

StG 6 / StG 10

DATA SHEET

Description

Diesel engines up to 1000 kW power as well as gas engines or turbines are the preferential application for this family of actuators.

A DC disk motor which already generates strong torque in both directions of rotation is their core. The torque additionally is multiplied by a reduction gearbox. Due to the low moment of inertia of the motors disc nevertheless quick response times can be gained. In case of voltage loss a return spring ensures setting back to zero position. Optionally the actuator is available without return spring. A contactless feedback system is integrated onto the governors output shaft offering an electrical position signal to any external control unit. A current limitation which is activated 20 seconds after the actuators might be blocked mechanically prevents them from damage by overheating.

The use of special materials and long-time lubricants assures maintenance-free operation and long working life of the actuators.

Application range

- Diesel engines up to 1000 kW
- Gas engines
- Gas and steam turbines

Certificates

On request



Features

Strong torque working in both directions

Quick response time

Return spring

Low current consumption on change of load

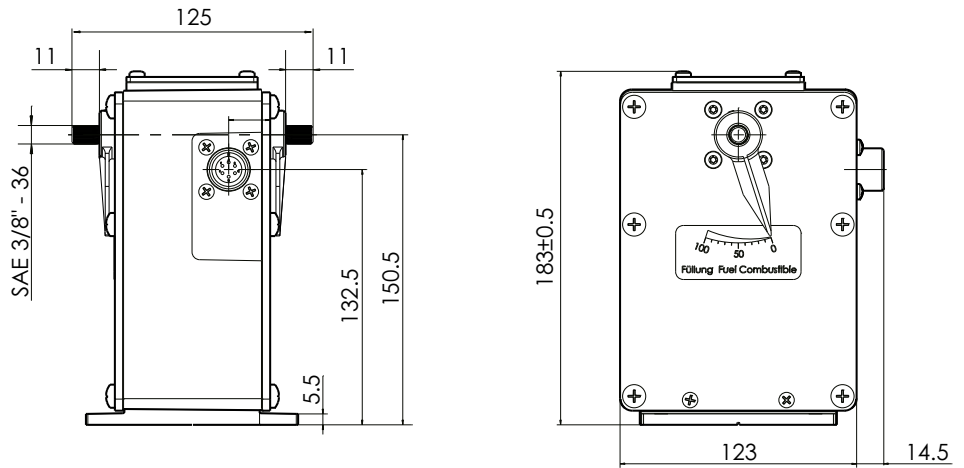
Low retaining current

Contactless feedback

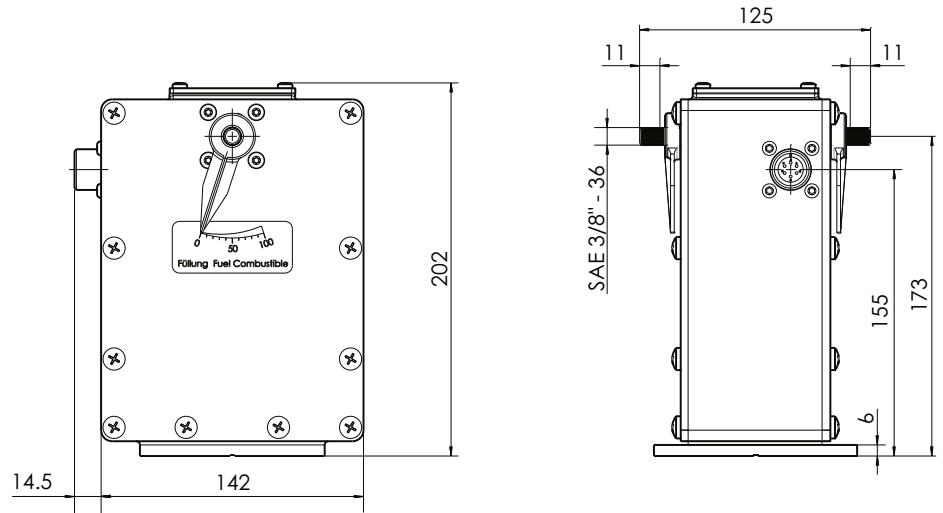
Current limitation in case of blocking to prevent actuator overheating

Dimensions

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Technical data

	StG 6-01	StG 6-02	StG 10
Rotation angle	36°	36°	36°
Torque	max. 4 Nm	max. 6 Nm	max. 10 Nm
Steady state torque	1.4 Nm	2 Nm	3.3 Nm
Suitable engine power	≤ 600 kW	≤ 600 kW	≤ 1000 kW
Return spring 0 %	0.52 Nm	0.52 Nm	0.64 Nm
Return spring 100 %	1.00 Nm	1.00 Nm	1.10 Nm
Current consumption	max. 5 A	max. 5 A	max. 5 A
Steady state current	1.7 A	1.7 A	1.7 A
No load response time 0 ... 100 %	75 ms	50 ms	60 ms
Position feedback 0 ... 100 %	1.6 ... 2.8 VDC	1.6 ... 2.8 VDC	1.6 ... 2.8 VDC
Cable length	max. 25 m	max. 25 m	max. 25 m
Ambient temperature range	-25 ... 90 °C	-25 ... 90 °C	-25 ... 90 °C -40 ... 90 °C
Permissible ambient humidity	< 95 %	< 95 %	< 95 %
Vibration level	± 1 mm at 1 ... 20 Hz, max. 0.24 m/s at 21 ...63 Hz, max. 5 g at 64 ... 300 Hz	± 1 mm at 1 ... 20 Hz, max. 0.24 m/s at 21 ...63 Hz, max. 5 g at 64 ... 300 Hz	± 1 mm at 1 ... 20 Hz, max. 0.24 m/s at 21 ...63 Hz, max. 5 g at 64 ... 300 Hz
Shock level	30 g, 11 ms, half sine	30 g, 11 ms, half sine	30 g, 11 ms, half sine
Protection grade	IP55	IP55	IP55
Weight	approx. 3.5 kg	approx. 3.5 kg	approx. 4.3 kg