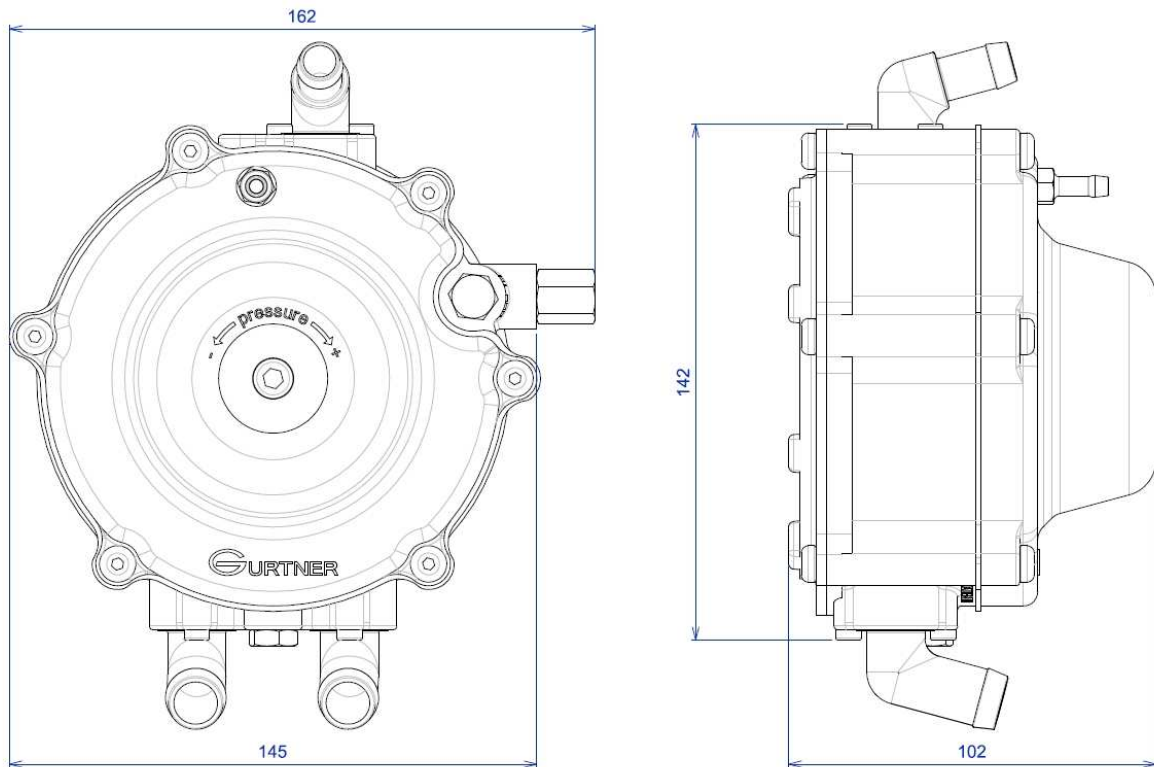




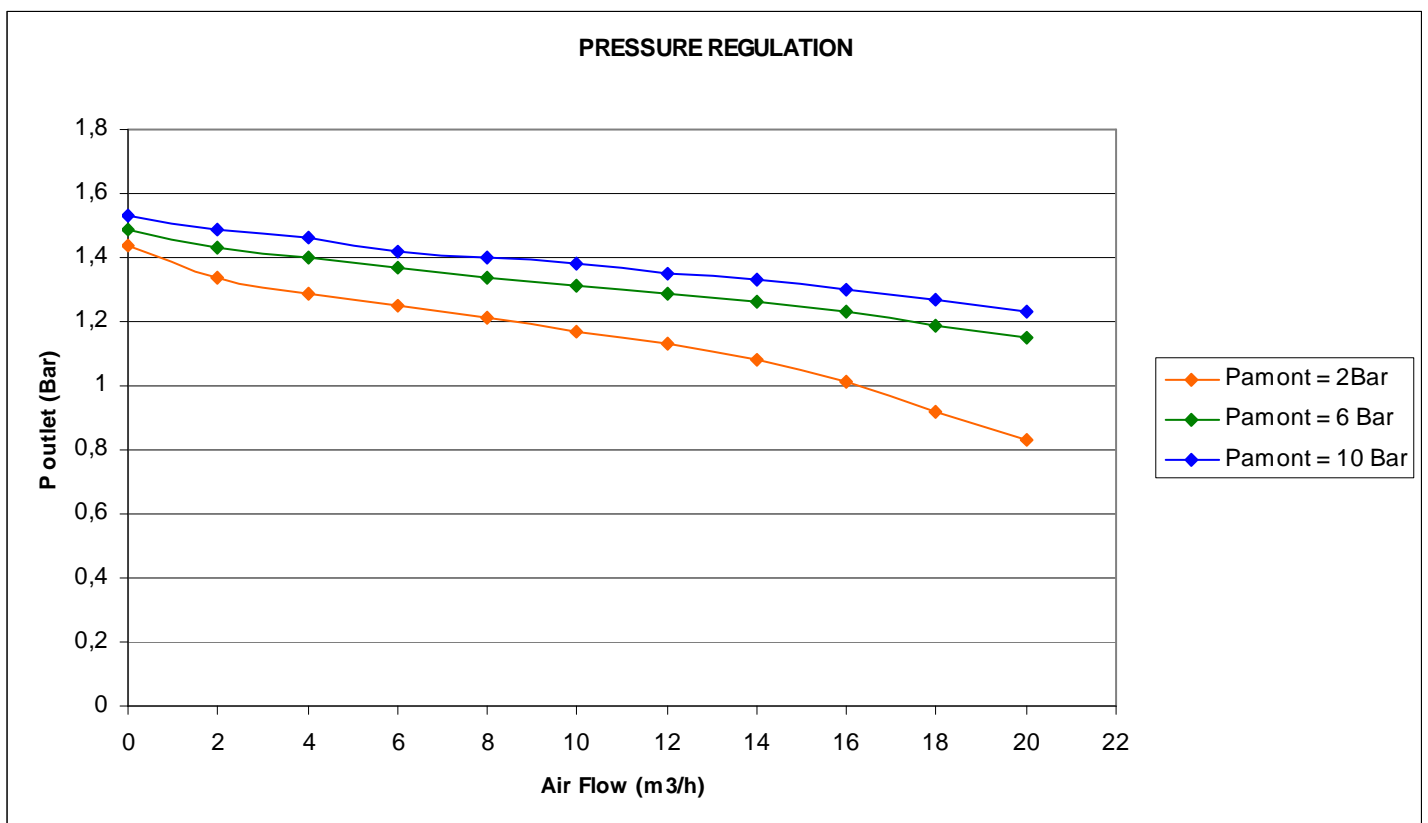
1. PRODUCT OVERVIEW

| VAPOJET - SINGLE STAGE VAPORIZER | |
|--|---|
| Inlet pressure | 2 to 20 bar |
| Adjustable outlet pressure | From 1 to 1.5 bar |
| Safety device against overpressure | Relief valve 5 bar |
| Working Temperature | -40°C to +120°C 40°F to +248°F |
| Maximum Power Basic Version: Luxe Version: | 180 kW - 245 HP 230 kW - 310 HP |
| Engine coolant fitting | Rotative elbow nipples Ø 16 mm |
| Gas outlet fitting | Rotative elbow nipple Ø 12 mm |
| Inlet gas connection | 2 possible positions at 90° - Female: M10x1 Female : M12x1 (Luxe version only) |
| Overall dimensions | 145 mm x 142 mm x 102 mm (see picture §2) |
| Agreement Number | (E7) 67R-01 912208 class 1&2 |
| Temperature sensor fitting | Tapping M5 |
| Option | Solenoid valve with filter Gas outlet fitting Diam 16 |

2. OVERALL DIMENSIONS



3. PRESSURE REGULATION



The curves on the previous picture, shown influence of air flow and inlet pressure on the outlet pressure. This test has been done with a mass production product on a laboratory flow bench.

