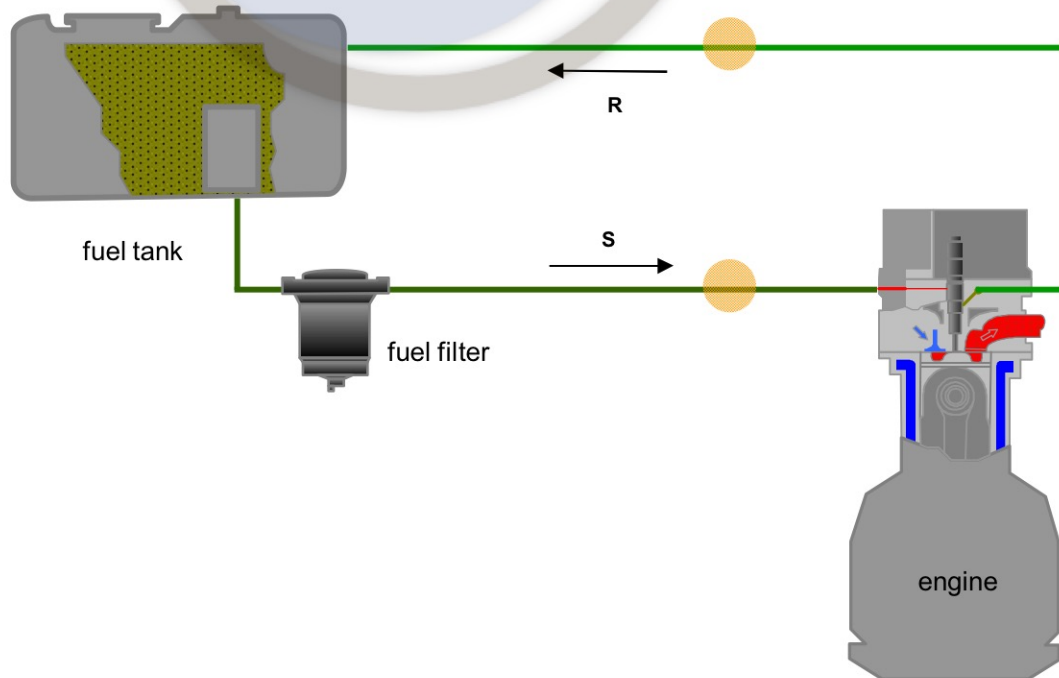


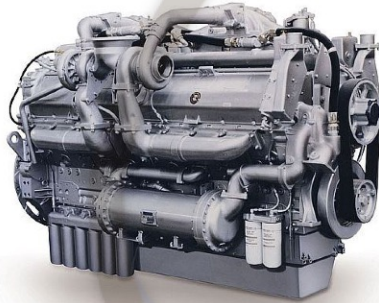
Application

Diesel fuel consumption measurement on oil well fracturing equipment.

Fuel system: differential system with diesel fuel supply line
From tank to engine and diesel return line from engine back
to tank!



Main engine types



Detroit 149

Approx. HP: 3000 max.
Approx. Consumption: 490l/h
Approx. Circulation flowrate: 1220 l/h
Recommended flowmeters: DFM 25S



Cummins 45 series

Approx. HP: 2250 max.
Approx. Consumption: 375l/h
Approx. Circulation flowrate: 900 l/h
Recommended flowmeters: DFM 20S



Cummins 50 series

Approx. HP: 3000 max.
Approx. Consumption: 400l/h
Approx. Circulation flowrate: 1000 l/h
Recommended flowmeters: DFM 20S

Application description

Customer request:

We are looking for a system which will turn **on automatically** when the engine is started and will send out a **frequency signal through our GPS** so we can monitor fuel consumption. Our problem (I regret to say) is fuel theft and once our crews understand system is tattling on them, they will not turn the system on, click go and much less send a proper fuel consumption log to our office there.

Aquametro recommendation:

We would recommend 2 single flowmeters size 20/25 mm for supply and return fuel line for each truck/engine. As well, 2 separate temperature sensors which measure the supply and return line fuel temperatures. All signals are connected to a F127 fuel consumption calculator which calculates the consumption and does the temperature correction as well. The F127 delivers the fuel consumption as a pulse or 4..20 mA output signal to the Trican GPS/FMS system.

The F127 can be powered via the tracker or the power supply of the truck, which guarantees, that the calculation only starts when engine is turned on!

Regarding theft we recommend as well to protect all components and fuel connections with seal wiring (or other methods) to prevent, that someone is tightening the connections.

Application description

FMS- GPS/Fleet Management System from Trican!



24 V Power supply



F127 fuel consumption calculator

Temperature corrected consumption, value as analogue or pulse signal

Return line Flowmeter DFM 20/25 S

from fuel tank



Return line temp. sensor



supply line temp. sensor



to fuel tank



supply line Flowmeter DFM 20/25 S



from engine

