

Rotary actuator with emergency function for ball valves

- Torque 20Nm
- Nominal voltage AC 24...240V / DC 24...125V
- Control: Open-close
- SRFA: Deenergised NC


Technical data

Electrical data	Nominal voltage	AC 24...240V, 50/60Hz / DC 24...125V	
	Nominal voltage range	AC 19.2...264V / DC 21.6...137.5V	
	Power consumption	In operation 7W @ nominal torque At rest 3.5W For wire sizing 18VA	
	Connection	Cable 1m, 2 x 0.75mm ²	
	Parallel connection	Yes (Note performance data for supply!)	
Functional data	Torque	Motor Min. 20Nm @ nominal voltage Spring return Min. 20Nm	
	Direction of rotation	Spring return – SRFA Deenergised NC, ball valve closed (A – AB = 0%)	
	Manual override	With hand crank and interlocking switch	
	Angle of rotation	Max. 90°	
	Running time	Motor 75s / 90° Spring return ≤20s @ –20...50°C / max. 60s @ –30°C	
	Sound power level	Motor ≤45dB(A) Spring return ≤62dB(A)	
	Position indication	Mechanical	
	Safety	Protection class	II totally insulated 
		Degree of protection	IP54 NEMA 2, UL Enclosure Type 2
		EMC	CE according to 2004/108/EC CE according to 2006/95/EC
Certification		Certified to IEC/EN 60730-1 and IEC/EN 60730-2-14	
Mode of operation		Type 1.AA	
Rated impulse voltage		4kV	
Control pollution degree		3	
Ambient temperature		–30...+50°C	
Non-operating temperature		–40...+80°C	
Ambient humidity		95% r.h., non-condensating	
Maintenance	Maintenance-free		
Dimensions / Weight	Dimensions	See «Dimensions»	
	Weight	Approx. 2kg	

Safety notes

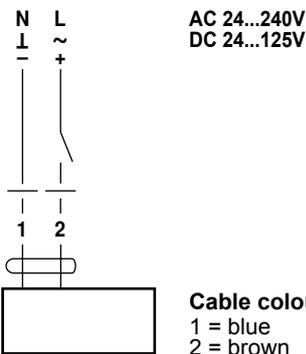

- The actuator has been designed for use in stationary heating, ventilation and air conditioning systems and is not allowed to be used outside the specified field of application, especially in aircraft or in any other airborne means of transport.
- Caution: Power supply voltage possible!
- It may only be installed by suitably trained personnel. Any legal regulations or regulations issued by authorities must be observed during installation.
- The device may only be opened at the manufacturer's site. It does not contain any parts that can be replaced or repaired by the user.
- The cable must not be removed from the device.
- The device contains electrical and electronic components and is not allowed to be disposed of as household refuse. All locally valid regulations and requirements must be observed.

Product features

Mode of operation	The actuator is equipped with a universal power module and can process supply voltages from AC 24...240V plus DC 24...125V. The actuator moves the ball valve to the operating position at the same time as tensioning the return spring. The ball valve is turned back to the safety position by spring force if the supply voltage is interrupted.
Simple direct mounting	Straightforward direct mounting on the ball valve with only one screw. The mounting position in relation to the ball valve can be selected in 90° steps.
Manual override	Manual operation of the valve with the hand crank, locking in any position with the interlocking switch. Unlocking is manual or automatic by applying the operating voltage.
Adjustable angle of rotation	Adjustable angle of rotation with mechanical end stop.
High operational reliability	The actuator is overload-proof, requires no limit switches and automatically stops when the end stop is reached.
Combination valve actuators	Refer to the valve documentation for suitable valves, their permitted media temperatures and closing pressures.

