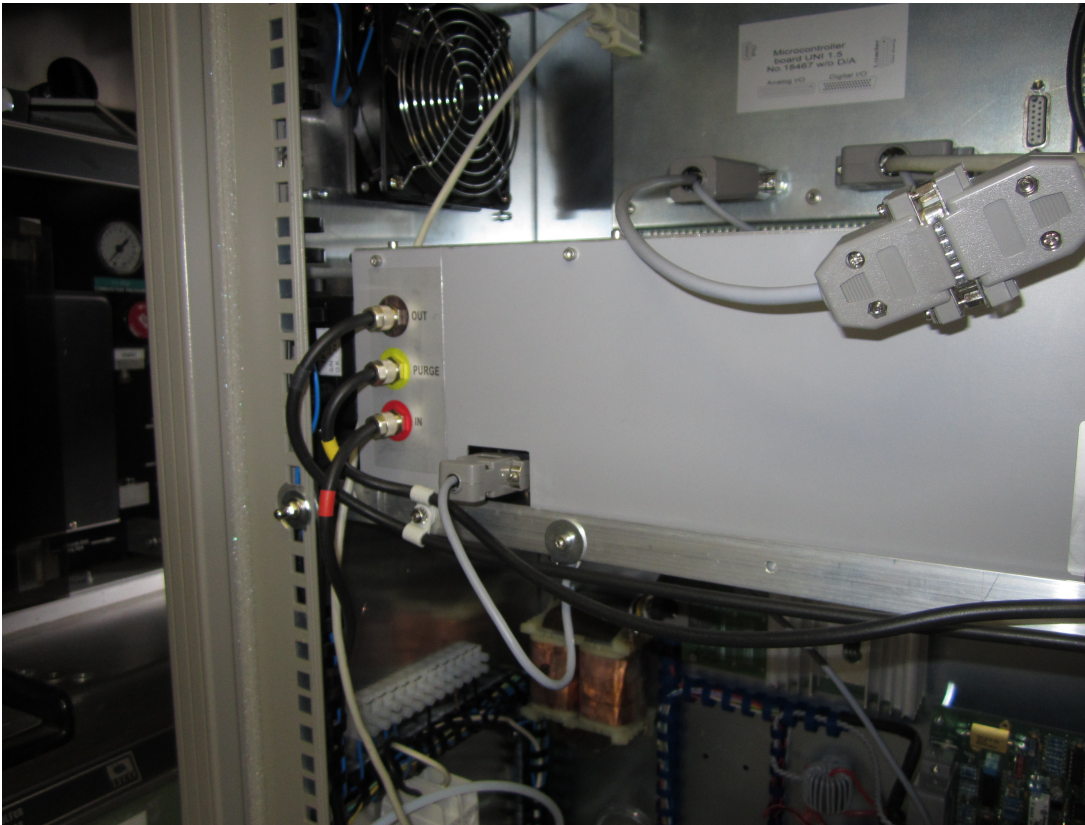


Replacing the flow sensor for a Eltra CS-800 instrument

The flow sensor is located in the IR cell box. In order to repair or replace it you must remove the IR cell box from the instrument. It is connected by two electrical connectors, one 7 pins (at the back, the flow sensor connection) and a 15 pins (which has all the other connections for the IR cell box.)



Use a small flat screwdriver to disconnect the two connectors.

There are 5 tubes connected to the box, 3 in the back and two at the front below the box, they are all color coded, the three in the back are black, yellow and red, and the two in the front black and red. The color dots will help the user reconnect them at the right place.

Disconnect the 5 tubes and the Allen Key nut which connects the box to the chassis.

Remove the box from the instrument and place it on a table, with the fittings facing the operator. Using a set of METRIC Allen Key's disconnect the top, front and bottom plates.

