



## Open/Close actuator (AC/DC 24 V and AC 230 V)

### Application

The type BFG... spring-return actuator is intended for the operation of fire and smoke dampers in ventilation and air-conditioning systems.

### Mode of operation

The BFG... 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

There are two fixed microswitches in the spring-return actuator BFG... for indicating the end positions of the damper. Intermediate positions of the damper blade are shown by a mechanical 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.

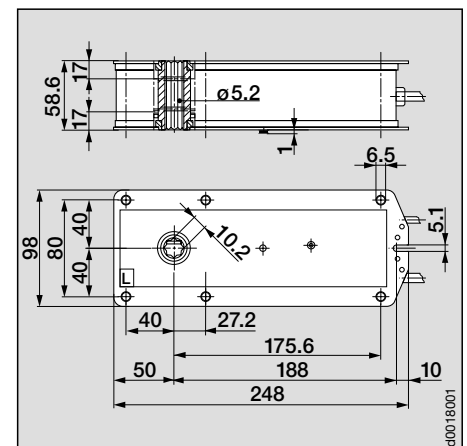
**Connection** is by means of flexible leads. The actuator BFG24 is also available with plug connectors suitable for attachment to the Type BKN230-24 communication and power supply unit fitted to their connecting leads (ordering code: BFG24-ST). This allows the actuator to be incorporated into the SBS-Control damper monitoring system.

**Electrical accessories for BFG24(-ST)**  
BAE72(-S) Thermoelectric Tripping Device (with test button), see pages 10/11.

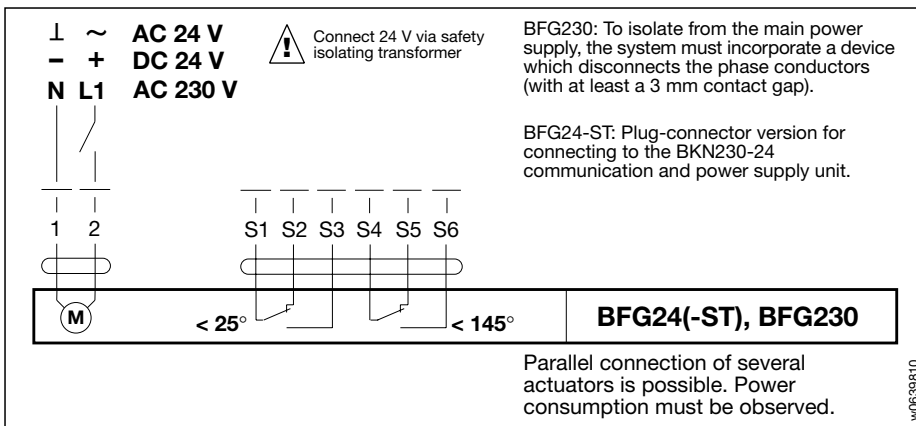
### Important

Read the note concerning installation and supply on page 2.

### Dimensions



### Wiring diagram



Technical data	BFG24(-ST)	BFG230
Nominal voltage	AC 24 V 50/60 Hz DC 24 V	AC 230 V 50/60 Hz -
Nominal voltage range	AC 19.2...28.8 V DC 21.6...28.8 V	AC 198...264 V -
Power consumption		
- motoring	7 W	8 W
- holding	2 W	3 W
For wire sizing	10 VA (I <sub>max</sub> 8.3 A @ 5 ms)	12.5 VA (I <sub>max</sub> 500 mA @ 5 ms)
Protection class	II	II
Degree of protection	IP 54	
Auxiliary switch	2 × SPDT 6(3)A, AC 250 V □ (contacts gold plate on silver)	
- Switching points	25°, 145° (△ angles of rotation of damper: 5°, 80°)	
Connecting cable	- motor 1 m, 2 × 0.75 mm <sup>2</sup> (halogen-free) - auxiliary switches 1 m, 6 × 0.75 mm <sup>2</sup> (halogen-free) (BFG24-ST with plug connectors, suitable for BKN230-24)	
Angle of rotation	180°	
Damper rotation	10 mm form-fit	
Torque	- motor min. 11 Nm - spring-return min. 8.5 Nm	
Running time	- motor 140 s - spring-return ≈ 20 s (@ t <sub>amb</sub> = 20 °C)	
Direction of rotation	selected by mounting L/R	
Position indication	mechanical with pointer	
Ambient temperature range	- 30... + 50 °C - Normal duty - 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	
Humidity test	to EN 60730-1	
EMC	CE according to 89/336/EEC	
Low Voltage Directive	CE according to 73/23/EEC	
Sound power level	motor max. 45 dB(A); spring ≈ 62 dB(A)	
Service life	min. 50 000 safe positions	
Maintenance	maintenance-free	
Weight	2800 g	3100 g