Electrical installation

Wiring diagram



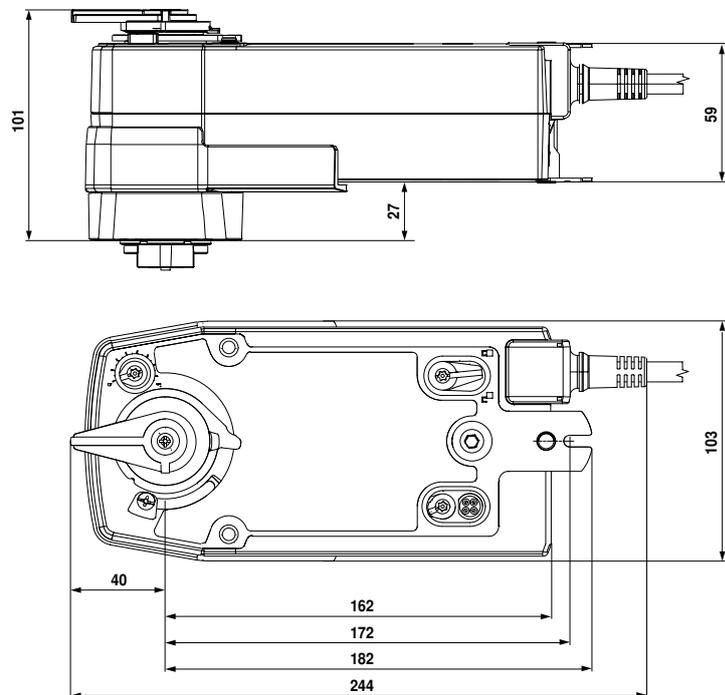
Notes

- Caution: Power supply voltage possible!
- Parallel connection of other actuators possible. Note the performance data.



Dimensions [mm]

Dimensional drawings



Rotary actuator with emergency function for ball valves

- Torque 20Nm
- Nominal voltage AC 24...240V / DC 24...125V
- Control: Open-close
- Two integrated auxiliary switches
- SRFA-S2: Deenergised NC


Technical data

Electrical data	Nominal voltage	AC 24...240V, 50/60Hz / DC 24...125V	
	Nominal voltage range	AC 19.2...264V / DC 21.6...137.5V	
	Power consumption	In operation	7W @ nominal torque
		At rest	3.5W
For wire sizing		18VA	
Auxiliary switch		2 x SPDT, 1 x 10% / 1 x 11...90%	
Connection	Motor	Cable 1m, 2 x 0.75mm ²	
	Auxiliary switch	Cable 1m, 6 x 0.75mm ²	
Parallel connection		Yes (Note performance data for supply!)	
Functional data	Torque	Motor	Min. 20Nm @ nominal voltage
		Spring return	Min. 20Nm
	Direction of rotation	Spring return	Deenergised NC, butterfly valve closed (A – AB = 0%)
		– SRFA-S2	
	Manual override		With hand crank and interlocking switch
	Angle of rotation		Max. 90°
	Running time	Motor	75s / 90°
		Spring return	≤20s @ –20...50°C / max. 60s @ –30°C
	Sound power level	Motor	≤45dB(A)
		Spring return	≤62dB(A)
Position indication		Mechanical	
Safety	Protection class		II totally insulated 
	Degree of protection		IP54
			NEMA 2, UL Enclosure Type 2
	EMC		CE according to 2004/108/EC
	Low-voltage directive		CE according to 2006/95/EC
	Certification		Certified to IEC/EN 60730-1 and IEC/EN 60730-2-14
	Mode of operation		Type 1.AA.B
	Rated impulse voltage	Actuator	4kV
		Auxiliary switch	2.5kV
	Control pollution degree		3
Ambient temperature		–30...+50°C	
Non-operating temperature		–40...+80°C	
Ambient humidity		95% r.h., non-condensating	
Maintenance		Maintenance-free	
Dimensions / Weight	Dimensions		See «Dimensions»
	Weight		Approx. 2.2kg (without butterfly valve)

