

## **BS IV – 4-Wheeler – LPG Kit – 1 stage Injection system**

### **Products:**

#### **1. Tank: 33L Toroidal Tank:**



**Water Capacity: 5L**

**Tare Weight : 4.5 Kg**

**Outer Diameter : 185 mm**

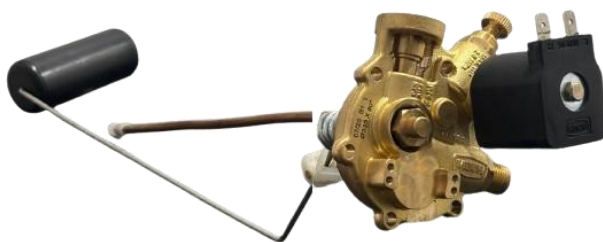
**Length : 244 mm**

**Working Pressure: 2 MPa**

**Temperature -20 to +65°C**

**Approval : IS 14899**

#### **2. Multifunction Valve:**



The Multi function valve, located on the LPG Tank, controls a number of operations such as 80% filling restriction, level indication, remote controlled solenoid valve, Excess pressure relief valve, Thermo fusible plug and Excess flow control valve.

Manual cock is also an integral part of the multi-functional valve. Available on 30° & 90° orientation for all sizes.

Approval: IS 15100

### **3. Filler Valve:**



The LPG refilling valve has a non-return valve and is located outside on the vehicle's body, in a secure location, either on the rear bumper or close to the petrol filler.

To refuel the vehicle in the former scenario, you just unscrew the cap and attach the gun, however in the later scenario, you might need to screw in a suitable gun adaptor.

ECE & ISO compliance.

### **4. Reducer:**



**Model No: KR 56**

**Output Pressure: 1.2 bar**

**Pressure Range: 1.0 - 1.4 bar**

**Gas inlet: M10 x 1mm**

**Gas Outlet: 10mm**

**Weight: 365 grams**

**Approval: ECE 67R - 05**

## 5. Rail Injector:



**Coil Resistance:**  $2.0 \Omega \pm 5\%$

**Opening Time:** 1.9ms

**Closing Time:** 1.25ms

**Max. Working Pressure:** 4 Bar

**Operating Temp:**  $-20^{\circ} \pm 120^{\circ} \text{C}$

**Operating Voltage Range:** 8-16 V.DC

**Approval:** ECE R67

## 6. Map Sensor:



Measures Gas pressure, gas temperature & engine vacuum.

Send signal to ECU

Precise and long lasting.

## 7. ECU:



It's an integrated electronic component, which program the controlling of injector according to various data input.

It controls both the electro magnetic valves.

Controls the fuel level indication, mode selection and error display.

## 8. Wiring Harness:



Connects all electronic components.

Power Distribution

Signal Transmission

## 9. SWITCH:



### ➤ Starting up and changeover:

Vehicles converted with LPG systems in gaseous phase are equipped with a push button change over switch with acoustic indicator (Beeps).

**A. Petrol Mode:** The LED when turned off, is to inform the user of petrol mode and gas level information disappears, that is to say that the five level LEDs are turned off.

**B. LPG Mode:** The LED when turned on, is to inform the user of gas mode and the level indicators show the level of LPG in the tank. If the vehicle is running on LPG and this gets exhausted, the vehicle will automatically switch over to Petrol.

**C. Error Indication:** In case of possible gas system working anomalies, system informs user by blinking LED. If there is a disruption in electrical signals in electromagnetic valve and level indicator, LED blinks and acoustic indicator beeps.

### **D. Acoustic indication:**

|                    |                               |
|--------------------|-------------------------------|
| Mode selection     | - Single Beep                 |
| Reserve Indication | - Five Five Beeps Three Times |
| Error Indication   | - Eight Beeps                 |
| Empty Indication   | - Ten Beeps Two Times         |