

## 341-024-05\_VNB(-S2F\_VNB) Open Close Actuator for Ball Valve

### Description

Spring return actuator for Ball Valves

- Running time motor 75 s / 90°
- Running time spring 20 s / 90°
- Torque motor 5 Nm
- Torque spring 5 Nm
- Nominal voltage 24 VAC/DC
- Control 2-point



### Technical data

#### Electrical data

<b>Nominal voltage</b>	24 VAC/DC, 50/60Hz
<b>Nominal voltage range</b>	19...29 VAC/DC
<b>Power consumption motor (motion)</b>	6.5 W
<b>Power consumption standby (end position)</b>	2.0 W
<b>Wire sizing</b>	9.0 VA
<b>Control</b>	2-point
<b>Connection motor</b>	cable 1000 mm, 2 x 0.75 mm <sup>2</sup> (halogen free)
<b>Connection feedback potentiometer</b>	-
<b>Connection GUAC</b>	-
<b>Feedback signal</b>	-
<b>341-024-05-S2F_VNB</b>	
<b>Auxiliary switch</b>	2 x SPDT (ag)
<b>Contact load</b>	5 (2.5) A, 250 VAC
<b>Switching point</b>	10° / 85°
<b>Connection auxiliary switch</b>	cable 1000 mm, 6 x 0.75 mm <sup>2</sup> (halogen free)

## Functional data

<b>Torque</b>	5 Nm
<b>Torque spring</b>	5 Nm
<b>Synchronized speed</b>	±5%
<b>Direction of rotation</b>	selected by mounting
<b>Manual override</b>	Manual operation
<b>Running Time motor</b>	75 s / 90°
<b>Running time spring</b>	20 s / 90°
<b>Sound power level motor</b>	< 45 dB(A)
<b>Sound power level spring</b>	< 65 dB(A)
<b>Position indication</b>	mechanical with pointer
<b>Service life</b>	> 60 000 cycles (0°...95°...0°)

## Safety

<b>Protection class</b>	III (safety extra-low voltage)
<b>Degree of protection</b>	IP 54
<b>EMC</b>	CE (2014/30/EU)
<b>LVD</b>	CE (2014/35/EU)
<b>RoHS</b>	CE (2011/65/EU - 2015/863/EU - 2017/2102/EU)
<b>Mode of operation</b>	Typ 1 (EN 60730-1)
<b>Rated impulse voltage supply / control</b>	0.8 kV (EN 60730-1)
<b>Control pollution degree</b>	3 (EN 60730-1)
<b>Ambient temperature normal operation</b>	-30°C...+50°C
<b>Storage temperature</b>	-30°C...+80°C
<b>Ambient humidity</b>	5...95% r.H., non-condensing (EN60730-1)
<b>Maintenance</b>	Maintenance free

## Dimensions/Weight

<b>Dimensions</b>	145 x 75 x 70 mm
<b>Weight</b>	1000 g
<b>Weight (S2F_VNB)</b>	1100 g

## Functionality / Properties

### Operating mode

Connect power supply to wire 1+2, actuator drives to position 1 while the pre-tensioned spring is wound up the same time. If the power supply is interrupted, actuator drives back to position 0 by spring power. The actuator is still maintaining the minimum torque at the position 0.

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

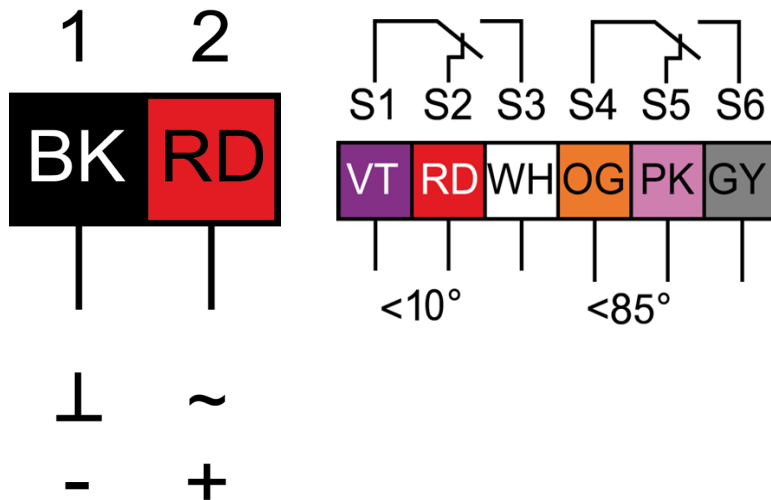
### Manual override

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

### Signaling

The two integrated auxiliary switches are activated at the fixed switching positions (10° and 85°). The damper position can be checked by the mechanical pointer.

