# ASM 134: Damper actuator



**ASM134F130**




### How energy efficiency is improved

Torque-dependent cut-off facility for efficient usage of energy

## Features

- For operating air dampers, shut-off dampers, butterfly valves and multi-leaf dampers
- For controllers with a switching (3-point) output
- Self-centring spindle adapter
- Gear unit can be disengaged to position the damper and for manual adjustment
- Stepping motor with electronic activation and cut-out
- Direction of rotation changed by transposing the connections
- Suitable for all fitting positions
- Maintenance-free
- Version with halogen-free cable on demand

## Technical data

| | | |
|---|---|---|
| **Power supply** | | |
| | Power supply | 230 V~, ±15%, 50 Hz |
| | Power consumption | 3.7 W, 4.7 VA |
| **Parameters** | | |
| | Torque and holding torque | 30 Nm |
| | Running time for 90° | 120/240 s |
| | Angle of rotation | Max. 95° |
| | Admissible damper shaft | Ø 12...20 mm, □ 10...16 mm |
| | Admissible damper shaft (hardness) | Max. 300 HV |
| | Operating noise | < 30 dB (A) |
| | Response time | 200 ms |
| **Ambient conditions** | | |
| | Admissible ambient temperature | –20...55 °C |
| | Admissible ambient humidity | < 95% rh, no condensation |
| **Construction** | | |
| | Weight | 1.8 kg |
| | Housing | Lower section black, upper section yellow |
| | Housing material | Fire-retardant plastic |
| | Power cable | 1.2 m long, 3 × 0.75 mm² |
| **Standards and directives** | | |
| | Type of protection | IP40 (EN 60529)<br>IP54 (EN 60529)<br>IP55 (EN 60529) |
| | Protection class | II (IEC 60730) |
| | EMC Directive 2014/30/EU | EN 61000-6-1, EN 61000-6-2<br>EN 61000-6-3, EN 61000-6-4 |
| | Low-Voltage Directive 2014/35/EU | EN 60730-1, EN 60730-2-14 |
| | Over-voltage categories | III |
| | Degree of contamination | III |
| | Mode of operation | Type 2 B (EN 60730) |
| | Software | A (EN 60730) |

### Overview of types

| Type | Power consumption during operation | Power consumption when idle |
|---|---|---|
| ASM134F130 | 3,7 W, 4,7 VA | 1,1 W, 2,7 VA |

### Accessories

| Type | Description |
|---|---|
| 0361977001 | Assembly materials for M3R/M4R, MH32F/MH42F with ASM 124 |
| 0370990001 | Auxiliary change-over contacts, single |

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| Type | Description |
|---|---|
| 0370990002 | Auxiliary change-over contacts, double |
| 0370992001 | Potentiometer, 2000 Ω, 1 W |
| 0370992002 | Potentiometer, 130 Ω, 1 W |
| 0372200001 | Fitting bracket |
| 0372201001 | Spindle extension with coupling |
| 0372202001 | Lever, fitting strip |
| 0372203001 | Driver axle for auxiliary contacts |
| 0372204001 | Spindle for clamping lever 0370059 |
| 0372455001 | Assembly part; DEF DN25...65 for ASM 124/134 |
| 0372455002 | Assembly part; DEF DN80...100 for ASM 124; DN125 for ASM 134 |
| 0372455003 | Assembly part; DEF DN150...200 for ASM 134 |

*Auxiliary change-over contacts: Infinitely variable 0...90°, admissible load 5(2) A, 24...230 V*

## Description of operation

When voltage is applied to the cable (2a or 2b), the control unit to be activated is moved to any desired position.
Direction of rotation (viewing the spindle adaptor from the actuator):

- The coupling piece turns in the clockwise direction, with the voltage on the brown cable (2a).
- The coupling piece turns in the anti-clockwise direction, with the voltage on the black cable (2b).

In the end positions (limit stop of damper, limit stop due to angle-of-rotation limit, max. angle of rotation of 92° reached) or in the case of an overload, the electronic motor cut-off is activated (no limit switches). The running time can be set with switches S1 and S2 according to requirements. The manual adjustment is performed by turning the spindle adaptor after releasing the gear unit (button on housing cover).
Direction of rotation changed by transposing the connections.

## Additional technical data

The upper section of the housing with the cover, manual adjustment knob and cover knob contains the stepping motor and the SUT electronics. The lower section of the housing contains the maintenance-free gear unit and the spindle adaptor. To reverse the direction of rotation, the brown and black cables must be swapped.

