



Dampers up to approx. 0.8 m²

Modulating damper actuator (AC/DC 24 V)

Control DC 0...10V and position feedback DC 2...10V

Application

The type LM24-SR is intended for the operation of air control dampers in ventilation and air-conditioning systems.

Mode of operation

The actuator is controlled by a standard DC 0...10V signal and runs to whatever position is specified by the signal. The purpose of measuring voltage U is to provide 0...100% electrical indication of damper position and to act as a master-slave control signal for other actuators.

Product features

Simple direct mounting on the damper spindle by universal spindle clamp. An antirotation device is supplied to prevent unwanted rotation of the whole unit.

Steplessly adjustable angle of rotation by integral potentiometer. Range matching of the working range and measuring signal U is performed automatically by the actuator.

Manual operation by self-resetting push-button when necessary (the gearing is disengaged while the pushbutton is held depressed).

High functional reliability

The actuator is overload-proof, needs no limit switches and halts automatically at the end stops.

Electrical accessories (see Doc. 2.Z-)

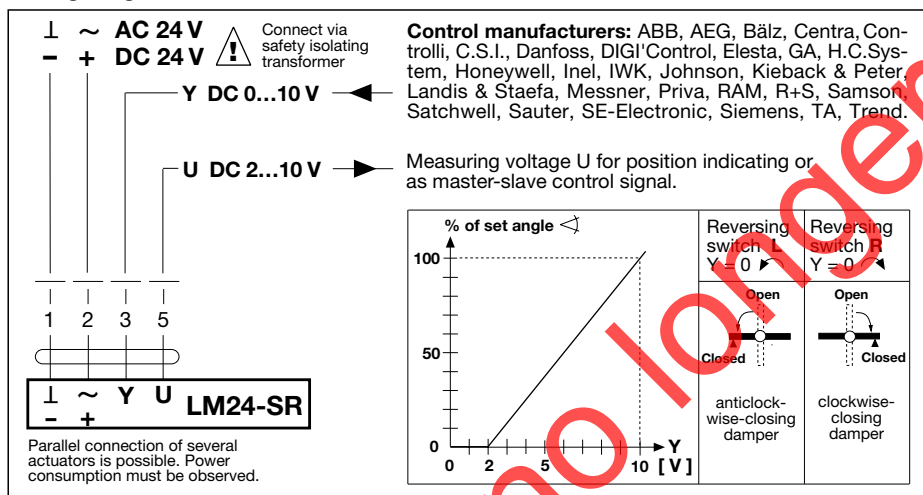
- SG..24 Positioners
- ZAD24 Digital position indicator

Control and monitoring functions, page 10

Important

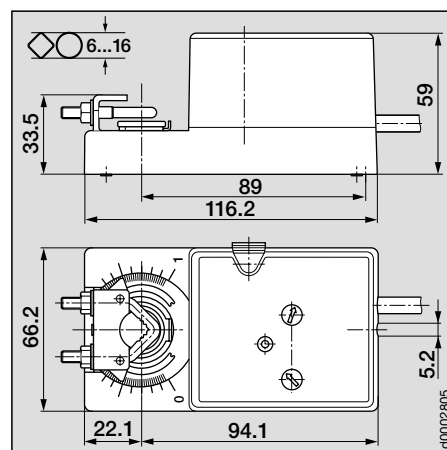
Read the notes about the use and torque requirements of the damper actuators on page 2.

Wiring diagram

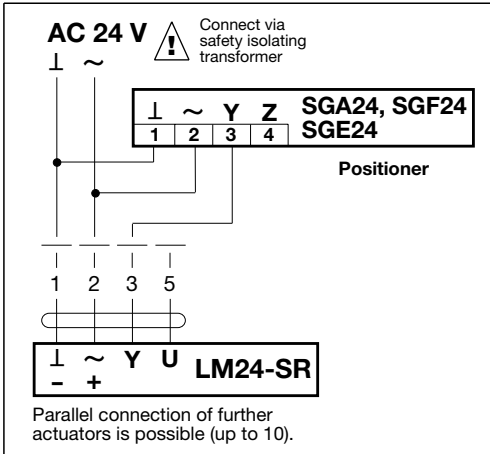


Technical data	LM24-SR
Nominal voltage	AC 24 V ~ 50/60 Hz, DC 24 V
Nominal voltage range	AC 19.2...28.8 V, DC 21.6...28.8 V
For wire sizing	4 VA
Power consumption	2 W
Connecting cable	1 m long, 4 × 0.75 mm ²
Control signal Y	DC 0...10V @ input resistance = 100 kΩ
Operating range	DC 2...10V (for set angle of rotation)
Measuring voltage U	DC 2...10V @ ≤ 0.5 mA (for set angle of rotation)
Synchronism tolerance	± 5%
Direction of rotation (at Y = 0 V)	selected with L/R switch at switch position L ↶ resp. R ↷
Manual operating	Pushbutton, self resetting
Torque	min. 4 Nm (at rated voltage)
Angle of rotation	max. 95° (adjustable with potentiometer 20...100%)
Running time	80...110 s for <math>\alpha < 95^\circ</math> (0...4 Nm)
Sound power level	max. 35 dB (A)
Position indication	mechanical
Protection class	⊠ (safety low voltage)
Degree of protection	IP 54 (bottom cable entry)
Ambient temperature range	- 30... + 50 °C
Non-operating temperature	- 40... + 80 °C
Humidity test	to EN 60335-1
EMC	CE according to 89/336/EEC, 92/31/EEC, 93/68/EEC
Maintenance	maintenance-free
Weight	620 g

