

StG EC 40

DATA SHEET

Description

This new generation of actuators provides high performance combined with rapid response, irrespective of direction of rotation or shaft position. Functional ranges are provided for marine applications and industrial purposes.

StG EC 40 comes with a fully maintenance-free brushless disc motor whose typical high torque is multiplied by the use of a planetary gear. Due to the low moment of inertia of the motor's disc and the sophisticated electronic control rapid response times can be achieved.

In case of power loss the self-locking gear is able to prevent undesired reactions of the linkage. Additionally manual override is possible. Optionally the actuator is available with a return spring to ensure setting to a zero if power supply fails. To enhance reliability the system is equipped with a redundant power supply.

The electronics are fully EMC protected and all customer interfaces are totally galvanically insulated from each other and from ground. The high protection grade IP66 guarantees optimal resistance to adverse environments. To improve durability several protection functions are implemented, for example, actuator current limitation to prevent the actuator from overheating. Besides analogue setpoint inputs and position feedback communication all above is done via CAN protocol which provides detailed error reports. Additionally major alarms and status are displayed directly by LEDs at the housing.

A contactless position feedback system fully insulated to any pollution offers a precise electrical signal of shaft position to any control device.

The use of special materials and long duration lubricants minimises maintenance and delivers an operating lifetime of ~25.000 h. The design allows any fitting position.

Application range

- Marine applications
- Cooling water valves
- Industrial engine applications



Features

Completely galvanically insulated customer interfaces

Redundant power supply

High torque irrespective of direction of rotation or shaft position

Planetary gear, self-locking

Return spring optional

Indifference to slow voltage changes of the supply

Contactless position feedback

Current limitation in case of mechanical blocking to prevent actuator overheating

Any mounting position possible

Monitoring

- All alarms result in completely galvanically insulated binary alarm outputs (SSR)
- Detailed error report via CAN bus
- Detection of line break
- Actuator current limitation to protect it against overheating
- Error logging
- Detection of difference between actuator position and setpoint: Activated when a significant difference lasts longer than a given time (e.g. when linkage is blocked)

