

Abstract

A pressure sensor, a pressure control apparatus, and a flow rate control apparatus are provided in which the temperature drift of the pressure sensor is automatically corrected, and pressure can be accurately detected in spite of changes in temperature.

5 A pressure-type flow rate control apparatus, in which an apparatus for correcting temperature drift according to the present invention is installed, has an upstream side pressure sensor 10 provided between an orifice 4 and a control valve 22 for detecting an upstream side pressure P_1 , and controls the flow rate of a fluid passing through the orifice 4 by means of a regulating control valve 22, while calculating the flow rate of the fluid
10 passing through the orifice 4 from the upstream side pressure P_1 , wherein the apparatus for correcting temperature drift comprises a temperature sensor 14 for measuring the temperature of the fluid, a memory means 64 for storing a relation between the fluid temperature T and an output drift of the upstream side pressure sensor 10, and a temperature drift correcting means which calculates the amount of the output drift of the
15 upstream side pressure sensor 10 from data in the memory means 64 when the temperature T of the fluid changes, and offsets the output drift of the upstream side pressure sensor 10 with the calculated amount of the output drift, thereby correcting the temperature drift.

By means of this arrangement, the temperature drift of the pressure sensor is automatically corrected, which makes it possible to control accurately the flow rate.



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