

• Torque motor 2.5 Nm • Nominal voltage AC/DC 24 V • Control modulating 2...10 V • Position feedback 2...10 V

Rotary actuator fail-safe for adjusting dampers in technical building installations

• Air damper size up to approx. 0.5 m<sup>2</sup>

**Technical data sheet** 



### **Technical data**

Electrical data	Nominal voltage	AC/DC 24 V
	Nominal voltage frequency	50/60 Hz
	Nominal voltage range	AC 19.228.8 V / DC 21.628.8 V
	Power consumption in operation	2.5 W
	Power consumption in rest position	1 W
	Power consumption for wire sizing	4 VA
	Connection supply / control	Cable 1 m, 4 x 0.75 mm <sup>2</sup>
	Parallel operation	Yes (note the performance data)
Functional data	Torque motor	2.5 Nm
	Torque fail-safe	2.5 Nm
	Operating range Y	210 V
	Input impedance	100 kΩ
	Position feedback U	210 V
	Position feedback U note	Max. 0.5 mA
	Position accuracy	±5%
	Direction of motion motor	selectable with switch L/R
	Direction of motion fail-safe	selectable by mounting L/R
	Manual override	No
	Angle of rotation	Max. 95°
	Angle of rotation note	adjustable starting at 37% in 2.5% steps (with mechanical end stop)
	Running time motor	150 s / 90°
	Running time fail-safe	<25 s / 90°
	Sound power level, motor	50 dB(A)
	 Mechanical interface	Universal shaft clamp 612.7 mm
	Position indication	Mechanical
	Service life	Min. 60'000 fail-safe positions
Safety data	Protection class IEC/EN	III, Safety Extra-Low Voltage (SELV)
	Degree of protection IEC/EN	IP42
	EMC	CE according to 2014/30/EU
	Certification IEC/EN	IEC/EN 60730-1 and IEC/EN 60730-2-14
	Type of action	Туре 1.АА
	Overvoltage category	III
	Rated impulse voltage supply / control	0.8 kV
	Pollution degree	3
	Ambient humidity	Max. 95% RH, non-condensing
	Ambient temperature	-3050°C [-22122°F]
	Storage temperature	-4080°C [-40176°F]
	Servicing	maintenance-free



TF24-SR

Safety notes         Image: Safety notes	Weight	Weight 0.62 kg	
Find the end of t	Safety notes		
systems and must not be used outside the specified field of application, especially in aircraft or     in any other airborne means of transport.     Outdoor application: only possible in case that no (sea) water, snow, ice, insolation or     aggressive gases interfere directly with the device and that it is ensured that the ambient     conditions remain within the thresholds according to the data sheet at any time.     Only authorised specialists may carry out installation. All applicable legal or institutional     installation regulations must be compiled during installation.     The device may only be opened at the manufacturer's site. It does not contain any parts that     can be replaced or the user.     Cables must not be removed from the device.     The device contains electrical and electronic components and must not be disposed of as     household refuse. All locally valid regulations and requirements must be observed.     The device contains electrical and electronic components and must not be disposed of as     household refuse. All locally valid regulations on the components must be observed.     Simple direct mounting     Simple of rotation     Adjustable angle of rotation     Adjustable angle of rotation     Adjustable angle of rotation     Adjustable angle of rotation     Simple mounting     SiG24     Positioner for built-in mounting     SiG24     Positioner for built-in mounting     SiG24     Positioner for built-in mounting     SiG24     Positioner for fort-panel mounting     SiG24     Positioner for fort-panel mounting     SiG24     Positioner for fort-panel mounting     SiG24     Positioner for fort damper rank arm KH8, Multipack 10 pcs.     SiG4     Si	Salety hotes		
Mode of operation       The actuator is connected with a standard control signal of 010 V and moves the damper to the operating position at the same time as tensioning the return spring. The damper is turned back to the fail-safe position by spring force when the supply voltage is interrupted.         Simple direct mounting       Simple direct mounting on the damper shaft with a universal shaft clamp, supplied with an antirotation device to prevent the actuator from rotating.         Adjustable angle of rotation       Adjustable angle of rotation at the same time as tensioning the return spring.         High functional reliability       The actuator is overload protected, requires no limit switches and automatically stops when the end stop is reached.         Accessories       Electrical accessories       Signal converter voltage/current 100 kΩ 420 mA, Supply AC/DC 24 V       Z-UIC         Positioner for wall mounting       SGE24       Positioner for wall mounting       SGE24         Positioner for wall mounting       SGE24       Positioner for wall mounting       SGE24         Positioner for wall mounting       CRP24-B1       Vpe       Actuator arm       Shaft extension 170 mm Ø10 mm for damper shaft Ø 616 mm       AV6-20         Ball joint suitable for damper crank arm KH8, Multipack 10 pcs.       KG10A       SGB       Damper crank arm Slot width 8.2 mm, clamping range Ø1018 mm       KH8       Screw fastening kit       SB-TF       Anti-rotation imiter, with end stop       ZDB-TF       Form fit adapter 8x6 mm	Â	<ul> <li>systems and must not be used outside the specified field of application, in any other airborne means of transport.</li> <li>Outdoor application: only possible in case that no (sea) water, snow, ice aggressive gases interfere directly with the device and that it is ensured conditions remain within the thresholds according to the data sheet at one only authorised specialists may carry out installation. All applicable legal installation regulations must be complied during installation.</li> <li>The device may only be opened at the manufacturer's site. It does not can be replaced or repaired by the user.</li> <li>Cables must not be removed from the device.</li> <li>The device contains electrical and electronic components and must not</li> </ul>	especially in aircraft or e, insolation or l that the ambient any time. al or institutional ontain any parts that be disposed of as
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Accessories       Description       Type         Signal converter voltage/current 100 kΩ 420 mA, Supply AC/DC 24 V       Z-UIC         Positioner for wall mounting       SGA24         Positioner for built-in mounting       SGE24         Positioner for vall mounting       SGF24         Positioner for wall mounting       SGF24         Positioner for moult mounting       SGF24         Positioner for wall mounting	Adjustable angle of rotation	Adjustable angle of rotation with mechanical end stops.	
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	Electrical installation		



Supply from isolating transformer.

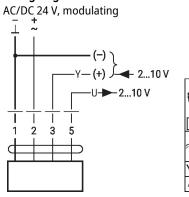
Parallel connection of other actuators possible. Observe the performance data.

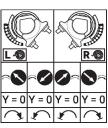


#### Wire colours:

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

# Wiring diagrams





# Dimensions

#### Spindle length

-	Min. 84
	Min. 20

## **Clamping range**

OI	
612.7	612.7