Remark: As this product is used with LPG, accuracy of the outlet pressure is also strongly linked to the vaporization power of the reducer.

4. BASIC VERSION vs LUXE VERSION

We have done the choice to decline our VAPOJET product in two different version LUXE and BASIC one.

You may have imagined that the only reason for the coating is only the aspect. This is not the main goal. In fact, black color as the propriety to emit more thermal power than every other color (this is the reason why all vehicles radiators are painted in black).

The evidence of this physical propriety has been highlighted by the scientist Max PLANCK who has expressed the black body radiation theory. Of course, this is the theory, but what about the results on our product?

| VAPORIZERS COMPARATIVE ANALYSIS NATURAL / BLACK ROAD TEST | | |
|---|--|--|
| Climatic conditions | Relative humidity 60 to 65% External temperature 0°C to 2°C | |
| TEST DESCRIPTION | GURTNER VAPOJET NATURAL | GURTNER VAPOJET LUXE |
| Pressure setting stability | - Pressure setting with hot engine : 1,00 bar - Pressure at start with cold engine : 1,10 bar - Pressure during road test : 1,00 bar | - Pressure setting with hot engine : 1,00 bar - Pressure at start with cold engine : 1,10 bar - Pressure during road test : 1,00 bar |
| Pressure accuracy during standard road test (Pressure peaks are not included) | Pressure goes from 0,98 bar to 1,03 bar. It means that pressure regulation accuracy is around 50 mbar. | Pressure goes from 0,97 bar to 1,00 bar. It means that pressure regulation accuracy is around 30 mbar. |
| Minimum pressure after big acceleration | 0,88 bar 12% less than pressure during road test | 0,88 bar 12% less than pressure during road test |
| Minimum gas temperature (at the outlet) during high load test (Full throttle) | +10°C | +28°C |
| CONCLUSION | - Good Pressure accuracy - This product allows to supply big engines - Medium power of vaporization | - Best Pressure accuracy - This product allows to supply bigger engines under hard weather conditions - Best power of vaporization |

The red line indicates that in equal driving conditions (same day, same winter conditions), the black coating allows better thermal exchange between the vaporizer body and the gas itself. Of course, it allows also firstly a better vaporization.

The consequence is the ability to feed bigger, high top end power engines with the lux version.

5. APPLICATION SAMPLES

The basic version of our reducer is dedicated to engines until 180 kW, when luxe version is able to supply engines until 230 kW.

To verify these performances, we have done some tests with some of our customers. Here are some samples of vehicles equipped with GURTNER VAPOJET.

- **Truck CHEVROLET V8 - 5.7 Liters - Vortec engine - 255 HP**
This vehicle is equipped with one luxe reducer. It is used daily, and engine start is done directly with gas.
- **BMW 740 I - V8 - 4.0 Liters - 286 HP**
This vehicle is equipped with one luxe reducer.
- **PORSCHE CAYENNE TURBO - V8 bi-turbo - 4.5 Liters - 450 HP**
This vehicle is equipped with two luxe reducers to guarantee all performances of the engine. Power has been tested on a roller bench.
- **Truck GMC V8 - 6.0 Liters - 320 HP**
This vehicle is equipped with one luxe reducer. It has been tested in Canada.

Of course, it's also possible to use our VAPOJET product on all small engines, especially if temperature is very cold during winter time.

6. WARRANTIES AND MAINTENANCES CONDITIONS

- **Warranty 24 months delivery date or 80000 km** (whichever come first - rubber parts excluded).
- Every year the reducer has to be checked by a skilled LPG installer.
- Every 50000 km it is recommended to use a complete maintenance kit (also available in our product range ref: 24600).

For more information, don't hesitate to contact us directly:



40 rue de la Libération
B.P. 129
25302 PONTARLIER CEDEX
☎ +33 (0)3 81 46 70 22
✉ contact@gurtner.fr
💻 www.gurtner.fr