



DIFFERENTIAL PRESSURE  
TRANSDUCER 699

## TYP DIFFERENTIAL PRESSURE TRANSDUCER

### FOR THE DIFFERENTIAL PRESSURE RECORDING AND CONTROL IN COMBINATION WITH EASYLAB AND TCU- LON-II

Differential pressure transducers based on the static measurement principle for the room or duct pressure control in combination with EASYLAB controllers TCU3 or LABCONTROL controllers TCU-LON-II

- Suitable for air and non-aggressive media
- For use in laboratories, clean rooms in the pharmaceutical and semiconductor industries, operating theatres, intensive care units, and offices with very demanding control requirements
- Constructions with calibration certificate to meet GMP requirements

#### Application □

---

##### Application

- Differential pressure transducer for the LABCONTROL system
- For the room or duct pressure control in combination with EASYLAB controllers TCU3 or with TCU-LON-II
- For the room and duct pressure monitoring in combination with monitoring systems TPM
- For use in laboratories, clean rooms in the pharmaceutical and semiconductor industries, operating theatres, intensive care units, and offices with very demanding control requirements

#### Description □

---

##### Variants

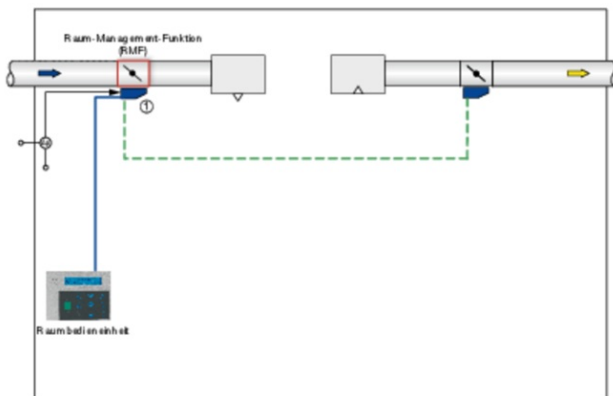
- 699: Measuring range  $\pm 50$  or  $\pm 100$  Pa
- 699-LCD: Measuring range  $\pm 50$  or  $\pm 100$  Pa, with differential pressure display
- GB404: Measuring range  $\pm 100$  Pa
- GB604-CAL: Measuring range  $\pm 100$  Pa, with calibration certificate to meet GMP requirements (Good Manufacturing Practice)
- Choose a sufficient measuring range above/below the setpoint pressure

## INFORMACJE TECHNICZNE

### Functional description

Static differential pressure transducers function according to the static differential pressure measurement principle. The sensor is a cylinder that consists of two chambers (one for positive pressure and one for negative pressure) separated by a diaphragm. If there is equal pressure in both chambers, the diaphragm is in the middle between the chambers and is not deformed. If there is a pressure difference, the diaphragm deforms towards the chamber with the negative pressure. The degree by which the diaphragm deforms is a measure for the differential pressure. This is why the voltage signal is proportional to the differential pressure.

### Principle of operation - room pressure control



#### ① Controller EASYLAB TCU3 or LABCONTROL TCU-LON-II

In a lab, the room pressure transducer is typically linked to the supply air controller; in a clean room, it is linked to the extract air controller.

Differential pressure transducer for the LABCONTROL system, for the measurement of room or duct pressure.

When the transducer is connected to a room controller, the supply air or extract air flow is controlled based on the differential pressure.

#### Differential pressure transducer

PT – DPS50



#### ① Type

PT Differential pressure transducer

#### ② Variants

- DPS50 Measuring range  $\pm 50$  Pa
- DPS100 Measuring range  $\pm 100$  Pa
- 699 Measuring range  $\pm 50$  or  $\pm 100$  Pa
- 699-LCD Measuring range  $\pm 50$  or  $\pm 100$  Pa, with differential pressure display
- GB604 Measuring range  $\pm 100$  Pa
- GB604-CAL Measuring range  $\pm 100$  Pa, with calibration certificate