

10.3 Floscan 201 fuel flow sender installation

1. The inlet and outlet ports in series 201 flow transducers have 1/4" NPT threads. Use only 1/4" NPT hose or pipe fittings to match. When assembling fittings into the inlet and outlet ports DO NOT EXCEED a torque of 15 ft. lbs. (180 inch lbs.), or screw the fittings in more than 2 full turns past hand tight, WHICHEVER COMES FIRST. FloScan Instrument Co., Inc. will not be responsible for cracked castings caused by failure to use 1/4" NPT fittings, over torquing the fittings, or assembling them beyond the specified depth.
2. A screen or filter should be installed upstream of the flow transducer to screen out debris which could affect rotor movement or settle in the V-bearings. As turbulence upstream of the transducer affects its performance, there should be a reasonable length of straight line between the transducer inlet and the first valve, elbow, or other turbulence-producing device.
3. Install the flow transducer with wire leads pointed UP to vent bubbles and insure that rotor is totally immersed in liquid. For maximum accuracy at low flow rates the transducer should be mounted on a horizontal surface.
4. Power supply: 12 VDC at 100mA filtered and regulated.
5. Series 200 flow transducers are designed to measure steady state flows. Indicated accuracies and pulse counts were obtained using heptane on a flow stand with rotary pumps and are reproducible in flow systems using rotary or gear pumps. Fuel systems with diaphragm fuel pumps and carburetors produce pulsating fuel flows. For accurate results on these systems consult the factory for the correct flow transducer/pulsation damper combination.

Wiring the Floscan Flow Transducer

The FF-5 unit measures the output from the transducer. A 5600 ohm (5k6) pull-up resistor is required. See wiring table and installation diagram below.

The gallon per hour K-Factor for the 201A-6 transducer is approximately 32,000. The K-Factor of each sensor (at 16 GPH), divided by 10, is written on a label attached to sensor. Multiply this number on the label by 10, which should give a value of approximately 32,000. The FF-5 requires a litre per hour K factor. Take the gallon per hour K factor, and divide it by 3.785 (which yields a K-Factor of approximately 8454).

Floscan transducer wire color	FF-5 D15HD Terminal/Other Terminal
White	Fuel flow sender 1 (D15HD pin 11 – Blue) Fuel flow sender 2 (D15HD pin 6 – yellow)
Black	FF-5 ground (D15HD pin 2 – Black) / Aircraft ground / Engine block
Red	+12V DC Supply (Not supplied by the FF-5)

Floscan connection diagram

