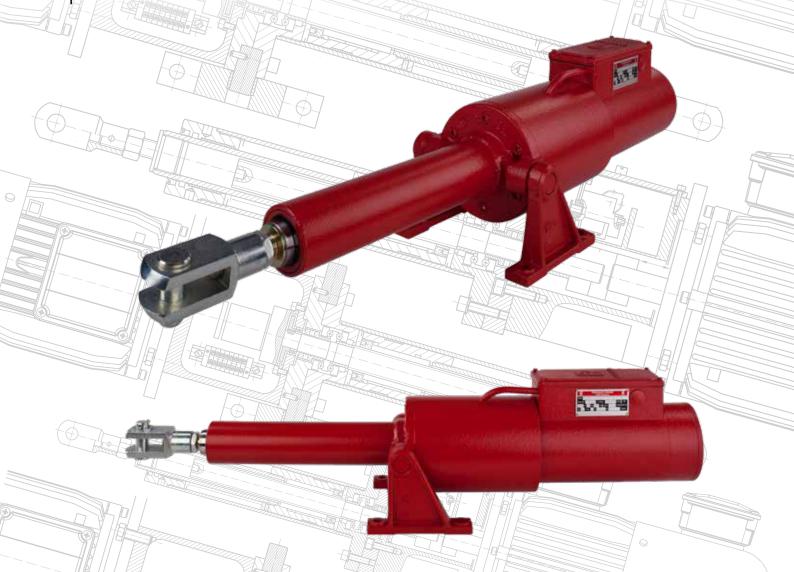


Electric actuators

The basic idea of an electric actuator is the transformation of a rotating motion into a linear motion. For more than five decades, we have pursued this idea resulting in a concept that is of convincing perfection.



RAHMANN Quality for the Future

The spindle system (spindle and spindle nut) is located in the completely encapsulated housing of the actuator. Power transmission outward is effected via a hard-chromium plated connecting rod. The entire system is a completely closed unit.



Our concept also features a very compact design. Moreover, the sturdiness of our drives deserves particular notice. This allows electric actuators by Rahmann to be operated always safely and reliably in most diverse applications and under most adverse operating conditions.

At the same time the travel speed is reduced and speeds of 3 mm/sec up to 25 mm/sec at forces of 40,000 N can easily be realized. This results in a multitude of possible combinations which can be adjusted to the respective requirements.

Another highlight of these series is the mechanical power circuit breaker. The latter also allows control of the force along the entire stroke. Consequently, in addition to a determination of the travel by means of intermediate and final positions the specific force can be determined as well.

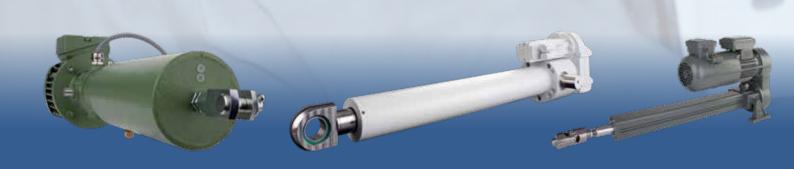


The series presented here use a motor that has been developed especially for such drives. This motor features a very compact design and develops its specific output within very short time.

From speeds of 50 mm/sec up to 150 mm/sec result forces of 300 N up to 15,000 N. The required compression and tractive forces can be considerably increased by use of a gear.



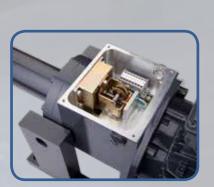
Should a malfunction occur and the previously selected load be exceeded, the electric actuator will switch off and that before damage to the entire system will occur.



Furthermore, this component provides for a floating mounting of drive and connecting rod and, thus, decouples the motor from axial forces, which could lead to damages in case of a rigid system. In addition, electric actuators by Rahmann feature a multitude of further options.

• E.g. mechanical check-back switches (for positions) can be used for both, intermediate stroke positions as well as an individual adjustment of the travel. This leads to an exact adjustment of the electric actuator to the prevailing operating conditions.

Moreover, the system of a manual emergency control allows adjustment even in case of a voltage drop. The crank handle required to this end is integrated in the drive housing - thus, it cannot get lost and you do not have to search for it in case of need. The system is designed so that control current will be interrupted as soon as the crank handle is connected. This provides for reliable protection against the danger of accident due to unexpected return of power.





• A 4-20 mA signal enables a functionspecific implementation into the existing control technology. This can easily be realized with all systems usual in the market.



- A standstill heating system or an additional cooling system can be provided, too. Therefore, it does not matter whether the electric actuator is operated under arctic temperature conditions, in tropical climate, or under extremely hot temperature conditions.
- A functional protection of the connecting rod can be used to protect against icing or possibly abrasive - bad soiling or falling stones. A protection of the connecting rod designed as telescopic steel tube or use of a chrome leather bellow strongly increases operational reliability.
- Thanks to special executions and numerous fastening possibilities an optimum solution will be found even in cramped or adverse space conditions.









The design of our electric actuators is always tailored to the very individual and particular requirements of their future operation.

On the basis of the fundamental concept of our drives, we have the experience as well as the technical possibilities to provide the best possible harmonization of each electric actuator with its specific application.

Eventual consideration of dust or shock or, by contrast, application of the requirements prescribed for an aseptic concept - all these problems can be solved with an electric actuator by Rahmann exactly designed to this particular end.

Thanks to our high vertical range of manufacture as well as the sole use of high-quality components, our product maintains its permanent position in the field of drive technology.

This is proven every day all over the world. Our customer's confidence in us is an incentive to us for innovation and at the same time it makes us undertake the commitment to seek for permanent improvement of our performance and, thus, the quality of our electric actuators.



RAHMANN GMBH

Clausewitzstr. 36 42389 Wuppertal / Germany Tel: 0049 (0)202 / 26071-0 info@rahmann-gmbh.com www.rahmann-gmbh.com