

## ASM 134: Actuators

### How energy efficiency is improved

Torque related cut-off for efficient energy use.

### Areas of application

For controllers with switching outputs (3-point control). For actuation of air, shut-off and restrictor dampers and louvers.

### Features

- 30 Nm torque and holding torque
- 230 V, 50/60 Hz
- 120 or 240 s running time for 90° can be selected with switch
- Protection class IP 54
- Operating noise < 30 db(A)
- Self-centring axle adaptor
- Gearbox that can be disengaged for positioning the damper and manual adjustment
- Stepping motor with control and electronic cut-off
- Maintenance-free

### Technical description

- Two-part housing made of self-extinguishing plastic, lower section black and upper section yellow
- Suitable for all installation positions
- Connecting cable 1.2 m long, 3 × 0.75 mm<sup>2</sup>
- Direction of rotation can be changed by reversing connections



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Type <sup>3)</sup>	Torque Nm	Holding torque Nm	Running time <sup>1)</sup> for 90° s	Power	Weight kg
<b>ASM 134 F130</b>	30	30	120/240	230 V~	1.8
Power supply	± 15%, 50...60 Hz		Type of protection	IP 54 as per EN 60529	
Power consumption	3,7 W	4,7 VA	Protection class	III as per IEC 60730	
Angle of rotation	90° <sup>1)</sup>		Noise while running	< 30 dB(A)	
Damper spindle	Ø 12...20 mm □10...16 mm		Response time	200 ms	
Damper spindle (hardness)	max. 300 HV		Wiring diagram	<a href="#">A05669</a>	
Permissible ambient temp.	-20...55 °C		Dimension drawing	<a href="#">M05671</a>	
Permissible ambient humidity	< 95% rh without condensation		Fitting instructions	MV 505771	
			Declaration of materials	MD 51.022	

### Accessories

- 0361977 001** Assembly kit for MH32 / MH42 control valve; MV 505477  
**0370059 000\*** Clamp-on lever for shafts of d=8-18 mm  
**0370990 001\*** Auxiliary change-over contacts <sup>2)</sup>, single, MV 505446  
**0370990 002\*** Auxiliary change-over contacts <sup>2)</sup>, double, MV 505446  
**0370992 001\*** Potentiometer, 2000 Ω, 1 W, MV 505446  
**0370992 002\*** Potentiometer, 130 Ω, 1 W, MV 505446  
**0372200 001** Fixing bracket; MV 505676  
**0372201 001** Spindle extension with coupling; MV 505676  
**0372202 001** Lever and tape; MV 505676  
**0372203 001** Connecting piece for contact unit; 0370990; MV 505676  
**0372204 001** Spindle for clamp-on lever 0370059; MV 505676

<sup>\*)</sup> Dimension drawing or wiring diagram are available under the same number

1) Maximum angle of rotation: 95° (without stops)

2) Fully variable from 0...90°; max. loading 5 (2) A, 24...230 V

3) Version with halogen-free cable available on request

### Operation

By connecting the power supply to either cable 2a or cable 2b, the final control element can be moved into any desired position.

The coupling piece turns (as viewed from the actuator towards the spindle adaptor) in a clockwise direction if power is connected to the brown wire (2a), and in an anti-clockwise direction if connected to the black wire (2b).

The electronic motor cut-out comes into operation (no limit switches) in both end positions (on reaching the damper stop, or if stopped by the rotation-angle limiter, or on reaching the maximum angle of 92°) or in the event of an overload.

The running time can be matched to requirements using switches S1 and S2. Manual adjustment by turning the spindle adaptor after de-coupling the gears (button on housing cover)

The direction of rotation can be changed by swapping the power-supply wires over.

### Engineering and fitting notes

The concept of combining stepping motor and electronics allows several dampers with different torque levels to be run in parallel. The actuator can be mounted in any position, can be inserted directly onto the damper shaft and is fixed using the self-centring clamp.

N.B.: The housing should not be opened.

The following accessories can be fitted to each actuator: one set of single auxiliary contacts or one set of double auxiliary contacts or one potentiometer. On the ASM 134, this type of accessory cannot be fitted if the length of the damper spindle is < 52mm. By re-positioning a disc under the coupling piece, the angle of rotation can be limited between 0 and 90° in steps of 5°. The coupling piece on the is suitable for damper spindles of Ø 12...20 mm and □ 10...16 mm.

