

363C-024-40\_VNB(-S2\_VNB) Modulating Actuator for Ball Valve

Description

Non Spring return actuator for Ball Valves

- Running time motor 150 s / 90°
- Torque motor 40 Nm
- Nominal voltage 24 VAC/DC
- Control continuous control (0)2–10 VDC
- Auxiliary switch (-S2) 2 x freely adjustable
- Matching with V2SAR100/125/150 Ball Valves with linkage 360-SHT-VB



Technical data

Electrical data

|                                          |                                                            |
|------------------------------------------|------------------------------------------------------------|
| Nominal voltage                          | 24 VAC/DC, 50/60Hz                                         |
| Nominal voltage range                    | 19–29 VAC/DC                                               |
| Power consumption motor (motion)         | 7.0 W                                                      |
| Power consumption standby (end position) | 2.0 W                                                      |
| Wire sizing                              | 9.0 VA                                                     |
| Control                                  | continuous control (0)2–10 VDC / Ri > 100 kΩ<br>(0)4–20 mA |
| Connection motor                         | cable 1000 mm, 3 x 0.75 mm² (halogen free)                 |
| Connection feedback potentiometer        | -                                                          |
| Connection GUAC                          | -                                                          |
| Feedback signal                          | -                                                          |
| <b>363C-024-40-S2_VNB</b>                |                                                            |
| Auxiliary switch                         | 2 x SPDT (Ag)                                              |
| Contact load                             | 5 (2.5) A, 250 VAC                                         |
| Switching point                          | 0–95°                                                      |
| Connection auxiliary switch              | cable 1000 mm, 6 x 0.75 mm² (halogen free)                 |

Functional data

|                    |                                                          |
|--------------------|----------------------------------------------------------|
| Torque             | 40 Nm                                                    |
| Synchronized speed | ±5 %                                                     |
| Manual override    | gearing latch disengaged with pushbutton, self-resetting |
| Running Time       | 150 s / 90°                                              |
| Sound power level  | < 45 dB(A)                                               |
| Service life       | > 60,000 cycles (0°–95°–0°)                              |

|                   |                                        |                                              |
|-------------------|----------------------------------------|----------------------------------------------|
| <b>Safety</b>     | Protection Class                       | III (safety extra-low voltage)               |
|                   | Degree of protection                   | IP54                                         |
|                   | EMC                                    | CE (2014/30/EU)                              |
|                   | LVD                                    | CE (2014/35/EU)                              |
|                   | RoHS                                   | CE (2011/65/EU - 2015/863/EU - 2017/2102/EU) |
|                   | Mode of operation                      | Type 1 (EN 60730-1)                          |
|                   | Rated impulse voltage supply / control | 0.8 kV (EN 60730-1)                          |
|                   | Control pollution degree               | 3 (EN 60730-1)                               |
|                   | Ambient temperature normal operation   | -30–50 °C                                    |
|                   | Storage temperature                    | -30–80 °C                                    |
|                   | Ambient humidity                       | 5–95 % R.H., non-condensing (EN60730-1)      |
|                   | Maintenance                            | maintenance free                             |
| <b>Dimensions</b> | Dimensions                             | 193 x 96 x 60 mm                             |
|                   | Weight                                 | 1600 g                                       |
|                   | Weight (S2_VNB)                        | 1700 g                                       |

## Functionality / Properties

### Operating mode

Connect power supply to wire 1+2 and a reference signal Y to wire 3 in range of (0)2–10 VDC, actuator drives to its specified position. The actual damper position (0–100%) is a feedback signal U on wire 4 for example to share with other actuators.

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

### Manual override

Manual override with self resetting pushbutton possible (the gear is disengaged as long as the button is pressed)

### Signaling

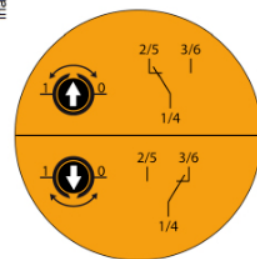
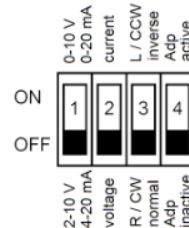
The two integrated auxiliary switches are freely adjustable in the angle of 0–95°. There are activated corresponding to the adjusted angle. The damper position can be checked by the mechanical pointer.

