SRFA-5

Rotary actuator with emergency function for rotary valves
- **Torque 20Nm**
- **Nominal voltage AC 24...240V / DC 24...125V**
- **Control: Open-close**
- **SRFA-5: 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 At rest For wire sizing	7W @ nominal torque 3.5W 18VA
	Connection		Cable 1m, 2 x 0.75mm^2
	Parallel connection		Yes (Note performance data for supply!)
Functional data	Torque	Motor Spring return	Min. 20Nm @ nominal voltage Min. 20Nm
	Direction of rotation	Spring return – SRFA-5	 Deenergised NC, valve closed (A – AB = 0%)
	Manual override		With hand crank and interlocking switch
	Angle of rotation		Max. 90°
	Running time	Motor Spring return	75s / 90° ≤20s @ –20...50°C / max. 60s @ –30°C
	Sound power level	Motor Spring return	≤45dB(A) ≤62dB(A)
	Position indication		Mechanical
Safety	Protection class		**II** totally insulated ⧈
	Degree of protection		IP54 NEMA 2, UL Enclosure Type 2
	EMC Low-voltage directive		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
Mechanical data	Connection flange		F05
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.

UL marked actuators is optional, please contact your local Sales Representative for details.

V8.3 04.2015•Subject to modification

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 valve to the operating position at the same time as tensioning the return spring. The 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 rotary valve with mounting flange. The mounting position in relation to the fitting 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.

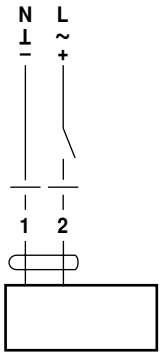
Adjustable angle of rotation
Adjustable angle of rotation with mechanical end stop.

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



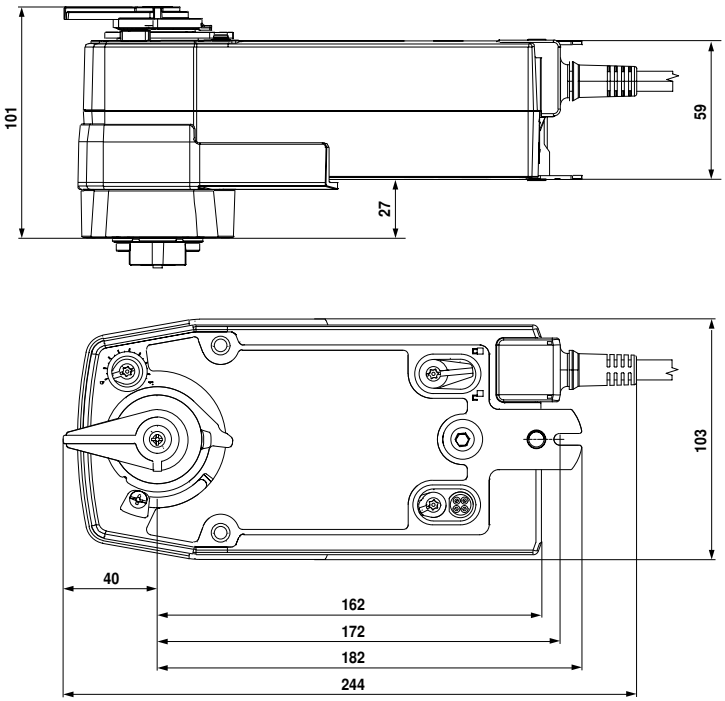
AC 24...240V
DC 24...125V

Cable colours:
1 = blue
2 = brown

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

Dimensions [mm]

Dimensional drawings



UL marked actuators is optional, please contact your local Sales Representative for details.

SRFA-S2-5

Rotary actuator with emergency function for rotary valves
- **Torque 20Nm**
- **Nominal voltage AC 24...240V / DC 24...125V**
- **Control: Open-close**
- **Two integrated auxiliary switches**
- **SRFA-S2-5: 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 – SRFA-S2-5	Deenergised NC, 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 Low-voltage directive		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.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
Mechanical data	Connection flange		F05
Dimensions / Weight	Dimensions		See «Dimensions»
	Weight		Approx. 2.2kg

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 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.

UL marked actuators is optional, please contact your local Sales Representative for details.

V8.3 04.2015•Subject to modification

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 valve to the operating position at the same time as tensioning the return spring. The 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 rotary valve with mounting flange. The mounting position in relation to the fitting 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.

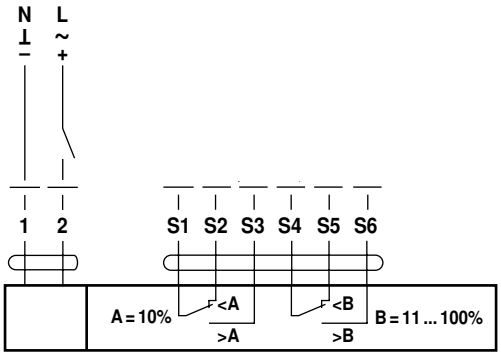
High operational reliability
The actuator is overload-proof, requires no limit switches and automatically stops when the end stop is reached.