Safety notes

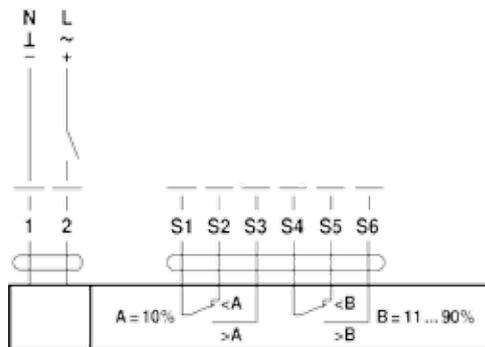

- The actuator has been designed for use in stationary heating, ventilation and air conditioning systems and is not allowed to be used outside the specified field of application, especially in aircraft or in any other airborne means of transport.
- Caution: Power supply voltage possible!
- It may only be installed by suitably trained personnel. Any legal regulations or regulations issued by authorities must be observed during installation.
- The device may only be opened at the manufacturer's site. It does not contain any parts that can be replaced or repaired by the user.
- The cable must not be removed from the device.
- The integrated switches of this actuator have to be connected either to Power supply voltage or safety extra low voltage. The combination Power supply voltage / safety extra low voltage is not allowed.
- The device contains electrical and electronic components and is not allowed to be disposed of as household refuse. All locally valid regulations and requirements must be observed.

Product features

Mode of operation	The actuator is equipped with a universal power module and can process supply voltages from AC 24...240V plus DC 24...125V. The actuator moves the ball valve to the operating position at the same time as tensioning the return spring. The ball valve is turned back to the safety position by spring force if the supply voltage is interrupted.
Simple direct mounting	Straightforward direct mounting on the ball valve with only one screw. The mounting position in relation to the ball valve can be selected in 90° steps.
Manual override	Manual operation of the valve with the hand crank, locking in any position with the interlocking switch. Unlocking is manual or automatic by applying the operating voltage.
Adjustable angle of rotation	Adjustable angle of rotation with mechanical end stop.
High operational reliability	The actuator is overload-proof, requires no limit switches and automatically stops when the end stop is reached.
Flexible signalisation	The actuator has one auxiliary switch with a fixed setting and one adjustable auxiliary switch. They permit a 10% or 11...90% angle of rotation to be signalled.
Combination valve actuators	Refer to the valve documentation for suitable valves, their permitted media temperatures and closing pressures.

Electrical installation

Wiring diagram



Cable colours:

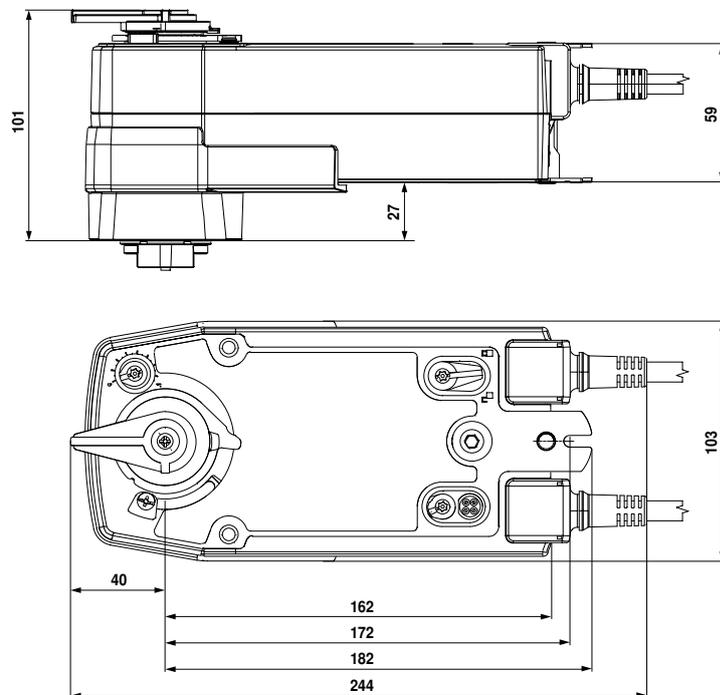
- 1 = blue
- 2 = brown
- S1 = violet
- S2 = red
- S3 = white
- S4 = orange
- S5 = pink
- S6 = grey

Notes

- Caution: Power supply voltage possible!
- Parallel connection of other actuators possible. Note the performance data.