### Mode of switch

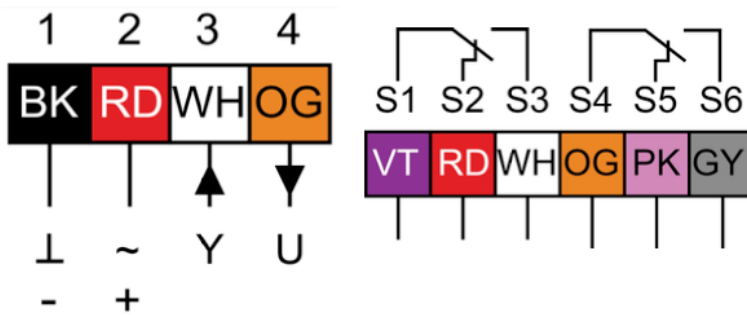
DIP switch under the case cover

### Adaption drive

- Actuator power off
- Setting the mechanical end stops
- Actuator power on
- Adaption enable
- Actuator drive to position 0
- Actuator drive to position 1
- Adaption disable, if desired angular range reached or rather if actuator reached end stop
- "Y" refers to the measured angular range



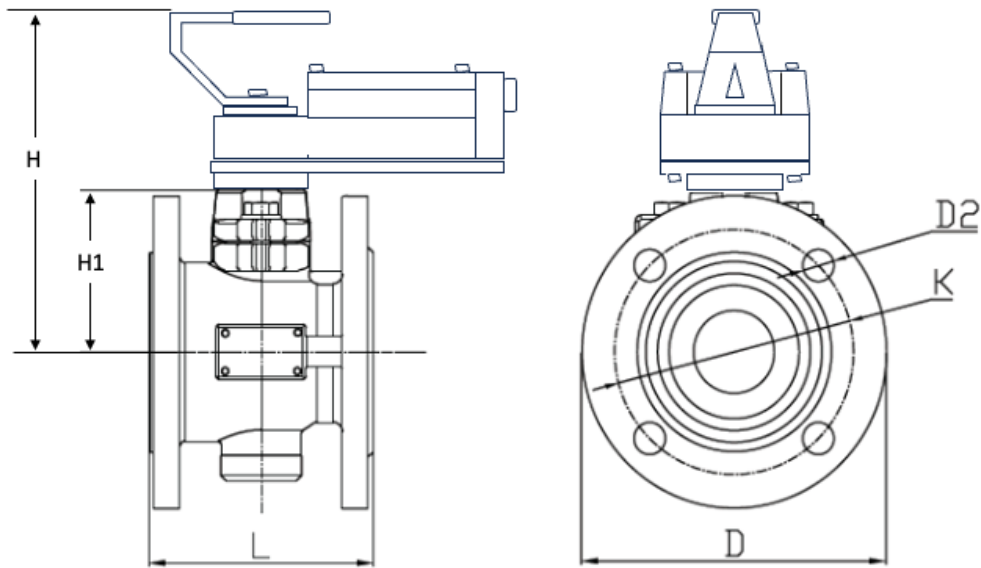
## Connector / Security Note



## 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.
- 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 house hold refuse. All locally valid regulations and requirements must be observed.

## Dimensions



Dimensions with 363...\_VNB+V2SAR... actuator and valve assembled:

| DN  | D (mm) | D2 (mm) | K (mm) | L (mm) | H1 (mm) | H (mm) |
|-----|--------|---------|--------|--------|---------|--------|
| 65  | 185    | 4-19    | 145    | 136.5  | 98      | 218    |
| 80  | 200    | 8-19    | 160    | 168    | 105     | 225    |
| 100 | 220    | 8-19    | 180    | 211    | 117     | 237    |
| 125 | 250    | 8-19    | 210    | 262.5  | 138     | 358    |
| 150 | 285    | 8-23    | 240    | 315    | 152     | 272    |