

# *Dreamjet*

SEQUENTIAL INJECTION SYSTEM  
C N G



# Dreamjet

## SEQUENTIAL INJECTION SYSTEM

ECE R 67-01

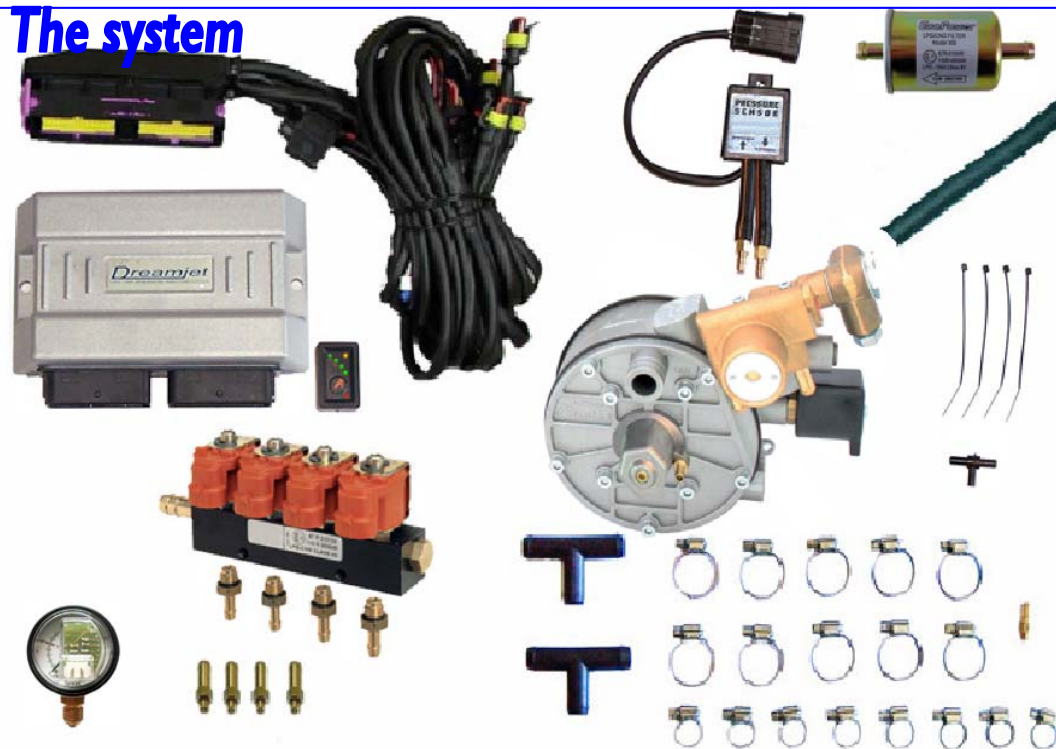
### CNG VERSION AVAILABLE FOR:

