ABSTRACT

Suction pump is a medical device that functions to remove fluid from the human body by suction or suction. This tool generally consists of several parts including the engine, suction hose and tubes. The right measurement and accurate results can increase the accuracy of the data produced. Use in the long run causes changes in accuracy, therefore measurements are taken to determine the truth value of an instrument by comparing it to the measured standards that can be traced using DPM. This Digital Pressure Meter (DPM) compares the value of the measuring scale on the suction pump with the DPM measuring scale. The author uses the MPX4115VC6U sensor as a pressure sensor, 2.4 inch Nextion TFT LCD to display pressure results, requiring a maximum pressure of -400 mmHg. This module is also equipped with the conversion of pressure results from mmHg to kPa. Based on data retrieval by measuring to a suction pump 6 times the smallest average deviation results are 1.0 mmHg at 0 mmHg pressure and the largest is 7.0 mmHg at pressures of -150, -200, -400 mmHg. The largest average deviation is due to a pressure leak between the module output connecting hose and the suction pump hose so the results are less accurate.

Keyword: Calibrator, Suction Pump, MPXV4115VC6U, TFT