Flexible signalization
The actuator has one auxiliary switch with a fixed setting and one adjustable auxiliary switch. They permit a 10% or 11...100% 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

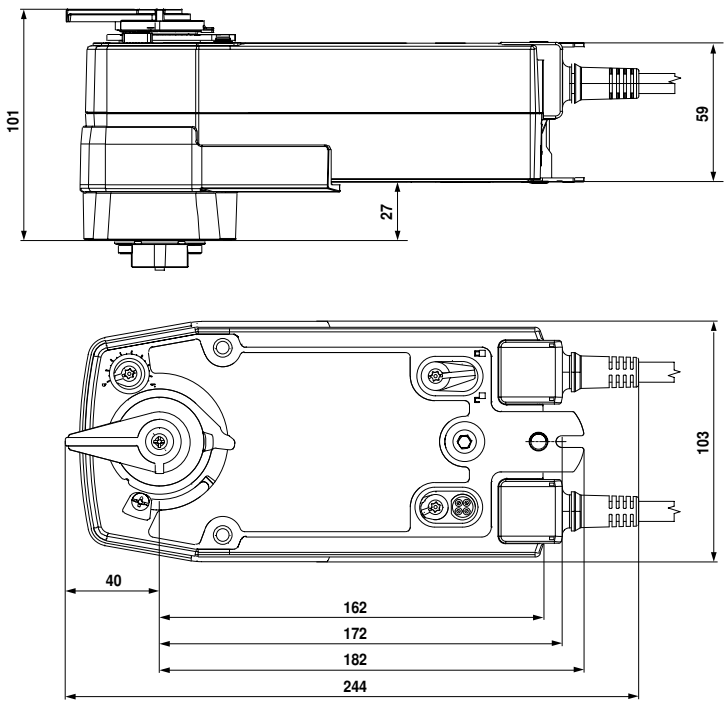


Cable colours:
1 = blue
2 = brown
S1 = violet
S2 = red
S3 = white
S4 = orange
S5 = pink
S6 = grey

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

Dimensions [mm]

Dimensional drawings



UL marked actuators is optional, please contact your local Sales Representative for details.

SRF24A-SR-5

Modulating rotary actuator with emergency function for rotary valves
- **Torque 20Nm**
- **Nominal voltage AC/DC 24V**
- **Control: modulating DC (0)2...10V**
- **Position feedback DC 2...10V**
- **SRF24A-SR-5: 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 At rest For wire sizing	5.5W @ nominal torque 3.5W 8.5VA
	Connection		Cable 1m, 4 x 0.75mm^2
	Parallel connection		Yes (Note performance data for supply!)
Functional data	Torque	Motor Spring return	Min. 20Nm @ nominal voltage Min. 20Nm
	Control	Control signal Y Operating range	DC (0)2…10V, input impedance 100kΩ DC 2...10V
	Position feedback (measuring voltage U)		DC 2...10V, max. 0.5mA
	Position accuracy		±5%
	Direction of rotation	Spring return – SRF24A-SR-5	 Deenergised NC, valve closed (A – AB = 0%)
	Manual override		With hand crank and interlocking switch
	Angle of rotation		Max. 90°
	Running time	Motor Spring return	90s / 90° ≤20s @ –20...50°C / max. 60s @ –30°C
	Sound power level	Motor Spring return	≤45dB(A) ≤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
Mechanical data	Connection flange		F05
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.

UL marked actuators is optional, please contact your local Sales Representative for details.

V8.3 04.2015•Subject to modification

Product features

Mode of operation The actuator is controlled with a standard signal of DC (0)2...10V and moves the valve to the operating position at the same time as tensioning the return spring. The 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 rotary valve with mounting flange. The mounting position in relation to the fitting 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.

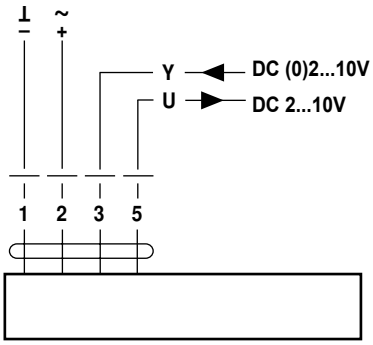
Adjustable angle of rotation Adjustable angle of rotation with mechanical end stop.

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

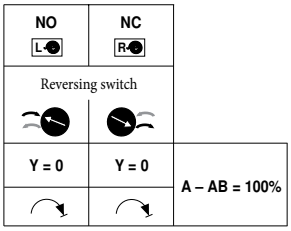
Wiring diagram



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

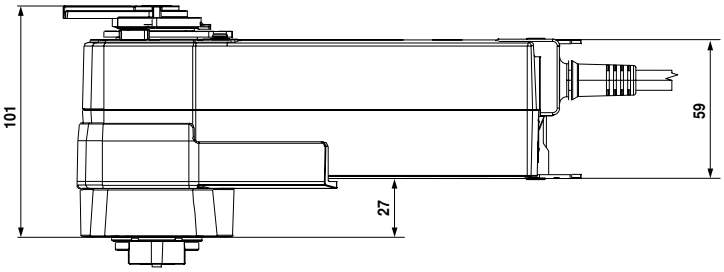
Cable colours:
1 = black
2 = red
3 = white
5 = orange

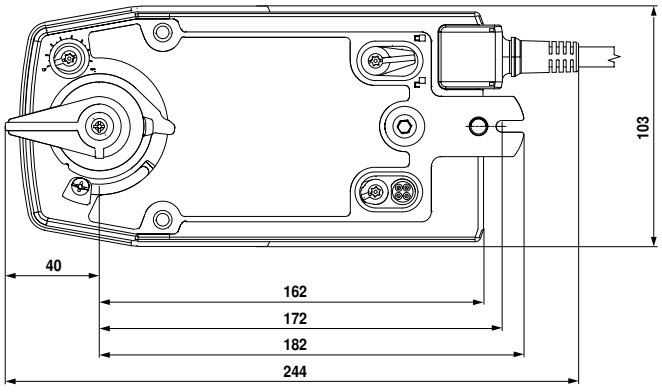
Direction of rotation



Dimensions [mm]

Dimensional drawings





UL marked actuators is optional, please contact your local Sales Representative for details.