

GMCU-II-110-FC

DATA SHEET

Description

The ELEKTRA Gas Metering Control Unit GMCU-II-110-FC serves as main component of a full authority gas engine management system. A flow setpoint specified via CAN bus leads to precise adjusting of the according gas flow to a gas mixer.

Core element is a throttle valve with integrated electronics for measurement of differential pressure across the butterfly disk.

Precise calibration of the gas metering unit combined with a high-accuracy valve actuator enables the unit to provide outstanding flow control.

Any measuring channels for gas pressures are integral part of the cast housing. The design is extremely robust and the absence of any tubes results in high shock and vibration resistance.

GMCU-II-110-FC is able to handle a differential pressure range of 40 ... 250 mbar.



Features

Accurate air-fuel ratio control

Compensation of gas quality fluctuations

Designed for integration into existing AFR control systems

Ideal for retrofitting and large engine OEM applications

Suitable for different gas types and qualities

No zero pressure regulator required

Tolerant to wet biogases and corrosive contaminants

Screwless fixation of the butterfly disk on shaft

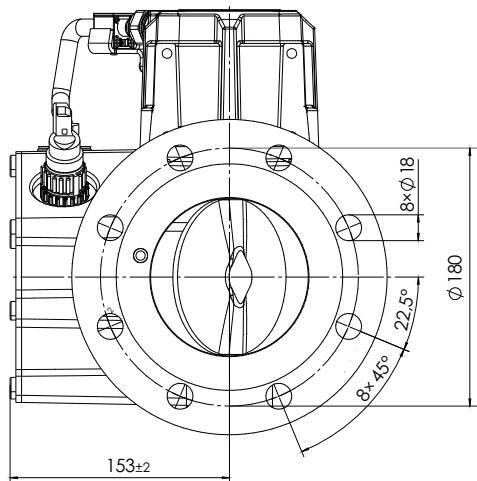
Mechanical elements temperature resistant up to 150 °C

CAN bus communication

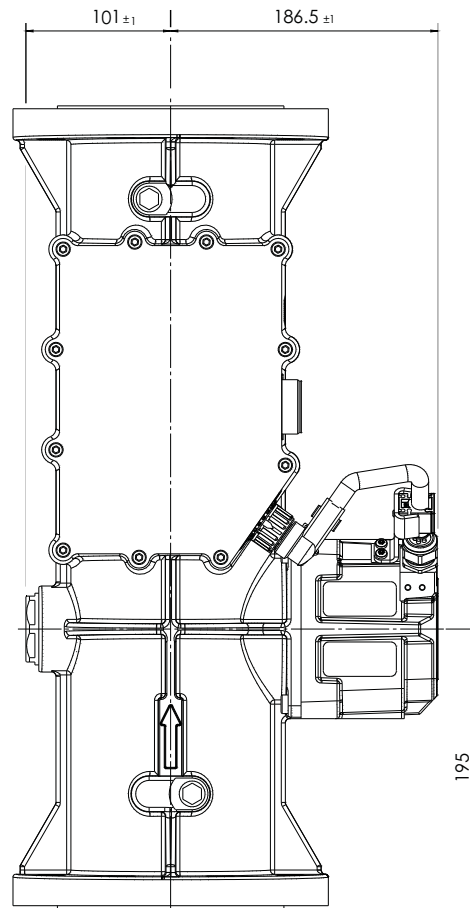
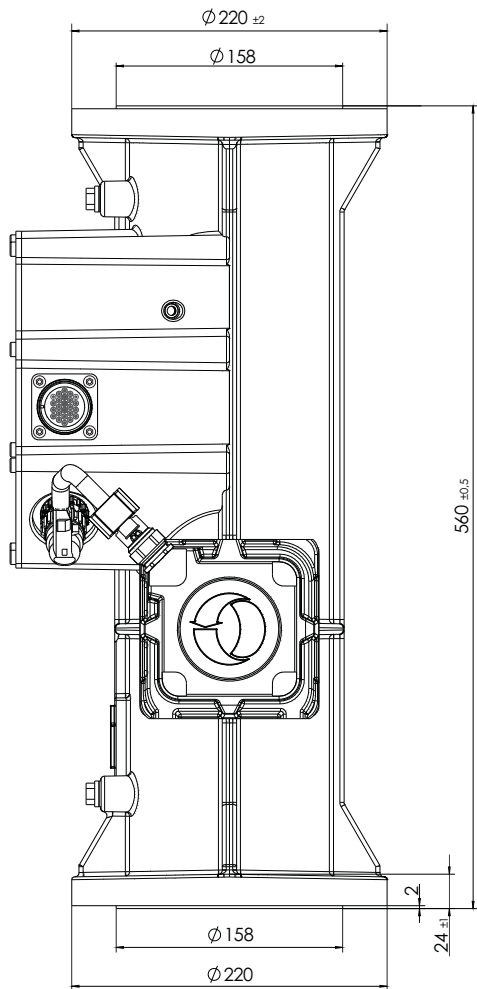
Technical data

| General specification | |
|----------------------------------|--|
| Supply voltage | 18 ... 32 VDC, nom. 24 VDC |
| Current consumption | Max. 6 A |
| Gas inlet pressure | 500 ... 2000 mbar (abs.) |
| Pressure difference inlet/outlet | 40 ... 250 mbar |
| Flow accuracy | < 5 % (at min. 15 % of maximum flow) |
| Operating temperature | -25 ... +85 °C |
| Storing temperature | -40 ... +100 °C |
| Permissible ambient humidity | <95 % at 55 °C |
| Vibration | Max. 2 mm at 10 ... 20 Hz Max. 0.24 m/s at 21 ... 63 Hz Max. 9 g at 64 ... 2000 Hz |
| Degree of protection | IP6K9K |
| I/O interface | CAN bus |

Dimensions



Flange according to
DIN 1092-1 DN100 / PN16



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