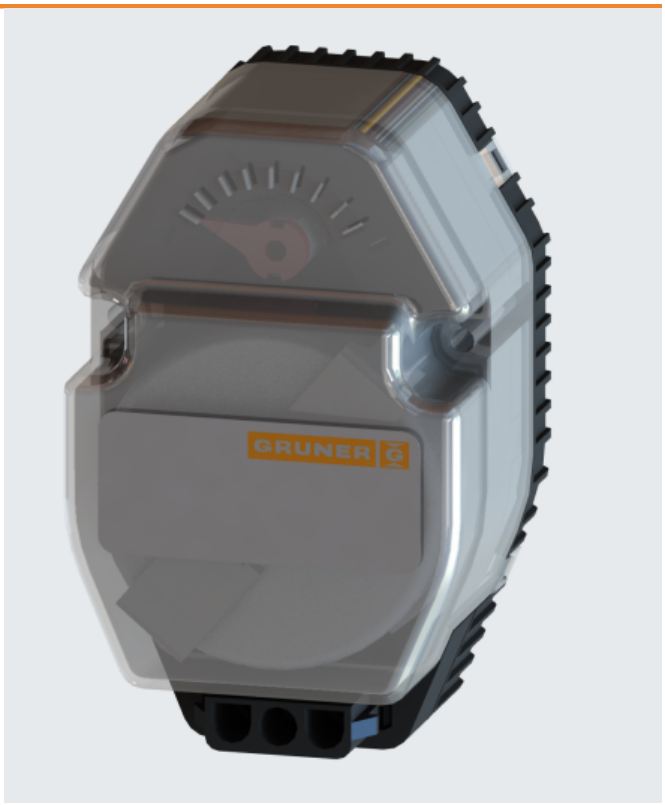
GRUNER
Schalten und Bewegen

Technical data sheet

237D-024-26

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** **24 VAC**
- **Control** **2- Point**
- **feedback signal** **1x switching output**
- **Damper coupling** **bis ca. 0,2 m²**

Technical data

Nominal voltage	Nominal voltage	24 VAC
	Nominal voltage range	19...29 VAC
	Power consuption Motor (Motion)	3,5 W
	Power consuption 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°
	Connection Motor	Tyco - AMP universal MATE-N-LOK Nr.: 350766-1
	Connection limit switch	via motor plug
Functional data	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

Safety	Protection class	III (low voltage safety current)
	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	0,8 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)
	Maintenance	maintenance free
Dimensions/ Weight	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.

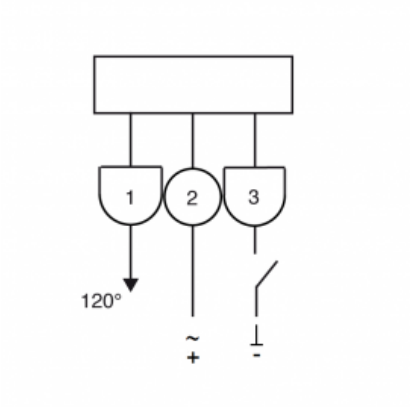
Signaling

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.

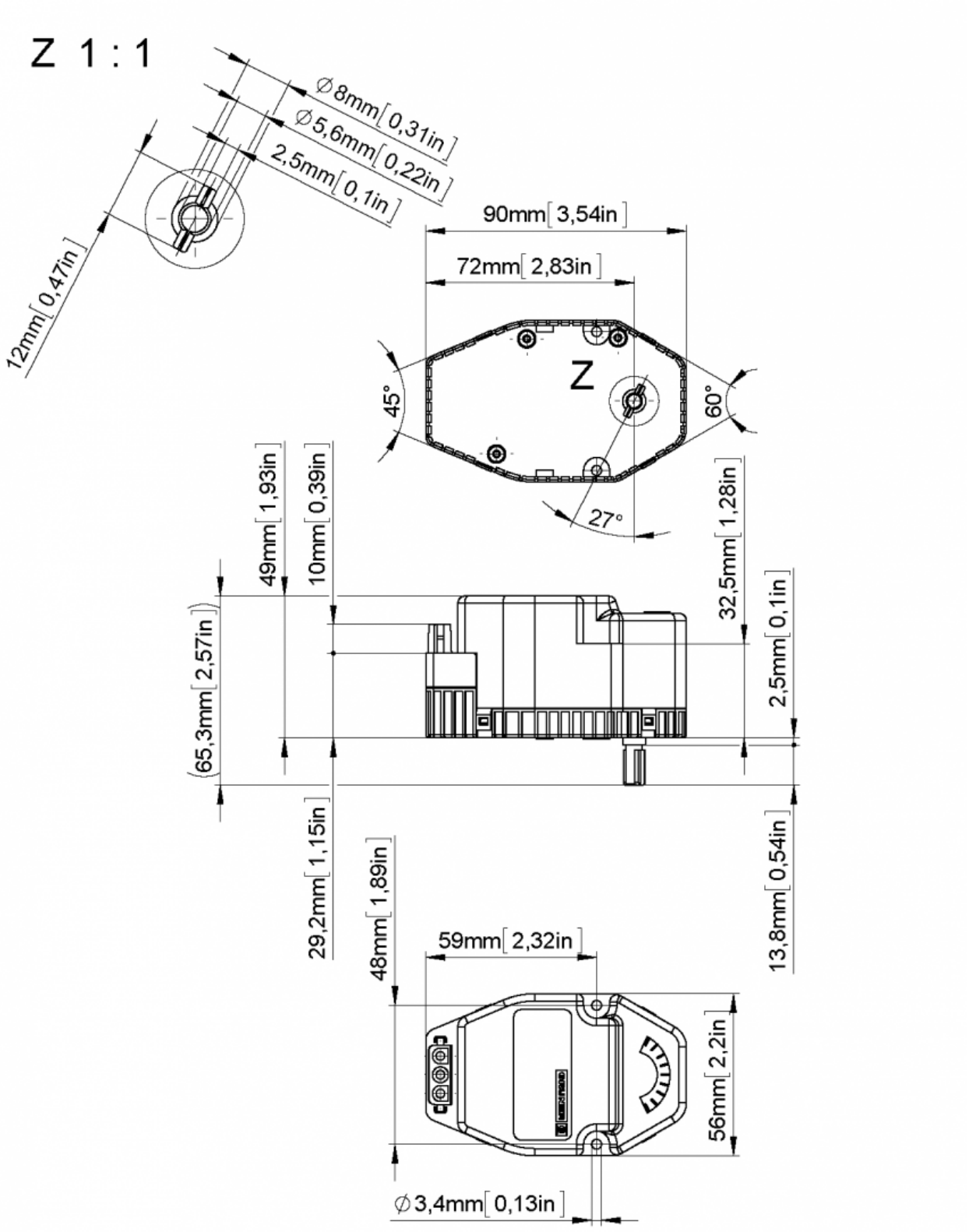
Connection / Safety remarks



Safety remarks

-Connect via safety isolation transformer
-The actuator is not allowed to be used outside the specified field of application, especially in airplanes.
-In 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



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