ASM 134: Damper actuator

ASM134F130

Improving energy efficiency

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

Features

- For controllers with a switching (3-point) output
- For operating air dampers, shut-off dampers, butterfly valves and multi-leaf dampers
- 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...60 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	IP 40 (EN 60529), IP 54 (EN 60529), IP 55 (EN 60529)
	Protection class	II (IEC 60730)
	EMC directive 2004/108/EC	EN 61000-6-1, EN 61000-6-2 EN 61000-6-3, EN 61000-6-4
	Low-voltage directive 2006/95/EC	EN 60730-1, EN 60730-2-14
	Over-voltage categories	III
	Degree of contamination	III
	Mode of operation	Type 1C (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

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 documents 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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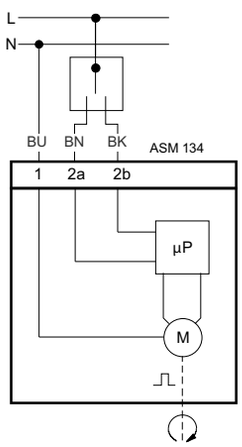
Coding switch

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

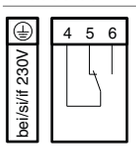
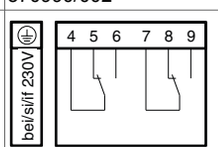
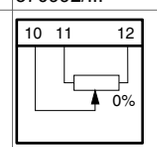
When disposing of the product, observe the currently applicable local laws.
More information on materials can be found in the Declaration on materials and the environment for this product.

Connection diagram



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

Accessories

370990/001	370990/002	370992/...
		

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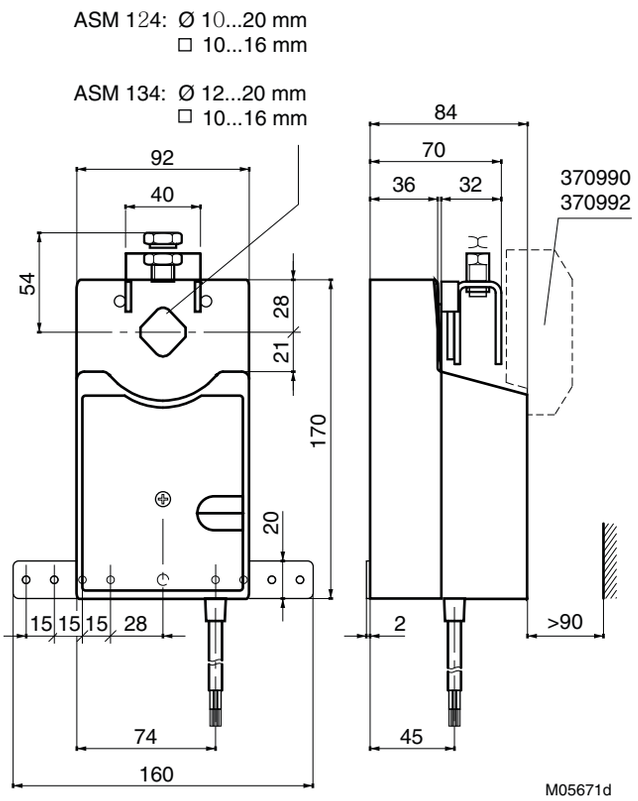
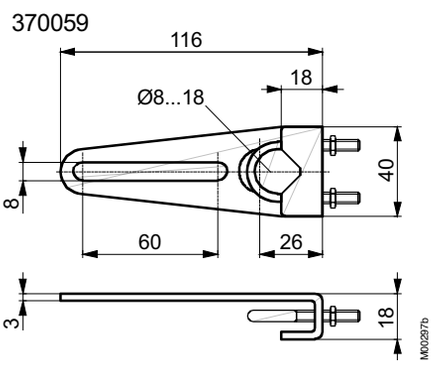
Dimension drawing



Accessories



Fr. Sauter AG
Im Surinam 55
CH-4016 Basel
Tel. +41 61 - 695 55 55
www.sauter-controls.com

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