

### CNG Pressure regulator (reducer)

Vehicles that use CNG (Compressed Natural Gas), like heavy trucks, buses, service vehicles and Bi-Fuel vehicles such as passenger cars, light and medium vans are equipped with a pressure regulator in order to optimize (reduce) the CNG pressure and deliver a steady flow to the engine's fuel supply lines.

Meat&Doria's CNG pressure regulators are based on piston technology, using a **cylinder-piston-spring assembly (4)** to control the outlet pressure.

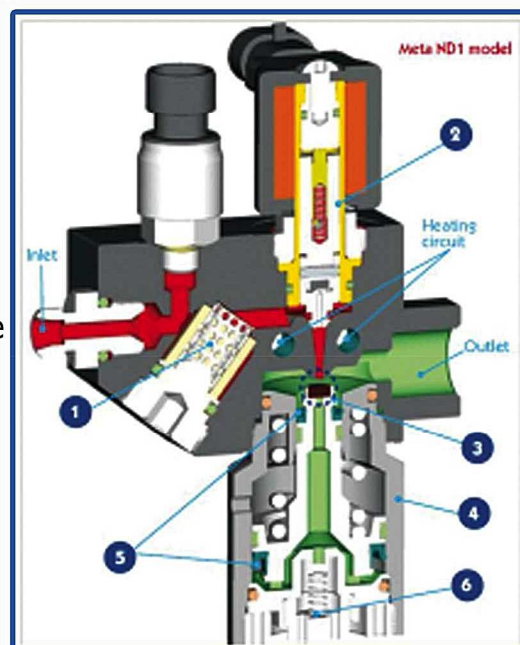
Piston technology, unlike diaphragms, increases durability, eliminates the need for maintenance and provides a very smooth and quiet operation. The compact and durable design allows easier assembly in the engine bay and offers increased safety.



All pressure regulators in our range are equipped with an integrated **high efficiency particles filter (1)**, a **shut-off valve (2)** which maintains the high pressure level (when the engine is stopped or it is running in gasoline etc) and a **pressure release valve (6)** in case of regulator malfunction. Engine cooling fluid is used for heating the regulators, especially around the **nozzle(s) (3)**.

Double stage regulators are used for heavy duty applications, while for passenger cars and vans, single stage regulators are sufficient. Depending on the model, an integrated inlet pressure sensor is provided, regardless the regulator type (single or double stage).

Meat&Doria's CNG Pressure regulators are tested for high pressure endurance at 300bar, as they are also tested with Helium for leakages.



The **dynamic sealing (5)** guarantees no leakages and very low friction, which offers increased life durability. (Sensitivity leakage: 4 gr/year)