GRUNER
Schalten und Bewegen

Technical data sheet

341C-024-05

Continuous control of Spring return

Description

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

- **Torque Motor** **5 Nm**
- **Torque Spring** **5 Nm**
- **Nominal Voltage** **24 VAC/DC**
- **Control** **Continuous 0(2)...10 VDC**
- **Valve size** **up to approx 1 m²**
- **Damper shaft** **Clamp**
  ◊ 13 mm/ Ø 16,5 mm

Technical data

Nominal voltage	Nominal voltage	24 VAC (50/60Hz), 24 VDC
	Nominal voltage range	19...29 VAC/DC
	Power consuption Motor (Motion)	6,5 W
	Power consuption Standby (end position)	2,0 W
	Wire sizing	7,5 VA
	Control	Continuous 0(2)...10 VDC / Ri >100 kΩ 0(4)...20 mA / Rext.=500Ω
	Position feedback	0(2)...10VDC, max. 5 mA
	Auxiliary switch	-
	Contact load	-
	Switching point	-
	Connection Motor	Cabel 1000 mm, 4 x 0,75 mm² (halogen free)
	Connection Auxiliary switch	-
	Connection GUAC	-
Functional data	Torque Motor	>5 Nm
	Torque Spring	>5 Nm
	Synchronised speed	±5%
	Direction of rotation	selected by mounting
	Manual override	Manual operation
	Angle of rotation	0°...max.+95° Can be limited with adjustable mechanical end stop min 40° Adaption of operating range to match the mechanical angle of rotation
	Running time Motor	<100 s / 90°
	Running time Spring	<20 s / 90°

Technical data

Functional data	Sound power level Motor	<35 dB(A)
	Sound power level Spring	<65 dB(A)
	Damper coupling	Clamp ◊ 13 mm/ Ø 16,5 mm
	Position indication	mechanical with pointer
	Service life	>60'000 cycles (0° - 95° - 0°) >1'000'000 partial cycles (max. ±5°)
Safety	Protection class	III (low voltage safety current)
	Degree of protection	IP54
	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 (EN60730-1)
	Ambient temperature Normal operation	-30°C...+50°C
	Storage temperature	-30°C...+80°C
	Ambient humidity	5...95% r.F., not condensing (EN 60730-1)
	Maintenance	maintenance-free
Dimensions/ Weight	Dimensions	145 x 75 x 70 mm
	Weight	ca. 1.200g

Operating mode / Properties

Operating mode

Through connecting the power supply to BU+BN (1+2) and a reference signal Y to BK (3) of 0(2)…10VDC, moves the actuator to its specified position. The actual damper position 0…100% is a feedback signal U for example to share the signal with other actuators. If the power supply is interrupted the actuator is moving to position 0 by spring power. The actuator is still maintaining the minimum torque at the damper spindle

The actuator is overload-proof and requires no end switches. It automatically stops when the end stop is reached.

Direct mounting

Simple direct mounting on the damper spindle with a universal spindle clamp, supplied with an anti-rotation strap to prevent the actuator from rotating.

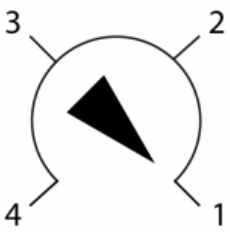
Manual override

The actuator can be operated only manually while the power supply is off. The supplied lever is to open and lock the damper position. The lock stays until the power supply is put on.

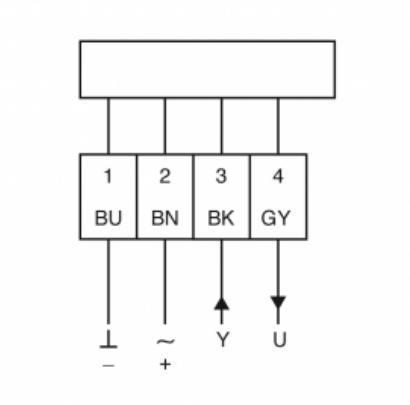
Mode- switch

Mode switchwith four rast positions at the housing

- Rotary direction Normal 2-10 V
- Rotary direvtion Normal 0-10 V
- Rotary direvtion invers 2-10 V
- Rotary direvtion invers 0-10 V



