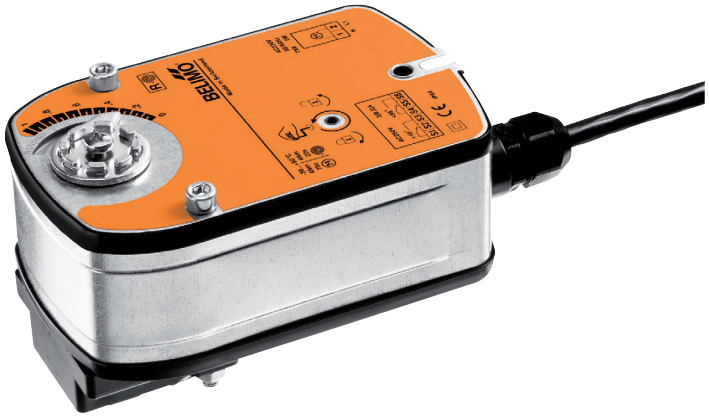
# Technical data sheet LRF230

**Rotary actuator with emergency control function for ball valves**

- **Nominal torque 4 Nm**
- **Nominal voltage AC 230 V**
- **Control Open-close**
- **Deenergised closed (NC)**



## Technical data

| | | |
|---|---|---|
| **Electrical data** | Nominal voltage | AC 230 V |
| | Nominal voltage frequency | 50/60 Hz |
| | Nominal voltage range | AC 198...264 V |
| | Power consumption in operation | 5 W |
| | Power consumption in rest position | 3 W |
| | Power consumption for wire sizing | 7 VA |
| | Connection supply / control | Cable 1 m, 2 x 0.75 mm² |
| | Parallel operation | Yes (note the performance data) |
| **Functional data** | Torque motor | Min. 4 Nm |
| | Torque spring return | Min. 4 Nm |
| | Direction of rotation spring-return | Deenergised NC, valve closed (A - AB = 0%) |
| | Manual override | with hand crank, can be fixed in any position |
| | Angle of rotation | 95° |
| | Running time motor | 75 s / 90° |
| | Running time emergency control position | <20 s / 90° |
| | Sound power level motor | 50 dB(A) |
| | Position indication | Mechanical |
| | Service life | Min. 60,000 emergency positions |
| **Safety** | Protection class IEC/EN | II reinforced insulation |
| | Degree of protection IEC/EN | IP54 |
| | EMC | CE according to 2014/30/EU |
| | Low voltage directive | CE according to 2014/35/EU |
| | Certification IEC/EN | IEC/EN 60730-1 and IEC/EN 60730-2-14 |
| | Mode of operation | Type 1 |
| | Rated impulse voltage supply / control | 2.5 kV |
| | Control pollution degree | 3 |
| | Ambient temperature | -30...50°C |
| | Non-operating temperature | -40...80°C |
| | Ambient humidity | 95% r.h., non-condensing |
| | Maintenance | Maintenance-free |
| **Weight** | Weight | 1.5 kg |

## Safety notes

- This device has been designed for use in stationary heating, ventilation and air conditioning systems and must not be used outside the specified field of application, especially in aircraft or in any other airborne means of transport.
- Outdoor application: only possible in case that no (sea)water, snow, ice, insolation or aggressive gases interfere directly with the actuator and that is ensured that the ambient conditions remain at any time within the thresholds according to the data sheet.
- Caution: Power supply voltage!
- Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied during installation.
- 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.
- Cables must not be removed from the device.

## Safety notes

- The device contains electrical and electronic components and must not be disposed of as household refuse. All locally valid regulations and requirements must be observed.

## Product features

**Mode of operation** The actuator moves the valve to the operating position at the same time as tensioning the return spring. The valve is turned back to the emergency position by spring force when the supply voltage is interrupted.

**Simple direct mounting** Simple direct mounting on the ball valve with only one screw. The mounting orientation in relation to the ball valve can be selected in 90° steps.

**Manual override** The valve can be manually operated and fixed in any position using a hand crank. Unlocking is carried out manually or automatically by applying the operating voltage.

**High functional reliability** The actuator is overload protected, requires no limit switches and automatically stops when the end stop is reached.

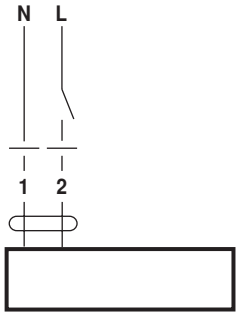
## Electrical installation

**Notes**

- Caution: Power supply voltage!
- Parallel connection of other actuators possible. Observe the performance data.

### Wiring diagrams

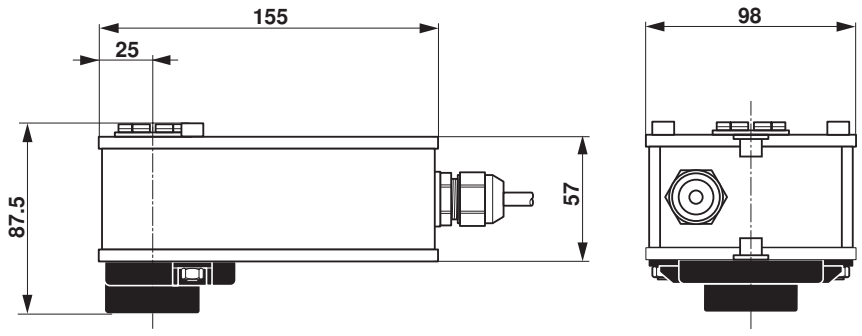
AC 230 V, open-close




**Cable colours:**
1 = blue
2 = brown

## Dimensions [mm]

### Dimensional drawings




## Further documentation

- Overview Valve-actuator combinations
- Data sheets for ball valves
- Installation instructions for actuators and/or ball valves
- General notes for project planning