- ➔ 3 CYLINDERS CAR
- ➔ 4 CYLINDERS CAR
- ➔ 5 CYLINDERS CAR
- ➔ 6 CYLINDERS CAR
- ➔ 8 CYLINDERS CAR

### The elements



### The system



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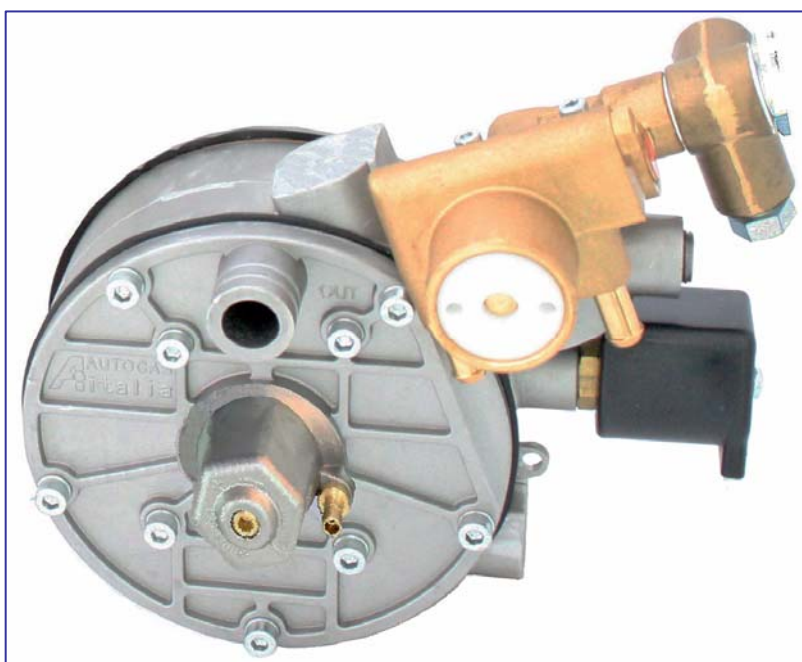
+39.059.233571



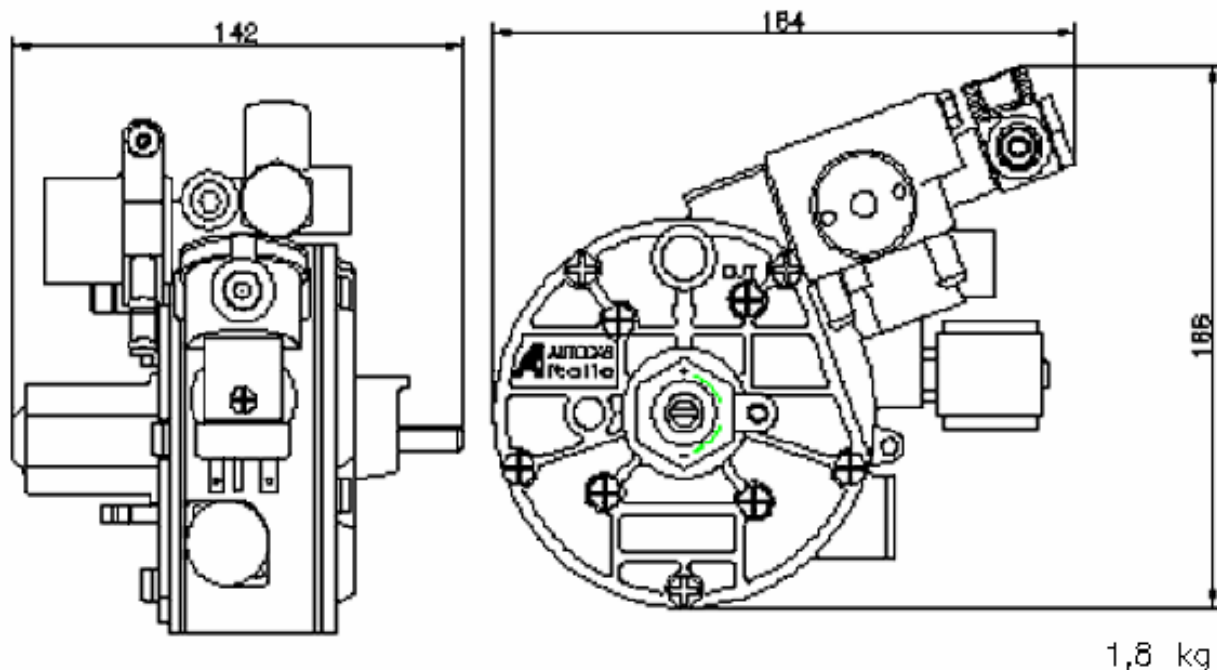
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**AUTOGAS**  
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**Riduttore elettronico metano modello RPN 05 per sistema iniezione sequenziale**  
**Electronic CNG reducer model RPN 05 for sequential injection system**  
**Regulador electrónico GNC modelo RPN 05 para inyección secuencial**  
**Elektronisches CNG reduzierer RPN 05 aufeinanderfolgendes Einspritzungssystem**



