

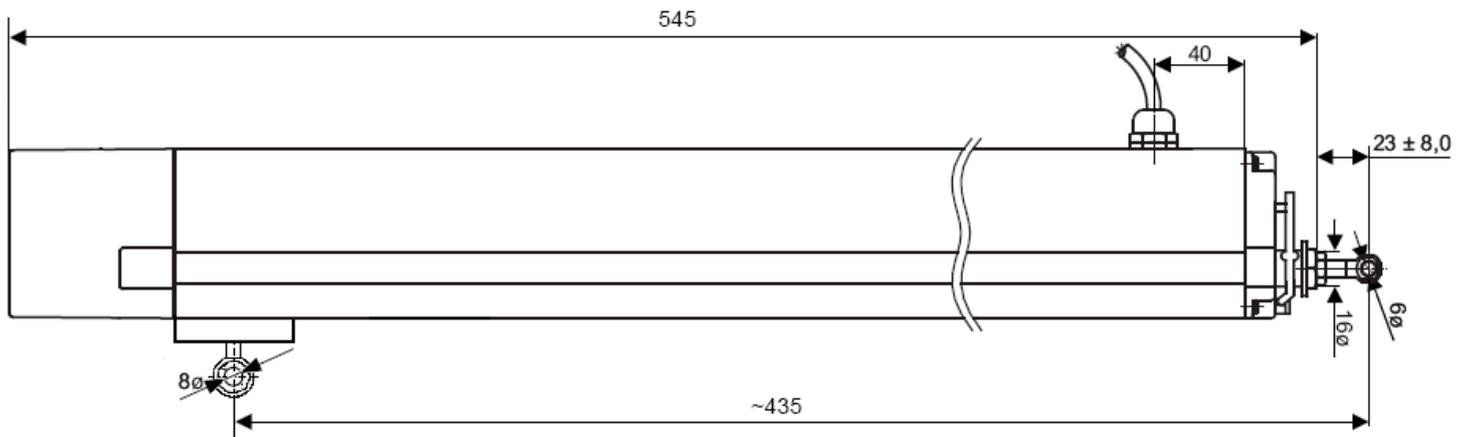
Using directions of spindle drive SP8 and FSP SHEV

User Manual

Contents

Dimensions of actuator.....	2
Technical description.....	2
Assembly instruction.....	2
Spare parts, attachments and controls.....	2
Applications.....	3
Routing of cable and electrical connections.....	3
Maintenance and exchange of system components.....	3
After installation.....	3
Manufacturer's declaration.....	3
Total life-span.....	3
FSP window control procedure	3
FSP window maintenance procedure	3
Declaration of Conformity.....	4

Dimensions of actuator



Technical description

- Linear spindle drive for smoke heat exhaust ventilation (SHEV) and natural ventilation systems.
- Colour of drive housing: silver anodized aluminium (E6/EV1), (optional drive housing in RAL colours).
- With electronic end switches and overload disconnection.
- Connection cable: silicone (type FRNC-SIHSI-FE90), length; approx. 1,0 m, 2x0,75mm² (standard).
- Certifikates: Passed a fire test oriented to DIN 18232, part 3, para 3.6 in the Dortmunder material testing institute. TÜV proved protection class IP 54 (optional IP 65).

<i>Technical specifications</i>	
Power supply voltage	24V DC
Output power	1,0A
Stroke force	800N
Pulling force	400N
Lifting speed (at 24 V DC, 2/3 load)	7,0mm/s
Ambient temperature range	od -5°C do +75°C
Power limitations	1,2A
Dimensions	43x76x545mm

Danger of Crushing and Clamping! The Window Closes Automatically!



When closing and opening the drive stops by the integrated overload disconnection.

Caution - Accelerator can seriously injure fingers and limbs. During assembly and operation, do not interfere into the window gap and the travelling chain or spindle! Potential churning and cutting points between the casement and the frame, dome lights and support frame must be secured up to a height of 2,50m.

Assembly instruction

For professional assembly, installation and maintenance by trained, qualified and sensible electricians and skilled fitters with knowledge of electrical and mechanical drive assembly. A reliable operation and an avoidance of damage and dangers is only guaranteed when the equipment is assembled carefully and the setting are carried out according to these instruction. Please pay attention to connection assignment, the permissible on drive voltage (see type indication plate), the minimum and maximum power ratings (see technical data) and keep the assembly and installation notes exactly. Connect never 24 V drives to 230 V.

Spare parts, attachments and controls

For spare parts or extension only use original spare parts.

Applications

Always ensure that your system corresponds to the valid regulations. In particular pay attention to opening range of the window, permissible fitting size, opening time and opening speed, pressing force, temperature resistance of the drive and connection cable, crosssection of the leads in relation to the cable length and power consumption. Required mounting parts are to be adapted to the window type and are to be complemented if necessary.

