DG 2080.11

DATA SHEET

Description

HEINZMANN's DG 2080.11 actuator with integrated speed governor can be used for a wide range of applications.

The system consists of the well-tried and tested actuator StG 2080 and the digital electronic speed/load control DC11. This combination results in excellent dynamic characteristics that makes it best for gas engine applications, for example.

The design provides a compact solution that is interchangeable with other proprietary units.

The control unit acts as a speed governor with the speed measured by an inductive speed pick-up usually. Alternatively a Hall-type pick-up can be used or both of them combined. Several additional analogue, digital and PWM inputs allow to regard further engine signals like boost pressure or oil temperature for instance.

Configuring and parametrising via PC program or a handheld programmer offers extensive options of adaption to the specific control demands and allows the use in a large range of different applications. The robust and durable construction offers low-maintenance. Moreover any mounting position and orientation is possible.

HEINZMANN's digital control systems are acknowledged for their high flexibility, which meets all customer needs and requirements. They are known for their long-life cycle and proven reliability.

Application range

Engine speed control, applicable to

- Fuel pumps
- Trottle valves
- Gas mixers

Features

- Compact system setup and size envelope
- Reduced wiring, easy installation
- Low and efficient maintenance
- Enhanced emergency operation
- High reliability
- Current limitation when actuator is blocked
- Any mounting position and orientation permissible

Monitoring

All alarms result in the common alarm output.

- All analogue inputs will be supervised
- Pick-ups will be supervised
- Application specific alarms
- Actuator current limitation to protect it against overheating
- Difference between actuator setpoint and current value: Activated when a significant difference lasts for a given time (e.g. when linkage is blocked)

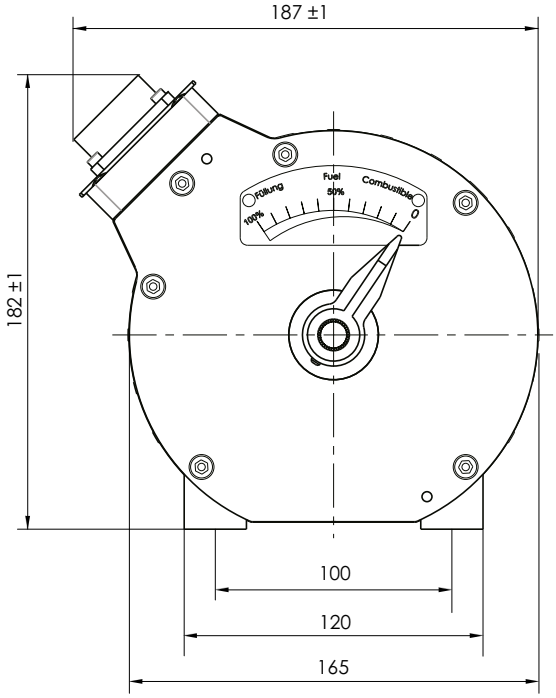
General data

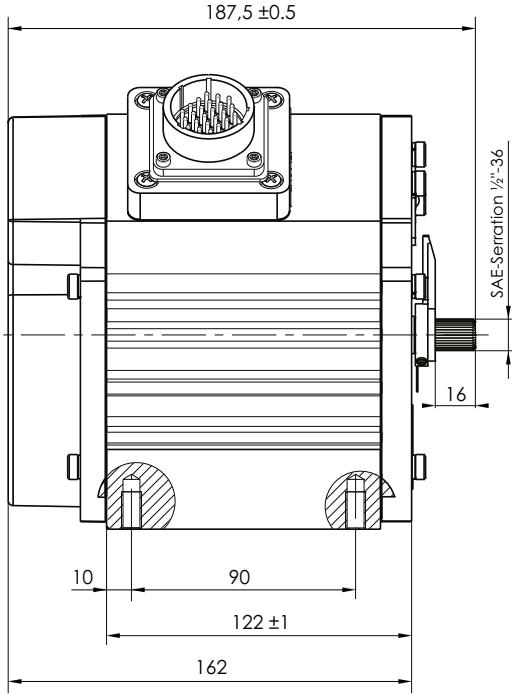
Voltage supply	nom. 24 V DC, 5 A operating range 16 ... 33 VDC
Torque in steady state condition	4 Nm
Max. torque (max. 20 seconds)	8 Nm
Rotation travel	68°
Rotation time (0 % - 100 %)	< 100 ms
Housing material	Aluminium
Weight	approx. 8 kg
Protection class	IP65
Ambient operating temperature	-25 °C to +85 °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 wave
Humidity	Permissable humidity up to 95 % at 55 °C
Connection	Plug 24-pin, cord optional
CAN communication, galvanically insulated	HZM-CAN-Protocol, Device-Net, CANopen, SAE-J1939

I/O

Pick-ups	1× inductive, 1× additional Hall sensor via multifunctional port
Temperature input	Pt1000, NTC
Alarm output	1× 300 mA, ground switching
Position feedback signal	configurabel as analogue output via multifunctional port
Multifunctional ports	
Port1 & Port2, optionally configurable	Analogue input 4 ... 20 mA, or 0 ... 5 V, Analogue output 4 ... 20 mA, Digital input, Digital output (max. 300mA), PWM-input 50 ... 500 Hz, PWM-output (max. 300mA)
Port3, optionally configurable	Analogue input 0 ... 5V, PWM-input 50 ... 500 Hz, Digital input, Pick-up Hall-type
Port4, optionally configurable	Analogue input 0 ... 5V, Digital input
Port5, optionally configurable	Analogue input 0 ... 20 mA or 0 ... 5 V, Digital input

Dimensions





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