|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <b>DATI TECNICI</b>                                                                                                                                                                                                                                                                                                                                                                                                                 |  <b>TECHNICAL DATA</b>                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <ul style="list-style-type: none"> <li>• Massima pressione in entrata: 220 Bar</li> <li>• Pressione primo stadio: 5,0 Bar</li> <li>• Pressione secondo stadio: 1,8 Bar</li> <li>• Alimentazione: 12 V d.c.</li> <li>• Uscita gas: conn. maschio int. Ø 14 mm, est. Ø 19 mm</li> <li>• Riscaldamento entrata/uscita: conn. maschio int. Ø 5 mm, est. Ø 7 mm</li> <li>• Temperatura di funzionamento: -20°C + 120°C</li> <li>• Omologazioni: E7*110R109-09</li> <li>• Versioni: Normale →100 KW; Super 100 KW→</li> </ul> | <ul style="list-style-type: none"> <li>• Max inlet pressure: 220 Bar</li> <li>• First stage pressure: 5,0 Bar</li> <li>• Second stage pressure: 1,8 Bar</li> <li>• Feeding: 12 V d.c.</li> <li>• Gas outlet: male connector for rubber hose int. Ø 14 mm, ext. Ø 19 mm</li> <li>• Heating in/out: male connector for rubber hose int. Ø 5 mm, ext. Ø 7 mm</li> <li>• Working temperature: -20°C + 120°C</li> <li>• Homologation: E7*110R109-09</li> <li>• Versions: Normal →100 KW; Super 100 KW →</li> </ul>                               |
|  <b>DATOS TÉCNICOS</b>                                                                                                                                                                                                                                                                                                                                                                                                               |  <b>TECHNISCHE DATEN</b>                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <ul style="list-style-type: none"> <li>• Presión maxima de entrada: 220 Bar</li> <li>• Presión primera etapa: 5,0 Bar</li> <li>• Presión segunda etapa: 1,8 Bar</li> <li>• Alimentación: 12 V d.c.</li> <li>• Salida gas: conector masc. int. Ø 14 mm, ext. Ø 19 mm</li> <li>• Calefacción entrada/salida: con. masculino int. Ø 5 mm, est. Ø 7 mm</li> <li>• Temperatura de trabajo: -20°C + 120°C</li> <li>• Omologación: E7*110R109-09</li> <li>• Versiones: Normal →100 KW; Super 100KW→</li> </ul>                 | <ul style="list-style-type: none"> <li>• Max Eingang Druck: 220 Bar</li> <li>• Erstes Stadium Druck: 5,0 Bar</li> <li>• Zweites Stadium Druck: 1,8 Bar</li> <li>• Spg.Versorgungsteil: 12 V d.c.</li> <li>• Gasanschluß: männlicher Stecker für den Gummischlauch inter.Ø14mm, Außen Ø19 mm</li> <li>• Heizung in/out: männlicher Stecker für den Gummischlauch inter.Ø 5mm, Außenø 7 mm</li> <li>• Arbeitstemperatur: -20°C + 120°C</li> <li>• Homologation: E7*110R109-09</li> <li>• Versionen: Normal →100 KW; Super 100 KW →</li> </ul> |



**DESCRIZIONE TECNICA COMPONENTI**  
**TECHNICAL COMPONENTS DESCRIPTION**  
**DESCRIPCIÓN TÉCNICA DE LOS COMPONENTES**  
**TECHNISCHE BESTANDTEIL-BESCHREIBUNG**



