

1.2.2) Electrical fuel pump

General note The engine manufacturer requests the use of an electrical auxiliary fuel pump.
The electrical auxiliary fuel pump is not just required in case of a malfunction or defect of the mechanical fuel pump, but also provides required fuel supply e.g. in case of vapour formation at high altitudes and temperatures.

Operating limits **NOTE:** If an electrical auxiliary fuel pump is installed, the whole fuel system has to be designed to warrant engine operation within the specified pressure limits.

NOTICE

The fuel pressure of an additional auxiliary fuel pump should not exceed 0.3 bar (4.4 psi).

1.3) Requirements of the fuel system

Delivery rate Electric or mechanical fuel pump:
- Min. 35 l/h (8.2 US gal/h).

Fuel lines See Fig. 2.

NOTICE

Fuel lines have to be established to the latest requirements such as FAR or EASA by the aircraft manufacturer.

NOTICE

For prevention of vapour locks, all the fuel lines on the suction side of the fuel pump have to be insulated against heat in the engine compartment and routed at distance from hot engine components, without kinks and protected appropriately.

At very critical conditions e.g. problems with vapour formation the fuel lines could be routed in a hose with cold air flow.

Secure fuel hoses with suitable screw clamps or by crimp connection.

Fuel return line

NOTICE

The installation of a fuel return line is mandatory. If the fuel distributor piece with regulator from ROTAX is not available, the fuel pressure must be regulated by a restriction in the fuel return line, which ensures that the fuel pressure is under all operating conditions within the operating limits specified by ROTAX.