**Auxiliary change-over contacts**

Switch rating max. 250 V~, current min. 20 mA at 20 V
Switch rating max. 4...30 V=, current min. 1...100 mA

## Intended use

This product is only suitable for the purpose intended by the manufacturer, as described in the “Description of operation” section.
All related product regulations must also be adhered to. Changing or converting the product is not admissible.

## Engineering and fitting notes

The concept of stepping motor and electronics enables the parallel operation of multiple air dampers with different torques. The actuator can be fitted in any position and can be plugged directly onto the damper spindle and fixed by means of the self-centring clamping lever.

**Beware of injury**
When the housing is opened, there is a risk of injury due to the return spring.
▶The housing must not be opened.

The maximum accessory equipment for an actuator is: 1 single auxiliary contact or 1 double auxiliary contact or 1 potentiometer. With the ASM 134, such accessories cannot be mounted if the length of the damper spindle < 52 mm. The angle of rotation can be limited to between 0° and 90° in 5° stages. The limitation is defined by means of a setting disc (under the coupling piece). This coupling piece is suitable for Ø 12...20 mm and □ 10...16 mm damper spindles.

## Outdoor installation

We recommend protecting the devices from the weather if they are installed outside buildings.


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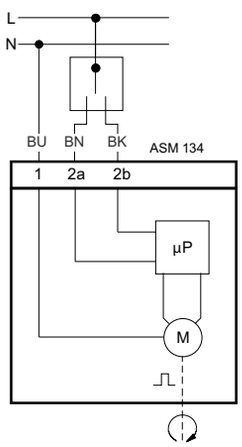
## Coding switch

| 90° | S1 | S2 | S3 |
|---|---|---|---|
| 240 s | off | on | – |
| 120 s | on | on | – |
| 120 s | on | off | – |
| 240 s | off | off | – |
| Factory setting position | on | on | on |

## Disposal

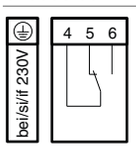
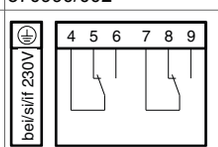
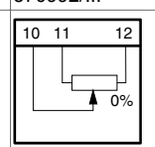
When disposing of the product, observe the currently applicable local laws.
More information on materials can be found in the Declaration on materials and the environment for this product.

## Connection diagram




Direction of operation 1:
2a closed, 2b open
Direction of operation 2:
2b closed, 2a open

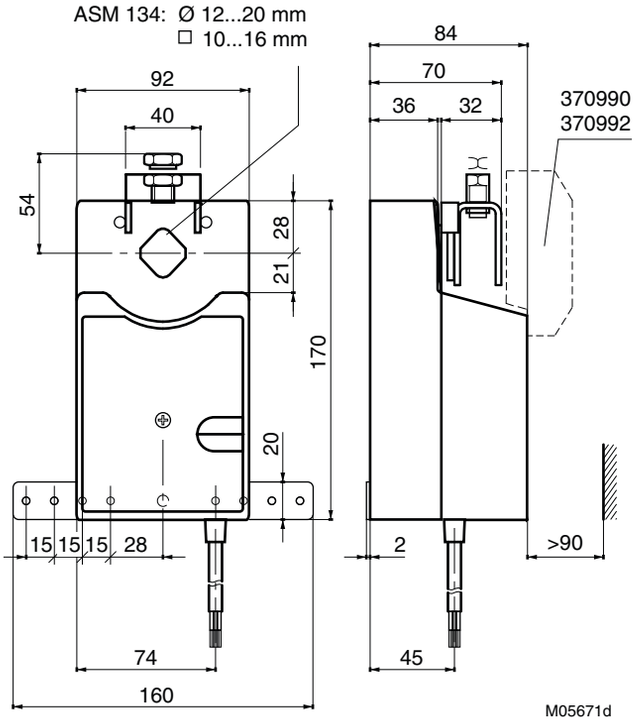
## Accessories

| 370990/001 | 370990/002 | 370992/... |
|---|---|---|
|  |  |  |

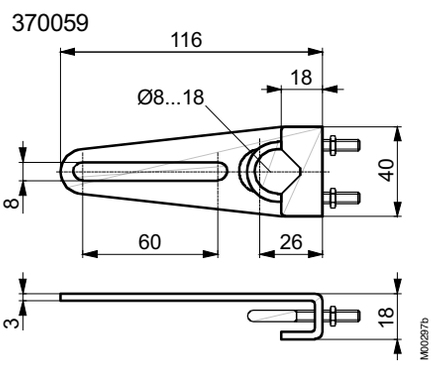
## Dimension drawing

ASM 124: Ø 10...20 mm
□ 10...16 mm

ASM 134: Ø 12...20 mm
□ 10...16 mm




## Accessories




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