Dimensions [mm]

Dimensional drawings



Modulating rotary actuator with emergency function for ball valves

- Torque 20Nm
- Nominal voltage AC/DC 24V
- Control: modulating DC (0)2...10V
- Position feedback DC 2...10V
- SRF24A-SR: Deenergised NC


Technical data

Electrical data	Nominal voltage	AC 24V, 50/60Hz / DC 24V	
	Nominal voltage range	AC 19.2...28.8V / DC 21.6...28.8V	
	Power consumption	In operation	5.5W @ nominal torque
		At rest	3.5W
	For wire sizing	8.5VA	
	Connection	Cable 1m, 4 x 0.75mm ²	
	Parallel connection	Yes (Note performance data for supply!)	
Functional data	Torque	Motor	Min. 20Nm @ nominal voltage
		Spring return	Min. 20Nm
	Control	Control signal Y	DC (0)2...10V, input impedance 100kΩ
		Operating range	DC 2...10V
	Position feedback (measuring voltage U)	DC 2...10V, max. 0.5mA	
	Position accuracy	±5%	
	Direction of rotation	Spring return	Deenergised NC, ball valve closed (A – AB = 0%)
		– SRF24A-SR	
	Manual override	With hand crank and interlocking switch	
	Angle of rotation	Max. 90°	
Running time	Motor	90s / 90°	
	Spring return	≤20s @ –20...50°C / max. 60s @ –30°C	
Sound power level	Motor	≤45dB(A)	
	Spring return	≤62dB(A)	
Position indication	Mechanical		
Safety	Protection class	III Extra low voltage / UL Class 2 Supply	
	Degree of protection	IP54	
		NEMA 2, UL Enclosure Type 2	
	EMC	CE according to 2004/108/EC	
	Certification	Certified to IEC/EN 60730-1 and IEC/EN 60730-2-14	
	Mode of operation	Type 1.AA	
	Rated impulse voltage	0.8kV	
	Control pollution degree	3	
	Ambient temperature	–30...+50°C	
	Non-operating temperature	–40...+80°C	
Ambient humidity	95% r.h., non-condensating		
Maintenance	Maintenance-free		
Dimensions / Weight	Dimensions	See «Dimensions»	
	Weight	Approx. 2kg	

Safety notes

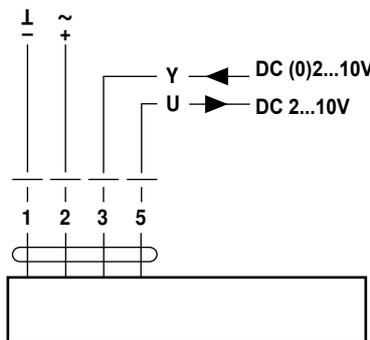

- The actuator has been designed for use in stationary heating, ventilation and air conditioning systems and is not allowed to be used outside the specified field of application, especially in aircraft or in any other airborne means of transport.
- It may only be installed by suitably trained personnel.
All applicable legal or institutional installation regulations must be complied with.
- The device may only be opened at the manufacturer's site. It does not contain any parts that can be replaced or repaired by the user.
- The cable must not be removed from the device.
- The device contains electrical and electronic components and is not allowed to be disposed of as household refuse. All locally valid regulations and requirements must be observed.

Product features

- Mode of operation** The actuator is controlled with a standard signal of DC (0)2...10V and moves the ball valve to the operating position at the same time as tensioning the return spring. The ball valve is turned back to the emergency position by spring force if the supply voltage is interrupted.
- Simple direct mounting** Straightforward direct mounting on the ball valve with only one screw. The mounting position in relation to the ball valve can be selected in 90° steps.
- Manual override** Manual operation of the valve with the hand crank, locking in any position with the interlocking switch. Unlocking is manual or automatic by applying the operating voltage.
- Adjustable angle of rotation** Adjustable angle of rotation with mechanical end stop.
- High operational reliability** The actuator is overload-proof, requires no limit switches and automatically stops when the end stop is reached.
- Combination valve actuators** Refer to the valve documentation for suitable valves, their permitted media temperatures and closing pressures.

Electrical installation

Wiring diagram



Notes

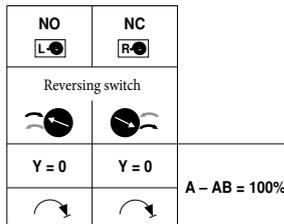
- Connect via safety isolation transformer.
- Parallel connection of other actuators possible. Note the performance data.



Cable colours:

- 1 = black
- 2 = red
- 3 = white
- 5 = orange

Direction of rotation



Dimensions [mm]

Dimensional drawings