Routing of cable and electrical connections

are only to be done by a qualified electrical company. In terms of installation stick to all significant guide lines. If possible, agree on cable types with the local approval authorities and fire protection authority. Please note particularly: Install all low voltage cables (24V DC) separately from the highvoltage cables. The cables must be installed in such a way that they cannot be sheared off, twisted or bent off during operation. Junction boxes and external drive controls must be accessible for maintenance work. Implement cable type, cable length and crosssection in accordance with the technical data in order for maintenance and repair all 230V system components must be able to be disconnected from the power supply.

Maintenance and exchange of system components

- Smoke heat exhaust ventilation and natural ventilation systems. The operational availability status is to be examined regularly. Always ensure that your system corresponds to the valid regulations. Manufacturer recommend maintenance service in every 6 months.
- Always disconnect in all-pole case the power supply and - so far available - the back up batteries before maintenance work or exchange of system components (e.g. exchange of the drive).
- A durable drive operation presupposes regular maintenance by the specialized and qualified company (is legally prescribed with smoke and heat venting systems).
- The operational availability status is to be examined regularly. With the maintenance: free the equipment from any contamination, check fixing and locking screws, test the opening and closing operation by trail run.
- Defective equipment must only be repaired in our works.

After installation

and any changes to the system check all functions by means of a trail run. After completion the user have must be instructed into all important operating steps.

Manufacturer's declaration

The drive including its controller is manufactured and tested according to the European Regulations.

Total life-span

Consider with automatic operation (natural climatic and ventilation control) the total life-span of 11 000 ventilation cycles.

FSP window control procedure

The FSP window is one of the elements of the natural smoke and heat ventilation system. Such system, acting as an active fire protection measure, should be serviced by qualified technicians at 6-month intervals. It is recommended to hire the same company which installed and started the system. When servicing the system it is necessary to check if

- both motors extend at the same pace. Different speeds of the motors can be caused by variations in the power supply line resistance of one of them. In such case, it is necessary to check the connections and restore equal working speeds of both motors. The permissible speed difference is 1%.
- both motors close the window with the fore of overload. If it does not happen, it is necessary to adjust the motors following the instructions contained in the installation manual. Closing the window with the force of overload ensures proper window tightness
- FSP window opens when connected to the control system. If not, it is necessary to verify the operation of SP8 motors by connecting them directly to the power supply (24V batteries) and determine whether the power consumption exceeds the permissible values provided on the motor data plate
- Check all metal elements for corrosion and, if need be, remove any rust spots. (see “**FSP window maintenance procedure**”)
- Check wooden elements for any signs of damage, especially at fixing points of metal holders coupling motors to the sash

FSP window maintenance procedure

- Windows are double coated with ecological acrylic lacquer. They should be repainted every 2-5 years depending on the usage conditions.
- It is recommended to remove leaves and other grime from the flashing at least once a year to ensure correct rainwater draining.
- Every couple of years, roof window hinges should be lubricated with grease.
- Elements covered with rust should be cleaned (with sand paper, wire brush) washed and painted.

Declaration of Conformity

KONFORMITÄTSERKLÄRUNG DECLARATION OF CONFORMITY

Hersteller
Manufacturer

aumüller

Aumüller Aumatic GmbH
Gemeindewald 11
86672 Thierhaupten
Germany

Produktart | Product type: Spindelantriebe für Fenster | Spindle drives for windows
Produktbaureihe | Product series: SP8 xxx S2 - 24V
SP8-Z xxx S2 - 230V

Ab Seriennummer | From serial number: XXXXXX-XX-XXX
Ab Datum | From date: (Year-W-Week) 16W10

Wir bestätigen die Konformität des oben bezeichneten Produktes mit folgend gelisteten EU-Richtlinien sowie Normen:
We herewith confirm the conformity of the above mentioned product with EC Directives and the standards listed below:

KONFORMITÄT CONFORMITY

Richtlinie über elektromagnetische Verträglichkeit 2014/30/EU
Directive relating to Electro-Magnetic Compatibility 2014/30/EU
Niederspannungsrichtlinie 2014/35/EU
Low Voltage Directive 2014/35/EU

HARMONISIERTE NORMEN HARMONIZED STANDARDS

DIN EN 60335-2-102:2016-05
DIN EN 61000-6-1:2007-10
DIN EN 61000-6-2:2006-03
DIN EN 61000-6-3:2011-09
DIN EN 61000-6-4:2011-09

SONSTIGE TECHNISCHE NORMEN UND SPEZIFIKATIONEN FURTHER TECHNICAL STANDARDS AND SPECIFICATIONS

Montageanweisung | Installation instructions

Thierhaupten, 01.03.2016



Geschäftsführer / Verantwortlich für die technische Dokumentation
Managing Director / Head of technical documentation



Die Sicherheitshinweise der mitgelieferten Produktdokumentation sind zu beachten!
The safety instructions of the supplied product documentation are to be observed!