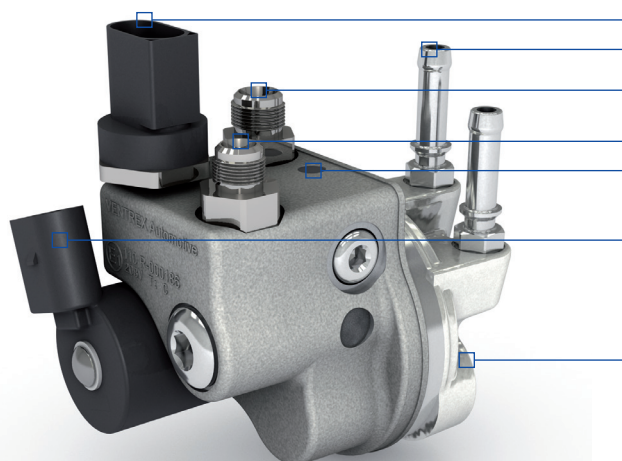


## PRODUCT SPECIFICATION ELECTRONIC PRESSURE REGULATOR EPR209

is a pressure regulator controlled by the electronic control unit for natural-gas vehicles approved by the technical regulations of ECE R110. The pressure regulator reduces the pressure in the tank down to 2 - 12 bar if necessary.

In comparison to the VENTREX pressure regulator EPR210 the pressure regulator EPR209 achieves higher mass flow rates.

The EPR is a two stage regulator. The first stage consists of a springloaded piston and the second stage consists of a proportional valve, which also acts as a shut off valve. Beside these two devices the pressure regulator is provided with a pressure relief device to protect the injection valve, a heat exchanger to conduct the low temperature which develops through expansion of the gas and a pressure sensor to measure the inlet pressure.



- high pressure sensor, 3-pins
- water connection - cooling system (90 °C), Ø 8 mm
- outlet - low pressure, max. 12 bar, 8 mm pipe
- inlet - high pressure, max. 260 bar, 6 mm pipe
- pressure relief valve, 16 bar ± 10%
- proportional valve PWM 0,5-2 kHz, 12 VDC, e-connector, 2-pin
- 2 fixing connection M8x10 on the back

### General properties

weight [kg]	0,9
dimensions [mm]	111x82x72
pressure relief valve [bar]	16 ± 10%
filtering	particle >50 µm
control	PWM-signal, 0,5 to 2 kHz, max. 2 A

### Operational parameter

inlet pressure [bar]	20 to max. 260
outlet pressure [bar]	2 to 12
operating temperature [°C]	-40 to 125
flow rate CNG [kg/h]	30 at Δp = 8 bar
leakage rate [mbar <sup>3</sup> /s]	internal: <math>1 \times 10^{-4}</math> external: <math>1 \times 10^{-5}</math>
	test medium: 90% air and 10% helium

### Connections

inlet	tube fitting Ø 6 mm, 7/16"-20 UNF
outlet	tube fitting Ø 8 mm, 1/2"-20 UNF
pressure sensor	3-pin connector
proportional valve	2-pin connector
heat exchanger	2 x hose connector/fitting Ø 8 mm, optional
fixing connection	2 x M8x10 inside

### Materials

valve body, other parts	EN AW-6082-T6
heat exchanger	EN AC AISi12(Fe)
seals	FKM, HNBR, duroplast
solenoid valve, other parts	stainless steel