



In-Tank Fuel Pump

Technical Spec

ECOTRONS LLC

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please contact us at info@ecotrons.com.

Product: **In-Tank Fuel Pump**

Part # : **EFP-35R**

Comment: All data given in this document are tested values
under normal condition and it might change slightly
in different situation.

Index	Page	Revision	Date	Note
1	----	First Edition	1.10.2018	V1.1
2		Second Edition	2.10.2018	V1.2

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General

Tank fuel pump is the key component in fuel injection system. It transfers fuel from tank to the fuel injector and boosts the fuel. The fuel pump can provide a stable 43psi fuel pressure with the help of fuel pressure regulator.

1 Characteristic

1.1 Picture of In-Tank Fuel pump



1.2 Basic characteristic

Supply voltage.....12V DC
Working current.....<3.5A
Pressure.....300kPa
Flow.....35L/h
Working life.....>3000h
Weight.....460g
Installation Style.....External
Working temperature.....-40°C...80°C

Fuel:

.....Gasoline
.....Gasoline with <=20% ethanol

Storage:

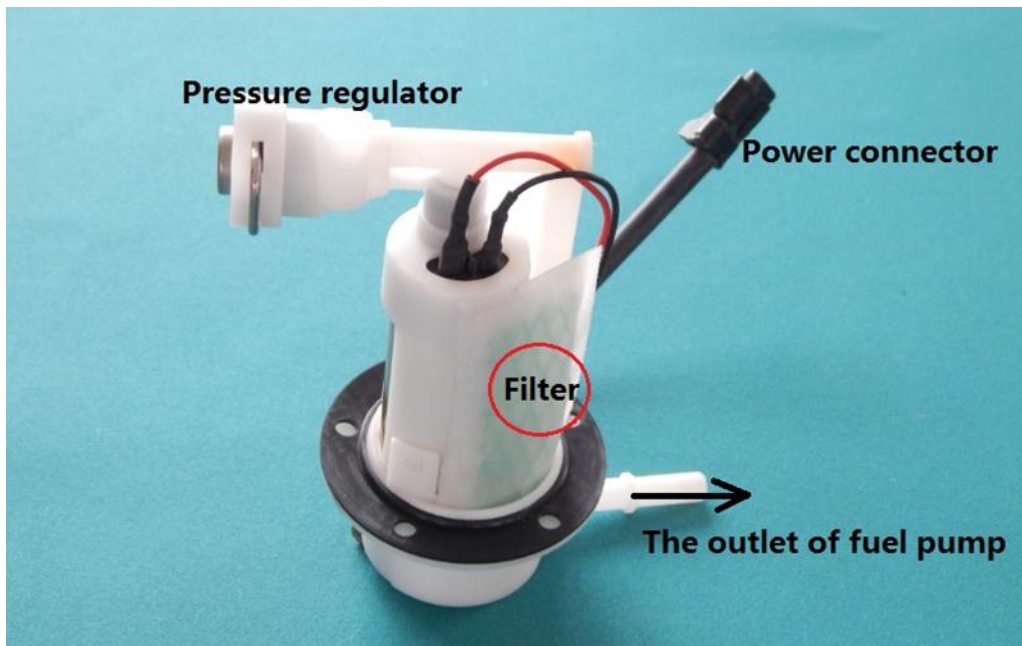
Storage Temp Range-30°C ...60°C
Humidity.....<=60%
Storage period.....<=2 years

2 Applications and installation

2.1 Applications

Fuel regulator works with fuel pump providing a suitable and stable pressed fuel in fuel supply, so that fuel can be injected to engine. If there is no enough fuel, the performance of the engine will be affected. So, please install the fuel pump according to SE-EFI installation Manual and do regular maintenance.

2.2 Mechanical Dimensions of fuel pump:



2.3 Installation instructions:

Connect the 12V power to fuel pump



Note: there is a connector in ECU harness, please connect it.

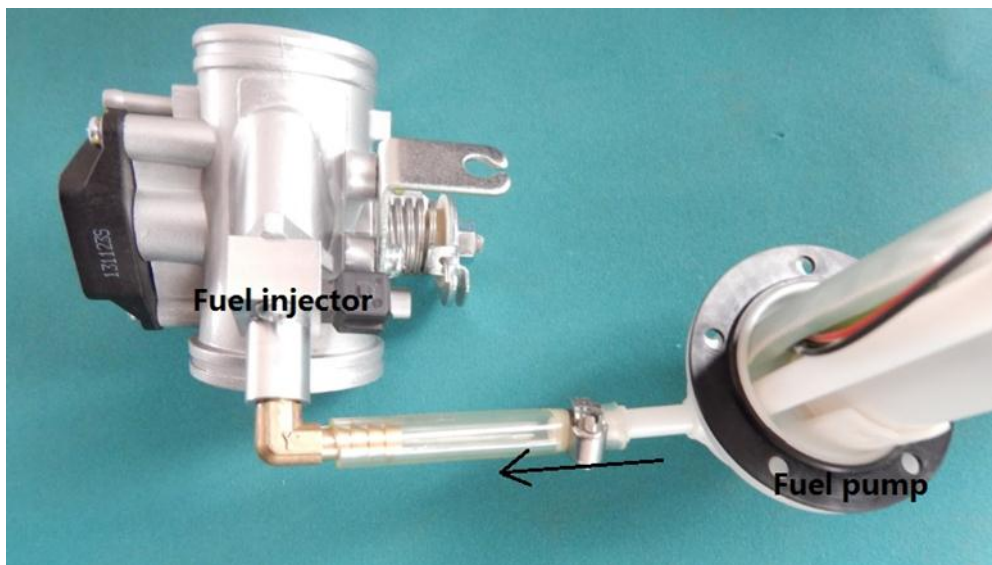
1. The fuel pump should be installed below the tank. Fuel pump and fuel filter should be lower than the lowest point of the fuel tank.
2. Install the fuel hose correctly. Please make sure there are no bubbles in the fuel line and seal all fuel lines with suppling clamps to make sure everything is air tight.
3. Install the fuel pump correctly. Otherwise the fuel pump will not provide enough pressure ($\geq 3\text{Bar}$).
4. Install the fuel pump in a proper place. Make sure there are no serious vibration and everything is air tight.
5. Do not drop the fuel pump. Otherwise it may be broken. You need change the fuel pump if it is broken.
6. Power on the fuel pump correctly. Do not make it short-circuited.

Attention:

1. There are inflammables in the fuel pump, so when you re-install or check the fuel pump, please remove all source of ignition and never power it on.

2. Be careful when you uninstall the fuel pump, since there are high pressure fuel in the fuel line.

Fuel supply system schematics:



3 Diagnoses and service

1. If the fuel pump doesn't work, please check the power supply system.
Check whether the battery voltage is 12V. Check whether the **blue wire (12V+)** of fuel pump is connected to the positive of battery and whether the **black wire (12V-)** of fuel pump is connected to the negative of battery.
2. ,Please check whether the fuel pump is hot if the power supply is fine, but fuel pump still doesn't work. If the fuel pump is hot, it may be blocked by impurities. Please change the fuel filter and use a new fuel pump.
3. If the fuel pump works well, but the fuel pressure cannot reach 3Bar, please check whether the fuel pressure regulator is good.
4. If the fuel pressure regulator is broken, please change it. If the fuel pressure regulator is good, please measure the fuel pressure, the current and the voltage. If the fuel pressure is lower than 280kPa and the current is lower than 1.3A, it means the fuel pump is broken, please change it.

4 Appendixes: Mechanical CAD Drawing

