

ASM5/10 Rotary Actuators

For controllers with switched output (three-point control). For the operation of air dampers, cut-off dampers and multi-louvre dampers.

Two-piece housing of fire-retardant plastic, black lower part, yellow upper part. Stepping motor with electronic control unit and maintenance-free gearbox; electronic, torque-based cut-out via stops on either the actuator or the air damper. Self-centring spindle adaptor for fitting to the damper spindle.

Coding switch for choosing the running time. Gearbox can be de-coupled in order to position the damper or to make manual adjustments. Power cable is 1 metre long, $3 \times 0.75 \text{ mm}^2$, fixed to the housing.

Fixing bracket, which functions as an anti-torsion device, has two metal screws. Suitable for fitting in any position. M5 thread holes for fitting to fixing bracket.



T09868

Model Types	Model	Description
	ASM-5-230	ASM-5-230 Rotary Actuator 5Nm, 230Vac
	ASM-5-24	ASM-5-24 Rotary Actuator 5Nm, 24Vac
	ASM-10-230	ASM-10-230 Rotary Actuator 10Nm, 230Vac
	ASM-10-24	ASM-10-24 Rotary Actuator 150m, 24Vac
Technical Data	Power Supply	AC24V 50/60 Hz +/-20% -(ASM-xx-24) AC230V 50/60 Hz +/-15% - (ASM-xx-230)
	Power Consumption - running	230Vac – approx 1.6VA 24Vac – approx 1.5A
	Power Consumption - standstill	230Vac – approx 1.6VA 24Vac – approx 1.5VA
	Damper Spindle	Ø8..16mm □6.5..12.7mm
	Damper Spindle (hardness)	Max. 300HV
	Torque	5Nm (ASM-5) 10Nm (ASM-10)
	Holding Torque	5Nm (ASM-15) 10Nm (ASM-10)
	Angle of Rotation	90° (maximum angle of rotation: 95° – without stops)
	Running Time	120s for 90° - 15Nm 120s for 90° - 30Nm
	Ambient Temperature Limits	-20..55°C (Operating)
	Ambient Humidity	< 95% non-condensing
	Degree of Protection	IP 54 as per EN 60529
	Protection Class	III as per EN 60730 II as per EN 60730
	Noise while Running	< 30dB(A)
	Weight	0.7 kg

Accessories	Model	Description
	ASM-SK-001	Auxiliary Switch Kit with Change-Over Contacts, Single
	ASM-SK-002	Auxiliary Switch Kit with Change-Over Contacts, Double

Operation

The final control element can be moved into any desired position by connecting the power supply. In 3-point control systems, the spindle adaptor turns (as viewed from the actuator towards the coupling) in a clockwise direction if power is connected to the brown wire, and in an anti-clockwise direction if connected to the black wire.

In 2-point control systems, the spindle adaptor turns (as viewed from the actuator towards the coupling) in a clockwise direction if power is connected to the brown wire, and in an anti-clockwise direction if no power is connected to the brown wire. The black wire always has power applied to it. 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 95°) or in the event of an overload.

Manual adjustment by de-coupling the gears (by pressing the button on the housing cover and moving the spindle adaptor at the same time).

In 3-point control systems, the direction of rotation can be changed by swapping the power-supply wires over.

Installation Notes

The concept of the synchronous motor allows several dampers to be run in parallel. The actuator can be mounted in any position (including upside down). It can be put directly onto the damper shaft and clipped onto the anti-torsion device. The self-centering spindle adaptor ensures that the damper spindles are operated smoothly. The damper drive can easily be removed from the damper spindle without having to take off the anti-torsion device.

The angle of rotation can be limited between 0 and 90°, and set anywhere between 5° and 80°. The limit is set by means of a screw on the drive itself and with the stop on the self-centering spindle adaptor. The spindle adaptor is suitable for damper spindles of Ø 8...16 mm, □6.5...12.7 mm.

The following accessories can be fitted to each actuator: one set of auxiliary contacts.

The auxiliary contacts should be screwed onto the drive's top cover. Before the mechanical connection can be established, the indicator knob should be removed. A new indicator is then visible on the lid of the auxiliary contacts.

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

The upper part of the housing, with the lid, manual-adjustment knob and the cap, contains the stepping motor and the actuator 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

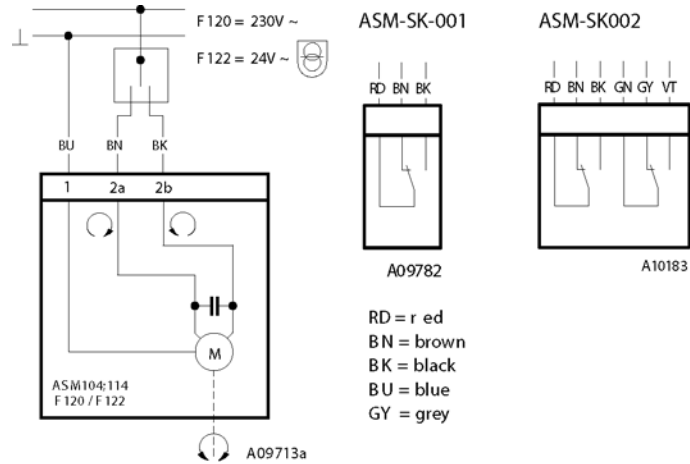
Switch rating: max. 230 V a.c.; min. current 20 mA at 20 V

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

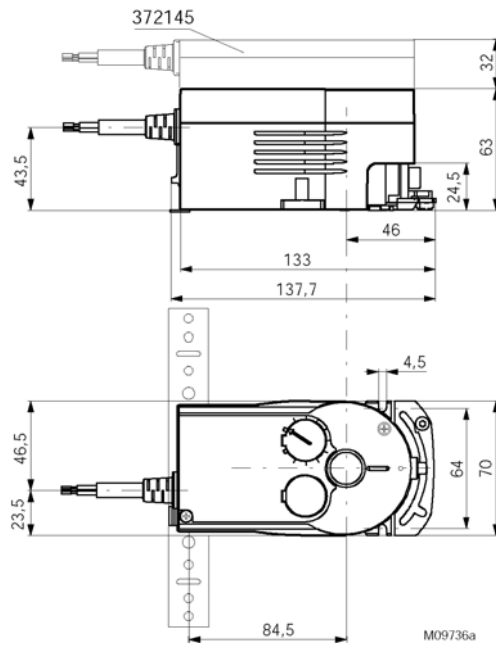
Wiring Terminals



Note: The electric installation, assembly, device connection and commissioning may only be carried out by qualified professionals! Read the notes about the use and torque requirements of the damper actuators.



Dimensions



All dimensions are in mm.