Gas Injector

Technical Spec

ECOTRONS LLC

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Note: If you are not sure about any specific details, please contact us at info@ecotrons.com.

Product: **Gas Injector**

Part#: **EGIJ Series**

Comment: All data given in this document are nominal values and might be subject of change at all time

Index	Page	Revision	Date	note
1	---	**First Edition**	2.10.2014	V1.0
2	---	**Second Edition**	7.11.2014	V1.1
3	---	**Third Edition**	2.18.2017	V1.2

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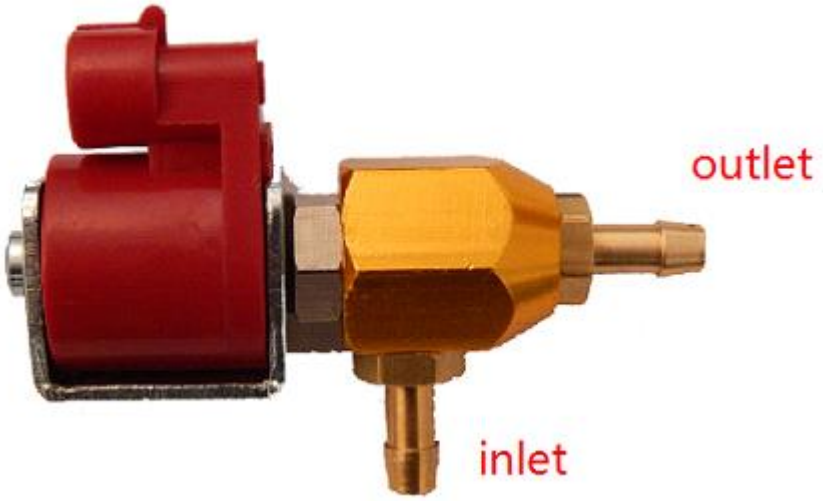
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1 Characteristic

General

EGIJ series gas injectors are designed to inject the gaseous into the intake manifold to achieve a homogeneous distribution of gaseous in air flow as efficiently as possible. The gas injectors are used on EFI system usually.

1.1 Product structure



1.2 Basic parameter

item	Gas injector
Working temperature	-20°C-+120℃
Storage temperature	-40℃ -+75℃
Working voltage	DC 7~16V
Open time	2.5ms±5% @12V
Close time	2.0ms±5% @12V
coil resistance	3Ω
Working pressure	50kPa-250kPa
maximum pressure	450kPa

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maximum bearing pressure	800kPa
air inlet	G1/8 thread, connector internal diameter Φ7
air outlet	G1/8 thread, connector internal diameter Φ7
port thread	M12X1
nozzle flow range	1.0~4.0mm(+0.04mm)
flow error	±0.4%L per 10L
coil color	Red or blue
weight	120g

2 Applications

2.1 typical applications

Gas injectors of EGIJ series are widely used in gaseous fuel injection System (EFI system), such as for CNG, LPG, Hydrogen system.

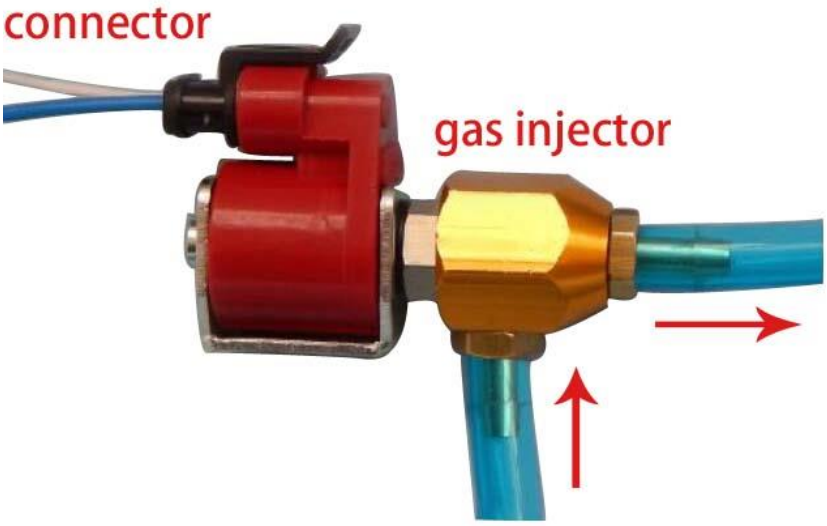
2.2 EGIJ series SIZE

item	ES-GF-1	ES-GF-2	ES-GF-3	ES-GF-4
Hole size(mm)	1.0	2.0	3.0	4.0

2.3 Applications with Ecotrons EFI system

There is a connector from ECU harness; you need connect it to the gas injector when you install the EFI system, plug the connector and tighten it.

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Gaseous injector connector:

Control signal wire: white wire

Power wire: Blue wire (12V DC)

The control signal is form ECU, when the voltage of control wire is Low(0V), the gaseous injector will inject fuel, and when the control signal voltage is high(12V), the gaseous injector will be closed and not inject CNG/LPG.

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3 Installation instructions



Install the gaseous injector to the intake manifold by a tube, and then fix it. Plug the connector from ECU harness at last.

4 Diagnoses and aftermarket

A) If the gaseous injector is broken or leaking, please connect us and replace new one injector.

Note: if the gaseous injector is leaking, please don't use it again for safe.

B) If there is control signal, but the gaseous injector doesn't inject CNG/LPG, maybe the fuel injector is jammed; you also need change a new injector.

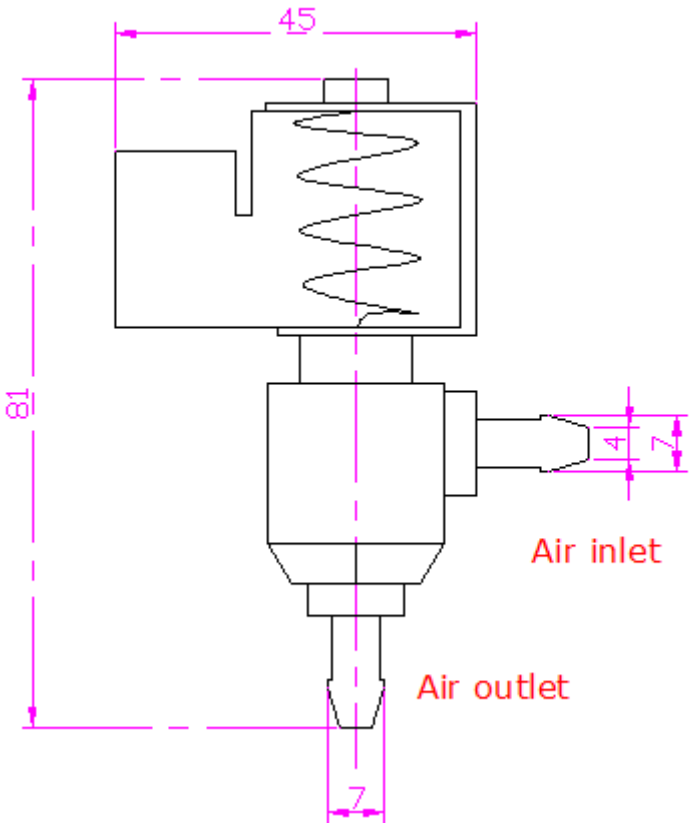
C) Disconnect the connector, and use the multimeter to measure the injector resistance.

It the resistance is out of range 3±1 ohm, and the resistance is too large or small, you also need change a new gaseous injector.

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5 Appendix: Mechanical CAD Drawing

(Unit: **mm**)



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