

Validation of new devices with pneumatic sensor for measurement and recording of arterial blood pressure

This paper presents construction, operating principle and initial study of new devices for measurement and recording of arterial blood pressure, created at Wrocław University of Science and Technology. This device is equipped with a pneumatic pressure sensor based on the pneumatic nozzle flapper amplifier principle. During the measurement sensor is applied to the patient's body, where the pulse is easily palpable. After that sensor is gradually pressed against the artery, in order to record peak amplitude. Maximum value of this amplitude corresponds to the real blood pressure waveform. This device was validated according to „International Protocol revision 2010 for the validation of blood pressure measuring devices in adults”.

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