

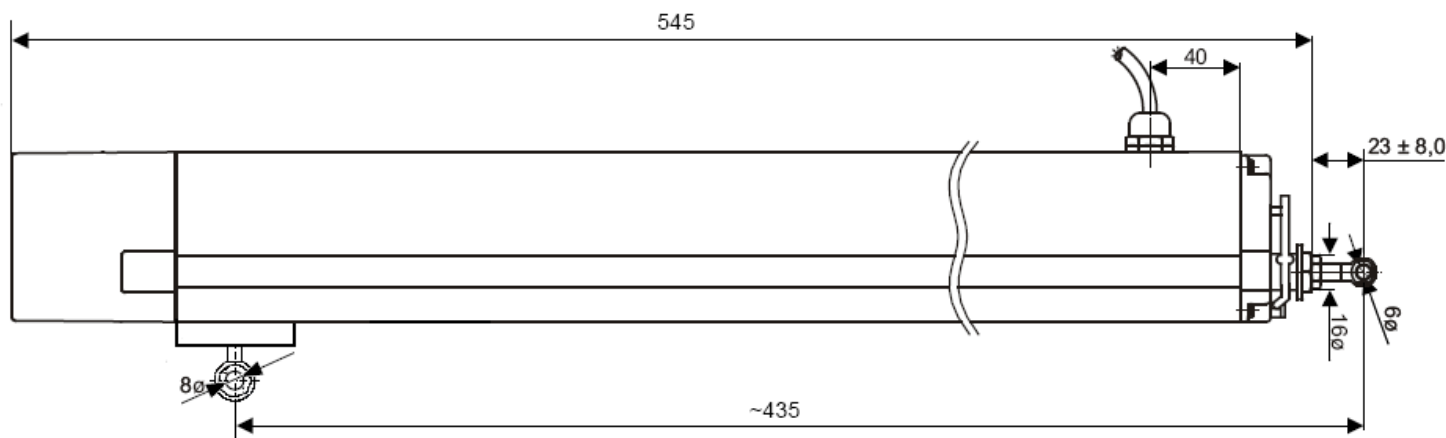
Using directions of spindel drive SP8 and FSP SHEV

User Manual

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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	1,1A
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 Incorporation

EINBAUERKLÄRUNG
für eine unvollständige Maschine
(nach Anhang II-1 B der EG-Richtlinie 2006/42/EG)

DECLARATION OF INCORPORATION
for a partly completed machinery
(in accordance with Annex II-part B of EG-Directive 2006/42/EG)

Hersteller
Manufacturer

aumüller

Aumüller Aumatic GmbH
Gemeindewald 11
86672 Thierhaupten

Produktbezeichnung
Product designation

Spindelantrieb / Spindle drive
SP8 – 24VDC
SP8-Z – 230VDC

Folgende grundlegende Sicherheits- und Gesundheitsschutzanforderungen nach Anhang 1 der o. a. EG-Richtlinie sind angewandt und eingehalten:
Follow basic compromise of safety and health protection requirements are applied and follow in accordance with Annex II-1 B of s. a. EG-Directive:

Nr./ no: 1.1.2; 1.1.3 / 1.2. 1 / 1.3.2-1.3.7 / 1.5.1; 1.5.4; 1.5.11 / 1.7.2; 1.7.3; 1.7.4, -4.1, -4.2, -4.3

Die speziellen technischen Unterlagen nach Anhang VII B wurden erstellt
The relevant technical documentation described in Annex VII, part B is prepared

Die Montageanleitung nach Anhang VI wurde erstellt
Assembly instructions described in Annex VI are prepared

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

Richtlinie über elektromagnetische Verträglichkeit 2004/108/EG, Niederspannungsrichtlinie 2006/95/EG
Directive concerning Electromagnetic Compatibility 2004/108/EC, low voltage Directive 2006/95/EC

Hiermit erklären wir, dass das Teil in der von uns gelieferten Ausführung und gemäß den beigefügten Betriebs- und Installationshinweisen zum Einbau in eine Maschine bestimmt ist, und ihr Betrieb solange untersagt ist, bis festgestellt ist, dass die Maschine, in die genanntes Teil eingebaut werden soll, den Bestimmungen der EG Maschinenrichtlinie 2006/42/EG entspricht.
We herewith declare that the part in the version delivered by us is intended to be installed in a machine in accordance with the enclosed operating and installation instructions, and that its operation is prohibited until the machine, into which the part is to be installed, is found to comply with the regulations of the EG Machine Directive 2006/42/EG.

Wir werden der zuständigen Behörde ggf. die vorgenannten speziellen technischen Unterlagen in Form von Papier oder elektronisch übermitteln.
We shall transmit the aforesaid relevant technical documentation in hardcopy- / or electronic form to appropriate authority.

Die vorgenannten speziellen technischen Unterlagen können angefordert werden bei:
The aforesaid relevant technical documentation can be required by follow person:

Rechtsverbindliche Unterschrift:
Legally binding signature:



Thierhaupten, den 28.05.2014
Gemeindewald 11
86672 Thierhaupten