

# Actuator with gear

# StG 16/30/40 StG 30.90/40.90

## DATA SHEET

## **Description**

Diesel engines up to 4000 kW power as well as gas engines or turbines are the preferential application for this family of actuators.

A DC disc 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 governor's 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 4000 kW
- → Gas engines
- → Gas and steam turbines

## **Certificates**

On request

## **Features**

Strong regulation torque working in both directions

Quick response time

Return spring

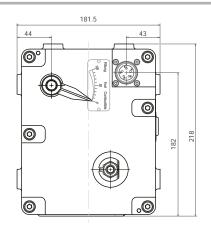
Low current consumption on change of load

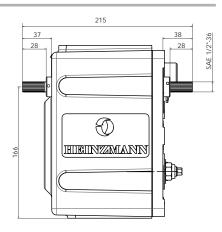
Low retaining current

Contactless feedback

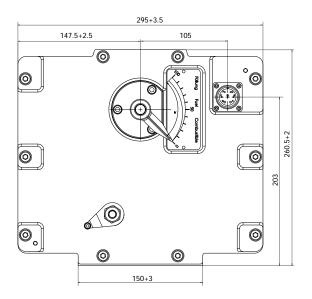
Current limitation in case of blocking to prevent actuator overheating

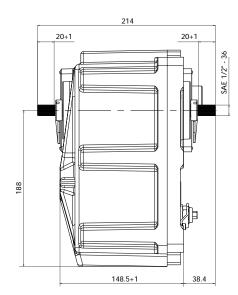
#### StG 16/30/40





#### StG 30.90/40.90





## Technical data

	StG 16	StG 30	StG 30.90	StG40	StG 40.90
Rotation angle	42°	42°	90°	42°	90°
Torque	max. 15 Nm	max. 31.5 Nm	max. 31.5 Nm	max. 44 Nm	max. 44 Nm
Steady state torque	5 Nm	10.7 Nm	10.7 Nm	14.5 Nm	14.5 Nm
Suitable engine power	≤ 1600 kW	≤ 3000 kW	≤ 3000 kW	≤ 4000 kW	≤ 4000 kW
Return spring 0 %	1.1 Nm	2.0 Nm	_	2.0 Nm	_
Return spring 100 %	2.2 Nm	4.1 Nm	_	4.1 Nm	_
Current consumption	max. 5 A	max. 5 A	max. 5 A	max. 7 A	max. 7 A
Steady state current	1.7 A	1.7 A	1.7 A	2.3 A	2.3 A
No load response time 0 100 %	120 ms	190 ms	235 ms	190 ms	275 ms
Position feedback 0 100 %	1.6 2.8 VDC				
Cable length	max. 25 m				
Ambient temperature range	-25 90 ℃				
Permissible ambient humidity	< 95 %				
Vibration level	± 1 mm at 1 20 Hz,				
	max. 0.24 m/s at 2163 Hz,				
	max. 5 g at 64 300 Hz				
Shock level	30 g, 11 ms, half sine				
Protection grade	IP55				
Weight	approx. 12.5 kg	approx. 12.5 kg	approx. 24.5 kg	approx. 12.5 kg	approx. 24.5 kg

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