

Full-rotation actuator for operating air control dampers and shutters in ventilation and air-conditioning systems for building services installations

- For air control dampers up to approx. 0.6 m²
- Torque 3 Nm
- Nominal voltage AC/DC 24 V
- Control: Open-close or 3-point
- Spindle driver: Form-fit 12 mm or 8 mm (with insert)


Technical data

Electrical data	Nominal voltage	AC 24 V, 50/60 Hz DC 24 V
	Nominal voltage range	AC/DC 19.3 ... 28.8 V
	Power consumption	In operation 1 W @ nominal torque At rest 0.5 W For wire sizing 2.5 VA
	Connection	Cable 1 m, 3 x 0.75 mm ²
Functional data	Torque	Min. 3 Nm @ nominal voltage
	Direction of rotation	Reversible with switch 0 ↺ or 1 ↻
	Manual override	Gearing latch disengaged with pushbutton, self-resetting
	Angle of rotation	Endless (adjustable 0 ... 330° ↺ with angle of rotation limiter ZDB-LU)
	Running time	150 s / 360° ↺
	Sound power level	max. 35 dB (A)
	Spindle driver	Form-fit 12 mm or 8 mm (with insert)
	Safety	Protection class
Degree of protection		IP54 in any mounting position
EMC		CE according to 89/336/EEC
Mode of operation		Type 1 (EN 60730-1)
Rated impulse voltage		0.8 kV (EN 60730-1)
Control Pollution Degree		3 (EN 60730-1)
Ambient temperature range		-30 ... +50 °C
Non-operating temperature		-40 ... +80 °C
Ambient humidity range		95% r.H., non-condensating (EN 60730-1)
Maintenance		Maintenance-free
Dimensions / Weight	Dimensions	See «Dimensions» on page 2
	Weight	Approx. 650 g

Safety notes


- The actuator is not allowed to be used outside the specified field of application, especially not in aircraft or any other form of air transport.
- Assembly must be carried out by trained personnel. Any legal regulations or regulations issued by authorities must be observed during assembly.
- 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.
- Mechanical interfaces which are not expressly envisaged by BELIMO for the LU24A must not be created.
- The cable must not be removed from the device.
- When calculating the required torque, the specifications supplied by the damper manufacturers (cross section, design, installation site), and the air flow conditions must be observed.
- 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

- Simple direct mounting** Form-fit direct mounting on a 12 mm or 8 mm damper spindle (with insert). The actuator can also be optionally equipped with a 10 mm form fit or an 8 ... 12 mm clamp (see «Accessories»).
- Manual override** Manual operation is possible with the self-resetting pushbutton (the gearing latch remains disengaged as long as the pushbutton is pressed).
- Adjustable angle of rotation** The angle of rotation of the full-rotation actuator can be adjusted in 10° increments between 0 and 330° 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.

Accessories

	Description
Mechanical accessories	Form-fit insert 10 x 10 mm, type ZF10-LU
	Clamp with 8 ... 12 mm clamping range and anti-rotation strap, type K-LU
	Angle of rotation limiter 0 ... 330°, type ZDB-LU

Electrical installation

Wiring diagrams

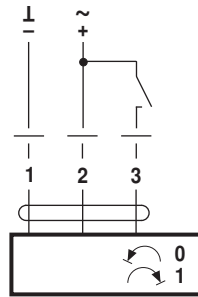
Notes

- Connection via safety isolating transformer.
- Other actuators can be connected in parallel.

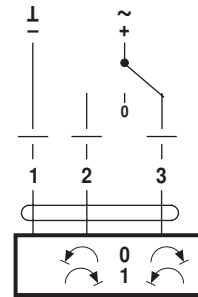
Please note the performance data.



Open-close control



3-point control

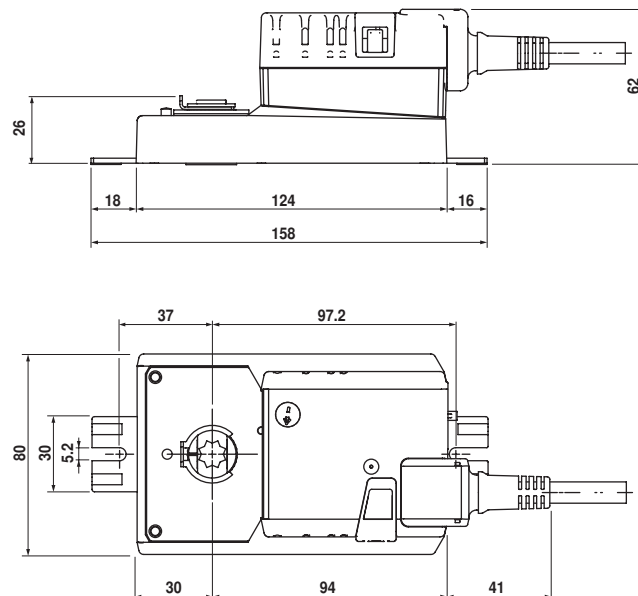


Direction of rotation



Dimensions [mm]

Dimensional drawings



Damper spindle	Length	■ I
	min. 20	12 or 8 (with insert)

