

Operation manual - Rack actuator E-xxx-24

Intended Use

Electro-rack actuator for automated natural ventilation to be connected to K + G / Grasl SHEVS Control Centres or Ventilation Controls. The installation is carried out in SHE mountings of type BF or BG (e.g., for skylights or roof flaps). For purely ventilation purposes, mount the actuator directly on the curb and ventilation frame.

Do not operate the actuator in the hand area below a mounting height of 2.5 m.

Use only in dry interiors.

Scope of delivery

Actuator with connection cable and eyebolt.

Further fixing material (fixing plugs, mounting bracket, coupling bracket etc.) is available separately.

Safety Instructions



WARNING!

Danger in the case of misuse!

Be sure to follow these instructions and keep them in a safe place.

⚠ Only authorised technical staff may carry out installation and connection.

⚠ The mounting material must be designed to suit the power specified on the actuator.



The actuator is not intended for operation in the hand area. There is a danger of crushing when reaching in due to automatic movement of the domelight / roof flap!

⚠ Observe the local workplace safety and accident prevention regulations, as well as the relevant rules of engineering, such as EN standards.

⚠ Keep children away from actuator and controls.

Installation and connection

⚠ The actuator must swing freely throughout the complete stroke and should not touch any part of the building.

⚠ Note the swinging movement of the actuator while positioning the connection box and the length of the connection cable. Provide the connection cable with a strain relief.

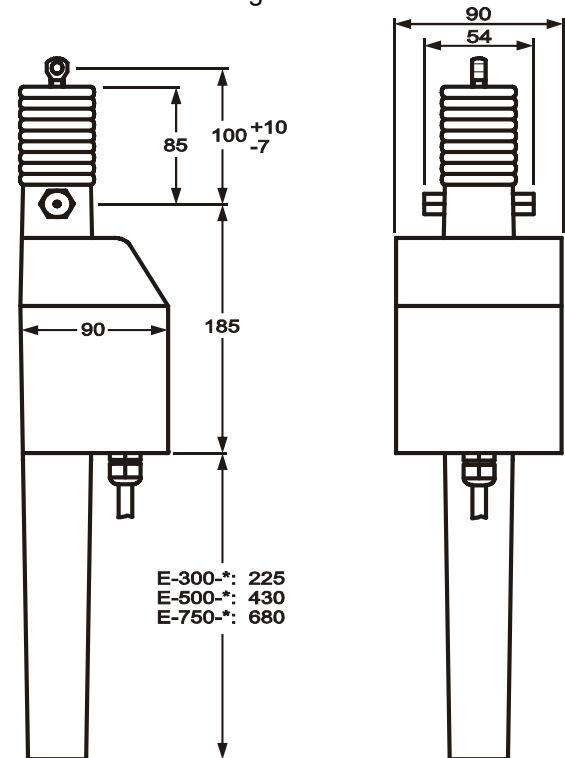
⚠ Flush-align the eyebolt, mounting bracket and coupling bracket. Ensure that adequately dimensioned bearing surfaces are in place for the mounting bracket and coupling bracket.

⚠ In the case of direct driving, e.g., with accumulators during installation or maintenance work, the actuator must be disconnected from the Control Centre / Control!

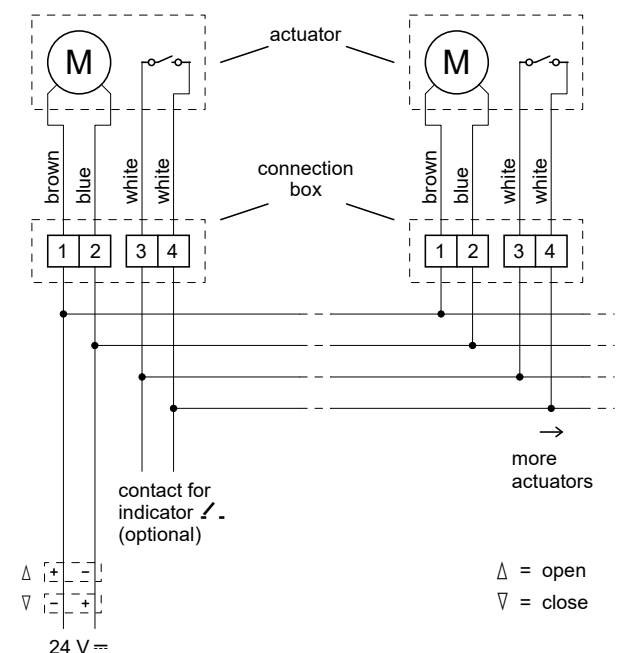
Fix the actuator with the fixing plugs into the mounting bracket. Fix the eyebolt with the bolt into the coupling bracket and secure with washer and splint pin.

Observe the relevant installation instructions while mounting in the fitting.

Dimensional drawing:



Connection:



Functions

The actuator has an emergency power-off, which will react in the event of overload. In this case, it continues only when moving in the other direction briefly.

Contact for position indicator $\swarrow _$: When moving towards OPEN, the contact is closed. The contact opens when the actuator has switched off while moving towards CLOSED.

\swarrow The travel direction of the actuator must not be switched immediately.

Maintenance

The actuator is maintenance-free. Check installation components and connection cable at least once a year, unless specified otherwise by any other local regulations.

Clean with a dry cloth. Do not use any solvent cleaner.

Technical data

Type	E-xxx-24
Stroke (xxx)	see name plate
Dimensions (in mm)	see dimensional drawing
Push / pull force	see name plate
Nominal voltage (inversion of polarity for changing the travel direction)	24 V $\overline{\text{=}}$ (+6 V / -5 V)
Required pause when changing the travel direction	≥ 1 s
Current input	0.65 A
Current input in the case of emergency power-off	0.83 A (ca. 100 ms)
Inrush current	ca. 2 A / 30 ms
Mode of operation / duty cycle (control voltage may be connected permanently)	S3 25 %
Travel speed	ca. 8 mm/s
Ambient temperature	-5 °C ... +60 °C
Relative humidity	20 % ... 80 %, non-condensing
Enclosure protection rating	IP54 (300 mm stroke) IP33 (stroke ≥ 500 mm)
Enclosure	plastic (light grey, like RAL 7035)
Connection cable (PVC, ca. 2.5 m)	4 x 0,5 mm ² (with contact $\swarrow _$)
Service life (stroke cycles)	> 10000
Stability	3500 N
Load rating of internal contact $\swarrow _$ (bistable). Provide fuse F 1 A on site	24 V $\overline{\text{=}}$ / 1 A
Emission sound pressure level	L _{pA} \leq 70 dB(A)

The requirements of Directives 2014/35/EU and 2014/30/EU are met. **CE**

Malfunctions

Fault	Cause	Remedy
Actuator without function	No supply voltage	Check Control Centre / Control
	Supply line interrupted	Check supply line
	Emergency power-off activated	Switch travel direction briefly
	Wind and rain control active	(no error)
Wong travel direction	Control cables are swapped	Swap control cables

Disposal

Dispose of the product using an environment-friendly method and not as domestic waste.