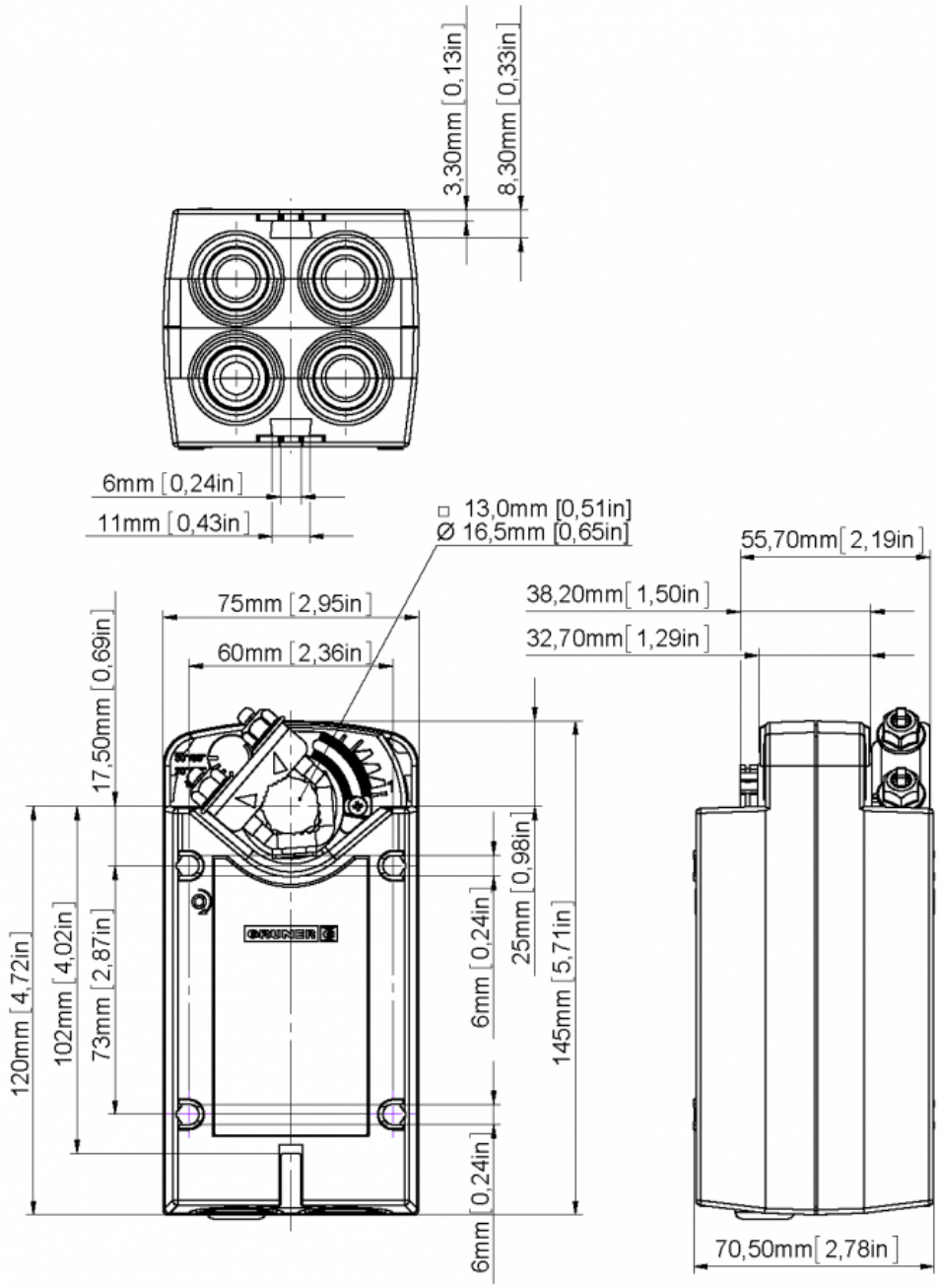
Connection / Safety remarks



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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