



TYP STATIC DIFFERENTIAL PRESSURE TRANSDUCERS

FOR THE STATIC EFFECTIVE AND DIFFERENTIAL PRESSURE MEASUREMENT

Differential pressure transducers based on the static measurement principle for volume flow rate measuring units Type VMR, VMRK or VME

- Linear volume flow rate actual value 2 – 10 V DC
- Recording of measured values for the display of volume flow rates or for the control of slave controllers
- Parameters are factory set

Application



Application

- Electronic volume flow controller Universal with static differential pressure transducer for use with volume flow rate measuring units
- For applications with polluted extract air, e.g. with fluff, sticky particles or aggressive substances
- Parameters are factory set
- On-site adjusting is not required
- For this application the Universal controller is only used for measuring the differential pressure and for transforming the measured value into a linear voltage signal. Connections for setpoint value signal and actuator are not relevant, and neither are the corresponding technical data.
- Volume flow rate actual value is available as linear voltage signal

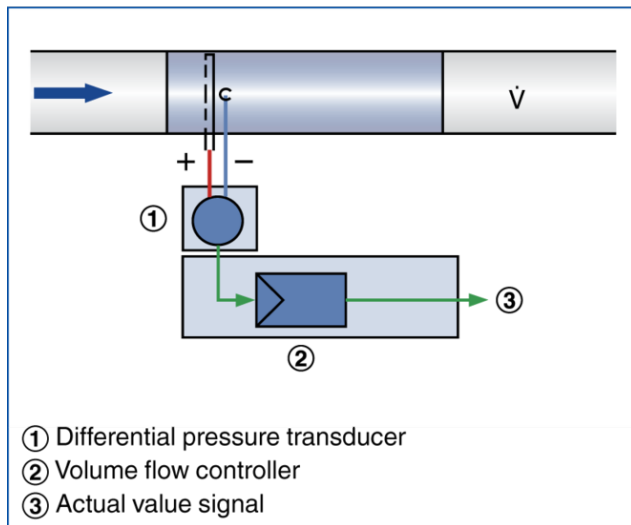
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Functional description

The volume flow rate is determined by measuring the effective pressure. For this reason the measuring unit is fitted with an effective pressure sensor.

The static differential pressure transducer (diaphragm pressure transducer) transforms the effective pressure into a voltage signal. The volume flow rate actual value is hence available as a voltage signal. The factory setting is such that 10 V DC always corresponds to the nominal volume flow rate (V_{nom}).

Principle of operation – static differential pressure transducer



Differential pressure sensor for contaminated and dust-loaded extract air.

Continuous airflow measurement.

A transducer converts the effective pressure measurement into a voltage signal such that it can be displayed or integrated into the central BMS.

Recording of measured values and use for slave controllers.

Measures the total airflow of a duct section, which may or may not be pressure-controlled, and enables slave control of, for example, the extract air with the same percentage.