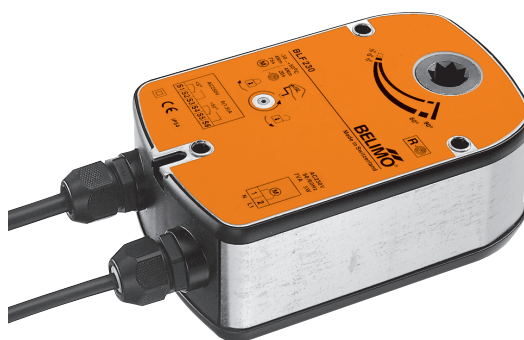**Spring-return actuator for small fire and smoke dampers 90°⊲ in ventilation and air-conditioning systems.**

• Torque 6/4 Nm
• Nominal voltage AC 230 V
• Control: Open/close
• Damper rotation: 12 mm form-fit

Technical Data

Electrical data	Nominal voltage	AC 230 V, 50/60 Hz
	Nominal voltage range	AC 198 ... 264 V
	Power consumption motoring	6 W @ nominal torque
	holding	3 W
	for wire sizing	7 VA / Imax. 150 mA @ 10 ms
	Auxiliary switch	2 x 1 SPDT
	Contact rating (contacts gold plate on silver)	1 mA ... 3 A (0.5 A), DC 5 V ... AC 250 V ▣
	Switching points	5°⊲ / 80°⊲
	Connecting cable motor	1 m, 2 x 0.75 mm² (halogen-free)
	auxiliary switch	1 m, 6 x 0.75 mm² (halogen-free)
Functional data	Torque motor	Min. 6 Nm
	spring-return	Min. 4 Nm
	Direction of rotation	Selected by mounting L/R
	Angle of rotation	Max. 95°⊲ (incl. 5°⊲ spring pretensioning)
	Running time motor	40 ... 75 s (0 ... 6 Nm)
	spring-return	~20 s @ −20 ... +50°C / max. 60 s @ −30°C
	Sound power level motor	Max. 45 dB (A)
	spring-return	~62 dB (A)
	Damper rotation	Form-fit 12 mm (10 mm with adapter supplied)
	Position indication	Mechanical with pointer
	Service life	Min. 60'000 safe positions
Safety	Protection class	**II** totally insulated ▣
	Degree of protection	IP54 in all mounting positions
	EMC	CE according to 2004/108/EC
	low-voltage directive	CE according to 2006/95/EC
	Mode of operation	Type 1.AA.B (EN60730-1)
	Rated impulse voltage	4 kV (EN60730-1)
	Control pollution degree	3 (EN60730-1)
	Ambient temperature range normal duty	−30 ... +50°C
	safety duty	The safe position will be attained up to max. 75°C when initiated by a thermal trip
	Non-operating temperature	−40 ... +80°C
	Ambient humidity range	EN 60730-1
	Maintenance	Maintenance-free
Dimensions / weight	Dimensions	See «Dimensions» on page 2
	Weight	Approx. 1'680 g

Safety notes

⚠

• **The actuator 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!**
• **The actuator is adapted and mounted to the fire and smoke damper by the damper manufacturer. For this reason, the actuator is only supplied direct to safety damper manufacturers. The manufacturer then bears full responsibility for the proper functioning of the damper.**
• **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 device contains electronic and electrical components and may not be disposed of with the household waste. Observe local regulations and valid laws.**

Product features

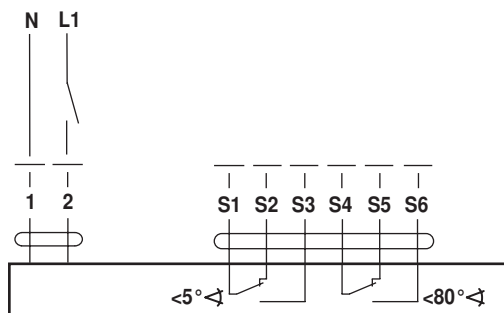|	
Mode of operation	The actuator moves the damper to its normal working position while tensioning the return spring at the same time. If the power supply is interrupted, the energy stored in the spring moves the damper back to its safe position.
Signalling	Two microswitches with fixed settings are installed in the actuator for indicating the damper end positions. The position of the damper blade can be read off on a mechanical position indicator.
Manual operation	Without power supply, the damper can be operated manually and fixed in any required position. Release of the locking mechanism can be achieved manually or automatically by applying the supply voltage.

Accessories

	Beschreibung	Typ
Electrical accessories	Auxiliary switch, 1 x SPDT 6 A (2.5 A), AC 250 V	SN1
	Auxiliary switch, 2 x SPDT 6 A (2.5 A), AC 250 V	SN2
Mechanical accessories	Adapter with clamp for rotary axes up to 20 mm for BF.. and BLF..	ZK-BF
	Adapter with DM18 rotary axis, L = 33 mm, for BF.. and BLF..	ZA18-BF
	Adapter 12/8 mm for BF.. and BLF..	ZA8-BF
	Adapter 12/11 mm for BF.. and BLF..	ZA11-BF
	Bracket for SN1 and SN2 auxiliary switches for BLF..	ZSN-BLF

Electrical installation

Wiring diagram

Note
- Caution: Main power supply voltage!
- Parallel connection of several actuators possible. Power consumption must be observed!

Dimensions [mm]

Dimensional diagrams