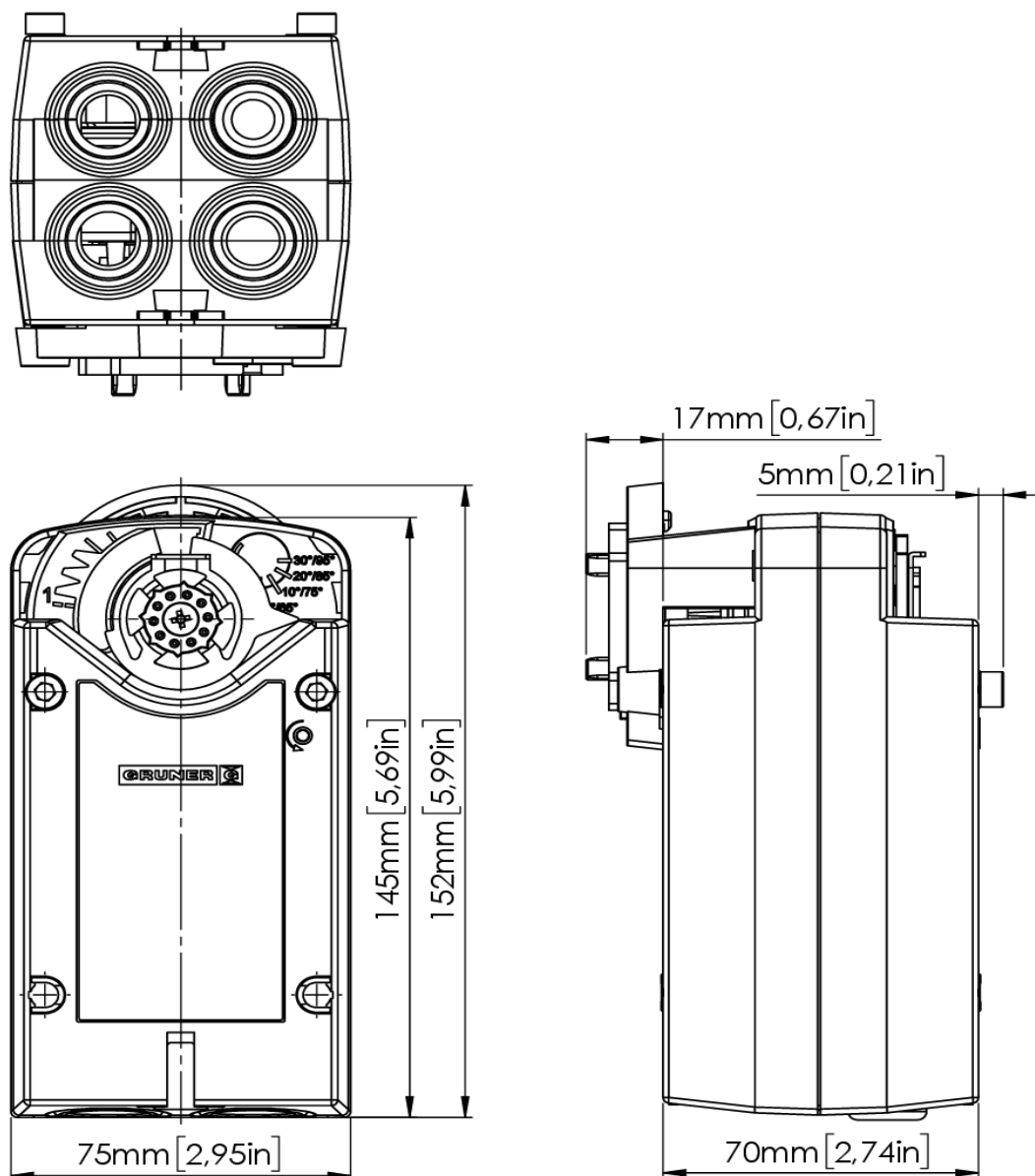
## Connector / Security Note



### Safety remarks

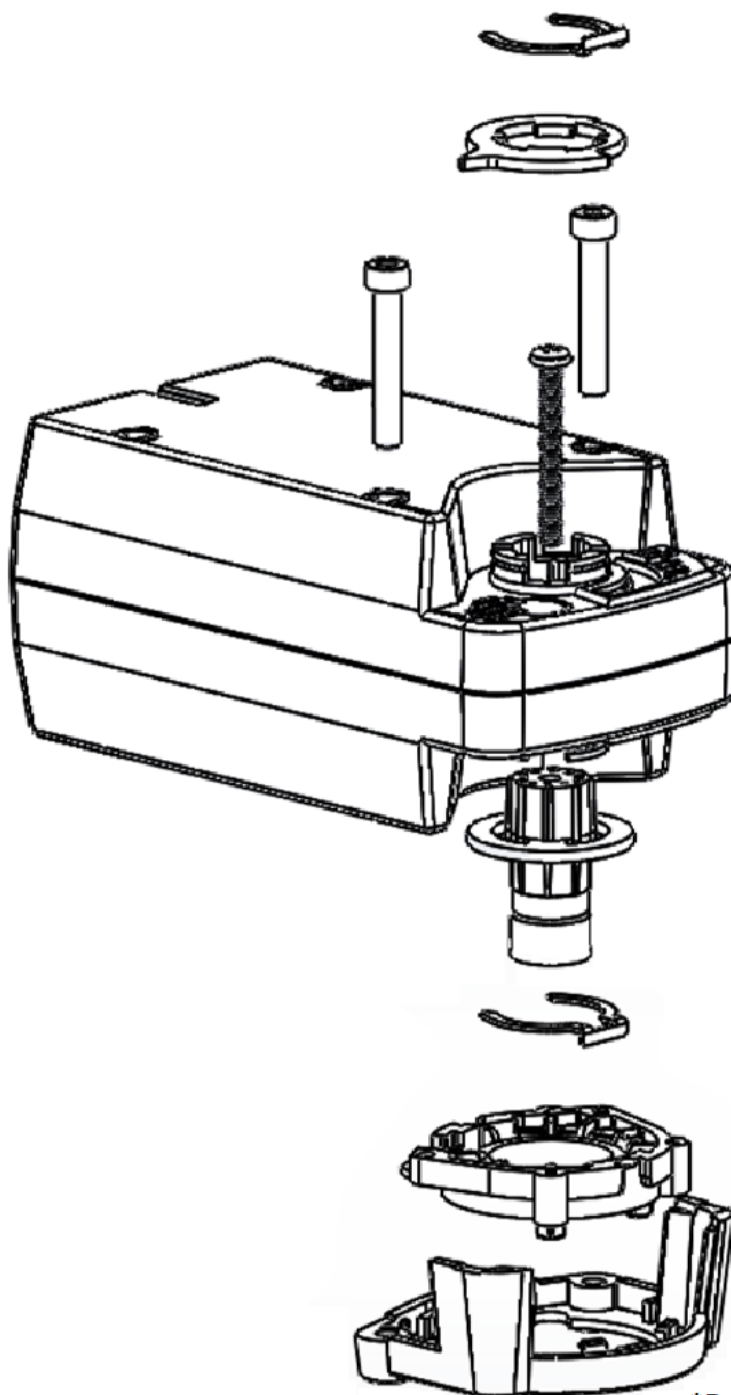
- Connect via safety isolation transformer!
- The device is not allowed to be used outside the specified field of application, especially in airplanes.
- It may only be installed by suitably trained personnel. Any legal regulations or regulations issued by authorities must be observed during assembly.
- The device may only be opened at the manufacturer's site.
- Cables must not be removed from the device.
- The cable of this actuator cannot be replaced. If the cable is damaged, the actuator should be scrapped.
- The device is not allowed to be disposed of as household refuse. All locally valid regulations and requirements must be observed.
- When calculating the required torque, the specifications supplied by the damper manufacturer's (cross section, design, installation site), and the air flow conditions must be observed.

## Technical Drawing



\*Darstellung mit Antrieb

\*Figure with actuator

**Exploded Drawing**

\*Darstellung mit Antrieb

\*Figure with actuator

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