

## Technical data sheet

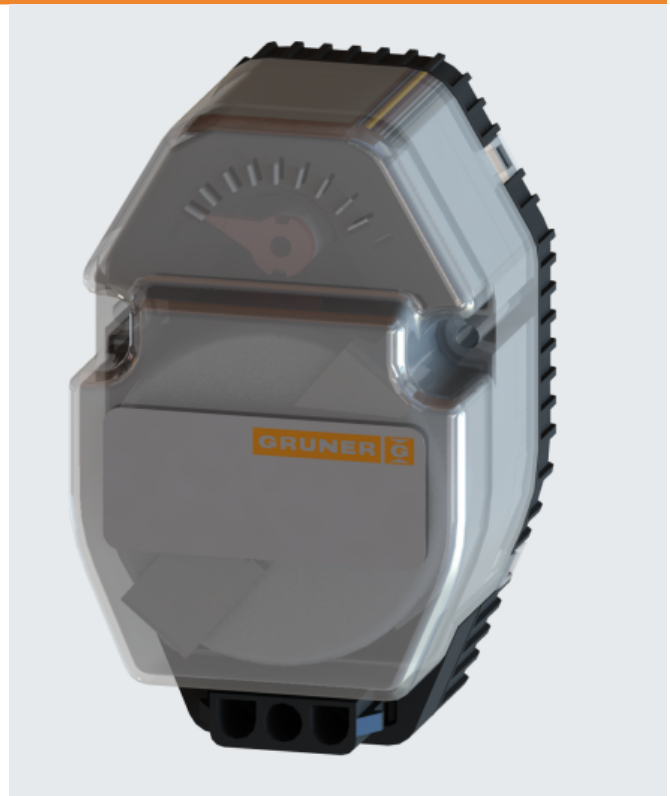
### 237D-230-26

#### Actuator with spring return

##### Description

**Spring-return Actuator for adjusting and regulating dampers and valves in air conditioning and ventilation.**

- Torque Motor            26 Ncm
- Torque Spring        12 Ncm
- Nominal Voltage    230 VAC
- Control                2- Point
- feedback signal    1x switching output
- Damper coupling    bis ca. 0,2 m<sup>2</sup>



##### Technical data

<b>Nominal voltage</b>	Nominal voltage	230 VAC (50/60 Hz)
	Nominal voltage range	203...263 VAC
	Power consumption Motor (Motion)	3,5 W
	Power consumption Standby (end position)	1,5 W
	Wire sizing	4,0 VA
	Control	2 Point
	Feedback signal	switching output
	limit switch	1 x SPST (Ag) supply voltage
	Contact load	5 (2,5) A, 250 VAC
	Switching point	120°
<b>Functional data</b>	Connection Motor	Tyco - AMP universal MATE-N-LOK Nr.: 350766-1
	Connection limit switch	via motor plug
	Synchronised speed	± 5%
	Torque Motor	> 26 Ncm
	Torque Spring	> 12 Ncm
	Direction of rotation	Motor : clockwise Spring: counter clockwise
	Manual override	Not
	Angle of rotation	90° (+ 30° excess movement) external mechanical stops > 90 ° possible
	Running time Motor	12 s / 90°
	Running time Spring	< 10 s / 90°
	Sound power level Motor	< 35 dB(A)
	Sound power level Spring	< 35 dB(A)
	Damper coupling	see on Technical Drawing
	Position indication	mechanical with pointer
	Service life	400.000 complete cycles

## Technical data

<b>Safety</b>	Protection class	II (double insulation)
	Degree of protection	IP 20 (without plug)
	EMC	CE (2004/108/EG)
	LVD	CE (2006/95/EG)
	RoHS	CE (2011/65/EU)
	Mode of operation	Typ 1.AA B (EN60730-1)
	Rated impulse voltage	4 kV (EN60730-1)
	Control pollution degree	3 (EN 60730-1)
	Ambient temperature Normal operation	0°C...+60°C
	Storage temperature	-20°C...+80°C
	Ambient humidity	5...95% r.F., non-condensing (EN 60730-1)
<b>Dimensions/ Weight</b>	Maintenance	maintenance free
	Dimensions	90 x 56 x 49 mm
	Weight	ca. 220 g

## Operating mode / Properties

### Operating mode

Through connecting the power supply to (2+3), the actuator moves to position 1 while the pre-tensioned spring is wound up the same time. If the power supply is interrupted the actuator is moving back to position 0 by the spring power. The actuator is still maintaining the minimum torque at the damper spindle.

The actuator is not overload-proof. There may an external blocking from a 90° rotation angle follow.

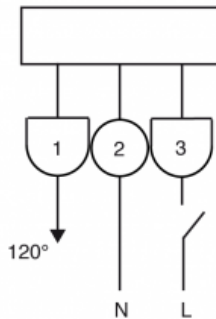
### Signaling

The built-in limit switch is by reaching the final position activated. It is connected in the supply voltage to the output.

### Direct mounting

Simple direct mounting on the damper spindle with special shaft.

## Connection / Safety remarks

**Safety remarks**

- Attention mains voltage
- The actuator is not allowed to be used outside the specified field of application, especially in airplanes.
- It may only be installed by suitably trained personnel. Any legal regulations or regulations issued by authorities must be observed during assembly.
- The device may only be opened at the manufacturer's site.
- When calculating the required torque, the specifications supplied by the damper manufacturers (cross-section, design, installation site), and the air flow conditions must be observed.
- The actuator is not allowed to be disposed of as household refuse. All locally valid regulations and requirements must be observed.

## Technical drawing

