

Directly acting brushless
actuator with rotary output

StG 2040/2080

DATA SHEET

Description

Medium-sized and large diesel engines as well as gas engines or turbines are the preferential application for this type of powerful actuators.

A multi-polar magnetised permanent magnet is mounted on the actuator shaft. Opposite of it a likewise multipolar armature is fixed. The design allows generation of powerful torque in both directions of working equally. Very fast response times are the result of this direct acting and gearless function. Optionally a return spring can be mounted on the output shaft to ensure setting to a zero position in case of voltage loss or similar.

A contactless feedback system mounted on the actuator shaft offers a precise electrical signal of shaft position to any external control device. The use of special materials and long-duration lubricants assure maintenance-free operation and long service life. Altogether, this type of actuator provides high regulation power working in both directions at only low current consumption. It allows any fitting position and orientation. Several different electrical connecting variants are available.

Application range

- Medium-sized and large diesel engines
- Gas engines
- Gas and steam turbines

Certificates

on request



Features

Strong regulation torque
working in both directions
equally

Quick response time

Low current consumption on
change of load

Extremely low retaining
current

Contactless feedback

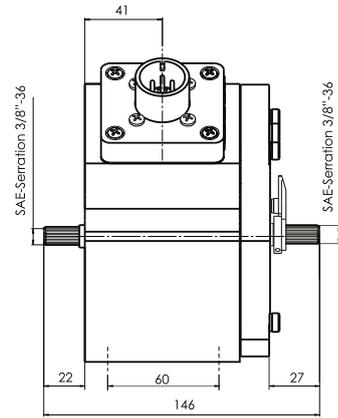
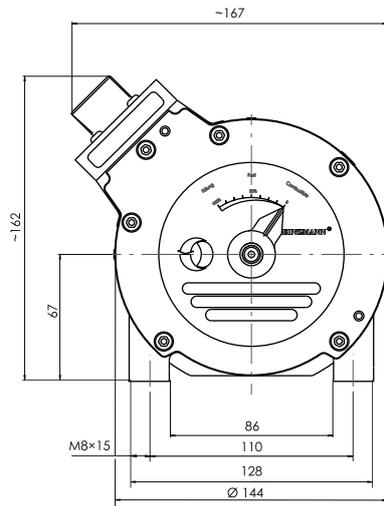
Any mounting position and
orientation possible

Maintenance-free

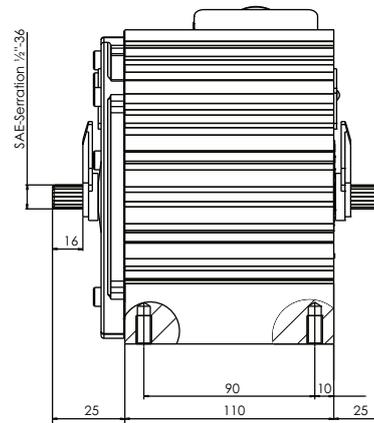
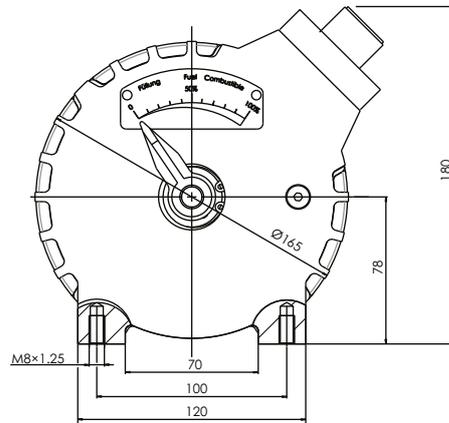
Return spring optional

Dimensions

StG 2040



StG 2080



Technical data

	StG 2040		StG 2080	
Rotation angle	36°	68°	36°	68°
Max. torque	7.4 Nm	5.6 Nm	11 Nm	8 Nm
Steady state torque	3.7 Nm	3.4 Nm	5.5 Nm	4.2 Nm
Return torque, 100 % position	~1.4 Nm	~1.4 Nm	~1.3 Nm	~1.6 Nm
Torque of return spring, 0 % position	~1.2 Nm	~1.0 Nm	~1.0 Nm	~1.0 Nm
No load response time	≤ 50 ms	≤ 70 ms	≤ 60 ms	≤ 85 ms
Current consumption	max. 8 A			
Steady state current	max. 4 A			
Position feedback (0 ... 100 %)	approx. 1.6 ... 2.8 VDC			
Ambiente temperature	-25 ... 90 °C (-40 °C on request)			
Permissible ambient humidity	< 95 % at 55 °C			
Vibration	± 1 mm at 1 ... 20 Hz max. 0.24 m/s at 21 ... 63 Hz max. 9g at 64 ... 2000 Hz			
Shock	30g, 11 ms, half sine			
Degree of protection	IP65, housing & plug IP00, with terminal			
Weight	approx. 6.6 kg		approx. 8.6 kg	