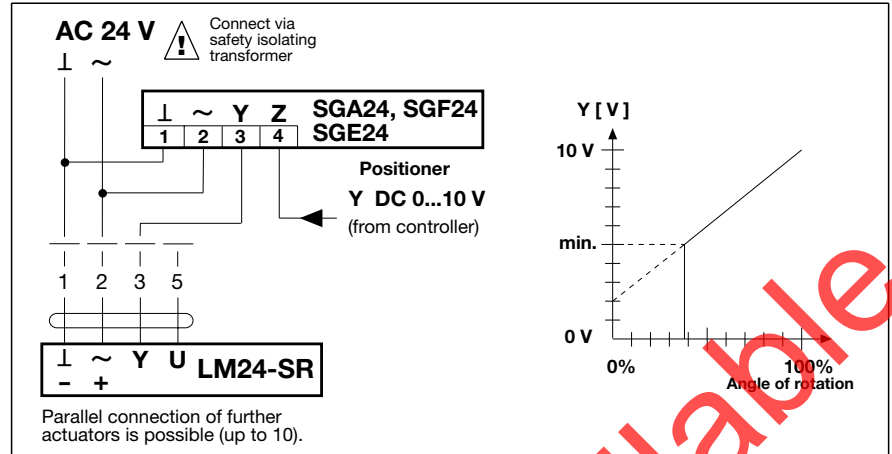
Dimensions



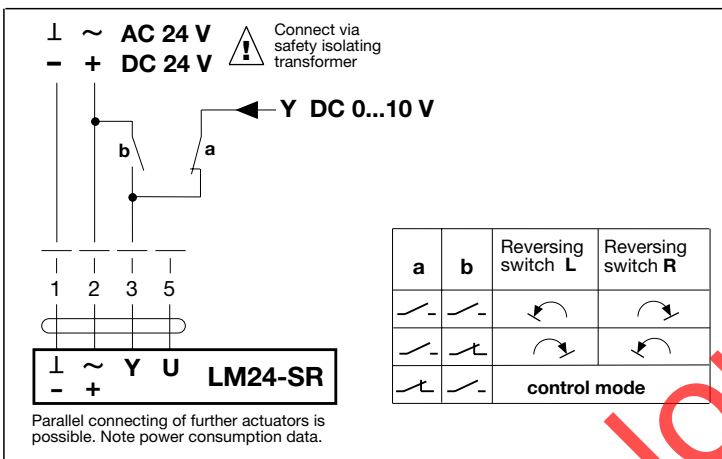
Remote control 0...100%



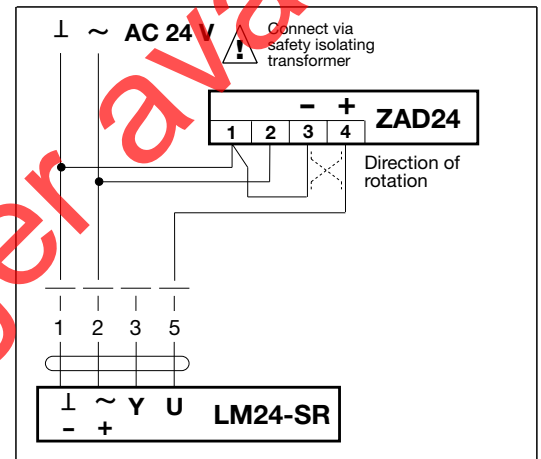
Minimum position



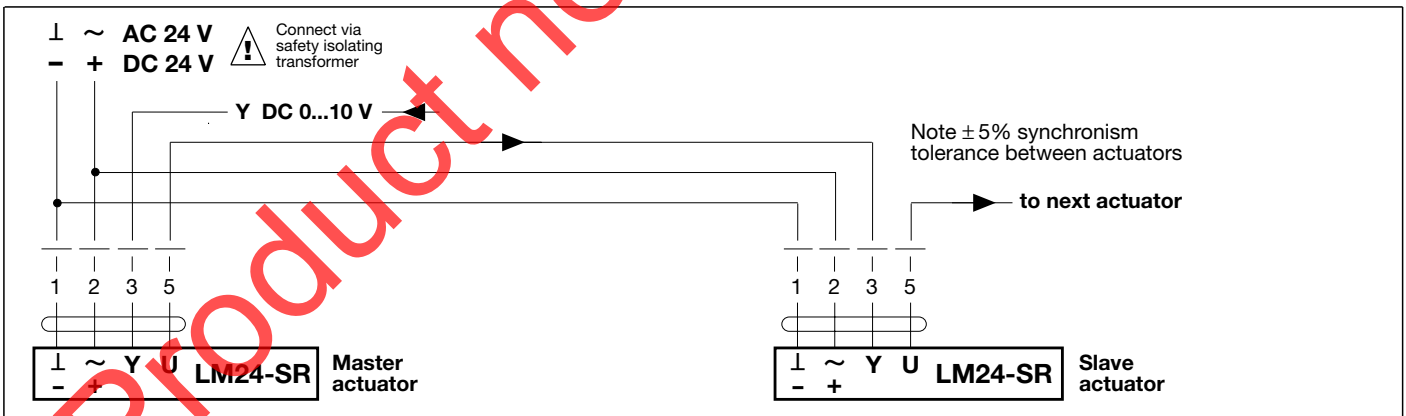
Override control



Position indication



Master-slave control (depending on position)



Function monitoring

