

The Digitronic AEB Polymer Injectors are designed according to newest technologies. The techno-polymer body provides low noise operation and a maximum of durability. The 2 Ohm coil resistance guarantees fastest opening and closing times at a best precision.

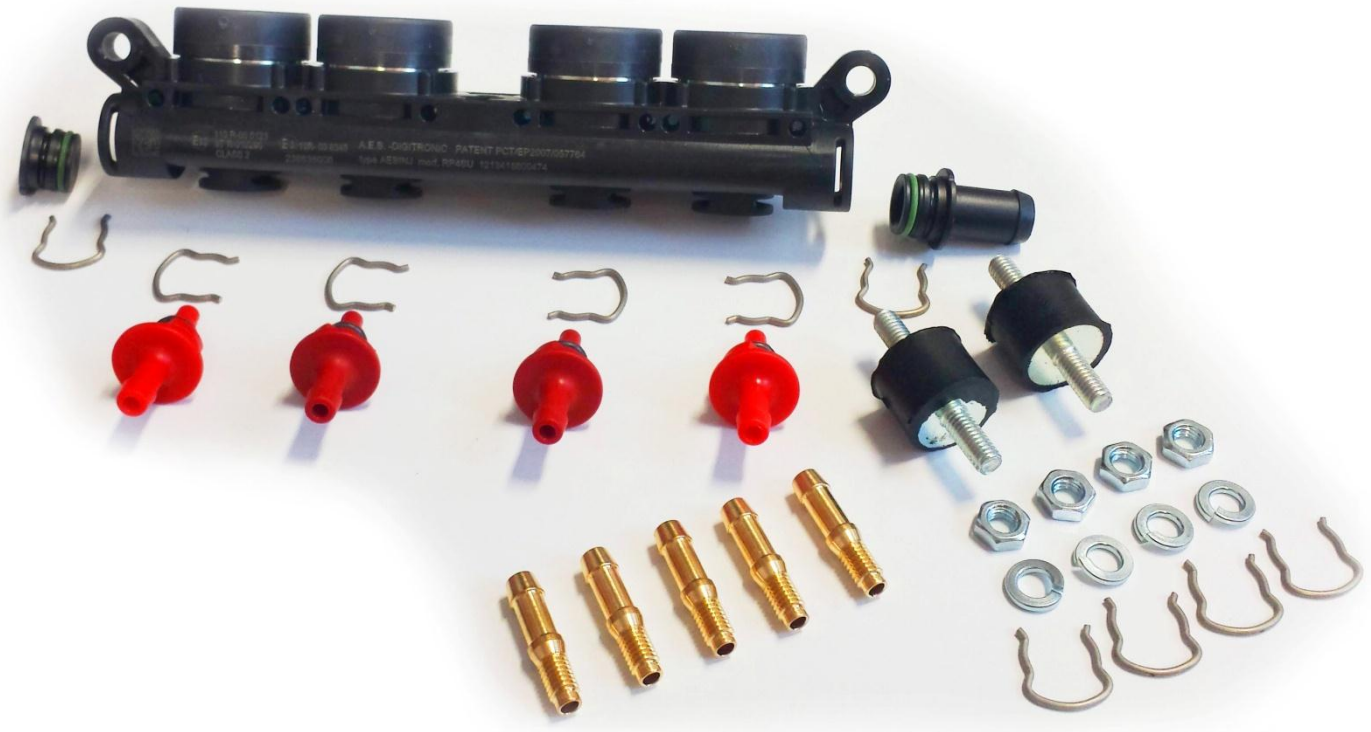
For LPG and CNG
Working temperature: -20°C +120°C
Impedance: 2 Ohm



For more details:

[Digitronic AEB Polymer Injector Nozzle Table](#)

[Digitronic Injector Rails](#)



Functional description

Device practical aspects

The electro-injector is a device installed in the vehicle gas conversion system that is placed below the pressure reducer and before the engine intake manifolds. The electro-injector is a valve usually closed, so in normal conditions there's no gas flow. The gas arrives from the pressure reducer into the injector on gaseous stage and the injector has to measure out the right gas quantity to inject into the intake manifolds. When the spark coils are energized, the valve opens and let the gas enter through a gauged nozzle. The stroke done by the valve, the opening time and the nozzle diameter, are the features that most affect the engine carburetion.

Document goal

This document means to supply the reference technical data sheet for the gas electro-injector device in every possible configurations (4, 3, 2 and 1 cylinder).



Tecnopolymer Injectors, interchangeable nozzle

Injectors assembling



Injectors mounting position

NO!!



NO!!



NO!!



NO!!



OK
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OK
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OK
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OK
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Injectors Characteristics

Supported gas typologies

- CNG
- LPG

Gas maximum pressure in working conditions

- CNG = 7 bar
- LPG = 4.5 bar

Mechanical data sheet

Parameter	Value
Valve stroke	0.5 ^{0/+0.1} mm
Maximum diameter of relative hole opening on front O-ring	4.2 mm
Maximum diameter available on gauged nozzle	3 mm
O-ring material	VITON 75°Sh

Injectors Opening and Closing Times

The Opening and Closing time of the Gas injectors are effected to the battery voltage rating and gas pressure into the injectors rail. All the AEB ECUs make an automatic compensation according to the battery voltage fluctuation and gas pressure into the Injectors rail. Here following the opening a closing time of the AEB Injectors with nominal voltage and working pressure.

- ✓ Voltage : 15V
- ✓ Pressure: 1 and 2 bar

Opening Times	[ms]
Pressure	$V_3=15\text{ V}$
1 bar	2.16 ± 0.15
2 bar	2.30 ± 0.15

Closing Times	[ms]
Pressure	$V_3 = 15\text{ V}$
1 bar	1.57 ± 0.15
2 bar	1.51 ± 0.15

