 s	120...150 s	90...120 s	120...150 s
Running time Spring return	10 s	10 s	10 s	10 s
Supply voltage	24 VAC/DC	24 VAC/DC	AC230V	AC230V
Frequency	50-60 Hz	50-60 Hz	50-60 Hz	50-60 Hz
Power consumption				
- Running	10.0 W	10.0 W	8.0 W	8.0
- At end position	4.0 W	4.0 W	4.5 W	4.5
Dimensioning	18.0 / 4 A @ 2 msec		13.0 / 0.3 A @ 2 msec	
Weight	2.7	2.7	2.9	2.9
Control signal	2-point	2-point	2-point	2-point
Position signal	None	None	None	None
Angle of rotation / working range	90°	180°	90°	180°
Angle of rotation / limitation	None	None	None	None
Service lifetime	60,000 rotations			
Auxiliary switches	3(1.5)A, AC230V			
Noise level	50 dB (A)			
Protection class	II			
Degree of protection	IP 54			
Cable aperture connection	PG11			
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		

## SECURITY FIRE

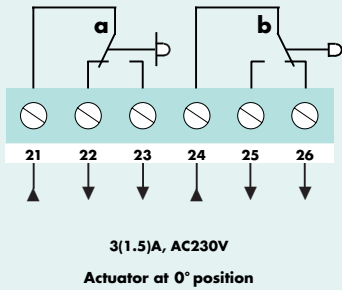
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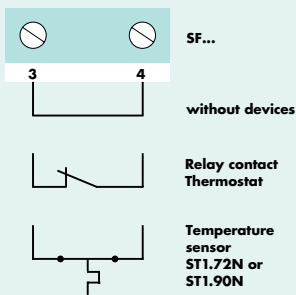
### Wiring Diagram



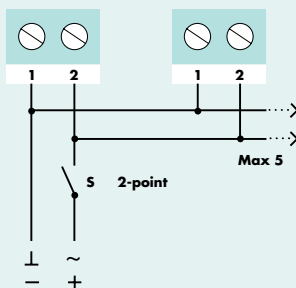
### Auxiliary switches (S)



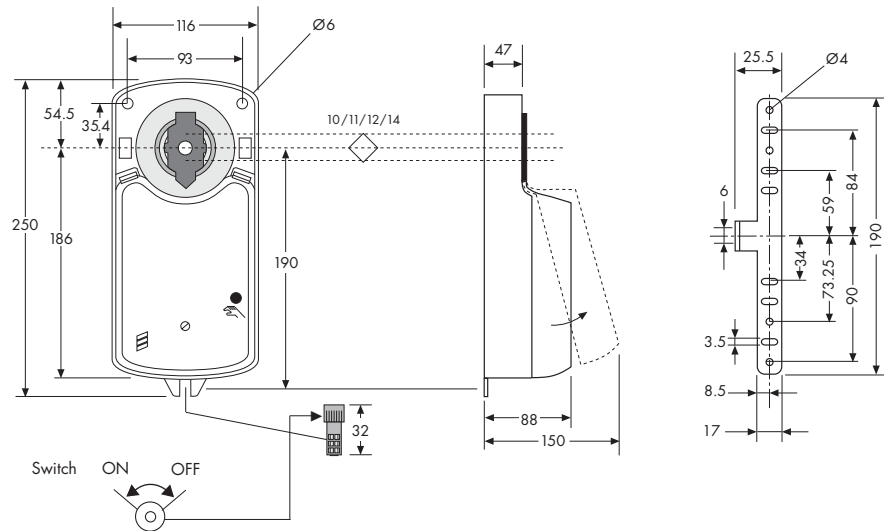
### Temperature sensor/ Thermostat



### Parallel connection



### Dimensions in mm

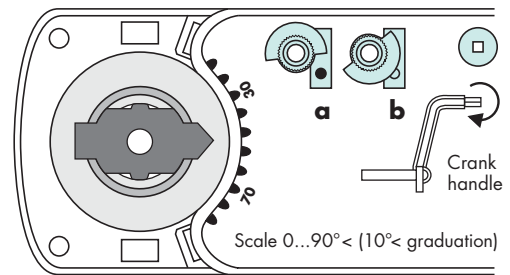


### Auxiliary switches

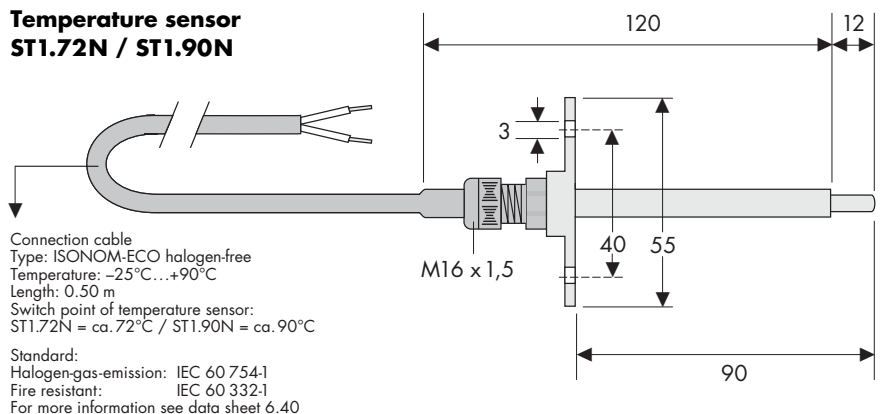
Factory setting fixed:

**SF..90**  
Switch **a** at 5°  
Switch **b** at 85°

**SF..180**  
Switch **a** at 10°  
Switch **b** at 170°



### Temperature sensor ST1.72N / ST1.90N



### Symbols for damper positions