**Fitting outdoors.** If the devices are fitted outdoors, we recommend that additional measures be taken to protect them against the effects of the weather.

### Coding switches

90°	S1	S2	S3
240 s	off	on	–
120 s	on	on	–
120 s	on	off	–
240 s	off	off	–
ex-works position	on	on	on

### Additional technical data

The upper part of the housing, with the lid, manual-adjustment knob and the cap, contains the stepping motor and the SUT electronic control unit. The lower part contains the maintenance-free gears and the spindle adaptor. To reverse the direction of operation, the brown and the black wires should be transposed.

#### Auxiliary change-over contacts

Switch rating: max. 230 V a.c.; min. current 20 mA at 20 V

Switch rating: max. 4...30 V d.c.; min. current 1...100 mA

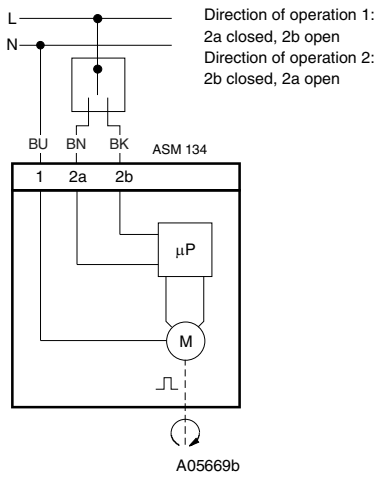
#### Power consumption:

Type	Running time s	Condition	active power P W	apparent power S VA
ASM 134 F130	120	Operating	3.7	4.7
		Standstill	1.1	2.7

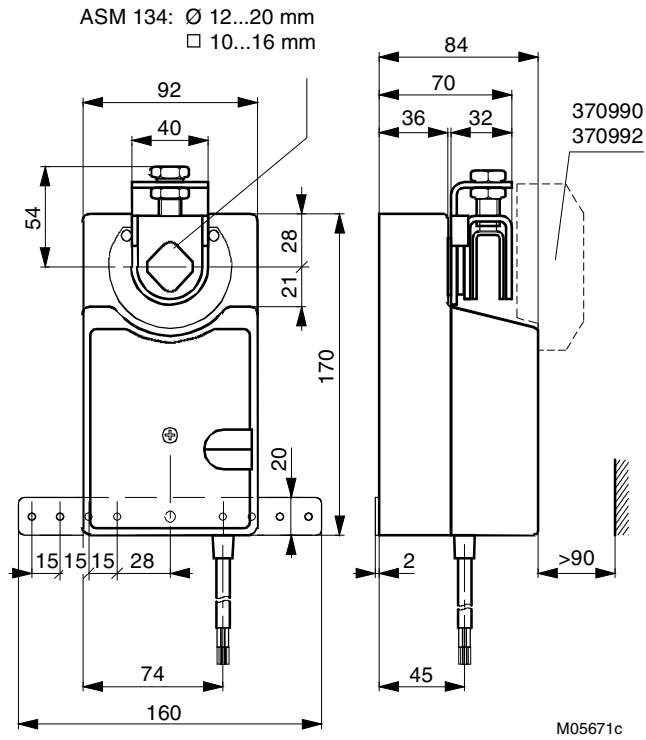
### CE conformity

EMC Directive 2004/108/EC	Machine Directive 98/37/EEC (II B)	Low-voltage Directive 2006/95/EC
EN 61000-6-1	EN 1050	EN 60730-1
EN 61000-6-2		EN 60730-2-14
EN 61000-6-3		Over-voltage category III
EN 61000-6-4		Degree of pollution III

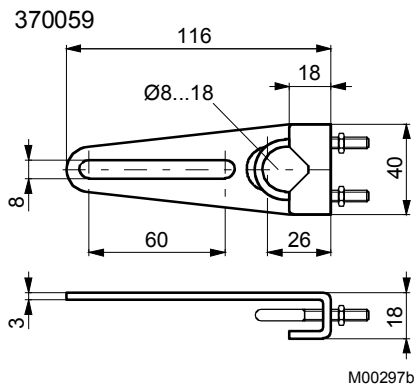
### Wiring diagram



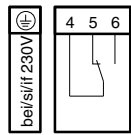
### Dimension drawing



### Accessories

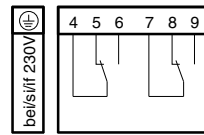


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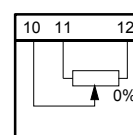
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