**Raccordo d'entrata**  
**Entry pipe fitting**  
**Conector da**  
**caneria**  
**Eintragung**  
**Rohrfitting**

Collegamento tubo  
rame proveniente dal  
serbatoio / multivalvola

*Fitting for copper pipe  
carrying CNG from the  
tank*

Conector para caneria  
de cobre que lleva el  
CNG del tanque

*Einpassung für das  
kupferne Rohr, das  
CNG vom Behälter  
trägt*

**Filtro metano**  
**CNG filter**  
**Filtro GNC**  
**Filter CNG**

Filtra il metano in  
ingresso per eliminare  
le impurità

*It used to clean the  
CNG coming from the  
tank*

Limpiaba el CNG que  
lleva del tanque

*Es verwendet, den  
CNG zu säubern, der  
vom Behälter kommt*

**Elettrovalvola**  
**Solenoid valve**  
**Válvula de solenoide**  
**Magnetventil**

Normalmente chiusa,  
permette l'entrata del  
metano nel riduttore  
durante il  
funzionamento a gas

*Normally closed, it  
allows to the CNG to  
enter in the reducer  
during gas working*

Normalmente cerrado,  
permite la entrada del  
GNC durante el  
funcionamiento gas

*Normalerweise  
geschlossen, darf es  
zum CNG in das 1.  
Stadium während der  
Gasfunktion  
hereinkommen*

**Riscaldamento**  
**Heating**  
**Calefacción**  
**Heizung**

Il collegamento al  
circuito raffreddamento  
motore consente il  
riscaldamento dei due  
stadi del riduttore

*The reducer stages  
are heated by the  
connection of the  
reducer to the car  
cooling circuit*

Las etapas del  
reductor son  
calentadas por la  
conexión al circuito  
refrigerante motor.

*Die Reduziererstadien  
werden durch den  
Anschluß des  
Reduzierers zum  
abkühlenden  
Stromkreis des Autos  
geheizt*

**Uscita gas**  
**Gas exit**  
**Salida gas**  
**Gasausgang**

Consente la  
connessione con gli  
iniettori.

*Fitting for rubber pipe  
at the outlet of the  
reducer to the  
injectors.*

Conector para  
manguera en caucho  
entre salida del  
reductor y inyectores.

*Einpassung für  
Gummrohr am  
Anschluß des  
Reduzierers zu den  
Injektoren.*

**Registro pressione**  
**Pressure screw**  
**Ajuste ralenti**  
**Untätige Justage**

Regola la pressione  
del riduttore.

*It adjust the pressure  
of the cng reducer.*

Ajusta la presión del  
reductor.

*Es justiert den Druck  
des cng Reduzierers.*

## Technical Specification Cng ECU



|    |              |                             |                   |
|----|--------------|-----------------------------|-------------------|
| 1  | $V_S$        | Supply voltage              | 0... 16V          |
| 2  | $V_{i\_an}$  | Input voltage analogic      | 0... 5V           |
| 3  | $V_{i\_dgt}$ | Input voltage digital       | 0... 16V          |
| 4  | $V_o$        | Ouput voltage               | 0... Vs           |
| 5  | $I_o$        | Ouput current for valves    | > 3 A             |
| 6  | $I_{inj}$    | Ouput current for injectors | 5 A               |
| 7  | $I_{st-by}$  | Stand by absorb current     | 0 A               |
| 8  | $I_s$        | Working absorb current      | 0,25 A            |
| 9  | $I_{s-p}$    | Maximum absorb current      | 10 A              |
| 10 | $T$          | Operating temperature       | -20° C / + 125° C |

