

MD10A-24

Modulating Damper Actuator
10 Nm (90 in-lb)



Product Description

MD10A-24 damper actuators operate in air control ventilation and air-conditioning systems for building services installations.

- For air control dampers up to approx. 2 m² (2.4 yard²)
- Torque 10 Nm (90 in-lb)
- Nominal voltage 24 Vac/dc
- Control: Modulating 0...10 V

Features

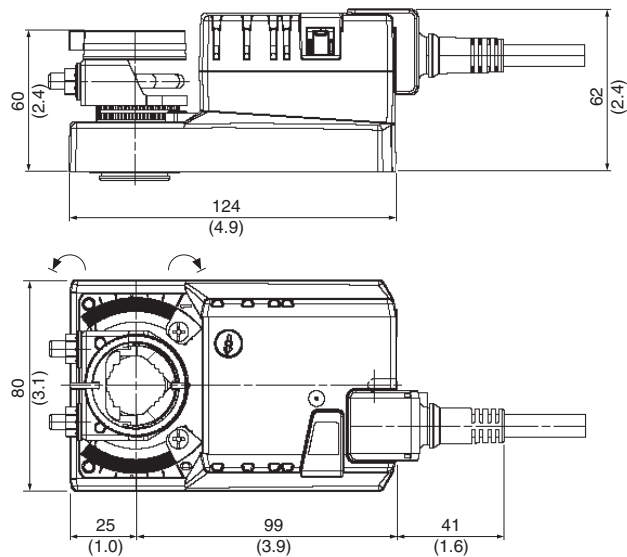
- Controlled by means of a standard control signal 2...10 Vdc. It opens to the position dictated by this signal. The measuring voltage Y allows the damper position (0 ... 100%) to be electrically indicated and serves as a follow-up control signal for other actuators.
- Simple direct mounting on the damper spindle with a universal spindle clamp, supplied with an anti-rotation strap to prevent the actuator from rotating.
- Manual operation is possible with the self-resetting push button (the gearing latch remains disengaged as long as the push button is pressed or detented).
- Adjustable angle of rotation with mechanical end stops.
- High Functional Reliability: The actuator is overload-proof, requires no limit switches and automatically stops when the end stop is reached.

Specifications

Part number	875-1019-000
Power supply	24 Vac $\pm 20\%$, 50–60 Hz, 24 Vdc $\pm 20\%$
Power consumption	
In operation	2 W @ nominal torque
At rest	0.4 W
For wire sizing	4 VA
Connection cable	1 m (3.3 ft), 4×0.75 mm ² (AWG 18)
Control signal X	0...10 V DC
Input resistance	100 k Ohm
Operating range	2–10 Vdc (for set angle of rotation)
Synchronization tolerance	$\pm 5\%$
Position feedback Y	2...10 Vdc (max. 1 mA)
Direction of rotation	Reversible with switch 0 / 1 at switch position 0 resp. 1
Angle of rotation	max. 95° (adjustable by mechanical stops)

Torque	min. 10 Nm (90 in-lb) @ nominal voltage
Running time	150 s
Position indication	Mechanical
Manual override	Gearing latch disengaged with push button, self-resetting, manual locking
Standards conformity	
EMC, emission	SS EN 50081-1
EMC, immunity	SS EN 50082-1
Protection class	III Safety extra-low voltage
Enclosure rating	IP 54
Ambient humidity	95% r.H (EN 60730-1)
Ambient temperature	
Operation	–30...+50 °C (–22 ...+122 °F)
Storage	–40...+80 °C (–40...+176 °F)
Sound power level	max. 35 dB (A)
Maintenance	Maintenance-free
Weight	Approx 0.8 kg (1.8 lb.)

Dimensions mm (in)



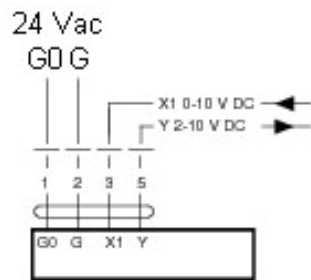
Damper spindle (in.)	Length mm (in.)	Ø mm
Clamp on top	min. 40 (1.57)	8...26.7 (0.31...1.04)
Clamp on bottom*	min. 20 (0.78)	8...20 (0.31...0.78)

*Option (Accessory K-MD10)

Application Considerations

Schneider Electric damper actuators are intended for HVAC use only, and shall not be used in other applications without express written consent. When calculating required torque, the specifications supplied by the damper manufacturers (cross section, design, installation site), and the air flow conditions must be observed.

Wiring



NOTE: Connection via safety isolating transformer.
Measuring voltage Y for position indication or as master-slave signal.
Parallel connection of several actuators is possible. Power consumption must be observed.

Accessories

Please refer to data sheet G-30-90 "Accessories Damper Actuators" 0-003-2251.