



*World leader in alternative fuel systems*



## Diesel blend system

The Diesel blend system makes it possible to convert diesel engines to dual-fuel engines by means of replacing a certain quantity of diesel by LPG or CNG. The Diesel blend system is installed beside the original motor management system, and in principle it is suitable for all diesel engines (as from Euro 3). The system communicates with the ECU via CAN-bus to ensure fully computer-controlled injection of the correct amount of LPG or CNG, depending on the specific characteristics of the diesel engine.

Making use of parameters such as engine speed, turbo pressure, amount of diesel injected, position of the accelerator pedal, engine torque and the temperature of the coolant, the system determines the optimum balance between diesel and LPG or CNG.

The key components of the system are all of OEM quality and specially designed for these applications. All components comply with the strictest regulations and certifications. The installation of the components is very easy due to the compact design of the components.

The dedicated diagnostic software is unique and enables fine tuning the Diesel blend system for optimal performance and emission reduction.

For the storage of the LPG or CNG there are different tank options available.

## Components



LPG Reducer

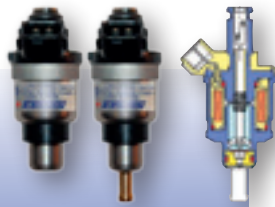
- Single stage
- Large capacity (14gr/s)
- Stable dynamic characteristics
- Adjustable pressure range with anti-tamper seal
- Map function
- Integrated OEM coolant sensor
- Complies with R67-01 homologation with 5 bar pressure relieve valve
- Complete with electronic lock off valve, liquid filter, and magnet
- Compact design for ease of installation



CNG Pressure regulator

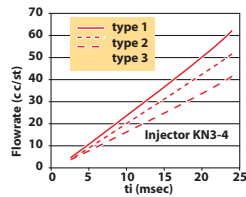
- Precision built 'Single Stage' regulator developed by KEIHIN in cooperation with PRINS
- Based on OEM technology, quality and standards
- Integrated relief valve
- Small pressure drop level equivalent to a two stage regulator
- Manifold reference function
- System pressure is not affected by tank pressure
- Performance at cold temperature is identical as at normal temperature
- Optional in-line electrical lock-off valve. Wide range of connections possible at the valve inlet





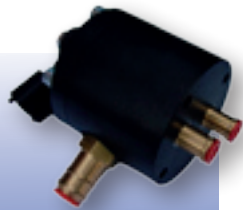
## Keihin OEM injector

- Developed by Keihin Corp, Japan, one of the worlds' leading injector manufacturers, in cooperation with Prins, ensuring quality and reliability
- Excellent linear flow rate (LFR = linear behaviour from minimum to maximum flow)
- Linear from 2,5 ms
- Model range available to cater for small and large engine displacement
- OEM quality injectors, performance guaranteed and long durability (290 million cycles)



## Injector rail

- Easy fitting
- Assembled and leak tested at factory prior to dispatch
- 2/3/4/5 cylinder assemblies



## Filter unit

- Compact design with single or dual delivery outlets
- Fitted with 10-micron (B10 > 75) dry gas filter protecting the fine tolerance of the injectors, from gaseous pollutants
- Combined gaseous temperature and 10 bar pressure sensor



## AFC-2

- ECM injector driver capability up to 6 cylinders
- Integrated injector simulator with cylinder selective switching
- One 81 pins connector for the master wiring loom and one small 40 pins connector for the specific engine configurations wiring loom
- Injector drivers based on "closed loop peak & hold current control" and "plunger movement detection control"
- Number of different communication interfaces for more advanced OEM engine integration
- OEM watertight case with ventilation plug
- High performance 32bit automotive controller combined with full diagnostic and self protected power out circuits for high reliability and durability
- Diagnostics, service and parameter load software operates from Windows 98 / 2000 / XP / Vista / 7 applications



## Fuel selector switch

- Small and compact design suits all cab interiors
- Fuel select: via smart touch control, informs operator of LPG tank contents, audible buzzer to alert low level switching or fault codes, illuminated fault code warning with LED
- Self programmable LED colours



## Tank dimensions

- Cylindrical tanks available: 70 – 250 liter for LPG and 21 – 140 liter for CNG

## DIESEL BLEND-2.0

