

ABSTRACT

FILTER WITH MEMORY, COMMUNICATION AND PRESSURE SENSOR

The present invention describes a system and method for accurately measuring the pressure within a filter housing. A pressure sensor and a communications device are coupled so as to be able to measure and transmit the pressure within the filter housing while in use. This system can comprise a single component, integrating both the communication device and the pressure sensor. Alternatively, the system can comprise separate sensor and transmitter components, in communication with one another. In yet another embodiment, a storage element can be added to the system, thereby allowing the device to store a set of pressure values. The use of this device is beneficial to many applications. For example, the ability to read pressure values in situ allows integrity tests to be performed without additional equipment. In addition, integrity testing for individual filters within multi-filter configurations is possible.

Figure 1