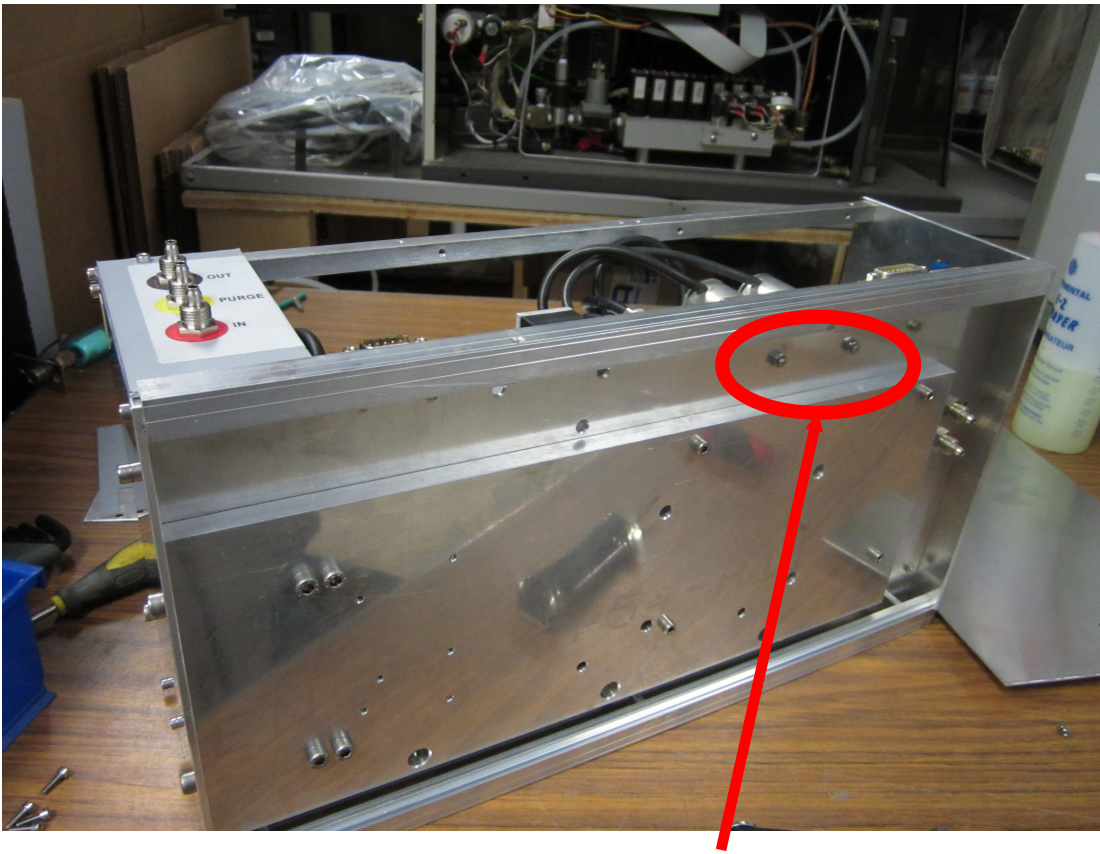
Identify the flow sensor assembly, picture below.



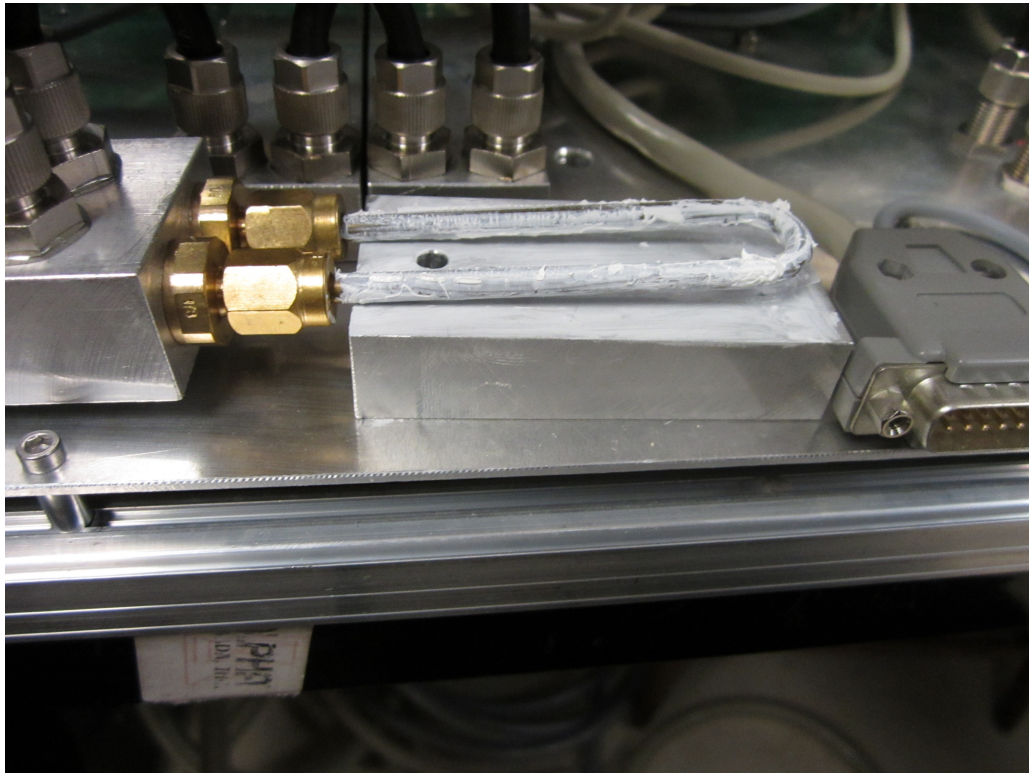
It is connected to two coils and input and output connections, a total of 6 tubes.
In order to change the sensor you must disconnect the 6 tubes, remember to mark the position in order to connect them properly at the new flow sensor afterwards.

In order to remove the FS (flow sensor) :

- first remove the two coils (using an AK (Allen Key))
- Change the position of the box in order to access the bottom, and loosen the two nuts that hold the two pieces around the FS in place.
- Now you can remove the top aluminum plate and remove the FS from its place.
- Between the two plates there is the FS tube and thermal conductive grease. Place the new FS in place and add some grease (if you have any)
- Then place the top plate and tighten the nuts in order to hold the FS in place.
- Reassemble everything in reverse order, make sure all the bolts are tight, also replace the connector using the metric AK.
- Put the three plates back in place and place the box back in the instrument.



These two nuts must be removed and then the top plate will come out.



You can see the grease, it helps make a better thermic contact between the flow sensor and the chassis.