

363C-024-20_VNB(-S2_VNB) Modulating Actuator for Ball Valve

Description

Non Spring return actuator for Ball Valves

- Running time motor 150 s / 90°
- Torque motor 20 Nm
- Nominal voltage 24 VAC/DC
- Control continuous control (0)2–10 VDC
- Auxiliary switch (-S2) 2 x freely adjustable
- Matching with V2SAR65/80 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)	3.0 W
Power consumption standby (end position)	1.5 W
Wire sizing	4.5 VA
Control	continuous control (0)2–10 VDC / Ri > 100 kΩ (0)4–20 mA
Connection motor	cable 1000 mm, 3 x 0.75 mm² (halogen free)
Connection feedback potentiometer	-
Connection GUAC	-
Feedback signal	-
363C-024-20-S2_VNB	
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	20 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°)

Safety	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
Dimensions	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

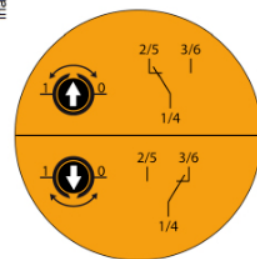
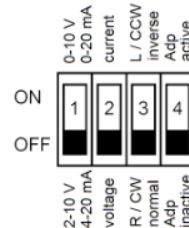
The two integrated auxiliary switches are freely adjustable in the angle of 0–95°. There are activated corresponding to the adjusted angle. The damper position can be checked by the mechanical pointer.

Mode of switch

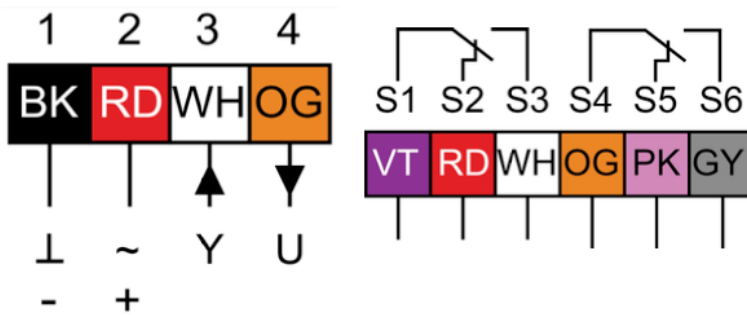
DIP switch under the case cover

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



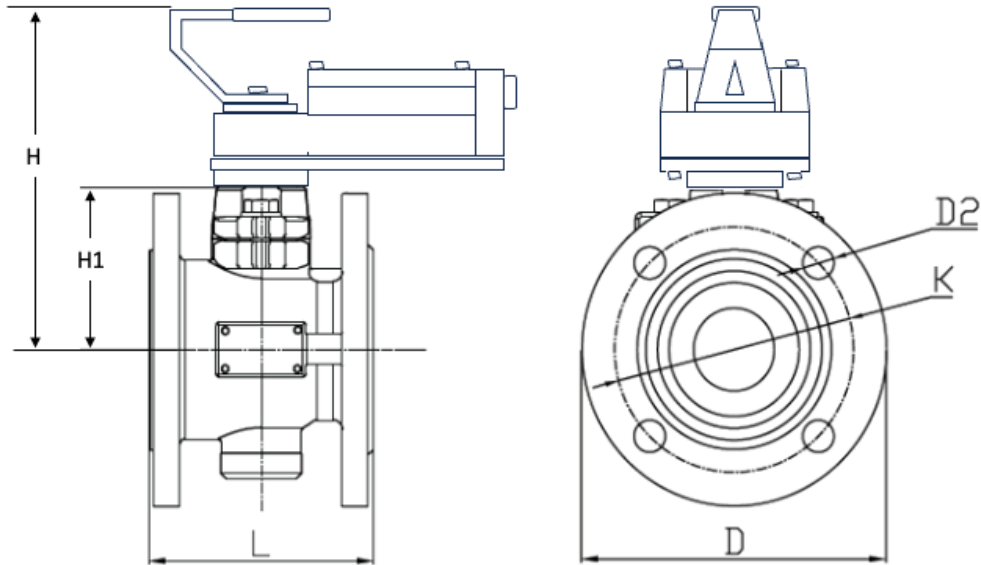
Connector / Security Note



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