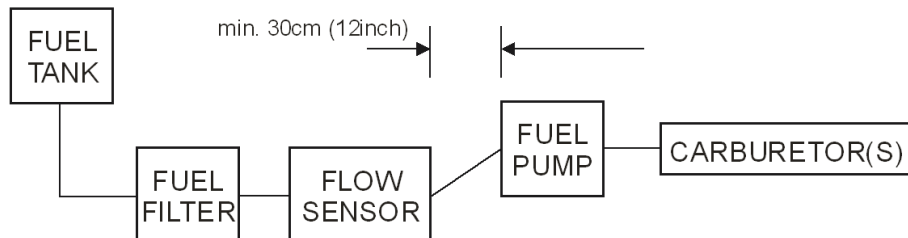


General Information

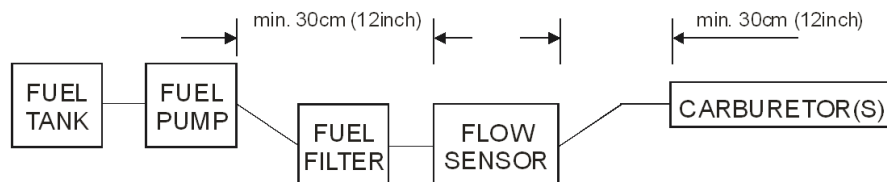
The Turbine Flow Sensor measures the flows of hydrocarbon fuels such as gasoline, kerosene, and diesel fuel and other light transmitting, non-corrosive liquids of similar viscosity.

The flow sensor gives signal with linearity $\pm 1\%$ over an engines normal operating range. Pressure drops are very low compared to other turbine flow transducers. The transducer bearing system is rated for continuous operation at the upper end of the flow range.

Carbureted Engines

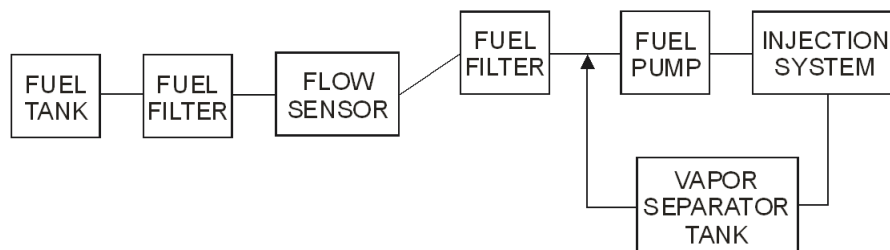


Carbureted Engines



⚠ NOTE: If you have a return line in your engine, perform the sensor connection according to the Application Note AN-05 Flow Return Line System.

EFI Engines

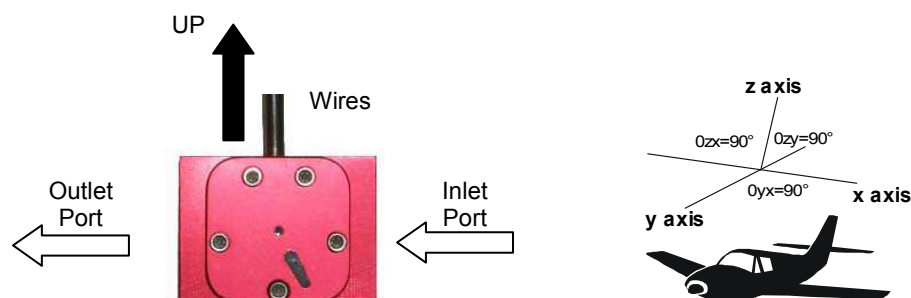


Flow Sensor Installation

Liquid enters the flow chamber tangentially, follows a helical flow path, and exits vertically, thereby venting any entrained vapor bubbles. The rotational velocity of the liquid is directly proportional to flow rate. A neutrally buoyant rotor spins with the liquid between V-jewel bearings.

The vapor venting design requires that the sensor is positioned with the electrical connectors pointing up. Turbulence caused by valves or sharp elbows mounted close to the sensor inlet can affect transducer K-Factor and should be minimized.

- ⚠ NOTE:** The sensor should **NOT** be installed with the wires pointing **DOWN** (the best situation is with wires pointing **UP** i.e. parallel to the Z axis of the aircraft). The sensor should be mounted so the fuel line exiting the sensor's output port travels up, even or drops no more than 4" per foot. If this is not possible, a loop should be put in the fuel line exiting the sensor.
- ⚠ NOTE:** The Red Cube FT-60 has 1/4" Female NPT ports. **DO NOT EXCEED** a torque of 25 ft. lbs. when installing fittings into the transducer. TL elektronik recommends that a fuel proof pipe thread sealant is used when installing fittings into the flow sensors, (LockTite PST, Rector Seal, Leaklok, Permatex, Jomar, etc). **NEVER USE TEFLON TAPE.**



Input Name	Sensor w/colour	TL-2524 FUEL COMPUTER	TL-3724 COMBINED INSTRUMENT	EFIS & EMS INTEGRA TL-6624 or EMS INTEGRA TL-6724
Power +12 Volts for sensor	Red (1)	13	2	32
Output from sensor	White (2)	17	1	31
Ground for sensor	Black (3)	18	4	14

Applicable for: 2524-08; 3724-20; 6624-44; 6724-32

Technical information:

Type of Sensor: FT-60 Flow Transducer (Electronics International, USA)

Flow Range: 2,28 to 265+ L/h (0.6 to 70+ GPH)

Working pressure: 69 BAR (1000 PSI)

Operation Temperature: -65°C to +125°C (-85°F to 257°F)

Rev. A

Information furnished by TL elektronik is believed to be accurate and reliable

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