## Technical Specification Cng Dosage Unit



|    |                           |                                                                      | Remarks                                      |
|----|---------------------------|----------------------------------------------------------------------|----------------------------------------------|
| 1  | Piloting voltage          | 12 V d.c.                                                            | from E.C.U.                                  |
| 2  | Opening and closing time  | 3.3 on and 2.7 off msec                                              |                                              |
| 3  | Electrical connection     | Integrated waterproof connector two ways Amp/Delphi compatible 1,5mm |                                              |
| 4  | Resistance of the coil    | 3 Ohm $\pm 4\%$ *                                                    | *upon request coil resistance of 1 Ohm also. |
| 5  | Function                  | Injector rail for sequential injection system                        | use for LPG and CNG                          |
| 6  | Normally                  | Closed                                                               |                                              |
| 7  | Max working pressure      | 0,45 Mpa                                                             |                                              |
| 8  | Burst pressure            | Over 10 Mpa                                                          |                                              |
| 9  | N.valve seat available    | 4,3,2                                                                |                                              |
| 10 | Vibration resistance test | 2 hours at 17Hz with amplitude of 1,5mm                              |                                              |
| 11 | Max.working temperature   | -20°C +120°C continuos                                               |                                              |
| 12 | Medium temperature        | -20°C / +65°C                                                        |                                              |
| 13 | Certifications            | Ece 67R 01 and 110R                                                  | European regulations                         |
| 14 | Angle in-out              | At 90°                                                               |                                              |
| 15 | Inlet-outlet connections  | Hose barb fitting d.10,5mm in<br>Hose barb fitting d.5,5mm out*      | *upon request                                |
| 16 | Corrosion resistance      | 144 h ISO 9227                                                       |                                              |
| 17 | Color coil                | Blu                                                                  |                                              |
| 18 | Text                      | Rail on the coil and on the valve body                               |                                              |
| 19 | Valve seat diameter       | 4mm                                                                  |                                              |
| 20 | Endurance test            | 165 million cycles                                                   |                                              |
| 21 | Durability test           | 20.000 cycles                                                        | test pressure of 450 Kpa                     |

**FILTRO SEPARATO Serie 300 per GPL / Metano**  
**SEPARATE FILTER UNIT Type 300 for LPG / CNG**



|  <b>DESCRIZIONE TECNICA</b><br><b>mod.300.001</b> |                                   |
|--------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|
| Massima pressione di esercizio                                                                                                       | 1,0 MPa                           |
| Pressione di scoppio                                                                                                                 | oltre 2,0 MPa                     |
| Materiale corpo                                                                                                                      | Acciaio zincato                   |
| Temperatura di funzionamento                                                                                                         | -20°C / +120°C                    |
| Capacità filtrante standard                                                                                                          | 7 micron                          |
| Superficie filtrante                                                                                                                 | circa 620 cm <sup>2</sup>         |
| Portagomma standard                                                                                                                  | 12 mm                             |
| Omologazioni                                                                                                                         | ECE R6701 / ECE R110<br>CLASSE #2 |
| <b>VERSIONI DISPONIBILI</b>                                                                                                          |                                   |
| Elemento filtrante                                                                                                                   | Poliestere                        |
| Portagomma IN - OUT                                                                                                                  | 16 mm                             |
| Portagomma IN - 4 Uscite                                                                                                             | 12 mm / n°4 uscite 8 mm           |

|  <b>TECHNICAL DATA SHEET</b><br><b>type 300.001</b> |                                  |
|----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|
| Maximum Working Pressure                                                                                                               | 1,0 MPa                          |
| Burst Pressure                                                                                                                         | over 2,0 MPa                     |
| Body material                                                                                                                          | Iron zinc plating                |
| Working Temperature                                                                                                                    | -20°C / +120°C                   |
| Standard Filtering Capacity                                                                                                            | 7 micron                         |
| Standard Filtering Surface                                                                                                             | about 620 cm <sup>2</sup>        |
| Standard Male Connectors                                                                                                               | 12 mm                            |
| Approval                                                                                                                               | ECE R6701 / ECE R110<br>CLASS #2 |
| <b>AVAILABLE VERSIONS</b>                                                                                                              |                                  |
| Filtering material                                                                                                                     | Polyester                        |
| Male Connectors IN - OUT                                                                                                               | 16 mm                            |
| Male Connectors IN - 4 Outlets                                                                                                         | 12 mm / no. 4 outlets 8 mm       |

# Dreamjet

LPG - CNG SEQUENTIAL INJECTION SYSTEM

## CNG



4 CYL.



6 CYL.



8 CYL.